

TEXAS WATER DEVELOPMENT BOARD

REPORT 154

HYDROLOGIC STUDIES OF SMALL WATERSHEDS,  
CALAVERAS CREEK, SAN ANTONIO RIVER  
BASIN, TEXAS, 1955-68

By

James T. Smith and Willard B. Mills  
United States Geological Survey

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Texas Water Development Board and  
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August 1972

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ABSTRACT

Inflow, pool consumption, and outflow for a group of nine floodwater-retarding reservoirs controlling runoff from 37.1 square miles in the 77.2-square-mile Calaveras Creek watershed near Elmendorf, Texas, were defined for the period 1955-68. During this period, annual rainfall ranged from 12.39 inches in 1956 to 40.41 inches in 1957.

Runoff for the periods of record at each reservoir (site) ranged from 3 percent of the 231-inch rainfall (period October 1960 to September 1968) at site 1, to 15 percent of the 352-inch rainfall (period July 1956 to September 1968) and 390-inch rainfall (period March 1955 to September 1968) at sites 7 and 8, respectively. Rainfall on the 77.2-square-mile watershed was 380 inches while runoff was 25.9 inches for the period March 1955 to September 1968.

During the period 1955-68, a total of 67,540 acre-feet entered the pools; 6,400 acre-feet was rainfall on the pool surfaces, and 61,140 acre-feet was surface runoff. Outflow from the pools was 43,700 acre-feet, and 23,510 acre-feet was consumed in the pools by evapotranspiration and seepage. Net gain in pool content

during the period of study was 332 acre-feet. During 8 years of record, 1961-68, (when all structures were built) the structures prevented an average of 42 percent of the annual runoff from passing downstream as streamflow. The structures reduced peak discharge from a large storm by as much as 99 percent.

Evidence is presented that showed a 40 percent reduction of the 25-year recurrence interval flood from about 9,600 to 5,600 cfs (cubic feet per second) because of the structures. A flood-frequency analysis, utilizing the log-Pearson Type III distribution, defined the 25-year flood as 6,340 cfs at site 6.

The average unit-hydrograph peak for site 6 was 1,340 cfs with a time-of-rise of 4.2 hours. The average unit-hydrograph peak for the streamflow station was 3,110 cfs with a secondary peak of 2,500 cfs.

A rain-gage network study showed that the network of 10 rain gages could be reduced to four gages with a resulting loss in accuracy for the average rainfall of  $\pm 10$  percent for about two-thirds of the time.





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INTRODUCTION

**History and Development of the  
Small Watershed Project in Texas**

The Flood Control Act of 1936, as amended and supplemented, authorized the construction of floodwater-retarding structures by the Soil Conservation Service of the U.S. Department of Agriculture. This act provided that "... federal investigations of watersheds and measures for runoff and water-flow retardation and soil-erosion prevention on watersheds shall be under the jurisdiction of and shall be prosecuted by the Department of Agriculture ...". The Department submitted survey reports to the Congress under the

authority of this act, and in 1944, 11 nationwide pilot watersheds were authorized. Subsequent legislation under Public Law 566 has further expanded the scope of this program.

Pursuant to the Flood Control Act of 1936 and subsequent legislation, the U.S.D.A. Soil Conservation Service (SCS) is investigating a large part of Texas to determine the need and economic feasibility of flood-control measures in accordance with the legislation. Each area investigated is subdivided into small watersheds usually consisting of one stream and its tributaries that are large enough to cause damaging floods. Many of the watersheds investigated require the building of floodwater-retarding structures (Figure 1) to help control flood flows.

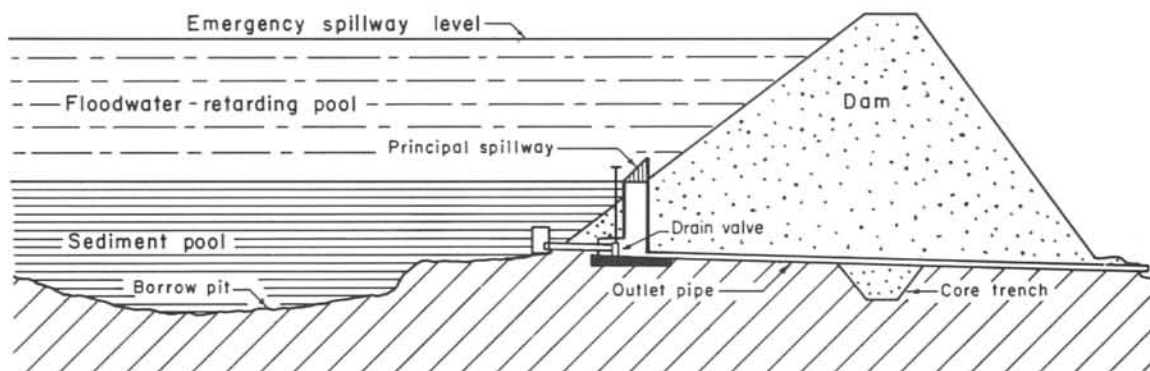


Figure 1.—Section of a Typical Floodwater-Retarding Structure

This watershed-development program will have varying but important effects on the natural surface- and ground-water resources of river basins, especially where a large number of the floodwater-retarding structures are built. Specifically, it is essential that hydrologic studies determine the extent to which these structures affect the yield and mode of occurrence of natural water supplies.

Hydrologic-data collection was started in Texas in 1951 and is now in progress in 13 rural watersheds of the State (Figure 2). The Soil Conservation Service, Texas Water Development Board, San Antonio River Authority, City of Dallas, and the Tarrant County Water Control and Improvement District No. 1 are cooperating with the Geological Survey in these investigations.

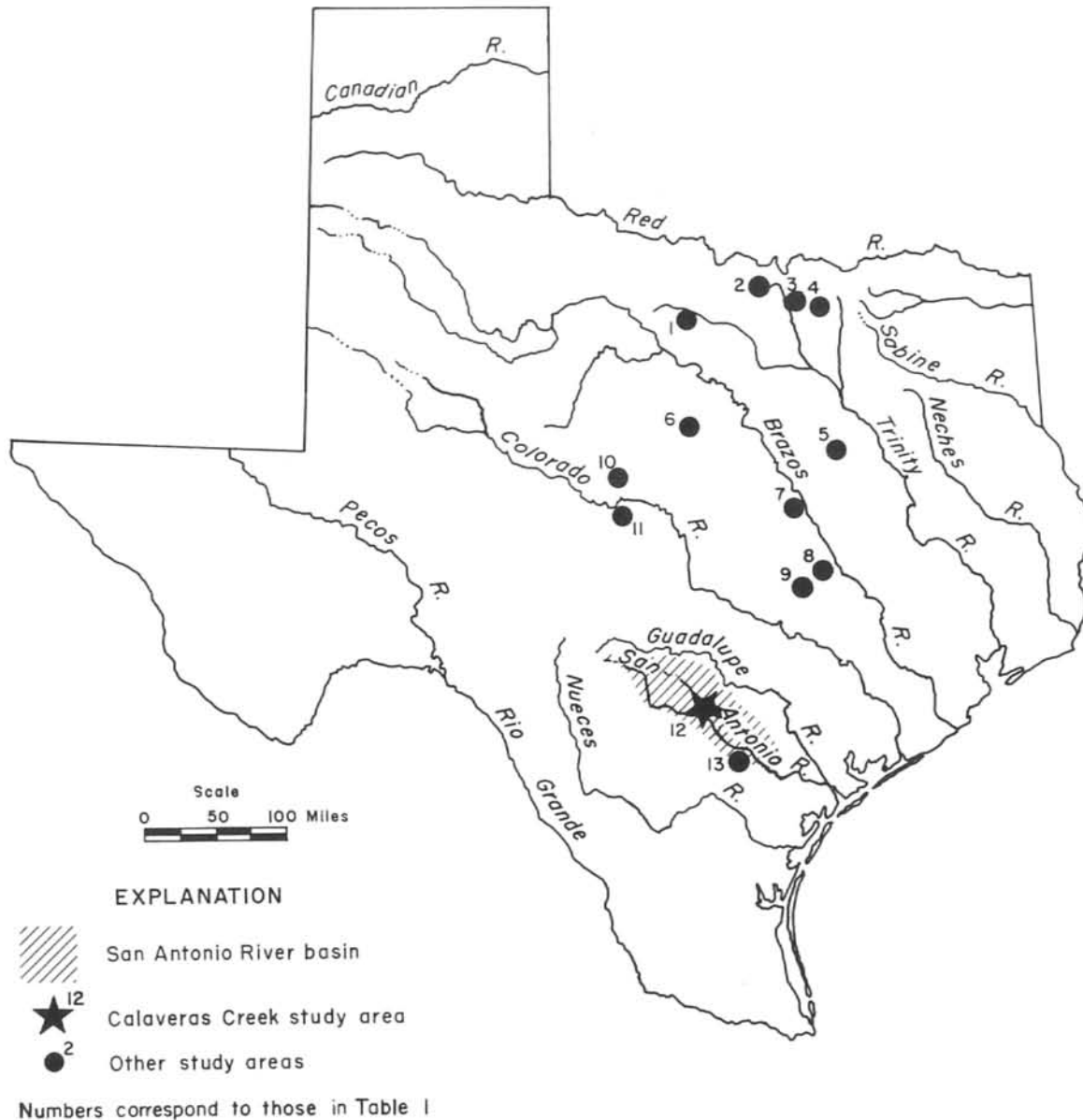


Figure 2.—Locations of Calaveras Creek and Other Small Watershed Study Areas in Texas

The choice of the areas to be studied was determined by their different conditions of rainfall, topography, geology, and soils. Hydrologic data will be available for "before and after" analyses of streamflow and rainfall records in six of the areas. A summary of the development of floodwater-retarding structures on each rural area as of September 30, 1968, is shown in Table 1. Basic data are also being collected on small urban areas in Austin, Bryan, Dallas, Houston and San Antonio.

The purpose of these small-watershed investigations is to collect sufficient data to meet the following objectives:

1. To determine the net effect of floodwater-retarding structures on the regimen of streamflow at downstream points.
2. To determine the effectiveness of the structures as ground-water recharge facilities.
3. To determine the effect of the structures on the sediment yield at downstream points.
4. To develop relationships between maximum rates and (or) volumes of runoff with rainfall in small natural watersheds.

Table 1.—Small Watershed Study Areas in Texas as of September 30, 1968

<u>STUDY AREA NO.</u>	<u>WATERSHED</u>	<u>DRAINAGE AREA ABOVE STREAM-GAGING STATION (SQ. MI.)</u>	<u>DATE HYDROLOGIC-DATA COLLECTION BEGAN</u>	<u>FLOODWATER-RETARDING STRUCTURES ABOVE STREAM-GAGING STATION</u>	<u>PERIOD OF CONSTRUCTION</u>
<u>Trinity River basin:</u>					
1	North Creek near Jacksboro	21.6	Aug. 1956	0	—
2	Elm Fork Trinity River near Muenster	46.0	July 1956	14	1954-57, 63
3	Little Elm Creek near Aubrey	75.5	June 1956	8	1966
4	Honey Creek near McKinney	39.0	July 1951	12	1951-57
5	Pin Oak Creek near Hubbard	17.6	Sept. 1956	6	1962-63, 65
<u>Brazos River basin:</u>					
6	Green Creek near Alexander	46.1	Oct. 1954	8	1954-56
7	Cow Bayou near Mooreville	85.0	Sept. 1954	26	1955-58, 64-65
8	1/2 Little Pond Creek at Burlington	22.2	Oct. 1962	0	—
9	1/2 North Elm Creek near Cameron	48.6	Oct. 1962	0	—
<u>Colorado River basin:</u>					
10	Mukewater Creek near Trickham	70.0	Aug. 1951	6	1961-62, 65
11	Deep Creek study area:				
	Deep Creek near Mercury	43.9	June 1951	5	1951-53
	Dry Prong Deep Creek near Mercury	8.31	June 1951	1	1951
<u>San Antonio River basin:</u>					
12	Calaveras Creek near Elmendorf	77.2	Aug. 1954	9	1954-59
13	Escondido Creek study area:				
	Escondido Creek at Kenedy	72.4	July 1954	10	1954-58
	Escondido Creek subwatershed No. 11 (Dry Escondido Creek) near Kenedy	8.43	Jan. 1 1958	1	1958

1/2 Adjacent watersheds; considered to be one study area.

5. To develop a stream-system model for basins with floodwater-retarding structures.

6. To determine the minimum instrumentation necessary for estimating the flood hydrographs below a system of structures, as needed for downstream water-management operation.

This is the tenth in the series of evaluation reports on hydrologic studies of rural small watersheds in Texas. Previous reports are as follows:

1. Cow Bayou (Mills, 1969).
2. Deep Creek (Mills and others, 1965).
3. Elm Fork Trinity River (Gilbert and others, 1962).
4. Escondido Creek (Kennon and others, 1967).
5. Honey Creek (Gilbert and others, 1964).
6. Little Elm Creek (Schroeder, 1966).
7. Mukewater Creek (Sauer, 1965).
8. Pin Oak Creek (Smith and Welborn, 1967).
9. Green Creek (Hampton, 1970).

### **Purpose and Scope**

The purpose of this report is to present hydrologic information about the developed Calaveras Creek watershed during the period 1955-68.

In presenting this hydrologic information, objectives 1, 2, 3, 4, and 6 (pp. 4 and 6) of the statewide investigations are discussed or reported upon. The analytical techniques used to accomplish these five objectives (numbered sequentially), are as follows:

1. A flow duration analysis, a flood-frequency analysis, a unit hydrograph analysis, and a water-budget analysis.
2. The effect of the floodwater-retarding structures on ground water is discussed, based on four years of ground water well records.
3. An evaluation of the amount of sediment deposited behind a floodwater-retarding structure, and a brief discussion of trap efficiency (see section on Water Quality).
4. A graphical multiple correlation relating rainfall to runoff.

5. A unit-hydrograph analysis.

6. A rain-gage density study.

### **Acknowledgments**

The San Antonio River Authority and Texas Water Development Board cooperated with the Geological Survey in the data-collection program.

The Soil Conservation Service provided information on pool capacity, physical and geologic characteristics of the watershed, climate, weekly records of rainfall and pool-gage heights, and sediment data.

## **DESCRIPTION OF THE WATERSHED**

### **Geography, Topography, and Climate**

Calaveras Creek originates about 4 miles east of suburban San Antonio in Bexar County (Figure 3). The stream flows southeastward for approximately 23 miles where it discharges into the San Antonio River in Wilson County. Calaveras Creek drains an area of 94.3 square miles.

This report is concerned with the part of the watershed above the stream-gaging station located on the main channel 2.5 miles east of Elmendorf. The drainage area above the stream-gaging station is 77.2 square miles or 82 percent of the total drainage area.

Altitudes range from 360 feet above mean sea level at the mouth of Calaveras Creek to 700 feet on the divide above site 3 (Table 2, Figure 3). Local relief varies from 30 feet to about 120 feet.

Stream channels in the central and lower reaches are 150 to 350 feet wide with banks 10 to 30 feet high. In the upper reaches, the channels average 50 feet in width with about 10-foot banks. Flood plains in the upper reaches are about 1,500 feet wide, gradually increasing to about 3,000 feet in the lower reaches. Calaveras Creek is approximately 23 miles long, and the average channel gradient is about 15 feet per mile.

The three principal tributaries of Calaveras Creek in the study area are Hondo, Chupaderas, and Parita Creeks. Gradients of the tributaries above the floodwater-retarding structures vary from about 69 feet per mile to about 24 feet per mile, the average being 42 feet per mile or approximately 3 times the average gradient of the main channel. The channel gradients as obtained from U.S. Geological Survey topographic maps are given in Table 2.

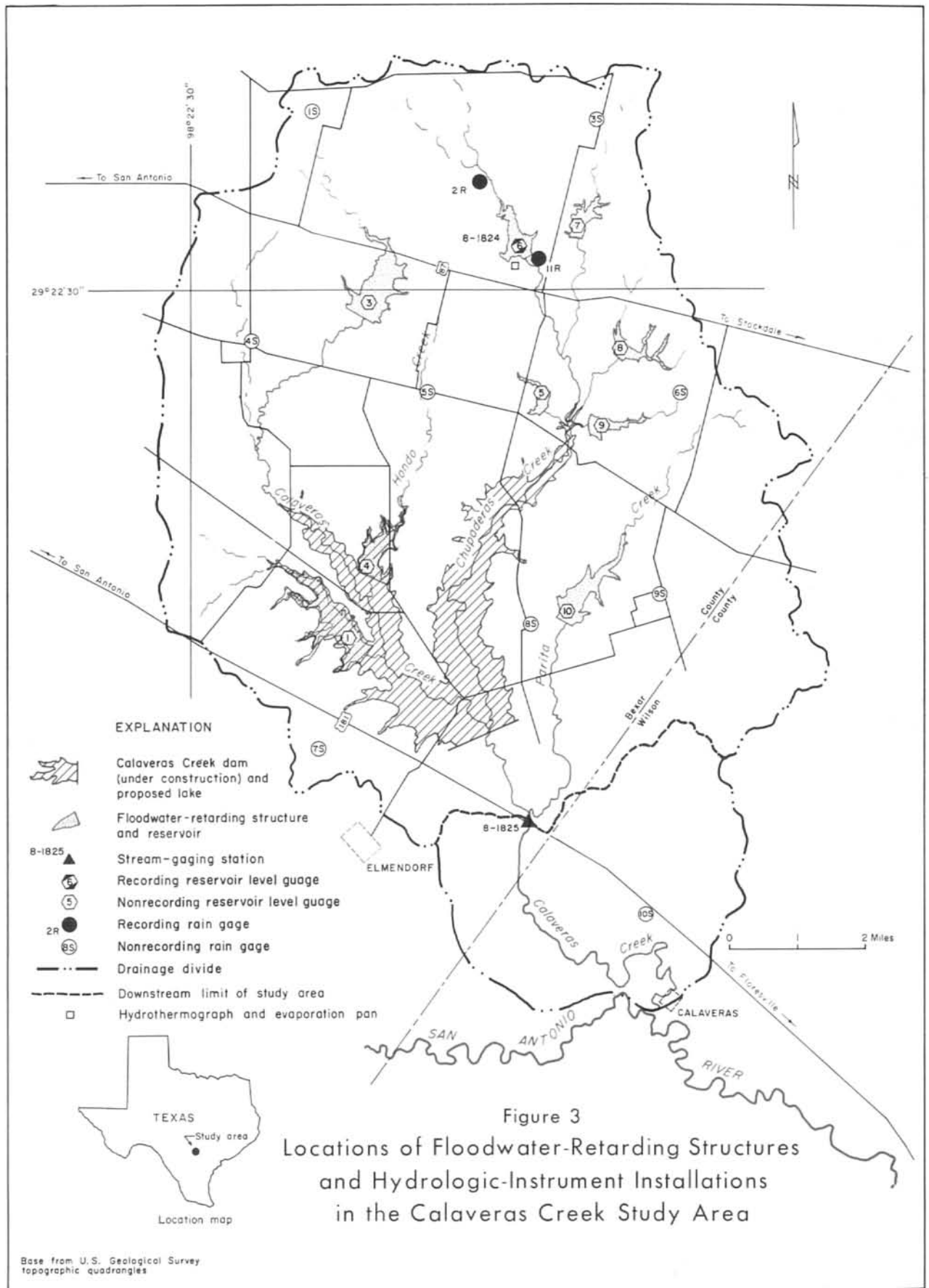


Table 2.—Elevations and Channel Gradients in the Calaveras Creek Watershed

STREAM NAME	STREAM SEGMENT ABOVE FLOODWATER-RETARDING-STRUCTURE NO.	MEAN SEA LEVEL ELEVATION		CHANGE IN ELEVATION (FT)	CHANNEL LENGTH (MI)	AVERAGE GRADIENT (FT/MI)
		AT UPPER END (FT)	AT STRUCTURE (FT)			
Calaveras Creek	1	590	450	140	3.5	40.0
Calaveras Creek tributary	3	700	555	145	4.0	36.2
Hondo Creek	4	600	460	140	4.8	29.2
Chupaderas Creek tributary	5	600	495	105	2.0	52.5
Chupaderas Creek	6	690	525	165	3.9	42.3
Chupaderas Creek tributary	7	620	525	95	3.7	25.7
Chupaderas Creek tributary	8	600	510	90	1.3	69.2
Chupaderas Creek tributary	9	620	490	130	2.2	59.1
Parita Creek	10	620	475	145	6.0	24.2
Weighted average of tributaries						36.8
Average gradient of tributaries						42.0
Calaveras Creek (main channel)		700	360	340	23.0	14.8

The climate of the study area is temperate and subhumid, characterized by long hot summers and short mild winters. Rainfall in the watershed occurs from various types of storms. Long-duration, low-intensity storms, resulting from southward moving continental polar fronts, are common during the fall and winter. Squall-line thunderstorms occur mostly during the period from April to September. Some of the heaviest rainfall occurs in late summer and early fall as a result of hurricanes moving inland from the Gulf of Mexico. Excessive rainfall causing serious flood and sediment damage may occur during any season, but is most frequent in the spring.

The long-term normal annual (a 30-year period from 1931 through 1960) precipitation at the U.S. Weather Bureau station at San Antonio is 27.84 inches. Rainfall is fairly well distributed, with the wettest months being May and September. During the period covered by this report (1954-68 calendar years), the range in annual precipitation at San Antonio was from 13.70 inches in 1954 to 48.83 inches in 1957. The mean annual precipitation for the period was 27.15 inches.

The maximum rainfall recorded during any 1-month period during the 95 years of record at San Antonio was 15.78 inches in September 1946. The maximum monthly rainfall at Floresville during 50 years of record was 11.53 inches in October 1960. The study area is about 13 miles northwest of Floresville and about 12 miles southeast of the center of San Antonio.

The mean annual temperature is about 69°F, but extremes ranging from 107°F to 0°F have been

recorded. The average growing season is 280 days, extending from February 23 to November 30.

### Geology

The geologic units exposed in the Calaveras Creek watershed are the Wills Point Formation of Paleocene age and the Wilcox Group and Carrizo Sand of Eocene age (Figure 4).

The Wills Point Formation is mainly sandy clay containing many sandy or limy concretions ranging from an inch to several feet in diameter. The clay is generally greenish-gray and weathers yellow-brown. The formation is about 400 feet thick, relatively impervious, and is not known to yield water to wells in Bexar County. However, small amounts of water may be absorbed and transmitted along fault planes. Some seepage may occur in this manner from the floodwater-retarding reservoirs at sites 3 and 6 (Figure 4).

Approximately two-thirds of the watershed is underlain by extensively faulted beds of the Wilcox Group, which is composed of relatively thin-bedded sand, sandstone, sandy shale, clay lentils, and thin beds of lignite. Some concretions of limestone and sand are present; but are not as large nor abundant as those found in the Wills Point. The average thickness of the Wilcox is about 900 feet; displacements along the fault zones are as much as 500 feet.

Water may enter the Wilcox directly from rainfall on the outcrop, from streamflow, or by downward

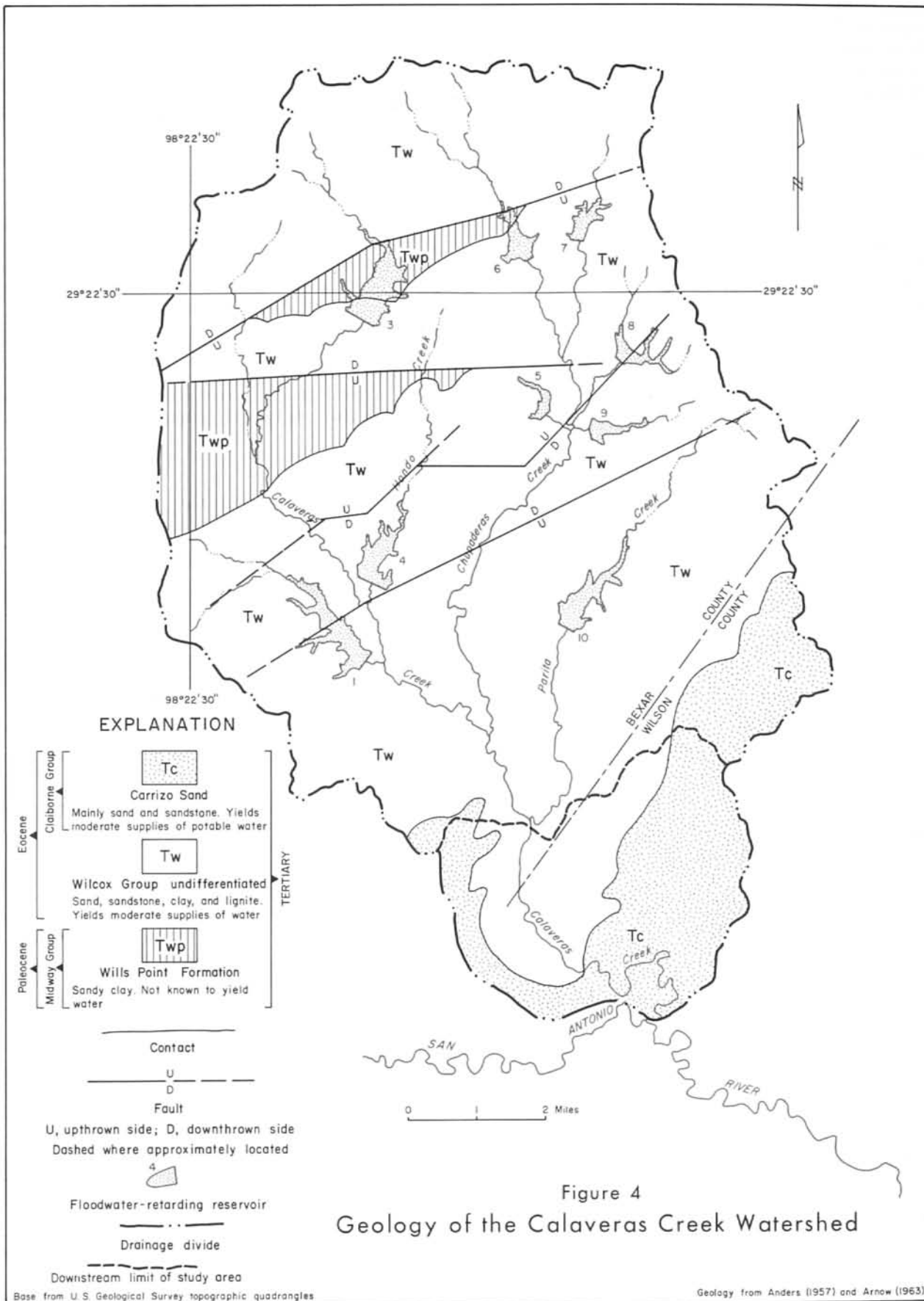


Figure 4  
 Geology of the Calaveras Creek Watershed

seepage of water from the floodwater-retarding reservoirs. The water table is below the lowest level of the streams, therefore, there is no base flow. All of the floodwater-retarding structures are underlain by beds of the Wilcox.

The Carrizo Sand, which unconformably overlies the Wilcox Group, crops out in the extreme southern tip of the Calaveras Creek watershed. In the area of outcrop, the Carrizo is composed of massive beds of fine to coarse, loose, cross-bedded sand with some thin beds of sandstone, silt, clay, and shale. The maximum thickness of the unit is about 600 feet. None of the floodwater-retarding structures are located on this formation.

The general distribution and description of the soil units in the Calaveras Creek watershed is shown on Figure 5 (Taylor and others, 1966). The predominant

series are the Crockett, Eufaula, Hockley, San Antonio, and Webb.

## WATER-CONSERVATION AND LAND-TREATMENT MEASURES

### Land Use and Management

The economy of the area is basically agricultural, with some oil and gas production. Truck crops and beef cattle are the major farm products. Some pasture lands, especially the open pasture and former cultivated lands, have been continuously overgrazed and are subject to moderately severe erosion.

The changes in land use shown in Table 3 are a result of the increased participation by individual land owners in land-management practices during the period 1954-65.

**Table 3.—Land Usage as Reflected by Land-Management Practices in the Calaveras Creek Watershed, 1954 and 1965 <sup>1/</sup>**

LAND USE	DECEMBER 1954		DECEMBER 1965	
	ACRES	PERCENT	ACRES	PERCENT
<b>Subwatershed No. 6</b>				
Cropland	1,686	37	1,670	37
Pastureland and hayland	190	4	1,520	34
Rangeland (native vegetation)	2,300	51	631	14
Irrigated land	0	0	0	0
Potential surface-water detention area	10	2	215	5
Miscellaneous uses: suburban, recreation, wildlife, roads, etc.	300	6	450	10
<b>Subwatershed totals</b>	<b>4,486</b>	<b>100</b>	<b>4,486</b>	<b>100</b>
<b>Entire watershed</b>				
Cropland	22,887	38	22,224	37
Pastureland and hayland	30,980	51	19,145	32
Rangeland (native vegetation)	5,200	9	5,200	9
Irrigated land	0	0	23	0
Potential surface-water detention area	75	0	12,300	20
Miscellaneous uses: suburban, recreation, wildlife, roads, etc.	1,210	2	1,460	2
<b>Watershed totals</b>	<b>60,352</b>	<b>100</b>	<b>60,352</b>	<b>100</b>

<sup>1/</sup> Data provided by U.S. Soil Conservation Service.



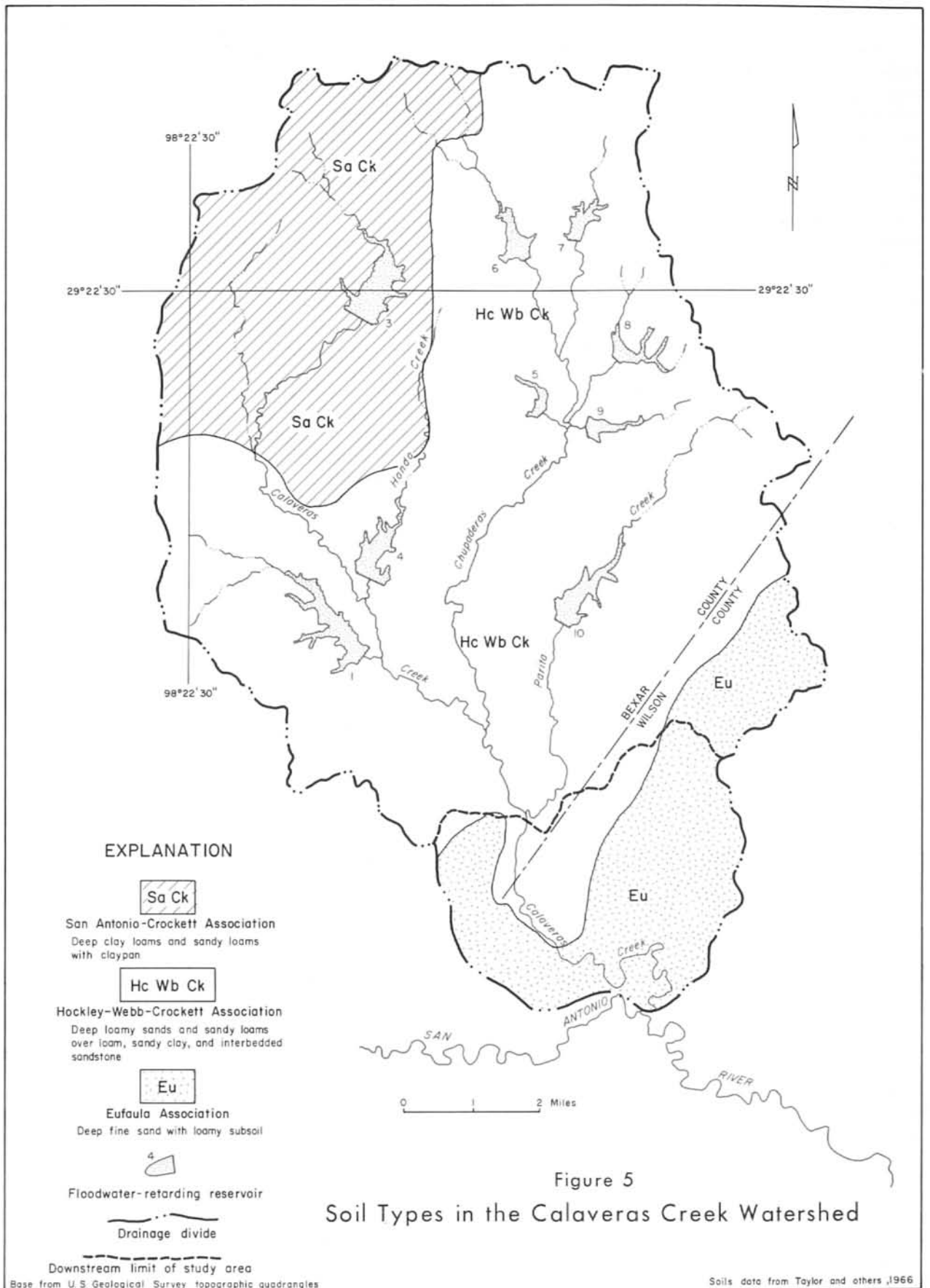


Figure 5  
Soil Types in the Calaveras Creek Watershed

## Farm Ponds

Farm ponds of various sizes, but usually much smaller than the floodwater-retarding reservoirs, have been built throughout the study area. These ponds undoubtedly affect the rainfall-runoff relationship to some extent, but because most of them were built prior to the construction of the reservoirs, their effects, with one exception, are not considered significant for the purposes of this report. One pond on Hondo Creek, just upstream from site 4, has a storage capacity of 152 acre-feet. This pond does reduce runoff into site 4 during the drier periods. Table 4 shows the results of a Soil Conservation Service farm pond survey in February 1960.

Table 4.—Farm Ponds in the Calaveras Creek Watershed <sup>1/</sup>

SITE NO.	NUMBER OF UPSTREAM PONDS	POND DATA	
		SURFACE AREA (ACRES)	CAPACITY (ACRE-FEET)
1	25	33.2	150.9
3	13	6.0	24.3
4	14	35.7	224
5	5	5.1	29.8
6	25	44.0	146.3
7	3	1.2	4.4
8	7	3.6	11.5
9	2	1.6	7.0
10	12	9.1	47.1
Uncontrolled <sup>2/</sup>	97	121.2	438.8
Stream-gaging station (8-1825)	203	260.7	1,084.1

<sup>1/</sup> Data for this table furnished by Soil Conservation Service from survey in February 1960.

<sup>2/</sup> Area downstream from all sites and upstream from the stream-gaging station.

## Floodwater-Retarding Structures

A program of land improvement by construction of floodwater-retarding structures and land-management practices was designed and supervised by the Soil Conservation Service. Nine of these structures were built in the watershed (Figure 3) during the period 1954-58. These nine floodwater-retarding structures have a capacity of 12,300 acre-feet of which 10,900 acre-feet is floodwater-retarding capacity. The structures partly control runoff from 48 percent of the drainage area (37.1 square miles of the total 77.2 square miles) above the stream-gaging station Calaveras Creek near Elmendorf. Table 5 gives the pertinent physical data for each of the floodwater-retarding structures.

In addition to the Soil Conservation Service structures being built in the watershed, the city of San Antonio (Public Service Board) began construction in 1967 of a dam (Figure 3) to impound water for municipal supply and cooling purposes at a steam-generating plant.

## HYDROLOGIC-DATA COLLECTION

### Rainfall

Ten rain gages were installed in August 1954 in accordance with National Weather Service (NWS) procedure. The locations of the gages are shown on Figure 3. Rain gage 2-R is a NWS 8-inch recording gage and the others are NWS 8-inch nonrecording gages. Data from the recording rain gage at site 6 (11-R, installed August 13, 1958) was rarely used because of the uncertainty of tipping-bucket rain gage records. This gage has since been modified from a tipping-bucket type to a float type.

All rain gages were serviced and rainfall measured weekly by employees of the Soil Conservation Service. Weekly rainfall totals at the nonrecording gages were converted to storm rainfalls on the basis of recorded rainfall at gage 2-R. A tabulation of storm rainfall in the study area during the period 1955-68 is given in Table 15.

Annual rainfall for the period of study ranged from 40.41 inches in 1957 (12.57 inches greater than the 27.84-inch normal annual rainfall at San Antonio) to 12.39 inches in 1956 (15.45 inches less than the normal annual). Figure 6 shows a comparison of a 3-year moving average of annual rainfall for the Calaveras Creek watershed and a 3-year moving average for San Antonio. Figure 6 also illustrates that both wet and dry years were included in the period of study.

### Runoff

#### Runoff Above Floodwater-Retarding Reservoirs

Runoff to the floodwater-retarding reservoirs was volumetrically computed by using data from the pool-level gages. The floodwater-retarding structure at site 6 was completed in December 1956, and a continuous pool-level recorder was installed December 20, 1956. The contents were estimated for the period October 1 to December 19, 1956. Records at this site include water years 1957-68.

Floodwater-retarding structures at sites 1, 3-5, and 7-10 were completed during the period 1954-58, and staff gages were installed during the period 1955-59. Records for these sites include water years 1960-68.

Table 5.--Floodwater-Retarding Structure Data, Calaveras Creek Watershed

SITE NUMBER	DRAINAGE AREA (SQ. MI.)	DATE DAM COMPLETED	DATE GAGE ESTABLISHED	DATUM OF GAGE ABOVE MEAN SEA LEVEL	EMERGENCY SPILLWAY			DROP INLET		PORTHOLES			CONTROLLED OPENING		PIPE DIAMETER THROUGH DAM (IN)	RANGE OF STAFF GAGES (FT)
					NUMBER AND WIDTH (FT)	GAGE HEIGHT (FT)	CONTENT (AC-FT)	GAGE HEIGHT (FT)	POOL CONTENTS (AC-FT)	NUMBER AND SIZE (IN)	GAGE HEIGHT AT BOTTOM (FT)	POOL CONTENTS (AC-FT)	GAGE HEIGHT AT BOTTOM (FT)	POOL CONTENTS (AC-FT)		
1	5.48	June 17, 1958	Mar. 9, 1959 1/	452.0	1 300	32.0	1,800	18.0	269	1 15x15 Notch	16.6	196	9.5	14.0	17	7.8-37.3
3	5.43	Oct. 27, 1954	Mar. 3, 1955	557.0	2 240 160	Both 30.3	2,040	18.0	325	1 10" dia.	15.98	216	None	--	17	3.4-33.9
4	4.99	Feb. 4, 1955	Mar. 3, 1955	461.0	2 200, 200	Both 31.5	1,820	18.0	279	1 10x24	16.5	200	8.5	7.2	17	3.4-37.3
5	1.36	Sept. 9, 1954	Mar. 4, 1955	485.0	1 175	28.0	616	18.0	104	None	--	--	8.5	0 est	12	10.2-33.9
6	7.01	Dec. 15, 1956	Dec. 18, 1956	516.06	2 250, 250	34.3 34.5	1,710 1,750	18.0	91	4 8x8	14.8	44	8.52	9.4	17	6.8-40.7
7	2.83	Mar. 2, 1956	July 16, 1956	530.3	1 275	31.4	1,040	18.0	162	None	--	--	11.5	28.5	17	10.2-33.9
8	2.39	Sept. 27, 1954	Mar. 3, 1955	499.0	2 125, 125	Both 29.0	893	18.0	198	None	--	--	10.5	20.0	14	10.4-33.9
9	1.46	Sept. 14, 1955	July 16, 1956	488.0	1 200	28.0	538	18.0	107	None	--	--	9.5	2 est	22	6.8-30.5
10	6.12	June 17, 1958	Mar. 10, 1959	473.3	1 350	30.9	1,870	18.0	334	1 10x22	15.7	199	4.5	4.8	17	4.2-33.9

1/ No record until October 1960.

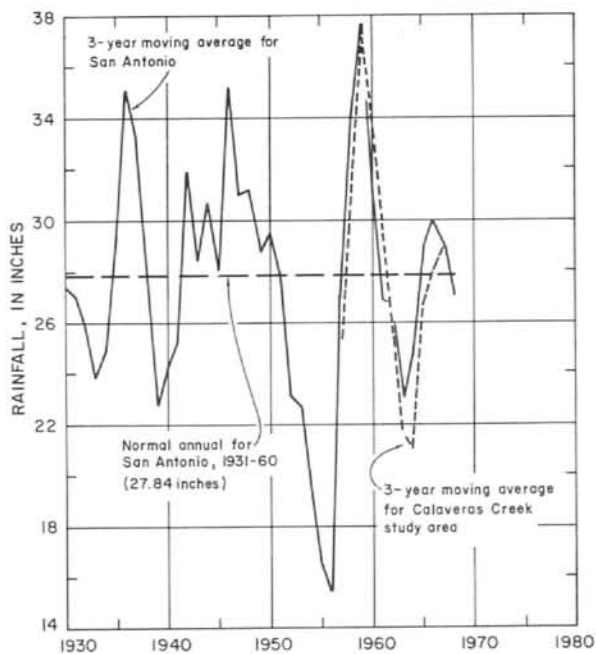


Figure 6.—Comparison of 3-Year Moving Average Rainfall at Calaveras Creek Study Area With the 3-Year Moving Average Rainfall at San Antonio, Texas

The volumetric computation of runoff requires a water-budget analysis, which is expressed by the equation:

$$Q_i = Q_o + C \pm \Delta S$$

where:  $Q_i$  is total inflow, including rainfall on the pool surface;

$Q_o$  is outflow through outlet works;

$C$  is pool consumption (evaporation, transpiration, and seepage); and

$\Delta S$  is the indicated change in pool contents.

The term  $Q_i$  is determined by measuring or estimating the right-hand terms of the equation.

The following sections describe the measurement and (or) computation of the factors of the water budget for the pools. Because total inflow ( $Q_i$ ) is computed from the other terms of the water-budget equation, they are discussed first. Although these terms are requisite to the computation of inflow to the reservoirs, they are also used later in defining the runoff-depletion effects of the reservoirs.

#### Outflow From Reservoirs

Stage-discharge rating curves were derived for the uncontrolled drop-inlet type principal spillways at all

sites. These ratings were drawn on the basis of current-meter measurements of the outflow made at various heads on the outlet structure. The hydraulic characteristics of this type of outlet afford a reliable rating as long as the outlet remains free of debris. Only minor difficulties were caused by debris during the period of study, and no flow over the emergency spillways occurred at any site during the period of record.

Outflow for site 6 was computed by obtaining daily gage heights from the recorder chart and applying them to the stage-discharge ratings. At the other eight sites where only weekly visits were made, daily gage heights were estimated from a graph based on weekly gage readings, peak marks, weather records, and the recorded graph at site 6. Estimated daily gage heights were then applied to the respective stage-discharge rating to obtain outflow for each of these eight sites.

Outflow obtained from the stage-discharge ratings for site 6 should be well within an accuracy range of 5 to 10 percent, while those obtained for the other 8 sites should be no more than 15 percent in error. These ratings apply only to the uncontrolled drop-inlets which discharge floodwater and do not include flow through controlled drains. Flow through the control drains (very infrequent) was computed from information in the engineer's field notes and from the additional loss in storage. Tables 16 and 17 show outflow from each structure by months and years, respectively.

#### Change in Reservoir Content

The change in reservoir content was computed for each site as a term in the water-budget equation. Pool stages for site 6 were picked from the recorder charts. For the other eight sites, pool stages were obtained from the estimated graph based on weekly pool-stage readings and crest-stage readings. These stages were then converted to contents in acre-feet by using stage-contents tables prepared for each site.

Area-capacity data for each site were furnished by the Soil Conservation Service. The tables represent the original pool contents, and no adjustment was made for reduction in storage from sediment deposition because most of the sediment was deposited below the stages used to compute most of the inflow to the pools.

Records were collected at each of the nine sites within a period ranging from 3 days to 28 months after the dam had been completed (see Table 5). The combined volume of the nine pools was 37 acre-feet at the beginning of the study period. During the period of study there was a net gain in pool storage of 332 acre-feet, resulting in a total pool storage of 369 acre-feet on September 30, 1968.

### Pool Consumption

Total pool consumption was divided into two components: Lake evaporation and other consumption (transpiration and seepage). Total consumption, in feet, was appropriately determined by two methods: (1) By determining total pool recession during periods of no inflow and no outflow ( $C = \Delta S$ ); and (2) by determining each of the components separately and summing them.

Pool evaporation, in feet, was computed by the Texas Water Rights Commission by using a method patterned after Kohler, Nordenson, and Baker (1959). Other consumption was determined by two methods: (1) By subtracting evaporation from total consumption for the months of no inflow or outflow; and (2) by using a monthly average value obtained from a plot of data from the first method.

Total consumption in acre-feet was then computed by multiplying the monthly mean-surface area by consumption in feet. Tables 16 and 17 show monthly and yearly, respectively, pool consumption at each of the reservoirs.

A recording hydrothermograph and a Young screened evaporation pan was installed by the Texas Water Development Board within one-quarter mile of site 6 on March 2, 1964. These instruments were still in operation September 30, 1968. Recording thermographs for air and water temperature, and a recording anemometer for wind velocity were operated by the Geological Survey at site 6 from March 13, 1963 to

October 7, 1965. Data from these instruments were not used in this study, but were used by the Texas Water Rights Commission in verifying results from the previously mentioned method of determining evaporation.

### Inflow to Reservoir

Total inflow into the pool ( $Q_i$ ) was computed for each site by substituting the values of outflow, change in reservoir content, and pool consumption in the water-budget equation. Total inflow ( $Q_i$ ), as computed from the equation, represents all water that enters the pool in any form, including rainfall on the pool surface.

Inflow to the reservoirs were adjusted for the effect of rainfall on the pools by using the following relation:

$$Q_a = Q_i - R_p$$

Where:  $Q_a$  is runoff from the area above the reservoir in acre-feet;

$Q_i$  is the total reservoir inflow, in acre-feet (including rainfall on the pool); and

$R_p$  is rainfall on the pool, in acre-feet.

A summary of the water-budget factors is given in Table 6. Monthly and yearly amounts of rainfall on the pools, total inflow, and runoff from the area above each reservoir are given in Tables 16 and 17, respectively.

Table 6.—Summary of Water-Budget Factors for Pools, Water Years 1955-68

SITE	DRAINAGE AREA (SQ. MI.)	YEARS OF RECORD	POOL CONSUMPTION IN	POOL OUTFLOW IN	TOTAL POOL INFLOW	RAIN-FALL ON POOL IN	NATURAL RUNOFF FOR INDICATED YEARS OF RECORD	RAINFALL IN	RUNOFF-RAINFALL RATIO IN PERCENT	
			ACRE-FEET (C)	ACRE-FEET ( $Q_o$ )	IN ACRE-FEET ( $Q_i$ )	ACRE-FEET ( $R_p$ )	ACRE-FEET INCHES ( $Q_a$ )	INCHES		
1	5.48	8.0	1,326	1,262	2,586	350	2,236	7.63	230.83	3
3	5.43	13.6	3,241	6,714	10,153	914	9,239	31.88	377.37	8
4	4.99	13.6	3,920	6,329	10,262	982	9,280	34.91	374.72	9
5	1.36	13.6	1,668	1,840	3,543	475	3,068	42.31	384.51	11
6	7.01	11.8	1,150	11,994	13,162	375	12,787	34.16	330.81	10
7	2.83	12.2	2,946	5,600	8,521	751	7,770	51.45	352.32	15
8	2.33	13.6	3,883	4,462	8,391	1,035	7,356	57.67	389.56	15
9	1.46	12.2	1,574	1,470	3,094	549	2,545	32.68	372.95	9
10	6.12	9.6	3,807	4,028	7,832	969	6,863	21.01	474.79	4

## Runoff From Study Area

Runoff from the entire 77.2-square-mile study area was determined from a continuous record of stage and a well-defined relationship between stage and discharge. The stage-discharge relation was defined by 199 current-meter discharge measurements and numerous observations of "no flow" during the period August 20, 1954 to September 30, 1968. The location of the gaging station is shown on Figure 3, and the degree to which the drainage area was controlled by floodwater-retarding structures is shown in Table 5.

Streamflow records for the gaging station Calaveras Creek near Elmendorf have been published annually by the Geological Survey in the Water-Supply Paper series prior to October 1960 and thereafter in the State report series (Surface Water Records of Texas). Monthly and yearly values of runoff at this station are given herein in Tables 16 and 17.

During the period March 1955 to September 1968, runoff at the gaging station was 25.86 inches while

rainfall on the drainage area was 380.16 inches. The time distribution of the runoff is illustrated on Figure 7, which also shows the amount of runoff from the area controlled by the floodwater-retarding structures.

## Runoff Summary

Water budgets for all nine of the floodwater-retarding reservoirs in the Calaveras Creek study area were obtained for the period October 1960 to September 1968. These data, taken from Table 17, are summarized in Table 7.

It can be determined from data in Table 7 that the structures passed as outflow the equivalent of 58 percent of the total inflow. Although the data indicate that the actions of evaporation, transpiration, and seepage will consume 42 percent of the total inflow to the structures in the average year, there is no known way of determining how much of this would have been consumed if the structures had not been built.

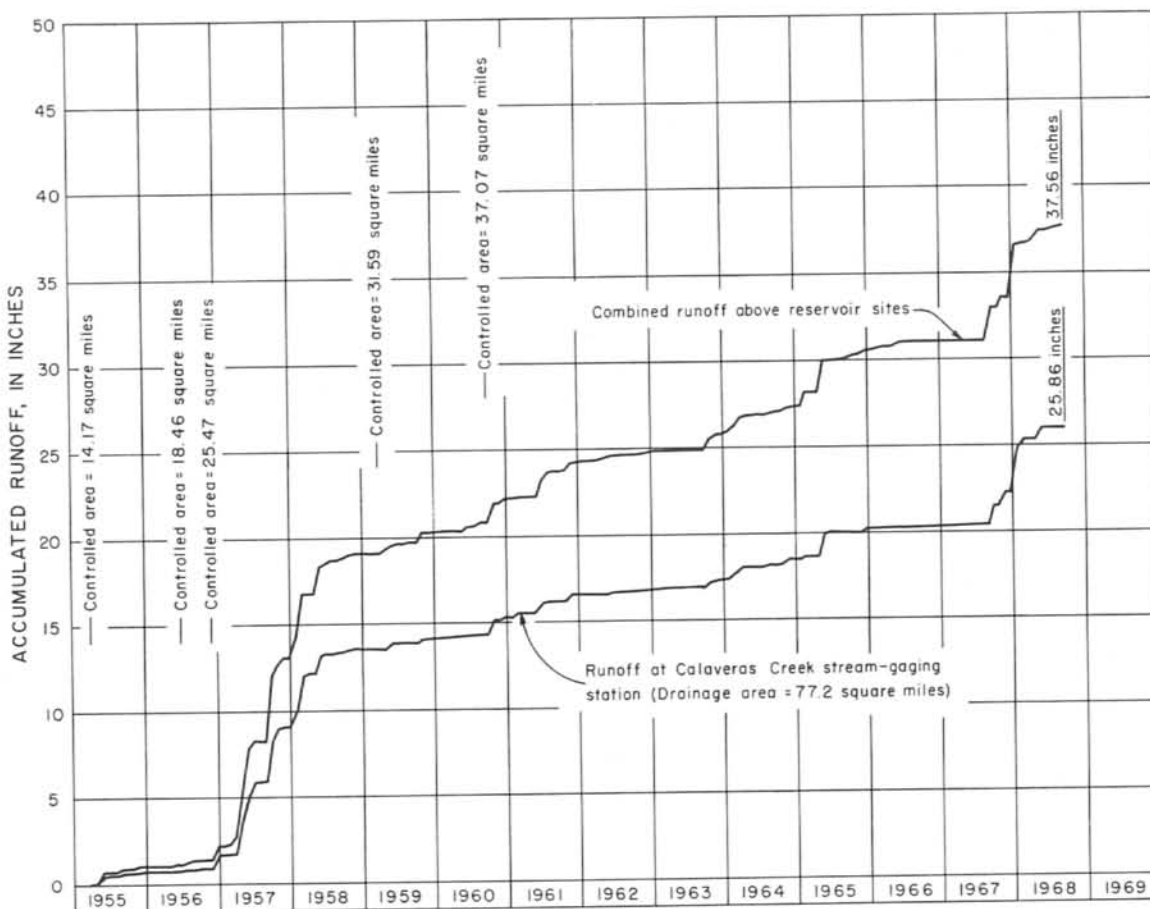


Figure 7.—Mass Diagram of Accumulated Runoff From Drainage Area Above All Reservoir Sites and Above the Stream-Gaging Station, March 1955 to September 1968

Table 7.—Hydrologic-Data Summary for Study Area, Water Years 1961-68

WATER YEAR	FLOW FROM AREA ABOVE STATION 1/		RAINFALL ON POOLS (AC-FT)	OUTFLOW FROM POOLS 2/ (AC-FT)	POOL CONSUMPTION		OUTFLOW FROM STUDY AREA		RAINFALL IN INCHES	
	(AC-FT)	(INCHES)			VOLUME (AC-FT)	RATIO TO TOTAL INFLOW 3/ (PERCENT)	(AC-FT)	(INCHES)	ABOVE STRUCTURES	STUDY AREA
1961	5,850	2.96	684	3,512	2,450	37	7,880	1.89	34.51	34.68
1962	1,765	.89	420	561	2,194	100	1,990	.47	21.32	21.47
1963	588	.28	121	43	932	131	661	.16	14.31	14.65
1964	4,118	2.09	474	2,062	2,198	48	5,400	1.30	27.80	28.17
1965	6,081	3.08	650	4,032	2,535	38	7,650	1.83	30.54	30.42
1966	1,913	.97	653	508	2,089	81	1,150	.28	33.70	33.65
1967	3,631	1.83	117	1,930	691	18	5,130	1.22	20.74	21.61
1968	9,326	4.75	907	8,979	2,512	25	18,220	4.41	36.74	36.98
Totals	33,272	16.85	4,026	21,627	15,601	—	48,081	11.56	219.66	221.63
Average annual	4,159	2.11	503	2,703	1,950	42	6,010	1.45	27.46	27.70

1/ Does not include rainfall on pool surface.

2/ Mostly uncontrolled outflow except as noted (see Table 16).

3/ Total inflow is equal to net inflow plus rainfall on pools.

4/ Controlled release.

NOTE: Controlled area = 37.1 square miles, study area = 77.2 square miles.

### Ground-Water Levels

Ground-water levels were measured in the study area to provide data for analyses of seepage from the reservoirs. Ground-water levels near site 6 were measured with a continuous water-stage recorder from November 1, 1955, to August 11, 1960. Water levels were measured at monthly intervals at six other wells in the vicinity of sites 6 and 7 during the period March 1955 to August 1960. The well near site 6 was drilled to a depth of 84.5 feet in sands of the lower Wilcox Group. Figure 8 shows the location of this well and the six wells that were measured each month. All the wells are less than 85 feet deep and are in the lower Wilcox Group.

Depth to water below the land surface in observation well G ranged from 35.2 feet in November and December 1956 to 30.1 feet in June 1960. The water level in observation well G gradually declined 0.8 foot from November 1955 through December 1956. A gradual rise of about 5 feet occurred from February 1957 through August 1960. All wells showed a similar gradual rise in water levels during this period.

Analyses of data collected in this study area fail to show a definite relationship between water impounded in the floodwater-retarding pools and the water table. Above normal rainfall on the outcrop area of the Wilcox Group during water years 1957-60 could account for the gradual rise in water levels. Estimated normal recharge to the Wilcox Group is about 1.5 inches annually. During

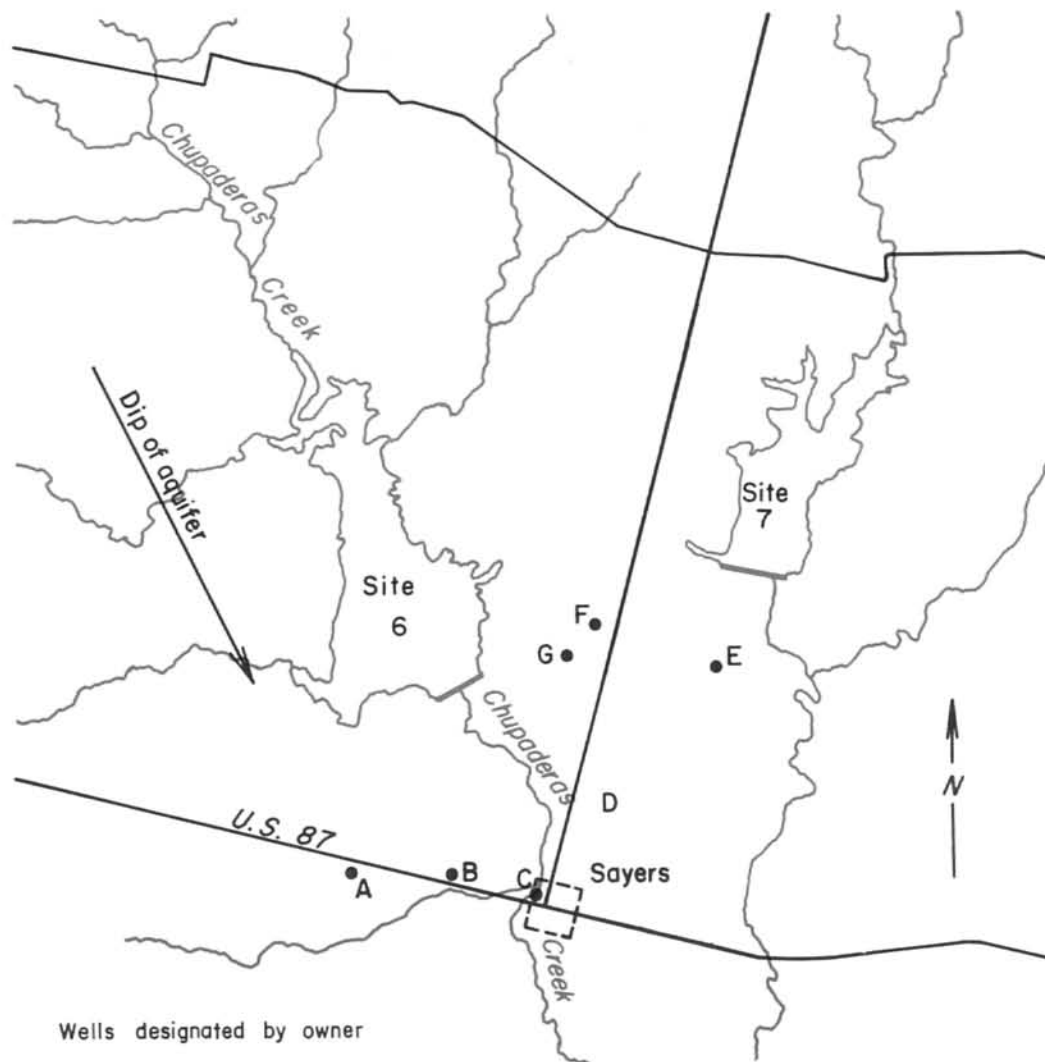
the years of 1957 and 1958 the recharge rate was probably greater.

Assuming a porosity of 20 percent for the lower part of the Wilcox, it would require 1.0 foot of rainfall recharge during the 4-year period (1957-60) to raise the ground-water level 5 feet. This would amount to 3 inches annually, which is about 10 percent of the average annual rainfall during this 4-year period.

During the period 1957-60, evapotranspiration and seepage from pools 6 and 7 averaged 412 acre-feet per year. Some of the seepage may have reached the water table. With the available observation wells and period of record, ground-water recharge from the floodwater-retarding pools could not be determined. However, considering the geologic and hydraulic properties of the lower part of the Wilcox, the relatively high potential evapotranspiration from the peripheral area of the pools, and the climatic change, it appears that ground-water recharge from the floodwater-retarding pool is insignificant and that most of the recharge was due to the increase in precipitation during this period of study.

### Water Quality

The chemical character of water determines its suitability for use and indicates its flocculating characteristics which affect the sediment trap efficiency



Wells designated by owner

- A. Troy Spivey
- B. Salem Cemetery
- C. Sayers' Mercantile Co.
- D. Jacob Gieniec
- E. Frank Jonietz
- F. Soil Conservation Service No. 4
- G. Soil Conservation Service No. 3 (Continuous recorder)

0 .5 mile

Figure 8  
 Locations of Ground-Water Observation Wells in  
 Calaveras Creek Subwatersheds 6 and 7



of the reservoirs. Low sodium concentration in proportion to calcium concentration aids flocculation of clay particles. Flocculation results in the formation of larger particles which settle to the bottom of a reservoir. Thus, a reservoir is a more efficient sediment trap if the water is low in sodium content.

Water samples for chemical analyses were collected from the outflow or pool at each floodwater-retarding structure on three occasions during period September 1962 to June 1967, and at the stream-gaging station on Calaveras Creek near Elmendorf on five occasions during the period April 1963 to May 1968.

Results of the chemical analyses of the samples are given in Table 8. These analyses are adequate to give a general indication of the chemical character of surface-water runoff from the study area.

The highest concentration of dissolved solids was 382 mg/l (milligrams per liter). Generally, the dissolved-solids concentration was less than 150 mg/l. Chloride concentrations ranged from 1.8 to 50 mg/l, and sulfate concentrations ranged from 1.6 to 126 mg/l. Nitrate concentration ranged from 0.1 to 5.5 mg/l, and fluoride concentrations ranged from 0.1 to 0.7 mg/l.

A low sodium concentration and a low dissolved-solids concentration are important in irrigation water. These concentrations in the samples collected were low enough to classify the water as excellent for irrigation (U.S. Salinity Laboratory Staff, 1954).

Surface water in the Calaveras Creek study area is of very good quality, moderately hard (36-193 mg/l), and is chemically suitable for municipal and domestic supply and irrigation.

The low ratio of sodium to calcium in the water probably contributed to the sediment trap efficiency of the reservoirs; however, because suspended sediment loads were not determined, trap efficiency could not be determined. The Soil Conservation Service ran a sediment survey at site 6 on March 12, 1968. This survey covered the period of impoundment from December 12, 1956 to March 12, 1968. A very low average annual reservoir sedimentation value (0.26 acre-feet per square mile) was determined for this watershed. In spite of this low value, trap efficiency probably exceeds 90 percent. Therefore, the low rate of reservoir sedimentation indicates that the sediment yield from the watershed is very low.

## HYDROLOGIC-DATA ANALYSES

### Rain-Gage Density

The rain-gage density study consisted of comparing the mean or average storm rainfall as

indicated by various combinations of rain gages within the study area (Figure 3). Mills and others (1965), in a study of relative accuracy of the Thiessen (1911) weighting method and the averaging method found that the differences in areal rainfall computed by these methods were insignificant.

A "storm" is defined as a rainfall period which is separated from prior or subsequent rainfall by a minimum of six hours. Only those storms having an average of 0.40 inch or greater were used in this density analysis. There were 212 storms selected on this basis (Table 15).

The variability in areal distribution of storm rainfall for the Calaveras Creek watershed is evaluated by five graphical comparisons. In each of these comparisons, the average storm rainfall (arithmetic mean) for 10 rain gages (all except 11R) was plotted as the independent variable (abscissa). Average storm rainfall for the following combinations of gages was plotted as the dependent variable (ordinate): 2R; 1S, 2R, and 3S; 4S, 5S, and 6S; 7S, 8S, and 9S; and 1S, 5S, 8S, and 10S. This grouping of rain-gage combinations was designed to isolate the influence of storm movement.

For each graphical analysis (see Figure 9 for an example), the standard error of estimate was computed by using  $\pm$  one standard error and the equal-yield line as paralleling the curve of relation. A summary of the results of the study is given in Table 9.

In Figure 9, the deviation or scatter of points from the line of equal yield progressively lessens above 2.0 inches, indicating that the larger storms are more generally dispersed over the watershed than the smaller thunderstorms. Maximum deviation occurs when the average storm rainfall is less than about 1.0 inch. This scatter is expected because of the uneven areal distribution of rainfall from isolated fast-moving thunderstorms.

A rain-gage network consisting of gages 1S, 5S, 8S, and 10S would provide estimates of average storm rainfall for the study area within  $\pm$  percent of the true rainfall about two-thirds of the time. For those storms above about 2 inches, the error would be somewhat less. Because the time distribution of storm rainfall is necessary for many hydrologic analyses, one of the nonrecording gages should be replaced by a recording gage in the event the network is reduced.

### Magnitude and Frequency of Rainfall

Hershfield (1961) has compiled a rainfall-frequency atlas using data from a large number of National Weather Service stations. A rainfall magnitude-frequency relationship can be constructed from data in this atlas for any point within the United

Table 8.--Chemical Analyses of Surface Water in the Calaveras Creek Study Area, Water Years 1962-68  
(Results in Milligrams Per Liter Except as Indicated)

DATE OF COLLECTION	DISCHARGE (CFS)	SILICA (SiO <sub>2</sub> )	IRON (Fe)	CALCIUM (Ca)	MAGNESIUM (%)	SODIUM (Na)	POTASSIUM (K)	BICARBONATE (HCO <sub>3</sub> )	CARBONATE (CO <sub>3</sub> )	SULFATE (SO <sub>4</sub> )	CHLORIDE (Cl)	FLUORIDE (F)	NITRATE (NO <sub>3</sub> )	BORON (B)	DISSOLVED SOLIDS (CALCULATED)			HARDNESS AS CaCO <sub>3</sub>		SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	pH		
															MILLIGRAMS PER LITER (MG/L)	TONS PER ACRE-FOOT	TONS PER DAY	CALCIUM, MAGNESIUM	NON-CARBONATE				
Calaveras Creek Subwatershed No. 1																							
Sept. 6, 1962		2.6		14	4.2	11		82	0	1.6	4.8	0.4	0.2		79	0.11		52	0	0.7	14.9	6.7	
Feb. 23, 1965		4.7		14	2.9	3.5	6.5	65	0	4.4	3.0	.7	.2		71	.10		47	0	.2	129	6.5	
June 6, 1967		6.9		27	4.3	12		86	0	31	15		1.2		152	.21		85	15	.6	262	7.5	
Calaveras Creek Subwatershed No. 3																							
Sept. 6, 1962		3.3		19	5.7	16		106	0	3.8	10	--	0.2		110	0.15		71	0	0.8	207	6.8	
Feb. 23, 1965		4.1		26	3.2	4.3	5.8	104	0	4.8	3.3	0.3	1.2		104	.14		78	0	.2	192	7.4	
June 6, 1967		5.5		38	5.9	11	10	133	0	12	10	.7	3.2		171	.23		119	0	.4	302	7.9	
Calaveras Creek Subwatershed No. 4																							
Sept. 6, 1962		4.1		19	6.3	18		98	0	16	10	0.5	0.2		122	0.17		73	0	0.9	222	6.7	
Feb. 23, 1965		5.7		24	3.4	4.3	5.8	93	0	10	3.2	.3	.2		103	.14		74	0	.2	187	6.6	
June 6, 1967		1.8		40	8.2	12	16	122	0	38	24	.6	5.5		206	.28		134	34	.5	366	7.1	
Calaveras Creek Subwatershed No. 5																							
Sept. 6, 1962		8.2		22	3.7	10		84	0	16.0	4.2	0.5	0.2		106	0.14		70	1	0.5	180	6.7	
Feb. 23, 1965		5.2		21	2.1	2.5	4.6	72	0	9.4	1.8	.2	.5		82	.11		61	2	.1	147	7.4	
Calaveras Creek Subwatershed No. 6																							
Sept. 6, 1962		7.8		56	13	57		137	0	136	50	0.7	0.0		382a/	0.52		193	80	1.8	614	6.9	
Apr. 29, 1963		4.6		18	9.6	28		133	0	186	18	.5	.2		262	.36		164	55	1.0	437	6.9	
Mar. 1, 1965		6.8		24	2.9	4.6	5.2	87	0	19	2.7	.3	2.0		104	.14		72	1	.2	183	6.7	
Calaveras Creek Subwatershed No. 7																							
Sept. 6, 1962		5.9		25	3.8	4.6	6.6	94	0	8.4	5.5	0.5	1.5		108	0.15		78	1	0.2	186	6.6	
Feb. 23, 1965		7.8		16	2.0	2.2	4.7	64	0	2.4	2.0	.2	.2		68	.09		48	0	.1	119	6.7	
June 6, 1967		6.6		46	4.4	6.6	11	151	0	18	9.7	.6	3.2		180	.24		133	9	.2	307	8.0	
Calaveras Creek Subwatershed No. 8																							
Sept. 6, 1962		9.8		20	3.9	14		74	0	16	13	0.5	0.2		113	0.15		66	5	0.7	198	6.6	
Feb. 23, 1965		5.4		15	2.6	4.2	5.0	60	0	7.0	3.5	.3	1.5		74	.10		48	0	.3	131	7.2	
June 6, 1967		5.4		25	3.8	9.8	9.1	90	0	16	11	.6	3.2		128	.17		78	4	.5	222	7.6	
Calaveras Creek Subwatershed No. 9																							
Sept. 6, 1962		7.3		11	2.6	12		55	0	9.6	5.8	0.5	0.2		76	0.10		38	0	0.8	128	6.7	
Feb. 23, 1965		6.5		10	2.7	5.8	6.3	50	0	7.6	3.8	.1	.8		69	.09		36	0	.4	112	7.3	
June 6, 1967		7.0		19	4.7	11	8.7	90	0	12	7.4	.7	3.2		118	.16		67	0	.6	200	7.6	
Calaveras Creek Subwatershed No. 10																							
Sept. 6, 1962		8.0		31	4.3	11		126	0	6.4	5.0	0.4	0.0		128	0.17		95	0	0.5	226	7.0	
Feb. 23, 1965		5.2		22	2.7	3.9	6.1	86	0	3.2	7.4	.3	1.2		92	.13		66	0	.2	166	7.8	
June 6, 1967		5.3		35	4.0	7.1	9.6	130	0	12	7.0	.7	3.2		168	.20		104	0	.3	258	7.6	
Calaveras Creek																							
Apr. 5, 1963	23.5	6.2		24	2.4	3.9	6.7	76	0	13	5.1	0.4	1.2		101	0.14		70	7	0.2	172	6.4	
Sept. 13, 1965	63.9	8.5		39	3.6	11		126	0	22	5.1	.5	1.5		156	.21		112	9	.5	281	6.5	
Feb. 23, 1965	1.11	6.7		30	3.7	11	4.2	109	0	13	5.6	.3	.8		127	.17		90	1	.5	227	7.5	
May 18, 1965	1,340	8.2		32	2.7	2.8	4.2	116	0	4.8	2.6	.1	.2		115	.16		91	0	.1	203	6.6	
May 23, 1968	6.4	.6		27	4.2	21		74	0	32	16	.3	.4		166	.20		2.52	85	11	1.0	273	8.5

a/ Residue on evaporation at 180°C.

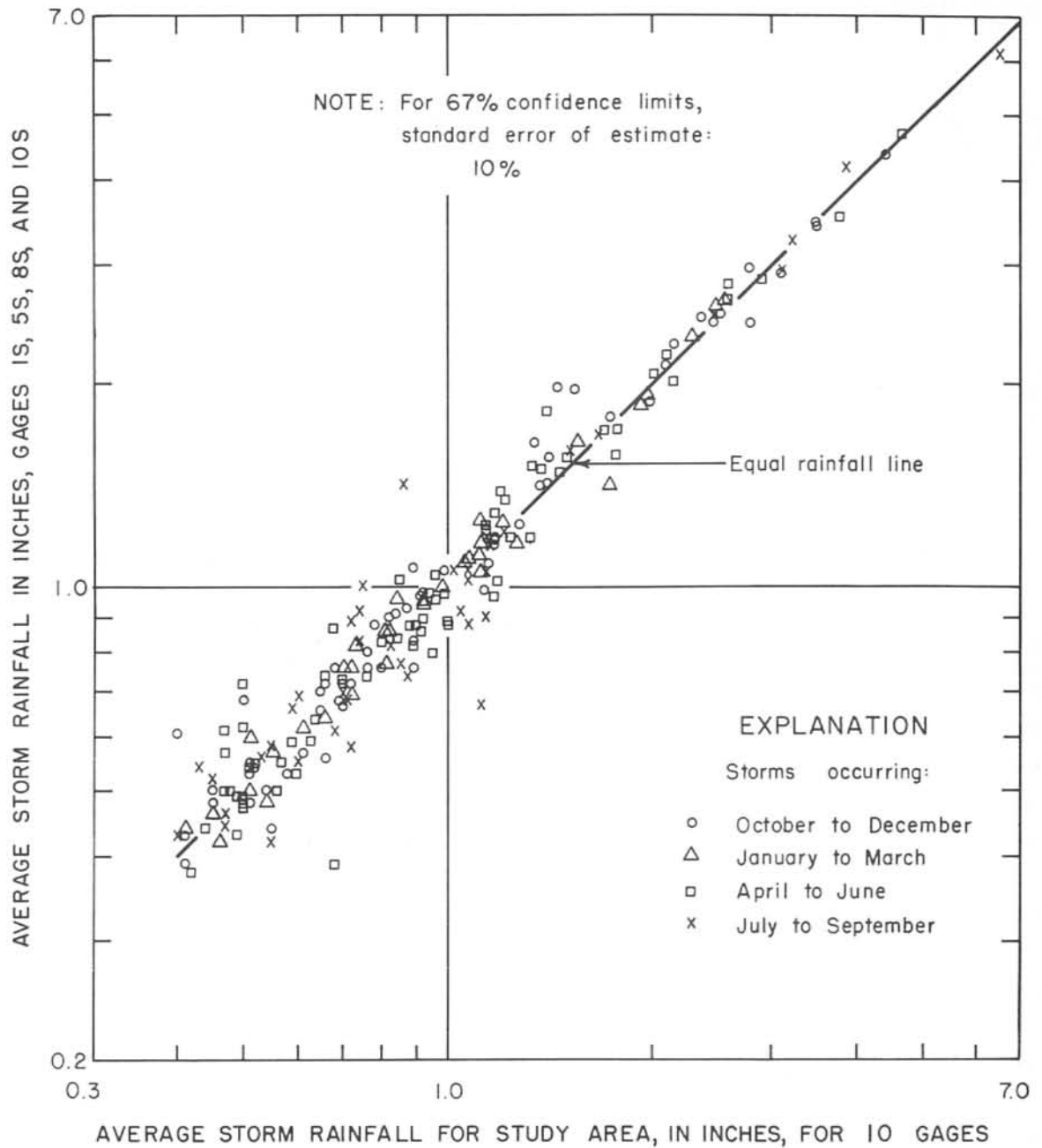


Figure 9.—Correlation of Concurrent Storm Rainfall, 4 Gages (15, 55, 85, and 105) and 10 Gages

States. The standard error of estimate is about 10 percent for a region of relatively low relief such as the Calaveras Creek study area.

Figure 10 shows the rainfall-frequency relationship for the Calaveras Creek study area as constructed from data in the rainfall-frequency atlas. This relationship shows the expected average maximum depth and frequency (recurrence interval) of storm rainfall for durations of 0.5, 1.0, 2.0, 3.0, 6.0, 12.0, and 24.0 hours. These curves can be used to estimate the recurrence

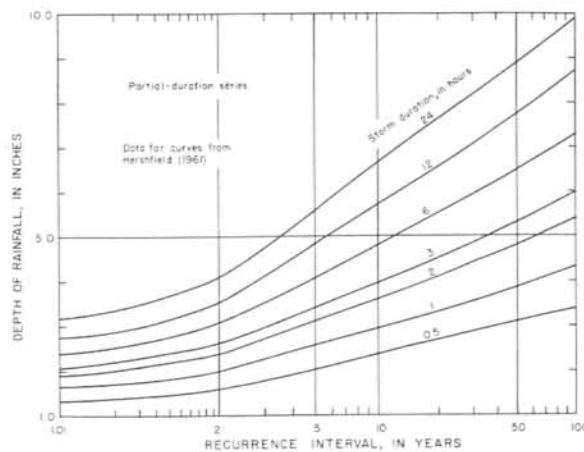
interval and storm rainfall increments expected in the study area. The values shown are based on the partial-duration series of frequency analysis.

An indication of the magnitude and frequency of storm rainfall experienced in the study area during 1955-68 is given in Table 10. Comparison of data in this table with that shown in Figure 10 indicates that no extremely large storm (more than 8 inches of rainfall) occurred during the period covered by this report. Moreover, the predominance of moderate storms

**Table 9.—Results of Rain-Gage Density Analysis, Calaveras Creek Study Area**

NO. OF GAGES	IDENTITY OF GAGES	ALIGNMENT OF GAGES	ERROR OF ESTIMATE $\checkmark$ (PERCENT)
1	2R		29
3	1S, 2R, 3S	east-west	22
3	4S, 5S, 6S	east-west	14
3	7S, 8S, 9S	east-west	16
4	1S, 5S, 8S, 10S	north-south	10

$\checkmark$  About two-thirds of the time the rainfall as measured by the network of gages shown in the first column will be within  $\pm$  the percent shown in the last column.



**Figure 10.—Rainfall Frequency Curves for the Calaveras Creek Study Area**

**Table 10.—Magnitude and Number of 24-Hour Storms in the Calaveras Creek Study Area, 1955-68**

PERIOD (CALENDAR YEAR)	AVERAGE ANNUAL RAINFALL (INCHES)	NUMBER OF STORMS DURING PERIOD WITH 24-HOUR RAINFALL TOTALS							TOTAL
		1-2 IN.	2-3 IN.	3-4 IN.	4-5 IN.	5-6 IN.	6-8 IN.	8 IN.	
1955	19.15	4	1	0	0	0	0	0	5
1956	15.42	2	0	1	0	0	0	0	3
1957	42.20	6	4	1	0	0	1	0	12
1958	38.24	8	3	1	0	0	0	0	12
1959	30.74	9	0	0	1	0	0	0	10
1960	33.11	4	2	1	1	0	0	0	8
1961	28.48	7	2	1	1	0	0	0	11
1962	16.76	4	0	0	0	0	0	0	4
1963	21.10	3	4	0	0	0	0	0	7
1964	26.20	6	3	0	0	0	0	0	9
1965	33.43	6	1	1	0	0	0	0	8
1966	28.32	3	0	0	0	0	0	0	3
1967	29.20	3	3	1	0	0	0	0	7
1968	37.37	4	4	1	0	0	0	0	9
<b>Total</b>		<b>69</b>	<b>27</b>	<b>8</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>108</b>

indicates that this period was below average for storm magnitude and frequency.

### Flood Frequency

Data on the magnitude and frequency of peak discharge from small drainage basins is required by those

responsible for the design of storm-drainage structures. Approximately 50 percent of the funds expended by the Texas Highway Department for culverts is spent in drainage basins of less than 100 square miles. Millions of dollars can be saved on these structures if reliable peak-discharge data are available for their design.

The 12 years of peak-discharge data (inflow) collected at subwatershed 6 affords a flood-frequency analysis for this 7.01-square-mile drainage basin. The annual-flood series (highest peak-discharge for year) was used with a log-Pearson Type III frequency distribution in the analysis. The annual peak discharges for water years 1957-68 are listed in Table 11, which also shows the probability of exceedance for each of the annual peaks. These values are computed from the equation:

$$P = \frac{m}{n+1}$$

where: P is probability of exceedance,

m is magnitude of flood, highest being 1

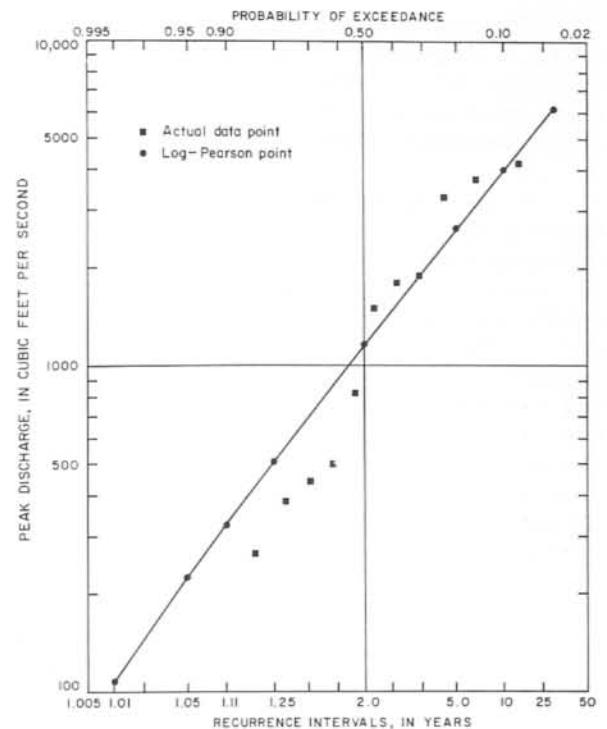
and, n is number of years of record.

The values of probability of exceedance by both methods and recurrence interval are plotted against peak discharge in Figure 11. Peak discharge for 1963 (13 cfs) was considered to be an extreme outlier and was not used with the log-Pearson distribution. Benson (1960) has shown that with 12 years of record, the 25-year flood can be defined within 25 percent at the 80 percent confidence level.

**Table 11.—Annual Peak Discharge (Inflow) for Calaveras Creek Subwatershed No. 6, Water Years 1957-68**

DATE OF PEAK	PEAK DISCHARGE (CFS)	PROBABILITY OF EXCEEDANCE
September 25, 1957	3,750	0.15
May 3, 1958	1,900	.31
April 11, 1959	266	.85
October 4, 1959	443	.69
June 18, 1961	827	.54
November 13, 1961	385	.77
April 4, 1963	13	.92
February 3, 1964	1,810	.38
May 18, 1965	3,330	.23
December 3, 1965	501	.62
September 22, 1967	1,500	.46
January 18, 1968	4,270	.08

The log-Pearson Type III distribution as derived has the following statistical parameters: Mean of logs = 3.065; standard deviation = 0.430 logs; skewness = 0.108 logs. The skewness indicates that the 11 years of data are



**Figure 11.—Flood-Frequency Curve for Calaveras Creek Subwatershed No. 6, Log-Pearson Type III Distribution, Water Years 1957-62, 64-68**

almost log-normally distributed. In the absence of regional flood studies involving small watersheds, the curve of Figure 11 should be useful.

A similar flood-frequency study was made for the streamflow station using 14 years of record (1955-68). A 25-year flood of 5,200 cfs was determined by the log-Pearson distribution method. A 25-year flood of 6,340 cfs for site 6 (drainage area 7.01 sq. mi.) as compared to a 25-year flood of 5,200 cfs from an area 11 times larger (77.2 sq. mi.) indicates a definite reduction in peaks because of the structures.

Patterson (1965) estimates a 25-year flood to be 9,600 cfs from a 77 square mile area similar to the Calaveras Creek watershed. Even allowing for a large error there is evidence of a significant reduction in peak flows due to the structures (about 4,000 cfs reduction or about 40 percent of 9,600 cfs).

### Unit Hydrograph

The runoff hydrograph for any storm is related to the duration and amount of runoff, the watershed topography, the drainage pattern, the valley and channel storage, and the time from the beginning of runoff until all parts of the watershed are contributing to the discharge at a given location.

The unit hydrograph, as defined by Sherman (1932), is a hydrologic tool which relates runoff to time. Fundamental concepts of the unit-hydrograph relationships are also presented by Hoyt and others (1936), and Mitchell (1948).

A storm-hydrograph study was made for the Calaveras Creek watershed to determine if unit hydrographs could be obtained. Storm hydrographs for 14 storms essentially meeting the unit-hydrograph criteria were selected for analyses. Of these selected storms, three were complex and necessitated the segregation of flow. The unit hydrographs were plotted and superimposed to illustrate the variation found in time of rise and peak discharge. Several storms, which had unit hydrographs well out of character with the 14 selected, were not used because of low runoff. Generally, less than 0.20 inches runoff will not fulfill surface detention abstractions.

#### Subwatershed No. 6

Figure 12 shows seven unit hydrographs for storms occurring on Calaveras Creek subwatershed No. 6 during this period of study. These storms and pertinent data for the derived hydrographs have been listed chronologically in Table 12 to facilitate identification and discussion.

The average intensity of rainfall for each storm was determined by dividing total rainfall by the time period during which the rainfall intensity equaled or exceeded 0.20 inch per hour, plus one-half of the time period during which the intensity was less than 0.20 inch per hour. Period of rise is defined as the time interval on the rising limb of the unit hydrograph between the minimum and maximum discharge. The time base is defined as the time interval during which direct storm runoff occurs.

**Table 12.—Storm Data and Unit-Hydrograph Characteristics for Selected Storms, Calaveras Creek Subwatershed No. 6**

STORM DESIGNATION	DATE OF STORM	AVERAGE INTENSITY OF RAINFALL (INCHES/HOUR)	STORM RUNOFF (INCHES)	UNIT HYDROGRAPH (CFS)	PERIOD OF RISE (HOURS)	DURATION OF RUNOFF (HOURS)
1	Sept. 25, 1957	0.50	2.56	1,460	3.0	15
2	Feb. 20-21, 1958	.21	1.02	1,320	5.5	14
3	May 2-3, 1958	.65	1.45	1,310	4.1	14
4	June 17-18, 1961	.21	.64	1,290	5.3	12
5	July 22-23, 1961	.23	.27	1,580	4.0	14
6	Nov. 13, 1961	.75	.35	1,110	3.5	15
7	Feb. 3-4, 1964	1.22	.61	2,960	1.5	10
A*	Average storm	—	—	1,340	4.2	14

\* Average unit hydrograph of storms 1 through 6.

Evidence of the variation in rainfall intensity and resulting runoff in this small watershed is shown on Figure 12 and in Table 12. All seven storms had appreciable depths of well-distributed rainfall in subwatershed 6. For storms 1 through 6, average rainfall intensity ranged from 0.21 to 0.75 inches per hour, and the runoff ranged from 0.27 to 2.56 inches. Variation in the time and magnitude of the individual unit-hydrograph peaks are evident. Adjustments of the hydrographs by the summation-curve (S-curve) procedure to obtain common hydrograph durations were not made because of the uncertainty as to the cause of the multiple peaks for some of the storms. If multiple peaks are a true reflection of the runoff from the area, S-curve adjustments should not be made. More storm data are needed for study of this aspect of the watershed hydrology.

From this example (Figure 12) it is evident that a unit hydrograph derived from one or two storms can be in error; therefore, it is desirable to average the unit hydrographs obtained from several suitable storms. Storm A is the average unit hydrograph obtained from storms 1 through 6. Cause of the multiple peaks with consequent broadening of the period of rise for the individual unit hydrographs may be due to the topographic controls of this subwatershed. Subwatershed 6 is tulip shaped with three main tributaries and numerous minor tributaries directly entering the reservoir which responds according to inflow time and magnitude.

In Figure 12 and Table 12, unit hydrograph 7 is obviously out of character with the other six hydrographs. Apparently, during this period of record

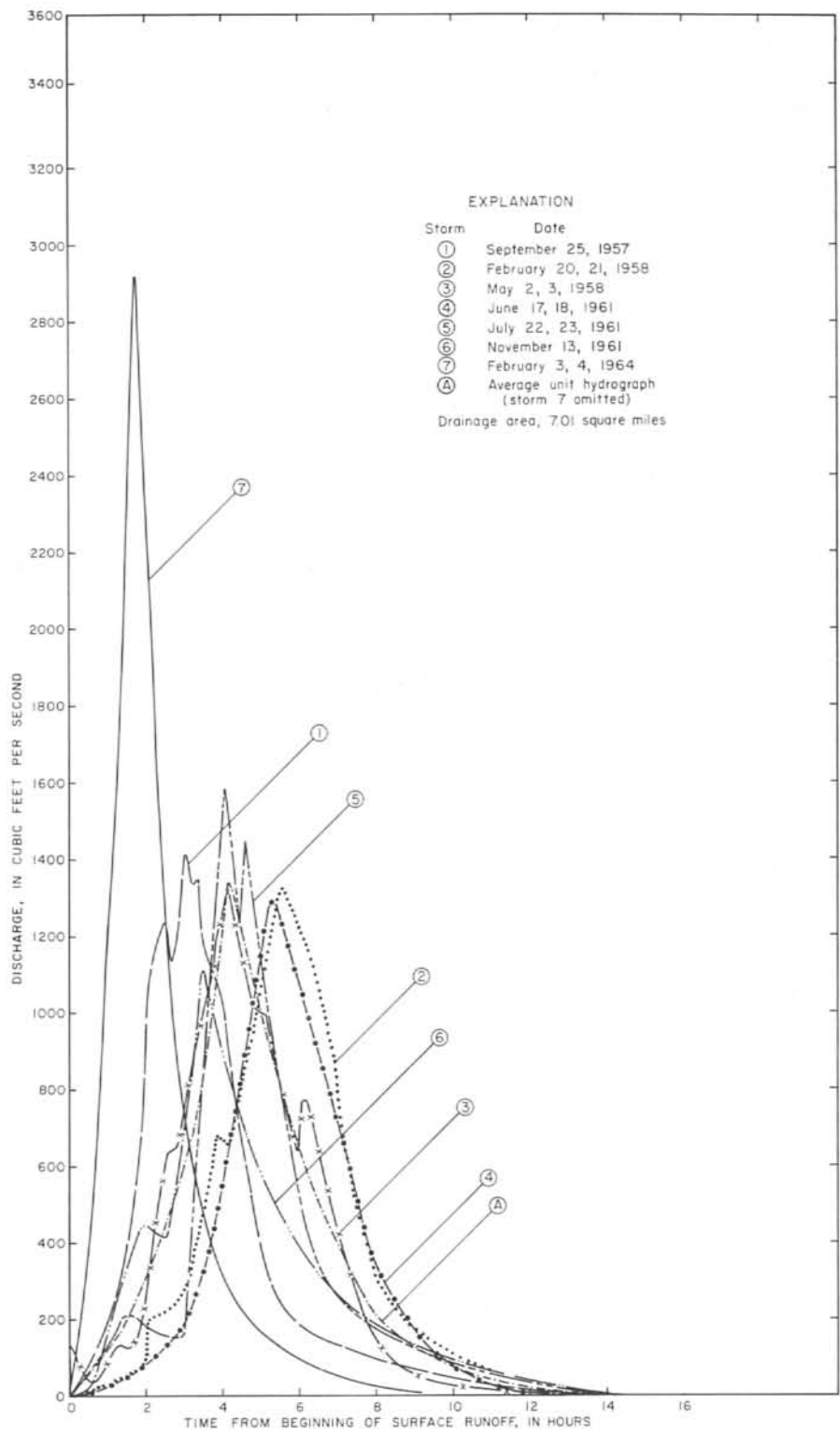


Figure 12  
Unit Hydrographs for Calaveras Creek Subwatershed No. 6

for subwatershed 6, storm 7 is an extreme. This storm resulted in fairly well distributed rainfall with an intensity approximately three times the average intensity of storms 1 through 6, and almost twice the intensity of storm 6. It should be noted that moderate antecedent precipitation in conjunction with rainfall of short duration, and moderate intensity are the prime controls for this type of storm. Hydrograph 7 further illustrates that the unit-hydrograph peak is considerably higher for extreme storms than for the ordinary storms.

### Study Area

The control of storm runoff by the nine floodwater-retarding structures precludes total theoretical application of the unit-hydrograph technique at the stream-gaging station. Some parts of the watershed will not be contributing directly to the shape of the unit hydrograph. However, the technique was applied to illustrate hydrograph characteristics below a system of floodwater-retarding reservoirs.

Figure 13 shows seven unit hydrographs for storms occurring over the entire Calaveras Creek study area above the stream-gaging station near Elmendorf. These storms and some of their characteristics are listed in Table 13 to facilitate identification and discussion.

The average intensity, period of rise, and time base given in Table 13 were determined as previously described for those storms listed in Table 12. However, in this analysis there are two periods of rise corresponding to the two peaks found in the study (storms 1, 2, 4, and 6 have one very flat lower peak and one higher normal peak). Storm C in Figure 13 is the average unit hydrograph.

The reason for two peaks at the stream-gaging station is the pattern of the stream channels below the floodwater-retarding structures (Figure 3). All of the storms studied are about equal in accordance with criteria for unit-hydrograph analysis, therefore, differences in runoff concentration and travel time on the two main tributaries of the watershed apparently cause the two peaks.

**Table 13.—Storm Data and Unit-Hydrograph Characteristics For Selected Storms in the Calaveras Creek Study Area**

STORM DESIGNATION	DATE OF STORM	AVERAGE INTENSITY OF RAINFALL (IN. PER/HR)	STORM RUNOFF (INCHES)	UNIT HYDROGRAPH (CFS)		PERIOD OF RISE (HRS)		DURATION OF RUN-OFF (HR)
				1ST PK	2ND PK	1ST PK	2ND PK	
1	Feb. 20-21, 1958	0.33	0.69	1/2 2,330	2,910	5.0	9.5	36.0
2	May 3, 1958	.61	.64	1/2 1,070	2,460	2.5	12.5	37.0
3	Oct. 3-4, 1959	.32	.31	4,466	1,972	2.8	12.5	30.0
4	Oct. 16, 1960	.54	.19	4,630	1,870	2.5	12.5	27.0
5	Oct. 29, 1960	.54	.44	2,030	2,610	5.5	14.0	36.0
6	June 17-18, 1961	.39	.34	3,260	2,280	5.2	13.0	36.0
7	March 18-19, 1964	.78	.18	4,000	3,370	2.2	11.0	32.0
C	Average storm	—	—	3,110	2,500	3.7	12.1	36.0

1/2 No distinct peak occurred; the figure shown is at the point of inflection on the rising limb of the hydrograph.

The drainage area contributing to unit-storm runoff at the stream-gaging station includes the subwatershed area above the floodwater-retarding structures only in theory. The structures will pass the flood wave, but only at a designed rate of from 5 to 10 cfs per square mile controlled. The outflow from floodwater-retarding structures was deducted from the discharge at the stream-gaging station in preparation of the hydrographs shown in Figure 13. For storms 1 and 2, the uncontrolled drainage area was 51.7 square miles as structures 1 and 10 (see Figure 3 and Table 5) had not

been completed. The uncontrolled drainage area was 40.1 square miles for storms 3 through 6.

### Rainfall-Runoff Relation

Numerous methods for estimating storm runoff have been devised; however, the relationship has thus far defied an exact mathematical solution because of the large number of variables that are involved. The amount of runoff resulting from a given storm is dependent upon



numerous parameters which include: Amount, duration, intensity, and areal distribution of rainfall; antecedent soil-moisture content; topographic features such as depression storage, watershed configuration, basin, and channel slopes; geologic environment including subsurface structures, water-table configuration, types of soil cover and its areal distribution; land-management practices; vegetal cover; and seasonal variations.

Of the several advanced methods of multiple correlation analysis, the coaxial graphical correlation technique as outlined by Kohler and Linsley (1951) has been found to be the most practical and suitable procedure for determination of runoff from rainfall without the use of a computer. This method is used in this report for subwatershed No. 6.

This technique involves an interrelation of the hydrologic variables adapted to three sets of curves drawn to reflect the influence of selected parameters. Parameters used to predict runoff from rainfall for the Calaveras Creek watershed are: Antecedent soil moisture conditions; seasonal effects; effective duration of storm rainfall; and total storm rainfall. In an individual watershed, topographic and geologic conditions remain essentially constant. Land-management practices produced no detectable runoff variations during the period of record. The effects of vegetal cover vary with the season, but may be compensated for by use of a set of seasonal curves.

A measurement of the soil-moisture content prior to each storm would be desirable, although not feasible; therefore, the variables representing the soil moisture conditions just prior to the storm period may be combined into a factor known as the antecedent-precipitation index (API).

A mathematical determination of the API may be made by using the formula:

$$API = API_0 K^t$$

where: API is the antecedent precipitation index;

API<sub>0</sub> represents the initial antecedent precipitation index;

K represents a predetermined exponentially varied factor based upon climatic and physiographic characteristics of a basin;

and, t is time between the subsequent periods of rainfall in days.

The factor K is largely a function of the potential evapotranspiration. The Calaveras Creek watershed lies within a subhumid region, therefore, potential evapotranspiration is rather large. A factor of 0.88 for the factor K was used in this study.

Extended storm periods were divided into definite units or "effective storm periods" based on the hydrograph analysis. An "effective storm period" is defined as the sum of the hourly increments in which rainfall intensity was at least 0.25 inch per hour plus one-half of the intervening rainfall accumulation periods of lesser intensity. Point rainfall at rain gage 2R was used (Figure 3) since subdividing the 701 square-mile area was considered unnecessary.

Storm runoff in inches was computed for each storm selected. Base flow was not present in this subwatershed area.

A total of 26 storms were selected, essentially meeting the foregoing criteria and for which storm hydrographs could be isolated. The data used to construct the coaxial graphical-correlation diagram (Figure 14) is given in Table 14. The fairly uniform distribution in individual rain-gage catch for a single storm period is shown by comparing rainfall at gages 1S, 2R, and 3S in Table 15. No storms occurred in August which could be used, therefore no seasonal curve was drawn for this month.

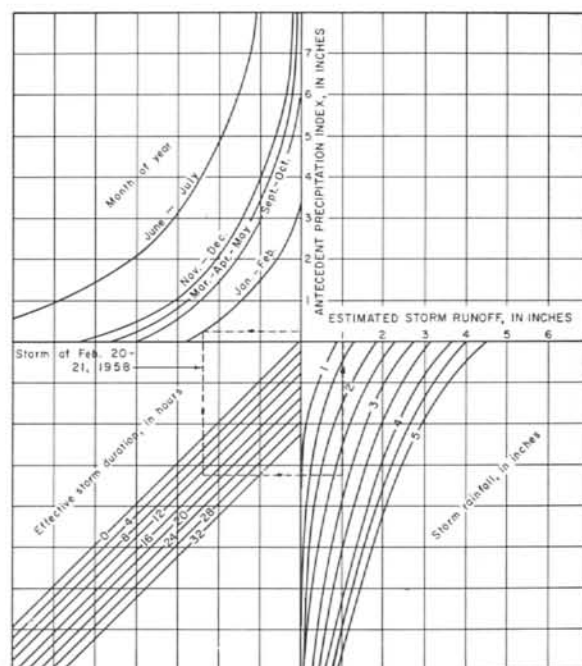


Figure 14.—Coaxial Rainfall-Runoff Relation for Estimating Runoff in Calaveras Creek Subwatershed No. 6

The graphical solution shown in Figure 14 was constructed by using five variables: Antecedent precipitation index; seasonal variations; effective storm duration; total storm precipitation; and total storm runoff. The construction of a graphical regression

Table 14.—Storm Parameters Used in Constructing Coaxial Rainfall-Runoff Relation,  
Calaveras Creek Subwatershed No. 6

DATE OF STORM	API (INCHES)	EFFECTIVE STORM PERIOD (HOURS)	RAINFALL (INCHES)	STORM RUNOFF (INCHES)
Feb. 23, 1957	0.85	2	1.03	0.21
Sept. 25, 1957	4.92	7	3.50	2.56
Jan. 4-5, 1958	.40	30	1.80	.30
Jan. 12, 1958	1.04	8	1.60	.48
Feb. 20-21, 1958	.25	13	2.75	1.02
Feb. 21-22, 1958	2.65	12	1.88	1.09
May 2-3, 1958	.20	6	3.89	1.45
Apr. 11, 1959	.78	4	2.00	.19
May 16, 1959	.57	0.6	1.25	.12
Oct. 3-4, 1959	.13	10.5	3.92	.25
Jan. 13, 1960	.37	0.5	1.08	.05
Oct. 29, 1960	1.19	3	2.00	.66
Dec. 7-8, 1960	.21	10	1.50	.07
June 17-18, 1961	2.19	17	3.60	1.08
July 22-23, 1961	.72	12	2.75	.27
Nov. 13, 1961	.22	3	2.25	.35
Nov. 8, 1963	.84	3.2	1.27	.08
Jan. 30, 1964	.13	3.5	2.12	.20
Feb. 3-4, 1964	1.42	1.8	2.20	.61
Mar. 18-19, 1964	.10	3	2.30	.37
Nov. 4, 1964	.77	8	2.50	.23
Mar. 30, 1965	.14	6.5	1.26	.02
Oct. 18, 1965	.52	2.2	2.11	.05
Dec. 2, 1965	.17	3.8	3.06	.29
Nov. 9, 1967	2.04	7.2	1.55	.48
Jan. 18, 1968	.48	2.2	2.67	1.59

involving numerous variables requires considerable trial and error. A modification in any one set of curves requires modification of the other curves.

After derivation of the coaxial rainfall-runoff relation, runoff from any individual storm may be estimated. It is necessary to determine four factors for any storm: API; month; effective storm duration; and the total storm rainfall. The dashed line in Figure 14 illustrates the mechanics of using the coaxial relationship for the storm of February 20-21, 1958. Values of the correlation factors for this storm example are given in Table 14.

The relation as derived has a standard error of estimate of  $\pm 55$  percent for 100 percent confidence limits; however, at the 90 percent confidence limits, the error of estimate is only  $\pm 25$  percent for the 26 storm samples used in the derivation. Inherent in any type of rainfall-runoff correlation in subhumid regions is the deviation of samples with runoff that is less than 10 percent of rainfall. Because this hydrologic condition is normal in this watershed (Table 6), large errors of estimate should be expected.

## Flow Duration

Cumulative frequency curves showing the duration of daily streamflow at a particular site can be used to evaluate the streamflow regimen and changes in this regimen. The shape and slope of these "flow-duration" curves are usually indicative of the hydrologic and geologic characteristics of the drainage basin. The flow-duration curve for the stream-gaging station is shown in Figure 15. This curve was prepared from streamflow data collected during water years 1955-68. During most of this period, runoff from 37.1 square miles of the 77.2-square-mile drainage area was controlled by floodwater-retarding structures (Table 5). Therefore, the curve cannot reflect characteristics of the natural hydrologic regimen. However, some pertinent characteristics of the controlled streamflow regimen are indicated from the curve.

From Figure 15 it is apparent that storm runoff subsides very rapidly. However, without the floodwater-retarding structures it is probable that the curve would be steeper and higher. This is characteristic of small watersheds with moderate basin slopes and slow to moderately permeable soils. From the curve, it is seen that for 10 percent of the time, streamflow was 5 cfs or greater, and that for 70 percent of the time there was no streamflow (discharge values less than .05 cfs are rounded to "0" in computations) at the gaging station. Because of the large number of days of no flow at the gaging station, ground-water recharge from the system of reservoirs has not been sufficient to sustain base flow.

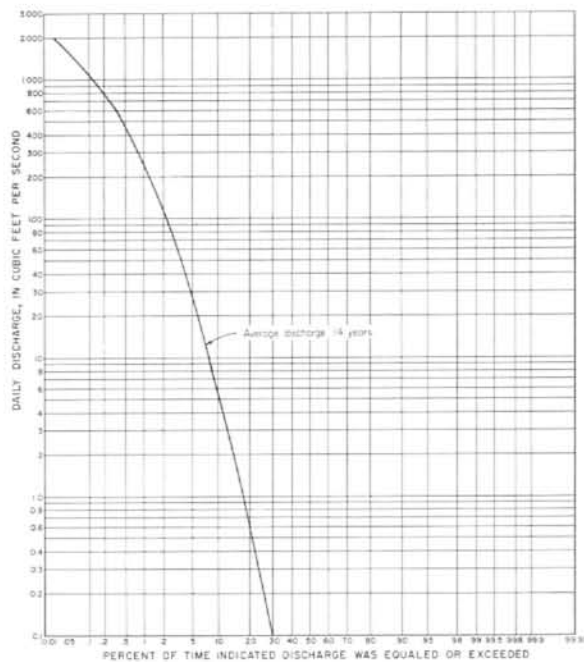


Figure 15.—Duration Curve of Daily Discharge, Calaveras Creek Near Elmendorf, Water Years 1955-68

## SUMMARY AND CONCLUSIONS

Hydrologic data collected in the Calaveras Creek study area between 1955 and 1968 served as the basis for making hydrologic analyses aimed at achieving a part of objectives 1, 2, 3, 4, and 6 of the State small watershed investigations as listed in the introduction. The results of these analyses and the objective to which they apply are summarized below:

### I. Objective No. 1:

#### A. Flood reducing effects of structures:

1. The flood-reducing aspects of a floodwater-retarding structure were illustrated by data collected at Calaveras Creek Reservoir 6. A peak inflow of 4,270 cfs was computed for the storm of January 18, 1968; whereas the maximum outflow was 47 cfs. Peak runoff at the downstream gaging station for this storm was 2,500 cfs.

2. Other analyses were made in an effort to define these effects further downstream. Unit hydrograph analyses showed the average unit hydrograph peaks for subwatershed No. 6 (drainage area = 7.01 sq. mi.) and the gaging station below all structures (drainage area = 77.2 sq. mi.) to be 1,340 and 3,110 cfs, respectively. Even allowing for a higher rate of runoff from the smaller watershed and the double peak for the larger watershed, the ratio of the two peaks should be much closer to the ratio of the drainage areas. Therefore, considerable peak reduction at the downstream gaging station is indicated.

3. Flood-frequency analyses show that 25-year recurrence interval floods from a 77.2 square mile drainage area that is partly controlled by the structures will be less than a 25-year frequency flood from an uncontrolled area 11 times smaller. Compared to a 25-year flood by Patterson (1965) from a similar area there is a significant reduction because of the structures (about 4,000 cfs reduction or about 40 percent of 9,600 cfs).

#### B. Streamflow depleting effects of structures:

1. The surface-water budget of the system of floodwater-retarding reservoirs shows that during the period 1955-68, 61,140 acre-feet of water flowed into ten reservoirs and 6,400 acre-feet of rain fell on the reservoir surfaces. Of the 67,540 acre-feet combined input, 43,700 acre-feet, or 65 percent, was discharged through the drop-inlet; 23,510 acre-feet, or 35 percent, was consumed by the actions of evaporation, transpiration, and seepage; and 332 acre-feet (or less than 1 percent) was used to increase storage. Further water-budget studies (assuming all outflow from reservoirs passes stream-gaging station), for the 14-year period 1955-68, show that approximately 60 percent of

the total flow passing the Calaveras Creek gaging station originates below the reservoirs and approximately 40 percent is outflow from the reservoirs.

## II. Objective No. 2:

1. Analyses of approximately three years of ground-water levels near three sites indicate no significant recharge to the water table results from the reservoirs.

## III. Objective No. 3:

A. Sediment trap-efficiency of the structures:

1. The Soil Conservation Service reported that sediment deposition in Reservoir 6 amounted to 0.26 acre-feet per square mile in the period December 1956 to March 1968. Since trap-efficiency probably exceeds 90 percent the low rate of reservoir sedimentation indicates a low sediment yield from the watershed for this period.

B. No data were collected to define the change in suspended sediment at considerable distance downstream from the structures.

## IV. Objective No. 4:

1. A coaxial graph relating runoff to antecedent precipitation, month of year, duration of storm, and total rainfall was derived for subwatershed No. 6. The relation was based on 26 storms ranging in runoff from 0.02 inch to 2.56 inches. The error of estimate for the relation is  $\pm 25$  percent at the 90 percent confidence limit. While this error of estimate is considered good for this area, large errors of estimate should be expected for those storms for which runoff is less than 10 percent of rainfall.

2. Analyses of the relationship between rainfall and runoff in the study area showed a

large variation from one subwatershed to another. The variation can be explained in part by the number of farm ponds in the subwatershed. For the period 1961-68, subwatershed No. 1 had 7.63 inches of surface runoff, whereas, subwatershed No. 8 had 29.09 inches from almost identical rainfall. The combined runoff from all nine subwatersheds for this period was 16.85 inches from 219.66 inches of rainfall.

3. The unit-hydrograph analysis made for subwatershed No. 6 (summary of results presented under objective 1) will also aid in achieving this objective. A multiple-regression analysis might yield more usable data in achieving this objective.

## V. Objective No. 5:

1. Analyses aimed at achieving this objective have not been made in this study area.

## VI. Objective No. 6:

1. Studies of the rainfall data collected at one recording and nine nonrecording rain gages in the study area showed that the network could be reduced to four gages with only a  $\pm 10$  percent reduction in accuracy of the computed average rainfall over the study area for about two-thirds of the time. The studies also showed that during the period 1955-68 the magnitude and frequency of storm rainfall probably was below average for this locality.

Although not listed as a specific objective of the Texas small watershed investigations, the gross lack of hydrologic data for small watersheds necessarily makes the collection and dissemination of such data under this project a major objective. All the hydrologic data collected at each of the eight small watersheds in the Calaveras Creek study area was too voluminous to present in this report. However, these data are compiled and presented annually in a basic-data report. These reports are prepared annually for each of the 13 watersheds in the Texas project.

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Table 15.—Summary of Rainfall, in Inches, for Calaveras Creek Study Area,  
March 1955 to September 1968

DATE OF STORM	GAGE NUMBER										
	1-S	2-R	3-S	4-S	5-S	6-S	7-S	8-S	9-S	10-S	11-R
Rain gages 1-S to 10-S installed											
1955											
Mar. 20	0.62	0.95	1.26	1.30	1.35	1.48	1.35	1.48	1.64	1.18	
Monthly Totals	.62	.95	1.26	1.30	1.35	1.48	1.35	1.48	1.64	1.18	
Apr. 2	0	0	0	0	0	0	.03	.04	.19	.05	
4- 8	.14	.09	.10	.12	.13	.13	.17	.15	.15	.22	
Monthly Totals	.14	.09	.10	.12	.13	.13	.20	.19	.34	.27	
May 10-11	.22	.17	.27	.23	.16	.22	.22	.24	.17	.21	
11	.19	.20	.28	.53	.52	.53	.59	.44	.53	.60	
15	2.40	2.03	1.68	1.53	2.31	1.22	0	.03	.32	.65	
19	1.21	.96	1.01	1.07	.99	1.05	1.30	1.28	1.06	1.50	
Monthly Totals	4.02	3.36	3.24	3.36	3.98	3.02	2.11	1.99	2.08	2.96	
June 4	.66	.70	.64	.53	.50	.55	.33	.28	.29	.50	
5	.09	.10	.09	.08	.07	.08	.05	.04	.04	.07	
8- 9	.07	.08	.05	.15	.09	.33	1.13	1.41	.78	.82	
10	.43	.45	.48	.49	.61	.75	.62	.76	.76	.55	
27	.46	.80	1.87	.48	.37	1.05	.44	.42	.59	.31	
Monthly Totals	1.71	2.13	3.13	1.73	1.74	2.76	2.57	2.91	2.46	2.25	
July 5	0	.15	0	0	.11	0	.02	0	0	0	
11	.14	0	.14	.09	.02	.02	.01	.05	.01	.02	
16	.01	.15	.15	.54	.03	.20	.26	.82	.90	.05	
20	0	0	.09	.73	.23	.30	.03	.03	.07	.38	
25	.62	.05	.08	0	0	.27	.19	.11	.01	.63	
31	.01	.23	.01	.01	.20	.01	.01	0	0	.25	
Monthly Totals	.78	.58	.47	1.37	.59	.80	.52	1.01	.99	1.33	
Aug. 1	.76	.30	.03	.06	0	.01	.01	0	0	.09	
2	.38	.15	.01	.03	0	0	0	0	0	.04	
4	.02	.05	.32	0	.01	0	0	0	0	0	
5	0	.17	0	0	0	.06	0	0	0	0	
11	.15	.40	.45	.22	.08	.15	.13	.16	.98	.01	
12	.06	.16	.18	.09	.03	.06	.05	.06	.39	.01	
18	2.11	1.56	1.68	1.47	.20	.11	.03	0	.01	.01	
20	.12	.14	.14	.02	.23	.29	0	.17	.51	.43	
28	.02	.10	.07	.10	.49	.31	.17	.18	.07	0	
30	1.66	.46	1.25	.10	.19	.28	.38	.90	.43	2.91	
31	.34	.09	.24	.13	.04	.15	.08	.18	.08	.57	
Monthly Totals	5.62	3.58	4.37	2.22	1.27	1.32	.85	1.65	2.47	4.07	
Sept. 12	.01	0	0	.02	.03	.01	.03	.10	.11	.02	
17	0	.08	0	0	.04	.34	0	0	0	0	
20	.16	.13	.16	.14	.02	.07	.12	.02	.02	.03	
21	.31	.26	.33	.28	.03	.13	.25	.04	.03	.07	
25	.01	.08	.03	.04	.03	.06	.09	.01	.05	.04	
Monthly Totals	.49	.55	.52	.48	.15	.61	.49	.17	.21	.16	
1955 WATER YEAR TOTALS <sup>1/2</sup>											
	18.97	16.22	19.06	16.51	15.32	16.78	14.42	15.65	15.69	18.80	
Oct. 1	.24	.16	.11	0	0	0	0	0	0	.01	
2	.93	.61	.42	.01	.01	.02	0	.02	.01	.03	
6	.32	.09	.06	.01	.02	.01	.02	0	0	0	
11	.57	1.40	1.32	.14	.25	.93	.29	1.40	1.75	.84	
17-24	.01	0	0	0	.01	0	0	0	0	0	
Monthly Totals	2.07	2.26	1.91	.16	.29	.96	.31	1.42	1.76	.88	
Nov. 7- 8	.86	.72	.69	.65	.67	.62	.47	.54	.58	.80	
29-30	1.34	1.48	1.50	1.54	1.85	1.88	1.93	2.06	1.94	1.90	
Monthly Totals	2.20	2.20	2.19	2.19	2.52	2.50	2.40	2.60	2.52	2.70	
Dec. 1	.03	0	.01	.03	.02	.01	.02	.01	.01	.02	
21	0	.03	.01	.01	0	0	0	0	0	0	
Monthly Totals	.03	.03	.02	.04	.02	.01	.02	.01	.01	.02	

<sup>1/2</sup> Data partly estimated.

DATE OF STORM	GAGE NUMBER										
	1-S	2-R	3-S	4-S	5-S	6-S	7-S	8-S	9-S	10-S	11-R
1955 CALENDAR YEAR TOTALS	21.94	19.71	21.55	17.03	16.28	18.17	19.29	17.87	18.99	20.08	
1956 Jan. 16-17	.81	.50	.41	.45	.35	.42	.37	.49	.53	.74	
22	.45	.45	.34	.33	.22	.35	.43	.24	.24	.11	
Monthly Totals	1.26	.95	.75	.78	.57	.77	.80	.73	.77	.85	
Feb. 1	.19	.22	.18	.18	.22	.12	.20	.15	.14	.17	
7- 8	.38	.50	.30	.37	.43	.39	.52	.42	.30	.53	
9-10	.02	.02	.03	.03	.04	.03	.02	.04	.03	.02	
20	.02	.02	.03	.06	.06	.07	.01	.07	.06	.12	
22	.12	.15	.23	.09	.33	.13	.29	.16	.03	.20	
Monthly Totals	.73	.91	.77	.73	1.08	.74	1.04	.84	.56	1.04	
Mar. 12-13	.05	.05	.02	.03	.04	.10	.16	.15	.15	.42	
15	.02	.02	.02	.02	.01	.02	.02	.03	.04	.04	
21	.18	.19	.18	.17	.15	.12	.16	.13	.11	.12	
Monthly Totals	.25	.26	.22	.22	.20	.24	.34	.31	.30	.58	
Apr. 21-22	.03	.03	.04	.06	.04	.04	.04	.04	.03	.08	
23	.21	.25	.22	.26	.23	.30	.30	.31	.29	.66	
30	.07	.08	.16	.16	.23	.06	.12	.10	.09	.06	
Monthly Totals	.31	.36	.42	.48	.50	.50	.46	.45	.41	.80	
May 1	1.09	.63	.42	1.00	.73	.75	1.09	1.08	.69	.07	
15	1.10	.64	1.74	.67	1.08	1.35	.82	.68	.41	.44	
26	.17	.36	.81	.01	.37	.02	.12	.68	.05	.12	
31	0	0	0	.22	0	0	0	0	0	0	
Monthly Totals	2.36	1.63	2.97	1.90	2.18	2.12	2.03	2.44	1.15	.63	
June 17	.04	0	.05	.01	.13	.04	0	.03	.08	.07	
18	.13	.44	1.01	.09	.01	.04	.10	0	.02	.04	
Monthly Totals	.17	.44	1.06	.10	.04	.08	.10	.03	.10	.11	
July 3	.07	.10	.03	.03	.07	.01	.02	.03	.02	.02	
9	1.12	2.20	2.20	2.75	1.52	1.31	.01	.03	.03	0	
10	0	.05	0	0	0	.07	0	.01	.40	.47	
24	.27	.32	.63	.01	0	.30	0	0	.23	.13	
Monthly Totals	1.46	2.67	2.86	2.79	1.59	1.69	.03	.07	.68	.62	
Aug. 20	1.36	.62	.76	.52	.59	.22	.90	.37	.21	.32	
26	.20	.24	.30	.30	.40	.46	.48	.56	.56	.55	
31	1.45	1.55	1.28	.93	1.10	1.14	.90	.78	1.41	.87	
Monthly Totals	3.01	2.41	2.34	1.75	2.09	1.82	2.28	1.71	2.18	1.74	
Sept. 4	0	.05	0	0	0	.14	.06	0	0	.02	
9	.34	.05	.03	.25	.03	.06	1.15	.76	.46	.05	
Monthly Totals	.34	.10	.03	.25	.03	.20	1.21	.76	.46	.07	
1956 WATER YEAR TOTALS	14.19	14.22	15.54	11.39	11.11	11.63	11.02	11.37	10.90	10.04	
Oct. 1	.05	.10	.12	.14	.10	.20	.20	.20	.46	.15	
3- 4	.09	0	.11	0	0	.09	.02	0	.01	.02	
12	.23	.25	.26	.13	.27	1.15	.09	.74	.48	.47	
13	.02	.02	.02	.01	.02	.09	.01	.06	.04	.04	
15	.49	.55	.47	.52	.58	.63	.46	.50	.42	.58	
16	.03	0	.06	.16	.09	.01	.04	.02	.02	.03	
18	.53	.20	.15	.75	.15	.21	.68	.47	.34	1.55	
Monthly Totals	1.44	1.12	1.19	1.71	1.21	2.38	1.50	1.99	1.77	2.84	
Nov. 2	.23	.21	.20	.25	.20	.17	.22	.16	.20	.21	
3- 4	.79	.72	.69	.84	.70	.59	.75	.54	.69	.70	
Monthly Totals	1.02	.93	.89	1.09	.90	.76	.97	.70	.89	.91	
Dec. 9	.12	.19	.35	.29	.29	.11	.23	.12	.12	.17	
18-19	3.00	2.88	3.05	3.30	3.25	4.10	3.70	4.15	4.35	3.25	
22	.27	.35	.61	.44	.31	.54	.82	.95	.92	.58	
Monthly Totals	3.39	3.42	4.01	4.03	3.85	4.75	4.75	5.22	5.39	4.00	



DATE OF STORM	GAGE NUMBER										
	1-S	2-R	3-S	4-S	5-S	6-S	7-S	8-S	9-S	10-S	11-R
1956 CALENDAR YEAR TOTALS	15.74	15.20	17.51	15.83	14.24	16.05	15.51	15.25	14.66	14.19	
1957											
Jan. 4	0	0	.01	0	.01	.01	0	.01	.01	0	
19	.03	.03	.05	.05	.05	.08	.04	.05	.07	.04	
27	.62	.50	.63	.48	.53	.39	.58	.55	.51	.30	
Monthly Totals	.65	.53	.69	.53	.59	.48	.62	.61	.59	.34	
Feb. 1	.10	.10	.07	.08	.06	.06	.07	.07	.07	.06	
17-18	.97	1.00	.92	1.03	1.07	.82	.83	.93	.82	.82	
19	.25	.25	.27	.26	.26	.32	.31	.33	.33	.33	
22	.14	.10	.11	.05	.04	.05	.04	.05	.05	.10	
23	1.35	1.00	1.12	.53	.45	.51	.44	.51	.46	.96	
Monthly Totals	2.81	2.45	2.49	1.95	1.88	1.76	1.69	1.89	1.73	2.27	
Mar. 3	.52	.50	.60	.62	.62	.47	.44	.43	.43	.33	
5	.10	.18	.11	.04	.09	.18	.03	.55	.06	.02	
11	.19	.07	.08	.09	.03	.01	.06	.04	.04	.03	
17	.35	.15	.35	.33	.34	.18	.23	.14	.34	.08	
20	.77	.64	.70	.93	1.07	.68	.73	.87	.86	1.13	
23	0	0	.04	0	.03	0	0	0	0	0	
27	1.53	1.20	1.39	1.08	1.21	.87	1.07	1.03	1.09	.66	
31	.48	.34	.40	.41	.43	.47	.50	.53	.54	.72	
Monthly Totals	3.94	3.08	3.67	3.50	3.82	2.86	3.06	3.59	3.36	2.97	
Apr. 3	.01	0	0	0	.01	0	0	0	0	0	
12	.02	0	.02	.04	.04	.02	.02	.01	.02	.03	
15	.67	.78	.81	.65	.57	.46	.74	.61	.45	.52	
19	2.54	2.45	2.63	2.77	2.47	3.60	2.49	3.01	3.74	3.39	
22	.38	.43	.51	.61	.70	.87	.99	1.25	1.18	1.96	
24	1.32	1.41	1.92	1.54	1.42	1.14	.88	.82	.81	.54	
26	.91	.59	.78	.54	.85	.91	.90	.86	.92	.71	
28	1.87	1.77	2.00	2.02	2.00	2.11	2.09	2.25	1.87	2.15	
Monthly Totals	7.72	7.43	8.67	8.17	8.06	9.11	8.11	8.81	8.99	9.30	
May 4	.24	.34	.27	.28	.24	.22	.20	.21	.15	.12	
9	.16	.13	.16	.09	.13	.11	.19	.19	.16	.38	
13	.63	.50	.63	.38	.50	.46	.74	.77	.66	1.57	
18	1.48	.97	1.07	1.20	1.12	1.20	.92	1.46	1.14	1.49	
27	2.94	2.84	3.35	2.18	2.50	2.11	1.50	2.81	3.21	2.37	
31	1.65	2.31	1.44	1.67	2.00	1.38	2.96	1.76	1.68	.86	
Monthly Totals	7.10	7.09	6.92	5.80	6.49	5.48	6.51	7.20	7.00	6.79	
June 1	.88	.88	1.69	.88	.99	1.01	.70	.90	.83	1.17	
4	.15	.22	.41	.36	.34	.49	.17	.51	.48	.28	
7	.19	.16	.02	.34	.47	.41	0	.10	.07	.91	
17	0	0	0	0	.01	.03	0	.01	0	.08	
21	.16	0	0	.05	0	.01	.07	.09	.15	.48	
Monthly Totals	1.38	1.26	2.12	1.63	1.81	1.95	.94	1.61	1.53	2.92	
July 9	.10	0	.09	.06	.01	0	0	0	0	0	
22	.42	0	0	0	0	0	0	0	0	0	
31	0	.11	.05	.12	.25	0	.11	.03	0	0	
Monthly Totals	.52	.11	.14	.18	.26	0	.11	.03	0	0	
Aug. 1	.03	0	.10	0	0	0	0	0	0	0	
18	.03	.03	.03	.72	.04	.04	.09	.03	.05	.04	
19	0	0	0	0	.11	0	0	0	0	0	
Monthly Totals	.06	.03	.13	.72	.15	.04	.09	.03	.05	.04	
Sept. 3	.72	.42	.41	.35	.40	.16	.19	.17	.30	.35	
7	.16	.05	.12	.14	.15	.10	.04	.06	.09	.02	
12	.70	.75	.70	.70	.70	.70	.70	.70	.70	.70	
22-23	5.71	6.24	6.99	5.29	6.88	6.35	6.30	6.95	7.10	4.75	
25	3.87	3.50	3.64	3.75	4.10	3.51	3.69	4.67	3.71	4.12	
Monthly Totals	11.16	10.96	11.86	10.23	12.23	10.82	10.92	12.55	11.90	9.94	
1957 WATER YEAR TOTALS	41.19	38.41	42.78	39.54	41.25	40.39	39.27	44.23	43.20	42.32	

DATE OF STORM	GAGE NUMBER										
	1-S	2-R	3-S	4-S	5-S	6-S	7-S	8-S	9-S	10-S	11-R
Oct. 9	0.42	0.34	0.35	0.49	0.44	0.38	0.50	0.49	0.48	0.58	
13	.24	.13	.13	.25	.16	.10	.19	.17	.16	.10	
15	.74	.62	.42	.49	.35	1.02	.35	.28	.27	.53	
21-22	3.20	2.94	2.95	2.54	2.83	2.20	2.30	2.04	1.88	1.76	
Monthly Totals	4.60	4.03	3.85	3.77	3.78	3.70	3.34	2.98	2.79	2.97	
Nov. 3	0	0	0	.02	0	0	0	.01	0	0	
10-11	1.48	1.26	1.40	1.57	1.62	1.63	1.72	1.71	1.73	1.75	
17	.10	.05	.07	.09	.08	.08	.07	.07	.08	.08	
22	.13	.11	.13	.20	.13	.18	.11	.10	.13	.21	
23-24	1.46	1.67	2.00	1.90	2.08	2.72	1.94	2.35	2.14	1.64	
Monthly Totals	3.17	3.09	3.60	3.78	3.91	4.61	3.84	4.24	4.08	3.68	
Dec. 6	.08	.10	.11	.11	.11	.09	.11	.10	.09	.14	
16	.02	0	.02	.01	.02	0	0	.01	0	0	
24-25	.88	.83	.85	.70	.81	.87	.59	.59	.54	.58	
27	.31	.29	.30	.25	.28	.30	.21	.20	.19	.20	
Monthly Totals	1.29	1.22	1.28	1.07	1.22	1.26	.91	.90	.82	.92	
1957 CALENDAR YEAR TOTALS	43.70	41.28	44.72	40.64	43.50	41.37	39.44	43.74	42.14	41.44	
1958											
Jan. 4-5	1.89	1.80	2.06	2.03	2.00	2.07	2.19	2.22	2.18	2.28	
12	1.57	1.60	1.51	1.39	1.32	1.65	1.18	1.56	1.85	1.21	
20	.21	.21	.14	.13	.21	.17	.25	.15	.14	.15	
23	1.08	1.01	1.14	1.05	1.12	1.04	1.12	1.14	1.20	1.31	
Monthly Totals	4.75	4.62	4.85	4.60	4.65	4.93	4.74	5.07	5.37	4.95	
Feb. 9-10	.65	.57	.69	.55	.50	.35	1.11	.74	.77	.67	
11-12	.22	.20	.20	.22	.22	.19	.19	.19	.19	.22	
20-21	2.81	2.50	2.46	2.78	2.75	2.44	2.41	2.40	2.34	2.71	
21-22	1.77	1.74	2.34	1.48	1.75	2.39	1.65	1.82	2.19	2.07	
Monthly Totals	5.45	5.01	5.69	5.03	5.22	5.37	5.36	5.15	5.49	5.67	
Mar. 1	.17	.05	.13	.16	.15	.17	.16	.16	.18	.14	
10	.26	.20	.26	.35	.37	.46	.35	.30	.26	.28	
12	.09	0	.13	.12	.25	.04	.07	.04	.02	.03	
18	.39	.30	.47	0	.43	.35	.29	.30	.30	.26	
23	.04	0	.03	.02	.03	.04	.02	.02	.05	.04	
26-27	.11	0	.10	.09	.07	.08	.04	.05	.06	.09	
Monthly Totals	1.06	.55	1.12	.74	1.30	1.14	.93	.87	.87	.84	
Apr. 8	.42	.40	.15	.12	.04	.02	.01	.01	.02	.02	
14	1.37	.54	.43	.79	.86	.69	.65	.78	1.22	1.13	
17	.27	.22	.26	.21	.25	.21	.13	.13	.12	.09	
26	0	0	.17	0	.06	.28	0	.16	.11	.08	
Monthly Totals	2.06	1.16	1.01	1.12	1.21	1.20	.79	1.08	1.47	1.32	
May 2	.10	.09	.11	.11	.09	.09	.09	.08	.08	.06	
3	4.00	3.89	4.42	4.72	3.91	3.73	3.66	3.41	3.32	2.74	
14	.20	.21	.23	.21	.38	.30	.18	.18	.26	.22	
15	.41	.43	.40	.43	.78	.61	.36	.38	.54	.45	
19	.43	.46	.43	.46	.84	.65	.38	.40	.58	.49	
Monthly Totals	5.14	5.08	5.59	5.93	6.00	5.38	4.67	4.45	4.78	3.96	
June 14	.07	.10	.15	.03	.05	.10	.03	0	.11	.03	
18	1.08	.40	.25	.16	.70	.69	.07	.16	.55	.96	
22	2.57	2.21	1.95	2.54	2.65	1.90	1.78	1.58	1.76	2.02	
Monthly Totals	3.72	2.71	2.35	2.73	3.40	2.69	1.88	1.74	2.42	3.01	
July 2	.25	.40	.28	.32	.26	.50	.11	.17	.19	.13	
6-7	.52	.84	.59	.67	.55	1.05	.23	.36	.39	.27	
7	1.23	.78	1.38	1.56	3.21	2.45	.67	1.89	3.13	.39	
10	.04	.09	.18	.05	.35	.60	.03	.33	.43	.00	
Monthly Totals	2.04	2.11	2.43	2.60	4.37	4.60	1.04	2.75	4.14	.79	
Aug. 14	.10	.50	.45	.14	.41	1.33	.20	.02	0	0	
24	.19	.25	.33	.10	.10	.07	.15	.05	.05	.03	
Monthly Totals	.29	.75	.78	.24	.51	1.40	.35	.07	.05	.03	

DATE OF STORM	GAGE NUMBER										
	1-S	2-R	3-S	4-S	5-S	6-S	7-S	8-S	9-S	10-S	11-R
Sept. 5	0.17	0.16	0.16	0.13	0.15	0.21	0.17	0.17	0.15	0.22	
6-7	1.49	1.44	1.41	1.21	1.37	1.84	1.49	1.51	1.35	1.97	
8	.28	.27	.26	.22	.26	.34	.28	.28	.25	.37	
9	.30	.18	.44	.66	.18	.16	1.27	1.25	.44	.58	
12-13	1.37	1.50	1.28	1.00	1.00	.08	.19	.02	.30	.06	
15	.22	.30	.55	.35	.42	1.08	.75	2.25	1.91	.38	
18-19	.32	.10	.18	1.34	.25	.25	.13	.23	.24	.26	
22	.71	.75	.82	.97	.82	1.00	1.01	1.54	1.38	1.16	
28	.36	.03	.06	.87	.28	.05	.26	.75	.39	.52	
30	.35	.32	.38	.48	.55	.59	.42	.47	.65	.49	
Monthly Totals	5.57	5.05	5.54	7.23	5.28	5.60	5.97	8.47	7.06	6.01	
1958 WATER YEAR TOTALS	39.14	35.38	38.09	38.84	40.85	41.88	33.82	37.77	39.34	34.15	
Oct. 1	.87	.79	.95	1.20	1.39	1.46	1.06	1.16	1.62	1.21	
5	.06	.05	.07	.06	.08	.05	.09	.07	.06	.05	
11	.64	.52	.57	.69	.90	.89	.77	1.00	.83	.96	
15-16	.65	.51	.67	.71	.70	.71	.76	.80	.78	.75	
17	.20	.20	.20	.20	.20	.20	.20	.20	.20	.20	
22	.46	.35	.38	.36	.55	.54	.43	.46	.42	.52	
25	.03	.02	.02	.02	.03	.03	.02	.02	.02	.03	
27	.66	.55	.58	.56	.75	.74	.63	.66	.62	.72	
28	.52	.43	.45	.44	.59	.58	.50	.52	.48	.56	
29	.86	.72	.76	.73	.98	.96	.83	.86	.80	.94	
30	.15	.14	.13	.14	.18	.17	.15	.15	.14	.16	
Monthly Totals	5.10	4.28	4.78	5.11	6.35	6.33	5.44	5.90	5.97	6.10	
Nov. 3	.05	.05	.05	.10	.07	.06	.11	.03	.02	.11	
4	.44	.62	.66	.51	.64	.62	.55	.46	.49	.46	
10	.01	0	0	0	.01	.02	0	.01	.01	0	
12-13	.82	1.18	1.27	1.20	1.10	1.58	1.20	1.56	1.34	1.48	
27	.15	.10	.14	.16	.10	.14	.10	.15	.14	.15	
Monthly Totals	1.47	1.95	2.12	1.97	1.92	2.42	1.96	2.21	2.00	2.20	
Dec. 1	.15	.10	.14	.16	.10	.14	.11	.14	.14	.16	
9	.04	.06	.05	.03	.03	.07	0	.03	.04	.10	
24	.20	.20	.20	.26	.25	.20	.26	.23	.23	.25	
29-30	.58	.52	.72	.47	.93	.91	.96	1.11	1.00	1.00	
Monthly Totals	.97	.88	1.11	.92	1.31	1.32	1.33	1.51	1.41	1.51	
1958 CALENDAR YEAR TOTALS	37.62	34.15	37.37	38.22	41.52	42.38	34.46	39.27	41.03	36.39	
1959 Jan. 3	0	0	0	.01	.01	0	0	.04	.04	.02	
6	.22	.20	.21	.27	.25	.16	.19	.19	.20	.24	
7	.06	.03	.07	.02	.02	.03	.02	.02	.02	.02	
12-13	.05	.04	.06	.06	.06	.04	.08	.02	.03	.03	
24-25	.07	.03	.07	.06	.04	.02	.03	.02	.02	.02	
Monthly Totals	.40	.30	.41	.42	.38	.25	.32	.29	.31	.33	
Feb. 1	.70	.57	.72	.74	.73	.63	.74	.77	.72	.83	
7-8	.17	.02	.09	.06	.07	.06	.07	.07	.09	.06	
12	.21	.17	.22	.27	.25	.22	.22	.21	.23	.25	
14	.47	.48	.66	.40	.58	.46	.44	.55	.57	.40	
19	.25	.25	.33	.35	.39	.36	.46	.43	.45	.44	
22	.22	.16	.24	.31	.30	.22	.24	.24	.28	.30	
26	.45	.43	.55	.25	.22	.33	.34	.39	.39	.35	
Monthly Totals	2.47	2.08	2.81	2.38	2.54	2.28	2.51	2.66	2.73	2.63	
Mar. 11	.05	.02	.03	.06	.02	.03	.01	.04	.01	0	
25	.30	.18	.14	.06	.09	.11	.04	.05	.04	.06	
28	.36	.35	.40	.36	.27	.18	.18	.12	.11	.18	
Monthly Totals	.71	.55	.57	.48	.38	.32	.23	.21	.16	.24	
Apr. 7	1.38	1.13	1.03	1.37	1.25	1.55	1.79	1.74	1.79	1.54	
8-9	.15	.12	.11	.14	.13	.16	.19	.19	.19	.16	
11	2.30	2.00	2.19	1.52	1.65	1.50	1.50	1.47	1.42	1.43	
15-17	.41	.32	.41	.45	.43	.27	.38	.39	.33	.38	
Monthly Totals	4.24	3.57	3.74	3.48	3.46	3.48	3.86	3.79	3.73	3.51	

DATE OF STORM	GAGE NUMBER										
	1-S	2-R	3-S	4-S	5-S	6-S	7-S	8-S	9-S	10-S	11-R
May 2	1.88	2.00	0.91	1.45	1.03	0.88	1.30	1.27	1.14	1.82	
10	1.30	.70	.72	1.25	1.54	1.20	.72	.86	.92	.20	
16	1.66	1.25	.58	.76	1.01	1.28	1.87	1.32	1.00	3.32	
21	.38	.37	.47	.30	.51	.66	1.09	.95	.99	.28	
23	.86	.82	1.06	.65	1.14	1.47	2.42	2.10	2.19	.62	
24	.16	.15	.19	.12	.21	.27	.44	.39	.40	.11	
Monthly Totals	6.24	5.29	3.93	4.53	5.44	5.76	7.84	6.89	6.64	6.35	
June 3	.13	.29	.28	.02	.80	1.34	0	.37	1.00	.67	
24	.08	.09	.11	.07	.08	.11	.09	.09	.09	.11	
25	1.51	1.78	2.25	1.43	1.45	2.14	1.67	1.83	1.75	2.04	
26	.49	.57	.72	.45	.47	.68	.54	.59	.56	.66	
Monthly Totals	2.21	2.73	3.36	1.97	2.80	4.27	2.30	2.88	3.40	3.48	
July 11	.17	.06	.10	.05	.05	.95	.46	.22	.22	.11	
19	.04	0	.13	.06	.04	.03	.05	.03	.03	.05	
21	1.27	.80	.43	.60	1.20	.30	1.05	.90	.26	.65	
Monthly Totals	1.48	.86	.66	.71	1.29	1.28	1.56	1.15	.51	.81	
Aug. 8	0	0	.20	.03	.13	.50	0	.03	.05	.08	
14	.20	.60	.43	.54	.43	.10	.51	.64	.17	.30	
23-24	.52	.53	1.08	.52	.26	.20	.07	.18	.25	.10	
24-25	.25	.18	.15	.22	.10	.12	.78	1.21	.70	.60	
26-27	1.15	2.02	1.44	.95	1.40	2.17	.53	.52	.75	.51	
Monthly Totals	2.12	3.33	3.30	2.26	2.32	3.09	1.89	2.58	1.92	1.59	
Sept. 7-8	.10	.03	.02	.20	.05	.02	.87	.14	.06	.15	
8-9	.17	.07	.04	.65	.44	.24	.04	.11	.15	.06	
10	.55	.17	.45	.95	1.08	1.17	.70	.89	.60	.81	
13	.05	.05	.05	.12	.11	.06	.06	.07	.08	.03	
23-25	.35	.15	.16	.16	.51	.34	.22	.23	.35	.55	
Monthly Totals	1.22	.47	.72	2.08	2.19	1.83	1.89	1.44	1.24	1.60	
1959 WATER YEAR TOTALS	28.63	26.29	27.51	26.31	30.38	32.63	31.13	31.51	30.02	30.35	
11-R gage installed											
Oct. 3-4	4.20	3.92	4.52	4.11	4.75	5.43	3.98	4.62	4.56	4.00	3.84
12-13	1.22	.83	.62	.56	.81	.94	1.07	.88	1.25	.99	.50
16	0	0	0	0	.02	.01	0	.02	0	0	0
31	.83	.72	1.57	.29	1.06	.95	.53	.99	.92	.83	1.49
Monthly Totals	6.25	5.47	6.71	4.96	6.64	7.33	5.58	6.51	6.73	5.82	5.83
Nov. 14	1.17	1.23	1.30	1.30	1.60	1.31	1.38	1.36	1.47	1.55	1.30
23	.20	.20	.26	.34	.33	.32	.40	.73	.49	.41	.23
28	.03	0	.05	0	0	0	0	.05	0	0	0
Monthly Totals	1.40	1.43	1.61	1.64	1.93	1.63	1.78	2.14	1.96	1.96	1.53
Dec. 4	.07	.05	.04	0	.04	.05	0	.05	.04	.03	.05
10-11	.08	.10	.11	.10	.09	.11	.08	.07	.07	.09	.10
15	.52	.61	.72	.53	.66	.75	.44	.67	.77	.80	.70
16	.14	.09	.12	.10	.06	.13	.10	.12	.13	.17	.02
26	.03	.05	.07	.06	.18	.06	.06	.10	.11	.07	.06
31	1.27	1.40	1.29	1.26	1.18	1.08	1.15	1.03	1.01	.82	1.10
Monthly Totals	2.11	2.30	2.35	2.05	2.21	2.18	1.83	2.04	2.13	1.98	2.03
1959 CALENDAR YEAR TOTALS	30.85	28.26	30.17	26.96	31.58	33.70	31.58	32.58	31.46	30.30	
1960 Jan. 5	.26	.13	.27	.27	.27	.24	.23	.24	.28	.25	.10
9	.20	.10	.20	.21	.21	.18	.18	.19	.22	.19	.10
13-14	.55	1.08	.80	1.09	.91	.76	.71	.66	1.26	.80	.80
14	.11	.10	.11	.16	.10	.15	.15	.32	.30	.17	.07
23-25	.07	0	.04	.05	.05	.02	.02	.02	.03	.03	0
26	.06	.06	0	.07	.06	.06	.06	.10	.05	.07	.06
Monthly Totals	1.25	1.47	1.42	1.85	1.60	1.41	1.35	1.53	2.14	1.51	1.13

DATE OF STORM	GAGE NUMBER										
	1-S	2-R	3-S	4-S	5-S	6-S	7-S	8-S	9-S	10-S	11-R
Feb. 2	0.75	0.50	0.60	0.70	0.72	0.61	0.76	0.75	0.79	0.82	0.55
8-9	0	0	0	.01	0	.02	0	.03	.01	.01	0
12	.14	.15	.13	.15	.22	.17	.15	.15	.17	.18	.15
20	.27	.13	.25	.22	.20	.13	.23	.14	.20	.16	.22
23	.27	.13	.25	.22	.20	.12	.23	.14	.20	.17	.21
28	.31	.13	.24	.31	.31	.30	.36	.31	.28	.36	.33
Monthly Totals	1.74	1.04	1.47	1.61	1.65	1.35	1.73	1.52	1.65	1.70	1.46
Mar. 1	0.16	0.07	0.12	0.15	0.16	0.15	0.18	0.15	0.14	0.18	0.17
6	.09	.10	.12	.13	.12	.10	.12	.12	.13	.13	.12
14	.24	.21	.22	.25	.24	.22	.21	.26	.27	.26	.21
19	0	0	0	.05	.05	.05	.07	.08	.07	.08	0
25	.76	.51	.88	.69	.76	.76	.85	.93	1.00	1.01	.65
26	.76	.51	.88	.69	.75	.76	.85	.93	.99	1.00	.65
Monthly Totals	2.01	1.40	2.22	1.96	2.08	2.04	2.28	2.47	2.60	2.66	1.80
Apr. 3	.12	.12	.16	.21	.23	.20	.18	.23	.22	.19	.12
17	.05	0	.02	.07	.04	.02	.02	.02	.03	0	0
24	.13	.15	.23	.55	.49	.54	.59	.35	.35	.20	.42
25	.49	.58	.84	.92	1.45	1.24	1.47	1.15	1.42	1.81	1.45
Monthly Totals	.79	.85	1.25	1.75	2.21	2.00	2.26	1.75	2.02	2.20	1.99
May 1	.85	.38	.47	.24	.45	.55	.43	.50	.69	.18	.29
3	.46	.25	.27	.17	.25	.34	.22	.31	.29	.27	.15
11	.17	.15	.15	.33	.44	.15	.28	.34	.35	.23	.20
20	.39	.40	.42	.53	.49	.54	.46	.55	.64	.53	.44
23	0	0	0	.07	0	0	0	.05	0	0	0
Monthly Totals	1.87	1.18	1.31	1.34	1.63	1.58	1.39	1.75	1.97	1.21	1.08
June 24-25	4.70	4.28	4.81	5.15	5.01	5.34	3.85	4.34	4.42	4.74	5.20
Monthly Totals	4.70	4.28	4.81	5.15	5.01	5.34	3.85	4.34	4.42	4.74	5.20
July 16	.54	.49	.81	.35	.52	1.49	.29	.93	.96	.72	.60
18	.27	.25	.40	.18	.26	.75	.15	.47	.48	.36	.30
19-20	1.32	.70	.23	.71	1.13	.23	1.15	.64	.61	.46	.20
Monthly Totals	2.13	1.44	1.44	1.24	1.91	2.47	1.59	2.04	2.05	1.54	1.10
Aug. 7	0	0	0	0	0	0	0	0	0	.19	0
8	0	0	0	0	0	0	0	0	0	0	.40
10	1.06	.36	.35	.23	.25	1.25	.66	.62	.83	1.74	.10
14-15	1.09	.41	.91	.28	.35	1.10	.54	.73	.64	1.30	.60
22	.64	.82	.50	.33	.01	.59	.42	.23	.31	.88	.50
27	.17	.21	.13	.08	0	.15	.10	.06	.08	.23	0
28	.36	.45	.28	.18	.01	.33	.23	.12	.17	.48	.10
Monthly Totals	3.32	2.25	2.17	1.10	.62	3.42	1.95	1.76	2.03	4.82	1.70
Sept. 3-4	0	0	.03	0	0	.08	.02	.07	.14	.28	0
24	.16	.34	1.13	.25	.21	1.00	.07	.10	.30	.10	.41
Monthly Totals	.16	.34	1.16	.25	.21	1.08	.09	.17	.44	.38	.41
1960 WATER YEAR TOTALS	27.73	23.45	27.92	24.90	27.70	31.83	25.68	28.02	30.14	30.52	25.26
Oct. 6	.75	.66	.70	.66	.63	.78	.40	.51	.61	.40	.60
14	1.06	1.00	.97	1.86	1.10	1.12	1.47	1.63	1.44	2.47	1.06
16	2.64	4.02	3.45	2.47	3.05	3.95	2.35	2.98	3.22	2.92	3.80
18	1.15	1.05	.93	.63	.56	.72	.50	.50	.51	.03	.53
24-25	1.08	1.12	1.15	1.10	1.14	1.25	1.57	1.47	1.37	7.13	1.04
29	2.60	2.00	2.66	2.11	2.44	2.00	1.91	1.94	1.76	1.58	2.67
Monthly Totals	9.28	9.85	9.86	8.83	8.92	9.82	8.20	9.03	8.91	11.53	9.70
Nov. 8-9	.52	.60	.50	.90	.74	.82	.93	.84	.79	.93	.80
20-21	.70	.54	.74	.60	.73	.73	.83	.74	.93	1.04	.74
22	.89	.65	.81	.83	.97	.93	.95	1.03	1.01	1.00	.60
Monthly Totals	2.11	1.79	2.05	2.33	2.44	2.48	2.71	2.61	2.73	2.97	2.14
Dec. 3	.04	0	0	.03	0	0	0	0	.05	0	0
7-8	2.27	1.50	1.94	2.07	2.03	2.22	2.21	2.25	2.54	2.55	2.15
14	.12	.08	.22	.30	.31	.26	.21	.19	.19	.14	
28-30	1.00	.90	1.03	1.10	1.14	1.19	1.38	1.33	1.34	1.27	1.15
Monthly Totals	3.43	2.48	3.19	3.50	3.48	3.67	3.80	3.77	4.12	3.96	3.30

DATE OF STORM	GAGE NUMBER										
	1-S	2-R	3-S	4-S	5-S	6-S	7-S	8-S	9-S	10-S	11-R
1960 CALENDAR YEAR TOTALS	32.79	28.37	32.35	30.91	31.76	36.66	31.20	32.74	35.08	39.22	31.01
1961 Jan. 6-7 26	.44 .30	.33 .22	.52 .30	.51 .32	.57 .33	.56 .28	.63 .30	.56 .31	.59 .33	.55 .40	.50 .20
Monthly Totals	.74	.55	.82	.83	.90	.84	.93	.87	.92	.95	.70
Feb. 5 11 15-16 25-26	1.52 0 .18 .02	1.25 .05 .12 0	1.42 0 .10 0	1.32 .02 .15 .02	1.50 0 .16 0	1.55 0 .24 0	1.65 0 .10 .03	1.73 0 .12 .02	1.77 0 .11 0	1.81 .02 .22 .02	1.55 0 .08 0
Monthly Totals	1.72	1.42	1.52	1.51	1.66	1.79	1.78	1.87	1.88	2.07	1.63
Mar. 15-16	.08	.04	.20	.05	.07	.04	.02	.05	.06	.03	.02
Monthly Totals	.08	.04	.20	.05	.07	.04	.02	.05	.06	.03	.02
Apr. 5 29	.49 .04	.37 0	.49 .02	.50 .09	.52 .05	.47 .09	.61 .02	.60 .05	.57 .04	.59 0	.40 0
Monthly Totals	.53	.37	.51	.59	.57	.56	.63	.65	.61	.59	.40
May Totals	0	0	0	0	0	0	0	0	0	0	0
June 1 8-9 13 15 16 17-18 30	0 1.06 1.23 .82 .28 4.00 .31	0 .88 .80 .74 .24 3.60 .26	0 1.43 1.63 1.28 .44 6.28 .34	.07 1.01 .93 .69 .24 3.36 .28	0 1.07 1.68 .79 .28 3.88 .32	.11 .90 .90 .80 .28 3.92 .35	.21 .54 1.61 .94 .32 4.59 .28	0 .70 1.99 1.03 .36 5.08 .29	0 .87 1.50 1.04 .36 5.10 .30	.02 .61 1.18 .88 .30 4.30 .36	0 .93 1.80 .92 .32 4.50 .30
Monthly Totals	7.70	6.52	11.40	6.58	8.02	7.26	8.49	9.45	9.17	7.65	8.77
July 9-10 13 22 27-28	2.47 .29 2.58 1.03	2.04 .30 2.75 1.43	2.73 .31 2.77 1.10	2.28 .23 2.00 .79	2.53 .20 1.74 .69	2.81 .19 1.68 .67	2.22 .18 1.59 .63	2.28 .19 1.69 .67	2.42 .23 2.03 .80	2.85 .20 1.73 .69	2.40 .28 2.40 .70
Monthly Totals	6.37	6.52	6.91	5.30	5.16	5.35	4.62	4.83	5.48	5.47	5.78
Aug. 4 11-12 28	.10 1.86 .12	.10 .45 .20	.11 .24 .00	.08 1.60 .03	.07 .08 0	.07 .49 0	.06 .87 0	.07 .20 0	.08 .11 0	.07 .05 0	.10 .10 0
Monthly Totals	2.08	.75	.35	1.71	.15	.56	.93	.27	.19	.12	.20
Sept. 11 13 25	1.02 .98 .09	1.70 1.20 0	1.22 1.45 .15	.87 .90 .06	1.21 .83 .04	1.17 .66 .05	1.02 1.50 .12	1.20 .85 .03	1.30 .94 .12	1.33 1.04 .06	.44 .97 0
Monthly Totals	2.09	2.90	2.82	1.83	2.08	1.88	2.64	2.08	2.36	2.43	1.41
1961 WATER YEAR TOTALS	36.13	33.19	39.63	33.06	33.45	34.25	34.75	35.48	36.43	37.77	34.05
Oct. 2 10 24	1.35 .90 1.13	1.06 .45 1.15	1.70 .52 1.35	.68 1.94 1.30	.70 2.75 1.34	.98 1.42 1.53	1.16 1.45 1.38	1.05 1.01 1.47	.92 .88 1.58	.45 3.28 1.77	.75 .60 1.17
Monthly Totals	3.38	2.66	3.57	3.92	4.79	3.93	3.99	3.53	3.38	5.50	2.52
Nov. 2 12-13 16 22	.36 2.90 .23 .05	.23 3.20 .12 0	.30 4.20 .18 .02	.22 3.22 .22 .05	.22 4.00 .22 .06	.33 3.27 .18 .01	.30 3.20 .26 .08	.22 3.25 .25 .07	.36 3.94 .22 .07	.40 3.60 .20 .11	.10 3.67 .27 .01
Monthly Totals	3.54	3.55	4.70	3.71	4.50	3.79	3.84	3.79	4.59	4.31	4.05
Dec. 6 17	.25 .19	.23 .16	.25 .43	.25 .26	.23 .46	.23 .32	.18 .43	.16 .36	.17 .36	.12 .53	0 .12
Monthly Totals	.44	.39	.68	.51	.69	.55	.61	.52	.53	.65	.12
1961 CALENDAR YEAR TOTALS	28.67	25.67	33.48	26.54	28.59	26.55	28.48	27.91	29.17	29.77	25.60

DATE OF STORM		GAGE NUMBER										
		1-S	2-R	3-S	4-S	5-S	6-S	7-S	8-S	9-S	10-S	11-R
1962												
Jan.	13	0.11	0.15	0.07	0.22	0.08	0.10	0.06	0.08	0.08	0.07	0.10
	21-22	.30	.18	.19	.34	.17	.14	.17	.17	.14	.13	.10
	25	.19	.06	.20	.19	.32	.44	.43	.48	.52	.48	.10
Monthly Totals		.60	.39	.46	.75	.57	.68	.66	.73	.74	.68	.30
Feb.	15	.61	.74	.75	.70	.59	.65	.79	.80	.77	.76	.68
	23	.57	.27	.27	.19	.20	.27	.21	.33	.29	.26	.10
Monthly Totals		1.18	1.01	1.02	.89	.79	.92	1.00	1.13	1.06	1.02	.78
Mar.	14	.60	.54	.54	.59	.55	.53	.44	.55	.54	.59	.34
	31	.03	.06	.10	.15	.16	.30	.43	.36	.36	.10	.05
Monthly Totals		.63	.60	.64	.74	.71	.83	.87	.91	.90	.69	.39
Apr.	4- 5	.76	1.05	1.08	1.12	1.05	1.42	.99	1.25	1.54	1.51	1.00
	6	.54	.50	.56	.60	.67	.56	.76	.68	.79	.69	.49
	23	.70	.75	.84	1.21	.92	1.19	1.46	.84	.90	.73	.89
	27	1.09	1.19	1.64	1.03	1.23	1.57	1.48	2.14	1.89	1.79	1.30
Monthly Totals		3.09	3.49	4.12	3.96	3.87	4.74	4.69	4.91	5.12	4.72	3.68
May	28-29	1.17	1.05	1.28	1.38	1.28	1.21	1.45	1.38	1.45	1.33	1.45
	31	.40	.55	.10	.27	.44	.40	.20	.33	.50	.18	.05
Monthly Totals		1.57	1.60	1.38	1.65	1.72	1.61	1.65	1.71	1.95	1.51	1.50
June	1	.89	.85	.39	1.11	1.20	.81	1.00	1.14	1.31	.92	.64
	2	.51	.30	.31	.89	.80	.44	.85	.86	.87	.78	.61
	19	0	.08	0	0	0	0	0	0	0	0	0
	27-28	.43	.18	.76	.44	.36	.24	1.22	.23	.30	.71	0
Monthly Totals		1.83	1.41	1.46	2.44	2.36	1.49	3.07	2.23	2.48	2.41	1.25
July Totals		0	0	0	0	0	0	0	0	0	0	0
Aug.	15	0	.18	0	.50	.47	.46	.28	.63	.38	.26	.20
	25	1.35	1.31	1.23	1.67	1.53	.70	1.25	.95	.52	.91	.91
	31	.05	.42	0	0	.30	.25	0	.08	0	.25	0
Monthly Totals		1.40	1.91	1.23	2.17	2.30	1.41	1.53	1.66	.90	1.42	1.11
Sept.	6	.25	.20	.73	.02	.07	.10	.14	.42	.32	.65	0
	8- 9	.22	.22	.28	.41	.48	.34	.35	.39	.32	.68	.30
	17	.80	.74	.63	.92	.52	.35	.13	.20	.64	.29	.56
	26	.26	.20	.25	.16	.14	.35	.19	.16	.28	.30	.12
Monthly Totals		1.53	1.36	1.89	1.51	1.21	1.14	.81	1.17	1.56	1.92	.98
1962 WATER YEAR TOTALS		19.19	18.37	21.15	22.25	23.51	21.09	22.72	22.29	23.21	24.83	16.68
Oct.	9	0	0	0	0	0	0	.16	.16	.12	.13	0
	29	.09	0	0	0	0	0	0	0	0	0	.20
Monthly Totals		.09	0	0	0	0	0	.16	.16	.12	.13	.20
Nov.	3- 4	0	0	0	0	0	0	.42	.30	.32	1.37	0
	6	.46	.27	.21	.17	.22	.20	.13	.10	.18	.21	.1
	19	.35	.27	.27	.32	.28	.37	.35	.44	.41	.25	.1
	20	.19	.15	.15	.18	.15	.21	.19	.24	.22	.14	.3
	24	.43	.93	.52	.54	.06	.07	.04	.12	.07	.03	.27
	27	.46	1.30	.51	.59	.76	.84	.84	.91	.86	.91	1.33
Monthly Totals		1.89	2.92	1.66	1.80	1.47	1.69	1.97	2.11	2.06	2.91	2.10
Dec.	2	.24	.66	.26	.30	.39	.43	.43	.47	.44	.47	.54
	23-24	.81	.50	.71	.74	.68	.58	.60	.58	.66	.95	.4
	26-31	.12	.05	.13	.16	.14	.15	.22	.16	.19	.17	.1
Monthly Totals		1.17	1.21	1.10	1.20	1.21	1.16	1.25	1.21	1.29	1.59	1.04
1962 CALENDAR YEAR TOTALS		14.98	15.90	14.96	17.11	16.21	15.67	17.66	17.93	18.18	19.00	13.33
1963												
Jan.	18	.34	.17	.21	.20	.19	.15	.14	.15	.20	.23	.08
Monthly Totals		.34	.17	.21	.20	.19	.15	.14	.15	.20	.23	.08

DATE OF STORM		GAGE NUMBER										
		1-S	2-R	3-S	4-S	5-S	6-S	7-S	8-S	9-S	10-S	11-R
Feb.	10	0.17	0.16	0.20	0.20	0.22	0.21	0.28	0.30	0.30	0.23	0.10
	11	.33	.32	.39	.41	.45	.41	.55	.59	.60	.47	.32
	17-18	2.05	1.80	2.21	2.10	2.02	2.65	2.13	2.64	2.58	2.67	2.03
Monthly Totals		2.55	2.28	2.80	2.71	2.69	3.27	2.96	3.53	3.48	3.37	2.45
Mar.	4-11	.06	.10	.07	.03	.07	.05	.03	.05	.04	.04	
	18	.07	.05	.06	.11	.05	.05	0	.12	.06	.03	
Monthly Totals		.13	.15	.13	.14	.12	.10	.03	.17	.10	.07	.05
Apr.	5	1.80	2.00	2.58	2.37	2.64	2.34	2.13	1.96	1.94	1.70	2.51
	19	.02	0	.04	.09	.12	.06	0	0	0	0	
	30	.07	0	.10	.13	.13	.19	.35	.25	.30	.40	
Monthly Totals		1.89	2.00	2.72	2.59	2.89	2.59	2.48	2.21	2.24	2.10	2.51
May	1	.14	.12	.16	.28	.25	.23	.22	.22	.21	.29	0
	5	.25	.20	.24	.11	.08	.07	.10	.08	.07	.26	.11
	18	.13	.10	.06	.19	.38	.05	.62	.01	0	.15	.09
Monthly Totals		.52	.42	.46	.58	.71	.35	.94	.31	.28	.70	.20
June	1	.02	.13	.05	0	0	.08	.07	.34	.10	.16	.08
	16-17	.67	.65	.92	.71	.90	.99	.90	1.02	1.10	.95	
	17	.15	.10	.14	.10	.24	.17	.07	.11	.12	.07	.87
	20	.45	.30	.43	.30	.23	.51	.20	.34	.35	.20	.38
	26	.05	.20	.24	.66	.13	.12	.14	.30	.50	.60	.10
	30	.01	0	.43	.23	0	.14	.20	.19	.13	.72	.04
Monthly Totals		2.35	1.38	2.21	2.00	2.00	2.01	1.58	2.30	2.30	2.70	1.47
July	2-3	.29	.25	0	.29	.64	0	0	.38	.78	.81	.20
Monthly Totals		.29	.25	0	.29	.64	0	0	.38	.78	.81	.20
Aug.	8-9	0	0	0	0	0	0	0	0	0	0	.2
	11	0	0	0	.02	0	0	.15	.02	.09	.04	
	14	.06	.06	.08	.12	.26	.04	.12	0	0	0	
	28	.15	.06	.01	0	0	0	0	0	.02	0	
	29	.10	.04	.01	0	0	0	0	0	.01	0	.1
Monthly Totals		.31	.16	.10	.14	.26	.04	.27	.02	.12	.04	.30
Sept.	2	.38	.15	.02	0	0	0	0	0	.05	0	
	12-13	1.19	1.00	.63	2.54	1.30	.38	1.50	1.28	.87	.82	1.00
	14	.15	.20	.23	.10	.27	.27	.22	.22	.58	.14	.32
	15	.70	.90	1.05	.43	1.23	1.23	.97	1.00	2.61	.61	1.60
	19	.08	.10	.11	.15	.20	.23	.26	.21	.23	.43	
Monthly Totals		2.50	2.35	2.04	3.22	3.00	2.11	2.95	2.71	4.34	2.00	2.92
1963 WATER YEAR TOTALS		14.03	13.29	13.43	14.87	15.18	13.47	14.73	15.26	17.31	16.65	13.52
Oct.	20	.08	0	0	0	0	.07	0	0	0	0	0
	24	3.86	2.60	2.69	2.52	2.68	2.90	2.40	2.90	2.71	2.40	2.46
	25-26	2.00	1.95	2.30	.78	.75	1.10	.55	.63	.66	.59	1.63
Monthly Totals		5.94	4.55	4.99	3.30	3.43	4.07	2.95	3.53	3.37	2.99	4.09
Nov.	8	1.20	1.27	1.80	1.64	1.59	3.14	2.88	3.38	2.88	3.83	1.53
	9-10	.13	.14	.20	.18	.18	.34	.32	.37	.32	.42	.20
	19	.64	.55	.76	.31	.54	.42	.50	.51	.43	.44	.69
	25-26	.68	.25	.43	.43	.55	.40	.31	.35	.30	.22	.38
	27-28	.77	.60	.69	.73	.75	.81	.97	.83	1.05	1.00	.54
Monthly Totals		3.42	2.81	3.88	3.29	3.61	5.11	4.98	5.44	4.98	5.91	3.34
Dec.	11	.12	.10	.12	.08	.09	.05	.07	.06	.06	.07	.04
	12	.12	.10	.13	.09	.09	.05	.07	.07	.06	.07	0
	13-14	1.00	.80	.86	.96	1.01	.98	1.06	1.03	1.06	1.18	.07
	21-22	.17	.15	.18	.23	.29	.18	.23	.20	.24	.24	.12
	23	0	0	0	0	0	0	0	0	0	0	.11
Monthly Totals		1.41	1.15	1.29	1.36	1.48	1.26	1.43	1.36	1.42	1.56	.34
1963 CALENDAR YEAR TOTALS		21.65	17.67	20.83	19.82	21.02	21.06	20.17	22.11	23.61	22.48	17.95



DATE OF STORM	GAGE NUMBER											
	1-S	2-R	3-S	4-S	5-S	6-S	7-S	8-S	9-S	10-S	11-R	
1964												
Jan. 15	0.80	0.51	0.79	0.92	0.88	0.90	1.35	0.94	0.95	1.15	0.44	
19	.03	.09	.04	.02	.02	.02	.02	.01	.02	.02	0	
30	1.82	2.12	2.25	2.01	2.02	2.43	2.12	2.18	2.11	2.99	2.12	
Monthly Totals	2.65	2.72	3.08	2.95	2.92	3.35	3.49	3.13	3.08	4.16	2.56	
Feb. 3	1.68	2.50	1.62	1.72	.87	.70	.60	.65	.72	.68	1.22	
4	0	.45	0	0	0	0	0	0	0	0	0	
17	.14	.05	.10	.10	.07	.07	.09	.05	.06	.10	.04	
21	.56	.50	.50	.63	.68	.58	.61	.61	.66	.82	.40	
24	.44	.40	.48	.51	.54	.47	.48	.49	.52	.66	.42	
Monthly Totals	2.82	3.90	2.79	2.96	2.16	1.82	1.78	1.80	1.96	2.26	2.08	
Mar. 2	.21	.20	.18	.20	.22	.48	.45	.63	.70	.42	.17	
9	.03	0	.05	.06	.05	.02	.02	.02	.03	0	.02	
18-19	2.10	2.30	2.00	2.10	2.11	1.93	1.70	2.00	1.86	1.50	2.34	
Monthly Totals	2.34	2.50	2.23	2.36	2.38	2.43	2.17	2.65	2.59	1.92	2.53	
Apr. 1-6	.04	0	.09	.03	.02	.05	0	.02	0	0	0	
17	.80	.75	.73	.84	.78	.82	.64	.82	.68	.42	.74	
25	.34	.34	.58	.31	.38	.39	.41	.51	.25	1.21	.10	
26	.06	.06	.10	.05	.07	.07	.07	.09	.04	.21	.10	
Monthly Totals	1.24	1.15	1.50	1.23	1.25	1.33	1.12	1.44	.97	1.84	.94	
May 1	0	0	0	0	0	0	0	0	0	0	.09	
6	.04	.04	.04	.05	0	.03	0	.04	.05	0	.03	
11	.23	.20	.15	.24	.20	.22	.20	.25	.25	.35	.13	
20	.29	.10	.07	.25	.23	.09	.26	.21	.21	.19	.14	
21	.71	.25	.16	.61	.57	.23	.64	.53	.54	.46	.14	
22	0	0	0	0	0	0	0	0	0	0	.20	
23	0	0	0	0	0	0	0	0	0	0	.10	
24	.40	.10	.08	.41	.78	0	.77	0	.08	.28	0	
25	.05	0	.08	0	.05	.10	.08	.04	0	.10	.10	
29	.10	.10	.12	.17	.14	.16	.15	.16	.18	.15	.13	
30	.64	.65	.78	1.08	.94	1.02	.97	1.02	1.14	1.00	1.06	
Monthly Totals	2.46	1.44	1.48	2.81	2.91	1.85	3.07	2.25	2.45	2.53	2.12	
June 2	.32	.35	.37	.50	.36	.46	.30	.35	.40	.23	0	
5	0	0	0	0	0	0	0	0	0	0	.33	
15	.08	.50	.25	.02	.03	.02	0	.45	0	.25	.06	
16	.15	.05	.05	.18	.14	.05	.17	.25	.02	.05	.09	
17	.02	.10	.53	.06	.21	1.76	.11	.38	.64	.80	.36	
27-29	0	0	0	0	.06	0	0	0	0	0	0	
Monthly Totals	.57	1.00	1.20	.76	.80	2.29	.58	1.43	1.06	1.33	.84	
July 2	.07	0	0	1.10	0	0	0	0	0	.23	0	
12	.16	.10	.24	.54	.44	.32	.74	.13	.04	.90	.44	
19	.01	.05	.06	.06	.02	.07	.02	0	.01	.01	.09	
20	.01	.02	.02	.02	.01	.03	.01	0	0	.01	0	
29	.31	.27	.02	.10	.09	.07	.02	.22	.31	1.14	0	
Monthly Totals	.56	.44	.34	1.82	.56	.49	.79	.35	.36	2.29	.53	
Aug. 7	1.29	1.05	.65	1.52	1.09	.73	1.48	.95	.99	.91	.90	
8	.34	.28	.18	.41	.29	.20	.39	.25	.26	.24	.48	
22	.83	.89	.52	1.91	.90	.48	2.00	.82	.81	1.55	.58	
23	.83	.88	.51	1.90	.90	.48	2.00	.82	.81	1.55	.12	
24	0	0	0	0	0	0	0	0	0	0	.34	
Monthly Totals	3.29	3.10	1.86	5.74	3.18	1.89	5.87	2.84	2.87	4.25	2.42	
Sept. 8	0	.16	.02	.03	0	0	0	0	0	0	0	
11	0	.30	.03	.07	0	0	0	0	0	0	0	
16	1.02	.38	.39	.53	.26	.36	.85	.58	.59	.36	.30	
17	.72	.27	.28	.38	.19	.26	.61	.42	.42	.25	.10	
20	.17	.03	.08	.02	.08	.44	.15	.05	.03	0	0	
22	.06	.25	.17	.42	.04	.01	.03	.48	.03	.01	.20	
23	.15	0	1.02	.43	.14	.10	.26	.57	.18	0	0	
26-27	.48	.43	.51	.61	.44	.50	.60	.87	.57	1.69	.27	
28-29	.01	0	.03	.01	.03	.12	.20	.32	.41	.03	.05	
Monthly Totals	2.61	1.82	2.53	2.50	1.18	1.79	2.70	3.29	2.23	2.34	1.02	
1964 WATER YEAR TOTALS	29.31	26.58	27.17	31.08	25.86	27.68	30.93	29.50	27.34	33.38	22.81	

DATE OF STORM	GAGE NUMBER										
	1-S	2-R	3-S	4-S	5-S	6-S	7-S	8-S	9-S	10-S	11-R
Oct. 19	0.03	0.04	0.03	0.03	0.04	0.01	0.03	0.03	0.01	0.04	0
26	2.18	2.35	2.20	2.39	2.35	2.58	2.90	2.60	2.60	3.03	2.20
Monthly Totals	2.21	2.39	2.23	2.42	2.39	2.59	2.93	2.63	2.61	3.07	2.20
Nov. 4-5	2.95	2.50	2.51	2.60	2.28	3.75	3.41	3.07	3.24	1.55	2.38
14-16	.33	.10	.22	.66	.14	.16	.22	.08	.14	.08	.14
19	.15	.05	.13	.08	.11	.20	.20	.10	.13	.25	0
Monthly Totals	3.43	2.65	2.86	3.34	2.53	4.11	3.83	3.25	3.51	1.88	2.52
Dec. 5	.05	.05	.06	.02	.02	.03	.02	.04	.03	.04	.02
9	1.11	1.15	1.39	1.15	1.20	1.06	1.11	1.23	1.14	1.15	1.43
10	0	0	0	0	0	0	.01	.01	.01	.01	.07
18	.05	.04	.05	.05	.06	.06	.05	.04	.04	.05	.03
Monthly Totals	1.21	1.24	1.50	1.22	1.28	1.15	1.19	1.32	1.22	1.25	1.55
1964 CALENDAR YEAR TOTALS	25.39	24.35	23.60	30.11	23.54	25.09	29.52	26.38	24.91	29.12	21.31
1965											
Jan. 3	1.05	.02	.08	.07	.08	.06	.06	.06	.08	.08	0
9	.17	.10	.10	.06	.07	.06	.06	.06	.07	.07	.05
21	.99	1.21	1.35	1.34	1.28	.93	1.29	.94	.94	.98	1.34
Monthly Totals	2.21	1.33	1.53	1.47	1.43	1.05	1.41	1.06	1.09	1.13	1.39
Feb. 4	1.86	1.80	2.30	2.05	2.08	1.94	2.00	1.90	1.94	1.86	2.08
5	.69	.65	.81	.70	.73	.66	.67	.65	.66	.65	.52
9	1.50	1.15	1.05	1.13	1.02	.87	.82	.74	.75	.73	.93
11	.14	.10	.16	.20	.27	.60	.68	.55	.61	.08	.27
16	1.09	1.20	1.36	1.37	1.38	1.04	1.11	1.12	1.11	1.22	1.30
17	.62	.50	.88	.45	.68	.60	.54	.68	.67	.50	.32
24	.13	.25	.20	.30	.27	.28	.25	.05	.35	.33	.30
Monthly Totals	6.03	5.65	6.76	6.20	6.43	5.99	6.07	5.69	6.09	5.37	5.72
Mar. 13	.26	.21	.16	.16	.22	.18	.14	.13	.18	.10	.15
14	.13	.11	.08	.09	.12	.10	.07	.07	.09	.06	.08
20	0	0	0	0	0	0	0	.01	.02	.02	0
25	.03	.04	.03	.06	.07	.04	.05	.06	.04	.08	0
29	.12	.09	.11	.07	.07	.06	.06	.06	.06	.05	.06
30	1.68	1.26	1.58	.95	1.04	.81	.90	.85	.78	.73	1.53
Monthly Totals	2.22	1.71	1.96	1.33	1.52	1.19	1.22	1.18	1.17	1.04	1.82
Apr. 2	.06	.08	.08	.06	.05	.10	.11	.08	.06	.06	.07
6	.60	.55	.52	.63	.55	.64	.73	.73	.58	.10	.24
15	.28	.20	.13	.15	.18	.22	.08	.03	.02	.03	.11
26	.45	.35	.40	.26	.42	.38	.31	.31	.25	.46	.29
26-27	.35	.25	.40	.25	.22	.37	.33	.32	.34	.32	.23
Monthly Totals	1.74	1.43	1.53	1.35	1.42	1.71	1.56	1.47	1.25	.97	.94
May 5	.25	.15	.21	.61	.61	.73	.39	.40	.59	.26	.31
9	.61	.60	.76	.80	.73	1.12	1.12	1.20	1.22	1.39	.79
11	.82	.85	.86	.61	.78	1.10	.95	.68	.72	1.08	.86
13	.31	.25	.26	.25	.25	.26	.27	.24	.30	.31	.27
16	1.27	1.45	2.11	1.38	2.27	1.90	2.20	0	0	0	2.30
17	.11	.10	.10	.11	.11	.10	.13	.20	.21	.17	.11
18	2.04	1.95	1.92	2.14	2.16	2.01	2.59	3.80	4.01	3.23	2.16
18-19	.64	.95	.95	1.30	1.37	1.10	1.37	.38	.79	1.13	.02
23	0	0	0	.31	0	0	.32	0	0	0	.05
30	.07	.15	.24	.12	.36	.23	.13	.16	.13	.13	.28
Monthly Totals	6.12	6.45	7.41	7.63	8.64	8.55	9.47	7.06	7.97	7.70	7.15
June 5	.46	.95	.96	.55	.65	1.36	.37	.57	1.41	1.64	.39
19	.16	0	0	0	.06	.39	.89	.41	.19	.29	0
25	0	0	0	0	0	0	0	0	0	0	.04
27	0	0	0	0	0	0	.12	0	0	0	0
Monthly Totals	.62	.95	.96	.55	.71	1.75	1.38	.98	1.60	1.93	.43
July 13	0	0	0	0	0	0	0	0	0	0	.02
17	0	.10	.10	0	0	0	.10	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	.03
26	0	0	0	0	0	0	0	0	0	0	.08
Monthly Totals	0	.10	.10	0	0	0	.10	0	0	0	.13

DATE OF STORM	GAGE NUMBER										
	1-S	2-R	3-S	4-S	5-S	6-S	7-S	8-S	9-S	10-S	11-R
Aug. 1	0	0.05	0.02	0	0	0.48	0	0	0	0.02	0.07
2	0	0	0	0	0	0	0	0	0	0	.10
3	0	0	0	0	0	0	0	0	0	0	.13
5	.92	.20	.19	.82	.51	T	1.08	.44	.91	.88	.55
6	0	0	.10	0	0	0	0	0	0	0	.34
11	.26	.25	.14	.16	.11	.01	.07	.04	.02	.13	.15
14	.17	.17	.09	.11	.08	.01	.05	.02	.02	.09	.16
20	0	0	0	0	0	0	0	0	0	0	.07
21	0	0	0	0	0	0	0	0	0	.16	0
31	0	0	.42	0	0	0	.03	0	0	.08	.06
Monthly Totals	1.35	.67	.96	1.09	.70	.50	1.23	.50	.95	1.36	1.63
Sept. 6	.03	0	0	.09	.02	0	.04	.27	.07	.04	0
19	.02	0	.05	.10	.02	0	.03	.04	.02	0	0
25-26	3.06	2.60	2.95	3.09	3.24	3.30	3.42	3.60	3.68	3.12	2.70
28	0	0	0	.02	0	0	0	0	0	.02	.05
Monthly Totals	3.11	2.60	3.00	3.30	3.28	3.30	3.49	3.91	3.77	3.18	2.75
1965 WATER YEAR TOTALS	30.25	27.17	30.80	29.90	30.33	31.89	33.88	29.05	31.23	28.88	28.23
Oct. 3-4	1.32	1.15	1.48	1.28	1.47	1.48	1.20	1.32	1.42	1.51	1.25
4-11	.02	.02	.03	.02	.04	.02	.02	.04	.02	.02	.03
17	.10	.05	.06	.04	.04	.01	.03	.04	.04	.04	.04
18	.10	.05	.06	.05	.04	.07	.03	.04	.04	.04	.05
18	2.15	2.20	1.96	1.93	1.61	3.18	1.47	1.92	1.84	1.60	1.76
18	.10	.10	.09	.09	.07	.15	.07	.09	.09	.07	.08
Monthly Totals	3.79	3.57	3.68	3.41	3.27	4.97	2.82	3.45	3.45	3.28	3.21
Nov. 2	.17	.13	.14	.12	.15	.15	.13	.17	.16	.13	.15
8	.93	1.10	.70	.34	.71	.64	.44	.53	.82	.47	.22
11	.34	.33	.36	.30	.61	.74	1.04	1.13	1.04	.22	1.30
12-15	.02	0	.02	.04	.03	.02	.02	.02	.03	.02	.05
15-22	.01	0	0	0	0	0	.01	0	0	0	0
Monthly Totals	1.37	1.56	1.22	.80	1.50	1.55	1.64	1.85	2.05	.84	1.72
Dec. 1	.11	.10	.11	.13	.12	.09	.10	.09	.09	.08	.10
2	.98	.85	.94	1.07	.98	.80	.86	.76	.77	.65	.87
2-3	2.10	2.05	2.45	2.09	2.22	2.19	1.91	1.83	1.94	1.92	2.14
3-6	0	0	0	0	0	0	0	.04	0	0	0
6-13	.10	0	.08	.07	.08	.05	.16	.12	.18	.11	.15
13-14	.48	.45	.49	.34	.53	.55	.57	.49	.58	.70	.49
14-15	.42	.40	.43	.30	.48	.49	.51	.52	.52	.62	.44
15	.17	.12	.15	.16	.16	.16	.16	.19	.20	.16	.11
17-18	.59	.43	.56	.59	.59	.58	.59	.66	.73	.59	.39
20-27	.08	.05	.09	.07	.09	.06	.08	.05	.07	.05	0
27-31	.02	0	.10	.02	.06	.10	.07	.29	.14	.07	0
Monthly Totals	5.05	4.45	5.40	4.84	5.31	5.07	5.01	5.14	5.22	4.95	4.71
1965 CALENDAR YEAR TOTALS	33.61	30.47	34.51	31.97	34.21	35.63	35.40	32.29	34.61	31.75	31.60
1966 Jan. 4	.40	.35	.31	.41	.43	.43	.55	.50	.49	.52	.31
5-10	.03	.02	.03	.04	.03	.04	.04	.03	.05	.03	.29
14	.28	.25	.28	.24	.28	.33	.24	.30	.33	.24	.20
18-19	.20	.15	.23	.18	.27	.22	.19	.23	.29	.34	.20
21	.19	.08	.22	.20	.23	.16	.16	.16	.19	.20	.14
24	.05	.02	.05	.05	.06	.04	.04	.04	.05	.05	.03
25	.02	.02	.02	.02	.02	.04	.02	.01	.02	.02	.03
28	.05	0	.06	.06	.05	.04	.04	.03	.03	.02	.10
Monthly Totals	1.22	.89	1.20	1.20	1.37	1.30	1.28	1.30	1.45	1.42	1.30
Feb. 9	.09	.07	.09	.05	.09	.17	.17	.13	.13	.11	.09
9	.77	.58	.72	.40	.74	1.40	1.39	1.11	1.09	.93	.75
11-12	.38	.35	.48	.47	.39	.47	.36	.45	.54	.71	.49
15	.19	.15	.25	.22	.24	.51	.35	.53	.51	.59	.26
23	.22	.20	.20	.22	.27	.20	.17	.21	.27	.26	.06
26	.87	.55	.82	.70	.74	.76	.73	.69	.62	.42	.71
Monthly Totals	2.52	1.90	2.56	2.06	2.47	3.51	3.17	3.12	3.16	3.02	2.36

DATE OF STORM	GAGE NUMBER										
	1-S	2-R	3-S	4-S	5-S	6-S	7-S	8-S	9-S	10-S	11-R
Mar. 9-10	0.02	0.02	0.01	0.02	0.03	0.03	0.02	0.03	0.04	0.02	0.02
12	.89	.65	.85	.22	.48	1.13	.12	.22	.32	.46	1.28
23	.02	.05	.09	.06	.25	.19	.12	.10	.09	.46	.09
27	.10	.10	.04	.10	.07	.18	.10	.08	.09	.03	.04
27	.60	.60	.26	.61	.40	1.06	.57	.45	.56	.16	.26
28	.04	.25	.32	.07	.05	.06	.06	.07	.07	.04	.07
Monthly Totals	1.67	1.67	1.57	1.08	1.28	2.65	.99	.95	1.17	1.17	1.76
Apr. 14	.22	.15	.21	.07	.12	.07	.02	.06	.07	.03	.09
17	1.34	1.10	1.22	.95	1.01	1.07	.93	1.13	1.01	1.03	1.11
22	.39	.30	.32	.30	.35	.39	.41	.46	.46	.77	.30
24-25	1.54	1.20	1.29	1.22	1.38	1.57	1.66	1.86	1.82	3.07	1.20
28	.03	.02	.03	.03	.03	.03	.01	.03	.04	.02	.09
Monthly Totals	3.52	2.77	3.07	2.57	2.89	3.13	3.03	3.54	3.40	4.92	2.79
May 1	1.36	1.35	1.78	1.24	1.50	1.45	1.18	1.32	1.60	1.45	1.57
3	.04	.02	.02	.03	.04	.02	.04	.02	.02	.05	.03
4-5	.58	.50	.58	.50	.58	.61	.57	.57	.63	.72	.53
5	.33	.25	.32	.30	.32	.32	.22	.33	.39	.23	.25
6	.09	.09	.08	.10	.15	.21	.11	.15	.19	.13	.14
12	.03	.02	.03	0	.02	.04	.02	.02	.01	.01	.05
18	1.54	.95	1.45	.60	.90	1.41	.10	.42	.57	.09	.85
23	.30	.20	.15	.60	.32	.17	.53	.29	.22	.21	.22
24	0	0	0	0	0	0	0	.02	.02	0	.02
26	.09	0	.04	.10	.03	.02	.03	.02	.01	0	.04
28-29	.49	.25	.43	.40	.27	.18	.46	.32	.20	.83	.29
Monthly Totals	4.85	3.63	4.88	3.87	4.13	4.43	3.26	3.48	3.86	3.72	3.99
June 13	0	.35	.60	.54	1.25	1.43	.88	.80	1.13	.45	.33
18	1.76	1.30	.97	.68	2.11	.50	1.00	.42	.26	.53	1.01
19	.61	.45	.33	.23	.73	.17	.34	.14	.09	.19	.35
20	.03	0	.03	.34	.79	.35	.26	.81	.49	.12	.11
22	.17	.02	.04	1.52	.14	.03	.77	1.13	.17	.94	.07
23	0	0	.11	.87	0	.68	.34	.05	.02	.04	.19
25	.11	0	0	.41	.08	.06	.27	.11	.21	.75	.21
Monthly Totals	2.68	2.12	2.08	4.59	5.10	3.22	3.86	3.46	2.37	3.02	2.27
July 5	.24	.75	.04	.58	.82	.16	1.39	1.04	.90	.16	.04
6	.41	.30	.08	.23	.33	.28	.55	.41	.36	.07	.13
6	0	0	0	.03	.17	.17	.03	.23	.11	.29	0
11-18	0	0	0	0	0	0	0	0	0	0	.03
Monthly Totals	.65	1.05	.12	.84	1.32	.61	1.97	1.68	1.37	.52	.20
Aug. 3	.03	.02	.05	.05	.04	.07	.08	.04	.04	.02	.03
3	.15	.03	.03	.05	.05	0	0	.02	0	.03	.05
6	.27	.20	.29	.17	.22	.49	.14	.48	.67	.97	.26
7	.28	.20	.29	.18	.23	.50	.14	.49	.68	.98	.26
11	.71	.50	.38	.77	.44	.41	.73	.47	.44	.60	.33
13	.17	.10	.01	.22	.01	.41	0	.04	.02	.05	0
20	.05	.05	0	0	.11	.11	.05	0	0	0	.03
25	.77	.45	.54	.41	.42	.30	.22	.18	.32	.81	.41
27	.51	.25	0	.21	.47	.19	.31	.21	.24	.41	.42
27	.83	.40	0	.35	.75	.31	.51	.34	.39	.64	.70
29	0	0	0	0	0	0	.03	.02	.02	.04	0
Monthly Totals	3.77	2.20	1.59	2.41	2.74	2.79	2.21	2.29	2.82	4.55	2.49
Sept. 5	.05	.10	0	.02	.21	0	.07	.04	0	.11	.01
6	1.00	.35	.22	.30	.08	.11	.24	.29	.49	.15	.55
7	.88	.65	.65	.28	.19	.20	.26	.26	.30	.20	.25
9-10,											
11-12	.12	.05	.08	1.26	.87	1.12	2.07	1.88	1.66	3.51	.24
17	.28	.53	.72	.35	.67	1.42	.26	.15	.40	.22	.50
17	.03	.05	.07	.03	.06	.13	.02	.01	.04	.02	0
18	.22	.42	.57	.28	.54	1.12	.22	.12	.32	.18	.36
27	1.58	.75	.53	1.57	1.20	1.25	.86	1.12	1.54	.86	.66
30	.07	.01	.04	.23	.14	.05	.01	.08	.09	.35	.18
Monthly Totals	4.23	2.91	2.88	4.32	3.96	5.40	4.01	3.95	4.84	5.60	2.75
1966 WATER YEAR TOTALS	35.32	28.72	30.25	31.99	35.34	38.63	33.25	34.21	35.16	37.01	29.55

DATE OF STORM	GAGE NUMBER										
	1-S	2-R	3-S	4-S	5-S	6-S	7-S	8-S	9-S	10-S	11-R
Oct. 3-10	0	0	0.05	0	0.42	0	0	0.04	0.03	0	0.07
14	.04	.13	.10	1.29	1.23	.48	.30	1.85	1.16	2.52	.61
17	.11	.15	.10	.11	.09	.10	.07	.09	.06	.05	.10
24	.22	.11	.09	.04	.05	.04	.07	.04	.07	.07	.04
Monthly Totals	.37	.39	.34	1.44	1.79	.62	.44	2.02	1.32	2.64	.82
Nov. 21-28	.06	0	0	.06	0	0	0	0	0	0	0
Monthly Totals	.06	0	0	.06	0	0	0	0	0	0	0
Dec. 4	.02	.01	.01	.02	.02	.02	.01	0	0	0	0
8	.02	.05	.10	.06	.06	0	.05	0	0	.10	.09
15	.01	.02	.09	.34	.37	.28	.15	.17	.13	.30	.43
19	0	.01	.03	.01	.02	.02	0	.01	.02	0	.04
26	0	0	0	0	0	.01	0	0	0	0	0
30	.05	.05	.06	.06	.08	.05	.05	.05	.10	.06	.03
Monthly Totals	.10	.14	.29	.49	.58	.38	.26	.23	.25	.46	.59
1966 CALENDAR YEAR TOTALS	25.64	19.67	20.58	24.93	27.60	28.04	24.48	26.02	26.01	31.04	21.32
1967											
Jan. 9	.04	.05	.05	.05	.04	.08	.05	.06	.09	.11	.05
13	.14	.15	.15	.13	.16	.18	.16	.16	.17	.19	.16
16-23	.04	.04	.04	.04	.05	.04	.03	.05	.06	.04	0
23-30	.03	0	.03	.01	.02	.02	.02	.02	.03	.01	0
Monthly Totals	.25	.24	.27	.23	.29	.32	.26	.29	.35	.35	.21
Feb. 6	.52	.50	.56	.45	.46	.48	.41	.45	.49	.43	.33
6-13	.04	.03	.03	.02	.03	.03	0	0	0	0	.03
19	.17	.10	.20	.07	.05	.02	.02	.02	.02	.03	.15
27	0	0	0	.05	.02	.02	.03	.06	.05	.05	0
27	.08	.09	.06	.02	.08	.08	.03	.04	.06	.04	.11
Monthly Totals	.81	.72	.85	.61	.64	.63	.49	.57	.62	.55	.62
Mar. 19	.04	.05	.09	.07	.11	.13	.12	.14	.14	.24	.09
23	.05	.05	.05	.06	.06	.05	.05	.05	.05	.59	.04
24	1.52	1.40	1.47	1.78	1.59	1.51	1.60	1.52	1.52	1.64	1.17
26	.33	.30	.32	.38	.34	.32	.34	.33	.33	.35	.48
Monthly Totals	1.94	1.80	1.93	2.30	2.10	2.01	2.12	2.04	2.04	2.29	1.78
Apr. 2	0	0	0	0	0	0	0	0	0	0	.03
11	.32	.20	.23	.15	.31	.27	.38	.30	.30	.38	.13
13	.56	.35	.39	.27	.55	.48	.66	.53	.53	.67	.58
17	0	0	.02	.12	0	.05	.15	.01	0	.02	.06
26	.01	0	.01	.01	.02	.01	.01	.02	.03	.01	.03
27-30	.06	.05	.04	.05	.10	.09	.11	.08	.09	.09	.04
Monthly Totals	.95	.60	.69	.60	.98	.90	1.31	.94	.95	1.17	.87
May 4	.14	.10	.26	.10	.09	.06	.03	.03	.04	.03	.06
5	.04	.10	.04	0	0	0	0	0	0	0	.04
20	.46	.50	.92	.17	.60	.96	3.63	1.23	.93	1.61	.28
28	.01	0	0	0	0	.06	.03	.04	0	.01	.04
29	.17	.05	.07	.04	.08	.16	.10	.34	.15	.25	.06
Monthly Totals	.82	.75	1.29	.31	.77	1.24	3.79	1.64	1.12	1.90	.48
June 12	0	0	0	0	0	0	0	0	.05	.07	0
Monthly Totals	0	0	0	0	0	0	0	0	.05	.07	0
July 1	1.50	1.40	1.13	.68	.87	1.39	1.47	.66	.55	1.72	.87
13	1.25	.40	.69	1.17	.47	.33	.99	.63	.36	.70	.24
20	.25	.25	.82	.18	.14	.06	.11	.32	.13	.94	.14
21	0	0	0	0	0	.13	0	.08	.03	.05	.05
Monthly Totals	3.00	2.05	2.64	2.03	1.48	1.91	2.57	1.69	1.17	3.41	1.30
Aug. 17	.50	.55	.65	.46	.44	.46	.45	.36	.33	.28	.32
18-19	.12	.35	.48	.18	.66	.30	.25	.62	.40	1.10	.49
23	.09	0	.15	1.90	1.37	.70	.35	.16	.26	.07	.74
25	0	0	.16	.69	.75	.41	.70	1.85	.87	.24	.16
31	0	0	0	.69	0	0	0	0	0	0	0
Monthly Totals	.71	.90	1.44	3.92	3.22	1.87	1.75	2.99	1.86	1.69	1.71

DATE OF STORM		GAGE NUMBER										
		1-S	2-R	3-S	4-S	5-S	6-S	7-S	8-S	9-S	10-S	11-R
Sept.	2	0.64	0.75	0.37	0.35	0.22	0.06	0.25	0.16	0.12	0.21	0
	3	.91	1.06	.52	.50	.31	.09	.36	.22	.16	.29	0
	4	.10	.12	.06	.06	.04	.01	.04	.02	.02	.03	0
	15	.13	.05	.39	.39	.24	1.02	0	.77	.92	0	.24
	15	.30	.43	.37	.66	.50	.45	.81	1.19	.22	.49	.48
	16	.22	.32	.27	.50	.37	.33	.60	.88	.17	.37	0
	19-22	7.48	6.85	8.29	8.22	8.30	8.63	8.94	9.43	9.63	10.56	8.07
	24	.04	0	.03	.02	.04	.03	1.14	.61	.35	.50	.12
	25-26	.06	0	.04	.02	.02	.03	.01	.03	.02	0	.04
Monthly Totals		9.88	9.58	10.34	10.72	10.04	10.65	12.15	13.31	11.61	12.45	9.08
1967 WATER YEAR TOTALS		18.89	17.17	20.08	22.71	21.86	20.53	25.14	25.72	21.34	26.98	17.46
Oct.	3	.09	.12	.08	.02	.10	.09	.02	.04	.07	.10	.10
	4	.16	.46	.35	.05	.63	.05	.43	.83	.36	1.12	.57
	7	.28	.05	.26	.40	.33	.29	.10	.40	.54	.35	.27
	15	1.15	1.00	.98	.84	.97	.99	1.18	1.36	1.63	1.27	.64
	15	.17	.15	.15	.13	.15	.15	.18	.20	.24	.19	.32
	30	1.05	.70	.68	.92	.80	.63	.53	.47	.55	.64	.33
Monthly Totals		2.90	2.48	2.50	2.36	2.98	2.20	2.44	3.30	3.39	3.67	2.23
Nov.	7	.09	.10	.10	.09	.10	.12	.10	.10	.11	.11	0
	7-8	1.88	1.81	2.00	1.86	2.06	2.36	2.00	2.11	2.17	2.27	1.99
	9-10	2.21	2.13	2.36	2.19	2.42	2.77	2.35	2.48	2.56	2.67	2.58
	13-20	0	0	0	.02	0	0	0	.02	.03	0	0
	28	.02	.02	.05	.03	.03	.03	.03	.04	.05	.03	.02
Monthly Totals		4.20	4.06	4.51	4.19	4.61	5.28	4.48	4.75	4.92	5.08	4.59
Dec.	2	.03	0	.16	.02	.02	.02	.03	.03	.03	.03	.05
	5	.31	.25	.30	.26	.31	.30	.31	.31	.30	.36	.30
	9	.07	.05	.07	.08	.07	.13	.07	.12	.13	.10	.07
	13	.03	.05	.08	.07	.06	.09	.03	.10	.23	.14	.03
	14-15	.57	.36	.52	.47	.54	.34	.44	.38	.37	.33	.40
	16-17	.16	.10	.14	.13	.15	.09	.12	.11	.10	.09	.17
	30	.13	.10	.12	.14	.15	.12	.10	.12	.15	.13	.08
	Monthly Totals		1.30	.91	1.39	1.17	1.30	1.09	1.10	1.17	1.31	1.18
1967 CALENDAR YEAR TOTALS		26.76	24.09	27.85	28.44	28.41	28.10	32.46	32.69	29.39	33.81	23.97
1968 Jan.	3	.10	.10	.12	.12	.13	.14	.12	.12	.15	.13	.06
	4-5	.21	.15	.22	.20	.23	.22	.14	.15	.17	.14	.15
	9	1.40	1.30	1.30	1.37	1.08	1.20	1.06	1.28	1.30	1.67	1.10
	9-15	.01	0	.01	.03	.02	.03	.01	.03	.03	.01	0
	18	4.00	2.65	2.68	2.74	2.57	1.94	1.76	1.66	1.64	1.30	2.15
	19-21	3.96	3.36	3.78	4.00	4.05	4.06	4.16	4.25	4.05	2.20	3.79
	28	.13	.12	.11	.12	.09	.06	.09	.07	.06	.06	.14
	30	0	0	0	.01	.01	.01	.02	.01	.01	.02	0
	Monthly Totals		9.81	7.68	8.22	8.59	8.18	7.66	7.36	7.57	7.41	5.53
Feb.	10-11	.52	.45	.52	.57	.57	.59	.51	.48	.53	.51	.51
	13	.06	.05	.08	.08	.09	.08	.07	.08	.11	.11	0
	13-14	.12	.10	.17	.16	.18	.15	.14	.16	.21	.23	.15
	17	.98	.83	.93	.96	.98	.97	.93	.98	.97	1.18	.89
	19	.23	.20	.22	.23	.23	.23	.22	.23	.23	.29	.21
	19	.03	.02	.03	.03	.04	.02	.02	.04	.05	.03	.03
	20-26	.01	0	.01	.03	.01	.03	.02	.04	.03	.02	.03
Monthly Totals		1.95	1.65	1.96	2.06	2.10	2.07	1.91	2.01	2.13	2.37	1.82
Mar.	4	.08	.03	.05	.07	.05	.05	.06	.06	.06	.07	0
	5	.21	.15	.19	.22	.22	.21	.25	.24	.24	.25	.16
	11	.60	.34	.54	.60	.51	.51	.51	.49	.62	.61	.39
	11	.03	.05	.06	.06	.10	.08	.05	.06	.05	.06	.13
19	.13	.05	.04	.20	.08	.12	.09	.10	.10	.10	.07	
Monthly Totals		1.05	.62	.88	1.15	.96	.97	.96	.95	1.07	1.09	.75
Apr.	1	.05	.05	.09	0	0	0	0	0	0	0	.20
	2	.10	.05	.15	.14	.22	.19	.13	.14	.20	.14	0
	8	.03	.03	.03	.03	.02	.11	.07	.07	.12	.13	.02
	8-9	1.06	1.30	1.37	.36	.34	.68	.31	.89	.93	.73	.55
	9	.16	.15	.21	.25	.23	.22	.42	.32	.30	.19	.09
	12-13	.46	.15	.18	.20	.17	.20	.18	.23	.25	.25	.22
	18	.05	.05	.05	.05	.04	.03	.04	.03	.05	.04	.02

DATE OF STORM		GAGE NUMBER										
		1-S	2-R	3-S	4-S	5-S	6-S	7-S	8-S	9-S	10-S	11-R
Apr.	20-21	0.73	0.81	0.71	0.58	0.57	0.59	0.68	0.52	0.51	0.42	0.84
	22	1.41	1.56	1.36	1.13	1.11	1.13	1.32	1.00	.98	.82	.56
	23	.03	0	.02	.04	.04	.03	.04	.03	.03	.04	.08
	28	0	0	.05	.04	.62	.57	1.59	2.27	2.57	.06	.20
Monthly Totals		4.08	4.15	4.22	2.82	3.36	3.75	4.78	5.50	5.94	2.82	2.78
May	3	.14	.15	.15	.32	.21	.19	.14	.15	.10	.06	.14
	3- 4	.07	.05	.10	.13	.14	.30	.33	.33	.12	.12	.10
	7	.28	.20	.37	.82	1.01	1.73	1.95	1.95	2.18	2.08	.55
	9	.10	0	.17	.08	.08	.10	.10	.16	.09	.10	.04
	10-11	2.93	2.45	2.73	1.95	1.75	1.92	.64	1.56	1.44	3.69	2.51
	17	.03	.20	.13	.23	.17	.13	.09	.17	.17	.02	.12
	27	.03	.02	.07	0	0	.04	0	0	0	0	0
Monthly Totals		3.58	3.07	3.72	3.53	3.36	4.41	4.25	4.32	4.10	6.07	3.46
June	1- 2	.40	.34	.60	.41	.55	.68	1.54	.95	.60	1.49	.11
	3	.19	0	.05	.03	0	.15	.04	0	.05	0	.05
	17	.31	.26	.46	.32	.40	.39	.37	.14	.27	1.30	1.08
	19	.16	.14	.25	.18	.22	.21	.20	.08	.14	.70	.12
	20	.62	.25	.12	.14	.04	.05	.03	.06	.04	0	.07
	22	.98	2.36	.93	2.82	1.11	.26	.21	.20	.26	.19	.22
	23	.12	.28	.11	.33	.13	.03	.02	.02	.03	.02	.23
	26	.08	.80	.67	.46	1.00	.57	.66	.54	.42	.90	.90
	30	0	0	.03	0	0	0	0	0	0	0	.05
Monthly Totals		3.76	4.43	3.22	4.69	3.45	2.34	3.07	1.99	1.81	4.60	2.83
July	2	0	0	0	.07	0	.03	.04	.09	0	.54	0
	7	0	.06	.02	.15	.33	.05	.56	.67	.09	.01	.15
	9	.05	.03	.07	.03	.04	.04	.04	.05	.08	.10	.07
	11	.96	1.09	.86	1.31	1.32	1.05	.63	.46	.49	.31	.75
	12	.31	.36	.28	.43	.43	.35	.21	.15	.16	.10	.31
	14	.18	0	.02	.04	.06	.02	.24	.06	.03	.07	0
	23-24	.01	0	.18	0	0	.01	0	0	0	0	.09
Monthly Totals		1.51	1.54	1.43	2.03	2.18	1.55	1.72	1.48	.85	1.13	1.37
Aug.	1	0	0	0	.30	.02	0	.14	.47	0	.24	0
	3	0	0	0	.02	0	0	0	0	0	0	0
	17	0	0	.03	.02	0	.06	0	0	0	0	0
	20	.43	.10	0	0	.16	0	.05	.17	0	.34	.13
	31	1.72	1.24	1.05	1.02	1.06	.83	.95	1.13	.87	.98	.84
Monthly Totals		2.15	1.34	1.08	1.36	1.24	.89	1.14	1.77	.87	1.56	.97
Sept.	1- 2	.98	.71	.60	.59	.61	.47	.55	.65	.50	.56	1.24
	4- 5	1.98	2.20	2.18	2.13	2.05	1.47	2.51	1.71	1.42	1.28	2.17
	9	.05	.20	.06	.08	.04	.12	.13	.45	.54	.53	.09
	13-14	.29	.05	.31	.23	.26	.53	.27	.35	.41	.54	.23
	23	.77	0	.06	.11	.04	.04	.46	.65	.09	.44	.07
	24	.39	.20	.21	.14	.24	.06	.17	.11	.16	.11	.18
Monthly Totals		4.46	3.36	3.42	3.28	3.24	2.69	4.09	3.92	3.12	3.96	3.98
1968 WATER YEAR TOTALS		40.75	35.29	36.55	37.23	36.96	34.90	37.30	38.73	36.92	39.06	33.27

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
FEBRUARY 1955								
Site 1								
a/ 3	Dam completed Oct. 27, 1954; station established Mar. 3, 1955.							
4	Dam completed Feb. 4, 1955; station established Mar. 1, 1955.							
5	Dam completed Sept. 9, 1954; station established Mar. 4, 1955.							
6	Dash line shown until record is available.							
7	Do.							
8	Dam completed Sept. 27, 1954; station established Mar. 3, 1955.							
9	Dash line shown until record is available.							
10	Do.							
MARCH 1955								
Site 1	--	--	--	--	--	--	--	--
3	3.5	0	- 1.4	2.1	0.6	1.5	0.01	1.06
4	.3	0	+ .5	.8	.1	.7	0	1.35
5	.3	0	- .3	0	0	0	0	1.35
6	--	--	--	--	--	--	--	--
7	--	--	--	--	--	--	--	--
8	6.1	0	+ 1.9	8.0	.9	7.1	.06	1.48
9	--	--	--	--	--	--	--	--
10	--	--	--	--	--	--	--	--
All sites	10.2	0	+ .7	10.9	1.6	9.3	.01	1.26
Stream gage	--	--	--	--	--	339	.08	1.27
APRIL 1955								
Site 1	--	--	--	--	--	--	--	--
3	4.4	0	- 4.3	.1	.1	0	0	.12
4	.4	0	- .4	0	0	0	0	.13
5	.2	0	- .2	0	0	0	0	.13
6	--	--	--	--	--	--	--	--
7	--	--	--	--	--	--	--	--
8	5.3	0	- 5.2	.1	.1	0	0	.13
9	--	--	--	--	--	--	--	--
10	--	--	--	--	--	--	--	--
All sites	10.3	0	- 10.1	.2	.2	0	0	.13
Stream gage	--	--	--	--	--	0	0	.15
MAY 1955								
Site 1	--	--	--	--	--	--	--	--
3	11.5	245.7	+ 32.8	290.0	4.9	285.1	.98	3.69
4	3.0	0	+ 2.9	5.9	.3	5.6	.02	3.98
5	9.5	b/ 19.4	+ 61.1	90.0	4.0	86.0	1.19	3.49
6	--	--	--	--	--	--	--	--
7	--	--	--	--	--	--	--	--
8	22.2	0	+118.2	140.4	4.9	135.5	1.06	3.02

See footnotes at end of table.



Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
MAY 1955--Continued								
Site 9	--	--	--	--	--	--	--	--
Site 10	--	--	--	--	--	--	--	--
All sites	46.2	265.1	+ 215.0	526.3	14.1	512.2	0.68	3.66
Stream gage	--	--	--	--	--	1,360	.33	3.02
JUNE 1955								
Site 1	--	--	--	--	--	--	--	--
Site 3	9.8	13.7	- 18.5	5.0	1.4	3.6	.01	1.83
Site 4	1.5	0	- .5	1.0	.2	.8	0	1.74
Site 5	17.6	b/ 7.1	- 21.4	3.3	2.9	.4	.01	2.25
Site 6	--	--	--	--	--	--	--	--
Site 7	--	--	--	--	--	--	--	--
Site 8	38.1	0	- 23.4	14.7	7.1	7.6	.06	2.76
Site 9	--	--	--	--	--	--	--	--
Site 10	--	--	--	--	--	--	--	--
All sites	67.0	20.8	- 63.8	24.0	11.6	12.4	.02	2.00
Stream gage	--	--	--	--	--	338	.08	2.35
JULY 1955								
Site 1	--	--	--	--	--	--	--	--
Site 3	5.6	0	- 3.3	2.3	.3	2.0	.01	.83
Site 4	2.0	0	- 1.8	.2	.1	.1	0	.59
Site 5	16.2	0	- 13.9	2.3	.7	1.6	.02	.60
Site 6	--	--	--	--	--	--	--	--
Site 7	--	--	--	--	--	--	--	--
Site 8	30.8	0	- 29.0	1.8	1.8	0	0	.80
Site 9	--	--	--	--	--	--	--	--
Site 10	--	--	--	--	--	--	--	--
All sites	54.6	0	- 48.0	6.6	2.9	3.7	.01	.72
Stream gage	--	--	--	--	--	6.5	0	.79
AUGUST 1955								
Site 1	--	--	--	--	--	--	--	--
Site 3	7.6	49.9	+ 28.5	86.0	1.6	84.4	.29	3.35
Site 4	.4	0	- .4	0	0	0	0	1.27
Site 5	10.9	b/ 3.1	- 13.1	.9	.9	0	0	1.29
Site 6	--	--	--	--	--	--	--	--
Site 7	--	--	--	--	--	--	--	--
Site 8	25.5	0	- 10.4	15.1	2.4	12.7	.10	1.32
Site 9	--	--	--	--	--	--	--	--
Site 10	--	--	--	--	--	--	--	--
All sites	44.4	53.0	+ 4.6	102.0	4.9	97.1	.13	2.07
Stream gage	--	--	--	--	--	285	.07	2.53

See footnotes at end of table.

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
SEPTEMBER 1955								
Site 1	--	--	--	--	--	--	--	--
3	8.0	13.5	- 21.2	0.3	0.3	0	0	0.42
4	.1	0	- .1	0	0	0	0	.15
5	5.4	b/ 2.6	- 7.8	.2	.2	0	0	.37
6	--	--	--	--	--	--	--	--
7	--	--	--	--	--	--	--	--
8	22.8	0	- 21.8	1.0	1.0	0	0	.61
9	Dam completed Sept. 14, 1955; station established July 16, 1956.							
10	--	--	--	--	--	--	--	--
All sites	36.3	16.1	- 50.9	1.5	1.5	0	0	.35
Stream gage	--	--	--	--	--	37	.01	.42
OCTOBER 1955								
Site 1	--	--	--	--	--	--	--	--
3	8.3	2.0	+ 9.9	20.2	.8	19.4	.07	1.19
4	c/ .2	0	- .2	0	0	0	0	.25
5	3.6	b/ .2	- 1.6	2.2	.2	2.0	.03	.63
6	--	--	--	--	--	--	--	--
7	--	--	--	--	--	--	--	--
8	14.9	0	- 3.4	11.5	1.3	10.2	.08	.96
9	--	--	--	--	--	--	--	--
10	--	--	--	--	--	--	--	--
All sites	27.0	2.2	+ 4.7	33.9	2.3	31.6	.04	.77
Stream gage	--	--	--	--	--	224	.05	1.24
NOVEMBER 1955								
Site 1	--	--	--	--	--	--	--	--
3	5.5	2.0	+ 13.6	21.1	1.6	19.5	.07	2.27
4	c/ 0	0	+ 1.0	1.0	.1	.9	0	2.40
5	2.1	0	+ 6.6	8.7	.5	8.2	.11	2.50
6	--	--	--	--	--	--	--	--
7	--	--	--	--	--	--	--	--
8	11.8	0	+ 46.8	58.6	3.3	55.3	.43	2.50
9	--	--	--	--	--	--	--	--
10	--	--	--	--	--	--	--	--
All sites	19.4	2.0	+ 68.0	89.4	5.5	83.9	.11	2.38
Stream gage	--	--	--	--	--	0	0	2.40
DECEMBER 1955								
Site 1	--	--	--	--	--	--	--	--
3	6.7	3.0	- 9.7	0	0	0	0	.03
4	.7	0	- .7	0	0	0	0	.02
5	4.1	0	- 4.1	0	0	0	0	.02
6	--	--	--	--	--	--	--	--

See footnotes at end of table.

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
DECEMBER 1955 --Continued								
Site 7	--	--	--	--	--	--	--	--
8	17.4	0	- 17.4	0	0	0	0	0.01
9	--	--	--	--	--	--	--	--
10	--	--	--	--	--	--	--	--
All sites	28.9	3.0	- 31.9	0	0	0	0	.02
Stream gage	--	--	--	--	--	125	.03	.02
JANUARY 1956								
Site 1	--	--	--	--	--	--	--	--
3	3.8	0	- 2.1	1.7	.7	1.0	0	.89
4	.2	0	- .2	0	0	0	0	.72
5	2.4	0	- 2.2	.2	.2	0	0	.66
6	--	--	--	--	--	--	--	--
7	--	--	--	--	--	--	--	--
8	10.2	0	- 8.8	1.4	1.4	0	0	.77
9	--	--	--	--	--	--	--	--
10	--	--	--	--	--	--	--	--
All sites	16.6	0	- 13.3	3.3	2.3	1.0	0	.79
Stream gage	--	--	--	--	--	0	0	.82
FEBRUARY 1956								
Site 1	--	--	--	--	--	--	--	--
3	4.5	0	- 3.7	.8	.7	.1	0	.86
4	c/ .1	0	- .1	0	0	0	0	1.00
5	1.6	0	- 1.3	.3	.3	0	0	.91
6	--	--	--	--	--	--	--	--
7	--	--	--	--	--	--	--	--
8	9.5	0	- 8.2	1.3	1.3	0	0	.74
9	--	--	--	--	--	--	--	--
10	--	--	--	--	--	--	--	--
All sites	15.7	0	- 13.3	2.4	2.3	.1	0	.89
Stream gage	--	--	--	--	--	0	0	.82
MARCH 1956								
Site 1	--	--	--	--	--	--	--	--
3	5.3	0	- 5.1	.2	.2	0	0	.23
4	c/ 0	0	0	0	0	0	0	.24
5	2.0	0	- 2.0	0	0	0	0	.23
6	--	--	--	--	--	--	--	--
7	Dam completed March 2, 1956; station established July 17, 1956.							
8	13.1	0	- 12.7	.4	.4	0	0	.24
9	--	--	--	--	--	--	--	--
10	--	--	--	--	--	--	--	--

See footnotes at end of table.

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
MARCH 1956--Continued								
All sites	20.4	0	- 19.8	0.6	0.6	0	0	0.24
Stream gage	--	--	--	--	--	0	0	.26
APRIL 1956								
Site 1	--	--	--	--	--	--	--	--
3	5.9	0	- 5.7	.2	.2	0	0	.42
4	c/ 0	0	0	0	0	0	0	.48
5	.5	b/ .4	- .9	0	0	0	0	.50
6	--	--	--	--	--	--	--	--
7	--	--	--	--	--	--	--	--
8	12.8	0	- 12.2	.6	.6	0	0	.50
9	--	--	--	--	--	--	--	--
10	--	--	--	--	--	--	--	--
All sites	19.2	.4	- 18.8	.8	.8	0	0	.46
Stream gage	--	--	--	--	--	0	0	.43
MAY 1956								
Site 1	--	--	--	--	--	--	--	--
3	8.6	3.0	+ 12.6	24.2	1.2	23.0	.08	2.01
4	c/ 1.0	0	0	1.0	.5	.5	0	2.04
5	1.3	0	+ .8	2.1	.1	2.0	.03	2.16
6	--	--	--	--	--	--	--	--
7	--	--	--	--	--	--	--	--
8	14.6	0	0	14.6	2.5	12.1	.09	2.12
9	--	--	--	--	--	--	--	--
10	--	--	--	--	--	--	--	--
All sites	25.5	3.0	+ 13.4	41.9	4.3	37.6	.05	2.05
Stream gage	--	--	--	--	--	170	.04	2.09
JUNE 1956								
Site 1	--	--	--	--	--	--	--	--
3	11.4	0	- 11.3	.1	.1	0	0	.19
4	c/ 1.0	0	- 1.0	0	0	0	0	.10
5	.5	b/ .4	- .9	0	0	0	0	.06
6	--	--	--	--	--	--	--	--
7	Station established July 17, 1956.			--	--	--	--	--
8	8.5	0	- 8.4	.1	.1	0	0	.08
9	Station established July 16, 1956.			--	--	--	--	--
10	--	--	--	--	--	--	--	--
All sites	21.4	.4	- 21.6	.2	.2	0	0	.13
Stream gage	--	--	--	--	--	0	0	.24

See footnotes at end of table.

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
JULY 1956								
Site 1	--	--	--	--	--	--	--	--
3	13.9	12.0	+ 17.2	43.1	1.1	42.0	0.14	2.14
4	c/ .1	0	0	.1	.1	0	0	1.50
5	1.1	b/ 1.0	+ .7	2.8	.1	2.7	.04	1.65
6	--	--	--	--	--	--	--	--
7	53.0	0	+ 12.3	65.3	3.5	61.8	.41	2.25
8	27.7	0	+ 86.3	114.0	2.0	112.0	.88	1.69
9	1.0	0	+ .2	1.2	.5	.7	.01	1.69
10	--	--	--	--	--	--	--	--
All sites	96.8	13.0	+ 116.7	226.5	7.3	219.2	.22	1.84
Stream gage	--	--	--	--	--	251	.06	1.54
AUGUST 1956								
Site 1	--	--	--	--	--	--	--	--
3	12.0	0	+ 25.9	37.9	1.4	36.5	.13	2.31
4	c/ .1	0	0	.1	.1	0	0	2.00
5	.5	0	+ .2	.7	.1	.6	.01	1.95
6	--	--	--	--	--	--	--	--
7	40.2	0	+ 13.3	53.5	2.5	51.0	.34	2.00
8	37.7	0	+ 17.7	55.4	3.8	51.6	.40	1.82
9	.4	0	+ .3	.7	.1	.6	.01	1.82
10	--	--	--	--	--	--	--	--
All sites	90.9	0	+ 57.4	148.3	8.0	140.3	.14	2.05
Stream gage	--	--	--	--	--	26	.01	2.18
SEPTEMBER 1956								
Site 1	--	--	--	--	--	--	--	--
3	13.6	13.5	- 26.9	.2	.2	0	0	.18
4	c/ 0	0	0	0	0	0	0	.50
5	.5	b/ .4	- .9	0	0	0	0	.11
6	--	--	--	--	--	--	--	--
7	49.8	0	- 49.5	.3	.3	0	0	.15
8	37.7	0	- 37.1	.6	.1	.5	0	.20
9	.5	0	- .4	.1	.1	0	0	.20
10	--	--	--	--	--	--	--	--
All sites	102.1	13.9	- 114.8	1.2	.7	.5	0	.26
Stream gage	--	--	--	--	--	215	.05	.38
OCTOBER 1956								
Site 1	--	--	--	--	--	--	--	--
3	9.7	2.0	0	11.7	1.1	10.6	.04	1.37
4	c/ 0	0	0	0	0	0	0	1.50
5	.2	0	- .2	0	0	0	0	1.79

See footnotes at end of table.

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
OCTOBER 1956--Continued								
Site 6	--	--	--	--	--	--	--	--
7	22.0	0	- 20.6	1.4	1.4	0	0	1.25
8	27.3	0	0	27.3	5.1	22.2	.17	2.38
9	.3	0	0	.3	.1	.2	0	2.38
10	--	--	--	--	--	--	--	--
All sites	59.5	2.0	- 20.8	40.7	7.7	33.0	.03	1.65
Stream gage	--	--	--	--	--	204	.05	1.52
NOVEMBER 1956								
Site 1	--	--	--	--	--	--	--	--
3	8.0	0	- 5.8	2.2	.8	1.4	0	.97
4	c/ 0	0	.0	0	0	0	0	.97
5	0	0	0	0	0	0	0	.82
6	Dam completed Dec. 15, 1956; station established Dec. 18, 1956.							
7	10.4	0	- 9.6	.8	.8	0	0	.90
8	17.1	0	- 15.3	1.8	1.7	.1	0	.76
9	.1	0	.0	.1	.0	.1	0	.76
10	--	--	--	--	--	--	--	--
All sites	35.6	0	- 30.7	4.9	3.3	1.6	0	.90
Stream gage	--	--	--	--	--	5.6	0	.91
DECEMBER 1956								
Site 1	--	--	--	--	--	--	--	--
3	6.7	200.0	+ 20.5	227.2	4.0	223.2	.77	3.54
4	c/ 7.5	b/ 48.5	+ 35.2	91.2	2.3	88.9	.33	4.21
5	3.8	0	+ 34.5	38.3	4.5	33.8	.47	4.30
6	c/ 5.7	224.0	+ 47.3	277.0	2.3	274.7	.73	3.59
7	21.5	20.0	+ 116.8	158.3	3.9	154.4	1.02	4.10
8	22.0	87.0	+ 113.9	222.9	9.8	213.1	1.67	4.75
9	2.3	0	+ 25.5	27.8	.6	27.2	.35	4.75
10	--	--	--	--	--	--	--	--
All sites	69.5	579.5	+ 393.7	1,042.7	27.4	1,015.3	.75	3.97
Stream gage	--	--	--	--	--	3,303.0	.73	4.30
JANUARY 1957								
Site 1	--	--	--	--	--	--	--	--
3	3.7	b/ 4.5	- 7.2	1.0	.6	.4	0	.57
4	5.2	14.4	- 19.2	.4	.4	0	0	.58
5	8.1	0	- 7.6	.5	.5	0	0	.53
6	14.8	0	- 14.3	.5	.5	0	0	.57
7	40.5	0	- 39.4	1.1	1.1	0	0	.56
8	28.5	0	- 26.8	1.7	1.5	.2	0	.48
9	5.6	0	- 5.5	.1	.1	0	0	.48
10	--	--	--	--	--	--	--	--

See footnotes at end of table.

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
JANUARY 1957--Continued								
All sites	106.4	18.9	- 120.0	5.3	4.7	0.6	0	0.56
Stream gage	--	--	--	--	--	1.0	0	.56
FEBRUARY 1957								
Site 1	--	--	--	--	--	--	--	--
3	4.2	13.6	+ 7.2	25.0	2.3	22.7	.08	2.27
4	1.7	b/ 5.9	- 6.7	.9	.7	.2	.0	1.84
5	5.5	0	- 2.9	2.6	1.6	1.0	.01	1.81
6	11.6	76.0	+ 17.2	104.8	1.8	103.0	.28	2.48
7	30.8	.8	+ 39.4	71.0	3.4	67.6	.45	1.96
8	15.7	0	- 6.5	9.2	5.2	4.0	.03	1.76
9	2.7	0	- 1.4	1.3	1.1	.2	0	1.76
10	--	--	--	--	--	--	--	--
All sites	72.2	96.3	+ 46.3	214.8	16.1	198.7	.15	2.11
Stream gage	--	--	--	--	--	100	.02	2.09
MARCH 1957								
Site 1	--	--	--	--	--	--	--	--
3	8.2	53.5	+ 29.3	91.0	3.8	87.2	.30	3.60
4	6.4	0	+ 15.5	21.9	1.4	20.5	.08	3.43
5	7.1	0	+ 25.2	32.3	3.2	29.1	.40	2.90
6	13.6	156.1	+ 8.7	178.4	3.2	175.2	.47	3.28
7	45.8	41.0	+ 20.0	106.8	8.0	98.8	.65	3.48
8	23.7	4.0	+ 40.8	68.5	8.7	59.8	.47	2.86
9	4.5	.0	+ 9.1	13.6	2.0	11.6	.15	2.86
10	--	--	--	--	--	--	--	--
All sites	109.3	254.6	+ 148.6	512.5	30.3	482.2	.35	3.32
Stream gage	--	--	--	--	--	673	.16	3.40
APRIL 1957								
Site 1	--	--	--	--	--	--	--	--
3	10.7	300.0	+ 247.9	558.6	23.9	534.7	1.84	7.85
4	49.5	395.3	+ 601.7	1,046.5	33.2	1,013.3	3.81	8.11
5	12.0	133.3	+ 114.0	259.3	16.9	242.4	3.34	8.58
6	24.8	845.4	+ 288.3	1,158.5	21.8	1,136.7	3.03	7.79
7	25.2	245.4	+ 309.8	580.4	35.4	545.0	3.61	8.53
8	48.8	299.9	+ 140.4	489.1	34.6	454.5	3.56	9.11
9	14.3	93.6	+ 107.6	215.5	14.6	200.9	2.58	9.11
10	--	--	--	--	--	--	--	--
All sites	185.3	2,312.9	+1,809.7	4,307.9	180.4	4,127.5	3.04	8.19
Stream gage	--	--	--	--	--	8,610	2.07	8.44

See footnotes at end of table.

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
MAY 1957								
Site 1	--	--	--	--	--	--	--	--
3	18.6	458.4	+ 73.0	550.0	12.2	537.8	1.86	6.63
4	62.3	471.3	+ 9.5	543.1	29.6	513.5	1.93	6.27
5	20.4	110.0	+ 60.8	191.2	12.2	179.0	2.47	5.98
6	22.1	735.5	+ 218.1	975.7	13.5	962.2	2.57	7.04
7	33.3	415.0	- 120.5	327.8	17.7	310.1	2.05	6.35
8	41.8	183.1	+ 25.0	249.9	19.0	230.9	1.81	5.48
9	23.0	59.0	+ 49.2	131.2	11.3	119.9	1.54	5.48
10	--	--	--	--	--	--	--	--
All sites	221.5	2,432.3	+ 315.1	2,968.9	115.5	2,853.4	2.10	6.44
Stream gage	--	--	--	--	--	5,670	1.36	6.64
JUNE 1957								
Site 1	--	--	--	--	--	--	--	--
3	23.4	345.0	- 356.2	12.2	8.0	4.2	.01	1.52
4	69.5	510.0	- 461.0	118.5	11.3	107.2	.40	1.46
5	27.4	127.7	- 135.6	19.5	5.6	13.9	.19	1.88
6	19.9	746.4	- 521.0	245.3	8.5	236.8	.63	1.51
7	40.7	355.0	- 212.1	183.6	11.9	171.7	1.14	1.57
8	52.5	155.0	- 196.4	11.1	7.7	3.4	.03	1.95
9	20.2	86.0	- 99.0	7.2	5.1	2.1	.03	1.95
10	--	--	--	--	--	--	--	--
All sites	253.6	2,325.1	-1,981.3	597.4	58.1	539.3	.40	1.59
Stream gage	--	--	--	--	--	3,130	.75	1.72
JULY 1957								
Site 1	--	--	--	--	--	--	--	--
3	14.0	5.9	- 19.7	.2	.2	0	0	.26
4	58.3	0	- 57.8	.5	.5	0	0	.18
5	23.8	0	- 23.6	.2	.2	0	0	.12
6	12.6	0	- 12.5	.1	.1	0	0	.14
7	29.8	0	- 29.5	.3	.3	0	0	.23
8	35.0	0	- 35.0	0	0	0	0	0
9	24.5	0	- 24.5	0	0	0	0	0
10	--	--	--	--	--	--	--	--
All sites	198.0	5.9	- 202.6	1.3	1.3	0	0	.16
Stream gage	--	--	--	--	--	0	0	.14
AUGUST 1957								
Site 1	--	--	--	--	--	--	--	--
3	7.9	0	- 7.8	.1	.1	0	0	.24
4	38.0	0	- 37.2	.8	.8	0	0	.32
5	17.3	0	- 17.2	.1	.1	0	0	.10
6	9.4	0	- 9.4	0	0	0	0	.06

See footnotes at end of table.



Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
AUGUST 1957--Continued								
Site 7	24.7	0	- 24.4	0.3	0.3	0	0	0.14
8	34.8	0	- 34.7	.1	.1	0	0	.04
9	13.2	0	- 13.1	.1	.1	0	0	.04
10	--	--	--	--	--	--	--	--
All sites	145.3	0	- 143.8	1.5	1.5	0	0	.16
Stream gage	--	--	--	--	--	0	0	.49
SEPTEMBER 1957								
Site 1	--	--	--	--	--	--	--	--
3	18.4	431.9	+ 449.7	900.0	17.3	882.7	3.05	11.13
4	51.6	317.0	+ 765.0	1,133.6	41.0	1,092.6	4.11	11.13
5	20.0	146.6	+ 215.2	381.8	19.0	362.8	5.00	11.52
6	19.9	690.8	+ 553.0	1,263.7	34.3	1,229.4	3.28	11.22
7	30.1	230.9	+ 439.0	700.0	33.7	666.3	4.41	11.66
8	34.4	204.3	+ 282.1	520.8	28.8	492.0	3.86	10.82
9	18.4	177.4	+ 184.2	380.0	16.8	363.2	4.66	10.82
10	--	--	--	--	--	--	--	--
All sites	192.8	2,198.9	+2,888.2	5,279.9	190.9	5,089.0	3.75	11.19
Stream gage	--	--	--	--	--	9,530	2.29	11.39
OCTOBER 1957								
Site 1	--	--	--	--	--	--	--	--
3	48.0	408.0	- 186.0	270.0	18.9	251.1	.87	4.05
4	50.9	727.3	- 577.0	201.2	18.1	183.1	.69	3.63
5	19.6	160.0	- 163.4	16.2	6.4	9.8	.14	3.74
6	16.4	843.4	- 525.8	334.0	4.6	329.4	.88	4.01
7	27.1	448.0	- 373.9	101.2	9.7	91.5	.61	3.79
8	37.2	220.1	- 192.3	65.0	12.3	52.7	.41	3.70
9	14.0	139.0	- 127.0	26.0	8.0	18.0	.23	3.70
10	--	--	--	--	--	--	--	--
All sites	213.2	2,945.8	-2,145.4	1,013.6	78.0	935.6	.69	3.86
Stream gage	--	--	--	--	--	3,040	.73	3.58
NOVEMBER 1957								
Site 1	--	--	--	--	--	--	--	--
3	27.3	149.7	- 47.0	130.0	14.5	115.5	.40	3.48
4	30.5	70.0	+ 5.5	106.0	18.9	87.1	.33	3.85
5	10.4	21.0	+ 2.2	33.6	8.8	24.8	.34	4.42
6	6.6	104.3	- .5	110.4	3.5	106.9	.29	3.23
7	21.4	50.0	0	71.4	10.3	61.1	.40	4.08
8	26.4	24.4	+ 3.4	54.2	15.2	39.0	.31	4.61
9	13.2	47.2	+ 2.6	63.0	10.0	53.0	.68	4.61
10	--	--	--	--	--	--	--	--

See footnotes at end of table.

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
NOVEMBER 1957--Continued								
All sites	135.8	466.6	- 33.8	568.6	81.2	487.4	0.36	3.77
Stream gage	--	--	--	--	--	1,040*	.25	3.80
DECEMBER 1957								
Site 1	--	--	--	--	--	--	--	--
3	20.4	35.0	- 40.0	15.4	4.2	11.2	.04	1.19
4	34.1	0	- 22.0	12.1	5.1	7.0	.03	1.07
5	10.1	0	- 6.6	3.5	2.3	1.2	.02	1.24
6	6.1	3.0	- 1.0	8.1	1.2	6.9	.02	1.24
7	14.4	0	- 5.6	8.8	3.1	5.7	.04	1.28
8	18.8	0	- 6.8	12.0	4.0	8.0	.06	1.26
9	11.1	0	- 5.2	5.9	2.6	3.3	.04	1.26
10	--	--	--	--	--	--	--	--
All sites	115.0	38.0	- 87.2	65.8	22.5	43.3	.03	1.20
Stream gage	--	--	--	--	--	52	.01	1.08
JANUARY 1958								
Site 1	--	--	--	--	--	--	--	--
3	18.8	240.2	+ 60.4	319.4	19.4	300.0	1.04	4.55
4	28.0	285.0	+ 22.0	335.0	23.5	311.5	1.17	4.67
5	16.8	93.0	+ 8.8	118.6	9.0	109.6	1.51	4.79
6	8.6	377.5	+ .6	386.7	4.9	381.8	1.02	4.70
7	12.6	169.5	+ 5.6	187.7	12.0	175.7	1.16	4.81
8	21.9	324.8	+ 10.3	357.0	16.2	340.8	2.67	4.93
9	13.7	137.0	+ 4.2	154.9	10.5	144.4	1.85	4.93
10	--	--	--	--	--	--	--	--
All sites	120.4	1,627.0	+ 111.9	1,859.3	95.5	1,763.8	1.30	4.71
Stream gage	--	--	--	--	--	3,200	.77	4.83
FEBRUARY 1958								
Site 1	--	--	--	--	--	--	--	--
3	16.7	395.7	+ 107.6	520.0	37.9	482.1	1.66	5.18
4	31.7	414.5	+ 210.5	656.7	41.2	615.5	2.31	5.21
5	13.7	145.0	+ 22.0	180.7	13.2	167.5	2.31	5.29
6	12.6	666.6	+ 235.9	915.1	17.8	897.3	2.40	5.22
7	22.6	200.0	+ 225.9	448.5	17.7	430.8	2.85	5.21
8	22.9	229.0	+ 144.4	396.3	20.2	376.1	2.95	5.37
9	10.6	167.2	+ 92.2	270.0	12.9	257.1	3.30	5.37
10	--	--	--	--	--	--	--	--
All sites	130.8	2,218.0	+1,038.5	3,387.3	160.9	3,226.4	2.38	5.23
Stream gage	--	--	--	--	--	7,920	1.90	5.17

See footnotes at end of table.

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES	
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION			
MARCH 1958									
Site 1	--	--	--	--	--	--	--	--	
3	23.8	130.0	- 142.2	11.6	4.1	7.5	0.03	0.92	
4	33.6	200.1	- 221.5	12.2	5.2	7.0	.03	.99	
5	14.0	14.8	- 26.4	2.4	2.4	0	0	1.23	
6	7.0	240.4	- 236.8	10.6	.8	9.8	.03	.74	
7	18.2	213.7	- 228.7	3.2	3.2	0	0	1.18	
8	22.6	134.3	- 153.0	3.9	3.9	0	0	1.14	
9	14.9	85.4	- 97.7	2.6	2.6	0	0	1.14	
10	--	--	--	--	--	--	--	--	
All sites	134.1	1,018.7	1,106.3	46.5	22.2	24.3	.02	.96	
Stream gage	--	--	--	--	--	828	.20	.96	
APRIL 1958									
Site 1	--	--	--	--	--	--	--	--	
3	41.3	6.0	- 41.4	5.9	4.9	1.0	.0	1.39	
4	30.8	0	- 16.5	14.3	5.8	8.5	.03	1.05	
5	16.5	0	- 11.0	5.5	2.2	3.3	.05	1.21	
6	7.3	.8	- 1.6	6.5	1.2	5.3	.01	1.16	
7	20.0	0	- 16.8	3.2	2.8	.4	0	1.17	
8	27.0	0	- 13.4	13.6	3.8	9.8	.08	1.20	
9	13.4	0	- 7.5	5.9	2.4	3.5	.04	1.20	
10	--	--	--	--	--	--	--	--	
All sites	156.3	6.8	- 108.2	54.9	23.1	31.8	.02	1.20	
Stream gage	--	--	--	--	--	43	.01	1.21	
MAY 1958									
Site 1	--	--	--	--	--	--	--	--	
3	50.5	318.5	+ 46.0	415.0	21.2	393.8	1.36	5.54	
4	67.5	408.7	+ 11.5	487.7	26.4	461.3	1.73	5.24	
5	22.3	67.5	+ 8.8	98.6	9.6	89.0	1.23	5.69	
6	15.4	542.5	- .4	557.5	6.4	551.1	1.47	5.24	
7	31.1	357.7	+ 11.2	400.0	14.4	385.6	2.55	5.66	
8	38.4	128.2	+ 13.4	180.0	17.3	162.7	1.28	5.38	
9	21.1	53.3	+ 5.6	80.0	11.6	68.4	.88	5.38	
10	--	--	--	--	--	--	--	--	
All sites	246.3	1,876.4	+ 96.1	2,218.8	106.9	2,111.9	1.55	5.39	
Stream gage	--	--	--	--	--	4,050	.97	5.38	
JUNE 1958									
Site 1	Dam completed June 17, 1958; station established Mar. 9, 1959.								
3	55.7	10.0	- 4.6	61.1	12.4	48.7	.17	3.13	
4	53.3	0	- 32.0	21.3	11.8	9.5	.04	2.67	
5	25.1	8.0	+ 2.2	35.3	5.3	30.0	.41	3.06	
6	12.8	18.0	+ 1.2	32.0	2.4	29.6	.08	2.65	

See footnotes at end of table.

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
JUNE 1958--Continued								
Site 7	32.5	18.0	+ 5.6	56.1	6.6	49.5	0.33	2.82
8	45.4	9.4	+ 3.4	58.2	8.3	49.9	.39	2.69
9	19.2	0	- 5.6	13.6	5.2	8.4	.11	2.69
10	Dam completed June 17, 1958; station established Mar. 10, 1959.							
All sites	244.0	63.4	- 29.8	277.6	52.0	225.6	.17	2.80
Stream gage	--	--	--	--	--	155	.04	2.62
JULY 1958								
Site 1	--	--	--	--	--	--	--	--
3	55.2	31.4	- 56.2	30.4	10.4	20.0	.07	2.78
4	72.8	25.8	+ 10.0	108.6	11.3	97.3	.37	2.66
5	24.8	23.0	- 8.8	39.0	8.5	30.5	.42	4.48
6	14.2	6.9	- 6.5	14.6	2.2	12.4	.03	2.20
7	35.9	1.2	- 14.0	23.1	9.4	13.7	.09	3.79
8	52.5	51.0	- 13.5	90.0	15.2	74.8	.59	4.60
9	25.2	51.6	- 2.4	74.4	9.4	65.0	.83	4.60
10	--	--	--	--	--	--	--	--
All sites	280.6	190.9	- 91.4	380.1	66.4	313.7	.23	3.06
Stream gage	--	--	--	--	--	750	.18	3.01
AUGUST 1968								
Site 1	--	--	--	--	--	--	--	--
3	36.9	11.3	- 47.1	1.1	1.1	0	.0	.45
4	66.2	0	- 60.0	6.2	1.5	4.7	.02	.37
5	24.6	0	- 18.6	6.0	1.6	4.4	.06	.95
6	12.1	0	- 10.5	1.6	.6	1.0	.0	.74
7	31.1	0	- 26.3	4.8	1.9	2.9	.02	.90
8	38.3	0	- 22.8	15.5	4.2	11.3	.09	1.40
9	19.8	0	- 16.1	3.7	2.6	1.1	.01	1.40
10	--	--	--	--	--	--	--	--
All sites	229.0	11.3	- 201.4	38.9	13.5	25.4	.02	.73
Stream gage	--	--	--	--	--	25	.01	.43
SEPTEMBER 1958								
Site 1	--	--	--	--	--	--	--	--
3	24.1	12.0	+ 41.0	77.1	13.0	64.1	.22	5.77
4	59.4	0	+ 15.0	74.4	23.4	51.0	.19	6.15
5	15.9	0	- 1.8	14.1	8.6	5.5	.08	5.43
6	9.3	0	+ 1.9	11.2	3.8	7.4	.02	5.22
7	19.3	0	- 2.4	16.9	11.4	5.5	.04	5.81
8	32.4	0	0	32.4	16.0	16.4	.13	5.60
9	16.3	0	0	16.3	9.4	6.9	.09	5.60
10	--	--	--	--	--	--	--	--

See footnotes at end of table.

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
SEPTEMBER 1958--Continued								
All sites	176.7	12.0	+ 53.7	242.4	85.6	156.8	0.12	5.65
Stream gage	--	--	--	--	--	399	.10	6.49
OCTOBER 1958								
Site 1	--	--	--	--	--	--	--	--
3	21.7	20.0	- 3.8	37.9	13.2	24.7	.09	5.21
4	33.1	0	+ 10.0	43.1	21.0	22.1	.08	5.65
5	11.5	0	+ 7.8	19.3	10.0	9.3	.13	6.33
6	5.6	0	+ .5	6.1	3.8	2.3	.01	4.49
7	14.9	0	+ 4.8	19.7	10.7	9.0	.06	5.39
8	27.4	0	+ 26.1	53.5	18.8	34.7	.27	6.33
9	13.0	0	+ 19.7	32.7	11.4	21.3	.27	6.33
10	--	--	--	--	--	--	--	--
All sites	127.2	20.0	+ 65.1	212.3	88.9	123.4	.09	5.34
Stream gage	--	--	--	--	--	258	.06	5.58
NOVEMBER 1958								
Site 1	--	--	--	--	--	--	--	--
3	18.3	20.0	- 23.5	14.8	4.6	10.2	.04	1.83
4	30.2	0	- 5.0	25.2	7.5	17.7	.07	1.95
5	10.0	0	0	10.0	2.6	7.4	.10	1.99
6	5.5	0	+ .7	6.2	1.8	4.4	.01	1.99
7	14.6	0	+ 15.6	30.2	4.3	25.9	.17	2.11
8	27.2	b/ 2.0	+ 3.4	32.6	7.6	25.0	.20	2.42
9	12.6	0	+ 6.0	18.6	5.1	13.5	.17	2.42
10	--	--	--	--	--	--	--	--
All sites	118.4	22.0	- 2.8	137.6	33.5	104.1	.08	2.04
Stream gage	--	--	--	--	--	327	.02	1.96
DECEMBER 1958								
Site 1	--	--	--	--	--	--	--	--
3	12.3	0	- 7.7	4.6	2.1	2.5	.01	1.02
4	26.5	0	- 15.0	11.5	4.3	7.2	.03	1.19
5	7.9	0	- 4.0	3.9	2.1	1.8	.02	1.31
6	5.4	0	- 3.3	2.1	.7	1.4	0	.93
7	15.5	0	- 8.0	7.5	2.4	5.1	.03	1.14
8	15.0	b/ 1.0	- 10.0	6.0	4.1	1.9	.01	1.33
9	10.6	0	- 6.0	4.6	2.6	2.0	.03	1.33
10	--	--	--	--	--	--	--	--
All sites	93.2	1.0	- 54.0	40.2	18.3	21.9	.02	1.10
Stream gage	--	--	--	--	--	11	0	1.17

See footnotes at end of table.

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
JANUARY 1959								
Site 1	--	--	--	--	--	--	--	--
3	10.7	0	- 9.5	1.2	0.8	0.4	0	0.38
4	18.8	0	- 15.0	3.8	1.4	2.4	.01	.38
5	9.1	0	- 7.4	1.7	.5	1.2	.02	.30
6	4.1	0	- 3.3	.8	.2	.6	0	.31
7	12.2	b/ 2.0	- 12.4	1.8	.7	1.1	.01	.33
8	12.8	b/ 4.3	- 16.3	.8	.8	0	0	.25
9	6.5	0	- 6.0	.5	.5	0	0	.25
10	--	--	--	--	--	--	--	--
All sites	74.2	6.3	- 69.9	10.6	4.9	5.7	0	.33
Stream gage	--	--	--	--	--	13	0	.34
FEBRUARY 1959								
Site 1	--	--	--	--	--	--	--	--
3	6.3	10.0	- 10.9	5.4	4.3	1.1	.1	2.36
4	14.1	0	- 5.0	9.1	8.4	.7	0	2.41
5	5.8	b/ 22.0	- 22.2	5.6	3.2	2.4	.3	2.42
6	2.6	0	+ .6	3.2	1.8	1.4	0	2.28
7	11.5	0	- 6.8	4.7	4.4	.3	0	2.42
8	13.0	b/ 28.0	- 28.0	13.0	6.2	6.8	.05	2.28
9	7.7	0	+ .5	8.2	4.3	3.9	.05	2.28
10	--	--	--	--	--	--	--	--
All sites	61.0	60.0	- 71.8	49.2	32.6	16.6	.01	2.35
Stream gage	--	--	--	--	--	16	0	2.46
MARCH 1959								
Site 1	Station established Mar. 9, 1959; water below lowest gage (146 ft.) to Oct. 1960.							
3	11.7	7.6	- 18.5	.8	.8	0	0	.54
4	25.1	0	- 24.0	1.1	1.1	0	0	.36
5	9.4	0	- 8.7	.7	.4	.3	0	.34
6	4.6	0	- 3.2	1.4	.2	1.2	0	.48
7	15.1	0	- 12.8	2.3	.8	1.5	.01	.46
8	21.4	b/ 18.7	- 39.4	.7	.7	0	0	.32
9	11.1	0	- 10.5	.6	.6	0	0	.32
10	Station established Mar. 10, 1959.							
All sites	98.4	26.3	- 117.1	7.6	4.6	3.0	0	.44
Stream gage	--	--	--	--	--	1.4	0	.38
APRIL 1959								
Site 1	--	--	--	--	--	--	--	--
3	20.6	30.0	+ 60.9	111.5	5.9	105.6	.36	3.69
4	29.4	0	0	29.4	10.8	18.6	.07	3.60
5	10.0	0	+ 7.9	17.9	3.9	14.0	.19	3.47
6	8.2	79.3	+ 22.0	109.5	2.8	106.7	.28	3.66
7	19.6	1.6	+ 56.7	77.9	6.2	71.7	.47	3.56

See footnotes at end of table.

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
APRIL 1959--Continued								
Site 8	27.6	0	+ 39.4	67.0	7.7	59.3	0.46	3.48
9	13.4	0	+ 7.7	21.1	6.1	15.0	.19	3.48
10	16.0	0	+ 40.0	56.0	.9	55.1	.17	3.76
All sites	144.8	110.9	+ 234.6	490.3	44.3	446.0	.26	3.63
Stream gage	--	--	--	--	--	253	.06	3.69
MAY 1959								
Site 1	--	--	--	--	--	--	--	--
3	35.7	9.3	+ 45.0	90.0	14.8	75.2	.26	5.38
4	33.8	0	+ 13.0	46.8	17.9	28.9	.11	5.93
5	12.5	0	+ 8.8	21.3	7.1	14.2	.20	5.59
6	11.7	69.6	+ .7	82.0	5.0	77.0	.21	4.92
7	27.6	0	- 8.4	19.2	12.1	7.1	.05	5.09
8	30.9	0	+ 18.4	49.3	15.9	33.4	.26	5.76
9	16.5	0	+ 3.5	20.0	11.0	9.0	.12	5.76
10	20.2	0	+ 61.6	81.8	10.6	71.2	.22	6.76
All sites	188.9	78.9	+ 142.6	410.4	94.4	316.0	.19	5.66
Stream gage	--	--	--	--	--	1,060	.25	5.82
JUNE 1959								
Site 1	--	--	--	--	--	--	--	--
3	37.7	26.0	- 45.0	18.7	6.4	12.3	.04	2.42
4	47.1	0	- 30.0	17.1	7.1	10.0	.04	2.36
5	14.0	0	- 6.4	7.6	3.1	4.5	.06	3.55
6	12.5	0	- 6.3	6.2	2.7	3.5	.01	2.91
7	29.7	0	+ 14.0	43.7	7.4	36.3	.24	3.31
8	39.1	0	+ 16.0	55.1	11.9	43.2	.34	4.27
9	21.3	0	- 5.0	16.3	7.9	8.4	.11	4.27
10	30.0	0	0	30.0	7.6	22.4	.07	3.14
All sites	231.4	26.0	- 62.7	194.7	54.1	140.6	.08	3.02
Stream gage	--	--	--	--	--	121	.03	2.78
JULY 1959								
Site 1	--	--	--	--	--	--	--	--
3	31.1	15.0	- 40.3	5.8	2.1	3.7	.01	1.09
4	39.9	0	- 28.6	11.3	3.0	8.3	.03	1.19
5	13.0	0	- 11.5	1.5	1.5	0	0	1.29
6	13.0	0	- 10.7	2.3	.7	1.6	0	.84
7	33.4	0	- 27.7	5.7	2.3	3.4	.02	1.04
8	44.4	0	- 28.4	16.0	3.7	12.3	.10	1.28
9	19.0	0	- 16.8	2.2	2.2	0	0	1.28
10	31.0	0	- 29.0	2.0	2.0	0	0	.83
All sites	224.8	15.0	- 193.0	46.8	17.5	29.3	.02	1.03
Stream gage	--	--	--	--	--	2.0	0	1.04

See footnotes at end of table.

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
AUGUST 1959								
Site 1	--	--	--	--	--	--	--	--
3	20.4	12.0	- 24.0	8.4	3.6	4.8	.02	2.51
4	25.6	0	- 16.0	9.6	4.6	5.0	.02	2.15
5	10.2	0	- 5.6	4.6	2.6	2.0	.03	2.70
6	10.1	0	- .8	9.3	2.9	6.4	.02	3.26
7	26.0	0	0	26.0	6.0	20.0	.13	2.06
8	37.9	0	- 9.0	28.9	7.8	21.1	.17	3.09
9	14.4	0	- 7.8	6.6	4.6	2.0	.03	3.09
10	25.0	0	- 21.0	4.0	3.6	.4	0	2.25
All sites	169.6	12.0	- 84.2	97.4	35.7	61.7	.04	2.61
Stream gage	--	--	--	--	--	.2	0	2.55
SEPTEMBER 1959								
Site 1	--	--	--	--	--	--	--	--
3	14.8	10.0	- 19.4	5.4	1.8	3.6	.01	1.49
4	22.9	0	- 15.8	7.1	3.9	3.2	.01	2.06
5	8.4	0	- 4.9	3.5	1.9	1.6	.02	2.00
6	9.0	0	- 6.4	2.6	.9	1.7	0	.75
7	25.3	0	- 21.8	3.5	2.7	.8	.01	1.22
8	30.2	b/ 35.0	- 58.0	7.2	4.4	2.8	.02	1.83
9	11.0	0	- 8.2	2.8	2.6	.2	0	1.83
10	19.4	0	- 17.6	1.8	1.8	0	0	1.34
All sites	141.0	45.0	- 152.1	33.9	20.0	13.9	.01	1.43
Stream gage	--	--	--	--	--	.4	0	1.55
OCTOBER 1959								
Site 1	--	--	--	--	--	--	--	--
3	20.9	22.3	+ 56.8	100.0	14.2	85.8	.30	5.82
4	25.6	0	+ 15.8	41.4	13.6	27.8	.10	5.88
5	18.0	0	+ 33.6	51.6	7.0	44.6	.62	7.03
6	10.0	68.2	+ 17.5	95.7	4.5	91.2	.24	5.89
7	25.3	137.6	+ 55.1	218.0	13.4	204.6	1.35	6.54
8	31.0	96.9	+ 122.1	250.0	16.4	233.6	1.83	7.33
9	14.6	0	+ 35.4	50	10.6	39.4	.51	7.33
10	38.6	99.0	+ 148.0	285.6	13.9	271.7	.83	6.62
All sites	184.0	424.0	+ 484.3	1,092.3	93.6	998.7	.59	6.31
Stream gage	--	--	--	--	--	1,390	.33	6.16
NOVEMBER 1959								
Site 1	--	--	--	--	--	--	--	--
3	13.9	22.0	- 28.8	7.1	2.6	4.5	.02	1.60
4	20.4	0	- 9.4	11.0	3.4	7.6	.03	1.79
5	11.5	0	- 6.8	4.7	2.4	2.3	.03	1.78
6	7.0	0	- 4.0	3.0	1.5	1.5	0	1.49

See footnotes at end of table.



Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
NOVEMBER 1959--Continued								
Site 7	22.4	0	- 14.0	8.4	4.1	4.3	0.03	1.68
8	25.2	0	- 10.2	15.0	5.2	9.8	.08	1.63
9	13.0	0	- 9.2	3.8	2.9	.9	.01	1.63
10	38.2	0	- 25.0	13.2	7.6	5.6	.02	2.05
All sites	151.6	22.0	- 107.4	66.2	29.7	36.5	.02	1.71
Stream gage	--	--	--	--	--	23	.01	1.76
DECEMBER 1959								
Site 1	--	--	--	--	--	--	--	--
3	8.5	5.7	- 5.2	9.0	2.9	6.1	.02	2.17
4	12.0	0	- 4.4	7.6	3.6	4.0	.02	2.03
5	7.6	0	- 3.2	4.4	2.7	1.7	.02	2.19
6	5.0	0	+ 4.5	9.5	1.9	7.6	.02	2.26
7	14.1	0	+ 14.0	28.1	5.2	22.9	.15	2.26
8	16.9	0	+ 6.8	23.7	6.8	16.9	.13	2.18
9	9.4	0	+ .4	9.8	3.8	6.0	.08	2.18
10	25.5	0	- 3.0	22.5	6.8	15.7	.05	2.08
All sites	99.0	5.7	+ 9.9	114.6	33.7	80.9	.05	1.90
Stream gage	--	--	--	--	--	44	.01	2.11
JANUARY 1960								
Site 1	--	--	--	--	--	--	--	--
3	5.6	0	+ 3.4	9.0	2.1	6.9	.02	1.54
4	8.7	0	0	8.7	2.8	5.9	.02	1.60
5	7.1	0	+ 3.2	10.3	1.9	8.4	.12	1.52
6	3.7	25.8	+ .6	30.1	1.2	28.9	.08	1.39
7	15.7	0	- 8.4	7.3	3.8	3.5	.02	1.51
8	14.2	0	- 6.8	7.4	4.5	2.9	.02	1.41
9	7.4	0	- 2.2	5.2	2.5	2.7	.03	1.41
10	22.9	1.7	+ 30.4	55.0	6.4	48.6	.15	1.84
All sites	85.3	27.5	+ 20.2	133.0	25.2	107.8	.06	1.55
Stream gage	--	--	--	--	--	201	.05	1.60
FEBRUARY 1960								
Site 1	--	--	--	--	--	--	--	--
3	5.6	11.1	- 11.6	5.1	2.1	3.0	.01	1.49
4	9.6	0	- 5.8	3.8	3.0	.8	.01	1.67
5	6.2	0	- 3.2	3.0	1.9	1.1	.02	1.48
6	4.8	0	- 1.7	3.1	1.8	1.3	0	1.25
7	15.7	0	- 11.2	4.5	3.3	1.2	.01	1.38
8	15.2	0	- 3.3	11.9	4.3	7.6	.06	1.35
9	8.3	0	- 1.1	7.2	2.3	4.9	.06	1.35
10	33.0	0	- 26.2	6.8	6.2	.6	0	1.58

See footnotes at end of table.

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
February 1960--Continued								
All sites	98.4	11.1	- 64.1	45.4	24.9	20.5	0.01	1.45
Stream gage	--	--	--	--	--	5.4	0	1.54
MARCH 1960								
Site 1	--	--	--	--	--	--	--	--
3	7.3	20.0	- 10.4	16.9	2.2	14.7	.05	1.83
4	9.8	0	- 3.6	6.2	3.4	2.8	.01	2.10
5	8.1	0	- 4.8	3.3	2.5	.8	.01	2.07
6	5.9	0	- .6	5.3	1.8	3.5	.01	1.70
7	16.4	0	- 2.8	13.6	4.4	9.2	.06	1.94
8	18.4	0	- 6.6	11.8	6.8	5.0	.04	2.28
9	11.0	0	- 4.3	6.7	3.4	3.3	.04	2.04
10	29.4	0	0	29.4	8.7	20.7	.06	2.52
All sites	106.3	20.0	- 33.1	93.2	33.2	60.0	.04	2.04
Stream gage	--	--	--	--	--	71	.02	2.12
APRIL 1960								
Site 1	--	--	--	--	--	--	--	--
3	9.2	10.0	- 5.5	13.7	1.4	12.3	.04	1.40
4	11.8	0	- 8.2	3.6	3.0	.6	.01	2.07
5	8.4	0	- 3.0	5.4	2.4	3.0	.04	2.11
6	7.1	0	- 3.6	3.5	1.8	1.7	0	1.13
7	19.2	0	- 5.5	13.7	3.6	10.1	.07	1.58
8	22.7	0	- 3.3	19.4	6.0	13.4	.11	2.00
9	11.3	0	- 5.0	6.3	3.1	3.2	.04	2.00
10	43.3	0	- 20.2	23.1	6.1	17.0	.05	1.87
All sites	133.0	10.0	- 54.3	88.7	27.4	61.3	.04	1.66
Stream gage	--	--	--	--	--	34	.01	1.79
MAY 1960								
Site 1	--	--	--	--	--	--	--	--
3	12.7	0	- 7.6	5.1	1.6	3.5	.01	1.50
4	11.1	0	- 8.0	3.1	2.0	1.1	0	1.44
5	12.2	0	- 7.6	4.6	1.9	2.7	.04	1.32
6	11.6	0	- 9.0	2.6	1.0	1.6	0	1.24
7	24.2	0	- 18.0	6.2	3.0	3.2	.02	1.39
8	28.5	0	- 16.1	12.4	4.7	7.7	.06	1.58
9	14.4	0	- 9.2	5.2	2.4	2.8	.04	1.58
10	36.9	0	- 29.0	7.9	5.9	2.0	.01	1.86
All sites	151.6	0	- 104.5	47.1	22.5	24.6	.01	1.49
Stream gage	--	--	--	--	--	0	0	1.54

See footnotes at end of table.

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
JUNE 1960								
Site 1	--	--	--	--	--	--	--	--
3	15.2	0	+ 24.6	39.8	4.3	35.5	.12	4.78
4	17.2	0	+ 2.2	19.4	3.2	16.2	.06	4.67
5	11.9	0	+ 22.7	34.6	4.5	30.1	.42	5.18
6	11.6	0	+ .7	12.3	3.7	8.6	.02	4.58
7	24.9	0	+ 26.3	51.2	9.3	41.9	.28	4.86
8	34.4	5.0	+ 42.9	82.3	13.9	68.4	.54	5.34
9	14.9	0	+ 13.2	28.1	6.6	21.5	.28	5.34
10	41.2	0	+ 45.0	86.2	11.0	75.2	.23	4.38
All sites	171.3	5.0	+ 177.6	353.9	56.5	297.4	.18	4.74
Stream gage	--	--	--	--	--	165	.04	4.72
JULY 1960								
Site 1	--	--	--	--	--	--	--	--
3	19.7	0	+ 1.6	21.3	2.1	19.2	.07	1.68
4	16.1	0	- 10.2	5.9	1.5	4.4	.02	1.59
5	17.9	0	- 15.1	2.8	2.7	.1	0	2.18
6	12.3	0	- 10.0	2.3	.8	1.5	0	1.41
7	32.4	0	- 26.3	6.1	3.8	2.3	.02	1.79
8	41.4	0	- 30.1	11.3	7.7	3.6	.03	2.47
9	18.0	b/ 5.0	- 14.8	8.2	3.7	4.5	.06	2.47
10	43.5	0	- 34.6	8.9	6.5	2.4	.01	2.04
All sites	201.3	5.0	- 139.5	66.8	28.8	38.0	.02	1.81
Stream gage	--	--	--	--	--	0	0	1.75
AUGUST 1960								
Site 1	--	--	--	--	--	--	--	--
3	16.8	20.0	- 23.0	13.8	2.1	11.7	.04	1.84
4	11.7	0	- 10.9	.8	.8	0	0	1.22
5	13.6	0	- 9.8	3.8	2.2	1.6	.02	2.03
6	7.3	0	- 5.3	2.0	1.1	.9	0	2.19
7	21.8	0	- 15.7	6.1	3.9	2.2	.01	2.10
8	34.8	0	- 19.1	15.7	9.8	5.9	.05	3.42
9	14.0	0	- 7.9	6.1	4.4	1.7	.02	3.42
10	39.4	0	- 32.8	6.6	4.9	1.7	.01	1.88
All sites	159.4	20.0	- 124.5	54.9	29.2	25.7	.02	2.06
Stream gage	--	--	--	--	--	0	0	1.89
SEPTEMBER 1960								
Site 1	--	--	--	--	--	--	--	--
3	9.8	0	- 9.6	.2	.2	0	0	.24
4	6.9	0	- 6.9	0	0	0	0	.19
5	8.5	0	- 7.9	.6	.6	0	0	.64

See footnotes at end of table.

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
SEPTEMBER 1960--Continued								
Site 6	5.6	0	- 5.4	0.2	0.2	0	0	0.56
7	17.3	0	- 16.2	1.1	1.1	0	0	.69
8	27.8	0	- 21.3	6.5	2.8	3.7	.03	1.08
9	10.6	b/ 2.4	- 11.9	1.1	1.1	0	0	1.08
10	29.0	0	- 28.4	.6	.6	0	0	.30
All sites	115.5	2.4	- 107.6	10.3	6.6	3.7	0	.48
Stream gage	--	--	--	--	--	0	0	.38
OCTOBER 1960								
Site 1	5.0	7.8	+ 77.6	90.4	3.4	87.0	.30	8.20
3	14.5	20.0	+ 255.2	289.7	16.6	273.1	.94	9.23
4	5.4	0	+ 139.8	145.2	4.1	141.1	.53	8.65
5	8.5	41.0	+ 103.9	153.4	12.1	141.3	1.95	9.37
6	5.5	283.4	+ 114.5	403.4	7.6	395.8	1.06	9.79
7	18.4	180.2	+ 225.4	424.0	19.3	404.7	2.68	9.60
8	19.8	142.0	+ 188.4	350.2	28.5	321.7	2.52	9.82
9	10.2	29.4	+ 72.0	111.6	13.4	98.2	1.26	9.82
10	36.4	107.2	+ 281.4	425.0	30.0	395.0	1.21	8.97
All sites	123.7	811.0	+1,458.2	2,392.9	135.0	2,257.9	1.14	9.16
Stream gage	--	--	--	--	--	3,080	.74	9.11
NOVEMBER 1960								
Site 1	9.0	40.0	- 40.6	8.4	3.8	4.6	.02	2.71
3	31.6	61.6	- 78.0	15.2	8.2	7.0	.02	2.17
4	32.5	0	- 26.0	6.5	6.5	0	0	2.50
5	11.7	16.0	- 22.0	5.7	4.8	.9	.01	2.46
6	5.2	94.4	- 79.0	20.6	2.2	18.4	.05	1.93
7	16.7	145.9	- 150.4	12.2	5.5	6.7	.04	2.20
8	25.7	163.0	- 144.7	44.0	6.7	37.3	.29	2.48
9	12.8	.0	- 2.6	10.2	5.2	5.0	.06	2.48
10	49.0	13.8	- 20.8	42.0	14.4	27.6	.08	2.68
All sites	194.2	534.7	- 564.1	164.8	57.3	107.5	.05	2.37
Stream gage	--	--	--	--	--	511	.12	2.39
DECEMBER 1960								
Site 1	11.6	0	+ 19.0	30.6	5.9	24.7	.08	3.80
3	12.8	80.0	- 19.0	73.8	11.0	62.8	.22	3.21
4	22.9	0	+ 37.0	59.9	10.6	49.3	.19	3.59
5	9.2	16.5	0	25.7	6.8	18.9	.26	3.56
6	4.3	33.1	+ 1.9	39.3	3.5	35.8	.10	2.85
7	12.1	0	+ 2.8	14.9	8.0	6.9	.05	2.20
8	17.6	b/ 47.7	- 3.3	62.0	10.8	51.2	.40	3.67
9	10.2	.0	+ 1.0	11.2	7.7	3.5	.04	3.67
10	38.8	17.4	+ 13.8	70.0	21.3	48.7	.15	3.95

See footnotes at end of table.

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
DECEMBER 1960--Continued								
All sites	139.5	194.7	+ 53.2	387.4	85.6	301.8	0.15	3.38
Stream gage	--	--	--	--	--	641	.15	3.54
JANUARY 1961								
Site 1	11.6	0	- 6.8	4.8	1.6	3.2	.01	.93
3	14.3	30.0	- 40.0	4.3	2.3	2.0	.01	.75
4	19.5	0	- 16.0	3.5	2.9	.6	0	.89
5	10.4	0	- 6.6	3.8	1.6	2.2	.03	.86
6	3.7	3.4	- 2.6	4.5	.7	3.8	.01	.65
7	13.6	0	- 8.4	5.2	2.0	3.2	.02	.77
8	14.4	b/ 19.7	- 19.1	15.0	2.5	12.5	.10	.84
9	8.9	0	- 4.4	4.5	1.8	2.7	.03	.84
10	38.8	0	- 27.4	11.4	4.9	6.5	.02	.90
All sites	135.2	53.1	- 131.3	57.0	20.3	36.7	.02	.82
Stream gage	--	--	--	--	--	75	.02	.79
FEBRUARY 1961								
Site 1	12.2	0	0	12.2	2.9	9.3	.03	1.78
3	12.6	30.0	- 18.0	24.6	4.1	20.5	.07	1.58
4	24.7	0	+ 23.0	47.7	5.2	42.5	.16	1.66
5	10.3	11.0	- 2.2	19.1	3.2	15.9	.22	1.72
6	4.3	17.8	- .5	21.6	1.7	19.9	.05	1.49
7	13.6	10.0	0	23.6	3.9	19.7	.13	1.60
8	19.2	b/ 10.0	+ 39.0	68.2	5.1	63.1	.49	1.79
9	11.5	19.2	- 1.8	28.9	3.7	25.2	.32	1.79
10	38.8	22.8	- 6.6	55.0	9.8	45.2	.14	1.88
All sites	147.2	120.8	+ 32.9	300.9	39.6	261.3	.13	1.68
Stream gage	--	--	--	--	--	238	.06	1.70
MARCH 1961								
Site 1	12.2	0	- 12.2	0	0	0	0	.02
3	14.3	27.0	- 41.2	.1	.1	0	0	.06
4	34.2	0	- 34.0	.2	.2	0	0	.05
5	14.7	0	- 14.6	.1	.1	0	0	.06
6	5.7	0	- 5.7	0	0	0	0	.07
7	19.7	0	- 19.5	.2	.2	0	0	.09
8	20.0	0	- 19.9	.1	.1	0	0	.04
9	11.8	0	- 11.7	.1	.1	0	0	.04
10	37.7	0	- 37.4	.3	.3	0	0	.06
All sites	170.3	27.0	- 196.2	1.1	1.1	0	0	.06
Stream gage	--	--	--	--	--	14	0	.06

See footnotes at end of table.

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
APRIL 1961								
Site 1	11.7	0	- 10.9	0.8	0.8	0	0	0.63
3	14.6	6.8	- 20.5	.9	.8	.1	0	.51
4	29.7	0	- 28.0	1.7	1.7	0	0	.59
5	13.8	0	- 12.9	.9	.9	0	0	.57
6	8.5	0	- 8.1	.4	.4	0	0	.42
7	16.7	0	- 15.6	1.1	1.1	0	0	.50
8	23.9	0	- 22.2	1.7	1.7	0	0	.56
9	12.1	0	- 10.4	1.7	1.0	.7	.01	.56
10	46.3	0	- 43.4	2.9	2.9	0	0	.62
All sites	177.3	6.8	- 172.0	12.1	11.3	.8	.0	.55
Stream gage	--	--	--	--	--	.0	.0	.55
MAY 1961								
Site 1	9.1	0	- 9.1	0	0	0	0	0
3	15.5	4.0	- 19.5	0	0	0	0	.04
4	29.5	0	- 29.4	.1	.1	0	0	.05
5	14.8	0	- 14.8	0	0	0	0	0
6	10.6	0	- 10.6	0	0	0	0	0
7	22.3	0	- 22.3	0	0	0	0	0
8	26.9	0	- 26.9	0	0	0	0	0
9	16.4	0	- 16.4	0	0	0	0	0
10	42.4	0	- 42.4	0	0	0	0	0
All sites	187.5	4.0	- 191.4	.1	.1	0	0	.01
Stream gage	--	--	--	--	--	0	0	0
JUNE 1961								
Site 1	15.7	0	+ 39.0	54.7	8.6	46.1	.16	8.49
3	22.4	45.0	+ 124.2	191.6	9.5	182.1	.63	7.20
4	42.1	0	+ 96.4	138.5	22.0	116.5	.44	7.68
5	21.3	63.2	+ 44.5	129.0	11.5	117.5	1.62	7.65
6	13.0	418.1	+ 25.8	456.9	7.0	449.9	1.20	8.20
7	30.6	471.6	+ 65.8	568.0	15.3	552.7	3.66	8.29
8	38.3	105.9	+ 75.8	220.0	19.8	200.2	1.57	7.26
9	19.4	14.0	+ 37.5	70.9	12.9	58.0	.74	7.26
10	55.4	151.0	+ 136.6	343.0	39.5	303.5	.93	9.01
All sites	258.2	1,268.8	+ 645.6	2,172.6	146.1	2,026.5	1.03	8.05
Stream gage	--	--	--	--	--	2,610	.63	8.19
JULY 1961								
Site 1	21.1	0	0	21.1	7.7	13.4	.05	4.62
3	44.8	70	+ 74.0	188.8	16.0	172.8	.60	5.84
4	70.7	0	+ 50.0	120.7	15.3	105.4	.40	5.02
5	25.3	20.0	+ 44	49.7	9.7	40.0	.55	5.26
6	17.0	268.6	+ 2.8	288.4	6.5	281.9	.75	6.50

See footnotes at end of table.

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
JULY 1961--Continued								
Site 7	34.1	85.0	0	119.1	15.3	103.8	0.69	5.98
8	47.4	18.0	+ 3.4	68.8	17.3	51.5	.40	5.35
9	22.7	0	+ 6.2	28.9	10.8	18.1	.23	5.35
10	57.5	0	+ 6.8	64.3	27.4	36.9	.11	5.16
All sites	340.6	461.6	+ 147.6	949.8	126.0	823.8	.42	5.51
Stream gage	--	--	--	--	--	676	.16	5.46
AUGUST 1961								
Site 1	19.7	0	- 17.2	2.5	1.5	1.0	0	.93
3	53.0	7.0	- 55.0	5.0	4.4	.6	0	1.18
4	63.9	0	- 60.0	3.9	3.5	.4	0	.93
5	20.3	0	- 19.6	.7	.7	0	0	.35
6	11.8	0	- 11.6	.2	.2	0	0	.63
7	29.1	0	- 27.9	1.2	1.2	0	0	.50
8	38.3	0	- 36.5	1.8	1.8	0	0	.56
9	25.1	0	- 24.0	1.1	1.1	0	0	.56
10	58.9	0	- 57.6	1.3	1.3	0	0	.24
All sites	320.1	7.0	- 309.4	17.7	15.7	2.0	0	.71
Stream gage	--	--	--	--	--	30	.01	.74
SEPTEMBER 1961								
Site 1	13.7	0	- 8.1	5.2	3.3	1.9	.01	2.64
3	37.5	22.5	- 50.0	10.0	6.8	3.2	.01	2.23
4	47.8	0	- 41.0	6.8	6.8	0	0	2.18
5	19.4	0	- 13.6	5.8	3.2	2.6	.04	1.97
6	11.1	0	- 7.5	3.6	1.2	2.4	.01	2.60
7	26.6	0	- 8.0	18.6	5.2	13.4	.09	1.42
8	33.6	0	- 25.0	8.6	5.3	3.3	.03	1.88
9	15.6	0	- 9.8	5.8	3.2	2.6	.03	1.88
10	50.9	0	- 38.2	12.7	10.6	2.1	.01	2.23
All sites	256.2	22.5	- 201.6	77.1	45.6	31.5	.02	2.21
Stream gage	--	--	--	--	--	.2	0	2.15
OCTOBER 1961								
Site 1	11.4	0	0	11.4	4.6	6.8	.02	3.99
3	23.9	15.1	- 27.0	12.0	8.2	3.8	.01	3.59
4	27.4	0	0	27.4	11.7	15.7	.06	4.24
5	13.7	0	- 1.8	11.9	7.0	4.9	.07	4.36
6	7.2	0	- 4.6	2.6	1.9	.7	0	2.91
7	20.4	0	- 5.1	15.3	7.9	7.4	.05	3.73
8	27.2	0	+ 3.0	30.2	10.5	19.7	.25	3.93
9	11.8	0	- 4.6	7.2	6.3	.9	.01	3.93
10	46.1	0	- 20.0	26.1	15.1	11.0	.03	3.46

See footnotes at end of table.

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
OCTOBER 1961--Continued								
All sites	189.1	15.1	- 60.1	144.1	73.2	70.9	0.04	3.66
Stream gage	--	--	--	--	--	6.1	0	3.68
NOVEMBER 1961								
Site 1	17.6	0	+ 107.7	125.3	4.9	120.4	.41	3.84
3	16.3	50.0	+ 65.0	131.3	7.2	124.1	.43	3.83
4	27.0	149.0	+ 149.0	325.0	11.5	313.5	1.18	4.02
5	13.9	31.0	+ 30.6	75.5	6.3	69.2	.95	4.16
6	5.4	123.8	+ 20.3	149.5	2.9	146.6	.39	3.92
7	15.7	90.9	+ 35.4	142.0	9.2	132.8	.88	4.14
8	18.0	0	+ 44.9	62.9	10.3	52.6	.41	3.79
9	10.2	0	+ 11.5	21.7	6.0	15.7	.20	3.79
10	38.0	29.8	+ 102.2	170.0	18.8	151.2	.46	4.19
All sites	162.1	474.5	+ 566.6	1,203.2	77.1	1,126.1	.57	3.96
Stream gage	--	--	--	--	--	1,090	.26	4.00
DECEMBER 1961								
Site 1	22.2	0	- 18.0	4.2	1.9	2.3	.01	.61
3	19.3	14.2	- 32.0	1.5	1.5	0	0	.51
4	34.1	0	- 16.0	18.1	2.7	15.4	.06	.57
5	11.0	0	- 8.8	2.2	1.2	1.0	.01	.62
6	2.8	0	- 2.3	.5	.1	.4	0	.43
7	14.5	0	- 11.2	3.3	1.4	1.9	.01	.58
8	16.7	0	- 13.2	3.5	1.7	1.8	.01	.55
9	6.5	0	- 5.5	1.0	1.0	0	0	.55
10	34.9	0	- 32.2	2.7	2.7	0	0	.52
All sites	162.0	14.2	- 139.2	37.0	14.2	22.8	.01	.53
Stream gage	--	--	--	--	--	0	0	.52
JANUARY 1962								
Site 1	18.8	0	- 16.0	2.8	1.8	1.0	.0	.66
3	10.9	14.0	- 21.0	3.9	1.4	2.5	.01	.58
4	32.0	0	- 22.0	10.0	2.9	7.1	.03	.66
5	11.4	0	- 6.4	5.0	1.1	3.9	.05	.63
6	3.6	0	- 2.9	.7	.3	.4	0	.39
7	12.9	0	- 11.1	1.8	1.2	.6	0	.54
8	16.0	0	- 9.7	6.3	2.0	4.3	.03	.68
9	5.9	0	- 4.8	1.1	1.1	0	0	.68
10	26.8	0	- 23.2	3.6	3.6	0	0	.74
All sites	138.3	14.0	- 117.1	35.2	15.4	19.8	.01	.60
Stream gage	--	--	--	--	--	0	0	.63

See footnotes at end of table.



Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
FEBRUARY 1962								
Site 1	18.8	0	- 10.4	8.4	2.6	5.8	0.02	1.00
3	11.0	2.0	- 10.0	3.0	2.2	.8	0	.97
4	27.3	0	- 10.0	17.3	3.7	13.6	.05	.89
5	8.0	0	- 6.0	2.0	1.4	.6	.01	.86
6	3.5	0	- 2.0	1.5	.7	.8	0	.98
7	11.8	0	- 8.0	3.8	2.0	1.8	.01	.95
8	15.5	0	- 9.6	5.9	2.6	3.3	.03	.92
9	5.1	0	- 3.6	1.5	1.4	.1	0	.92
10	31.9	0	- 26.8	5.1	5.1	0	0	1.10
All sites	132.9	2.0	- 86.4	48.5	21.7	26.8	.01	.98
Stream gage	--	--	--	--	--	1.8	0	.98
MARCH 1962								
Site 1	21.4	0	- 19.0	2.4	2.0	.4	0	.87
3	12.7	8.9	- 20.4	1.2	1.2	0	0	.67
4	31.3	0	- 25.0	6.3	3.1	3.2	.01	.78
5	10.6	0	- 9.4	1.2	1.2	0	0	.77
6	5.5	0	- 4.8	.7	.3	.4	0	.58
7	14.9	0	- 12.4	2.5	1.4	1.1	.01	.69
8	19.7	0	- 15.4	4.3	2.3	2.0	.02	.83
9	8.8	0	- 7.2	1.6	1.2	.4	.01	.83
10	33.3	0	- 29.4	3.9	3.9	0	0	.90
All sites	158.2	8.9	- 143.0	24.1	16.6	6.4	0	.76
Stream gage	--	--	--	--	--	0	0	.75
APRIL 1962								
Site 1	18.6	0	+ 3.0	21.6	10.1	11.5	.04	4.69
3	15.5	10.0	- 11.5	14.0	5.7	8.3	.03	3.62
4	29.2	0	- 8.0	21.2	16.0	5.2	.02	4.33
5	12.8	0	+ 1.8	14.6	6.5	8.1	.11	4.32
6	7.6	0	+ 1.7	9.3	3.2	6.1	.02	3.67
7	19.7	0	+ 15.0	34.7	8.0	26.7	.18	4.06
8	25.0	0	+ 15.4	40.4	12.5	27.9	.22	4.74
9	9.4	0	+ 1.3	10.7	6.6	4.1	.05	4.74
10	37.1	0	+ 44.1	81.2	21.5	59.7	.18	5.02
All sites	174.9	10.0	+ 62.8	247.7	90.1	157.6	.08	4.28
Stream gage	--	--	--	--	--	175	.04	4.23
MAY 1962								
Site 1	22.0	0	- 5.8	16.2	3.6	12.6	.04	1.65
3	17.5	2.9	- 10.4	10.0	2.1	7.9	.03	1.64
4	45.2	0	- 12.0	33.2	5.3	27.9	.10	1.67
5	16.9	0	+ 3.6	20.5	1.7	18.8	.26	1.24
6	11.6	0	- 10.1	1.5	1.1	.4	0	1.47

See footnotes at end of table.

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
MAY 1962--Continued								
Site 7	22.0	0	- 17.3	4.7	3.0	1.7	0.01	1.57
8	29.3	0	+ 9.6	38.9	4.3	34.6	.27	1.61
9	13.0	0	+ 3.9	16.9	2.1	14.8	.19	1.61
10	43.7	0	+ 29.3	73.0	8.0	65.0	.20	1.83
All sites	221.2	2.9	- 9.2	214.9	31.2	183.7	.09	1.62
Stream gage	--	--	--	--	--	6.9	0	1.67
JUNE 1962								
Site 1	29.3	0	+ 2.8	32.1	6.6	25.5	.09	3.07
3	19.0	10.0	- 4.8	24.2	3.0	21.2	.07	2.18
4	51.4	0	- 37.0	14.4	9.0	5.4	.02	2.62
5	19.8	0	- 9.0	10.8	3.7	7.1	.10	2.34
6	9.8	0	- 6.3	3.5	1.0	2.5	.01	1.49
7	22.3	0	- 15.2	7.1	3.2	3.9	.03	1.65
8	35.9	0	- 18.9	17.0	4.2	12.8	.10	1.49
9	13.9	0	- 8.4	5.5	2.2	3.3	.04	1.49
10	61.1	0	- 5.8	55.3	12.0	43.3	.13	2.36
All sites	262.5	10.0	- 102.6	169.9	44.9	125.0	.06	2.16
Stream gage	--	--	--	--	--	712	.17	2.43
JULY 1962								
Site 1	27.6	0	- 27.6	0	0	0	0	0
3	19.7	2.6	- 22.3	0	0	0	0	0
4	46.8	0	- 46.8	0	0	0	0	0
5	21.0	0	- 21.0	0	0	0	0	0
6	8.6	0	- 8.6	0	0	0	0	0
7	22.7	0	- 22.7	0	0	0	0	0
8	42.3	b/ 6.2	- 48.5	0	0	0	0	0
9	13.9	0	- 13.9	0	0	0	0	0
10	67.6	0	- 67.6	0	0	0	0	0
All sites	270.2	8.8	- 279.0	0	0	0	0	0
Stream gage	--	--	--	--	--	0	0	0
AUGUST 1962								
Site 1	20.9	0	- 18.9	2.0	1.9	.1	0	1.53
3	15.7	1.0	- 9.3	7.4	1.8	5.6	.02	1.94
4	33.3	0	- 28.2	5.1	4.0	1.1	0	2.00
5	15.6	0	- 13.1	2.5	1.9	.6	.01	1.86
6	5.1	0	- 30.1	.6	.4	.2	0	1.45
7	19.0	0	- 41.9	4.1	2.1	2.0	.01	1.73
8	32.7	0	- 30.1	2.6	2.6	0	0	1.41
9	11.4	0	- 9.5	1.9	1.3	.6	.01	1.41
10	48.3	0	- 43.6	4.7	4.7	0	0	1.28

See footnotes at end of table.

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
AUGUST 1962--Continued								
All sites	202.0	1.0	- 172.1	30.9	20.7	10.2	.01	1.61
Stream gage	--	--	--	--	--	0	0	1.62
SEPTEMBER 1962								
Site 1	11.2	0	- 8.8	2.4	.8	1.6	.01	.81
3	10.2	0	- 6.2	4.0	1.2	2.8	.01	1.39
4	20.8	0	- 17.2	3.6	2.0	1.6	.01	1.17
5	9.4	0	- 5.9	3.5	1.1	2.4	.03	1.17
6	2.8	0	- 2.5	.3	.3	0	0	.98
7	14.0	0	- 11.4	2.6	1.5	1.1	.01	1.40
8	9.8	0	- 7.8	2.0	2.0	0	0	1.14
9	8.2	0	- 4.6	3.6	1.0	2.6	.03	1.14
10	33.8	0	- 27.0	6.8	4.5	2.3	.01	1.36
All sites	120.2	0	- 91.4	28.8	14.4	14.4	.01	1.16
Stream gage	--	--	--	--	--	0	0	1.27
OCTOBER 1962								
Site 1	6.8	0	- 6.7	.1	.1	0	0	.16
3	7.1	0	- 7.1	0	0	0	0	.02
4	11.8	0	- 11.7	.1	.1	0	0	.05
5	6.2	0	- 6.2	0	0	0	0	0
6	1.5	0	- 1.5	0	0	0	0	.03
7	8.0	0	- 8.0	0	0	0	0	0
8	10.6	0	- 10.6	0	0	0	0	0
9	6.7	0	- 6.7	0	0	0	0	0
10	30.8	0	- 30.4	.4	.4	0	0	.14
All sites	89.5	0	- 88.9	.6	.6	0	0	.04
Stream gage	--	--	--	--	--	0	0	.07
NOVEMBER 1962								
Site 1	5.2	0	- 1.3	3.9	1.1	2.8	.01	1.97
3	5.8	0	+ 34.5	40.3	1.4	38.9	.13	2.02
4	10.2	0	+ 3.9	14.1	1.6	12.5	.05	.74
5	4.7	0	- 1.6	3.1	1.0	2.1	.03	1.57
6	1.4	0	+ 3.5	4.9	.4	4.5	.01	2.41
7	6.6	0	+ 19.4	26.0	1.8	24.2	.16	1.93
8	9.3	0	+ 36.1	45.4	2.1	43.3	.34	1.69
9	3.4	0	0	3.4	1.1	2.3	.03	1.69
10	14.6	0	+ 45.4	60.0	5.1	54.9	.17	2.08
All sites	61.2	0	+ 139.9	201.1	15.6	185.5	.09	1.87
Stream gage	--	--	--	--	--	178	.04	1.94

See footnotes at end of table.

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
DECEMBER 1962								
Site 1	4.0	0	- 2.1	1.9	0.7	1.2	0	1.25
3	8.5	0	- 6.8	1.7	1.3	.4	0	1.20
4	9.6	0	- 6.9	2.7	1.4	1.3	0	1.21
5	3.7	0	0	3.7	.8	2.9	.04	1.18
6	2.2	0	- 1.9	.3	.3	0	0	1.15
7	7.3	0	+ 1.4	8.7	1.4	2.3	.05	1.18
8	12.0	0	0	12.0	2.3	9.7	.08	1.16
9	4.2	0	0	4.2	.8	3.4	.04	1.16
10	32.6	0	+ 11.2	43.8	4.4	39.4	.12	1.26
All sites	84.1	0	- 5.1	79.0	13.4	65.6	.03	1.20
Stream gage	--	--	--	--	--	112	.03	1.19
JANUARY 1963								
Site 1	3.2	0	- 3.1	.1	.1	0	0	.14
3	5.3	0	- 5.1	.2	.2	0	0	.22
4	4.7	0	- 4.5	.2	.2	0	0	.18
5	3.9	0	- 3.8	.1	.1	0	0	.17
6	1.3	0	- 1.3	0	0	0	0	.17
7	6.8	0	- 6.6	.2	.2	0	0	.18
8	11.7	0	- 11.4	.3	.3	0	0	.15
9	2.5	0	- 2.4	.1	.1	0	0	.15
10	19.4	0	- 18.8	.6	.6	0	0	.18
All sites	58.8	0	- 57.0	1.8	1.8	0	0	.17
Stream gage	--	--	--	--	--	0	0	.19
FEBRUARY 1963								
Site 1	2.6	0	+ 1.2	3.8	1.2	2.6	.01	2.96
3	5.3	0	+ 6.4	11.7	2.6	9.1	.03	2.56
4	5.2	0	+ 4.0	9.2	2.5	6.7	.03	2.78
5	3.3	0	+ 3.0	6.3	1.7	4.6	.06	2.99
6	1.3	0	+ .5	1.8	.5	1.3	0	2.45
7	7.0	0	+ 6.7	13.7	3.1	10.6	.07	2.77
8	10.3	0	+ 21.2	31.5	6.1	25.4	.20	3.27
9	2.7	0	+ 3.2	5.9	2.1	3.8	.05	3.27
10	24.8	b/ 11.2	+ 54.0	90.0	10.9	79.1	.24	3.50
All sites	62.5	11.2	+ 100.2	173.9	30.7	143.2	.07	2.88
Stream gage	--	--	--	--	--	169	.04	2.91
MARCH 1963								
Site 1	3.2	0	- 3.2	0	0	0	0	.03
3	7.8	0	- 3.9	3.9	.1	3.8	.01	.11
4	7.5	0	- 6.5	1.0	.1	.9	0	.09
5	3.7	0	- 3.6	.1	.1	0	0	.11

See footnotes at end of table.

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
MARCH 1963--Continued								
Site 6	1.4	0	- 1.4	0	0	0	0	0.13
7	10.8	0	- 10.6	.2	.2	0	0	.13
8	14.7	0	- 14.5	.2	.2	0	0	.10
9	3.3	0	- 3.2	.1	.1	0	0	.10
10	30.9	0	- 30.4	.5	.5	0	0	.13
All sites	83.3	0	- 77.3	6.0	1.3	4.7	0	.10
Stream gage	--	--	--	--	--	0	0	.11
APRIL 1963								
Site 1	4.6	0	- .5	4.1	.8	3.3	.01	2.48
3	10.4	0	+ 2.6	13.0	2.5	10.5	.04	2.34
4	10.02	0	+ 3.2	13.4	2.3	11.1	.04	2.65
5	6.6	0	+ 5.7	11.8	1.5	10.3	.14	2.70
6	3.7	0	+ 5.3	9.0	.6	8.4	.02	2.26
7	12.5	0	+ 16.3	28.8	3.1	25.7	.17	2.54
8	24.8	0	+ 30.5	55.3	4.9	50.4	.40	2.59
9	4.6	0	+ 1.7	6.3	1.6	4.7	.06	2.59
10	30.0	0	- 12.0	18.0	8.0	10.0	.03	2.23
All sites	107.4	0	+ 52.3	159.7	25.3	134.4	.07	2.42
Stream gage	--	--	--	--	--	71	.02	2.45
MAY 1963								
Site 1	4.0	0	- 3.8	.2	.2	0	0	.94
3	12.3	0	- 9.9	2.4	.6	1.8	.01	.56
4	10.3	0	- 9.7	.6	.6	0	0	.75
5	6.8	0	- 5.9	.9	.4	.5	.01	.54
6	3.9	0	- 3.8	.1	.1	0	0	.40
7	13.9	0	- 11.1	2.8	.6	2.2	.01	.49
8	24.1	b/ 13.9	- 37.2	.8	.8	0	0	.35
9	4.8	0	- 4.6	.2	.2	0	0	.35
10	34.0	0	- 33.0	1.0	1.0	0	0	.31
All sites	114.1	13.9	- 119.0	9.0	4.5	4.5	0	.54
Stream gage	--	--	--	--	--	0	0	.48
JUNE 1963								
Site 1	2.6	0	- 2.3	.3	.3	0	0	1.54
3	12.9	0	- 9.7	3.2	1.7	1.5	.01	1.93
4	6.8	0	- 5.9	.9	.9	0	0	1.86
5	5.8	0	- 4.8	1.0	.8	.2	0	1.99
6	2.4	0	- 2.0	.4	.2	.2	0	1.65
7	13.8	0	- 10.0	3.8	2.0	1.8	.01	1.92
8	20.0	b/ 18.2	- 35.2	3.0	2.7	.3	0	2.01
9	4.6	.0	- 3.6	1.0	1.0	0	0	2.01

See footnotes at end of table.

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
JUNE 1963--Continued								
Site 10	33.0	0	- 25.4	7.6	5.7	1.9	0.01	2.30
All sites	101.9	18.2	- 98.9	21.2	15.3	5.9	0	1.88
Stream gage	--	--	--	--	--	0	0	1.98
JULY 1963								
Site 1	1.5	0	- 1.5	0	0	0	0	.07
3	10.3	0	- 10.0	.3	.3	0	0	.37
4	7.7	0	- 7.6	.1	.1	0	0	.31
5	3.0	0	- 2.9	.1	.1	0	0	.32
6	1.3	0	- 1.3	0	0	0	0	.18
7	11.2	0	- 11.0	.2	.2	0	0	.22
8	16.0	0	- 16.0	0	0	0	0	0
9	3.9	0	- 3.8	.1	.1	0	0	0
10	26.7	0	- 25.4	1.3	1.3	0	0	.58
All sites	81.6	0	- 79.5	2.1	2.1	0	0	.26
Stream gage	--	--	--	--	--	.2	0	.32
AUGUST 1963								
Site 1	.3	0	- .3	0	0	0	0	.27
3	7.9	0	- 7.8	.1	.1	0	0	.20
4	1.1	0	- 1.1	0	0	0	0	.23
5	1.4	0	- 1.4	0	0	0	0	.15
6	.8	0	- .8	0	0	0	0	.18
7	9.4	0	- 9.3	.1	.1	0	0	.15
8	7.5	0	- 7.5	0	0	0	0	.04
9	2.6	0	- 2.6	0	0	0	0	.04
10	16.9	0	- 16.8	.1	.1	0	0	.14
All sites	47.9	0	- 47.6	.3	.3	0	0	.18
Stream gage	--	--	--	--	--	0	0	.15
SEPTEMBER 1963								
Site 1	.4	0	- .2	.2	0	.2	0	2.95
3	9.2	0	+ 19.8	29.0	1.9	27.1	.09	2.77
4	1.1	0	+ .8	1.9	.3	1.6	.01	3.06
5	.7	0	- .5	.2	.2	0	0	2.56
6	.4	0	+ .3	.7	.2	.5	0	2.37
7	7.1	0	+ .9	8.0	1.5	6.5	.04	2.37
8	4.8	0	+ 2.8	7.6	.8	6.8	.05	2.11
9	2.2	0	- .8	1.4	.5	.9	.01	2.11
10	13.3	0	- 8.0	5.3	4.4	.9	0	3.52
All sites	39.2	0	+ 15.1	54.3	9.8	44.5	.02	2.77
Stream gage	--	--	--	--	--	131	.03	2.86

See footnotes at end of table.

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
OCTOBER 1963								
Site 1	4.2	0	+ 31.2	35.4	0.9	34.5	0.12	3.04
3	12.7	13.3	+ 284.9	310.9	10.6	300.3	1.04	5.37
4	3.9	0	+ 30.1	34.0	1.1	32.9	.12	3.42
5	.4	0	+ 1.9	2.3	.2	2.1	.03	3.43
6	2.6	212.8	+ 49.3	264.7	2.2	262.5	.70	4.66
7	8.6	91.0	+ 135.4	235.0	6.3	228.7	1.51	4.99
8	8.5	b/ 1.5	+ 140.7	150.7	3.8	146.9	1.15	4.20
9	2.0	.0	+ 3.6	5.6	.9	4.7	.06	4.07
10	16.0	0	+ 116.0	132.0	5.4	126.6	.39	3.69
All sites	58.9	318.6	+ 793.1	1,170.6	31.4	1,139.2	.58	4.13
Stream gage	--	--	--	--	--	836	.20	3.81
NOVEMBER 1963								
Site 1	17.5	0	+ 15.3	32.8	5.7	27.1	.09	4.56
3	41.1	26.6	- 18.0	49.7	15.9	33.8	.12	3.28
4	11.4	0	- 1.4	10.0	4.1	5.9	.02	3.61
5	4.2	0	+ 9.7	13.9	1.5	12.4	.17	3.61
6	10.8	33.7	- 2.2	42.3	3.5	38.8	.10	3.20
7	16.4	28.0	- 2.8	41.6	9.6	32.0	.21	3.88
8	22.8	42.5	+ 32.7	98.0	14.9	83.1	.65	4.94
9	3.2	0	+ 13.2	16.4	2.5	13.9	.18	5.11
10	50.1	175.9	+ 169.0	395.0	22.7	372.3	1.14	5.04
All sites	177.5	306.7	+ 215.5	699.7	80.4	619.3	.31	4.02
Stream gage	--	--	--	--	--	1,090	.26	4.16
DECEMBER 1963								
Site 1	12.3	0	- 9.4	2.9	1.9	1.0	0	1.41
3	25.8	55.9	- 75.0	6.7	5.7	1.0	0	1.35
4	6.9	0	- 5.2	1.7	1.5	.2	0	1.47
5	3.7	0	- 2.0	1.7	.8	.9	.01	1.48
6	7.9	0	- 6.6	1.3	.3	1.0	0	1.06
7	20.9	0	- 16.8	4.1	3.1	1.0	.01	1.29
8	17.3	0	- 13.3	4.0	4.0	0	0	1.27
9	2.9	0	- 1.8	1.1	.8	.3	0	1.26
10	40.0	0	- 33.0	7.0	6.9	.1	0	1.35
All sites	137.7	55.9	- 163.1	30.5	25.0	5.5	0	1.31
Stream gage	--	--	--	--	--	.4	0	1.30
JANUARY 1964								
Site 1	8.0	0	+ 27.6	35.6	4.3	31.3	.11	3.35
3	18.7	6.3	+ 135.0	160.0	9.8	150.2	.51	2.69
4	4.6	0	+ 15.4	20.0	2.5	17.5	.07	2.93
5	3.2	0	+ 15.8	19.0	1.5	17.5	.24	2.92

See footnotes at end of table.

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
JANUARY 1964--Continued								
Site 6	6.7	49.0	+ 33.9	89.6	2.3	87.3	.23	2.79
7	13.7	32.7	+ 53.6	100.0	6.8	93.2	.62	3.08
8	16.4	0	+ 16.7	33.1	10.0	23.1	.18	3.32
9	2.6	0	+ 23.6	26.2	2.1	24.1	.31	3.35
10	34.1	6.9	+ 47.0	88.0	16.0	72.0	.22	3.20
All sites	108.0	94.9	+ 368.6	571.5	55.3	516.2	.26	3.03
Stream gage	--	--	--	--	--	536	.13	3.03
FEBRUARY 1964								
Site 1	13.9	0	- 7.4	6.5	3.8	2.7	.01	2.07
3	21.7	202.9	- 126.0	98.6	15.1	83.5	.29	3.05
4	12.3	0	+ 34.8	47.1	3.9	43.2	.16	2.19
5	4.9	0	+ 2.0	6.9	2.0	4.9	.07	2.16
6	11.0	365.6	- 27.5	349.1	4.4	344.7	.92	3.27
7	14.2	132.8	- 42.0	105.0	7.8	97.2	.64	2.78
8	13.5	35.3	+ 3.4	52.2	6.3	45.9	.36	1.96
9	4.0	0	+ 2.8	6.8	2.1	4.7	.06	1.82
10	45.7	6.4	- 21.0	31.1	10.1	21.0	.06	1.89
All sites	141.2	743.0	- 180.9	703.3	55.5	647.8	.33	2.48
Stream gage	--	--	--	--	--	986	.24	2.34
MARCH 1964								
Site 1	23.2	0	+ 46.4	69.6	3.4	66.2	.23	2.21
3	27.8	62.0	+ 25.0	114.8	8.9	105.9	.37	2.39
4	25.1	0	+ 147.6	172.7	4.9	167.8	.63	2.38
5	8.3	0	+ 31.5	39.8	2.2	37.6	.52	2.38
6	8.8	175.7	- .5	184.0	2.6	181.4	.48	2.43
7	19.9	107.8	+ 2.3	130.0	5.3	124.7	.83	2.24
8	20.2	90.2	0	110.4	7.7	102.7	.81	2.40
9	7.0	0	+ 16.0	23.0	2.9	20.1	.26	2.43
10	41.8	74.2	+ 7.0	123.0	13.4	109.6	.34	2.51
All sites	182.1	509.9	+ 275.3	967.3	51.3	916.0	.46	2.53
Stream gage	--	--	--	--	--	1,370	.33	2.43
APRIL 1964								
Site 1	26.1	0	- 16.2	9.9	2.8	7.1	.02	1.15
3	40.4	11.2	- 43.0	8.6	4.6	4.0	.01	1.21
4	51.2	0	- 45.0	6.2	4.7	1.5	.01	1.24
5	12.4	0	- 10.2	2.2	1.7	.5	.01	1.25
6	9.2	0	- 7.7	1.5	.9	.6	0	1.21
7	23.7	0	- 16.8	6.9	3.5	3.4	.02	1.50
8	24.2	0	- 13.5	10.7	4.3	6.4	.05	1.36
9	9.9	0	- 3.4	6.5	1.8	4.7	.06	1.33

See footnotes at end of table.



Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
APRIL 1964--Continued								
Site 10	50.0	0	- 40.0	10.0	5.8	4.2	0.01	1.14
All sites	247.1	11.2	- 195.8	62.5	30.1	32.4	.02	1.23
Stream gage	--	--	--	--	--	1.8	0	1.23
MAY 1964								
Site 1	25.5	0	- 14.8	10.7	6.2	4.5	.02	3.01
3	46.3	5.0	- 17.0	34.3	7.6	26.7	.09	2.24
4	48.0	0	- 38.0	10.0	9.2	.8	0	2.91
5	15.2	0	- 10.8	4.4	3.4	1.0	.01	2.91
6	11.5	0	- 9.4	2.1	1.2	.9	0	1.51
7	28.7	0	- 18.6	10.1	3.1	7.0	.05	1.48
8	36.4	0	- 9.9	26.5	5.4	21.1	.17	1.79
9	12.6	0	- 4.8	7.8	2.3	5.5	.07	1.85
10	59.6	0	- 24.0	35.6	10.4	25.2	.08	2.17
All sites	283.8	5.0	- 147.5	141.5	48.8	92.7	.05	2.22
Stream gage	--	--	--	--	--	24	.01	2.37
JUNE 1964								
Site 1	23.5	0	- 22.0	1.5	1.3	.2	0	.62
3	42.2	0	- 40.0	2.2	2.2	0	0	.70
4	44.4	0	- 42.0	2.4	2.3	.1	0	.80
5	14.8	0	- 11.5	3.3	.9	2.4	.03	.80
6	11.5	0	- 10.9	.6	.6	0	0	1.00
7	26.2	0	- 22.8	3.4	2.4	1.0	.01	1.20
8	42.9	0	- 19.3	23.6	6.1	17.5	.14	2.14
9	13.5	0	- 10.6	2.9	2.8	.1	0	2.29
10	55.4	0	- 37.0	18.4	7.6	10.8	.03	1.63
All sites	274.4	0	- 216.1	58.3	26.2	32.1	.02	1.10
Stream gage	--	--	--	--	--	48	.01	1.04
JULY 1964								
Site 1	20.0	0	- 18.1	1.9	1.5	.4	0	1.05
3	36.3	0	- 35.0	1.3	1.3	0	0	.55
4	36.2	0	- 34.8	1.4	1.4	0	0	.61
5	12.4	0	- 11.7	.7	.5	.2	0	.56
6	9.6	0	- 9.1	.5	.3	.2	0	.43
7	23.9	0	- 23.1	.8	.6	.2	0	.34
8	41.9	b/ 11.8	- 52.5	1.2	1.2	0	0	.47
9	10.7	0	- 10.2	.5	.5	0	0	.49
10	52.7	0	- 51.0	1.7	1.7	0	0	.42
All sites	243.7	11.8	- 245.5	10.0	9.0	1.0	0	.57
Stream gage	--	--	--	--	--	0	0	.70

See footnotes at end of table.

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
AUGUST 1964								
Site 1	19.6	0	+ 40.1	59.7	7.0	52.7	0.18	5.83
3	27.7	0	- 16.2	11.5	5.6	5.9	.02	3.25
4	29.1	0	- 2.2	26.9	6.1	20.8	.08	3.31
5	9.0	0	- 6.9	2.1	1.8	.3	0	3.18
6	6.0	0	- 5.1	.9	.7	.2	0	2.67
7	19.4	0	- 16.6	2.8	2.4	.4	0	1.86
8	26.4	0	- 22.4	4.0	4.0	0	0	1.89
9	9.3	0	- 7.7	1.6	1.6	0	0	1.89
10	48.6	0	- 40.0	8.6	8.3	.3	0	2.43
All sites	195.1	0	- 77.0	118.1	37.5	80.6	.04	3.15
Stream gage	--	--	--	--	--	509	.12	3.56
SEPTEMBER 1964								
Site 1	22.8	0	- 17.6	5.2	4.8	.4	0	2.65
3	20.1	5.0	- 17.5	7.6	3.5	4.1	.01	2.29
4	33.6	0	- 15.6	8.0	2.1	5.9	.02	1.25
5	4.6	0	- 4.1	.5	.4	.1	0	1.18
6	2.8	0	- 2.4	.4	.2	.2	0	1.92
7	13.6	0	+ 8.5	22.1	2.8	19.3	.13	2.52
8	22.9	0	- 15.0	7.9	3.3	4.6	.04	1.89
9	6.9	0	- 5.7	1.2	1.2	0	0	1.79
10	31.0	0	- 25.0	6.0	5.7	.3	0	2.06
All sites	148.3	5.0	- 94.4	58.9	24.0	34.9	.02	2.03
Stream gage	--	--	--	--	--	.6	0	2.20
OCTOBER 1964								
Site 1	16.2	0	- 4.8	11.4	3.7	7.7	.03	2.80
3	14.9	0	+ 7.4	22.3	2.9	19.4	.07	2.26
4	15.5	0	- 3.2	12.3	2.9	9.4	.04	2.41
5	2.9	0	+ 2.0	4.9	.4	4.5	.06	2.39
6	2.0	0	+ 7.3	9.3	.2	9.1	.02	2.33
7	15.1	0	+ 22.6	37.7	2.5	35.2	.23	2.24
8	17.1	0	+ 12.7	29.8	3.6	26.2	.21	2.53
9	3.9	0	- 1.5	2.4	1.5	.9	.01	2.59
10	25.2	0	- 1.0	24.2	5.8	18.4	.06	2.60
All sites	112.8	0	+ 41.5	154.3	23.5	130.8	.07	2.44
Stream gage	--	--	--	--	--	293	.07	2.49
NOVEMBER 1964								
Site 1	17.6	0	+ 36.8	54.4	8.2	46.2	.16	3.70
3	20.6	0	+ 54.4	75.0	6.7	68.3	.24	3.16
4	17.1	0	+ .6	17.7	4.2	13.5	.05	2.56
5	5.0	0	+ 5.9	10.9	1.0	9.9	.14	2.53

See footnotes at end of table.

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
NOVEMBER 1964--Continued								
Site 6	14.7	58.5	+ 28.3	101.5	1.8	99.7	0.27	2.76
7	16.0	30.3	+ 44.9	91.2	6.3	84.9	.56	2.86
8	20.8	b/ 20.8	+ 74.1	115.7	8.2	107.5	.84	3.94
9	5.2	0	+ 11.8	17.0	2.6	14.4	.18	4.11
10	49.9	0	+ 139.1	189.0	12.3	176.7	.54	3.77
All sites	166.9	109.6	+ 395.9	672.4	51.3	621.1	.31	3.17
Stream gage	--	--	--	--	--	878	.21	3.27
DECEMBER 1964								
Site 1	14.3	0	- 11.2	3.1	2.8	.3	0	1.20
3	14.1	4.0	- 12.0	6.1	3.0	3.1	.01	1.20
4	9.9	0	- 6.8	3.1	1.8	1.3	0	1.28
5	3.7	0	- 2.0	1.7	.7	1.0	.01	1.28
6	8.7	0	- 6.8	1.9	1.3	.6	0	1.31
7	20.0	0	- 15.4	4.6	3.2	1.4	.01	1.50
8	18.6	0	- 15.3	3.3	3.3	0	0	1.20
9	4.3	0	- 2.4	1.9	1.0	.9	.01	1.15
10	25.4	0	- 18.0	7.4	5.5	1.9	.01	1.20
All sites	119.0	4.0	- 89.9	33.1	22.6	10.5	.01	1.30
Stream gage	--	--	--	--	--	0	0	1.26
JANUARY 1965								
Site 1	14.0	0	- 9.5	4.5	2.9	1.6	.01	1.43
3	11.6	1.2	- 7.4	5.4	4.4	1.0	0	1.95
4	7.3	0	- 3.8	3.5	1.6	1.9	.01	1.43
5	3.0	0	- 1.8	1.2	.7	.5	.01	1.43
6	6.9	0	- 5.3	1.6	1.0	.6	0	1.43
7	12.6	0	- 8.7	3.9	3.0	.9	.01	1.53
8	14.4	0	- 8.9	5.5	2.8	2.7	.02	1.11
9	5.1	0	- 2.4	2.7	.8	1.9	.02	1.05
10	27.5	0	- 20.5	7.0	4.7	2.3	.01	1.08
All sites	102.4	1.2	- 68.3	35.3	21.9	13.4	.01	1.42
Stream gage	--	--	--	--	--	0	0	1.36
FEBRUARY 1965								
Site 1	19.2	0	+ 112.2	131.4	16.7	114.7	.39	6.10
3	14.6	63.1	+ 117.3	195.0	18.5	176.5	.61	5.96
4	19.8	0	+ 196.3	216.1	12.6	203.5	.77	6.43
5	5.4	0	+ 51.5	56.9	5.1	51.8	.71	6.43
6	9.5	273.5	+ 21.6	304.6	6.2	298.4	.80	5.98
7	13.4	128.5	+ 48.1	190.0	15.9	174.1	1.15	6.76
8	16.4	118.0	+ 73.4	207.8	18.4	189.4	1.48	6.11
9	4.6	0	+ 61.5	66.1	6.8	59.3	.76	6.04

See footnotes at end of table.

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
FEBRUARY 1965--Continued								
Site 10	32.4	46.4	+ 121.1	199.9	28.8	171.1	0.52	6.04
All sites	135.3	629.5	+ 803.0	1,567.8	129.0	1,438.8	.73	6.10
Stream gage	--	--	--	--	--	1,120	.27	6.08
MARCH 1965								
Site 1	24.3	0	- 16.5	7.8	4.4	3.4	.01	1.24
3	23.0	17.8	- 26.0	14.8	7.6	7.2	.02	2.03
4	45.7	0	- 38.5	7.2	5.8	1.4	.01	1.52
5	14.1	0	- 10.1	4.0	2.0	2.0	.03	1.52
6	8.1	0	0	8.1	1.7	6.4	.02	1.80
7	19.0	0	- 6.4	12.6	4.6	8.0	.05	1.96
8	25.1	0	- 13.6	11.5	4.1	7.4	.06	1.30
9	9.5	0	- 4.7	4.8	2.1	2.7	.03	1.19
10	48.1	0	- 41.8	6.3	5.9	.4	0	1.17
All sites	216.9	17.8	- 157.6	77.1	38.2	38.9	.02	1.56
Stream gage	--	--	--	--	--	0	0	1.46
APRIL 1965								
Site 1	29.5	0	- 17.6	11.9	5.2	6.7	.02	1.51
3	32.3	2.1	- 22.4	12.0	5.8	6.2	.02	1.62
4	33.4	0	- 27.0	6.4	5.2	1.2	0	1.42
5	10.7	0	- 8.2	2.5	1.8	.7	.01	1.42
6	12.4	0	- 7.9	4.5	.9	3.6	.01	1.47
7	21.3	0	- 15.9	5.4	3.6	1.8	.01	1.53
8	22.3	0	- 17.1	5.2	5.2	0	0	1.70
9	12.6	0	- 9.7	2.9	2.9	0	0	1.71
10	28.9	0	- 11.2	17.7	7.3	10.4	.03	1.47
All sites	203.4	2.1	- 137.0	68.5	37.9	30.6	.02	1.42
Stream gage	--	--	--	--	--	8.3	0	1.44
MAY 1965								
Site 1	34.8	232.0	+ 74.5	341.3	34.9	306.4	1.05	9.02
3	39.9	154.7	+ 66.2	260.8	24.9	235.9	.81	6.42
4	61.8	646.0	+ 120.2	828.0	33.9	794.1	2.99	8.58
5	18.1	169.6	+ 64.3	252.0	13.6	238.4	3.29	8.64
6	17.8	579.2	+ 8.7	605.7	7.7	598.0	1.60	6.71
7	26.9	275.7	+ 22.4	325.0	19.8	305.2	2.02	7.41
8	32.6	343.9	+ 33.5	410.0	27.8	382.2	3.00	8.40
9	12.5	110.9	+ 26.6	150.0	17.4	132.6	1.70	8.55
10	58.0	688.4	+ 53.6	800.0	47.3	752.7	2.30	8.22
All sites	302.4	3,200.4	+ 470.0	3,972.8	227.3	3,745.5	1.89	7.89
Stream gage	--	--	--	--	--	5,300	1.27	7.79

See footnotes at end of table.

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
JUNE 1965								
Site 1	39.5	9.7	- 41.3	7.9	4.7	3.2	0.01	1.18
3	61.0	6.0	- 63.8	3.7	2.9	.3	0	.70
4	63.0	.2	- 49.1	14.1	3.5	10.6	.04	.71
5	24.4	0	- 22.9	1.5	1.4	.1	0	.71
6	14.0	0	- 11.9	2.1	.4	1.7	0	.93
7	30.4	0	- 26.2	4.2	2.4	1.8	.01	.96
8	42.7	1.2	- 37.4	6.5	5.4	1.1	.01	1.64
9	18.8	0	- 15.3	3.5	3.5	0	0	1.75
10	51.1	0	- 37.3	13.8	8.8	5.0	.02	1.65
All sites	344.9	17.1	- 305.2	56.8	33.0	23.8	.01	.99
Stream gage	--	--	--	--	--	40	.01	1.00
JULY 1965								
Site 1	41.4	0	- 41.2	.2	.2	0	0	.07
3	50.6	.4	- 50.9	.1	.1	0	0	.03
4	66.0	0	- 66.0	0	0	0	0	0
5	24.9	0	- 24.9	0	0	0	0	0
6	15.5	0	- 15.4	.1	.1	0	0	.10
7	33.8	0	- 33.6	.2	.2	0	0	.10
8	48.9	0	- 48.9	0	0	0	0	.01
9	17.1	0	- 17.1	0	0	0	0	0
10	60.8	0	- 60.8	0	0	0	0	0
All sites	359.0	.4	- 358.8	.6	.6	0	0	.05
Stream gage	--	--	--	--	--	0	0	.04
AUGUST 1965								
Site 1	36.4	0	- 32.8	3.6	3.6	0	0	1.19
3	33.3	0	- 30.6	2.7	2.7	0	0	1.11
4	52.0	0	- 49.6	2.4	2.4	0	0	.71
5	19.6	0	- 18.7	.9	.9	0	0	.70
6	10.4	0	- 9.5	.9	.9	0	0	.79
7	22.2	0	- 20.7	1.5	1.5	0	0	.96
8	33.7	b/ 9.6	- 42.0	1.3	1.3	0	0	.50
9	13.4	0	- 12.6	.8	.8	0	0	.50
10	49.5	0	- 46.3	3.2	3.2	0	0	.72
All sites	270.5	9.6	- 262.8	17.3	17.3	0	0	1.02
Stream gage	--	--	--	--	--	0	0	.92
SEPTEMBER 1965								
Site 1	28.1	0	- 10.2	17.9	7.8	10.1	.03	3.45
3	23.0	6.1	- 21.9	7.2	4.8	2.4	.01	2.98
4	36.3	0	- 26.4	9.9	8.0	1.9	.01	3.27
5	15.7	0	- 10.5	5.2	3.1	2.1	.03	3.28

See footnotes at end of table.

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
SEPTEMBER 1965--Continued								
Site 6	6.1	0	- 5.0	1.1	0.8	0.3	0	2.74
7	17.5	0	- 13.8	3.7	3.6	.1	0	3.00
8	18.6	b/ 34.3	- 43.7	9.2	2.9	6.3	.05	3.26
9	12.2	0	- 8.5	3.7	3.7	0	0	3.30
10	44.4	0	- 28.2	16.2	12.2	4.0	.01	3.56
All sites	201.9	40.4	- 168.2	74.1	46.9	27.2	.01	3.18
Stream gage	--	--	--	--	--	11	0	3.31
OCTOBER 1965								
Site 1	25.2	0	- 18.4	6.8	6.8	0	0	2.98
3	20.3	0	+ 49.4	69.7	6.5	63.2	.22	3.69
4	24.4	0	- 7.8	16.6	7.8	8.8	.03	3.27
5	10.0	0	+ 3.2	13.2	3.1	10.1	.14	3.27
6	6.6	0	+ 13.5	20.1	1.0	19.1	.05	3.55
7	11.5	0	+ 4.8	16.3	4.5	11.8	.08	3.68
8	15.9	b/ 5.3	+ 95.8	117.0	4.7	112.3	.88	4.79
9	9.7	b/ 10.4	+ 14.9	35.0	5.7	29.3	.38	4.97
10	28.4	0	+ 121.4	149.8	14.4	135.4	.41	4.15
All sites	152.0	15.7	+ 276.8	444.5	54.5	390.0	.20	3.68
Stream gage	--	--	--	--	--	137	.03	3.53
NOVEMBER 1965								
Site 1	11.2	0	- 8.2	3.0	3.0	0	0	1.43
3	18.6	0	- 14.6	4.0	3.6	.4	0	1.44
4	17.4	0	- 13.2	4.2	3.3	.9	0	1.47
5	6.7	0	- 4.2	2.5	1.5	1.0	.01	1.50
6	5.7	0	- 4.4	1.3	1.0	.3	0	1.49
7	7.5	0	- 5.8	1.7	1.6	.1	0	1.22
8	18.2	0	- 14.3	3.9	3.8	.1	0	1.51
9	6.3	0	- 1.6	4.7	2.2	2.5	.03	1.55
10	27.8	0	+ 6.2	34.0	9.0	25.0	.08	1.82
All sites	119.4	0	- 60.1	59.3	29.0	30.3	.02	1.51
Stream gage	--	--	--	--	--	8.4	0	1.51
DECEMBER 1965								
Site 1	18.2	0	+ 26.6	44.8	11.3	33.5	.11	4.98
3	20.8	5.8	+ 90.6	117.2	15.7	101.5	.35	4.93
4	15.2	0	+ 18.8	34.0	12.0	22.0	.08	5.28
5	8.6	0	+ 20.7	29.3	6.1	23.2	.32	5.31
6	9.2	36.4	+ 29.1	74.7	3.5	71.2	.19	4.77
7	20.1	0	+ 82.4	102.5	9.0	93.5	.62	5.40
8	16.9	0	+ 74.1	91.0	15.1	75.9	.60	5.11
9	7.7	0	+ 30.0	37.7	8.5	29.2	.37	5.07

See footnotes at end of table.

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
DECEMBER 1965--Continued								
Site 10	43.0	62.4	+ 39.6	145.0	28.0	117.0	0.36	5.15
All sites	159.7	104.6	+ 411.9	676.2	109.2	567.0	.29	5.06
Stream gage	--	--	--	--	--	361	.09	5.04
JANUARY 1966								
Site 1	13.0	0	- 9.9	3.1	3.0	.1	0	1.26
3	14.4	0	- 9.0	5.4	4.0	1.4	0	1.14
4	12.8	0	- 6.4	6.4	3.7	2.7	.01	1.37
5	6.8	0	- 4.3	2.5	2.5	0	0	1.37
6	6.8	0	- 5.5	1.3	1.2	.1	0	1.05
7	18.9	0	- 16.2	2.7	2.7	0	0	1.20
8	16.4	0	- 12.2	4.2	4.0	.2	0	1.28
9	7.7	0	- 5.3	2.4	2.4	0	0	1.30
10	20.3	266.7	- 277.4	9.6	5.3	4.3	.01	1.38
All sites	117.1	266.7	- 346.2	37.6	28.8	8.8	0	1.24
Stream gage	--	--	--	--	--	173	.04	1.27
FEBRUARY 1966								
Site 1	13.4	0	+ 6.1	19.5	6.8	12.7	.04	2.89
3	14.9	5.6	- 5.0	15.5	8.4	7.1	.02	2.35
4	14.1	0	+ 2.2	16.3	5.7	10.6	.04	2.46
5	5.4	0	+ 4.6	10.0	3.0	7.0	.10	2.47
6	4.6	0	- 1.0	3.6	2.1	1.5	0	2.18
7	15.8	0	+ 4.6	20.4	5.6	14.8	.10	2.56
8	13.2	0	+ 20.0	33.2	10.5	22.7	.18	3.38
9	7.0	0	+ 16.9	23.9	6.6	17.3	.22	3.51
10	15.5	0	+ 108.6	124.1	8.3	115.8	.35	3.33
All sites	103.9	5.6	+ 157.0	266.5	57.0	209.5	.11	2.70
Stream gage	--	--	--	--	--	44	.01	2.71
MARCH 1966								
Site 1	16.6	0	- 12.4	4.2	2.2	2.0	.01	1.01
3	21.5	0	- 12.0	9.5	5.6	3.9	.01	1.64
4	16.8	0	- 10.6	6.2	2.8	3.4	.01	1.27
5	7.8	0	- 3.5	4.3	1.6	2.7	.04	1.28
6	6.7	0	+ .5	7.2	1.5	5.7	.02	1.67
7	19.7	0	- 1.7	18.0	3.4	14.6	.10	1.57
8	19.6	2.6	+ 8.3	30.5	8.1	22.4	.18	2.51
9	9.6	0	- 2.4	7.2	5.2	2.0	.02	2.65
10	26.7	0	+ 5.7	32.4	6.6	25.8	.08	1.86
All sites	145.0	2.6	- 28.1	119.5	37.0	82.5	.04	1.61
Stream gage	--	--	--	--	--	0	0	1.41

See footnotes at end of table.

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
APRIL 1966								
Site 1	18.0	0	- 5.0	13.0	5.8	7.2	0.02	2.92
3	31.9	6.0	+ 12.0	49.9	10.6	39.3	.14	3.27
4	19.2	0	- 4.0	15.2	5.8	9.4	.04	2.89
5	9.5	0	- 1.6	7.9	3.3	4.6	.06	2.89
6	9.0	14.3	+ 9.0	32.3	2.5	29.8	.08	2.88
7	18.7	0	+ 16.1	34.8	6.4	28.4	.19	3.07
8	30.3	4.6	+ 1.0	35.9	10.1	25.8	.20	3.12
9	13.5	0	+ .2	13.7	6.0	7.7	.10	3.13
10	33.8	0	+ 47.3	81.1	12.0	69.1	.21	3.29
All sites	183.9	24.9	+ 75.0	283.8	62.5	221.3	.11	3.05
Stream gage	--	--	--	--	--	191	.05	3.07
MAY 1966								
Site 1	17.9	0	- 6.4	11.5	7.1	4.4	.02	3.42
3	38.8	6.1	0	44.9	16.2	28.7	.10	4.47
4	22.0	0	- 9.8	12.2	8.4	3.8	.01	4.12
5	12.0	0	- 1.9	10.1	5.0	5.1	.07	4.13
6	14.0	29.0	- 4.6	38.4	4.1	34.3	.09	4.07
7	36.7	5.4	+ 4.8	46.9	11.9	35.0	.23	4.88
8	31.9	22.6	- 7.6	46.9	14.9	32.0	.25	4.50
9	16.4	0	+ 3.4	19.8	9.2	10.6	.14	4.43
10	41.0	0	+ 21.0	62.0	18.2	43.8	.13	4.10
All sites	230.7	63.1	- 1.1	292.7	95.0	197.7	.10	4.15
Stream gage	--	--	--	--	--	80	.02	3.95
JUNE 1966								
Site 1	19.7	0	- 10.5	9.2	6.8	2.4	.01	4.04
3	46.7	0	- 31.0	15.7	8.9	6.8	.02	2.73
4	24.3	0	+ 35.3	59.6	9.2	50.4	.19	5.08
5	14.7	0	- 6.4	8.3	5.6	2.7	.04	5.10
6	14.9	0	- 13.0	1.9	1.9	0	0	2.16
7	33.7	0	- 25.7	8.0	4.6	3.4	.02	2.08
8	41.1	0	- 23.4	17.7	9.3	8.4	.07	3.06
9	20.0	0	- 13.7	6.3	6.1	.2	0	3.22
10	46.9	0	- 23.9	23.0	11.8	11.2	.03	2.78
All sites	262.0	0	- 112.3	149.7	64.2	85.2	.04	3.21
Stream gage	--	--	--	--	--	35	.01	3.43
JULY 1966								
Site 1	19.0	0	- 15.1	3.9	2.8	1.1	0	1.69
3	45.7	0	- 39.9	5.8	2.5	3.3	.01	.81
4	36.1	0	- 23.1	13.0	3.2	9.8	.04	1.31
5	14.4	0	- 12.4	2.0	1.4	.6	.01	1.32

See footnotes at end of table.



Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
JULY 1966--Continued								
Site 6	14.0	0	- 13.9	0.1	0.1	0	0	0.65
7	35.2	0	- 35.0	.2	.2	0	0	.12
8	41.6	0	- 40.0	1.6	1.6	0	0	.54
9	21.4	0	- 20.3	1.1	1.1	0	0	.61
10	47.1	0	- 41.9	5.2	4.2	1.0	0	1.03
All sites	274.5	0	- 241.6	32.9	17.1	15.8	.01	.95
Stream gage	--	--	--	--	--	34	.01	1.08
AUGUST 1966								
Site 1	12.6	0	- 8.9	3.7	2.7	1.0	0	2.27
3	29.1	4.0	- 25.6	7.5	6.7	.8	0	3.28
4	23.1	0	- 17.8	5.3	5.1	.2	0	2.73
5	10.4	0	- 8.5	1.9	1.9	0	0	2.74
6	8.2	0	- 7.1	1.1	1.0	.1	0	2.18
7	20.7	0	- 15.5	5.2	2.5	2.7	.02	1.59
8	33.6	b/ 14.1	- 41.5	6.2	6.2	0	0	2.61
9	16.6	0	- 12.6	4.0	4.0	0	0	2.79
10	45.0	0	- 35.6	9.4	9.3	.1	0	2.79
All sites	199.3	18.1	- 173.1	44.3	39.4	4.9	0	2.55
Stream gage	--	--	--	--	--	3.4	0	2.57
SEPTEMBER 1966								
Site 1	10.6	0	- .6	10.0	4.7	5.3	.02	4.11
3	20.7	0	- 6.7	14.0	6.8	7.2	.02	3.87
4	19.3	0	+ 1.6	20.9	7.3	13.6	.05	3.97
5	6.4	0	- 2.8	3.6	2.2	1.4	.02	3.96
6	4.6	0	- 3.7	.9	.8	.1	0	2.95
7	16.3	0	- 12.4	3.9	3.9	0	0	2.88
8	22.9	b/ 6.2	- 12.0	17.1	9.6	7.5	.06	5.05
9	12.2	0	- 1.0	11.2	7.0	4.2	.05	5.40
10	28.9	0	+ 48.4	77.3	17.3	60.0	.18	5.07
All sites	141.9	6.2	+ 10.8	158.9	59.6	99.3	.05	3.99
Stream gage	--	--	--	--	--	83	.02	4.08
OCTOBER 1966								
Site 1	7.8	0	- 7.4	.4	.4	0	0	.68
3	15.5	5.1	- 15.7	4.9	2.9	2.0	.01	.50
4	16.2	0	- 12.8	3.4	3.0	.4	0	1.76
5	5.0	0	- 4.1	.9	.9	0	0	1.79
6	2.6	0	- 2.3	.3	.2	.1	0	.38
7	14.4	0	- 11.1	3.3	1.1	2.2	.01	.34
8	14.2	0	- 13.0	1.2	1.1	.1	0	.57
9	9.8	0	- 9.0	.8	.8	0	0	.62

See footnotes at end of table.

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
OCTOBER 1966--Continued								
Site 10	36.5	0	- 29.0	7.5	7.2	0.3	0	1.02
All sites	122.0	5.1	- 104.4	22.7	17.6	5.1	0	.80
Stream gage	--	--	--	--	--	52	.01	1.09
NOVEMBER 1966								
Site 1	4.9	0	- 4.9	0	0	0	0	.02
3	9.3	2.7	- 12.0	0	0	0	0	0
4	9.2	0	- 9.2	0	0	0	0	0
5	2.9	0	- 2.9	0	0	0	0	0
6	1.4	0	- 1.4	0	0	0	0	0
7	8.4	0	- 8.4	0	0	0	0	0
8	11.5	0	- 11.5	0	0	0	0	0
9	5.3	0	- 5.3	0	0	0	0	0
10	19.0	0	- 19.0	0	0	0	0	0
All sites	71.9	2.7	- 74.6	0	0	0	0	0
Stream gage	--	--	--	--	--	0	0	.01
DECEMBER 1966								
Site 1	3.3	0	- 3.1	.2	.2	0	0	.34
3	5.8	1.3	- 6.3	.7	.7	0	0	.13
4	7.4	0	- 6.8	.6	.6	0	0	.54
5	1.4	0	- 1.4	.1	.1	0	0	.55
6	.8	0	- .7	.1	.1	0	0	.18
7	5.8	0	- 5.2	.6	.6	0	0	.32
8	9.1	0	- 8.5	.6	.6	0	0	.36
9	6.5	0	- 6.1	.4	.4	0	0	.38
10	21.5	0	- 20.8	.7	.7	0	0	.30
All sites	61.6	1.3	- 58.9	4.0	4.0	0	0	.31
Stream gage	--	--	--	--	--	0	0	.35
JANUARY 1967								
Site 1	2.9	0	- 2.7	.2	.2	0	0	.24
3	4.6	.3	- 4.5	.4	.4	0	0	.24
4	5.3	0	- 5.0	.3	.3	0	0	.29
5	1.1	0	- 1.1	0	0	0	0	.29
6	.4	0	- .4	0	0	0	0	.24
7	2.6	0	- 2.4	.2	.2	0	0	.27
8	5.0	0	- 4.6	.4	.4	0	0	.32
9	3.6	0	- 3.3	.3	.3	0	0	.32
10	13.3	0	- 12.6	.7	.7	0	0	.34
All sites	38.8	.3	- 36.6	2.5	2.5	0	0	.27
Stream gage	--	--	--	--	--	0	0	.27

See footnotes at end of table.

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
FEBRUARY 1967								
Site 1	2.7	0	- 2.5	0.2	0.2	0	0	0.52
3	5.0	0	- 4.2	.8	.8	0	0	.77
4	5.7	0	- 3.5	2.2	.6	1.6	.01	.65
5	.6	0	- .6	0	0	0	0	.64
6	1.1	0	- 1.0	.1	.1	0	0	.77
7	5.2	0	- 4.6	.6	.6	0	0	.85
8	6.4	0	- 5.6	.8	.8	0	0	.67
9	3.7	0	- 3.2	.5	.5	0	0	.63
10	15.5	0	- 14.2	1.3	1.3	0	0	.62
All sites	45.9	0	- 39.4	6.5	4.9	1.6	0	.68
Stream gage	--	--	--	--	--	0	0	.63
MARCH 1967								
Site 1	3.0	0	- 2.0	1.0	.8	.2	0	2.17
3	7.3	0	- 2.8	4.5	2.3	2.2	.01	1.92
4	6.3	0	- 2.9	3.4	1.4	2.0	.01	2.10
5	.4	0	- .2	.2	.1	.1	0	2.10
6	0	0	0	0	0	0	0	1.83
7	6.4	0	- 2.1	4.3	1.5	2.8	.02	1.93
8	6.9	0	- 3.8	3.1	2.0	1.1	.01	1.99
9	5.0	0	- 2.0	3.0	1.4	1.6	.02	2.01
10	13.9	0	- 7.6	6.3	3.8	2.5	.01	2.02
All sites	49.2	0	- 23.4	25.8	13.3	12.5	.01	2.00
Stream gage	--	--	--	--	--	6.2	0	2.05
APRIL 1967								
Site 1	3.2	0	- 2.5	.7	.4	.3	0	1.12
3	11.3	0	- 8.9	2.4	1.0	1.4	0	.85
4	5.7	0	- 4.2	1.5	.6	.9	0	.95
5	.3	0	- .2	.1	0	.1	0	.98
6	0	0	0	0	0	0	0	.63
7	6.5	0	- 5.8	.7	.7	0	0	.69
8	8.1	0	- 6.5	1.6	.8	.8	0	.86
9	5.1	0	- 4.5	.6	.6	0	0	.90
10	17.8	0	- 16.2	1.6	1.6	0	0	.93
All sites	58.0	0	- 48.8	9.2	5.7	3.5	0	.87
Stream gage	--	--	--	--	--	0	0	.88
MAY 1967								
Site 1	3.3	0	- .8	2.5	1.0	1.5	.01	2.91
3	11.0	0	- 10.3	.7	.7	0	0	.81
4	4.8	0	- 3.9	.9	.3	.6	0	.80
5	.3	0	- .3	0	0	0	0	.77

See footnotes at end of table.

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
MAY 1967--Continued								
Site 6	0	0	0	0	0	0	0	0.90
7	6.5	0	- 6.2	.3	.3	0	0	1.29
8	6.9	0	- 5.9	1.0	.8	.2	0	.86
9	5.8	0	- 5.1	.7	.7	0	0	.77
10	17.9	0	- 15.8	2.1	2.1	0	0	1.19
All sites	56.5	0	- 48.3	8.2	5.9	2.3	0	1.24
Stream gage	--	--	--	--	--	209	.05	1.23
JUNE 1967								
Site 1	3.0	0	- 3.0	0	0	0	0	0
3	9.6	0	- 9.6	0	0	0	0	0
4	6.8	0	- 6.8	0	0	0	0	0
5	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0
7	4.6	0	- 4.6	0	0	0	0	0
8	5.0	0	- 5.0	0	0	0	0	0
9	4.6	0	- 4.6	0	0	0	0	0
10	14.6	0	- 14.6	0	0	0	0	0
All sites	48.2	0	- 48.2	0	0	0	0	0
Stream gage	--	--	--	--	--	0	0	0
JULY 1967								
Site 1	2.3	0	- 1.8	.5	.4	.1	0	2.43
3	9.4	0	- 7.9	1.5	1.0	.5	0	2.63
4	1.2	0	- 1.1	.1	.1	0	0	1.52
5	0	0	0	0	0	0	0	1.48
6	0	0	0	0	0	0	0	2.26
7	2.8	0	- 2.3	.5	.5	0	0	2.64
8	2.5	0	- 1.8	.7	.6	.1	0	2.01
9	4.0	0	- 3.3	.7	.7	0	0	1.91
10	9.7	0	- 5.4	4.3	1.2	3.1	.01	1.54
All sites	31.9	0	- 23.6	8.3	4.5	3.8	0	2.10
Stream gage	--	--	--	--	--	0	0	1.93
AUGUST 1967								
Site 1	1.0	0	- .09	.1	.1	0	0	2.30
3	7.4	0	- 3.9	3.5	1.6	1.9	.01	1.92
4	.8	0	- .3	.5	.2	.3	0	3.27
5	0	0	0	0	0	0	0	3.22
6	0	0	0	0	0	0	0	1.05
7	3.1	0	- 2.7	.4	.4	0	0	1.44
8	1.9	0	- 1.0	.9	.3	.6	0	1.81
9	2.4	0	- 1.9	.5	.4	.1	0	1.87

See footnotes at end of table.

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
AUGUST 1967--Continued								
Site 10	5.0	0	- 2.1	2.9	1.3	1.6	0	1.88
All sites	21.6	0	- 12.8	8.8	4.3	4.5	0	1.97
Stream gage	--	--	--	--	--	6.6	0	2.27
SEPTEMBER 1967								
Site 1	c/ 3.4	180.9	+ 224.8	409.1	7.4	401.7	1.37	11.83
3	11.9	67.2	+ 253.3	332.4	5.1	327.3	1.13	9.80
4	7.2	211.6	+ 265.9	484.7	1.0	483.7	1.82	10.08
5	c/ 8.1	42.2	+ 92.8	143.1	.4	142.7	1.97	10.04
6	c/ 11.9	384.0	+ 48.7	444.6	15.5	429.1	1.15	9.82
7	5.7	261.9	+ 144.4	412.0	2.4	409.6	2.71	10.34
8	16.6	277.7	+ 195.7	490.0	9.3	480.7	3.77	10.61
9	3.8	41.7	+ 100.0	145.5	2.7	142.8	1.83	10.65
10	17.2	453.9	+ 318.9	790.0	10.3	779.7	2.39	11.20
All sites	85.8	1,921.1	+1,644.5	3,651.4	54.1	3,597.3	1.82	10.50
Stream gage	--	--	--	--	--	4,860	1.17	10.89
OCTOBER 1967								
Site 1	35.1	14.5	- 33.4	16.2	9.8	6.4	.02	2.40
3	37.7	47.4	- 59.0	26.1	11.7	14.4	.05	2.81
4	61.7	0	- 48.0	13.7	13.3	.4	0	2.95
5	21.9	0	- 16.8	5.1	5.1	0	0	2.98
6	12.8	.2	- 8.8	4.2	2.2	2.0	.01	2.50
7	33.6	0	- 22.0	11.6	5.2	6.4	.04	2.50
8	34.1	0	- 21.0	13.1	7.1	6.0	.05	2.24
9	18.8	0	- 12.4	6.4	4.3	2.1	.03	2.50
10	42.4	9.0	- 20.6	30.8	17.6	13.2	.04	2.84
All sites	298.1	71.1	- 242.0	127.2	76.3	50.9	.03	2.65
Stream gage	--	--	--	--	--	68	.02	2.73
NOVEMBER 1967								
Site 1	31.9	83.9	+ 13.6	129.4	17.7	111.7	.38	4.41
3	30.7	128.7	+ 28.0	187.4	16.7	170.7	.59	4.20
4	57.9	146.6	+ 48.0	252.5	19.9	232.6	.87	4.61
5	17.8	43.6	+ 19.0	80.4	7.4	73.0	1.01	4.61
6	11.0	238.6	+ 5.7	255.3	6.9	248.4	.66	4.19
7	23.1	100.0	+ 25.0	148.1	10.6	137.5	.91	4.42
8	23.0	151.9	+ 10.0	184.9	16.4	168.5	1.32	5.18
9	14.1	38.1	+ 12.2	64.4	10.3	54.1	.69	5.28
10	44.4	100.4	0	144.8	25.3	119.5	.37	5.09
All sites	253.9	1,031.8	+ 161.5	1,447.2	131.2	1,316.0	.67	4.56
Stream gage	--	--	--	--	--	2,730	.66	4.56

See footnotes at end of table.

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
DECEMBER 1967								
Site 1	25.7	0.2	- 18.0	7.9	4.4	3.5	0.01	1.12
3	22.4	11.7	- 28.0	6.1	5.0	1.1	0	1.20
4	49.6	4.4	- 48.0	6.0	5.9	.1	0	1.29
5	15.4	0	- 13.0	2.4	2.3	.1	0	1.30
6	7.0	0	- 5.8	1.2	1.0	.2	0	1.07
7	16.6	0	- 14.0	2.6	2.6	0	0	1.39
8	19.4	0	- 13.0	6.4	3.5	2.9	.02	1.13
9	11.5	0	- 7.4	4.1	2.2	1.9	.02	1.09
10	34.1	0	- 20.0	14.1	6.2	7.9	.02	1.21
All sites	201.7	16.3	- 167.2	50.8	33.1	17.7	.01	1.19
Stream gage	--	--	--	--	--	4.2	0	1.20
JANUARY 1968								
Site 1	9.2	b/ 683.9	- 173.1	520.0	12.5	507.5	1.74	7.66
3	28.6	599.0	+ 310.0	937.6	36.5	901.1	3.11	9.16
4	70.8	666.4	+ 398.0	1,135.2	55.6	1,079.6	4.06	8.16
5	14.2	265.0	+ 39.0	318.2	23.7	294.5	4.06	8.18
6	19.2	1,186.0	+ 275.7	1,480.9	43.0	1,437.9	3.84	7.97
7	18.4	500.0	+ 26.0	544.4	30.9	513.5	3.40	8.21
8	21.6	372.7	+ 99.0	493.3	37.2	456.1	3.58	7.74
9	10.1	65.9	+ 12.4	88.4	15.7	72.7	.93	7.66
10	43.8	700.0	+ 6.6	750.4	50.5	699.9	2.14	7.52
All sites	235.9	5,038.9	+ 993.6	6,268.4	305.6	5,962.8	3.02	8.06
Stream gage	--	--	--	--	--	10,940	2.63	7.99
FEBRUARY 1968								
Site 1	2.5	6.3	- .6	8.2	1.0	7.2	.02	1.93
3	22.6	265.0	- 277.0	10.6	9.6	1.0	0	1.87
4	49.0	304.3	- 339.0	14.3	10.4	3.9	.01	2.10
5	13.1	13.1	- 21.6	4.6	4.0	.6	.01	2.10
6	8.1	264.3	- 267.6	4.8	1.9	2.9	.01	1.74
7	15.2	1.2	- 6.0	10.4	4.6	5.8	.04	1.96
8	16.2	77.8	- 83.0	11.0	6.9	4.1	.03	2.06
9	13.0	6.5	- 2.0	17.5	4.4	13.1	.17	2.07
10	24.1	195.0	- 127.6	91.5	7.3	84.2	.26	2.11
All sites	163.8	1,133.5	-1,124.4	172.9	50.1	122.8	.06	1.96
Stream gage	--	--	--	--	--	1,110	.27	2.00
MARCH 1968								
Site 1	3.3	2.6	- 1.2	4.7	.5	4.2	.01	1.02
3	25.1	15.1	- 29.0	11.2	3.8	7.4	.03	.94
4	38.2	0	- 22.0	16.2	4.7	11.5	.04	.96
5	13.5	0	- 8.8	4.7	1.8	2.9	.04	.96

See footnotes at end of table.

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
MARCH 1968--Continued								
Site 6	6.1	0.3	- 2.9	3.5	0.8	2.7	0.01	0.70
7	17.8	0	- 12.0	5.8	1.8	4.0	.03	.88
8	19.6	0	- 10.0	9.6	3.2	6.4	.05	.96
9	13.9	0	- 8.0	5.9	2.0	3.9	.05	.97
10	23.4	b/ 150.7	- 149.0	25.1	3.6	21.5	.07	1.01
All sites	160.9	168.7	- 242.9	86.7	22.2	64.5	.03	.92
Stream gage	--	--	--	--	--	68	.02	.96
APRIL 1968								
Site 1	3.3	0	- 1.1	2.2	2.2	0	0	4.28
3	32.6	24.0	+ 29.0	85.6	12.9	72.7	.25	4.01
4	35.8	0	- 11.0	24.8	15.1	9.7	.04	3.36
5	15.0	0	+ 2.2	17.2	5.9	11.3	.16	3.36
6	8.2	98.2	+ 3.1	109.5	3.3	106.2	.28	4.15
7	21.8	7.1	+ 12.0	40.9	6.8	34.1	.23	4.22
8	25.3	0	+ 14.0	39.3	12.0	27.3	.21	3.81
9	15.4	0	+ 5.0	20.4	7.5	12.9	.17	3.75
10	1.9	125.6	+ 48.2	175.7	1.2	174.5	.53	4.91
All sites	159.3	254.9	+ 101.4	515.6	66.9	448.7	.23	4.10
Stream gage	--	--	--	--	--	956	.23	4.15
MAY 1968								
Site 1	3.9	0	- 1.1	2.8	1.8	1.0	0	4.07
3	46.7	73.6	- 10.0	110.3	14.8	95.5	.33	3.45
4	47.6	89.8	+ 16.0	153.4	15.1	138.3	.52	3.37
5	16.6	.8	0	17.4	6.2	11.2	.	3.36
6	11.6	203.1	- 4.0	210.7	4.4	206.3	.55	3.26
7	27.2	7.1	- 9.0	25.3	8.6	16.7	.11	3.71
8	33.3	27.6	- 14.0	46.9	14.7	32.2	.25	4.30
9	20.7	29.4	- 5.0	45.1	9.4	35.7	.46	4.41
10	28.1	430.0	- 20.8	437.3	9.3	428.0	1.31	4.25
All sites	235.7	861.4	- 47.9	1,049.2	84.3	964.9	.49	3.73
Stream gage	--	--	--	--	--	2,230	.54	3.81
JUNE 1968								
Site 1	3.9	0	- 1.8	2.1	1.2	.9	0	3.48
3	48.2	35.5	+ 36.0	119.7	13.6	106.1	.37	3.91
4	51.5	0	- 22.0	29.5	15.5	14.0	.05	3.49
5	20.8	0	- 12.8	8.0	5.9	2.1	.03	3.45
6	12.2	24.2	+ 3.6	40.0	2.7	37.3	.10	4.05
7	28.4	0	- 22.0	6.4	6.3	.1	0	3.22
8	38.6	0	- 29.0	9.6	7.2	2.4	.02	2.46
9	24.8	0	- 11.8	13.0	4.5	8.5	.11	2.34

See footnotes at end of table.

Table 16.--Monthly Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
JUNE 1968--Continued								
Site 10	1.9	b/ 82.3	- 43.5	40.7	1.3	39.4	0.12	2.04
All sites	230.3	142.0	- 103.3	269.0	58.2	210.8	.11	3.29
Stream gage	--	--	--	--	--	110	.03	3.17
JULY 1968								
Site 1	3.8	0	- 3.0	.8	.6	.2	0	1.81
3	55.8	32.2	- 55.0	33.1	8.7	24.4	.08	1.58
4	49.7	b/ 98.6	- 115.0	33.3	9.4	23.9	.09	2.17
5	23.0	0	- 18.8	4.2	3.5	.7	.01	2.18
6	18.1	3.8	- 9.2	12.7	1.4	11.3	.03	1.52
7	32.5	0	- 29.5	3.0	2.9	.1	0	1.43
8	39.2	0	- 31.0	8.2	4.4	3.8	.03	1.52
9	23.3	0	- 15.2	8.1	2.8	5.3	.07	1.55
10	7.1	0	- 6.9	.2	.2	0	0	1.17
All sites	252.5	134.7	- 283.6	103.6	33.9	69.7	.04	1.62
Stream gage	--	--	--	--	--	0	0	1.62
AUGUST 1968								
Site 1	2.4	0	- 2.2	.2	.2	0	0	1.21
3	51.0	3.4	- 44.0	10.4	3.7	6.7	.02	1.86
4	15.1	b/ 112.0	- 113.0	14.1	.6	13.5	.05	1.23
5	19.8	0	- 16.8	3.0	1.5	1.5	.02	1.24
6	15.2	0	- 14.4	.8	.6	.2	0	1.32
7	28.7	0	- 26.8	1.9	1.5	.4	0	1.08
8	40.3	0	- 38.5	1.8	1.7	.1	0	.92
9	17.6	0	- 16.4	1.2	1.2	0	0	.89
10	c/ 0	0	0	0	0	0	0	.90
All sites	190.1	115.4	- 272.1	33.4	11.0	22.4	.01	1.24
Stream gage	--	--	--	--	--	0	0	1.28
SEPTEMBER 1968								
Site 1	2.2	0	+ .4	2.6	.9	1.7	.01	3.90
3	37.8	4.6	+ 11.0	53.4	10.2	43.2	.15	4.06
4	4.6	b/ 6.1	- .5	10.2	1.4	8.8	.03	3.26
5	17.7	0	- 8.7	9.0	4.0	5.0	.07	3.24
6	10.7	0	+ 1.1	11.8	2.7	9.1	.02	3.43
7	21.4	0	- 10.7	10.7	6.2	4.5	.03	3.42
8	24.0	0	- 18.6	5.4	5.4	0	0	2.79
9	11.3	0	- 4.8	6.5	3.7	2.8	.04	2.69
10	c/ 0	0	0	0	0	0	0	2.93
All sites	129.7	10.7	- 30.8	109.6	34.5	75.1	.04	3.42
Stream gage	--	--	--	--	--	0	0	3.51

a/ Portholes were partially plugged and landowner opened valve at different times so there was more water released through drop inlet than any other site.

b/ Water below uncontrolled outlet; either releasing water through valve or pumping water for irrigation or construction purposes.

c/ Pool dry during all or part of month.



Table 17.--Annual Water Budget Summary for Calaveras Creek Study Area, 1955-68

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
1955 WATER YEAR <i>a/</i>								
Site 1	--	--	--	--	--	--	--	--
3	50.4	322.8	+ 12.6	385.8	9.2	376.6	1.30	11.39
4	7.7	0	+ .2	7.9	.7	7.2	.03	9.21
5	60.1	32.2	+ 4.4	96.7	8.7	88.0	1.21	9.48
6	--	--	--	--	--	--	--	--
7	--	--	--	--	--	--	--	--
8	150.8	0	+ 30.3	181.1	18.2	162.9	1.28	10.12
9	--	--	--	--	--	--	--	--
10	--	--	--	--	--	--	--	--
All sites	269.0	355.0	+ 47.5	671.5	36.8	634.7	.85	10.19
Stream gage	--	--	--	--	--	3,190	.57	10.53
1955 CALENDAR YEAR <i>a/</i>								
Site 1	--	--	--	--	--	--	--	--
3	70.9	329.8	+ 26.4	427.1	11.6	415.5	1.43	14.88
4	8.6	0	+ .3	8.9	.8	8.1	.30	11.88
5	69.9	32.4	+ 5.3	107.6	9.4	98.2	1.35	12.63
6	--	--	--	--	--	--	--	--
7	--	--	--	--	--	--	--	--
8	194.9	0	+ 56.3	251.2	22.8	228.4	1.79	13.59
9	--	--	--	--	--	--	--	--
10	--	--	--	--	--	--	--	--
All sites	344.3	362.2	+ 88.3	794.8	44.6	750.2	1.00	13.36
Stream gage	--	--	--	--	--	3,550	.65	14.19
1956 WATER YEAR								
Site 1	--	--	--	--	--	--	--	--
3	99.5	35.5	+ 14.7	149.7	8.2	141.5	.49	12.72
4	3.4	0	- 1.2	2.2	.8	1.4	.01	11.25
5	20.2	2.4	- 5.6	17.0	1.5	15.5	.21	11.38
6	--	--	--	--	--	--	--	--
<i>a/</i> 7	143.0	0	- 23.9	119.1	6.3	112.8	.75	4.40
8	215.9	0	+ 42.6	258.5	16.8	241.7	1.89	11.63
<i>a/</i> 9	1.9	0	+ .1	2.0	.7	1.3	.02	3.71
10	--	--	--	--	--	--	--	--
All sites	483.9	37.9	+ 26.7	548.5	34.3	514.2	.56	11.88
Stream gage	--	--	--	--	--	1,140	.24	12.39
1956 CALENDAR YEAR								
Site 1	--	--	--	--	--	--	--	--
3	103.4	230.5	+ 15.6	349.5	11.7	337.8	1.17	15.11
4	10.0	48.5	+ 33.9	92.4	3.0	89.4	.34	15.26
5	14.4	2.2	+ 27.8	44.4	5.3	39.1	.54	15.14

See footnotes at end of table.

Table 17.--Annual Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
1956 CALENDAR YEAR--Continued								
Site <u>a/</u> 6	5.7	224.0	+ 47.3	277.0	2.3	274.7	0.73	3.59
<u>a/</u> 7	196.9	20.0	+ 62.7	279.6	12.4	267.2	1.77	10.65
8	238.2	87.0	+ 115.2	440.4	28.8	411.6	3.23	16.05
<u>a/</u> 9	4.6	0	+ 25.6	30.2	1.4	28.8	.37	11.60
10	--	--	--	--	--	--	--	--
All sites	573.2	612.2	+ 328.1	1,513.5	64.9	1,448.6	1.19	15.23
Stream gage	--	--	--	--	--	3,900	.94	15.49
1957 WATER YEAR								
Site 1	--	--	--	--	--	--	--	--
3	133.5	1,814.8	+ 430.9	2,379.2	74.3	2,304.9	7.95	39.95
4	350.0	1,762.4	+ 845.0	2,957.4	121.2	2,836.2	10.66	40.00
5	145.6	517.6	+ 262.6	925.8	63.8	862.0	11.89	40.33
<u>a/</u> 6	154.4	3,474.2	+ 575.4	4,204.0	86.0	4,118.0	11.00	37.68
7	354.8	1,308.1	+ 468.9	2,131.8	117.9	2,013.9	13.33	40.73
8	381.6	933.3	+ 287.5	1,602.4	122.2	1,480.2	11.60	40.39
9	129.1	416.0	+ 232.1	777.2	51.8	725.4	9.31	40.39
10	--	--	--	--	--	--	--	--
All sites	1,649.0	10,226.4	+3,102.4	14,977.8	637.2	14,340.6	10.57	40.08
Stream gage	--	--	--	--	--	30,950	7.43	40.41
1957 CALENDAR YEAR								
Site 1	--	--	--	--	--	--	--	--
3	204.8	2,205.5	+ 143.2	2,553.5	106.0	2,447.5	8.44	42.79
4	458.0	2,511.2	+ 216.3	3,185.5	161.0	3,024.5	11.37	41.87
5	181.7	698.6	+ 60.5	940.8	76.8	864.0	11.91	42.82
6	177.8	4,200.9	+ .8	4,379.5	93.0	4,286.5	11.44	42.57
7	363.8	1,786.1	+ 2.8	2,152.7	134.9	2,017.8	13.36	43.63
8	397.6	1,090.8	- 6.8	1,481.6	137.1	1,344.5	10.54	42.07
9	164.7	602.2	+ 77.0	843.9	71.7	772.2	9.92	41.37
10	--	--	--	--	--	--	--	--
All sites	1,948.4	13,095.3	+ 493.8	15,537.5	780.5	14,757.0	10.87	42.39
Stream gage	--	--	--	--	--	31,850	7.64	42.14
1958 WATER YEAR								
Site 1	--	--	--	--	--	--	--	--
3	418.7	1,747.8	- 309.5	1,857.0	162.0	1,695.0	5.85	38.43
4	558.8	2,131.4	- 654.5	2,035.7	192.2	1,843.5	6.93	37.56
5	213.8	532.3	- 192.6	553.5	77.9	475.6	6.56	41.53
6	128.4	2,803.4	- 543.5	2,388.3	49.4	2,338.9	6.25	36.35
7	286.2	1,458.1	- 419.4	1,324.9	102.5	1,222.4	8.09	38.50
8	383.8	1,121.2	- 226.9	1,278.1	136.6	1,141.5	8.95	41.88
9	192.5	680.7	- 156.9	716.3	87.2	629.1	8.08	41.88
10	--	--	--	--	--	--	--	--

See footnotes at end of table.

Table 17.--Annual Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
1958 WATER YEAR--Continued								
All sites	2,182.2	10,474.9	-2,503.3	10,153.8	807.8	9,346.0	6.89	38.56
Stream gage	--	--	--	--	--	21,500	5.17	38.56
1958 CALENDAR YEAR								
Site 1	--	--	--	--	--	--	--	--
3	375.3	1,195.1	- 71.5	1,498.9	144.3	1,354.6	4.67	37.77
4	533.1	1,334.1	- 71.0	1,796.2	182.9	1,613.3	6.07	37.80
5	203.1	351.3	- 21.0	533.4	75.1	458.3	6.32	41.94
6	115.8	1,852.7	- 18.3	1,950.2	46.4	1,903.8	5.08	35.28
7	268.3	960.1	- 27.5	1,200.9	96.8	1,104.1	7.31	37.99
8	371.0	879.7	- 11.7	1,239.0	135.6	1,103.4	8.65	42.39
9	190.4	494.5	- 7.6	677.3	85.7	591.6	7.60	42.39
10	--	--	--	--	--	--	--	--
All sites	2,057.0	7,067.5	- 228.6	8,895.9	766.8	8,129.1	6.00	38.21
Stream gage	--	--	--	--	--	17,970	4.26	38.81
1959 WATER YEAR								
Site 1	--	--	--	--	--	--	--	--
3	241.3	159.9	- 96.7	304.5	60.4	244.1	.84	29.72
4	346.5	0	- 131.4	215.1	91.0	124.1	.47	29.23
5	121.8	22.0	- 46.2	97.6	38.9	58.7	.81	31.47
6	92.3	148.0	- 9.5	231.7	23.5	208.2	.56	26.82
7	245.4	3.6	- 6.8	242.2	60.0	182.2	1.21	28.13
8	326.9	89.0	- 85.8	330.1	89.6	240.5	1.89	32.64
9	157.1	0	- 22.9	134.2	58.9	75.3	.97	32.64
a/ 10	141.6	0	+ 34.0	175.6	26.5	149.1	.46	18.08
All sites	1,672.9	423.4	- 365.3	1,731.0	448.8	1,282.2	.80	28.98
Stream gage	--	--	--	--	--	2,000	.42	29.28
1959 CALENDAR YEAR								
Site 1	--	--	--	--	--	--	--	--
3	232.3	169.9	- 38.9	363.3	60.2	303.1	1.05	31.25
4	314.7	0	- 119.4	195.3	78.8	116.5	.44	30.14
5	129.5	22.0	- 26.4	125.1	36.3	88.8	1.22	32.66
6	97.8	217.1	+ 10.6	325.5	25.1	300.4	.80	29.05
7	262.2	141.2	+ 35.9	439.3	65.3	374.0	2.48	29.97
8	330.4	182.9	+ 13.4	526.7	87.5	439.2	3.44	33.70
9	157.9	0	- 16.0	141.9	57.1	84.8	1.09	33.70
a/ 10	243.9	99.0	+ 154.0	496.9	54.8	442.1	1.35	28.83
All sites	1,768.7	832.1	+ 13.2	2,614.0	465.1	2,148.9	1.27	30.42
Stream gage	--	--	--	--	--	2,920	.69	30.60

See footnotes at end of table.

Table 17.--Annual Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
1960 WATER YEAR								
Site 1	--	--	--	--	--	--	--	--
3	145.2	111.1	- 15.3	241.0	37.8	203.2	0.70	25.89
4	160.9	0	- 49.4	111.5	40.3	71.2	.27	26.25
5	131.0	0	- 1.9	129.1	32.7	96.4	1.33	29.53
6	91.9	94.0	- 16.3	169.6	21.3	148.3	.40	25.09
7	249.4	137.6	- 22.7	364.3	58.9	305.4	2.02	27.72
8	310.5	101.9	+ 55.0	467.4	88.9	378.5	2.97	32.07
9	146.9	7.4	- 16.6	137.7	46.8	90.9	1.17	31.83
10	420.9	100.7	+ 24.2	545.8	84.6	461.2	1.41	29.02
All sites	1,656.7	552.7	- 43.0	2,166.4	411.3	1,755.1	1.04	27.20
Stream gage	--	--	--	--	--	1,930	.47	27.36
1960 CALENDAR YEAR								
Site 1	--	--	--	--	--	--	--	--
3	160.8	222.7	+ 120.1	503.6	53.9	449.7	1.55	30.91
4	163.7	0	+ 99.4	263.1	40.9	222.2	.84	31.29
5	123.3	73.5	+ 56.4	253.2	44.3	208.9	2.88	33.92
6	84.9	436.7	+ 3.1	524.7	26.7	498.0	1.33	30.02
7	234.8	326.1	0	560.9	69.0	491.9	3.26	31.24
8	300.5	357.7	- 23.3	634.9	106.5	528.4	4.14	36.90
9	143.1	36.8	+ 27.2	207.1	55.8	151.3	1.94	36.66
10	442.8	140.1	+ 178.6	761.5	122.0	639.5	1.96	33.87
All sites	1,679.5	1,641.4	+ 517.5	3,838.4	532.2	3,306.2	1.72	32.19
Stream gage	--	--	--	--	--	4,710	1.13	32.37
1961 WATER YEAR								
Site 1	152.6	47.8	+ 30.3	230.7	39.5	191.2	.65	34.75
3	287.9	403.9	+ 112.2	804.0	79.8	724.2	2.50	34.00
4	422.9	0	+ 111.8	534.7	78.9	455.8	1.71	33.79
5	179.7	167.7	+ 46.5	393.9	54.6	339.3	4.68	33.83
6	100.7	1,118.8	+ 19.4	1,238.9	31.0	1,207.9	3.23	35.13
7	253.5	892.7	+ 41.9	1,188.1	77.0	1,111.1	7.36	33.15
8	325.1	506.3	+ 9.0	840.4	99.6	740.8	5.81	34.25
9	176.7	62.6	+ 35.6	274.9	60.9	214.0	2.75	34.25
10	550.9	312.2	+ 164.8	1,027.9	162.4	865.5	2.65	35.70
All sites	2,450.0	3,512.0	+ 571.5	6,533.5	683.7	5,849.8	2.96	34.51
Stream gage	--	--	--	--	--	7,880	1.89	34.68
1961 CALENDAR YEAR								
Site 1	178.2	0	+ 64.0	242.2	37.8	204.4	.70	28.48
3	288.5	321.6	- 40.0	570.1	60.9	509.2	1.76	27.32
4	450.6	149.0	+ 94.0	693.6	83.6	610.0	2.29	27.88
5	188.9	125.2	- 15.4	298.7	45.4	253.3	3.49	27.58

See footnotes at end of table.

Table 17.--Annual Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
1961 CALENDAR YEAR--Continued								
Site 6	101.1	831.7	- 4.6	928.2	22.6	905.6	2.42	27.82
7	256.9	657.5	- 16.8	897.6	62.7	834.9	5.53	27.60
8	323.9	153.6	+ 3.3	480.8	76.1	404.7	3.17	26.55
9	172.0	33.2	- 33.4	171.8	47.9	123.9	1.59	26.55
10	545.7	203.6	- 59.6	689.7	133.3	556.4	1.70	28.27
All sites	2,505.8	2,475.4	- 8.5	4,972.7	570.3	4,402.4	2.24	27.75
Stream gage	--	--	--	--	--	4,740	1.14	27.84
1962 WATER YEAR								
Site 1	239.8	0	- 11.0	228.8	40.8	188.0	.64	22.72
3	191.7	130.7	- 109.9	212.5	35.5	177.0	.61	20.92
4	405.8	149.0	- 73.2	481.6	71.9	409.7	1.54	22.95
5	164.1	31.0	- 45.4	149.7	33.1	116.6	1.61	22.33
6	73.5	123.8	- 26.6	170.7	12.2	158.5	.42	18.27
7	209.9	90.9	- 78.9	221.9	40.9	181.0	1.20	21.04
8	288.1	6.2	- 80.3	214.0	55.0	159.0	1.25	21.09
9	118.1	0	- 45.4	72.7	30.2	42.5	.55	21.09
10	502.6	29.8	- 100.0	432.4	99.9	332.5	1.02	22.80
All sites	2,193.6	561.4	- 570.7	2,184.3	419.5	1,764.8	.89	21.32
Stream gage	--	--	--	--	--	1,990	.47	21.47
1962 CALENDAR YEAR								
Site 1	204.6	0	- 110.8	93.8	31.3	62.5	.21	17.66
3	153.6	51.4	- 95.3	109.7	21.3	88.4	.30	16.23
4	348.9	0	- 220.9	128.0	49.1	78.9	.30	17.12
5	140.1	0	- 73.2	66.9	20.4	46.5	.64	15.94
6	63.2	0	- 39.9	23.3	8.0	15.3	.04	14.60
7	181.2	0	- 85.2	96.0	25.6	70.4	.47	15.70
8	258.1	6.2	- 89.5	174.8	36.9	137.9	1.10	15.67
9	103.9	0	- 53.5	50.4	18.8	31.6	.41	15.67
10	461.6	0	- 123.8	337.8	73.2	264.6	.81	18.11
All sites	1,915.2	57.6	- 892.1	1,080.7	284.6	796.1	.39	16.28
Stream gage	--	--	--	--	--	1,190	.28	16.47
1963 WATER YEAR								
Site 1	38.4	0	- 23.8	14.6	4.5	10.1	.03	14.69
3	102.8	0	+ 3.0	105.8	12.7	93.1	.32	14.30
4	86.2	0	- 42.0	44.2	10.1	34.1	.13	13.91
5	49.8	0	- 22.5	27.3	6.7	20.6	.28	14.28
6	21.6	0	- 4.4	17.2	2.3	14.9	.04	13.38
7	114.4	0	- 21.9	92.5	14.2	78.3	.52	13.88
8	165.8	32.1	- 41.8	156.1	20.2	135.9	1.06	13.47
9	45.5	0	- 22.8	22.7	7.6	15.1	.19	13.67

See footnotes at end of table.

Table 17.--Annual Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
1963 WATER YEAR--Continued								
Site 10	307.0	11.2	- 89.6	228.6	42.4	186.2	0.57	16.28
All sites	931.5	43.3	- 265.8	709.0	120.7	588.3	.28	14.31
Stream gage	--	--	--	--	--	661	.16	14.65
1963 CALENDAR YEAR								
Site 1	56.4	0	+ 23.4	79.8	11.1	68.7	.23	20.32
3	161.0	95.8	+ 174.3	431.1	42.2	388.9	1.34	21.06
4	76.8	0	- 3.8	73.0	13.7	59.3	.22	19.41
5	43.5	0	- 5.1	38.4	7.4	31.0	.43	20.05
6	37.8	246.5	+ 36.0	320.3	7.6	312.7	.83	18.71
7	138.4	119.0	+ 81.1	338.5	30.0	308.5	2.04	20.93
8	182.5	76.1	+ 92.8	351.4	38.5	312.9	2.45	21.03
9	39.3	0	- 1.1	38.2	9.9	28.3	.36	21.26
10	335.1	187.1	+ 136.2	658.4	67.5	590.9	1.81	22.88
All sites	1,070.8	724.5	+ 533.8	2,329.1	227.9	2,101.2	1.05	20.66
Stream gage	--	--	--	--	--	2,300	.55	20.72
1964 WATER YEAR								
Site 1	216.6	0	+ 55.1	271.7	43.6	228.1	.78	30.95
3	360.8	388.2	+ 57.2	806.2	90.8	715.4	2.47	28.34
4	296.7	0	+ 43.7	340.4	43.8	296.6	1.12	26.12
5	93.1	0	+ 3.7	96.8	16.9	79.9	1.10	25.86
6	98.4	836.8	+ 1.8	937.0	19.2	917.8	2.45	26.15
7	229.2	392.3	+ 40.3	661.8	53.7	608.1	4.03	27.16
8	293.4	181.3	+ 47.6	522.3	71.0	451.3	3.54	27.63
9	84.6	0	+ 15.0	99.6	21.5	78.1	1.00	27.68
10	525.0	263.4	+ 68.0	856.4	114.0	742.4	2.27	27.63
All sites	2,197.8	2,062.0	+ 332.4	4,592.0	474.5	4,117.7	2.09	27.80
Stream gage	--	--	--	--	--	5,400	1.30	28.17
1964 CALENDAR YEAR								
Site 1	230.7	0	+ 38.8	269.5	49.8	219.7	.75	29.64
3	330.8	296.4	- 84.9	542.3	71.2	471.1	1.63	24.96
4	317.0	0	+ 10.8	327.8	46.0	281.8	1.06	23.87
5	96.4	0	0	96.4	16.5	79.9	1.10	23.54
6	102.5	648.8	- 9.9	741.4	16.5	724.9	1.94	23.63
7	234.4	303.6	- 23.4	514.6	46.7	467.9	3.10	23.60
8	301.3	158.1	- 41.0	418.4	63.4	355.0	2.78	24.89
9	89.9	0	+ 7.9	97.8	22.4	75.4	.97	25.09
10	519.4	87.5	- 63.9	543.0	102.6	440.4	1.35	25.12
All sites	2,222.4	1,494.4	- 165.6	3,551.2	435.1	3,116.1	1.59	25.25
Stream gage	--	--	--	--	--	4,650	1.12	25.92

See footnotes at end of table.

Table 17.--Annual Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
1965 WATER YEAR								
Site 1	315.3	241.7	+ 38.4	595.4	95.1	500.3	1.71	32.89
3	338.9	255.4	+ 10.3	604.6	84.3	520.3	1.80	29.42
4	427.8	646.2	+ 46.7	1,120.7	81.9	1,038.8	3.91	30.32
5	147.5	169.6	+ 24.6	341.7	30.7	311.0	4.29	30.33
6	126.1	911.2	+ 4.1	1,041.4	23.0	1,018.4	2.72	28.35
7	248.2	434.5	- 2.7	680.0	66.6	613.4	4.06	30.81
8	311.2	527.8	- 33.2	805.8	83.0	722.8	5.67	31.76
9	119.2	110.9	+ 25.7	255.8	43.1	212.7	2.73	31.94
10	501.2	734.8	+ 48.7	1,284.7	141.8	1,142.9	3.50	31.48
All sites	2,535.4	4,032.1	+ 162.6	6,730.1	649.5	6,080.6	3.08	30.54
Stream gage	--	--	--	--	--	7,650	1.83	30.42
1965 CALENDAR YEAR								
Site 1	321.8	241.7	+ 17.6	581.1	101.5	479.6	1.64	34.57
3	349.0	257.2	+ 85.9	692.1	97.5	594.6	2.05	32.85
4	442.3	646.2	+ 53.9	1,142.4	96.1	1,046.3	3.93	34.09
5	161.2	169.6	+ 38.4	369.2	39.3	329.9	4.55	34.21
6	122.2	889.1	+ 13.5	1,024.8	25.2	999.6	2.67	31.76
7	236.2	404.2	+ 26.6	667.0	69.7	597.3	3.95	34.51
8	305.7	512.3	+ 50.9	868.9	91.5	777.4	6.09	35.50
9	129.5	121.3	+ 61.1	311.9	54.4	257.5	3.31	35.68
10	499.9	797.2	+ 95.8	1,392.9	169.6	1,223.3	3.74	35.03
All sites	2,567.8	4,038.8	+ 443.7	7,050.3	744.8	6,305.5	3.20	33.88
Stream gage	--	--	--	--	--	6,990	1.67	33.48
1966 WATER YEAR								
Site 1	195.4	0	- 62.7	132.7	63.0	69.7	.24	32.98
3	323.4	27.5	+ 8.2	359.1	95.5	263.6	.91	33.63
4	244.7	0	- 34.8	209.9	74.3	135.6	.51	35.22
5	112.7	0	- 17.1	95.6	37.2	58.4	.81	35.34
6	104.3	79.7	- 1.1	182.9	20.7	162.2	.43	29.60
7	254.8	5.4	+ .4	260.6	56.3	204.3	1.35	30.25
8	301.6	55.4	+ 48.2	405.2	97.9	307.3	2.41	37.46
9	148.1	10.4	+ 8.5	167.0	64.0	103.0	1.32	38.63
10	404.4	329.1	+ 19.4	752.9	144.4	608.5	1.86	36.75
All sites	2,089.4	507.5	- 31.0	2,565.9	653.3	1,912.6	.97	33.70
Stream gage	--	--	--	--	--	1,150	.28	33.65
1966 CALENDAR YEAR								
Site 1	156.8	0	- 78.1	78.7	42.5	36.2	.12	24.64
3	294.3	30.8	- 151.2	173.9	73.3	100.6	.35	24.25
4	220.5	0	- 61.4	159.1	54.8	104.3	.39	27.50
5	96.7	0	- 45.2	51.5	27.5	24.0	.33	27.60
6	87.6	43.3	- 43.7	87.2	15.5	71.7	.19	20.35

See footnotes at end of table.

Table 17.--Annual Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
1966 CALENDAR YEAR--Continued								
Site 7	244.3	5.4	- 105.7	144.0	42.9	101.1	0.67	20.61
8	285.4	50.1	- 140.4	195.1	76.0	119.1	.93	26.98
9	146.0	0	- 55.2	90.8	48.8	42.0	.54	28.04
10	382.2	266.7	- 216.6	432.3	100.9	331.4	1.01	26.95
All sites	1,913.8	396.3	- 897.5	1,412.6	482.2	930.4	.46	24.56
Stream gage	--	--	--	--	--	695	.17	25.02
1967 WATER YEAR								
Site 1	40.8	180.9	+ 193.2	414.9	11.1	403.8	1.38	24.56
3	108.1	76.6	+ 167.2	351.9	16.5	335.4	1.16	19.61
4	76.6	211.6	+ 209.4	497.6	8.1	489.5	1.84	21.96
5	20.1	42.2	+ 82.0	144.3	1.5	142.8	1.97	21.86
6	18.2	384.0	+ 42.9	445.1	15.9	429.2	1.15	18.06
7	72.0	261.9	+ 89.0	422.9	8.3	414.6	2.74	20.11
8	94.1	277.7	+ 128.5	500.3	16.7	483.6	3.79	20.06
9	59.6	41.7	+ 51.7	153.0	8.5	144.5	1.86	20.04
10	201.9	453.9	+ 161.6	817.4	30.2	787.2	2.41	21.07
All sites	691.4	1,930.5	+1,125.5	3,747.4	116.8	3,630.6	1.83	20.74
Stream gage	--	--	--	--	--	5,130	1.22	21.61
1967 CALENDAR YEAR								
Site 1	117.5	279.5	+ 170.8	567.8	42.4	525.4	1.80	31.45
3	168.3	255.3	+ 142.2	565.8	46.3	519.5	1.79	27.15
4	213.0	362.6	+ 190.2	765.8	43.6	722.2	2.72	28.51
5	65.9	85.8	+ 79.6	231.3	15.3	216.0	2.98	28.41
6	44.2	622.8	+ 38.4	705.4	25.7	679.7	1.81	25.26
7	116.7	361.9	+ 102.7	581.3	25.0	556.3	3.68	27.76
8	135.8	429.6	+ 137.5	702.9	42.0	660.9	5.18	27.68
9	82.4	79.8	+ 64.5	226.7	24.1	202.6	2.60	27.93
10	245.8	563.3	+ 189.8	998.9	71.4	927.5	2.84	28.89
All sites	1,189.6	3,040.6	+1,115.7	5,345.9	335.8	5,010.1	2.55	28.03
Stream gage	--	--	--	--	--	7,880	1.90	28.65
1968 WATER YEAR								
Site 1	127.2	791.4	- 221.5	697.1	52.8	644.3	2.20	37.29
3	439.2	1,240.3	- 88.0	1,591.5	147.2	1,444.3	4.98	39.05
4	531.5	1,428.2	- 256.5	1,703.2	166.9	1,536.3	5.78	36.95
5	208.8	322.5	- 57.1	474.2	71.3	402.9	5.56	36.96
6	140.2	2,018.7	- 23.5	2,135.4	70.9	2,064.5	5.51	35.90
7	284.7	615.4	- 89.0	811.1	88.0	723.1	4.79	36.44
8	334.6	630.0	- 135.1	829.5	119.7	709.8	5.56	35.11
9	194.5	139.9	- 53.4	281.0	68.0	213.0	2.73	35.20
10	251.2	1,793.0	- 333.6	1,710.6	122.5	1,588.1	4.86	35.98

See footnotes at end of table.



Table 17.--Annual Water Budget Summary for Calaveras Creek Study Area, 1955-68--Continued

STATION	WATER BUDGET, IN ACRE-FEET						FLOW FROM AREA ABOVE STATION, IN INCHES	RAINFALL ON AREA ABOVE STATION, IN INCHES
	POOL CONSUMPTION	OUTFLOW	CHANGE IN POOL CONTENT	TOTAL INFLOW	INFLOW FROM RAINFALL ON POOL	FLOW FROM AREA ABOVE STATION		
1968 WATER YEAR--Continued								
All sites	2,511.9	8,979.4	-1,257.7	10,233.6	907.3	9,326.3	4.75	36.74
Stream gage	--	--	--	--	--	18,220	4.41	36.98
TOTALS FOR PERIOD 1955-68								
Site 1	1,326.1	1,261.8	- 2.0	2,585.9	350.4	2,235.5	7.63	230.83
3	3,241.4	6,714.5	+ 196.9	10,152.8	914.2	9,238.6	31.88	377.37
4	3,919.5	6,328.8	+ 13.8	10,262.1	982.1	9,280.0	34.91	374.72
5	1,668.3	1,839.5	+ 35.4	3,543.2	475.5	3,067.7	42.31	385.09
6	1,150.0	11,993.5	+ 18.7	13,162.2	375.4	12,786.8	34.16	330.88
7	2,945.5	5,600.5	- 24.8	8,521.2	750.6	7,770.6	51.45	352.32
8	3,883.4	4,462.2	+ 45.6	8,391.2	1,035.4	7,355.8	57.67	389.56
9	1,573.8	1,469.6	+ 50.7	3,094.1	549.2	2,544.9	32.68	372.95
10	3,806.7	4,028.1	- 2.5	7,832.3	968.7	6,863.6	21.01	274.79
All sites	23,514.7	43,698.5	+ 331.8	67,545.0	6,401.5	61,143.5	37.56	376.35
Stream gage	--	--	--	--	--	108,791	25.86	380.16

a/ Less than a 12-month period.

