Los Angeles County Flood Control District

HYDRAULIC DEPARTMENT

REPORT TO H. E. HEDGER, CHIEF ENGINEER

ANNUAL REPORT

ON

HYDROLOGIC DATA

SEASON 1938-39

Paul Baumann, Sr. Asst. Chief Engineer
Finley B. Laverty, Chief Hydraulic Engineer

July 1, 1940

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
LOS ANGELES, CALIFORNIA

July 1, 1940

H. E. HEDGER
CHIEF ENGINEER

751 S. FIGUEROA ST.
ROOM 410

FILE NO. 2-20
SUBJECT Annual Report on Hydrologic Data Season of 1938-39.

Honorable Board of Supervisors
L. A. County Flood Control District
501 Hall of Records
Los Angeles, California

Gentlemen:

There is transmitted herewith for your files, the Los Angeles County Flood Control District's Annual Report on Hydrologic Data for the Season of 1938-39.

This report includes data collected and compiled by the District's Hydraulic Department on precipitation, evaporation, runoff, dam operation, ground water and conservation. These data are basic for planning, design, and operation of flood control and conservation projects. The value of continuing the collection compilation and publication of this type of data cannot be over estimated, due to its widespread use by the District and also by many public and private agencies and individuals.

The District wishes to record its appreciation of the valuable cooperation rendered by the various individuals and organizations who have furnished data and have served as observers.

Yours truly,

H. E. Hedger

H. E. Hedger, Chief Engineer

Los Angeles County Flood Control District
Hydraulic Division

July 1, 1940

Mr. H. E. Hedger
Chief Engineer
Los Angeles County
Flood Control District
Los Angeles, California

Dear Sir:

We transmit herewith the Annual Report on Hydrologic Data for the season 1938-39. This report includes basic data collected and compiled by the Hydraulic Division of the District. Among the records presented are some which have been furnished by various individuals and agencies which regularly cooperate with the District.

This report is divided into five sections as follows:

1. Precipitation
2. Evaporation
3. Dam Operation
4. Runoff
5. Conservation and Ground Water

Rainfall records by months are included for 362 stations of which 327 furnished complete records for the season.

Records from 45 automatic raingages owned and maintained by the District and from 11 privately owned automatic raingages are also available. The gages are not sufficient to cover all areas in the County where intensity data are needed, but furnish increasingly valuable information.

Precipitation in the County was in general slightly above normal for 1938-39 except in the San Gabriel Mountains. The following comparison of rainfall indices for the season, based on seasonal averages for the areas relative to 66 year normal indices, shows the distribution:

	% of normal
1. San Gabriel Mountain Area	99.5
2. Valley and Coastal Plain	112.0
3. Santa Monica Mountains	116.0
4. North of San Gabriel Mountains	115.0

No floods occurred during the season and no damage of consequence resulted.

The water year used by the District and the U. S. Geological Survey extends from October 1st to September 30th. The unusual storm of September 24, 25 and 26, 1939, was thus included in the season of 1938-39. Had this storm not been included the rainfall index would have been 25% less and the seasonal rainfall would have been subnormal.

The section on Evaporation includes records from 22 stations by months. Included also are summaries for six stations giving monthly evaporation in inches for the entire period of record of the station. Seasonal evaporation varies greatly in different parts of the District. Our records show a maximum of 91.36 inches at Encino Reservoir.

The Dam Operation Section includes tabulations showing daily gage height, storage, inflow and outflow for 14 dams operated by the District. These dams have a present storage capacity of 92,852 acre feet and control 409.5 square miles out of 1592 square miles of mountain drainage area, a portion of which drains to the North into the Great Basin.

The total inflow into the 14 dams during 1938-39 amounted to 103,914 acre feet and the total release was 97,471 acre feet. The waste into the Ocean from the San Gabriel River was 1083 acre feet; from the Los Angeles River, 82,750 acre feet; and from Ballona Creek, 28,490 acre feet, totalling 112,320 acre feet. This flow originated almost entirely in the valley areas, while a large proportion of the regulated flow was conserved by channel percolation and spreading.

The Runoff Section includes data pertinent to the District's gaging stations and includes lists of stream flow measurements, mean daily runoff and storm hydrographs.

The District operates 56 recorder stations on main streams and tributaries for purposes of (1) Dam Operation; (2) Design Data; and (3) Conservation Data.

The Conservation and Ground Water Section of this report includes a summary of water table changes in various underground basins and data on water conserved by the District's spreading operations. Various graphs and ground water contour maps are appended to more clearly show the fluctuation and conditions in the several basins.

Each month 75 key wells in the several basins are measured and approximately 1200 wells are measured each Fall and Spring. Additional data are secured from various cities and water companies.

The general trend of the water tables in the various basins from the Fall of 1937 to the Fall of 1938 indicated a definite rise. The same indication is shown for the period from the Fall of 1938 to the Spring of 1939. These changes are summarized in detail in the report and are based on averages of a number of wells in each local area.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

Hydraulic Division

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LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

Hydraulic Division

REPORT ON PRECIPITATION

Season 1938-39

FOREWORD:

The Los Angeles County Flood Control District has continued the policy followed in previous years of placing raingages throughout the County to obtain more effective distribution, particularly in the mountain areas and areas which have been affected by fire. Annual inspection of present stations and proposed locations with suggestions to observers is directed toward obtaining accurate and complete records. The District's rain season includes the period between October 1-st and September 30-th to conform with the water year as used by the United States Geological Survey. Observers are impressed with the importance of obtaining daily readings at a regular time, which is 5 p.m. for all District and cooperative stations where possible.

Length of Records:

The length of records obtained is an important item in collecting data, particularly for use in frequency studies and for obtaining seasonal normal rainfall and indices, and so the District is continually striving to obtain long time records, and to maintain present locations with reliable observers. New locations are chosen carefully so that duplication of records will be eliminated. The desirability of locality and the permanency of the station is also considered.

The District has continuous records of 153 stations 10 years to 14 years in length; 56 stations 15 years to 24 years; 38 stations 25 years to 49 years and 9 stations 50 years and over, a total of 256 long time stations.

Distribution of Gages:

The value of data obtained is dependent on the proper distribution of equipment in the mountain and valley areas, particularly in coordinating rainfall and runoff for various drainage areas and districts, and for the proper operation of the District's dams and debris basins.

The distribution of raingages in the valley area is fairly complete and satisfactory both as to the various drainage areas and stream gaging districts. The distribution in the mountain areas however is not as complete due to scarcity of observers and poor accessibility during the winter season. Additional locations are therefore necessary, particularly for automatic raingages.

The District maintained 45 automatic raingages during the 1938-39 season, 27 of which were in the mountains and the remaining 18 in the valley area. Two 12 inch capacity Fergusson type automatic gages were purchased by the District during the season and these have been found very satisfactory. In general, each automatic gage is placed close to a standard United States Weather Bureau specification type of gage as a check. However the automatic records are used primarily for intensity purposes and the timing of storms while the standard gage is used in compiling total rainfall for each season. Automatic gages afford the maximum information regarding rainfall, as they furnish a continuous graphic record of rainfall occurrence.

There are 11 privately owned automatic gages cooperative with the District from which records are received or made available to us on request.

In order to supplement available rainfall intensity data, the District maintained special gages utilizing glass graduates at all the District dams, debris basins and most of the patrol stations. These gages are read at frequent intervals during storms thereby furnishing valuable intensity data.

Value of Precipitation Data:

1. Estimates of flood flows for design purposes.
2. Rainfall frequency studies.
3. Seasonal normals and indices studies for the County, District, and various drainage areas and localities.
4. Relationship of rainfall to runoff and percolation in various drainage areas.
5. Utilization of intensity data in operation of District Dams and Debris Basins.
6. Utilization of intensity data in operation of construction and patrol work.
7. Conservation studies.

Many services are rendered to outside agencies during the season, as shown under the following classifications:

1. United States Weather Bureau:
   Daily rainfall and snow records furnished to the United States Weather Bureau at Los Angeles every month (includes 40 cooperative rainfall stations) for publication.
2. United States Engineer Department:
   Daily rainfall and intensity data furnished to the United States Engineers, on all major storms.

3. Division of Water Resources State of California:
Daily rainfall and snow records furnished to the State Division of Water Resources at Sacramento, each month during the winter and spring, for their Snow Surveys Bulletin. This service involves records from 38 cooperative rainfall stations. Considerable data are also furnished the Los Angeles Branch of the Division as well.
4. Pasadena Water Department:
Daily rainfall data for practically all stations affecting Pasadena furnished to the Engineering Branch of the Pasadena Water Department.
5. United States Forest Service:
Rainfall data furnished to the Flood Control Surveys Division of the United States Forest Service at Glendora.
6. Various:
Data requested by individuals and agencies.

Statistics:

The following table shows the number, types and ownership of raingages from which data are received every month:

TABLE I. Gage Ownership and Type

		Type	Number of Gages. 1938 - 39	Total
(a)	Flood Control	Std. 8"	175	
		Std. 8" *	33	
		Auto-Ferg. 9" Cap.	31	
		Auto-Ferg. 12" Cap.	13	
		Auto-Friez 30" Cap.	1	
		Can & Glass Grad.	10	
		Glass Graduate Spl.	1	
		Glass Graduate Spl. Hanson	2	266
(b)	Los Angeles Water Department	Std. 8"	16	
		Std. 8" *	2	
		Auto-Stevens	1	19
(c)	United States Weather Bureau	Std. 8"	9	
		Std. 8" *	6	
		Auto.	2	17
(d)	City of Long Beach	Std. 8"	5	
		Std. 8" *	1	
		Auto.	1	7

TABLE I. Gage Ownership and Type (Concluded)

		Type.	Number of Gages 1938 - 39	Total
(e)	City of Beverly Hills	Auto-Ferg. 9" Cap.	1	1
(f)	So. Pacific R.R.	Std. Type 3"	3	3
(g)	So. Calif Edison Co.	Std. 8"	3	3
(h)	U. S. Forest Service	Std. 8"	5	
		Std. 8" *	2	
		Auto-Friez Tipping Bucket	2	9
(i)	L.A. County Rec. Dept.	Std. 8"	4	
		Std. 8" *	1	5
(j)	L.A. County Survey Dept. Storm Drain Division	Auto-Ferg. 9" Cap.	3	3
(k)	Pomona Valley Prot. Association	Std. 8"	4	4
(l)	Glendora Irrigation Co.	Std. 8"	4	4
(m)	Pasadena Water Dept.	Std. 8"	7	
		Std. 8" *	1	
		Auto-Friez Tipping Bucket	1	9
(n)	State of Calif. - DWR	Std. 8"	4	4
(o)	Miscellaneous-Individuals, Companies, Cities, Towns, etc.	Std. 8"	42	
		Std. 8" *	5	
		Std. Type 6"	1	
		Std. Type 5"	1	
		Spl. Std. Type 4½"	1	
		Std. Type 3"	13	
		Dial Type	2	65
			Total	419
			Std. 8 **	-51
			***	-6
Total gages from which the District receives records				362

* Represents an automatic gage accompanying the standard gage at the same location.

* * Represents number of automatic gages deducted from total number of gages to agree with the number of records published.

*** Represents gages located in Long Beach from which records are made available to the District, upon request.

The District owns 64% of all the gages from which daily records are received each month. The remainder are privately owned, as shown on preceding page, and are made cooperative with the District. Each observer is supplied with all the necessary supplies, and records are sent in each month.

TABLE II. Complete Seasonal Reports.

Type	Season 1938-39
F.C. Standard Gage with F.C. Auto. Gage	32
F.C. Standard Gage only	151
F.C. Automatic Gage only	1
F.C. Automatic with Private Standard Gage	11
F.C. Can and Glass Graduate	8
F.C. Glass Graduate Special	3
Private Cooperative Standard Gage	110
Private Automatic Gage	6
Private Automatic and Private Standard Gage	3
Private Dial Gage	2
Total	327

The above table shows the number of stations which furnished complete records, or records which could be completed by estimates from adjacent stations for not more than 10 percent of total seasonal amount. This table shows that of the 362 stations reporting during the season, 90 percent furnished complete records. Included in the season are 14 stations established late in the season and 4 stations re-established when gages were available. Deducting these 18 stations from the total number of stations available for the season, 95 percent of the balance furnished complete reports.

The following table presents a complete list of the automatic raingages which were active in the season 1938-39 and shows the length of active record.

TABLE III

ACTIVE AUTOMATIC RAIN GAGES

SEASON 1938-39.

F.C. No.	Name of Station	Elev. USGS	Type and Capacity	Watershed	Period of Record
6	Topanga Canyon Guard Sta.	747	Fergusson - 9"	Topanga Canyon	8-18-30 to date
10	Bel Air	540	" 9"	Stone Canyon	1- 4-29 to date
11A	Upper Franklin Reservoir	867	" 9"	Franklin Canyon	9-29-37 to 9-19-39
11B	Upper Franklin Reservoir	870	" 9"	Franklin Canyon	9-19-39 to date
15	Van Nuys Warehouse	695	" 9"	L. A. River	8-18-30 to date
22	Johnson Rch.-Bell Canyon	930	" 9"	L. A. River	10-6- 38 to date
33A-E	Pacoima Dam	1700	" 9"	Pacoima	9-22-30 to 9-28-38
33A'-E	Pacoima Dam	1500	" 9"	Pacoima	9-28-38 to date
47A	Clear Creek	3100	" 12"	Big Tujunga	11- 2-28 to date
52	Switzers Camp	3000	" 9"	Arroyo Seco	10-27-37 to 10-6-38
52	Switzers Camp	3000	" 12"	Arroyo Seco	10-6-38 to date
53B	Colby Ranch - Lower	3150	" 9"	Big Tujunga	4-19-26 to 6-30-37
53A	Sleepy Hollow Ranch	3500	" 12"	Big Tujunga	6-30-37 to date
54	Loomis Ranch	4050	" 12"	Big Tujunga	11-24-31 to 7- 1-37
54	Loomis Ranch	4050	" 9"	Big Tujunga	7- 1-37 to date
57B-E	Opid's Camp	4350	" 12"	San Gab. W. Fork	12-14-25 to date
60A	Hoegee's Camp	2750	" 12"	Big Santa Anita	10-11-26 to 12-10-35
60B	Winter Creek	2580	" 12"	Big Santa Anita	12-10-35 to 10-13-37
60A	Hoegee's Camp	2750	" 12"	Big Santa Anita	10-13-37 to date
65	Sierra Madre	1160	" 9"	Rio Hondo	12- 9-27 to date
70-E	Dalton #1	800	" 9"	San Gabriel	12- 4-26 to date
83-E	Big Pines County Park	6860	" 9"	Desert	12-17-25 to date
85D	Camp Baldy Guard Sta.	4300	" 12"	San Antonio	11-11-27 to date
92	Pomona College	1190	" 9"	San Antonio	12- 2-27 to date
108B	El Monte	285	" 9"	Rio Hondo	10-11-38 to date
150	Monrovia Falls	1650	" 9"	Sawpit	2- 4-28 to 10-5-38
150	Monrovia Falls	1650	" 12"	Sawpit	10- 5-38 to date
158	Tanbark Flats	2700	" 12"	San Dimas	1-16-29 to 7- 7-39
158	Tanbark Flats	2700	Friez Tip.Bucket(Private)	San Dimas	7- 7-39 to date
178	Azusa - Griffith	545	Fergusson 9"	San Gabriel	1- 1-31 to date
210B	Brand Park	1250	" 9"	L. A. River	12-27-28 to date

TABLE III

ACTIVE AUTOMATIC RAIN GAGES (Con't.)

F.C. No.	Name of Station	Elev. USGS	Type and Capacity	Watershed	Period of Record
213	Hancock Park	177	Fergusson 9"	Ballona	1-13-29 to date
228B	Beverly Hills	255	" 9" (Private)	Ballona	10-14-31 to date
235	Henninger Flats	2650	" 9"	Eaton Canyon	12-30-29 to date
257	Griffith Park Nursery	750	" 9"	Ballona	9-19-30 to date
259B	Chatsworth Patrol Sta.	1249	" 9"	L. A. River	8-17-37 to date
261-E	Acton	3075	" 9"	Santa Clara	11-27-30 to date
280	Flintridge Fire Station	1325	" 9"	Arroyo Seco	7-26-30 to date
283a	Crystal Lake - E. Flats	5740	" 12"	San Gab. N. Fork	11-26-35 to date
289	Laguna Bell	140	" 12" (Private)	Rio Hondo	10- 6-30 to date
290	Newmark	375	" 12" (Private)	L. A. River	10- 6-30 to date
291	96-th & Central	121	" 12" (Private)	L. A. River	10- 6-30 to date
303B	Cal. Tech.	763	" 9"	Alhambra Wash	12-13-30 to date
311b	Pasadena-Meterolog. Sta.	918	Friez Tip. Bucket (Private)	Arroyo Seco	10- 1-38 to date
334-E	San Gabriel Dam #2	2335	Fergusson 9"	San Gab. W. Fork	1-14-32 to date
338	Mt. Wilson	5650	" 12"	Various	3- 9-32 to date
348C	Honor Camp #4	2000	" 12"	San Gab. E. Fork	5-11-38 to date
352	Lechuza Patrol Station	1530	" 9"	Arroyo Sequis and Trancas	11-28-34 to date
356	Diamond Bar Ranch #2	675	" 9"	San Jose Creek	3-30-38 to date
367	Upper Haines Canyon	3450	" 9"	Big Tujunga	1-13-33 to date
373	Brigg's Terrace	2310	" 9"	Verdugo	11-21-33 to date
380	El Sereno	553	" 9"	L. A. River	11- 5-34 to date
402B	State Prison Camp #35	5585	" 12"	Big Tujunga and San Gab. W. Fork	11- 8-37 to date
415	Signal Hill City Hall	115	" 9"	Ocean	3-15-37 to date
418	Pickens Canyon	4250	" 9"	Verdugo	10-29-36 to date
419	Mt. Gleason	5450	J.P. Friez-Cam 30"	Pacoima	9-21-37 to date
425	San Gabriel Dam #1	1470	Fergusson 12"	San Gabriel	10-12-37 to date
433	Altadena Co. Forestry Park	1710	" 9"	Arroyo Seco	9-14-38 to date
439	Charlton Flats	5650	" 12"	Big Tujunga and San Gabr. W. Fork	8- 2-39 to date
577	Los Angeles - U.S.W.B.	330	Friez Tip. Bucket (Private)	L. A. River	2-19-97 to date
X-3	Rustic Canyon Fire Area	900	Fergusson 9"	Ocean	12- 2-38 to date
690	San Antonio-Guard Sta.	2380	Stevens Float (Private)	San Antonio	12-17-37 to date

The District also has records of 34 automatic gages at stations which are now inactive. These records are available in our files.

SUMMARY OF SEASONAL PRECIPITATION:

I. Tropical Storm of September 24, 25, 26 - 1939.

The most important storm during the season 1938-39 occurred on September 24, 25 and 26, 1939 and caused the largest amount of debris to flow into some of the District debris basins since the flood of March 1938.

The total rainfall during the September storm amounted to over 25% of the entire season's rainfall for the County as a whole. Stated in another way, the total for this storm was more than 27% of the County 66 year seasonal normal rainfall. The largest storm totals occurred in the San Antonio Canyon area ranging from approximately 11 inches at the 4000 ft. level to almost 18 inches at the 8300 ft. level. The range of average rainfall in the County as a whole varied from 4 inches at Long Beach to 11 inches on the face of the San Gabriel Mountains and decreased to about 1.50 inches in the desert near Lancaster.

The maximum intensity at Los Angeles amounted to 5.42 inches in 18 hours and 3 minutes. This is the third largest amount ever to be recorded by the United States Weather Bureau at Los Angeles within a 24 hour period, being exceeded by the New Year's storm of January 1934 with an amount of 7.36 inches, and the March 2, 1938 flood with an amount of 6.38 inches, each for a 24 hour period. See Table IV for other maximum values.

II. Comparison of Mountain and Valley Rainfall:

Los Angeles County as a whole received slightly more than normal rainfall, the 1938-39 seasonal index being 108 plus, i.e., 108 percent of the County 66 year seasonal normal, and this was due primarily to the occurrence of the storm in September.

Rainfall varied somewhat from the last two seasons. Instead of even distribution throughout the valley and mountain areas, the 1938-39 season received 111% in the valley areas as against 101% in the mountain areas. The heaviest monthly rainfall occurred in the following order: December, September, January, March, February and April, with little or no rain in October and November.

Table of Comparative Rainfall

The following 8 locations represent stations of long time records with rainfall data in the valley, mountains, foothills, and the coastal areas:

Station	Elev.	Yrs. of Record	66 yr. Normal Inches	1938 1939 Inches	% of Normal
Los Angeles (USWB)	417	67	15.45	18.74	121%
Opid's Camp	4350	22	42.15	36.87	87%
Hoegee's Camp	2750	14	44.59	38.67	87%
Colby's Ranch	2950	42	30.89	27.32	88%
Mount Wilson	5850	35	36.03	39.60	110%
Mouth of San Antonio Cn.	2500	35	26.95	28.54	106%
Pasadena	865	67	19.94	23.71	119%
Long Beach	30	45	13.08	15.68	120%

Comparison of Precipitation by Areas

The following table compares precipitation by areas using averages of a number of stations. Stations used are identical with those used in similar tables in previous reports, excepting where these stations are now inactive, nearby stations have been substituted.

Station	No. of Sta. Used	Ave. 66 yr. Normal Inches	Season 1938-39 Ave. Amt. Inches	% 66 yr. Normal
San Gabriel Mts.	18	29.58	29.43	99.5
Valley (And Coastal Plain)	24	17.33	19.44	112.0
Santa Monica Mts.	14	19.54	22.74	116.0
Desert Side - Area No. of San Gabriel Mountains	10	12.76	14.62	115.0

Number of Days Rainfall .01 inch or more

Los Angeles (USWB) 32 days midnight to midnight
Opid's Camp 39 days 5 p.m. to 5 p.m.

If the Opid's Camp record is analyzed on a midnight to midnight basis the number of days rainfall is practically the same as at Los Angeles.

Maximum Rainfall

The following table presents maximum rainfall amounts in Los Angeles County for the period of this report (using the standard gage readings only).

Station	Maximum Seasonal	Maximum Day	Date
Crystal Lake - E. Pine	40.09		
Mount Wilson		8.71 *	9-25-39
Camp Baldy Ranger Station		8.71 *	9-25-39
Kelly's Kamp * * *	53.71	13.08 * *	9-25-39

* 5 p.m. reading is interpolated from automatic gage.
* * 5 p.m. reading is interpolated from Trails Inn.
* * * Adjacent to County - San Antonio Canyon.

Comparative Maximum Rainfall Intensities

The following table shows a comparison of maximum intensities for nine representative stations in the District during the season. (See Table IV).

III. Summary of Snowfall:

Snowfall at five high mountain points is shown as follows:

Sta. No.	Location	Elev.	Season 1938-39 Amt. in Inches
82	Table Mountain	7500 ft.	100
83	Big Pines Rec. Camp	6860 ft.	106
283a	Crystal Lake - E. Pine	5740 ft.	81
308	Kelly's Kamp	8300 ft.	144
419	Mt. Gleason (Santa Clara Ridge)	5450 ft.	28

It is of interest to note that the snow pack at certain points in the San Gabriel Mountains averaged 40 percent water content based on this season's measurements taken on February 25, 1939 and increased to 47 percent water content on measurements again taken on April 1, 1939.

COOPERATION (of Rainfall Observers)

As in the past observers have continued to cooperate with the District in the collection of these data. With the exception of one percent who are employees of the District all observers are private individuals who receive no compensation for sending in records. Also, private ownership of gages has increased to 36% of all stations reporting, yet 95% of all records sent in are complete for the season. This cooperation has been due in part to the personal contact made with the various observers on our annual inspection trips, as well as to the ever increasing interest manifested by the observers in rainfall. This interest by the observers results in better records and prompt reporting.

We wish to express our appreciation to the many agencies and individuals who have so freely cooperated with us in the collection of these data and by so doing have made this report possible.

RESPONSIBILITY:

These reports on rainfall and evaporation records have been compiled by Mr. C. George Carlson under the immediate supervision of Mr. Walter J. Wood, Assistant Chief Hydraulic Engineer.

Table V. which follows, presents monthly and seasonal rainfall amounts for stations from which the District received records during the season 1938-39.

Table VI. entitled "Raingage Station Locations" gives pertinent data regarding each of the stations.

TABLE IV

COMPARATIVE MAXIMUM RAINFALL INTENSITIES IN INCHES

		5min.	10min.	15min.	30min.	60min.	120min.	300min.	24hrs.	Storm Total Auto.	Storm Total Std.
Sta. No. 577 Los Angeles (USWB) 1938-39	Amt.	.22	.27	.31	.39	.67	1.25	2.44	5.42	5.03	
	Date	12-17-38	12-17-38	12-18-38	12-18-38	9-24-39	9-24-39	9-25-39	9-24,25-39	12-17,21-38	
	Amt.									5.62	
	Date									9-24,25-39	
Max.of Record	Amt.	.42	.65	.70	1.14	1.51	1.99	3.06	7.36	8.27	9.67
	Date	1-14-08	2-18-14	2-18-14	2-18-14	2-18-14	2-18-14	3-2-38	12-31-33 1-1-34	12-31-33 1-1-34	3-2,10-84
Sta. No. 15 VanNuys Whse. 1938-39	Amt.	.33	.41	.50	.68	.89	1.36	1.96	4.81	5.38	5.34
	Date	12-15-38	12-15-38	12-15-38	12-15-38	12-15-38	12-14-38	12-14,15-38	9-24,25-39	12-14,16-38	
	Amt.									5.02	5.07
	Date									9-25,26-39	
Max.of Record	Amt.	.33	.41		.68	.89	1.36		6.94	7.85	7.81
	Date	12-15-38	12-15-38		12-15-38	12-15-38	12-14-38		12-31-33 1-1-34	12-30-33 1-1-34	12-30-33 1-1-34
Sta. No. 178 Azusa-Griffith 1938-39	Amt.	.20	.29	.38	.54	.63	.87	1.21	4.47	4.67	
	Date	9-24-39	9-24-39	9-24-39	9-24-39	9-24-39	9-24-39	9-24-39	9-24,25-39	9-24,26-39	
Max.of Record	Amt.	.31	.44		.77	1.10	1.73		8.27	12.14	12.02
	Date	2-28-38	2-28-38		10-17-34	10-17-34	12-31-33 1-1-34		12-31-33 1-1-34	12-31-33 1-1-34	1-14,19-16
* Sta. No. 425 San Gab.Dam#1 1938-39	Amt.	.40	.56	.69	.85	1.17	1.50	1.95	4.77	2.30	2.35
	Date	9-24-39	9-24-39	9-24-39	9-24-39	9-24-39	1-5-39	1-5-39	9-24,25-39	1-5,6-39	
	Amt.									5.72	5.78
	Date									9-24,26-39	
	Amt.										8.19
	Date	Automatic gage not working properly									12-18,20-38
Max.of Record	Amt.	.60	.62		1.04	1.18	1.76		10.37	12.07	25.08
	Date	4-5-26	4-5-26		4-5-26	4-5-26	3-2-38		3-1,2-38	4-4,8-26	12-17,22-21
Sta.No.261-E Acton-Mellen 1938-39	Amt.	.12	.17	.20	.26	.39	.59	1.11	2.01	3.82	4.07
	Date	9-24-39	9-24-39	9-10-39	9-10-39	12-17,18-38	12-17,18-38	9-25-39	9-24,25-39	12-17,21-38	
	Amt.									2.46	2.52
	Date									9-24,26-39	
Max.of Record	Amt.	.29	.41		.66	.72"	.69		3.00	3.82	6.69
	Date	8-26-35	8-26-35		10-1-32	10-1-32	2-16-32		3-1,2-38	12-17,21-38	12-18,27-21
Sta. No. 6 Topanga Cn. 1938-39	Amt.	.26	.50	.62	1.02	1.20	1.50	2.40	6.32	4.85	5.13
	Date	12-14-38	12-14-38	12-14-38	12-14-38	12-14,15-38	12-14,15-38	9-24,25-39	12-24,25-39	12-14,16-38	
	Amt.									6.40	6.37
	Date									9-24,26-39	
Max.of Record	Amt.	.28	.50		1.12	1.52	2.72		13.44	15.88	16.03
	Date	1-5-35	12-14-38		2-22-36	12-31-33	12-31-33		12-31-33	12-29-33 1-1-34	12-29-33 1-1-34
Sta. No. 92 Pomona College 1938-39	Amt.	.15	.26	.31	.42	.58	.67	1.21	3.79	5.50	5.10
	Date	12-19-38	12-19-38	12-19-38	12-19-38	12-19-38	12-19-38	12-18,19-38	9-24,25-39	12-17,21-38	
	Amt.									4.33	4.81
	Date									9-24,26-39	
Max.of Record	Amt.	.23	.29		.58	.92	1.47		7.86	8.87	11.03
	Date	10-17-34	10-17-34		10-17-34	1-1-34	1-1-34		12-31-33 1-1-34	12-31-33 1-1-34	2-10,18-27
Sta.No.57B-E Opid's Camp 1938-39	Amt.	.22	.28	.32	.43	.69	1.15	2.33	5.77	10.36	9.58
	Date	12-18-38	12-18-38	12-18-38	12-18-38	12-18-38	12-18-38	12-18-38	12-17,18-38	12-17,22-38	
	Amt.										8.46
	Date	Automatic gage not working properly.									9-24,25-39
Max.of Record	Amt.	1.17	1.18	1.18	1.52	2.21	3.40	7.60	15.96	21.34	33.95
	Date	4-5-26	4-5-26	4-5-26	4-5-26	4-5-26	4-5-26	3-2-38	3-1,2-38	4-4,8-26	12-18,23-21
	1.03 inches in one minute 4:48 A.M. to 4:49 A.M. April 5, 1926										
Sta. No. 60A Hoegee's Camp 1938-39	Amt.	.12	.18	.25	.42	.83	1.52	2.38	4.41	8.80	9.16
	Date	12-18-38	3-9-39	1-5-39	1-5-39	1-5-39	1-5-39	1-5-39	12-17,18-38	12-17,21-38	
	Amt.									2.64	2.81
	Date									1-5,6-39	
	Amt.										10.86
	Date	Automatic gage not in operation.									9-24,26-39
Max.of Record	Amt.	.43	.57		.91	1.58	2.88		14.76	17.51	30.39
	Date	12-27-36	12-27-36		10-18-36	3-2-38	3-2-38		3-1,2-38	12-30-33 1-1-34	4-5,9-26

* San Gabriel Dam #1 Station was formerly at Robert's Relay Station and previously to that at Edison Intake.

* Standard Gage.

TABLE V

SEASON 1938-39 MONTHLY RAINFALL SUMMARY

RAINFALL RECORDS IN INCHES

Sta. No.	Station	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Season Total
2	Escondido Patrol	.14	.03	7.36	2.75	1.64	.93	.61	.16	0	0	T	4.83	18.45
3	Seminole Hot Springs	.10	T	7.88	3.98	1.68	2.84	.62	T	T	0	0	6.54	23.64
4	Crags Country Club	.09	.02	10.36	4.07	1.67	2.03	.58	0	0	0	0	6.22	25.04
5A	Calabasas	.09	.01	10.08	3.26	1.13	1.30	.41	.17	0	0	0	6.27	22.72
5B	Calabasas	Sta. 5A moved to "B" location 7-1-39												
6	Topanga Canyon	.04	.03	9.72	4.90	1.62	1.47	.37	.07	.02	0	0	6.37	24.61
7C	Bel Air Bay Club	0	0	7.14	3.08	1.25	.79	.36	.09	0	0	0	4.50	17.21
8	Mandeville Canyon	0	0	6.70	4.07	1.45	1.55	.27	.05'	0	0	0	4.20	18.99
9	Sepulveda & Chase	.02	0	9.81	3.34	1.14	1.41	.27	.09	0	0	0	4.86	20.94
10	Bel Air	T	0	8.31	4.10	1.39	1.30	.24	.11	0	0	0	5.21	20.66
11A	Upper Franklin Reservoir	0	0	8.16	3.83	1.37	1.10	.16	.02	0	0	0	5.22*	19.86
11B	Upper Franklin Reservoir	Sta. 11A moved to "B" location 9-19-39												
12	Franklin-Mulholland Patrol #1	0	0	9.55	4.58	1.10	1.15	.20'	0	0	0	0	5.22	21.80
13	No. Hollywood - Blix	0	0	8.47	3.84	1.28	1.41	.15	.02	0	0	0	5.30	20.47
14	Roscoe - Merrill	.14	T	8.50	2.96	1.07	2.11	.22	.25	0	0	0	3.91	19.16
15	Van Nuys - City Warehouse	.01	0	9.42	3.58	.90	1.33	.22	.08	0	0	.01	5.07	20.62
16C	Sherman Oaks - Stone Canyon	N.I.	N.I.	N.I.	N.I.	N.I.	.33"	.25	.06	0	0	0	6.11	Inc.
17	Sepulveda Canyon Patrol #2	0	0	9.90	4.89	1.10	1.82	.25	.13	0	0	0	8.15	26.24
18	Adohr Dairy	.02	0	9.53	3.92	1.22	1.49	.34	.04	0	0	0	6.24	22.80
19	Topanga - Summit	.06	0	9.00	3.57	1.02	1.24	.30	.18	0	0	0	7.07	22.44
20	Girard	.09	T	8.36	3.48	1.16	.87	.29	.06	0	T	T	4.89	19.20
21	Brant Ranch	.07	0	8.15	3.44	1.17	.88	.23	.10	0	0	T	5.45	19.49
22	Johnson - Bell Canyon	0	0	8.17	2.95	1.26	1.12	.33	.20	0	0	0	3.71	17.74
23-E	Chatsworth Reservoir	.12	.01	7.37	3.07	1.17	.96	.32	.14	T	T	.01	3.56	16.73
24B	Chatsworth	.10'	0	7.86	3.04	1.54	.78	.27	.16	0	0	.01'	3.23	16.99
24C	Chatsworth	Sta. 24B moved to "C" location 9-1-39												
25B	No. L. A. - Andrews	.09	0	9.89	3.24	1.23	1.01	.35	.21	0	0	.01	4.73	20-76
27	W. D. Miller Ranch	.15	0	9.21	2.90	1.22	1.19	.25	.09	0	0	0	3.38	18.39
28	San Fernando Lemon Ass'n.	.15	.01	10.59	3.63	1.32	1.49	.35	.12	.02	0	0	3.47	21.15
29B	Granada Pump Plant	.08	0	11.27	3.76	1.42	1.67	.33	.35	0	0	0	3.34	22.22
30	Sylmar	.15	0	11.93	3.99	1.44	1.56	.42	.05	0	0	0	3.02	22.56
32-E	Newhall	.06	.01	10.57	3.24	1.63	1.75	.23	.10	0	0	0	3.07	20.66
33A'-E	Pacoima Dam	.27	T	10.27	3.55	1.45	1.96	.23	.18	0	0	0	4.07	21.98
38	Chapelle Ranch	.07	0	8.87	2.89	1.14	1.58	.23	.28	0	0	0	4.14	19.20
39A	Sunset Canyon - Burbank	.15	.01	8.97	3.87	1.14	2.67	.33	.15	.01'	0	T	6.32	23.62
39B	Sunset Canyon - Burbank	Sta. 39A moved to "B" location 3-20-39												
42	Redondo - City Hall	.70	0	5.62	2.91	1.85	.70	.34	.16	0	0	0	2.74	15.02
43A	Palos Verdes (Admin. Bldg.)	.26	0	6.15	3.29	1.60	.69	.34	.19	0	T	0	5.87	18.39
43B	Palos Verdes (Golf Club)	.22	T	6.52	3.61	1.64	.90	.31	.10	0	T	0	5.87	19.17
44	Pt. Vincente Light House	.04	0	5.82	3.05	.98	.66	.44	.10	0	0	0	4.00	15.09
46B-E	Big Tujunga Dam	.14	.03	10.63	3.92	1.23	3.19	.71	.42	0	0	.01	5.61	25.89
47A	Clear Creek	.55	0	12.40	4.01	1.96	4.37	.65	.25	0	0	0	7.65	31.84
48	Oak Will	.43	T	11.33	3.40	2.55	3.28	.37	.27'	0	0	0	6.80	28.43
49	Altadena - Chiesa	.14	T	9.32	3.49	1.24	2.11	.46	.31	0	T	0	6.33	23.40
50B	Arroyo Seco Patrol	.08	T	9.50	3.95	1.32	2.13	.30'	.24	0	0	0	6.34	23.86
51	Little Cienega (Headlee's)	.75	.02	12.06	3.88	2.28	4.14	2.13	.21'	0	0	0	9.82	35.29
52	Switzer's Camp	.38	T	10.24	3.36	1.73	3.80	.56	.28	0	0	0	7.82	28.17
53A	Sleepy Hollow Ranch	.21	0	11.63	3.12	1.37	3.21	.65	1.10	0	0	0	6.69	27.98
53B	Colby's Ranch - Lower	.19	0	12.01	3.15	1.56	3.00	.71	.52	0	0	0	6.18	27.32
54	Loomis Ranch (Alder Creek)	.33	0	8.99	2.23	1.62	2.09	.52	.39	0	0	0	6.38	22.55
56	Valley Forge Lodge	N.I.	N.I.	N.I.	5.15	2.74	4.39	.95	.20	0'	0'	0'	N.R.	Inc.
56	Kamp Kole (formerly V.F.L.)	Station re-established 12-23-38												
57B-E	Opid's Camp	.37	.07	15.48	4.55	2.68	3.90	.88	.18	0	0	0	8.76	36.87
58	Sturtevant Camp	.79	.20	14.71	5.48	2.30	3.38	.97	.18	0	0	0	6.35	34.36
60A	Hoagee's Camp	.49	.12	12.90	5.28	3.14	4.31	1.00	.17	0	0	0	11.26	38.67
63B-E	Santa Anita Dam	.49	.04	8.80	4.10	1.77	3.18	.69	.24	0	0	T	7.28	26.59
64	Clark's Half Way House	.44	.04	7.87*	3.98	1.95	3.08	.47	.25	0	0	0	3.70"	21.78*
65	Sierra Madre - Hersey	.29	.05	8.42	4.37	1.76	2.36	.43	.24	0	0	0	6.62	24.54
66	Sierra Madre - Pegler Ranch	.20	.04	8.50	4.11	1.85	2.15	.30	.12'	0	0	0	5.74	23.01
67B	Monrovia - City Hall	.30	.08	7.84	4.25	1.61	1.89	.37	.10	0	0	T	5.35	21.79
68B	Sawpit Dam	.51	.03	8.48	4.78	1.85	3.04	.57	.31	0	0	0	6.43	26.00
69	Sawpit Canyon	.92	.08	9.69	5.28	2.33	3.52	.92	.41	0	0	0	8.75	31.90
70-E	Dalton #1	.48	.04	7.88	4.18	1.91	2.36	.88	.18	0	0	0	5.94	23.85
73	Glendora - Engle Wild	.35	.09	7.39	3.71	2.12	2.40	.75	.09	0	0	0	4.65	21.55
76	San Gabriel Forks	.59	0	9.98	4.44	1.99	3.67	1.19"	Station Discontinued					21.86"
76B	San Gabriel Dam #1 Camp	.60	.03	9.93	4.17	1.97	3.79	1.19	.50	0	0	0	6.01	28.19
78B	Coldbrook Ranger Station	.38	0	Station Discontinued										Inc.
80	Prairie Forks	.33	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	Station	Discontinued			Inc.
82	Table Mountain	.36	.01	3.74	2.66	1.09	1.14	1.24	.54	0	T	.01	5.04	15.83
83-E	Big Pines Camp	.65	T	8.17	3.78	2.06	2.37	2.55	.66	0	0	T	5.72	25.96
85D	Camp Baldy - Ranger Station	.59	0	10.81	4.00	2.39	3.07	1.95	.42	0	0	0	11.24	34.47
87	San Dimas Ranger Station	.41	.02	8.36	4.03	2.25	2.82	.72	.01	0	0	0	7.53	26.15
89-E	San Dimas Dam	.44	.06	5.89	3.46	2.25	2.15	.68	0	0	0	0	5.31	20.44
90	Brydon Ranch	.47	T	7.75	3.87	2.14	2.77	.77	.05	0	0	0	6.34	24.16
91	Claremont - Indian Hill	.21	.04	6.83	3.14	2.11	2.27	.86	.07	0	0	0	5.23	20.76
92	Pomona College	.21	.06	6.44	3.29	1.88	1.58	.60	.05	0	T	0	5.06	19.17
93	Claremont - Fire Station	.17	.04	7.13	3.09	1.87	2.26	.57	.01	0	0	0	4.69	19.83
94	Charter Oak - Fields	.11	0	6.76	3.32	1.92	2.73	.60	0	0	0	0	4.99	20.43
95	San Dimas - Fire Warden	.20	.06	7.00	2.84	1.88	1.82	.58	.02	0	0	0	3.95	18.35
96-E	Puddingstone Dam	.26	.05	6.88	3.09	1.89	1.54	.51	.03	0	0	0	4.14	18.39
97	San Dimas-Ferguson	.20	.0	7.20	2.80	1.62	2.16	.61	0	0	0	0	3.05	17.64
98	Azusa - Hibsch	.20	.08	7.25	3.51	1.64	2.32	.64	0	0	0	0	4.93	20.57
99	Azusa - Foothill Ranch	.13	.08	7.52	3.65	1.68	2.05	.60	0	0	0	0	5.05	20.76
100	Fish Canyon	.57	.12	9.38	4.67	3.30	2.97	.93	.38	0	0	0	6.50	28.82
101	Hurst Ranch - Covina	.08	.04	8.28	2.64	1.85	1.65	.70	0	0	0	0	4.72	19.96
102	Howell Ranch - Walnut	.05	0	7.68	2.98	2.18	1.70	.50	0	0	0	0	6.58	21.67
104	No. Whittier - Cole Ranch	0	.04'	7.18	3.14	1.56	1.83	.52	.15	0	0	0	5.79	20.21
105	Ea. Whittier - Sharpless	0	0	6.16	2.85	1.73	1.76	.34	0	0	0	0	5.65	18.49
106	Whittier - City Hall	T	T	5.89	2.50	1.32	1.57	.35	.05	0	0	T	5.05	16.73
107B	Downey - Fire Station	T	.03	6.70	2.83	1.73	1.14	.27	0	0	0	0	5.99	18.69
108B	El Monte - Fire Station	.06	.02	5.98	2.64	1.47	1.41	.40	.05	0	0	0	4.81	16.84
109	West Arcadia	.02	.02	7.63	4.43	1.61	1.60	.58	.09	0	0	0	5.42	21.40
110	Alhambra	.05	T	9.90	3.97	1.55	1.22	.37	.11	0	0	0	5.38	22.55
111	So. Pasadena	.02	T	8.07	4.01	1.29	1.06	.34	.08	0	T	0	5.40	20.27
114	Gardena - Rosecrans	0	0	5.90	3.02	1.61	.95	0	0	0	0	0	5.61	17.09
116A	Inglewood High School	.06	0	5.62	2.08	1.64	1.00	.21	.10	0	T	T	5.32	16.03
116B	Inglewood Fire Station	Station 116A moved to "B" location 4-22-39												
117C	Compton	T	T	6.22	2.93	1.63	1.01	.17	0	0	0	0	6.43	18.39
117B'	Compton Fire Station	Station 117C moved to "B"' location 1-27-39												
117D	Compton Junior College	N.I.	N.I.	N.I.	1.81"	1.61	.94"	.19	T	0	T	0	6.41	Inc.
118B	Wilmington	.01	.03	6.18	2.52	2.30	.78	.26	.11	0	0	0	4.71	16.90
119	Soldiers Home - Sawtelle	.02	0	6.99	3.46	1.28	1.15	.23	.06	0	0	T	4.90	18.09
120	Vincent Patrol Station	T	0	4.92	1.62	.34	1.79	.45	.23	0	0	.02	2.38	11.75
121	Lancaster	T	0	4.17	1.55	.20	1.39	.20'	.35'	0	0	.03	1.42	9.31
122	Rouff Ranch	.60	0	6.87	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	3.19	Inc.
123	Eli Munz Ranch	.06'	T'	7.69	4.29	.60	2.98	.52'	.29'	0	T'	.13'	2.84	19.40
124B	Bouquet Canyon	.16	.02	6.92	3.30	1.09	2.34	.29	.13	0	0	T	3.18	17.43
125	Power House #1	.24	.03	8.11	3.89	1.77	2.55	.57	.25	0	T	0	3.03	19.44
126	Venice - City Hall	0	0	6.40	3.15	1.58	.96	.24	0	0	0	0	4.51	16.84
127	Dry Canyon Reservoir	.07	T	7.26	2.04	1.21	1.54	.27	.18	0	0	0	3.68	16.25
128-E	Radium Hot Springs	.12	0	7.57	4.92	1.85	3.24	.47	.63	0	0	0	3.27	22.07
130A	Sandberg	.28	0	8.27	3.31	.85	3.34	.72	.56	0	0	.01	3.62	20.96
130B	Sandberg Co. Guard Station	Station 130A moved to "B" location 12-1-38												
134	San Dimas - Stevens	.45	.11	7.53	2.99	1.43	2.20	.53	0	0	0	0	3.75	18.99
135	Norwalk	0	0	7.27	3.28	1.46	1.51	.36	0	0	0	0	5.50	19.38
136B	Hollywood	T	0	7.36	3.11	1.64	1.19	.20	.07	0	0	0	5.20	18.77
137B	Curson Canyon	.03	0	7.93	3.63	1.42	1.35	.19	.09	0	T	T	5.30	19.94
139	L.A.W.D., 2-nd & Hill Sts., L.A.	0	0	7.24	2.88	1.01	1.47	.21	.04	0	0	0	5.05	17.90
F.C.	751 So. Figueros St., L.A.	.01	T	7.10	3.19	1.19	1.70	.18	.07	T	T	T	4.73	18.17
140	Sawtelle - W. L.A.	.03	0	6.58	3.40	1.35	1.16	.25	.06	0	0	T	4.74	17.57
143	Azusa - City Hall	.21	.13	7.23	3.56	1.63	2.22	.75	.09	0	0	T	4.96	20.78
144	Sierra Madre Dam	.36	.02	8.79	4.10	1.88	2.73	.48	.27	0	0	0	6.41	25.04
150	Monrovia Falls	.48	.11	9.33	4.96	2.33	3.53	.81	.38	0	0	0	7.89	29.82
155B	Little Rock Creek	T	0	4.49	1.92	.75	1.40	.42	.26	0	0	.06	3.72	13.02
156	La Mirada	0	0	6.29	2.89	1.52	1.15	.29	.09	0	0	0	5.12	17.35
157-E	El Segundo	.06	0	5.69	2.88	1.63	.57	.23	.17	0	0	0	4.53	15.76
158	Tanbark Flats	.38	.05	9.04	4.83	1.96	4.29	1.04	.18	0	T	0	5.68	27.45
164	Monrovia - O'Connor	.25	.06	7.93	4.33	1.61	2.05	.39	.14	0	0	0	6.06	22.82
167	Arcadia Pump Plant	.26	.03	8.06	4.24	1.48	1.89	.44	.13	0	T	0	5.82	22.35
168	San Gabriel - Watts	.08	.02	8.59	3.83	1.29	1.28	.43	.02	0	0	0	4.54	20.08
169	Sierra Madre - Hogan	.24	.03	8.20	3.93	1.54	2.08	.46	.14	0	0	0	5.34	21.96
170	Potrero Heights	0	.06	7.40	2.90	1.24	1.45	.55	.15	0	0	T	5.57	19.32
171	Chapman Wells	.02	0	8.33	4.21	1.50	1.70	.52	.36	0	0	0	5.68	22.32
174	Glendora - Warren	.32	.11	7.30	3.12	2.09	2.09	.73	.07	0	0	0	4.86	20.69
175A	Alta Canyada	.26	T	N.R.	N.R.	Inc.	2.83	.31	.22	0	T	0	6.85	Inc.
175B	Alta Canyada	Station 175A moved to "B" location 2-9-39												
176	Altadena - Rubio L. & W. Co.	.17	.03	10.67	3.80	1.22	1.70	.45	.32	0	0	0	6.73	25.09
177	La Canyada	.10	T	9.20	4.05	1.41	2.06	.62	.15	0	0	0	6.82	24.41
178	Azusa - Griffith	.15	.06	6.60	2.80	1.53	1.76	.63	0	0	0	0	4.71	18.24
179	Sierra Madre - Carter	.36	.01	8.56	4.24	1.74	2.57	.43	.28	0	0	0	6.18	24.37
182	Baldwin Park - Leach	.03	.06	7.41	2.81	1.46	1.67	.62	.01	0	0	0	4.74	18.81
185	Glendora - West	.29	0	6.97	3.48	1.90	2.05	.66	.03	0	0	0	5.43	20.81
187	San Dimas - Mount	.20	.05	7.05	3.11	Station discontinued								Inc.
188	San Dimas - Howard	.26	.07	6.42	2.76	1.55	2.18	.60	.03'	0	0	0	3.57	17.44
189	San Dimas - Harris	.23	.02	7.20	3.12	1.89	2.16	.54	0	0	0	0	4.25	19.41
192B	Bell - Fire Department	T	.02	6.05	2.85	1.92	1.10	.29	.01	0	T	T	5.23	17.47
193	Covina - Temple	.08	.08	7.25	2.96	1.87	1.73	.55	T	0	0	0	5.12	19.64
196	La Verne - Leader	.10	.02	7.10	3.26	2.00	1.75	.24'	0	0	0	0	3.75	18.22
198	Brand Estate	.04	0	6.90	3.04	1.09	1.67	.24	.11	.01	0	0	4.48	17.58
199B	Huntington Park	0	.01	6.69	3.13	1.45	1.06	.18	0	0	0	0	4.94	17.46
200	Saugus-S.C.E.Co.	.04	.01	7.43	2.35	.86	1.06	.26	.03	0	0	T	3.03	15.07
201	Puente Hills	.08	.06	6.20	2.87	1.50	1.99	.39	.13	0	0	0	3.56	16.78
205	Puente - S.C.E.Co.	.04	.03	6.40	2.89	1.52	1.62	.54	.03	0	0	0	4.52	17.59
206	Valencia Heights	0	0	6.36	2.74	1.53	1.60	.60	0	0	0	0	4.89	17.72
208	Artesia - Barr Lumber Co.	0	0	7.00	2.56	1.42	.96	.26	T	0	0	0	5.17	17.37
209	Big Tujunga - Edison Patrol Sta.	.11	.02	10.70	3.38	1.18	2.97	.57	.33	0	0	.01'	5.53	24.80
210B	Brand Park	.12	.01	8.86	3.72	1.56	2.23	.31	.14	.01'	0	T	5.53	22.49
213	Hancock Park	T	0	6.52	3.02	1.23	1.23	.17	.06	0	T	T	5.02	17.25
216	Glendale - Jones	.01	T	8.29	3.84	1.08	1.08	.23	.09	T	0	T	5.52	20.14

NOTE: Amounts shown are in inches depth of Rainfall.

TABLE V. 1938-39 (Continued)

Sta. No.	Station	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Season Total
217	Watts	0	0	6.61	2 47	1.54	1.10	.17	.02	0	0	0	6.32	18.23
218	Torrance - General Petrol.	.11	0	5.53	2 88	1.97	.84	.30	T	0	0	0	6.43	18.06
219	Pacoima Whse. County F.S.	.19	0	9.24	2.95	1.05	1.38	.26	.17	0	0	0	3.44	18.68
220	Whittier Narrows	0	.04	6.38	2.58	1.32	1.44	.40	.16	0	0	0	5.57	17.89
221B	Kiener Ranch	N.R.	N.R	9.48	N.R.	N.R.	N.R.	N.R.	N.R.	0	0	0	3.22	Inc.
222	Lankershim Power Plant	.02	0	7.78	3.07	.73	1.14	.25	.10	0	0	0	4.46	17.55
223B-E	Big Dalton Dam	.61	.03	7.95	4.02	2.18	2.95	1.12	.12	0	T	T	5.89	24.87
224	Long Beach-Los Alamitos Land Co.	.01	.01	5.42	2.33	2.13	.78	.24	.10	0	0	0	4.66	15.68
225	Montana Ranch	T	0	6.15	2.94	1.78	.83	.23	.04	0	T	T	6.69	18.66
226	Burbank	.04	0	8.70	3.47	1.10	1.84	.25	.05	0	T	0	4.82	20.27
227B	San Gabriel - Gleason	.08	0	8.79	3.99	1.27	1.19	.45	.03	0	0	0	5.00	20.80
228B	Beverly Hills - City Hall	T	0	7.64	3.57	1.30	1.06	.18	.08	0	0	T	5.69	19.52
230C	Live Oak Canyon - Elder	.25	.08	7.15	3.01	2 12	2.45	.57	.11	0	0	0	4.32	20.06
233	Covina - Matthews	.17	.07	6.58	3.10	1.93	1.77	.56	.04	0	0	0	4.95	19.17
234	Covina - Thorpe	.08'	.02	6.39	2.85	1.27*	1.83*	.47'	T'	0	0	0	4.95	17.86
235A	Henninger Flats	.39	.09	10.97	4.31	1.81	2.99	.73	.43	T	T	0	8.72	30.44
235B	Henninger Flats	Station 235A moved to "B" location 1-2-39												
236	Ford - Craig Ranch	.27	0	10.45	3.18	1.41	1.79	.18	.15'	0	0	0	3.33	20.76
237	Stone Canyon Dam	0	0	9.23	4.31	1.15	1.44	.20	.30	0	0	0	5.00	21.63
238	Hollywood Dam	0	0	7.80	3.40	1.20	1.13	.19	.09	0	0	0	4.44	18.25
240	Little Tujunga	.34	0	8.53	3.21	1.50	3.55	.25	.15	0	0	0	4.12	21.65
241	Long Beach	T	.01	5.24	2.12	1.98	.63	.22	.07	0	T	T	3.84	14.11
242	La Verne - Hathaway	T	0	6.82	3.28	1.63	1.87	.24	0	0	0	0	3.98	17.82
246B	Culver City	0	.02	5.74	2.49	1.21	1.15	.19	T	0	0	0	3.82	14.62
247	Rivera	0	0	5.81	2.57	1.37	1.22	.25	T	0	T	T	5.00	16.22
248-E	West Saddle Peak	.11	.02	9.46	3.88	1.86	1.65	.65	.04	0	0	0	7.69	25.36
249	Mint Canyon - Oaks Garage	.20	0	6.93	1.93	1.29	1.75	.30	.28	0	0	0	2.58	15.26
250B	Acton	T	0	5.61	1.84	.47	1.40	.61	.28	0	0	0	3.04	13.25
251	La Cresenta	.32	.01	9.90	4.46	1.30	3.02	.49	.20	0	0	0	6.69	26.39
252B	Castaic	.02	T	6.76	2.87	1.62*	.90	.26'	.03'	0	0	0	N.R.	12.46"
253	Western Ave., Tank	T	0	7.31	2.54	1.75	1.51	.20	.10	0	0	0	6.05	19.46
254	Rowlands Ranch	T	0	7.14	2.92	1.26	1.76	.58	.12	0	0	0	5.35	19.13
255	State Narcotic Hospital	.11	.09	6.77	2.65	1.53	1.66	.64	0	0	0	0	4.97	18.36
256	Pomona - S.P.R.R.	0	.10	7.99	2.64	1.60	2.08	.40	0	0	0	0	4.75	19.56
257	Griffith Park - Nursery	T	0	7.76	3.56	.94	1.44	.19	.07	0	T	0	4.90	18.86
258a	Griffith Park - Tunnel	0	0	8.82	3.75	1.10	1.67	.34	.05	0	0	0	5.20	20.93
258b	Griffith Park - So. Slope	0	0	8.00	3.55	1.75	1.62	.30	.08	0	0	0	5.40	20.70
258c	Griffith Park - No. Slope	0	0	9.36	4.16	1.72	1.92	.42	.09	0	0	0	5.60	23.27
259B	Chatsworth Co. F.S. - Twin Lakes.	.08	.02	7.97	3.63	1.92	1.25	.30	.14	0	0	0	3.31	18.62
261-E	Acton - Mellen	.10	0	6.17	1.68	.84	1.72	.37	.27	0	0	T	3.09	14.24
263B	Pomona - Frater	.07	.05	8.28	2.70	1.73	2.00	.48	T	0	0	.05	4.26	19.62
		Station 263A moved to "B" location 10-1-38												
264	Sand Canyon - Riley	0	0	12.53	2.25	2.79	1.72	0	.31	0	0	0	4.70	24.30
265B-E	Puente Hills (La Habra Heights)	.08	.07	6.95	2.86	1.58	1.82	.41	.09	0	0	0	5.52	19.38
265C-E	Puente Hills (La Habra Heights)	Station 265B-E moved to "C" location 5-31-39												
266	E.Whittier-Leffingwell Ranch	T	.01	5.69	2.89	1.58	1.81	.40	0	0	0	0	5.83	18.21
268-E	Torrance - S.C.E.Co.	.04	T	5.71	2.53	1.63	.75	.23	.04	0	0	0	2.46	13.39
269A	Diamond Bar Ranch #1	.07	.06	6.80	3.21	1.61	2.04	.49	0	0	0	0	5.94	20.22
269B	Diamond Bar Ranch-Horse Camp	.05	0	6.66	2.91	1.81	2.01	.50	0	0	0	0	6.92	20.86
270	County Farm	0	.02	6.02	2.55	1.52	1.04	.28	0	0	0	0	5.82	17.25
271	Dominguez Hills	0	0	5.87	2.31	1.57	.90	.20'	.03'	0	0	0	5.31	16.19
272	Headworks Plant	0	0	8.99	3.86	1.06	1.85	.26	0	0	0	0	4.31	20.83
273	San Pedro Hills	.13	0	6.35	3.76	1.41	1.12	.36	.20	0	0	0	4.12	17.45
274	Acton - Hubbard	.10	0	5.10	1.75	.99	2.06	.47	.17	0	0	.07	3.26	13.97
275	San Marino	0	0	10.24	4.49	1.62	1.19	.37	.02	0	0	0	5.80	23.73
277	Sawmill Mt. Ranch	.23	.02	9.59	5.01	.88	3.92	.21	.42	0	0	.20	3.60	24.08
278B	Clark Memorial Library	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	.20'	0	0	0	0	4.98	Inc.
279B	Kinnelona Ranch	.25'	0	10.33	4.02	1.60	2.46	.46*	.33	0	0	0	6.99	26.44
280	Flintridge Fire Station	.09	0	9.31	4.10	1.22	2.03	.29	.14	0	0	0	6.83	24.01
283a	Crystal Lake - East	.90	0	14.13	4.03	2.52	4.58	2.63	.16	0	0	0	11.14	40.09
283b	Crystal Lake - West	.86	0	12.92	3.63	2.14	3.80	2.18	.08	0	0	0	9.92	35.53
284	Placerita Canyon	.15	0	15.20	3.85	1.85	2.05	.25	0'	0	0	0	4.00	27.35
285B	Mt. St. Mary's College	0	0	8.38	3.67	1.91	1.59	.24	0	0	0	0	5.20	20.99
285C	Mt. St. Mary's College	Station 285B moved to "C" location 9-5-39												
287	Glendora - Irrigation Co.	.16	.07	6.95	3.20	1.79	1.92	.69	.02	0	0	0	5.09	19.89
289	Laguna Bell	T'	.02'	5.52	2.67	1.31	1.13	.26	0	0	0	0	4.97	15.88
290	Newmark	.03'	.02'	6.90	3.03	1.28	1.29	.35	.09	0	0	0	5.80	18.79
291	96-th St. & Central Ave	T'	.02'	6.49	2.91	1.60	1.12	.10	0	0	0	0	6.25	18.49
292-E	Encino Reservoir	.06	0	9.82	3.59	1.07	1.25	.26	.11	.02	0	.01	5.46	21.65
293	Lower San Fernando Reservoir	.13	0	9.03	3.61	1.33	1.51	.33	.06	0	0	0	2.93	18.93
294	Mira Monte Reservoir	.25	.03	8.80	4.27	1.73	2.52	.39	.23	0	0	0	5.92	24.14
295D	Glendale - Taylor	.01	.01	8.07	3.79	.98	1.83	.25	.09	T	0	T	5.45	20.48
295F	Glendale - Kennedy	.0		Station 295D moved to "F" location 10-12-38										
298	Gorman	.15	0	7.79	2.34	.21	.14	.60	.06	0	0	.10	3.16	14.55
299C	Calivalli Farms	T	0	3.66	1.45	.20	1.29	.24	.40	0	T	.22	2.64	10.10
300B	Garrapata Canyon	.07	.01	9.61	4.96	1.21	1.76	.32	.06	0	0	0	8.91	21.91
303B	Cal. Tech.	.03	T	10.97	4.39	1.58	1.34	.37	.02'	0	0	0	6.67	25.37
304	Deer Park	1.13	.09	10.82	4.96	2.39	4.24	1.08	.65	0	0	0	11.64	37.00
305	Mason Estate (Arroyo Sequis)	.19	.07	7.94	3.75	2.13	2.06	.64	.10	T	T	T	6.38	23.26
306A	Trancas Canyon at Highway	N.R.	N.R.	N.I.	N.I.	N.I.	2.06	.30	.05	0	0	0	4.90	Inc.
306B	Trancas Canyon	Sta. "A" re-established 3-9-39. Sta. "B" discontinued 11-28-38.												
307	Snow Crest Camp	N.I.	N.I.	N.I.	N.I.	N.I.	1.62	2.21	.45'	0	0	0	13.25	Inc.
		Station 307 re-established 3-7-39.												

Sta. No.	Station	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Season Total
308	Kelly's Kamp	.60	0	16.30	8.93	4.21	3.69	2.73	.50'	0	0	0	16.75	53.71
309	Padua Hills	.29	T	8.05	3.68	2 24	2.74	.63	0	0	0	0	5.74	23.37
311a	Pasadena - Sunset Reservoir	.05	T	8.88	4.23	1.17	1.39	.35	.34	0	0	0	6.31*	22.72
		Station 311a discontinued 9-25-39.												
311b	Pasadena - Meteorological Sta.	.05	T	8.87	4.16	1.17	1.46	.36	.35	0	0	0	6.26	22.68
		Station 311b established 10-5-38.												
312	Glendora Irrig. Co., Azusa Plt.	.30	.12	7.50	3.90	1.56	2.13	.69	.11	0	0	0	5.34	21.65
314	San Dimas Water Co., S.D. Plant	.45	.08	7.21	2.91	1.70	2.14	.52	.03	0	0	T	3.68	18.72
315	Glendora Irrig. Co., H.C.Warren	.37	.13	7.69	3.59	1.83	2.39	.73	.05	0	0	0	5.35	22.13
317	Big Pines - Sawmill Flat #2	.32	T	8.65	4.18	1.95	2.53	1.96	.70	0	0	T	7.79	28.08
318	Big Pines - Jackson Lake	.26	T	10.26	3.31	1.92	2.39	2.08	1.14	0	0	0	4.21	25.57
319	Big Pines - Apple Tree Flat	.51	T	10.40	3.35	1.85	2.58	2.32	1.00	0	0	0	4.79	26.80
320A	Sycamore Canyon - Chevy Chase	.03	T	8.66	4.05	1.13	1.81	.31	.05	0	0	0	7.08	23.12
321-E	Pine Canyon Patrol	.06	T	8.00	3.81	1.16	2.65	.52	.29	0	0	T	.13	3.68	20.30
322	E. S. Munz Ranch	0	0	5.78	2.78	.30	1.15	.21	.10	0	0	T	2.18	12.50
326B	Santa Ynez Canyon	N.I.	N.I.	N.I.	N.I.	N.I.	1.84*	.24	.11	0	0	0	5.71	Inc.
		Sta. 326A discontinued due to fire. Reestab. at "B" location 3-9-39.												
334-E	San Gabriel Dam #2	.32	T	13.66	4.13	2.05	3.28	1.00	.17	0	T	0	9.98	34.59
336	Silver Lake Reservoir	0	0	7.86	3.43	1.20	1.18	.18	.07	0	0	0	4.80	18.72
338	Mt. Wilson - Standard Gage	.39	T	15.23	4.33	2.92	3.79	1.05	.11	0	T	T	11.78	39.60
338	Mt. Wilson - Automatic Gage	.44	T	15.23	4.33	2.92	3.62	1.04	.11	0	T	T	12.08	39.77
338	Mt. Wilson - Marvin Gage	.41	T	14.03	3.62	1.88	3.20	1.06	.10	0	T'	T'	N.R.	24.30"
339	Walnut - Fruit Growers Ass'n.	.08	.05	7.12	3.17	1.68	1.86	.57	0	0	0	.02	7.06	21.61
341	Blum Ranch	T	0	5.69	1.55	.50	1.23	.35	.14	0	0	0	2.46	11.92
342	Upland	.25	0	7.83	3.38	2.61	2.61	.93	.13	0	0	0	4.74	22.48
343	Telegraph Road	T	0	5.71	2.72	1.62	.73	.28	.01	0	0	T	4.99	16.06
346	Downey #2 "Live Wire"	0	.03	6.70	2.57	1.65	1.01	.31	0	0	0	0	5.68	17.95
347-E	Baldwin Park Exp. Station	.06	.04	7.49	2.91	1.61	1.70	.65	.02	0	0	0	5.02	19.50
348C	Honor Camp #4	.33	0	8.68	3.74	1.97	3.35	1.05	.05'	0	0	0	5.84	25.01
349B	Camp Rincon	.50	0	10.85	4.34	2.12	2.96	1.38	.21	0	0	0	5.69	28.05
351D-E	Palmdale	0	0	4.76	1.65	.78	1.71	.22	.38	0	0	.04	1.89	11.43
352	Lechuza Patrol Station	.16	.10	8.03	4.02	2.28	2.18	.72	.13	0	0	0	7.91	25.53
353	Duarte - Monrovia Citrus Ass'n.	.22	0	8.56	3.83	1.41	2.21	.40	.09'	0	0	0	5.19	21.91
354B	Honor Camp #6	.42	.02	11.30	4.00	2.51	2.90	1.81	.23	0	0	T	10.48	33.67
355	L. A. Junior College	.02	T	7.94	3.21	1.06	1.47	.17	.20	0	T	T	5.27	19.34
356	Diamond Bar Rch. #2 - Spadra	.03	.06	7.07	2.55	1.49	1.88	.49	0	0	0	0	5.60	19.17
357	Power House #3	.15	0	10.99	4.11	1.54	2.00	.40	.06	0	0	0	3.03	22.28
358B	Aldrich Ranch	0	0	5.93	1.97	.48	1.48	.67	.40'	0	0	0	5.91	16.84
360A	Haines Canyon - Gravel Pit	.23	.02	9.78	3.42	1.04	3.09	.30	.21	0	T	T'	4.56	22.65
360B	Haines Debris Basin	Station 360A moved to "B" location 7-31-39.												
362	El Mirador Ranch	.04	0	9.13	4.25	1.18	1.66	.27	.15	0	0	0	5.84	22.52
364	Lower Haines Canyon (U.S.G.S.)	.29	.02	10.78	4.21	1.44	3.64	.35	.23	0	T	T	6.76	27.72
366	Valyermo	0	0	5.34	1.51	.32	1.65	.59	0	0	0	0	3.47	12.88
367	Haines Canyon - Upper	.45	.02	11.12	5.34	1.52	4.09	.49	.28	0	T	T	8.40	31.71
372	San Francisquito Power Hse. #2	.06	T	7.07	2.98	1.26	1.74	.26	.35	0	0	0	3.56	17.28
373	Briggs Terrace (Pickens Canyon)	.60	.02	10.54	4.62	1.51	3.02	.43	.24	0	0	0	7.42	28.40
375	Griffith Park Zoo	.06	0	9.11	4.18	1.43	1.83	.52	.10'	0	0	0	6.20	23.43
376	Little Rock - Juniper Hills	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	T	1.41	Inc.
377	Lake Sherwood Estates	Station discontinued.												
378	La Canyada - Hall	.15	0	10.37	4.16	1.44	2.21	.34	.23	0	0	0	7.14	26.04
379A	San Gabriel - East Fork	.46	.04	9.37	3.94	2.21	3.39	1.44	.22	0	0	0	5.24	26.31
379B	San Gabriel - East Fork	Station 379A moved to "B" location 11-10-38.												
380	El Sereno	0	0	7.00	3.43	1.12	1.21	.26	.12	0	0	0	5.39	18.53
381B	Santa Monica - "Outlook"	.03	0	6.38	3.57	1.25	1.23	.30	.07	0	0	.01	4.11	16.95
382B	Marks Pasture - Puente Hills	Station discontinued.												
384B	San Rafael Hills - Laverty	.02	T	8.47	4.20	1.33	1.32	.27	.16	.01	0	0	6.86	22.64
385	No. Whittier Heights - Smith	0	.04	7.13	2.93	1.72	1.67	.39	.14	0	0	T	6.35	20.37
386B	Dume Canyon - Oakley	.25	.10	7.86	4.86	1.67	2.17	2.42	.30	0	0	0	8.75	28.38
387	Covina - City Water Co.	.06	.08	6.88	2.90	1.58	1.67	.46	.01'	T	T	0	4.68	18.30
388	Hynes - Hayden	0	0	5.82	2.83	1.54	1.08	.25	.09	0	0	0	6.68	18.09
389	Glendora - Brown	.35	.10	7.66	3.56	1.90	2.37	.79	.04	0	T	T	5.18	21.95
390B	Morris Dam	.68	.05	8.97	4.42	2.19	3.09	.98	.33	0	0	0	6.25	26.96
391	Montebello - Cotton	0	0	5.69	2.44	1.40	1.61	.51	.06	0	0	0	4.50	16.21
392B	Altadena - Barton	.23	.02	10.60	3.85	1.34	2.12	.47	.32	.01	T	0	6.84	25.80
394	Highland Park - Lindsay	.02	0	7.14	3.96	1.40	1.10	.30	.10	0	0	T	5.83	19.85
395	Olive View Sanatorium	.29	0	11.94	3.96	1.58	1.88	.21	.11	0	0	0	3.33	23.30
396	Oneota Ranch-San Fernando	.08	0	10.05	2.98	1.17	1.25	.22	.09'	0	0	0	2.08	17.92
397	Begue Ranch - Tujunga	.20'	.01'	10.50	4.00	1.19	3.20	.29	.20	0	0	0	6.11	25.70
398A	Trails Inn - Ice House Canyon	N.I.	N.I.	N.I.	N.I.	N.I.	1.17	*2.86	.03	0	0	0	15.01	Inc.
398B	Trails Inn - Ice House Canyon	Sta. 398A reëstablished at "B" location 3-7-39.												
400	Pasadena-Washington & Palm Terr.	.06	.01	10.51	4.09	1.26	1.51	.41	.40	0	0	0	6.42	24.67
401	Verdugo Mountain	0	0	8.54	3.44	1.26	2.00	.37	.28	0	0	0	5.46	21.35
402B	State Prison Camp #35 - Chilao	.42	0	11.95	2.95	2.09	2.07	.93	.47	0	T	0	7.87	28.75
403	Altadena - Lindvall	.23	.04	10.18	3.77	1.45	2.21	.61	.34	0	0	0	7.50	26.33
404	Glendale - Opid	.02	T	8.38	3.70	.96	1.71	.22	.05	0	0	0	4.94	19.98
405	Soledad Canyon - Nelsmn	.17	0	7.42	1.96	.51	2.00	.31	.57	0	0	0	3.10	16.04
406	West Azusa	.09	.07	7.35	2.90	1.27	1.74	.65	.02	0	0	0	4.86	18.95
407	Newhall - U.S.F.S.	.05	T	11.93	3.92	1.23	1.87	T	0	0	0	0	3.70	22.70
408	Soledad Canyon - Mitchell	T	0	11.81	2.89	.88	1.85	.20	.14	0	0	0	3.93	21.70
409	Ridge Route - New - State Road	.12	0	7.20	2.32	1.85*	2.88*	.51	0	0	0	0	3.53	18.41
410C	New Ridge Route-Old Edison Hse.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	3.60	Inc.
		Station 410C established 9-14-39												
411	Rivera - Pico - Robinson	.03	.02	6.68	2.71	1.45	1.42	.35	.07	0	0	0	4.73	17.46
412	Pasadena - Ohio & Euclid	.02	T	9.15	4.16	1.51	1.13	.41	.18	0	0	0	5.55	22.11
415	Signal Hill - City Hall - L.B.	0	.03	4.89	2.41	1.72	.54	.25	.08	0	0	0	5.93	15.85

TABLE V. 1938-39 (Continued)

Sta. No.	Station	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Season Total
416	Altadena - Ventura St.	.11	.02	9.27	3.66	1.33	1.95	.44	.25	0	0	0	6.27	23.30
417	Lamanda Park - Webber	.10	0	10.59	4.47	1.54	1.61	.53	.26	0	0	0	6.95	26.05
418	Pickens Canyon - U.S.F.S. Plots	.58	.02	10.84	4.19	1.38	3.44	.67	.24	0	T	T	8.56	29.92
419	Santa Clara Ridge - Mt. Gleason	.59	.12	10.57	3.87	2.65	1.82	1.36	.22	0	0	0	5.60	26.80
420	Acton - Modie Ranch	.20'	.04'	5.78	1.71	.61	1.34	.51	.14	0	0	0	3.03	13.36
421	Mouth of Lopez Canyon	.22	0	9.42	2.92	.83	1.34	.24	.15	0	0	0	3.19	18.31
422	Pacoima Canyon	.35	0	10.28	3.91	3.24	3.27	1.52	.18'	0	0	0	6.30	29.05
423	Wagon Wheel Ranch - Aliso Cn.	.25	0	8.69	2.46	2.18	2.37	2.43	.12	T	0	.10	6.32	24.92
425	San Gabriel Dam #1	.73	.04	10.14	4.43	2.54	4.01	.99	.43	0	0	T	6.10	29.41
427	Downey - Jordon	T	T	6.06	2.70	1.56	1.18	.33	.06	0	0	0	5.19	17.08
428	Mouth of Eaton Canyon	.25	.03	9.90	3.69	1.34	2.16	.54	.29	0	0	0	7.25	25.45
429	Red Box - Angeles Crest Hwy.	.34	.05	14.24	3.10	.76	5.21*	.31	.08	0	0	0	11.20	35.29
430	Saugus - State Road Maint.	.03	T	8.85	2.64	.88	2.21	.25	T	0	0	0	2.95	17.81
431	Baldwin Hills	0	0	6.45	2.89	1.35	1.41	.17	.08	0	0	0	5.79	18.12
432	Santa Anita - Fern Lodge	.41	.06	10.51	4.54	2.23	3.34	.82	.15	0	0	0	8.71	30.77
433	Altadena - Co. Forestry Park	.21	.01	10.70	3.43	1.27	2.12	.59*	.36*	.03'	0	0	7.04	25.76
434	Malibu Hdqts. - L.A. Co. F.S.	.10	0	8.35	2.96	1.18	2.34	.90	.02	0	0	0	5.38	21.23
					Station 434 established 10-6-38.									
435	Monte Nido Canyon	.09	.01	9.58	4.09	1.66	1.66	.62	.01	0	0	0	7.73	25.45
					Station 435 established 10-6-38.									
436	Hansen Dam	.18'	0	7.94	2.78	.94	1.54*	.26'	.09	0	0	0	Inc.	13.73"
					Station 436 established 10-19-38.									
437	Hamilton Bowl - L. B.	0	.02	4.82	2.22	1.59	.64	.27	.09	0	0	0	4.53	14.18
438	Encino - Quirello	N.I.	N.I.	N.I.	N.I.	N.I.	1.57	.24	.08	0	T	T	3.98	Inc.
					Station 438 established 3-9-39.									
439	Charlton Flats (U.S.F.S.)	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	0	11.17	Inc.
					Station 439 established 8-2-39.									
440	Chilao U.S.F.S. Guard Station	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	0	7.81	Inc.
					Station 440 established 8-2-39.									
441-E	Palmdale - County Road Maint.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	1.88	Inc.
					Station 441-E established 8-22-39.									
442	Mescal Creek	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	2.34	2.45	Inc.
					Station 442 established 8-22-39.									
443	Junc. Mulholland & Latigo Cn. Rds.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	T	7.26	Inc.
					Station 443 established 8-23-39.									
444	Rolling Hills - Palos Verdes	N.I.	N.I.	N.I.	N.I.	N.I.	N.1.	N.I.	N.I.	N.I.	N.I.	0	5.87	Inc.
					Station 444 established 8-24-39.									
445	Live Oak Dam - Larry	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	0	3.09	Inc.
					Station 445 established 8-29-39.									
446	Aliso Canyon-Santa Susana Mts.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	3.53	Inc.
					Station 446 established 8-30-39.									
447	Las Flores Cn.-Santa Monica Mts.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	5.17	Inc.
					Station 447 established 8-31-39.									
449	Eaton Dam	.23'	.04'	8.83	3.69	1.34	1.60	.40	.22	T	0	0	6.67	23.02
					Station 449 established 12-1-37.									
508B	Arroyo Seco Ranger Station	.19	T	9.23	3.54	1.55	2.50	.42	.25	0	T	0	6.96	24.64
577	L.A. U.S.W.B.	.01	T	7.26	2.96	1.13	1.44	.24	.02	T	T	.01	5.67	18.74
589	Mountain Springs	.42	.05	7.68	3.11	2.01	2.37	.83	.04	0	T	0	4.75	21.26
593B	Newhall Ranch - Piru	.02	T	6.79	3.04	1.23	1.44	.43	.10	0	0	0	2.23	15.28
594	Newhall - S.P.R.R.	.02	T	10.26	3.18	.99	1.91	.21	.04	0	0	0	3.46	20.07
610A	Pasadena - Jones	.06#	0#	11.18	4.06	1.25	1.68	.41	.40#	0	0	0	6.20	25.24
610B	Pasadena - City Hall	.05	.01	9.95	4.48	1.33	1.38	.39	.24	0	0	0	5.88	23.71
612	Arroyo Seco - Chlorine Plant	.17	.01	8.83	3.66	1.52	2.47	.42	.27	0	0	0	6.90	24.25
613B	Pasadena - Hurlbut Fire Station	N.I.	N.I.	N.I.	N.I.	1.41	1.16	.38	.16	.02	0	0	6.13	Inc.
					Station 613B established 1-27-39.									
618	Santa Susana	0	0	5.66	2.44	1.46	1.39	.40	0	0	0	0	2.65	14.00
656B	Sunland - Keim	.14	0	8.11	3.00	1.20	3.00	.30'	.26	0	0	0	4.63	20.64
					Station 656B re-established 10-1-38.									
676	L.A. - West 80-th St.	T	T	6.19	2.96	1.75	1.07	.19	T	0	T	T	6.44	18.60
677	Pasadena - Hayes	.03	0	9.07	4.05	1.20	1.96	.40	.26	0	0	0	6.47	23.44
678	Pasadena - Sheldon Reservoir	.04	.01	8.67	3.80	1.25	1.87	.38	.42	0	0	0	6.45	22.89
679	No. Whittier Hts.- Citrus Assn.	.04	.04	6.64	2.90	1.69	1.54	.31	.13	0	0	0	5.49	18.78
680	U.C.L.A.	.01	T	7.51	3.64	1.41	1.04	.24	.07	0	T	0	4.76	18.68
681	Santa Anita Ranger Station	.27	0	8.65	4.45	1.63	2.42	.40	.21	0	T	0	6.05	24.08
682	Gould - S.C.E. Sub Station	.27	0	10.08	3.87	1.35	2.65	.36	.28	0	0	0	7.22	26.08
683	Sunset Ranger Sta. - U.S.F.S.	N.I.	N.I.	N.I.	N.I.	Inc.	2.80	.50*	.49	0	0	T	7.49	Inc.
					Station 683 established 2-10-39.									
684	Arcadia Warehouse - U.S.F.S.	.26'	.03'	7.90	4.15	1.56	1.67	.46	.02	0	T	T	5.26	21.31
					Station 684 established 12-1-38.									
686	Big Dalton Spreading Ground	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	5.16	Inc.
					Station 686 established 9-1-39.									
687A	Eaton Canyon - Upper	.35	0	9.65	4.60	2.20	3.60	.50	.25	0	0	0	10.90	32.05
687B	Eaton Canyon - Upper				Station 687A moved to "B" location 5-1-39.									
689B	San Marino - Cooper	0	0	10.97	4.33	1.27	1.30	.36'	.05	.11	0	0	5.44	23.83
690	San Antonio-U.S.F.S. Guard Sta.	.50	0	8.35'	3.86	3.43	3.30	.92	.10	0	0	T	8.57	29.03
691	San Antonio-Spreading Grounds	.25'	T'	7.25	3.38	1.82	2.53	.70	.06	0	0	0	5.19	21.18
					Station 691 established 12-1-38.									
X-3	Rustic Canyon Fire Area	0'	0'	8.47	4.32	1.38	1.52	.33	.17	0	0	0	5.30	21.49
					Station X-3 established 12-2-38.									
X-3B	Ristic & Sullivan Cns. Fire Area	0'	0'	7.91	3.76	1.21	1.58	.39	.19	0	0	0	8.04	23.08
					Station X-3B established 12-2-38.									
X-3C	Pacific Palisades Fire Area	0'	0'	7.97	4.64	1.44	1.09	.38	.06	0	0	0	4.80	20.38
					Station X-3C established 12-2-38.									

NOTE: Amounts shown are in inches depth of Rainfall.

LEGEND.

Partly Estimated	*
Estimated from nearby Station	'
Incomplete Record	"
Estimated by Pasadena Water Dept.	#
Not Installed	N.I.
No Record	N.R.
Automatic Record	a

TABLE VI

RAINGAGE STATION LOCATIONS

Sta. No.	Type Gage	Quad. Index	Elev. USGS	Observer	Location
2	S	22-25	1025	H. A. Gibson	Upper Escondido Canyon
3	S	34-09	875	V. M. Ward	La Sierra Canyon at Cornell
4	Sp	22-70	600	J. Roldan	Malibu Creek, S. W. of Calabasas
5A	Sp	33-54	950	Tom Farmer	In Calabasas, So. Side Blvd.
5B		33-64	924	Tom Farmer	In Calabasas, El Canon Ave.
6	SA	24-01	747	E. C. Roth	0.4 mi. S. side of Topanga Bridge
7C	S	24-55	90*	Henry Jenks	Bel Air Bay Club - Roosevelt Hwy.
8	Sp	25-03	470	M. D. Gardner	Rear of Admin. Bldg., Mandeville Canyon
9	Scw	48-37	815	Robert Larson	8535 Sepulveda Blvd.
10	SA	25-51	540*	O. F. Bell	Bel Air Admin. Bldg.
11A	ScwA	37-88	867	W. H. Wood	Upper Franklin Cn. Reservoir-S. end
11B		37-97	870	Fred Gertsch	Upper Franklin Cn. Reservoir-N. end
12	S	37-86	1175	City employees	Mulholland Hwy., at Franklin Canyon
13	S	38-34	593	Katie Blix	10834 E. Blix St., North Hollywood
14	Scw	49-46	1000	E. S. Merrill	Near Mouth of La Tuna Canyon
15	ScwA	37-41	695	Frank Carr	Aetna & Vesper Sts., Van Nuys
16C	S	37-35	900	Monroe Goldstein	15023 Encanto Drive, Sherman Oaks
17	S	37-07	1400	City employees	Sepulveda Canyon at Mulholland Hwy.
18	S	36-73	815*	E. M. Sherman	Adohr Dairy, Ventura Blvd.
19	S	35-96	1520	R. L. Scott	Summit - Topanga Canyon Road
20	S	35-93	892*	Allen Shaw	S.E. cornor Ventura & Topanga Canyon Roads
21	S	36-02	876*	Carl Wyninger	Canoga Road - North of Ventura Blvd.
22	SA	46-58	930	Paul Johnson	S.W. of Stagg & Cohasset Sts., Bell Canyon
23-E	Scw	46-87	865	R. R. Melrose	East end Chatsworth Reservoir
24B	S	46-94	965*	E. L. Johnson	E. of Vassar-S. of Devonshire Sts., Chatsworth
24C		46-94	965		70 ft. North of Garage on ground
25B	Sp	47-47	797	Jack Andrews	19055 W. Parthenia St., Northridge
27	S	48-64	944	W. D. Miller	14163 Van Nuys Blvd.
28	S	48-32	950*	D. Hanneman	San Fernando Lemon Ass'n. Packing House
29B	S	47-81	1130	City employees	Granada Pump Plant
30	Scw	59-28	1250*	W. C. Simonds	Sylmar Olive Packing Plant
32	S	58-61	1245	Milan A. Priest	Inland Hwy., 1/4 mile N. of Newhall
33A'-E	SA	60-07	1500	R. E. Waddicor	Caretaker's new house below Pacoima Dam
38	S	49-34	1060	Sam Chappell	10100 Helen St., Roscoe
39A	S	50-19	1650	F. C. Employees	Rear of house, 0.7 mile above Club in Sunset Canyon
39B	S	50-19	1610	F. C. Employees	Sunset Dam, Burbank
42	S	7-15	50*	City Clerk	Roof of City Hall, Redondo
43A	Sp	2-10	300*	G. B. Snelgrove	75 Malaga Cove Plaza, Palos Verdes Estates
43B	Sp	2-10	450	Gomer Sims	Golf Club - Palos Verdes Estates
44	Sp 3"	1-85	125	A. Trittinger	Near Point Vincente Light House
46B-E	S	51-01	2050	D. J. Robertson	Big Tujunga Canyon, below dam
47A	SA	51-22	3100	Mrs. H. H. Rogers	1.6 mile up Clear Creek, from Big Tujunga
48	S	51-15	1800	J. R. Phillips	Oak Wild Resort - Arroyo Seco
49	Sp	40-50	1345	Geo. S. Chiesa	165 E. Foothill Blvd., Altadena
50B	S	40-10	1155	H. J. Durand	352 Foothill Blvd., Flintridge
51	S	65-69	4650	Frank M. Headlee	1 mile North of Coldbrook Camp
52	SA	51-44	3000	J. A. Percell	Switzer's Camp
53A	SA	62-89	3500	Edward Emerick	Sleepy Hollow Rch., Coldwater Canyon, 1 mile S. of Junction, Big Tujunga Creek
53B	Swb	62-89	3150	Joe Argay	1/2 mile N. of "A", Coldwater Canyon
54	SwbA	63-55	4050	Mrs. L. G. Loomis	Near Junc. N. & Middle Forks Alder Creek
56	S	52-24	3400	Long Beach Y.M.C.A.	West Fork San Gabriel River
56	S	52-24	3400	Employees	Kamp Kole (Formerly Valley Forge Lodge)
57B-E	SwbA	52-04	4350	Mrs. E. T. Opid	West Fork San Gabriel River
58	S	52-67	3375	F.C. Thomas and Tex Strange	Upper Big Santa Anita Canyon
60A	SA	52-69	2750	Joe E. Clark	W. Fork Santa Anita Canyon called Winter Creek at Hoegee's Camp
63B-E	S	41-81	1400	Joseph Propst	Caretaker's house, Santa Anita Dam
64	S	41-71	1600	Joe E. Clark	Clark's Half Way House on old Sturtevant Trail
65	SwbA	41-42	1160	Mrs. Laura Hersey	575 N. Hermosa Ave., Sierra Madre
66	S	41-54	665	C. J. Pegler	415 E. Live Oak Ave., Sierra Madre
67B	Sp 3"	41-95	560*	G. H. Duell	Roof - City Hall, Monrovia
68B	S	42-12	1378	F. C. Employees	Sawpit Dam
69	S	42-31	2000	F. C. Employees	Upper Sawpit Canyon
70-E	SA	42-93	800	Roger Dalton	Mouth of San Gabriel River
73	S	43-54	1200	Mrs. J. P. Englehart	Mouth of Engle Wild Canyon
76	S	54-57	1600	Albert E. Marshall	W. Side San Gab. Forks, U.S. Guard Station
76B	S	54-57	1500	Ted Cooper	San Gabriel Dam, # 1 Camp
78B	S	54-60	3250	Mrs. R. F. Hill	North Fork San Gabriel
80	S	67-05	5680	Gus Wissendorff	2 miles E. of Vincent Gulch - Junction
82	S	67-11	7500	Freeman & Greeley	Top of Table Mountain
83-E	SA	67-02	6860	Leslie E. Mac Donald	Big Pines County Park
85D	SwbA	56-46	4300	R. N. Tunstall	Camp Baldy U. S. Guard Station
87	S	44-33	1500	Johnson & Winters	San Dimas Canyon at W. Fork
89-E	S	44-24	1350	G. W. Rodgers	San Dimas Canyon below Dam at Caretaker's house
90	S	44-44	1680	R. S. Bryden	N. end Wheeler - La Verne Road
91	S	44-87	1405	W. White	Indian Hill Road, N. of Base Line
92	SA	32-90	1190	Dr. W. T. Whitney	Pomona College Observatory
93	S	32-80	1165	Harvey Case	N. side 2-nd St., bet. Harvard & Yale Sts.
94	S	31-60	805	Will G. Fields	Covina Blvd. at P.E.R.R. crossing, Charter Oaks
95	S	43-99	960	Samuel L. Trout	114 E. First St., San Dimas
96-E	S	31-90	1030	F. A. Pollard	Knoll above caretaker's house Puddingstone Dam
97	S	44-08	1000	Mrs. C. Ferguson	N. side Junita, E. of Walnut, San Dimas
98	Swb	42-96	602	John Hibsch	325 Foothill Blvd., Azusa
99	S	43-06	615	Charles Stewart	Foothill Blvd., S. Side, 2 miles W. of Citrus
100	Swb	42-73	1050	August Bohm	Above U.S.G.S. Gaging Station, Fish Canyon
101	S	30-53	358	Hurst Bros.	S. Cornor Orange & Merced Ave., Covina
102	S	31-29	475	C. Cullum	1 mile W. of Walnut P.O., S. of R.R. tracks
104	Sp	30-09	600	Bert Priest	S. end of 7-th Ave., North Whittier Heights
105	S	16-64	215	Peter E. Sharpless	1226 Laurel Ave., Whittier
106	S	16-61	365*	E. W. Henryman	City Hall Roof, N. W. Cornor Greenleaf
107B	S	15-65	118	T. C. Loggins	224 W. 2-nd St., Downey Fire Station
108B	SA	29-62	285*	Martin Sorensen	126 S. Tyler St., El Monte Fire Station
109	S	41-37	490	Mamie L. Picard	2307 Naomi Drive, Arcadia
110	S	28-70	485*	J. W. Clay	N.W. cor. 2-nd & Main, Rear of City Hall Alhambra
111	Sp	40-48	660*	Norval B. Krug	N.W. Cor. Mound & Mission, City Hall, So. Pasadena
114	S	14-09	64	C. E. Rosecrans	S.E. Cor. Vermont & Rosecrans Blvds.
116A	Sp	13-43	117*	Geo. Green	Inglewood City Hall
116B	Sp	13-43	125*	Eugene D. Wells	111 E. Queen St., Inglewood Fire Station
117C	S	8-90	67	Geo. H. Nye	320 So. Poinsettia Ave., Compton
117B'	S	8-70	68	Edward Dowd	Fire Station - Compton
117D	GGG	8-70	68	P. Bousman	Compton Junior College
118B	S	3-41	40	E. A. Bishop	1251 Banning Blvd., Wilmington
119	S	25-44	335*	L. P. Emerick	National Military Home, Sawtelle
120	S	74-70	3250	J. B. Sigrist	1533 Sierra Hwy., Vincent
121	S	112-79	2350	R. E. Lofinck	Union High School, Lancaster
122	S	98-29	3200	Mrs. Cy Cooke	Bouquet Canyon Road, 1/2 mile South of Elizabeth Canyon Road
123	Sp	96-73	3250	Eli Munz	Between Elizabeth & Hughes Lakes
124B	Acw	84-31	3000	R. W. Mathews	Bouquet Cn. W. of Orchard & Reservoir Yard
125	Scw	83-40	2100	Station Operator	Power Plant #1, Upper San Francisquito
126	S	12-41	7*	A. S. Ede	Venice City Yards
127	Scw	70-71	1507	Jim Ray	Dry Canyon Reservoir
128-E	S	95-49	2041	Louis G. Klein	Elizabeth Lake Canyon at Radium Hot Springs
130A	S	106-95	4200	A. R. Grant	Old Ridge Route - Sandberg
130B	S	106-85	4025	J. L. Ozanne	Quail Lake County Patrol Station
134	S	44-07	1110	A. L. Stevens	1/2 mile N. of Foothill Blvd., San Dimas
135	S	10-30	83	C. S. Hargitt	1/4 mile N. of Center St., 1/5 mile W. of Bloomfield
136B	S	26-70	305*	H. P. Larson	6225 Santa Monica Blvd
137B	S	38-48	1125	F.C. Employee	East side Curson Canyon
139	Scw	27-54	300*	D. A. Lane	S.E. cor. 2-nd & Hill Sts., roof L.A.W.D.
F.C.-B	S	27-33	262*	F. C. Employee	751 So. Figueroa St., L. A.
140	S	25-55	232*	W. B. Scott	Rear - 1620 S. Purdue
143	S	42-96	607	Paul E. Smith	City Hall Park Azusa
144	S	41-52	1100	Al Freeland	Foot of Sierra Madre Dam
150	SA	42-11	1650	F. C. Employees	Monrovia Canyon Falls
155B	S	87-79	2900	Gene Breslin	Little Rock Creek, 1.5 miles below Dam
156	Sp 3"	10-81	90	Standard Oil Employee	Center St. & Lemont Ave., La Mirada

* #7C is 10 ft. above ground. #10 is 12 ft. above. #18 is 12 ft above. #20 is 10 ft above. #21 is 15 ft above. #24B is 10 ft above. #28 is 10 ft above. #30 is 20 ft above. #42 is 30 ft above. #43A is 20 ft above. #67B is 40 ft above ground.

* #106 is 15 ft. above ground. #108B is 16 ft. above. #110 is 15 ft. above. #111 is 30 ft. above. #116A is 15 ft. above. #116B is 12 ft. above. #119 is 12 ft. above. #126 is 10 ft. above. #136B is 20 ft. above. #139 is 85 ft. above. Flood Control - B is 75 ft. above. #140 is 20 ft. above ground.

TABLE VI (Continued)

Sta. No.	Type Gage	Quad. Index	Elev. USGS	Observer	Location
157-E	Sp	12-88	135	E. R. Tyler	Standard Oil Refinery, El Segundo
158	Sp A	55-49	2700	U.S.F.S. Employee	W. Fork San Dimas Canyon, Tanbark Flats
158	Sp Ap	55-49	2700	U.S.F.S. Employee	Automatic Gage at Laboratory, Tanbark Flats
164	Sp 3"	41-93	690	Charles J. O'Connor	432 N. Primrose, Monrovia
167	Sp	41-64	611	Scott M. Lee	Arcadia Pump Plant., 89 Orange Grove Ave.
168	S	41-09	433*	Richard Watts	309 E. Live Oak Ave., San Gabriel
169	Sp	41-63	700	Jos. P. Hogan	Sierra Madre Pump Plant, 621 Sierra Madre Ave.
170	S	29-15	320	J. A. Reifer, Jr.	3623 Delta St., San Gabriel
171	S	41-35	635	W. E. Comerford	S. Michillinda Ave., Near Colorado Blvd.
174	Sp	43-86	965	C. G. Warren	Old Foothill - 2.75 miles E. of Glendora
175A	CGG	50-87	1915	K. L. Williams	5268 Linda Vista Drive, Alta Canyada
175B	CGG	50-87	2020	W. N. Carpenter	N.W.cor. Alta Canyada & Del Oro Drive
176	Sp	40-61	1125	J. H. Parsons	575 Sacramento St., Altadena
177	S	51-09	1275	Mrs. S. T. Chisam	4620 Commonwealth Ave., La Canyada
178	A	43-09	545*	E. B. Griffith	Bonita St. between Azusa and Citrus Ave.
179	Swb	41-42	1110	Arthur N. Carter	N. of upper end Baldwin Ave., Sierra Madre
182	Sp	30-41	378	S. Howard Leach	334 N. Maine St., Baldwin Park
185	S	43-46	822	L. M. West	460 E. Bennett St., Glendora
187	S	43-99	960	W. E. Mount	167 N. San Dimas Ave., San Dimas
188	S	44-07	1075	Mrs. Emma A. Howard	828 E. Baseline Ave., San Dimas
189	Sp	43-98	1000	J. R. Harris	112 W. 6-th St., San Dimas
192B	S	15-12	145	J. F. Salvail	6320 Pine St., Bell
193	S	31-21	575	W. B. Temple	748 Puente St., Covina
196	Sp 3"	44-39	1054*	Alice C. Mc Clellan	2152 Third St., La Verne
198	SpDial	39-21	815	F. W. Pomeroy	Brand Residence, Ext.of Grand View Ave., Glendale
199B	S	14-81	175*	W. E. Ford	City Yard, Slauson & Miles, Huntington Park
200	Sp 3"	70-27	1093	W. H. Roberts	2.5 miles W. of Saugus Ridge Route
200	S	70-27	1093		50 ft. W. of 3" at S.C.E.Co. sub-station
201	S	17-00	860	Mrs. Blanche Lowery	Alta Mira Orchard, 1 mile N. E. Summit Turnbull Canyon Road
205	Sp	30-79	374	G. C. Hoisington	S.C.E.Co. Sub.Sta. 1.5 miles E. of Puente
206	S	30-94	467	P. R. Jackson	2024 Azusa Ave., Valencia Heights
208	Sp 5"	10-14	49	W. S. Russell	Barr Lumber Co., 1804 Pioneer St., Artesia
209	S	62-49	2600	F. C. Employee	Big Tujunga at Lucas Creek Edison Patrol Sta.
210B	SA	39-21	1250	F. C. Employee	S.W.Slope, 200 ft. above Tank, Brand Park
213	SA	26-43	177	F. C. Employee	La Brea Fossil Pits, 5801 Wilshire Blvd., L.A.
216	Swb	39-43	620	J. E. Jones	318 E. Randolph St., Glendale
217	Sp 3"	14-75	110	J. S. Carver & Students	2265 E. 103 St., Watts
218	S	7-54	75	Marion E. Dice	2 mi. N.W.of Torrance, Gen'l.Petroleum Corpn.
219	S	48-94	955	R. N. Skaggs	12605 Osborne Ave., Pacoima
220	S	29-28	195	D. M. Cate	547 Friendship Ave., Near Montebello
221B	S	59-99	1375	L. Grossnickle	Caretaker's house, Kiener Rch., Pacoima Wash
222	Scw	38-10	732	Station Operator	11845 Vose St., No. Hollywood Generating Plant
223B-E	S	43-83	1575	Paul Keiser	S.of Caretaker's house below Big Dalton Dam
224	S	4-03	30*	W. N. Beach	Bldg. W.of 22 Pacific Ave., Long Beach
225	Sp 3"	9-85	47	J. F. Anthony	Montana Rch., 3 miles S.W. of Artesia
226	S	38-91	650*	F. Olchvary	125 E. 3-rd St., Burbank Fire Station
227B	S	40-99	487	Geo. B. Gleason	424 N. Milton Ave., San Gabriel
228B	Ap	26-02	255*	C. Valle Riestra	City Hall Roof, Beverly Hills
230C	Swb	44-68	1255	C. S. Elder	4055 N. San Antonio Ave.,6 mi.N.Foothill Blvd.
233	S	31-11	527	J. L. Matthews	161 Nevilla Place, Covina
234	S	31-23	630	Ben F. Thorpe	N.side Cameron Ave.,2 mi. E. of Barranca St.
235A	Sp A	41-10	2560	E. L. Lioret	Henninger Flats, Forestry Nursery, Mt. Wilson
235B			2550		Henninger Flats, 200 ft. S. of "A" (Toll Road)
236	S	59-88	1455	V. H. Craig	Craig Ranch, San Fernando
237	Scw	37-49	725	H. L. Murrietta	Stone Canyon Dam
238	Scw	38-68	750	C. J. Chewings	Hollywood Dam
240	S	60-67	1700	F. J. Wright	4.3 mi.up Little Tujunga Cn., Fr.Foothill Blvd.
241	Sp	4-03	30*	C. Bower	City Hall, Long Beach, 1/4 mi. from Ocean
242	Sp 3"	32-20	1036	W. O. Hathaway	P.E.R.R. Station, La Verne
246B	S	26-18	65*	Bus Depot Employee	Cor. Jefferson & Duquesne Sts., Culver City
247	S	15-93	151	J. B. Robinson	233 Burke St., Rivera
248-E	S	23-12	890	Ralph Ziehlke	W. Slope Saddle Peak, above Crater Camp
249	S	84-48	2400	W. A. Dadrill	Mint Canyon Rd. - The Oaks Garage
250B	S	73-85	2555	Joe Schadler	Soledad Canyon - 2 miles West of Acton
251	S	50-57	1565	H. A. Scheuner	2908 Foothill Blvd., La Crescenta
252A	S	69-80	1156*	W. H. Callie	Castaic - W. side Old Ridge Route
252B	S	69-80	1156	Ernest J. Clark	Castaic - 100 ft. North of "A"

* #168 is 6 ft. above ground. #178 is 8 ft. above. #196 is 10 ft. above. #199B is 10 ft. above. #224 is 50 ft. above. #226 is 15 ft. above. #228B is 30 ft. above. #241 is 30 ft. above. #246B is 10 ft. above. #252A is 10 ft above ground.

Sta. No.	Type Gage	Quad. Index	Elev. USGS	Observer	Location
253	S	13-95	235	Mrs. R. R. Bohmer	Western Ave., Tank L.A.W.D.
254	S	17-50	466	D. F. Ferrero	Ext.Grazide Rd. & S. of Rowland Rch. House
255	S	31-55	770	L. P. Groff	State Narcotic Hospital, Near Spadra
256	Sp 3"	32-44	862*	Station Operator	S.P.R.R. Depot, Pomona
256	S	32-44	862*		F.C. Standard Installed 9-13-39
257	SA	39-17	750	J. Kladler	Griffith Pk.Nursery, 2650 N.Commonwealth Ave.
258a	CGG	38-97	1100	Louis Strauss	W. of Tunnel, Pt. of Ridge, Griffith Park
258b	CGG	39-07	1400	Louis Strauss	S. Slope, Mt. Hollywood, Griffith Park
258c	CGG	39-06	1600	Louis Strauss	N. Slope Mt. Hollywood, Griffith Park
259B	SA	46-92	1249	Geo. M. Guthbert	21880 Mayan Dr., Co.Forestry Sta., Twin Lakes Pk.
261-E	SA	73-30	3075	H. F. Mellan	Escondido Cn., N. Branch, Near Acton
263B	S	32-56	793	Milton Frater	895 Philadelphia St., Pomona
264	S	59-92	1900	H. Riley	Sand Canyon - Coyote Canyon Branch
265B-E	S	17-74	725	P. J. Weisel, Jr.	Anaheim Rd.,1-mi.N.Whittier Blvd,Puente Hills
265C-E	S	17-74	675		300 ft. S. W. of "B"
266	Sp	17-06	253	J. F. Harris	Leffingwell Rch.-1/2 mi. S.of Whittier Blvd.
268-E	Sp	7-94	57	Sta. Operator	190-th & Western Ave., S.C.E.Co. Sub Station
269A	S	18-53	710*	F. E. Lewis	Diamond Bar Ranch #1, Brea Canyon Road
269B	Sp	18-62	760	Bert Walker	Diamond Bar Ranch, Horse Camp
270	S	15-46	104	Clyde Morrow	County Farm, 741 Old River School Road
271	S	8-63	195	James L. Nash	Dominguez Hill, S. side of Reservoir
272	S	38-94	473	W. A. Herring	W. of N.entrance Griffith Pk., Near L.A River
273	Sp 5"	2-12	1235	W. W. Mc Carrell	Top of San Pedro Hills, W. end
273	S	2-12	1235		F.C. Standard Installed 8-24-39
274	Sp	85-68	3250	Mrs. A. S. Hubbard	Mint Canyon Road, just East of Summit
275	Sp 3"	40-87	670	G. L. Brown	Huntington Estates, San Marino
277	S	108-17	3700	Clarence Scates	Sawmill Mt.Rch., 8.9-mi. N.W. of Lake Hughes
278B	S	26-86	203*	H. M. Hughes	2205 W. Adams, L.A.
279B	Sp	41-21	1500	Rose M. Lockhart	Kinnelon Rch., E. Side Eaton Wash.
280	SA	40-01	1325	Station Employees	1028 Inverness Dr., Flintridge Fire Station
283a	ScoA	65-57	5740	F. Driscoll and	Crystal Lake Co.Park.- East Pine Flat
283b	Sco	65-58	5370	F. Richards	Crystal Lake Co.Park - West Pine Flat
284	Sp	59-22	1480	John Wood	Dulin Ranch - Placerita Canyon
285B	S	25-11	1015	Sister Gertrude Joseph	Mt.St.Mary's College, Ridge between Bocume & Canyon West
285C	S	25-11	1025	Martin Bullinger	Rear of Caretaker's House
287	Sp	43-36	782*	H. C. Warren	234 N. Michigan Ave., Glendora
289	Aco	15-52	140	L.A.Co. Surveyors	0.1 mi. W. of Compton & Aboneria Road, 0.2 mi. N. of Baker Ave.
290	Aco	28-75	375	L.A.Co. Surveyors	La Merced Hills-Garfield Ave.at S.C.E.Co.Sta.
291	Aco	14-45	121	L.A.Co. Surveyors	96-th st., & Central Ave., L. A.
292-E	Scw	36-85	1000	John H. Cowen	Crest of Encino Dam- 1 mi. S.W. of Encino
293	Scw	48-11	1150	F. Ortiz	800 ft. N. of W.end Lower San Fernando Dam
294	Sp	41-53	985	Al Freeland	Mira Monte Ave. at Pump Plant near foot of Mt. Wilson Trail
295D	S	39-34	526	Mrs. A. W. Taylor	448 W. Pioneer Drive, Glendale
295F	S	39-34	530	Morris Kennedy	415 W. Lexington Ave., Glendale
298	S	105-40	3830	J. L. Ralphs	Gorman, Ridge Route, N.W. Cornor L.A. County.
299C	S	88-26	2835	Mrs. Lena Schwab	1-mile W. of Pear Blossom, 1-mile N. of Victorville Highway
300B	Sp 3"	36-18	990*	R. L. Peeler	1/2 mi. N.E.of Topanga Cn.Rd.in Garrapata Cn.
303B	SA	40-76	763	Students	Cal.Tech. Campus E. of Admin. Bldg.
304	S	42-30	2700	F. C. Employee	Deer Park, 1-1/2 mi. up from Sawpit Dam
305	S	21-01	1155	R. L. Mason	East Fork Arroyo Sequis, South of Road
306B	S	21-55	310	Wm. Steeb	2.8 miles up Trancas Canyon
306A	S	21-56	15	Mrs. May Bozeman	Roosevelt Hwy. at Trancas Canyon
307	Sp	56-73	6500	Samuel Mac Intyre	Snow Crest Camp, Rear of Tavern
308	Sp	56-96	8300	H. S. Delker	Kelly's Kamp- 1-1/4 mi. N.E. of Ontario Pk.
309	Sp	45-05	1768	Kenneth B. Forbes	1-1/2 mi. N. of Baseline Rd., 300 ft. East of Monte Vista Ave.
311a	S	40-43	930	H. Sievert	Sunset Reservoir, Manzanita St., Pasadena
311b	SpAp	40-43	918	H. Sievert	1083 Mentone St., Pasadena
312	Sp	42-85	675	Fred F. Kammerdiener	1-mi.N.W.Azusa, 0.4mi.W.of W.end Sierra Madre Av
314	Sp	44-07	1064	F. L. Brockhan	N.E. Cor. Foothill & Artesia Ave., 0.3 mile W. of Puddingstone Diversion
315	Sp	43-15	865	J. M. Boggeman	300 ft. W. of Ben Lomand Ave.on Sierra Madre Av.
317	Sco	67-12	6750	L. Mac Donald	0.6 mile S.E. of Main Road near Swartout Valley Park Entrance
318	Sco	66-70	6075	Leonard M. Luglan	So. edge Jackson Lake
319	Sco	66-81	5900	Leonard M. Luglan	Big Pines Pk., Apple Tree Flat
320A	CGG	39-93	900	G. W. Burroughs	2816 E. Chevy Chase Blvd.
320A	S	39-93	900		F.C. Standard Installed 3-2-39
321-E	S	96-72	3400	Co. Forestry Employees	Co.Guard Sta., bet.Elizabeth & Hughee Lakes
322	CGG	110-48	2600	Eric Munz	Lancaster-Bailey Rd.,14-mi.W.of Lancaster
326B	S	24-43	500	W. W. Culp	2-mi.in Santa Ynez Cn.from Beverly Blvd.

* #256 is 12 ft. above ground. #269A is 10 ft above. #278B is 8 ft. above. #287 is 15 ft. above. #300B is 5 ft. above ground.

TABLE VI (Continued)

Sta. No.	Type Gage	Quad. Index	Elev. USGS	Observer	Location
334-E	SA	53-35	2335	F. C. Employee	San Gabriel Dam #2, W.Fork, San Gabriel River
336	Scw	39-39	455	Caretaker	Silver Lake Reservoir, Los Angeles
338	Swb	52-47	5650*	J. O. Hickox	50 ft. S. of 60 inch Telescope, Mt. Wilson
338	A	52-47	5650*		50 ft. S. of 60 inch Telescope, Mt. Wilson
338	Awb	52-47	5638*		Marvin Gage on Roof of Office, Mt. Wilson
339	Sp	51-49	533	Operator	1/2 mi.S.E.of Walnut, S. side U.P.R.R. Tracks
341	S	74-43	2900	Geo. J. Blum	Aliso Canyon - E. of Acton
342	S	45-17	1550	L. Wood	1544 N. Benson Ave., Upland
343	Sp	16-04	141	F. C. Collins	439 E. Telegraph Rd., Rivera
346	GG Spl	15-65	119*	Mrs. K. C. Weiss	241 N. Downey Ave., Downey
347-E	S	30-30	387	Various	Scott Pl,One Blk. W.of Maine St.,Baldwin Pk.
348C	SA	55-36	2000	G. H. Mc Kelvey	0.6 mile N.N.E. of Camp Bonita, E. Fork San Gabriel River
349B	S	54-46	1530	Mrs. C. M. Schmidt	Camp Rincon,1.3 mi.W.of Fks.San Gabriel River
351D-E	Swb	86-82	2648	H. P. Schoeller	Palmdale, One Blk. E. of Main Highway
352	SA	21-21	1530	L. Cesena	4 mi. from Roosevelt Hwy.,on Decker Road
353	Sp	42-26	458	R. T. Chew	Duarte Rd.at Buena Vista St., Duarte
354B	S	56-27	4527	M. M. Smith	Divide between Cow and San Antonio Canyons, 1-1/4 miles S.W. of Camp Baldy
355	S	27-01	315*	Frank S. Trueblood	855 N. Vermont Ave., L.A.
356	Sp A	31-86	675*	W. P. Collins	Spadra Office Diamond Bar Ranch, 0.5 mile S.E. of Pomona Blvd.
357	Scw	59-08	1248	Operator	Power Hse. #3,N.of Upper San Fernando Res.
358B	S	77-16	4050	A. P. Aldrich	Pallett Cr. 2-1/2 mi.N.W. of Devil's Punch Bowl
360A	S	50-23	2150	F. C. Employee	Haines Canyon at Rock Crusher Plant
360B	GG Spl H	50-23	2196		Haines Canyon at Debris Basin on 7-31-39
362	Sp	40-23	1025	J. D. Hoffman	W. end of Mirador Drive, Pasadena
364	Swb	50-23	2250	F. C. Employee	50 ft. E. of U.S.G.S. Gaging Sta.,Haines Cr.
366	S	77-45	3740	L. F. Noble	1/2 mi.N.W. Valyermo,1/2 mi.S.of Big Rock Cr.Rd.
367	Swb A	50-42	3450	F. C. Employee	At Upper Fork near Head of Haines Canyon
372	Scw	82-76	1580	Operator	San Francisquito Cn. 11 miles N.E. of Saugus
373	SA	50-76	2310	L. R. Bleitz	Briggs Terrace, Pickens Canyon
375	S	39-16	575	B. C. Gibson	Griffith Park Zoo, Los Angeles
376	S	76-50	3150	S. K. Chacksfield	Little Rock, Juniper Hills
377C	Sp	V-Co.	1050	H. J. Kircher	N.W. edge of Lake Sherwood-Ventura County
378	Sp 3"	51-09	1350	C. J. Skow	4874 Commonwealth Ave., La Canada
379A	S	54-86	1500	F. C. Employee	2 mi. above confluence E.& W.Fks.San Gab.River
379B	S	54-96	1600		2.7 mi. Above confluence E.& W.Fks. San Gab.River
380	SA	28-11	553	Geo. P. Morgan	4566 Bedilliou St., Los Angeles
381B	S	25-08	100*	Paul F. Knief	1245 4-th St., Santa Monica
382B	Sp	30-09	600	W. S. Marks	3 mi. W. of 7-th Ave., on Ext. of Orange Grove, No. Whittier Heights
384B	S	40-26	825	F. B. Laverty	502 Lake View Road, Pasadena
385	Sp 3"	30-19	500	J. A. Smith	1058 Los Robles Ave., No. Whittier Heights
386B	Sp 3"	21-71	1500	R. H. Oakley	Dume Canyon, just N.W. of Vera Canyon
387	Sp	31-11	545*	H. H. Snodgrass	125 E. College St., Covina
388	S	9-41	72	Bob Kamp	347 So. Paramount Blvd., Hynes
389	Sp	43-35	825	Frank H. Brown	Rear of Rch.at Intersection of Penn and Sierra Madre Aves., Glendora
390B	Sp	43-21	1210	Pasadena Water Dept.	Morris Dam, San Gabriel Canyon
391	Sp	29-08	205	Mrs. Zola Cotton	117 W. Washington Ave., Montebello
392B	Sp	40-71	1335	C. W. Barton	1330 Hull Lane, Altadena
394	S	40-28	680	Robert H. Lindsay	6425 Elsin St., Los Angeles.
395	S	59-57	1425	R. N. Loomis	Olive View Sanitarium, San Fernando
396	Sp	48-63	1005	W. H. Bowlus, Jr.	13781 Payton Ave., San Fernando
397	Sp	50-25	1835	Philip Begue	9743 Tujunga Canyon Road at Summit
398A	Sp	56-85	6200	Mrs. J. H. Warner	1-1/2 mi.E.of Ice House Resort,in Ice Hse.Cn.
398B	Sp		6250	C. H. Plank	300 ft. E. of "A" location
400	Sp	40-63	1010	H. J. Sievert	Washington & Palm Terrace, Pasadena
401	S	50-29	2825	R. C. Bodine	Oakmont Firetruck trail, Verdugo Mt.
402B	SA	64-05	5585	H. J. Childers	State Prison Camp #35,1-1/2 mi.N.E.of Chilao
403	Sp	40-90	1360	F. C. Lindvall	1860 Allen Drive, Altadena
404	GGG	39-54	653	John Opid	811 N. Glendale Ave., Glendale
405	S	73-06	2250	James E. Nelson	11.7 mi. E.of Mint Canyon on Soledad Cn.Road
406	S	42-88	505	Geo. E. Love	624 W. Broadway, W. Azusa
407	S	58-82	1325	Ray Mc Cormick	17700 San Fernando Road, 1 mile S.E. of Newhall U.S.F.S.
408	S	71-58	1472	J. Mitchell	.4 mi. S. of Soledad Canyon Road, 1.2 mi. W. of Junction of Sand & Soledad Canyons
409	S	93-12	2425	Rex C. Farmer	18 miles N. of Castaic Jct.,New Ridge Route
410C	S	81-13	2380	E. E. Blohm	7 miles N. of Castaic Jct., at Old Edison House, New Ridge
411	Sp	16-10	173	V. M. Robinson	345 S. Passons Blvd.,1/2 mi.S.of Whittier Blvd.
412	Sp	40-57	755	H. J. Sievert	W.of Euclid Ave.,200 ft.N.of Glenarm,Pasadena
415	SA	4-30	115*	Geo. I. Osborne	Signal Hill, City Hall, Long Beach
416	Sp	40-40	1179	C. C. Curtis	2424 Lincoln Ave., Altadena
417	Sp 3"	41-05	742*	F. G. Webber	150 N. Vineda St., Lamanda Park
418	SA	50-94	4250	F. C. Employee	Upper end Pickens Cn., U.S.F.S. Exp. Plots
419	SA	61-92	5450	Daniel Webster Boore	Head of Paccima Canyon on Santa Clara Ridge, Mt. Gleason
420	S	74-07	3100		3.3 mi. S.of Acton on Mt.Gleason Truck Trail

* #338 Standard and Automatic are 6 ft. above ground. #338 Marvin is 12 ft. above. #346 is 35 ft. above. #355 is 20 ft. above. #356 is 10 ft. above. #381 is 15 ft. above. #387 is 38 ft. above. #415 is 10 ft. above. #417 is 10 ft. above ground.

Sta. No.	Type Gage	Quad. Index	Elev. USGS	Observer	Location
421	Scw	48-91	1173	Joseph Hand	12559 Filmore St., San Fernando Valley
422	S	60-35	2200	B. K. Walsh	2 mi. above Pacoima Dam, 1 mi.W.of Dillons Rch.
423	S	75-08	3920	Vernon Wert	Aliso Canyon, 6 mi. S. of Blum Ranch
425	SA	54-49	1470	F. C. Employee	East Abutment San Gabriel Dam #1
427	S	15-64	127	L. W. Jordan	751 W. 12-th St., Downey
428	Sp	40-90	1340	H. J. Laity	2059 Rubio Drive, Altadena
429	S	51-83	4460	I. Bird	Angeles Crest Hwy., .9 miles S. of Red Box
430	S	70-57	1176	C. T. Warren	Saugus, at State Road Maint. Dept.
431	S	26-48	150	J. M. Donovan	3870 S. La Brea Ave., Baldwin Hills
432	Swb	52-89	2035	R. B. Hosford	Santa Anita Canyon, Fern Lodge
433	SA	51-69	1710	A. L. Goldenberg	Altadena,County Forestry Rec.Pk.,Mt.Curve Ave.
434	S	34-46	800	B. O. Butler	Cornell Rd.,1mi. S.of Ventura Blvd.,Malibu Hdqts.
435	S	23-12	600	C. A. Bollman	Brents Mt.Cragg Road, at Monte Nido
436	S	49-13	1020	E. B. Davey	Hansen Dam, Osborne Ave., Tujunga Wash
437	S	4-30	23*	J. C. Vidmar	Hamilton Bowl, Long Beach
438	GGG	36-94	950	C. E. Quirello	17151 Oak View Dr., Encino
438	S	36-94	950		
439	SA	63-89	5650	K. M. Kaylor	Charlton Flats, U.S.F.S. Reservoir
440	S	63-87	5150	K. M. Kaylor	Chilao U.S.F.S. Guard Station
441-E	S	86-82	2662	James R. Nelan	Palmdale, County Road Maint. Yard
442	S	78-53	3810	E. A. Eberle	Mescal Creek on Fort Tejon Road
443	S	21-80	1725	W. A. Brandenberger	Junc. Latigo Canyon and Mulholland Roads
444	S	2-52	475	C. C. Miller	"Rolling Hills", Palos Verdes Hills
445	S	44-56	1630	Al. A. Quiroz	Live Oak Canyon Rim, 1/3 mile above Dam.
446	S	58-48	2367	G. A. Tidrick	5.5 mi. above Devonshire St.,in Aliso Canyon
447	S	23-65	138	T. E. Cheney	0.7 mi. in Las Flores Canyon at County Forestry Guard Station
449	GG Spl H	41-03	902*	F. C. Employee	Top of Gate House, Eaton Dam
508B	S	51-39	1220	U. S. Forest Ranger	Arroyo Seco Cn.at mouth of El Prieto Cn.USFS.
577	Awb	27-55	330*	U. S. W. B.	S.W.cor. 6-th & Main St.,Los Angeles U.S.W.B.
589	Sp	44-25	1400	Mrs. E. B. White	Mouth of San Dimas Cn.Top of Hill,E.edge of Cn.
593B	Sp	68-69	675	John Lewis	3.1 mi. W. of L.A.-Ventura County Line 0.4 mi. S. of Highway
594	Sp 3"	58-72	1270	A. B. Thatcher	Southern Pacific R. R. Depot, Newhall
610A	Sp	40-73	993	Morris Jones	1250 N. Holliston, Pasadena
610B	Sp	40-55	864	H. J. Sievert	City Hall, Pasadena
612	Sp	51-39	1181*	H. J. Sievert	1/4 mi. up from Mouth of Arroyo Seco Canyon
613B	Sp	40-46	780	Cap't. H. H. Burgess	Hurlbut St. Fire Station #5, Pasadena
618	Sp	V-Co.	980	J. M. Fuller	1 mi. W.of Santa Susana,.5 mi.N.E.of L.A. Ave.
656B	GGG	49-83	1265	Russell Keim	10921 O'Dell Ave., Sunland
676	Sp 4-1/2"	13-93	173	H. F. Parkinson	1727 W. 80-th St., Los Angeles
677	Sp	40-22	983	Jack Hayes	1408 Ontario Ave., Pasadena
678	Sp	40-32	1047	H. J. Sievert	Sheldon Reservoir, Pasadena,E. side of Canyon
679	Sp Dial	30-27	310	H. I. Morris	533 9-th Ave., No.Whittier Hts.Citrus Ass'n.
680	Sp	25-52	425	Students	U.C.L.A. Westwood
681	Sp	41-63	890	U.S.F.S.	U.S.F.S. Ranger Station, Santa Anita Ave.
682	Sp	51-17	1900	S.C.E.Co.	Gould-S.C.E.Co.Sub Sta. off Angeles Crest Hwy.
683	Sp	51-58	2110	U.S.F.S.	U.S.F.S. Guard Sta.,Millard Cn. & West Ravine
684	Sp	41-65	518	U.S.F.S.	U.S.F.S. Warehouse, Arcadia
686	Sp	43-64	1175	N. D. Meacham	Big Dalton Spreading Grounds
687A	Spl p 6"	52-18	2210	L. E. Windsor	Upper Eaton Canyon, Cabin #8
687B	S	52-18	2200	L. E. Windsor	150 ft. + or - S. of "A" location
689B	Sp 6"	40-68	608	Carl V. Cooper	2814 Garlaris Road, San Marino
690	Sp Ap	45-22	2380	U.S.F.S.	U.S.F.S. Guard Station above Mouth of San Antonio Canyon
691	GGG	45-14	2075*	Jess R. Corrington	San Antonio at the Mouth of San Antonio Cn.
X-3	SA	24-82	900	Walter Miller	Rustic Canyon Fire Area 3.5 miles from Sunset Blvd.
X-3B	S	36-77	1900	City Employee	Ridge between Rustic & Sullivan Canyons, near Mulholland Highway
X-3C	S	24-74	420	W. G. Robertson	15015 Mc Kendree Ave., Pacific Palisades

* #437 is 17 ft. above ground. #449 is 13 ft. above. #577 is 87 ft. above. #612 is 10 ft. above. #691 is 15 ft. above ground.

LEGEND REGARDING GAGE TYPE AND OWNERSHIP

S - - - - Standard 8" gage unless followed by number showing diameter and owned by Flood Control.

A - - - - Flood Control automatic gage - Fergusson type.

Sp - - - Private gage of standard type 8" diameter.

Sp 6" - - Private gage of standard type 6" diameter.

Sp 5" - - Private gage of standard type 5" diameter.

Sp 4½" - Private gage of standard type 4-1/2" diameter.

Sp 3" - - Private gage of standard type 3" diameter.

CGG - - - Special "can" gages using glass graduate for measuring.

GG - - - Uses glass graduate for measuring in place of stick.

GG Spl H - Uses glass graduate with special Henson type collector ring.

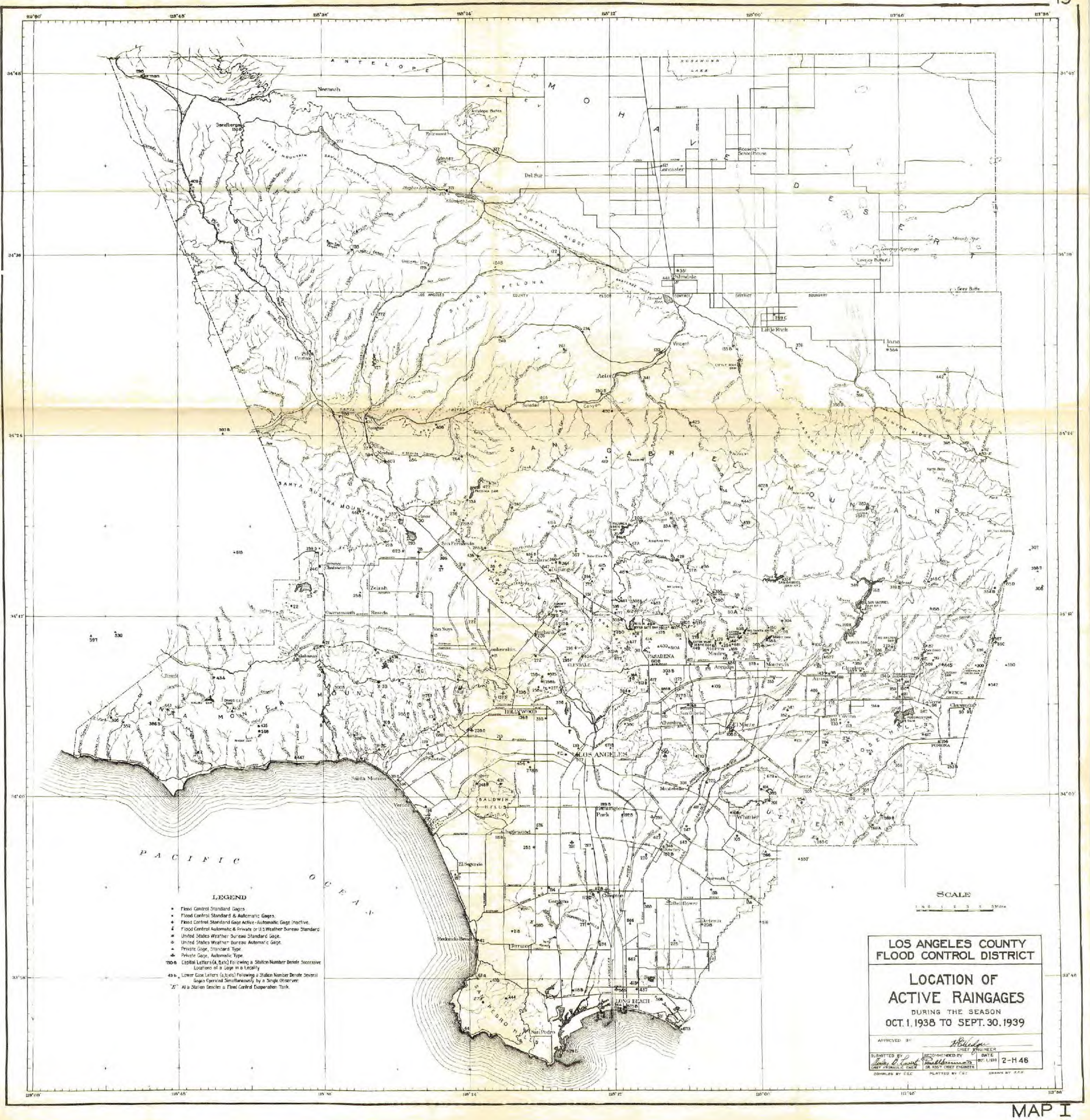
cw - - - Gage owned by L.A. City Water Department.

co - - - Gage owned by L.A. County but not the Flood Control.

Spl - - - Special type gage.

wb - - - Gage owned by U.S. Weather Bureau.

AP - - - Automatic tipping bucket at U.S.W.B. - L.A.



LEGEND

- Flood Control Standard Gages.
- Flood Control Standard & Automatic Gages.
- Flood Control Standard Gage Active - Automatic Gage Inactive.
- Flood Control Automatic & Private or U.S Weather Bureau Standard.
- United States Weather Bureau Standard Gage.
- United States Weather Bureau Automatic Gage.
- Private Gage, Standard Type.
- Private Gage, Automatic Type.
- 210-B Capital Letters (A, B etc) Following a Station Number Denote Successive Locations of a Gage in a Locality.
- 43-b Lower Case Letters (a, b etc) Following a Station Number Denote Several Gages Operated Simultaneously by a Single Observer.
- "E" At a Station Denotes a Flood Control Evaporation Tank.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

LOCATION OF ACTIVE RAINGAGES

DURING THE SEASON

OCT. 1, 1938 TO SEPT. 30, 1939

APPROVED BY: H. R. Gilman, CHIEF ENGINEER

SUBMITTED BY: Harry A. Lovell, CHIEF HYDRAULIC ENGR.

RECOMMENDED BY: Paul Kaufman, SR. ASST. CHIEF ENGINEER

DATE: OCT. 1, 1939

2-H 46

COMPILED BY C.S.C. PLOTTED BY C.S.C. DRAWN BY R.K.H.

MAP I


LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
ISOHYETAL MAP
SEASON 1938-1939
FOR
LOS ANGELES COUNTY
APPROVED BY
CHIEF ENGINEER
SUBMITTED BY
CHIEF HYDRAULIC ENGR
RECOMMENDED BY
SR ASST. CHIEF ENGINEER
DATE
OCT 1, 1939
2-H 47
COMPILED BY
PLATTED BY
DRAWN BY
LEGEND
Flood Control Standard Gages.
Flood Control Standard & Automatic Gages.
Flood Control Standard Gage Active-Automatic Gage Inactive.
Flood Control Automatic & Private or U.S. Weather Bureau Standard.
United States Weather Bureau Standard Gage.
United States Weather Bureau Automatic Gage.
Private Gage, Standard Type.
Private Gage, Automatic Type.
210-B Capital Letters (A, B, etc) Following a Station Number Denote Successive Locations of a Gage in a Locality.
43-b Lower Case Letters (a, b, etc) Following a Station Number Denote Several Gages Operated Simultaneously by a Single Observer.
"E" At a Station Denotes a Flood Control Evaporation Tank.
Season includes the period from October 1st to September 30th inclusive.
SCALE
5 Miles
ANTELOPE VALLEY
MOHAVE DESERT
ROSAMOND LAKE
PACIFIC OCEAN
SAN GABRIEL MOUNTAINS
SANTA SUSANA MOUNTAINS
SANTA MONICA MOUNTAINS
SIERRA PELONA
PORTAL RIDGE
LIEBRE MOUNTAIN
SAWMILL MOUNTAIN
BALDWIN HILLS
SAN JOSE HILLS
PUENTE HILLS
SAN PEDRO HILLS
Neenach
Fairmont
Antelope Buttes
Del Sur
Lancaster
Roosevelt School House
Palmdale
Little Rock
Llano
Lovejoy Springs
Lovejoy Buttes
Grey Butte
Vincent
Acton
Castaic
Saugus
Newhall
Sylmar
San Fernando
Chatsworth
Zelzah
Reseda
Owensmouth
Van Nuys
Lankershim
Burbank
Glendale
Hollywood
Pasadena
Sierra Madre
Arcadia
Monrovia
Azusa
Glendora
La Verne
Claremont
Pomona
San Gabriel
Alhambra
El Monte
Covina
Puente
Los Angeles
Montebello
Whittier
Huntington Park
Downey
Norwalk
Bellflower
Artesia
Compton
Gardena
Torrance
Inglewood
El Segundo
Redondo Beach
Culver
Sawtelle
Santa Monica
Venice
San Pedro
Long Beach
LOS ANGELES COUNTY FLOOD CONTROL DISTRICT BOUNDARY
MAP II

EVAPORATION RECORDS

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
Hydraulic Division

REPORT ON EVAPORATION

Season 1938-39

FOREWORD:

The District has continued the use of evaporation tanks at rainfall stations as in former years. The consistant practice of reading both rainfall and evaporation at 5 p.m. has cut the time spent in reading to a minimum and has made the records more useful. In many instances the observer has added other instruments such as maximum and minimum thermometers, anemometers, and psychrometers, to make a more nearly complete weather station; and the District has furnished special form blanks for filling out these records. Thus, additional information is received to better coordinate evaporation with rainfall.

Evaporation tanks placed near reservoirs and spreading grounds furnish data which are valuable in correlating records of these works. Private individuals and agencies have also made use of these data.

Number of Stations:

The District maintained 22 land evaporation stations and 2 lake pans during the season. The principal unit is the Baldwin Park Experimental Station, which is cooperatively maintained by several agencies. This station is fully equipped with the following instruments: an eight inch standard raingage, maximum and minimum thermometer, thermograph, anemometer, four foot diameter evaporation pan of the United States Weather Bureau type, six foot diameter evaporation tank, two foot diameter evaporation tank, and a District two foot diameter tank. All tanks except the one which is furnished by the District, are equipped with hook gages for reading the evaporation.

EQUIPMENT:

The land pan in use by the District is 24 inches in diameter and 36 inches in depth and is sunk in the ground 33 inches, with the water surface at ground level. A one-quarter inch brass rod embedded in a block of concrete to hold it in a vertical position, is placed in the center of the tank. This rod has a sharp point at the upper end, and serves as a reference point for water levels.

The lake pans in use at San Gabriel Dams # 1 and # 2 are 30 inches square and 18 inches deep with a 6 inch wave baffle to protect the pan from water splashing in on all sides. This pan is floated on suitable rigging so that the pan is submerged to make the reservoir surface and water level in pan identical.

SUMMARY OF SEASONAL EVAPORATION:

The following table indicates the maximum rate of evaporation at District stations for the season.

In former years the Palmdale Station has averaged 98.191 inches annually and 15.881 inches for the month of July. These values represent the largest amounts of evaporation in the County. However, this station was not in operation during the season, so that the amounts below are only comparative.

Maximum	Seasonal Amt. Inches - Encino Reservoir	91.358	
Maximum	Monthly Amt. Inches - San Gabriel Dam #2	13.105	in July
Maximum	Daily Amt. Inches - Encino Reservoir	.575	May 25
Maximum	Daily Amt. Inches - Encino Reservoir	.575	July 18

The next largest seasonal evaporation measured in the District's pans was at San Gabriel Dam # 2, and amounted to 86.645 inches.

During some winter months a number of stations indicate water as frozen or partially frozen, thus giving an incomplete total evaporation as a result.

Table I. presents monthly evaporation data for the stations operated.

Table II. summarizes monthly evaporation records for certain stations for their respective periods of record.

TABLE I.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

EVAPORATION RECORDS
IN INCHES

Season 1938-39

Sta.° No.	Station	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Total
23	Chatsworth	6.645	7.485	4.195	3.465	3.830	3.185	5.045	7.315	8.900	10.225	9.935	8.380	78.605
32	Newhall	6.540	6.305	4.185	3.270	3.620	4.280	6.270	7.485	7.955*	9.325*	9.570	8.400	77.205
33A	Pacoima Dam	6.750	10.025	5.745	4.670	4.230	4.270	6.215	6.330*	8.120	8.885	8.060	7.760	81.060
46B	Big Tujunga	5.955	5.555	2.875	2.070	2.510	3.000	4.800	5.925	8.925	9.675	9.860	6.700	67.850
57B	Opid's	2.250	1.835	.945	.240#	Froz	.785#	4.280	5.745	7.675	8.005	8.035	3.840	43.635#
63B	Santa Anita	5.150	4.715	2.770	2.300	2.050	2.275	3.820	4.485	5.892	6.280	6.470*	6.260	52.467
70	Dalton	6.940	6.420	4.005	3.290	3.575	3.320	4.685	6.100	7.725	8.645	8.695	9.190	72.590
83	Big Pines Pk.	4.822	4.140	1.380#	Froz	Froz	Froz	2.905*	6.790	9.635	10.310	9.365	5.191	54.538#
89	San Dimas Dam	3.885	4.465	1.680*	.605	.615	.600	.970	.975	1.815	5.705	4.880	3.945	30.140x
96	Puddingstone	7.410	6.345	4.265	3.000	3.369	2.975	5.025	5.850	8.575	10.125	8.645	7.640	73.224
128	Radium Hot Spg.	6.030	5.505	3.540	2.495	3.185	3.660	5.870	7.560	9.660	10.950	10.685*	S.D.	69.140*
157	El Segundo	6.065	5.675	3.975	3.370	4.635	4.605	6.275	7.665	9.335	9.340	8.210*	S.D.	69.150*
223B	Big Dalton	5.275	4.650	4.075	2.975	3.475	2.475	3.550	4.275	6.325	7.700	7.875	6.975	59.625
248	W. Saddle Pk.	4.345	3.785	2.570	2.005	2.955	3.505	3.840	4.825	6.175	6.747*	6.745	5.965	53.462
261	Acton (near)	6.965	7.125	3.914	3.015	3.320	3.965	6.235*	8.025	10.770	12.505	13.090*	7.590	86.519
265B	Puente Hills	4.575	4.480	2.630	1.745	2.522	2.753*	Inc.	N.R.	5.837*	6.245	5.853	5.347*	41.987*
265C	Puente Hills	Station 265B moved to "C" location 5-31-39.												
268	Torrance	4.880	3.030	1.245	1.060*	2.390	3.160	5.215	6.405	7.345	8.250	7.605	7.540	58.125*
292	Encino-F.C.	8.265	6.685	3.953	3.180	3.890	4.175	7.790	8.460	10.480	12.070	11.730	10.680	91.358
	" U.S.W.B.	6.360	5.244	3.456	1.932	4.020	3.324	6.000	7.296	8.316	10.668	9.828	8.532*	74.976
	" Lake	6.264	6.000	3.168	2.008	3.516	2.868	4.920	6.312	7.224	8.796	8.904	7.452*	67.432
334	S. G. Lake Pan	N.R.	N.R.	N.R.	N.R.	1.095*	2.200	3.395*	N.R.	N.R.	N.R.	N.R.	N.R.	6.690*
334	S. G. Dam #2	6.755	5.935	3.780	3.035	3.245	3.945	6.405	8.060	10.735	13.105	12.795	8.850	86.645
321	Pine Cn. Patr.	4.530	3.785	2.560	1.710	2.520	3.555	5.045	6.710	9.360	10.285	9.725	6.450	66.235
347	Bald. Pk.- F.C.	5.200	4.065	2.425	1.875	3.195*	2.940*	4.610	6.495	8.570	9.065	8.455	7.135*	63.960
	" " USWB.	4.670	3.570	2.610	2.010	3.180	3.380	4.980	6.340	8.320	8.940	8.530	7.470*	64.000
	" " 6 ft.	4.240	3.230	2.190	1.540	2.520	2.650	4.140	5.510	7.190	7.680	7.190	5.960*	54.040
	" " 2 ft.	5.140	3.910	2.490	1.910	2.740	2.930	4.680	6.340	8.250	9.040	8.300	6.950*	62.680
441	Palmdale	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	6.775	6.775*
		Station 441 established 8-22-39.												
425	S. G. #1	7.220	6.810	3.730	3.095	3.615*	3.560	5.055	6.135	7.585	8.410	8.910	7.138	70.263

° No. is that of rainfall station at which pan is located.

LEGEND.

Partly estimated	*
Incomplete record	*
Records incomplete - Partly frozen	#
Leaky tank	+
Not installed	N.I.
No record	N.R.
Station discontinued	S.D.
Records questionable	x

TABLE II

MONTHLY EVAPORATION AT PACOIMA DAM

STATION #33.

	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Total	Mean
1930-31	6.070	7.100	4.460	2.720	2.980	7.610	6.500	5.180	6.850	9.540	8.580	8.640	76.230	6.352
31-32	7.280	5.930	2.510	2.330	1.915	5.435	6.565	5.280	7.815	9.285	9.045	7.830	71.220	5.935
32-33	7.290	7.810	3.355	3.415	4.320	5.640	4.940	5.725	6.210	9.120	8.105	6.735	72.665	6.055
33-34	6.895	7.280	3.460	4.620	2.790	4.990	6.015	6.270	3.675	7.695	7.265	7.690	68.645	5.720
34-35	6.195	3.740	3.330	2.285	3.115	2.780	3.165	3.800	4.725	6.780	7.415	6.665	53.995	4.500
35-36	5.810	4.290	3.610	3.340	1.930	4.220	4.530	5.510	5.515	6.705	7.110	7.985	60.555	5.046
36-37	5.560	5.650	3.080	.725#	1.940	3.825	5.400	3.925	4.850	7.170	6.585	6.990	55.710#	4.642
37-38	5.590	3.265	3.045	3.185	1.835	3.215	4.215	3.965	3.915	6.090	6.700	7.485	52.505	4.375
38-39	6.750	10.025	5.745	4.670	4.230	4.270	6.215	6.330	8.120	8.885	8.060	7.760	81.060	6.755
Total	57.440	55.090	32.525	27.300#	25.055	41.985	47.545	45.985	51.675	71.270	68.865	67.780	592.585	49.380
Mean	6.382	6.121	3.622	3.033	2.784	4.665	5.283	5.109	5.742	7.919	7.652	7.531	65.843	

NOTE: Evaporation is excessive for November 1938 to May 1939 inclusive due to a leaky tank.

MONTHLY EVAPORATION AT OPID'S CAMP

STATION #57

	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Total	Mean
1931-32	2.136	1.375	1.775	Froz	Froz	1.822	3.310	4.300	5.368	7.940	7.680	5.450	41.156#	3.430
32-33	3.060	2.025	.255#	Froz	Froz	.010#	2.460	3.460	4.955	6.925	6.715	5.100	34.965#	2.914
33-34	2.985	8.550	.100	2.050	2.700	.925	3.815	5.265	5.220	6.845	6.500	2.235	47.190	3.932
34-35	1.710	1.200	.240#	Froz	.116#	.277#	1.822	2.625	4.485	5.580	5.320	4.195	27.570#	2.298
35-36	5.560	2.190	.698#	1.284#	.625#	2.047#	2.662#	5.475	6.052	8.046	7.310	6.205	48.154#	4.013
36-37	3.890	2.294	.660#	Froz	Froz	1.320	2.949	6.040	8.340	10.665	11.210	7.910	55.278#	4.606
37-38	4.935	1.905	1.300#	.980#	.275#	1.049#	3.120	5.135	7.190	8.830	8.075	5.450	48.244#	4.020
38-39	2.250	1.835	.945	.240	Froz	.785#	4.280	5.745	7.675	8.005	8.035	3.840	43.635#	3.636
Total	26.526	21.374	5.973#	4.554#	3.716#	8.235#	24.418	38.045	49.285	62.836	60.845	40.385	346.192#	28.843
Mean	3.316	2.672	.747	.569	.464	1.029	3.052	4.756	6.161	7.854	7.606	5.048	43.274	

MONTHLY EVAPORATION AT BIG TUJUNGA DAM

STATION #46.

	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Total	Mean
1931-32	6.000	3.300	.525	.475	.675"	5.425	5.950"	6.225	8.025	10.600	9.975	8.675	65.850"	5.488
32-33	7.075	6.400	2.675	2.125	3.900	5.378	4.945	5.850	8.475	10.850	9.325	7.875	74.873	6.239
33-34	6.775	5.225	1.800	3.125	2.400	5.200	6.450	7.575	6.075	9.275	8.725	6.935	69.560	5.797
34-35	5.325	2.830	1.900	1.575	2.350	2.450	2.950	4.500	6.950	8.000	7.500	7.000	53.330	4.444
35-36	5.675	2.975	2.585	2.450	1.250	4.025	4.350	6.900	7.650	8.800	9.250	7.575	63.485	5.290
36-37	5.175	3.875	1.650	.580	1.275	2.650	4.500	5.200	7.225	9.175	9.025	8.325	58.655	4.888
37-38	5.925	3.425	2.825	2.525	1.525	2.075	3.660	5.440	7.150	9.175	9.225	8.030	60.980	5.082
38-39	5.955	5.555	2.875	2.070	2.510	3.000	4.800	5.925	8.925	9.675	9.860	6.700	67.850	5.654
Total	47.905	33.585	16.835	14.925	15.885"	30.203	37.605"	47.615	60.475	75.550	72.885	61.115	514.583	42.881
Mean	5.988	4.198	2.104	1.866	1.986	3.775	4.701	5.952	7.559	9.444	9.111	7.639	64.323	

MONTHLY EVAPORATION AT BIG DALTON DAM

STATION #223

	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Total	Mean
1930-31	10.220	9.170	5.840	4.660	3.860	8.860	7.740	8.020	9.800	12.760	11.970	11.160	104.060	8.672
31-32	7.320	5.085	3.025	3.210	2.710	6.020	7.195	7.150	8.410	11.025	11.835	8.885	81.840	6.820
32-33	6.785	7.875	3.100	4.250	4.350	6.470	5.510	6.605	9.390	10.925	10.225	7.775	83.260	6.938
33-34	8.030	7.990	3.220	4.515	2.845	6.425	7.075	9.425	6.755	12.150	11.355	11.015	90.800	7.567
34-35	7.025	3.770	3.520	2.870	4.165	3.250	4.425	5.725	8.300	10.450	10.425	7.825	71.750	5.979
35-36	6.500	4.125	3.275	2.875	1.850	4.050	4.100	7.000	8.235	9.325	9.550	8.460	69.335	5.778
36-37	6.225	5.000	2.925	1.500	1.925	3.275	5.750	5.000	6.600	9.400	9.400	8.250	65.250	5.438
37-38	6.975	3.800	3.225	3.400	2.650	2.125	2.650	3.450	6.075	8.950	8.800	7.530	59.630	4.969
38-39	5.275	4.650	4.075	2.975	3.475	2.475	3.550	4.275	6.325	7.700	7.875	6.975	59.625	4.969
Total	64.355	51.465	32.205	30.255	27.830	42.950	47.995	56.650	69.890	92.685	91.435	77.835	685.550	57.130
Mean	7.151	5.718	3.578	3.362	3.092	4.772	5.333	6.294	7.766	10.298	10.195	8.648	76.172	

MONTHLY EVAPORATION AT BIG SANTA ANITA DAM

STATION #63.

	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Total	Mean
1930-31	6.980	6.290	5.990	3.560	2.450	5.950	4.820	4.560	6.100	7.820	6.980	6.880	68.380	5.698
31-32	5.175	3.860	2.675	3.040	2.380	4.345	5.470	4.635	5.540	6.875	7.635	5.565	57.195	4.766
32-33	5.930	6.595	3.490	3.535	3.410	4.810	4.420	4.370	5.505	5.990	5.365	4.150	57.570	5.798
33-34	4.125	4.810	2.675	3.375	2.010	3.720	3.695	4.165	2.840	4.460	4.445	4.625	44.945	3.745
34-35	6.395	4.275	4.080	3.275	4.410	3.470	3.730	4.465	6.135	9.025	9.205	7.265	65.730	5.478
35-36	6.710	5.185	4.585	4.285	2.350	4.780	4.620	6.970	7.365	8.365	8.320	7.735	71.270	5.939
36-37	6.090	6.535	3.935	1.990	2.375	4.045	5.260	4.680	5.245	7.905	8.080	7.550	63.690	5.308
37-38	6.015	3.730	4.220	3.955	2.490	3.000	3.710	4.370	4.435	6.100	6.995	7.005	56.025	4.669
38-39	5.150	4.715	2.770	2.300	2.050	2.275	3.820	4.485	5.892	6.280	6.470	6.260	52.467	4.372
Total	52.570	45.995	34.420	29.315	23.925	36.395	39.545	42.700	49.057	62.820	63.495	57.035	537.272	45.773
Mean	5.861	5.111	3.824	3.257	2.658	4.044	4.394	4.744	5.451	6.980	7.055	6.337	59.697	

MONTHLY EVAPORATION AT MELLEN'S RANCH (Near ACTON)

STATION #261

	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Total	Mean
1931-32	6.810	4.325	2.185	2.636	1.945	5.885	6.925	7.795	10.180	13.375	13.980	10.935	86.976	7.248
32-33	7.890	6.490	3.130	3.045	4.415	6.260	6.860	7.100	10.189	12.775	12.250	10.075	90.519	7.543
33-34	8.105	7.455	3.950	4.625	3.545	7.175	9.000	10.895	9.230	13.795	15.430	10.350	101.555	8.463
34-35	7.710	4.565	3.915	2.940	3.990	4.010	5.385	8.020	11.805	13.005	11.670	10.240	87.255	7.271
35-36	7.800	5.537	4.638	4.750	2.210	6.000	6.530	10.125	11.340	13.040	13.215	10.820	96.005	8.000
36-37	6.965	6.740	3.510	1.805	2.655	4.350	6.365	7.623	9.945	13.265	13.535	10.580	87.338	7.278
37-38	7.920	4.625	4.300	4.360	2.350	3.240	5.620	7.320	9.255	11.865	11.620	9.510	81.985	6.832
38-39	6.965	7.125	3.914	3.015	3.320	3.965	6.235*	8.025	10.770	12.505	13.090	7.590	86.519	7.210
Total	60.165	46.862	29.542	27.176	24.430	40.885	52.920	66.903	82.714	103.625	102.830	80.100	718.152	59.845
Mean	7.521	5.858	3.693	3.397	3.054	5.111	6.615	8.363	10.339	12.953	12.854	10.012	89.769	

EVAPORATION RECORDS IN INCHES

LEGEND FOR EVAPORATION RECORDS

Maximum monthly amount for the period _____

Minimum monthly amount for the period _ _ _ _ _

Records incomplete "

Records incomplete - partly frozen #

Records partly estimated *

DAM OPERATION RECORDS

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

Hydraulic Division

DAM OPERATION

Season 1938-39.

Foreword:

Sixteen dams and sixteen debris basins were operated and maintained by the Flood Control District during the 1938-1939 season. These structures have been built over a period of 22 years. Fifteen dams and ten debris basins were constructed by the District while the balance were constructed by the United States Engineer Department. The two following tables present pertinent data relative to dams and debris basins respectively.

Dams Owned and Operated

By

Los Angeles County Flood Control District

	Dam	Date of Completion	Drainage Area Sq. Mi.	Original Storage Ac. Ft.	Present Storage in A.F.
1	Pacoima	Feb. 1929	27.8	6060.	5004.3
**2	Sunset Canyon	Nov. 1929	0.44	9.	----
3	Big Tujunga #1	July 1931	81.4	6240	4488.0
4	Devil's Gate	June 1920	30.6	4554.	2966.8
5	Eaton Wash	Feb. 1937	9.48	956.3	698.3
**6	Sierra Madre	Feb. 1928	2.39	55.	----
7	Big Santa Anita	Mar. 1927	10.8	1376.	688.4
8	Sawpit	June 1927	3.27	476.	319.7
9	San Gabriel # 1	July 1939	°° 161.7	53344.	47191.0
10	San Gabriel # 2	Apr. 1934	40.4	12298.	10887.0
11	Big Dalton	Aug. 1929	4.49	1290.	968.7
12	San Dimas	Sept. 1922	15.9	1496.	1155.1
*13	Puddingstone Div.	July 1928	2.57	147.5	47.6
14	Puddingstone	Jan. 1928	° 14.9	17398.	17398.0
15	Live Oak	Nov. 1922	2.30	250.	227.5
16	Thompson Creek	Mar. 1928	3.91	812.	812.0

Total Controlled Drainage Area 412.4 sq. mi. by 92,852. acre-feet Storage capacity.

* For Diversion of flow only.
** Debris Dams.
° Exclusive of Live Oak and San Dimas Dams.
°° Exclusive of San Gabriel Dam # 2.

Debris Basins Owned and Operated

By

Los Angeles County Flood Control District.

Debris Basin		Date of Completion	Drainage Area Sq. Mi.	Capacity Cu. Yd.
1	Haines	8-24-38***	1.53	158,200
2	Dunsmuir	10-20-36	.84	118,700
3	Shields	1-26-37	.27	46,600
4	Eagle - Goss	10-20-36	.61	71,900*
5	Hall - Beckley	2-21-35	.84	73,700
6	Pickens	2-19-35	1.84	116,400
7	Snover	3- 9-37	.23	34,800*
8	Hay	10-20-36	.20	35,300
9	Verdugo	3- 9-35	15.24	151,700
10	Brand	11-12-35	1.03	55,000**
11	Nichols	11-23-37	.94	32,200*
12	Lincoln	1-17-36	.50	35,200
13	Fern	12- 5-35	.30	31,700
14	West Ravine	12-10-35	.25	49,300
15	Fair Oaks	12-29-35	.21	27,800
16	Las Flores	4-15-36	.42	48,900

* Data from original survey used - basins were cleaned out but not resurveyed.

** Data from original survey used, but corrected since basin was not cleaned out.

*** Date of reconstruction by the United States Engineer Department. The Los Angeles County Flood Control District constructed the original outlet on the existing gravel pit in 1924.

Purpose:

The flood control dams are primarily flood control and secondarily conservation structures. When conditions permit, the flood waters are stored to be released when the runoff below the dams has subsided; these releases are usually made in sufficiently small quantities so that they either percolate or are used directly for irrigation. The value of water conserved in this manner will average hundreds of thousands of dollars annually.

Records:

"Dam Operation Records" show the daily water surface elevation, storage in acre-feet, mean daily inflow and outflow in second-feet, and the monthly and yearly inflow and outflow totals. The inflows are usually determined from storage change and known outflows with no allowance for evaporation. The outflows are usually determined from known valve openings or gaging station records. Storage losses at Devil's Gate and Eaton Dams are largely due to percolation in the reservoirs. Allowances are made for these percolation losses as noted on the operation sheets. Due to debris encroachment, storages were corrected from time to time as indicated on the operation sheets.

Summary:

The yearly runoff into the reservoirs for the period of this report was comparatively moderate with no unusual storms excepting that of September 25, 1939. The September storm was unusual in that it produced high intensities and occurred late in the season. This latter fact prevented high runoff quantities as the watersheds were dry. As a result of the moderate runoff, almost the entire yearly inflow into the reservoirs was conserved by allowing the waters to percolate into the channels and spreading grounds or by storing for use during the dry summer period.

Continual changes in the storage ratings of several reservoirs necessitated corrections as frequently as data became available. These storage changes were the result of encroachment from debris and silt deposits left by the March 2, 1938 flood and sluicing operations which were in progress at several reservoirs during this period. The corrections made were based on partial surveys, soundings and volumetric determinations. The volumetric determinations were made whenever both the inflow and outflow could be determined independently.

The accuracy of inflow records computed from storage changes are necessarily subject to the accuracy of the storage records. In those cases where excessive debris encroachment occurred, the percentage of error in the inflow records is in direct proportion to the percentage of error in the areas used.

The following table summarizes the total yearly inflow and outflow at the dams together with the seasonal storage changes.

Runoff Summary for the District's Dams.

	Dam.	Inflow Ac.Ft.	Outflow Ac. Ft.	Storage in Ac.Ft. on 9-30-38	Storage in Ac.Ft. on 9-30-39
1.	Pacoima	3525.1	3080.1*	0	445.2
2.	Big Tujunga	9905.2	9105.9	0	799.6
3.	Devil's Gate	3044.2	633.7	331.3	488.2
4.	Eaton Wash	339.7	83.7	0	62.0
5.	Santa Anita	2726.5	2461.0	0	265.3
6.	Sawpit	231.9	169.9	0	58.1
7.	San Gabriel # 2	11559.6	11368.9	16.5	20.0
8.	San Gabriel # 1	67231.	61655.	53.	5793.0
9.	Big Dalton	280.4	287.8*	16.3	8.8
10.	San Dimas	2164.7	2023.6	0	141.0
11.	PuddingstoneDiv.	1288.1	1293.4*	5.4	0
12.	Puddingstone	1576.0	5305.0	8485.6	4756.2
13.	Live Oak	20.6	3.2	0	0
14.	Thompson Creek	21.4	0	3.6	0
	Total	103914.4	97471.2	8911.7	12837.4

NOTE: Outflow includes valve release only, other losses as indicated by the storage changes are due to evaporation and percolation. All inflow values are subject to error due to some undetermined evaporation and percolation losses.

* Outflow includes some small quantities of evaporation and percolation losses.

Responsibility:

Preparation of the operation records was under the direction of H. A. vanderGoot and the supervision of W. J. Wood, Assistant Chief Hydraulic Engineer.

Dam maintenance and operation was under the direct supervision of Finley B. Laverty, Chief Hydraulic Engineer and F. H. Hay, Maintenance and Operation Engineer.

DAM OPERATION RECORDS

BIG DALTON DAM

F. C. Dist. Form 68 Revised 600 5/39

Storages based on U.S.S.C.S. survey of Sept. 1934 corrected for debris following 3-2-38.

Daily Gage Height in feet and Operation Record of BIG DALTON Dam

In Big Dalton Canyon for the Year Ending September 30, 1939

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Continuous Water Stage Recorder Au

Drainage Area 4.5 Square Miles. Capacity of Reservoir 968.7 Ac. Ft. at Spillway Elev. 1706.0 Ft. Gage Heights Read Daily

Day	OCTOBER				NOVEMBER				DECEMBER				JANUARY				Day
	Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	
1	1618.7	139	0	1.2	1612.4	4.5	0.05	0.05	1612.4	4.5	0.1	0.1	1630.6	44.7	0.5	0	1
2	1615.0	79	0	3.0	1612.4	4.5	0.05	0.05	1612.5	4.6	0.1	0	1630.9	45.6	0.6	0	2
3	1612.5	4.6	0	1.7	1612.4	4.5	0.05	0.05	1612.7	4.8	0.1	0	1631.2	46.8	0.5	0	3
4	1612.4	4.5	0	0	1612.4	4.5	0.05	0.05	1612.9	5.1	0.1	0	1631.5	47.9	0.5	0	4
5	1612.4	4.5	0	0	1612.4	4.5	0.05	0.05	1613.1	5.3	0.1	0	1633.7	56.1	4.2	0	5
6	1612.4	4.5	0	0	1612.4	4.5	0.05	0.05	1613.2	5.5	0.1	0	1634.7	60.1	2.0	0	6
7	1612.4	4.5	0	0	1612.4	4.5	0.05	0.05	1613.4	5.7	0.1	0	1635.3	62.6	1.2	0	7
8	1612.4	4.5	0	0	1612.4	4.5	0.05	0.05	1613.6	6.0	0.1	0	1635.6	64.7	1.1	0	8
9	1612.4	4.5	0	0	1612.4	4.5	0.1	0.1	1613.7	6.1	0.1	0	1636.3	66.8	1.0	0	9
10	1612.4	4.5	0	0	1612.4	4.5	0.1	0.1	1613.8	6.3	0.1	0	1636.7	68.6	1.0	0	10
11	1612.4	4.5	0	0	1612.4	4.5	0.1	0.1	1613.9	6.4	0.1	0	1637.1	70.4	0.8	0	11
12	1612.4	4.5	0	0	1612.4	4.5	0.1	0.1	1614.0	6.5	0.1	0	1637.4	71.7	0.7	0	12
13	1612.4	4.5	0	0	1612.4	4.5	0.1	0.1	1614.2	6.8	0.1	0	1637.7	73.1	0.7	0	13
14	1612.4	4.5	0	0	1612.4	4.5	0.1	0.1	1614.4	7.1	0.1	0	1638.0	74.4	0.7	0	14
15	1612.4	4.5	0	0	1612.4	4.5	0.1	0.1	1614.7	7.5	0.1	0	1638.3	75.6	0.7	0	15
16	1612.4	4.5	0	0	1612.4	4.5	0.1	0.1	1614.9	7.8	0.2	0	1638.6	77.2	0.7	0	16
17	1612.4	4.5	0	0	1612.4	4.5	0.1	0.1	1615.1	8.1	0.2	0	1638.8	78.2	0.6	0	17
18	1612.4	4.5	0	0	1612.4	4.5	0.1	0.1	1617.5	11.8	1.9	0	1639.1	79.6	0.6	0	18
19	1612.4	4.5	0	0	1612.4	4.5	0.1	0.1	1619.6	15.5	1.8	0	1639.3	80.6	0.6	0	19
20	1612.4	4.5	0	0	1612.4	4.5	0.1	0.1	1623.5	24.0	4.3	0	1639.6	82.0	0.6	0	20
21	1612.4	4.5	0	0	1612.4	4.5	0.1	0.1	1625.2	28.3	2.2	0	1640.2	85.0	1.5	0	21
22	1612.4	4.5	0	0	1612.4	4.5	0.1	0.1	1626.3	31.3	1.5	0	1640.5	86.6	0.8	0	22
23	1612.4	4.5	0	0	1612.4	4.5	0.1	0.1	1627.0	33.3	1.0	0	1640.8	88.2	0.8	0	23
24	1612.4	4.5	0.05	0.05	1612.4	4.5	0.1	0.1	1627.6	35.1	0.9	0	1641.1	89.7	0.8	0	24
25	1612.4	4.5	0.05	0.05	1612.4	4.5	0.1	0.1	1628.1	36.6	0.8	0	1641.3	90.8	0.5	0	25
26	1612.4	4.5	0.05	0.05	1612.4	4.5	0.1	0.1	1628.6	38.2	0.8	0	1641.5	91.9	0.6	0	26
27	1612.4	4.5	0.05	0.05	1612.4	4.5	0.1	0.1	1629.0	39.4	0.6	0	1641.7	92.9	0.5	0	27
28	1612.4	4.5	0.05	0.05	1612.4	4.5	0.1	0.1	1629.4	40.7	0.7	0	1642.0	94.5	0.6	0	28
29	1612.4	4.5	0.05	0.05	1612.4	4.5	0.1	0.1	1629.7	41.7	0.5	0	1642.2	95.6	0.6	0	29
30	1612.4	4.5	0.05	0.05	1612.4	4.5	0.1	0.1	1630.0	42.7	0.5	0	1642.6	97.9	1.1	0	30
31	1612.4	4.5	0.05	0.05					1630.3	43.7	0.5	0	1643.0	100.2	1.2	0	31
TOTAL			0.40	5.3			2.6	2.6			1.9.9	0.1			28.5	0	
Inf. Ac. Ft.			0.8				5.2				39.5				56.5	102.0	
Outf. Ac. Ft.				12.5				5.2				0.2			0	17.5	
Maximum Mean Daily Inflow			0.05				0.1				4.3				4.2	4.3	
Minimum Mean Daily Inflow			0				0.05				0.1				0.5	0	
Storage Change			-11.8				0				+392				+56.5	+83.9	

REMARKS { indicates mean for period. ½ Year

Max. W. S. Elev.	1663.3 feet on 5-30-39 Storage 272.1 Acre Feet	RECORDS COLLECTED BY		COMPUTATIONS	Date
Min. W. S. Elev.	1612.4 feet on 10/4-12/1/38 Storage 4.5 Acre Feet	H. Paul Keiser	Dam Tender	Gage Hts. copied	C.C.G
Max. Peak Inf.	26.1 C.F.S. from 1:00 P.M. on 1-5-39 to 2:30 P.M. on 1-5-39	Willis T. Lind	Hydrographer	Storage applied	J.A.H.
Max. Peak Outf.	2.7 C.F.S. from 8:00 A.M. on 7-8-39 to 8:00 A.M. on 7-12-39		Hydrographer	Inf. & Outf. computed	H.A.V.-C.C.G.
Gage heights and storage as of Midnight on day shown.				Checked	J.A.H.-H.A.V.

F. C. Dist. Form 68 Revised 600 5/39

Storages based on U.S.S.C.S. survey of Sept.1934 corrected for debris following 3-2-38.

Daily Gage Height in feet and Operation Record of BIG DALTON Dam

In Big Dalton Canyon for the Year Ending September 30, 1939

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Continuous Water Stage Recorder Au

Drainage Area 4.5 Square Miles. Capacity of Reservoir 968.7 Ac. Ft. at Spillway Elev. 1706.0 Ft. Gage Heights Read daily

Day	FEBRUARY				MARCH				APRIL				MAY				Day
	Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	
1	1643.2	101.4	0.6	0	1651.4	160.2	0.6	0	1657.4	213.0	1.0	0	1661.7	255.3	0.4	0	1
2	1643.4	102.6	0.6	0	1651.6	161.6	0.6	0	1657.7	215.9	1.4	0	1661.8	256.4	0.4	0	2
3	1644.0	106.1	1.8	0	1651.7	162.6	0.6	0	1658.0	218.7	1.4	0	1661.9	257.4	0.3	0	3
4	1644.5	109.3	1.6	0	1651.9	164.3	0.6	0	1658.3	221.6	1.5	0	1662.0	258.4	0.5	0	4
5	1644.8	111.1	0.9	0	1652.0	165.1	0.6	0	1658.5	223.5	1.0	0	1662.0	258.4	0.3	0	5
6	1645.1	113.1	1.0	0	1652.2	166.6	0.5	0	1658.7	225.4	0.8	0	1662.0	258.4	0.3	0	6
7	1645.4	115.0	1.0	0	1652.3	167.7	0.5	0	1658.9	227.3	0.8	0	1662.1	259.5	0.3	0	7
8	1646.2	120.4	2.7	0	1652.4	168.5	0.5	0	1659.0	228.3	0.8	0	1662.2	260.5	0.3	0	8
9	1646.6	123.2	1.4	0	1652.7	171.1	1.5	0	1659.1	229.3	0.7	0	1662.3	261.6	0.3	0	9
10	1647.1	126.7	1.8	0	1653.1	174.5	1.7	0	1659.3	231.2	0.7	0	1662.3	261.6	0.3	0	10
11	1647.5	129.7	1.5	0	1653.3	176.2	0.9	0	1659.5	233.2	0.8	0	1662.4	262.6	0.3	0	11
12	1647.8	131.6	1.0	0	1653.5	177.9	0.8	0	1659.6	234.2	0.7	0	1662.5	263.7	0.3	0	12
13	1648.1	134.1	1.2	0	1653.7	179.6	0.9	0	1659.8	236.1	0.9	0	1662.5	263.7	0.4	0	13
14	1648.4	136.3	1.1	0	1653.8	180.5	0.7	0	1659.9	237.1	0.8	0	1662.6	264.7	0.4	0	14
15	1648.7	138.6	1.2	0	1654.0	182.2	0.6	0	1660.1	239.1	0.8	0	1662.7	265.8	0.4	0	15
16	1649.0	140.9	1.1	0	1654.1	183.1	0.6	0	1660.3	241.1	0.7	0	1662.7	265.8	0.4	0	16
17	1649.2	142.5	0.8	0	1654.2	184.0	0.6	0	1660.4	242.1	0.6	0	1662.8	266.8	0.4	0	17
18	1649.4	144.1	0.8	0	1654.3	184.8	0.5	0	1660.5	243.2	0.6	0	1662.9	267.9	0.4	0	18
19	1649.6	145.6	0.8	0	1654.4	185.7	0.5	0	1660.6	244.2	0.6	0	1662.9	267.9	0.4	0	19
20	1649.8	147.2	0.8	0	1654.6	187.5	0.5	0	1660.7	245.2	0.6	0	1663.0	268.9	0.3	0	20
21	1650.0	148.8	0.8	0	1654.7	188.4	0.6	0	1660.8	246.2	0.6	0	1663.0	268.9	0.2	0	21
22	1650.2	150.4	0.8	0	1654.9	190.1	0.5	0	3660.9	247.2	0.5	0	1663.1	270.0	0.2	0	22
23	1650.4	152.0	0.8	0	1655.0	191.0	0.5	0	1661.0	248.2	0.5	0	1663.1	270.0	0.2	0	23
24	1650.6	153.7	0.9	0	1655.1	191.9	0.5	0	1661.1	249.2	0.5	0	1663.1	270.0	0.2	0	24
25	1650.8	155.3	0.8	0	1655.2	192.8	0.5	0	1661.2	250.2	0.5	0	1663.1	270.0	0.2	0	25
26	1651.0	156.9	0.8	0	1655.6	196.4	1.9	0	1661.3	251.3	0.5	0	1663.2	271.1	0.2	0	26
27	1651.1	157.7	0.6	0	1656.1	200.9	2.2	0	1661.4	252.3	0.5	0	1663.2	271.1	0.1	0	27
28	1651.3	159.4	0.6	0	1656.4	203.7	1.4	0	1661.5	253.3	0.5	0	1663.2	271.1	0.1	0	28
29					1656.7	206.4	1.4	0	1661.6	254.3	0.5	0	1663.2	271.1	0.1	0	29
30					1657.0	209.2	1.4	0	1661.7	255.3	0.5	0	1663.2	271.1	0.1	0	30
31					1657.2	211.1	1.0	0					1663.1	270.0	0.1	1.2	31
TOTAL			29.8	0			26.0	0			22.3	0			8.6	1.2	
Inf. Ac. Ft.			59.1				51.6				44.2				17.1	274.0	
Outf. Ac. Ft.				0				0				0			2.4	20.3	
Maximum Mean Daily Inflow			2.7				2.2				1.4				0.4	4.3	
Minimum Mean Daily Inflow			0.6				0.5				0.5				0.1	0	
Storage Change			+59.2				+51.7				+44.2				+14.7	+253.7	

REMARKS { Indicates mean for period. i = Interpolated. ½ Year

Max. W. S. Elev.	1663.3 feet on 5-30-39 Storage 272.1 Acre Feet	RECORDS COLLECTED BY		COMPUTATIONS	Date
Min. W. S. Elev.	1612.4 feet on 10/4-12/1/38 Storage 4.5 Acre Feet	H. Paul Keiser	Dam Tender	Gage Hts. copied	J.A.H.-C.C.G.
Max. Peak Inf.	26.1 C.F.S. from 1:00 p.m. on 1-5-39 to 2:30 p.m. on 1-5-39	Willis T. Lind	Hydrographer	Storage applied	J.A.H.-C.C.G.
Max. Peak Outf.	2.7 C.F.S. from 8:00 a.m. on 7-8-39 to 8:00 a.m. on 7-12-39		Hydrographer	Inf. & Outf. computed	H.A.V.-C.C.G.
Gage heights and storages as of midnight on day shown.				Checked	C.C.G.-H.A.V.

F. C. Dist. Form 68 Revised 600 5/39

Storages based on U.S.S.C.S. survey of Sept. 1934 corrected for debris following 3-2-38.

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Daily Gage Height in feet and Operation Record of BIG DALTON Dam

In Big Dalton Canyon for the Year Ending September 30, 1939.

Continuous Water Stage Recorder Au

Drainage Area 4.5 Square Miles. Capacity of Reservoir 968.7 Ac. Ft. at Spillway Elev. 1706.0 Ft. Gage Heights Read Daily

Day	JUNE Gage Height	JUNE Acre Ft. Storage	JUNE C.F.S. Inflow	JUNE C.F.S. Outflow	JULY Gage Height	JULY Acre Ft. Storage	JULY C.F.S. Inflow	JULY C.F.S. Outflow	AUGUST Gage Height	AUGUST Acre Ft. Storage	AUGUST C.F.S. Inflow	AUGUST C.F.S. Outflow	SEPTEMBER Gage Height	SEPTEMBER Acre Ft. Storage	SEPTEMBER C.F.S. Inflow	SEPTEMBER C.F.S. Outflow	Day
1	1662.8	266.8	0.1	1.4	1654.9	190.1	0	1.2	1643.2	101.4	0	1.2	1627.8	35.7	0	0.9	1
2	1662.6	264.7	0.1	1.4	1654.6	187.5	0	1.2	1642.8	99.1	0	1.2	1627.2	33.9	0	0.9	2
3	1662.4	262.6	0.1	1.4	1654.3	184.8	0	1.2	1642.4	96.8	0	1.2	1626.6	32.2	0	0.9	3
4	1662.1	259.5	0.1	1.4	1654.0	182.2	0	1.2	1642.0	94.5	0	1.2	1626.0	30.5	0	0.8	4
5	1661.9	257.4	0.1	1.4	1653.8	180.5	0	1.2	1641.5	91.9	0	1.2	1625.5	29.2	0	0.8	5
6	1661.6	254.3	0.1	1.4	1653.6	178.8	0	1.2	1641.0	89.2	0	1.2	1624.8	27.3	0	0.8	6
7	1661.4	252.3	0.1	1.4	1653.3	176.2	0	1.2	1640.6	87.1	0	1.2	1624.2	25.7	0	0.8	7
8	1661.2	250.2	0.1	1.4	1652.6	171.9	0	2.1	1640.0	84.0	0	1.2	1623.6	24.2	0	0.8	8
9	1660.9	247.2	0.1	1.3	1652.2	166.8	0	2.7	1639.6	82.0	0	1.2	1622.9	22.6	0	0.8	9
10	1660.7	245.2	0	1.3	1651.6	161.6	0	2.7	1639.1	79.6	0	1.1	1622.2	21.0	0	0.8	10
11	1660.4	242.1	0	1.3	1650.9	156.1	0	2.6	1638.7	77.7	0	1.1	1621.6	19.7	0	0.7	11
12	1660.1	239.1	0	1.3	1650.5	152.9	0	1.6	1638.3	75.8	0	1.1	1620.9	18.2	0	0.7	12
13	1659.9	237.1	0	1.3	1650.1	149.6	0	1.4	1637.8	73.5	0	1.1	1620.2	16.7	0	0.8	13
14	1659.6	234.2	0	1.3	1649.8	147.2	0	1.3	1637.3	71.3	0	1.1	1619.5	15.4	0	0.7	14
15	1659.3	231.2	0	1.3	1649.5	144.9	0	1.3	1636.9	69.5	0	1.1	1618.7	13.9	0	0.7	15
16	1659.0	228.3	0	1.3	1649.1	141.7	0	1.3	1636.4	67.3	0	1.1	1618.0	12.6	0	0.7	16
17	1658.8	226.4	0	1.3	1648.8	139.4	0	1.3	1636.0	65.5	0	1.1	1617.3	11.4	0	0.6	17
18	1658.6	224.5	0	1.3	1648.5	137.1	0	1.3	1635.4	63.0	0	1.1	1616.7	10.4	0	0.5	18
19	1658.3	221.6	0	1.3	1648.2	134.8	0	1.3	1634.8	60.5	0	1.1	1616.0	9.4	0	0.5	19
20	1658.0	218.7	0	1.3	1647.8	131.8	0	1.3	1634.3	58.5	0	1.0	1615.5	8.6	0	0.4	20
21	1657.7	215.9	0	1.3	1647.4	128.9	0	1.3	1633.8	56.5	0	1.0	1614.6	7.4	0	0.6	21
22	1657.5	214.0	0	1.3	1647.0	126.0	0	1.3	1633.4	55.0	0	1.0	1613.5	5.9	0	0.7	22
23	1657.2	211.1	0	1.3	1646.7	123.9	0	1.3	1632.9	53.0	0	1.0	1612.6	4.7	0	0.6	23
24	1656.9	208.3	0	1.3	1646.3	121.1	0	1.3	1632.4	51.2	0	1.0	1613.4	5.7	0.8	0.3	24
25	1656.6	205.5	0	1.3	1646.0	119.0	0	1.3	1631.8	49.0	0	1.0	1615.0	7.9	1.1	0	25
26	1656.4	203.7	0	1.3	1645.6	116.4	0	1.3	1631.3	47.2	0	1.0	1615.3	8.3	0.2	0	26
27	1656.1	200.9	0	1.3	1645.2	113.7	0	1.3	1630.7	45.1	0	1.0	1615.4	8.5	0.1	0	27
28	1655.8	198.2	0	1.3	1644.8	111.1	0	1.3	1630.2	43.4	0	0.9	1615.5	8.6	0.1	0	28
29	1655.5	195.5	0	1.3	1644.4	108.6	0	1.3	1629.6	41.4	0	0.9	1615.6	8.8	0	0	29
30	1655.2	192.6	0	1.3	1644.0	106.1	0	1.3	1629.0	39.4	0	0.9	1615.6	8.8	0	0	30
31					1643.6	103.7	0	1.3	1628.4	37.5	0	0.9					31
TOTAL			0.9	39.6			0	44.9			0	33.4			2.3	16.8	
Inf. Ac. Ft.			1.8				0				0				4.6	28.4	
Outf. Ac. Ft.				78.9				89.1				66.2			33.3	28.8	
Maximum Mean Daily Inflow			0.1				0				0				1.1		
Minimum Mean Daily Inflow			0				0				0				0		
Storage Change			-77.2				-89.1				-66.2				-28.7	-7.5	

REMARKS: Indicates mean for period.

Max. W. S. Elev.	1663.1	feet	on 5-30-39	Storage	272.1	Acre Feet		
Min. W. S. Elev.	1612.4	feet	on 10/4/38-12/1/38 &		4.5	Acre Feet		
Max. Peak Inf.	26.1	C.F.S. from	1:00 P.M. on 1-5-39	to	2:30 P.M. on 1-5-39			
Max. Peak Outf.	2.7	C.F.S. from	8:00 A.M. on 7-8-39	to	8:00 A.M. on 7-12-39			

Gage heights and storages of Midnight on day shown.

RECORDS COLLECTED BY

H. Paul Keiser	Dam Tender
Willis T. Lind	Hydrographer
	Hydrographer

COMPUTATIONS

	Date
Gage Hts. copied	C.C.G.
Storage applied	C.C.G.
Inf. & Outf. computed	C.C.G.
Checked	H.A.V.

DEVIL'S GATE DAM

F. C. Dist. Form 68 Revised 600 5/39

Storages based on U.S.S.C.S. survey of June 1938.

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Daily Gage Height in feet and Operation Record of DEVIL'S GATE Dam

In Arroyo Seco for the Year Ending September 30, 1939.

Continuous Water Stage Recorder Au

Drainage Area 30.6 Square Miles. Capacity of Reservoir 2966.8 Ac. Ft. at Spillway Elev. 1054.0 Ft. Gage Heights Read daily.

Day	OCTOBER Gage Height	OCTOBER Acre Ft. Storage	OCTOBER C.F.S. Inflow	OCTOBER C.F.S. Outflow	NOVEMBER Gage Height	NOVEMBER Acre Ft. Storage	NOVEMBER C.F.S. Inflow	NOVEMBER C.F.S. Outflow	DECEMBER Gage Height	DECEMBER Acre Ft. Storage	DECEMBER C.F.S. Inflow	DECEMBER C.F.S. Outflow	JANUARY Gage Height	JANUARY Acre Ft. Storage	JANUARY C.F.S. Inflow	JANUARY C.F.S. Outflow	Day
1	1020.3	291.4	0	17.5			0	0		0	0	0	1027.1	638.5	7.8	0	1
2	1019.6	261.5	0	12.8			0	0		0	0	0	1027.0	632.5	6.5	0	2
3	1019.6	261.5	0	0			0	0		0	0	0	1026.9	626.8	5.5	0	3
4	1019.5	257.3	0	0			0	0		0	0	0	1026.8	621.0	5.0	0	4
5	1019.1	240.6	0	5.6			0	0		0	0	0	1028.6	728.8	* 64.4	0	5
6	1018.1	200.7	0	16.9			0	0		0	0	0	1028.7	734.4	* 19.8	0	6
7	1016.9	155.7	0	19.5			0	0		0	0	0	1028.6	728.8	14.0	0	7
8	1015.4	104.1	0	25.4			0	0		0	0	0	1028.5	722.7	12.0	0	8
9	1013.7	52.6	0	25.4			0	0		0	0	0	1028.4	716.5	10.5	0	9
10	1011.0	2.2	0	25.4			0	0		0	0	0	1028.3	710.4	8.6	0	10
11	1009.8	0	0	0 11.1			0	0		0	0	0	1028.2	704.3	8.0	0	11
12		0	0	0			0	0		0	0	0	1028.1	698.1	7.1	0	12
13		0	0	0			0	0	1003.0	0	0	0	1028.0	692.0	6.6	0	13
14		0	0	0			0	0	1012.4	215	* 108	0	1027.9	686.1	5.5	0	14
15		0	0	0			0	0	1016.4	138.0	93.8	0	1027.8	680.1	4.5	0	15
16		0	0	0			0	0	1016.5	141.6	36.8	0	1027.7	674.2	3.7	0	16
17		0	0	0			0	0	1016.7	148.6	38.5	0	1027.6	668.2	3.5	0	17
18		0	0	0			0	0	1024.2	477.7	200.9	0	1027.5	662.3	3.5	0	18
19		0	0	0			0	0	1028.6	728.8	201.0	34.4	1027.4	656.3	3.6	0	19
20	STORAGE	0	0	0	STORAGE		0	0	1029.1	759.6	116.0	61.8	1027.3	650.4	* 2.9	0	20
21		0	0	0			0	0	1028.5	722.7	61.3	44.4	1027.8	680.1	* 21.7	0	21
22		0	0	0			0	0	1028.2	704.3	36.5	16.8	1027.7	674.2	* 6.1	0	22
23		0	0	0			0	0	1028.0	692.0	* 28.4	9.6	1027.7	674.2	* 6.0	0	23
24	NO	0	0	0	NO		0	0	1027.9	686.1	20.0	3.2	1027.6	668.2	4.2	0	24
25		0	0	0			0	0	1027.8	680.1	18.3	0	1027.5	662.3	3.7	0	25
26		0	0	0			0	0	1027.7	674.2	16.8	0	1027.4	656.3	3.1	0	26
27		0	0	0			0	0	1027.6	668.2	15.0	0	1027.3	650.4	2.5	0	27
28		0	0	0			0	0	1027.5	662.3	13.5	0	1027.2	644.4	2.2	0	28
29		0	0	0			0	0	1027.4	656.3	11.9	0	1027.2	644.4	* 5.2	0	29
30		0	0	0			0	0	1027.3	650.4	10.2	0	1027.2	644.4	* 5.2	0	30
31		0	0	0					1027.2	644.4	8.8	0	1027.1	638.5	* 2.2	0	31
TOTAL			0	149.3			0	0			938.5	170.2			265.1	0	
Inf. Ac. Ft.			0				0				1861.5				525.6	2387.3	
Outf. Ac. Ft.			296.1 + (*35.2)					0			337.6 + (*879.5)			(*531.8)		633.7 + **	
Maximum Mean Daily Inflow			0				0				2010				64.4	200.1	
Minimum Mean Daily Inflow			0				0				0				2.2	0	
Storage Change			-331.3				0				+644.4				-5.9 + *	+307.2	

REMARKS: Inflows taken from Pasadena Water Dept's. Arroyo Seco Gaging Station. * = Estimated percolation loss in A.F.

Max. W. S. Elev.	1029.1	feet	on 12-20-38	Storage	759.6	Acre Feet		
Min. W. S. Elev.	Dry	feet	on various times	Storage	0	Acre Feet		
Max. Peak Inf.	201.0	C.F.S. from	mean daily on 12-19-38	to		on		
Max. Peak Outf.	61.8	C.F.S. from	mean daily on 12-20-38	to		on		

Gage heights and storages as of midnight on day shown. * Indicates inflow computed, daily percolation estimated.

** 1446.5 A.F. percolation loss.

RECORDS COLLECTED BY

M.O. Brown	Dam Tender
W.T. Lind	Hydrographer
	Hydrographer

COMPUTATIONS

	Date
Gage Hts. copied	J.A.H.-C.C.G.
Storage applied	J.A.H.-C.C.G.
Inf. & Outf. computed	J.A.H.
Checked	H.A.V.-C.C.G.

DEVIL'S GATE DAM (CONT.)

F. C. Dist. Form 68 Revised 500 5/39

Storages based on U.S.G.S. survey of June 1938.

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Daily Gage Height in feet and Operation Record of DEVIL'S GATE Dam

In Arroyo Seco for the Year Ending September 30, 1939

Continuous Water Stage Recorder Au

Drainage Area 30.6 Square Miles. Capacity of Reservoir 2966.8 Ac. Ft. at Spillway Elev. 1054.0 Ft. Gage Heights Read Daily

Day	FEBRUARY				MARCH				APRIL				MAY				Day
	Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	
1	1027.1	638.5	5.2	0	1025.5	547.5	0	0	1025.3	536.5	0	0	1023.5	441.8	0	0	1
2	1027.0	632.5	2.1	0	1025.4	542.0	0	0	1025.2	530.9	0	0	1023.4	436.7	0	0	2
3	1027.1	638.5	7.9	0	1025.4	542.0	0	0	1025.2	530.9	0	0	1023.3	431.7	0	0	3
4	1027.1	638.5	4.8	0	1025.3	536.5	0	0	1025.1	525.4	0	0	1023.3	431.7	0	0	4
5	1027.0	632.5	1.7	0	1025.2	530.9	0	0	1025.0	519.9	0	0	1023.2	426.6	0	0	5
6	1027.0	632.5	4.5	0	1025.2	530.9	0	0	1025.0	519.9	0	0	1023.2	426.6	0	0	6
7	1026.9	626.8	1.5	0	1025.1	525.4	0	0	1024.9	514.6	0	0	1023.1	421.6	0	0	7
8	1027.0	632.5	7.2	0	1025.0	519.9	0	0	1024.8	509.3	0	0	1023.1	421.6	0	0	8
9	1026.9	626.8	1.3	0	1025.5	547.5	16.2	0	1024.8	509.3	0	0	1023.0	416.5	0	0	9
10	1026.8	621.0	2.5	0	1025.9	569.6	13.9	0	1024.7	504.1	0	0	1023.0	416.5	0	0	10
11	1026.8	621.0	2.5	0	1025.9	569.6	2.0	0	1024.7	504.1	0	0	1022.9	411.7	0	0	11
12	1026.7	615.3	1.8	0	1025.9	569.6	1.8	0	1024.6	498.8	0	0	1022.8	406.8	0	0	12
13	1026.6	609.5	1.5	0	1025.8	564.1	1.6	0	1024.5	493.5	0	0	1022.8	406.8	0	0	13
14	1026.5	603.8	1.3	0	1025.8	564.1	1.3	0	1024.5	493.5	0	0	1022.8	406.8	0	0	14
15	1026.5	603.8	1.0	0	1025.7	558.5	1.1	0	1024.4	488.2	0	0	1022.7	402.0	0	0	15
16	1026.4	598.1	1.0	0	1025.7	558.5	0.9	0	1024.4	488.2	0	0	1022.7	402.0	0	0	16
17	1026.3	592.3	1.0	0	1025.6	553.0	0.9	0	1024.3	482.9	0	0	1022.6	397.2	0	0	17
18	1026.2	586.6	1.0	0	1025.6	553.0	0.9	0	1024.2	477.7	0	0	1022.6	397.2	0	0	18
19	1026.1	580.8	1.0	0	1025.5	547.5	0.9	0	1024.2	477.7	0	0	1022.5	392.4	0	0	19
20	1026.1	580.8	0.9	0	1025.4	542.0	0.8	0	1024.1	472.4	0	0	1022.5	392.4	0	0	20
21	1026.0	575.1	0.9	0	1025.4	542.0	0.7	0	1024.1	472.4	0	0	1022.4	387.5	0	0	21
22	1025.9	569.6	0.8	0	1025.3	536.5	0.7	0	1024.0	467.1	0	0	1022.3	382.7	0	0	22
23	1025.9	569.6	0.8	0	1025.2	530.9	0.7	0	1024.0	467.1	0	0	1022.3	382.7	0	0	23
24	1025.8	564.1	0.7	0	1025.2	530.9	0.7	0	1023.9	462.0	0	0	1022.2	377.9	0	0	24
25	1025.8	564.1	0.6	0	1025.1	525.4	0.6	0	1023.8	457.0	0	0	1022.2	377.9	0	0	25
26	1025.7	558.5	0.4	0	1025.3	536.5	7.9	0	1023.8	457.0	0	0	1022.1	373.0	0	0	26
27	1025.7	558.5	0	0	1025.5	547.5	7.7	0	1023.7	451.9	0	0	1022.0	368.2	0	0	27
28	1025.6	553.0	0	0	1025.5	547.5	2.2	0	1023.6	446.9	0	0	1022.0	368.2	0	0	28
29					1025.4	542.0	0.6	0	1023.6	446.9	0	0	1021.9	363.6	0	0	29
30					1025.4	542.0	0.3	0	1023.5	441.8	0	0	1021.9	363.6	0	0	30
31					1025.3	536.5	0	0					1021.8	359.0	0	0	31
TOTAL			55.9	0			64.4	0			0	0			0	0	
Inf. Ac. Ft.			1109				127.7				0				0	2625.9	
Outf. Ac. Ft.			•196.4				•144.2				•94.7				•82.8	633.7+••	
Maximum Mean Daily Inflow			7.9				16.2				1.5				0	200.1	
Minimum Mean Daily Inflow			0				0				0				0	0	
Storage Change			-85.5				-16.5				-94.7				-82.8	+27.7	

REMARKS: Inflows computed from storage change and estimated percolation loss. •= Estimated percolation losses in A.F. — % Year

Max. W. S. Elev.	1029.1	feet on	12/20/38	Storage	759.6	Acre Feet		
Min. W. S. Elev.	Dry	feet on	various times	Storage	0	Acre Feet		
Max. Peak Inf.	201.0	C.F.S. from	mean daily on	12/19/38	to	on		
Max. Peak Outf.	61.8	C.F.S. from	mean daily on	12/20/38	to	on		

RECORDS COLLECTED BY: M.C. Brown, Dam Tender; W.T. Lind, Hydrographer; Hydrographer

COMPUTATIONS — Date: Gage Hts. copied J.A.H.; Storage applied J.A.H.; Inf. & Outf. computed J.A.H.; Checked H.A.V.

Gage heights and storage as of Midnight on day shown.

•• 1446.5 A.F. percolation loss.

F. C. Dist. Form 68 Revised 500 5/39

Storages based on U.S.G.S. survey of June 1938

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Daily Gage Height in feet and Operation Record of DEVIL'S GATE Dam

In Arroyo Seco for the Year Ending September 30, 1939

Continuous Water Stage Recorder Au

Drainage Area 30.6 Square Miles. Capacity of Reservoir 2966.8 Ac. Ft. at Spillway Elev. 1054.0 Ft. Gage Heights Read Daily

Day	JUNE				JULY				AUGUST				SEPTEMBER				Day
	Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	
1	1021.8	359.0	0	0	1020.0	278.2	0	0	1018.0	196.7	0	0	1016.4	138.0	0	0	1
2	1021.7	354.4	0	0	1019.9	274.0	0	0	1018.0	196.7	0	0	1016.3	134.5	0	0	2
3	1021.7	354.4	0	0	1019.8	269.8	0	0	1017.9	193.0	0	0	1016.3	134.5	0	0	3
4	1021.6	349.8	0	0	1019.8	269.8	0	0	1017.9	193.0	0	0	1016.2	131.0	0	0	4
5	1021.5	345.2	0	0	1019.7	265.7	0	0	1017.8	189.2	0	0	1016.2	131.0	0	0	5
6	1021.5	345.2	0	0	1019.7	265.7	0	0	1017.8	189.2	0	0	1016.1	127.4	0	0	6
7	1021.4	340.5	0	0	1019.6	261.5	0	0	1017.7	185.5	0	0	1016.1	127.4	0	0	7
8	1021.4	340.5	0	0	1019.5	257.3	0	0	1017.6	181.7	0	0	1016.0	123.9	0	0	8
9	1021.3	335.9	0	0	1019.5	257.3	0	0	1017.6	181.7	0	0	1016.0	123.9	0	0	9
10	1021.2	331.3	0	0	1019.4	253.1	0	0	1017.5	178.0	0	0	1016.0	123.9	0	0	10
11	1021.2	331.3	0	0	1019.4	253.1	0	0	1017.5	178.0	0	0	1015.9	120.6	0	0	11
12	1021.1	326.7	0	0	1019.3	248.9	0	0	1017.4	174.2	0	0	1015.9	120.6	0	0	12
13	1021.0	322.1	0	0	1019.2	244.8	0	0	1017.4	174.2	0	0	1015.8	117.3	0	0	13
14	1021.0	322.1	0	0	1019.2	244.8	0	0	1017.3	170.5	0	0	1015.8	117.3	0	0	14
15	1020.9	317.7	0	0	1019.1	240.6	0	0	1017.3	170.5	0	0	1015.7	114.0	0	0	15
16	1020.9	317.7	0	0	1019.0	236.4	0	0	1017.2	166.7	0	0	1015.7	114.0	0	0	16
17	1020.8	313.3	0	0	1019.0	236.4	0	0	1017.1	163.1	0	0	1015.6	110.7	0	0	17
18	1020.7	308.9	0	0	1018.9	232.4	0	0	1017.1	163.1	0	0	1015.6	110.7	0	0	18
19	1020.7	308.9	0	0	1018.9	232.4	0	0	1017.0	159.2	0	0	1015.6	110.7	0	0	19
20	1020.6	304.5	0	0	1018.8	228.5	0	0	1017.0	159.2	0	0	1015.5	107.4	0	0	20
21	1020.6	304.5	0	0	1018.7	224.5	0	0	1016.9	155.7	0	0	1015.5	107.4	0	0	21
22	1020.5	300.2	0	0	1018.7	224.5	0	0	1016.9	155.7	0	0	1015.4	104.1	0	0	22
23	1020.5	300.2	0	0	1018.6	220.5	0	0	1016.8	152.1	0	0	1015.4	104.1	0	0	23
24	1020.4	295.8	0	0	1018.6	220.5	0	0	1016.8	152.1	0	0	1017.7	185.5	42.2	0	24
25	1020.3	291.4	0	0	1018.5	216.6	0	0	1016.7	148.6	0	0	1024.0	467.1	144.7	0	25
26	1020.3	291.4	0	0	1018.4	212.6	0	0	1016.7	148.6	0	0	1024.8	509.3	24.0	0	26
27	1020.2	287.0	0	0	1018.3	208.6	0	0	1016.6	145.1	0	0	1024.7	504.1	0	0	27
28	1020.2	287.0	0	0	1018.3	208.6	0	0	1016.6	145.1	0	0	1024.6	498.8	0	0	28
29	1020.1	282.6	0	0	1018.2	204.6	0	0	1016.5	141.6	0	0	1024.5	493.5	0	0	29
30	1020.1	282.6	0	0	1018.2	204.6	0	0	1016.5	141.6	0	0	1024.4	488.2	0	0	30
31					1018.1	200.7	0	0	1016.4	138.0	0	0					31
TOTAL			0	0			0	0			0	0			210.9	0	
Inf. Ac. Ft.			0				0				0				418	3044.2	
Outf. Ac. Ft.			•76.4				•81.9				•62.7				•68.0	633.7+••	
Maximum Mean Daily Inflow			0				0				0				144.7	200.1	
Minimum Mean Daily Inflow			0				0				0				0	0	
Storage Change			-76.4				-81.9				-62.7				+350.2	+156.9	

REMARKS: Inflows computed from storage changes and estimated percolation loss. • = Estimated percolation loss in A.F. — Yearly Totals

Max. W. S. Elev.	1029.1	feet on	12/20/38	Storage	759.6	Acre Feet		
Min. W. S. Elev.	Dry	feet on	various times	Storage	0	Acre Feet		
Max. Peak Inf.	201.0	C.F.S. from	mean daily on	12/19/38	to	on		
Max. Peak Outf.	61.8	C.F.S. from	mean daily on	12/20/38	to	on		

RECORDS COLLECTED BY: M.C. Brown, Dam Tender; W.T. Lind, Hydrographer; Hydrographer

COMPUTATIONS — Date: Gage Hts. copied J.A.H.-C.C.G.; Storage applied J.A.H.-C.C.G.; Inf. & Outf. computed C.C.G.; Checked H.A.V.-C.C.G.

Gage heights and storage as of Midnight on day shown.

•• 1446.5 A.F. percolation loss.

EATON WASH DAM

F. C. Dist. Form 68 Revised 600 5/39

Storages based on Calif. Tech. Student survey corrected for debris loss following 3-2-38.

Daily Gage Height in feet and Operation Record of EATON WASH Dam

In Eaton Wash for the Year Ending September 30, 1939

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Continuous Water Stage Recorder All

Drainage Area 9.48 Square Miles. Capacity of Reservoir 698.3 Ac. Ft. at Spillway Elev. 887.5 Ft. Gage Heights Read daily.

Day	OCTOBER Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	NOVEMBER Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	DECEMBER Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	JANUARY Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Day
1											0	0	857.4	401	0	0	1
2											0	0	857.2	383	0	0	2
3											0	0	857.0	366	0	0	3
4											0	0	856.7	341	0	0	4
5											0	0	859.1	553	11.6	0	5
6											0	0	858.9	534	0.4	0	6
7											0	0	858.7	516	0.4	0	7
8											0	0	858.4	489	0	0	8
9											0	0	658.2	471	0.3	0	9
10											0	0	858.0	453	0.3	0	10
11											0	0	857.8	436	0.5	0	11
12											0	0	857.6	418	0.2	0	12
13											0	0	857.4	401	0.2	0	13
14	NO STORAGE				NO STORAGE				847.0	0	0	0	857.2	383	0.1	0	14
15									852.7	7.5	4.0	0	857.0	366	0.2	0	15
16									852.5	6.7	0	0	856.8	350	0.1	0	16
17									852.1	5.2	0	0	856.6	333	0	0	17
18									861.0	74.2	35.5	0	856.4	317	0.1	0	18
19									863.6	106.6	21.3	2.4	856.3	309	0.3	0	19
20									861.7	81.8	15.5	25.8	856.1	292	0	0	20
21									861.0	74.2	5.0	6.8	856.8	350	3.8	0	21
22									860.3	67.0	0.1	2.0	856.7	341	0.4	0	22
23									860.0	63.9	0	0	856.6	333	0.5	0	23
24									859.6	60.1	0	0	856.4	317	0	0	24
25									859.3	57.2	0	0	856.2	300	0	0	25
26									859.0	54.3	0	0	856.0	284	0	0	26
27									858.7	51.6	0	0	855.9	276	0.3	0	27
28									858.4	48.9	0	0	855.7	261	0	0	28
29									858.1	46.2	0	0	855.5	246	0	0	29
30									857.9	44.4	0	0	855.4	238	0	0	30
31									857.6	41.8	0	0	855.2	223	0	0	31
TOTAL			0	0			0	0			81.4	37.0			19.7	0	
Inf. Ac. Ft.			0				0				161.5				39.1	200.6	
Outf. Ac. Ft.				0				0			73.4 + (•46.3)				0 + (•58.6)	73.4+(•104.9)	
Maximum Mean Daily Inflow			0				0				35.5				11.8	35.5	
Minimum Mean Daily Inflow			0				0				0				0	0	
Storage Change			0				0				+ 41.8				- 19.5	+ 22.3	

REMARKS Outflows are valve releases and do not include percolation. (•) = Loss by percolation.

Max. W. S. Elev.	864.25 feet on 12-19-38 Storage 112.3 Acre Feet	RECORDS COLLECTED BY		COMPUTATIONS	Date
Min. W. S. Elev.	Dry feet on various times Storage Acre Feet	C.C.Green	Dam Tender	Gage Hts. copied	J.A.H.
Max. Peak Inf.	169.4 C.F.S. from 10:00 p.m. on 12-18-38 to 12:00 p.m. on 12-18-38	W.T.Lind	Hydrographer	Storage applied	J.A.H.
Max. Peak Outf.	29.0 C.F.S. from 10:00p.m. on 12-19-38 to 8:00 p.m. on 12-20-38	R.E.Lindsay	Hydrographer	Inf. & Outf. computed	J.A.H.
				Checked	C.C.G.

½ Year

Gage heights and storages as of midnight on day shown.

Inflows computed from storage change, valve discharge and computed percolation and evaporation.

F. C. Dist. Form 68 Revised 600 5/39

Storages based on Calif. Tech. Student survey corrected for debris loss following 3-2-38.

Daily Gage Height in feet and Operation Record of EATON WASH Dam

In Eaton Wash for the Year Ending September 30, 1939

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Continuous Water Stage Recorder All

Drainage Area 9.48 Square Miles. Capacity of Reservoir 698.3 Ac. Ft. at Spillway Elev. 887.5 Ft. Gage Heights Read daily.

Day	FEBRUARY Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	MARCH Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	APRIL Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	MAY Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Day
1	855.0	208	0	0	851.1	27	0	0	849.5	0.8	0						1
2	854.9	201	0	0	851.0	24	0	0	849.4	0.7	0						2
3	854.8	194	0	0	850.9	23	0	0	849.2	0.6	0						3
4	854.7	187	0	0	850.8	22	0	0	849.1	0.5	0						4
5	854.5	174	0	0	850.6	19	0	0	848.9	0.4	0						5
6	854.3	160	0	0	850.4	17	0	0	848.8	0.4	0						6
7	854.2	154	0	0	850.2	14	0	0	848.6	0.3	0						7
8	854.0	140	0	0	850.1	13	0	0	848.6	0.3	0						8
9	853.9	135	0	0	850.5	18	0.2	0	848.5	0.3	0						9
10	853.7	124	0	0	851.3	32	0.8	0	848.5	0.3	0						10
11	853.6	116	0	0	851.1	27	0	0	848.4	0.3	0						11
12	853.4	108	0	0	851.0	24	0	0	848.3	0.2	0						12
13	853.3	102	0	0	850.9	23	0	0	848.2	0.2	0						13
14	853.2	97	0	0	850.8	22	0	0		0	0						14
15	853.0	86	0	0	850.7	21	0	0			0						15
16	852.9	82	0	0	850.6	19	0	0			0						16
17	852.7	75	0	0	850.5	18	0	0			0						17
18	852.5	67	0	0	850.4	17	0	0			0						18
19	852.4	63	0	0	850.2	14	0	0			0						19
20	852.3	59	0	0	850.1	13	0	0			0						20
21	852.2	56	0	0	850.0	12	0	0			0						21
22	852.0	48	0	0	850.0	12	0	0			0						22
23	851.9	46	0	0	850.0	12	0	0			0						23
24	851.8	43	0	0	850.0	12	0	0			0						24
25	851.6	39	0	0	849.9	11	0	0			0						25
26	851.4	34	0	0	849.8	10	0	0			0						26
27	851.3	32	0	0	850.2	14	0	0			0						27
28	851.2	29	0	0	850.1	13	0	0			0						28
29					849.9	11	0	0			0						29
30					849.8	10	0	0			0						30
31					849.7	09	0	0									31
TOTAL			0	0			1.0	0			0	0			0	0	
Inf. Ac. Ft.			0				2.0				0				0	202.6	
Outf. Ac. Ft.				0+(•19.4)				0+(•4.0)				0+(•0.9)			0	73.4+(•129.2)	
Maximum Mean Daily Inflow			0				0				0				0	35.5	
Minimum Mean Daily Inflow			0				0				0				0	0	
Storage Change			-19.4				- 2.0 + •4.0				- 0.9				0	0	

REMARKS (•) = Percolation loss.

Max. W. S. Elev.	864.25 feet on 12-19-38 Storage 112.3 Acre Feet	RECORDS COLLECTED BY		COMPUTATIONS	Date
Min. W. S. Elev.	Dry feet on various times Storage Acre Feet	C.C.Green	Dam Tender	Gage Hts. copied	J.A.H.
Max. Peak Inf.	169.4 C.F.S. from 10:00 p.m. on 12-18-38 to 12:00 p.m. on 12-18-38	W.T.Lind	Hydrographer	Storage applied	J.A.H.
Max. Peak Outf.	29.0 C.F.S. from at 10:00p.m. on 12-19-38 to 8:00 p.m. on 12-20-38	R.E.Lindsay	Hydrographer	Inf. & Outf. computed	J.A.H.
				Checked	C.C.G.

½ Year

Gage heights and storages as of midnight on day shown.

Inflows computed from storage change, valve discharge and computed percolation and evaporation.

EATON WASH DAM (CONT)

F. C. Dist. Form 88 Revised 600 5/39

Storages based on Calif. Tech. Student survey corrected for debris loss following March 2,38.

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Daily Gage Height in feet and Operation Record of EATON WASH Dam

In Eaton Wash for the Year Ending September 30, 1939.

Continuous Water Stage Recorder Au

Drainage Area 9.48 Square Miles. Capacity of Reservoir 698.3 Ac. Ft. at Spillway Elev. 887.5 Ft.

Gage Heights Read Daily

Day	JUNE Gage Height	JUNE Acre Ft. Storage	JUNE C.F.S. Inflow	JUNE C.F.S. Outflow	JULY Gage Height	JULY Acre Ft. Storage	JULY C.F.S. Inflow	JULY C.F.S. Outflow	AUGUST Gage Height	AUGUST Acre Ft. Storage	AUGUST C.F.S. Inflow	AUGUST C.F.S. Outflow	SEPTEMBER Gage Height	SEPTEMBER Acre Ft. Storage	SEPTEMBER C.F.S. Inflow	SEPTEMBER C.F.S. Outflow	Day
1															0	0	1
2															0	0	2
3															0	0	3
4															0	0	4
5															0	0	5
6															0	0	6
7															0	0	7
8															0	0	8
9															0	0	9
10															0	0	10
11															0	0	11
12	RESERVOIR DRY				RESERVOIR DRY				RESERVOIR DRY						0	0	12
13															0	0	13
14		NO STORAGE				NO STORAGE				NO STORAGE				NO STORAGE	0	0	14
15															0	0	15
16															0	0	16
17															0	0	17
18															0	0	18
19															0	0	19
20															0	0	20
21															0	0	21
22															0	0	22
23															0	0	23
24													851.9	4.6	9.3	0	24
25													861.7	31.8	51.1	5.2	25
26													862.0	85.1	8.7	0	26
27													861.2	76.4	0	0	27
28													860.7	71.1	0	0	28
29													860.2	65.0	0	0	29
30													859.8	62.0	0	0	30
31																	31
TOTAL			0	0			0	0			0	0			69.1	5.2	
Inf. Ac. Ft.			0				0				0				137.1	339.7	
Outf. Ac. Ft.				0				0				0			10.3 + (°64.7)	83.7+(°193.9)	
Maximum Mean Daily Inflow			0				0				0				51.1	51.1	
Minimum Mean Daily Inflow			0				0				0				0	0	
Storage Change			0				0				0				+62.0	+62.0	

REMARKS (°) = Percolation loss.

Yearly Totals

Max. W. S. Elev.	864.25	feet on 12/19/38	Storage 112.3	Acre Feet		
Min. W. S. Elev.	Dry	feet on various times	Storage	Acre Feet		
Max. Peak Inf.	169.4	C. F. S. from 10:00 P.M. on 12/18/38	to 12:00 P.M. on 12/18/38			
Max. Peak Outf.	29.0	C. F. S. from 10:00 P.M. on 12/19/38	to 8:00 P.M. on 12/20/38			

Gage heights and storages as of Midnight on day shown.

Inflows computed from storage change, valve discharge and computed percolation and evaporation.

RECORDS COLLECTED BY		COMPUTATIONS	Date
C.O. Green	Dam Tender	Gage Hts. copied	J.A.H.
W.T. Lind	Hydrographer	Storage applied	J.A.H.
R.E. Lindsay	Hydrographer	Inf. & Outf. computed	J.A.H.
		Checked	C.C.G.-H.A.V.

LIVE OAK DAM

F. C. Dist. Form 88 Revised 600 5/39

Storages based on U.S.C.S. survey of May 1938.

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Daily Gage Height in feet and Operation Record of LIVE OAK Dam

In On Live Oak Creek for the Year Ending September 30, 1939.

Continuous Water Stage Recorder Au

Drainage Area 2.30 Square Miles. Capacity of Reservoir 227.5 Ac. Ft. at Spillway Elev. 1497.0 Ft.

Gage Heights Read at various times.

Day	OCTOBER Gage Height	OCTOBER Acre Ft. Storage	OCTOBER C.F.S. Inflow	OCTOBER C.F.S. Outflow	NOVEMBER Gage Height	NOVEMBER Acre Ft. Storage	NOVEMBER C.F.S. Inflow	NOVEMBER C.F.S. Outflow	DECEMBER Gage Height	DECEMBER Acre Ft. Storage	DECEMBER C.F.S. Inflow	DECEMBER C.F.S. Outflow	JANUARY Gage Height	JANUARY Acre Ft. Storage	JANUARY C.F.S. Inflow	JANUARY C.F.S. Outflow	Day
1											0	0	1449.7	0.5	0	0	1
2											0	0	1449.8	0.6	0	0	2
3											0	0	1449.8	0.6	0	0	3
4											0	0	1449.8	0.6	0	0	4
5											0	0	1450.7	0.8	0.1	0	5
6											0	0	1450.8	0.8	0.05	0	6
7											0	0	1450.9	0.9	0.05	0	7
8											0	0	1451.0	0.9	0.05	0	8
9											0	0	1451.1	0.9	0.05	0	9
10											0	0	1451.2	1.0	0.05	0	10
11											0	0	1451.3	1.0	0.05	0	11
12		STORAGE				STORAGE				STORAGE	0	0	1451.5	1.1	0.05	0	12
13											0	0	1451.6	1.1	0.05	0	13
14											0	0	1451.7	1.2	0	0	14
15											0	0	1451.9	1.2	0	0	15
16											0	0	1452.0	1.3	0	0	16
17											0	0	1452.1	1.3	0	0	17
18		NO				NO				NO	0	0	1452.2	1.4	0	0	18
19									1445.0	0	0	0	1452.4	1.4	0	0	19
20									1448.4	0.3	0.1	0	1452.5	1.5	0	0	20
21									1449.1	0.4	0.05	0	1453.0	1.7	0.1	0	21
22									1449.2	0.4	0.05	0	1453.1	1.8	0.05	0	22
23									1449.3	0.5	0.05	0	1453.3	1.9	0.05	0	23
24									1449.4	0.5	0	0	1453.4	2.0	0.05	0	24
25									1449.4	0.5	0	0	1453.5	2.0	0.05	0	25
26									1449.4	0.5	0	0	1453.7	2.2	0.05	0	26
27									1449.5	0.5	0	0	1453.8	2.2	0.05	0	27
28									1449.5	0.5	0	0	1454.0	2.3	0.05	0	28
29									1449.6	0.5	0	0	1454.1	2.4	0	0	29
30									1449.6	0.5	0	0	1454.4	2.6	0.1	0	30
31									1449.7	0.5	0	0	1454.5	2.7	0.05	0	31
TOTAL											0.25	0			1.10	0	
Inf. Ac. Ft.											0.5				2.2	2.7	
Outf. Ac. Ft.												0				0	
Maximum Mean Daily Inflow											0.1				0.1	0.1	
Minimum Mean Daily Inflow											0				0	0	
Storage Change											+0.5				+2.2	+2.7	

REMARKS Inflows are computed from storage change. Mean for period. ½ Year

Max. W. S. Elev.	1465.4	feet on 4/26-5/1/39	Storage 20.5	Acre Feet		
Min. W. S. Elev.	1445.0	feet at & various times	Storage 0	Acre Feet		
Max. Peak Inf.	1.4	C. F. S. from midnight on 2-3-39	to 4:00 a.m. on 2-4-39			
Max. Peak Outf.	Est. 8.0	C. F. S. from at 5:00 p.m. on 9-16-39	to empty & reservoir			

Gage heights and storages as of midnight on day shown.

RECORDS COLLECTED BY		COMPUTATIONS	Date
W.T.Lind	Dam Tender	Gage Hts. copied	J.A.H.
O.L.Brewster	Hydrographer	Storage applied	J.A.H.
H.A.van der Goot	Hydrographer	Inf. & Outf. computed	J.A.H.
		Checked	C.C.G.

F. C. Dist. Form 66 Revised 600 5/29

Storages based on U.S.S.C.S. survey of May 1936.

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Daily Gage Height in feet and Operation Record of LIVE OAK Dam

In/On Live Oak Creek for the Year Ending September 30, 1939

Continuous Water Stage Recorder Au

Drainage Area 2.30 Square Miles. Capacity of Reservoir 227.5 Ac. Ft. at Spillway Elev. 1497.0 Ft.

Gage Heights Read at various times.

Day	FEBRUARY Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	MARCH Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	APRIL Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	MAY Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Day
1	1454.7	2.8	0.05	0	1462.9	14.4	0.05	0	1464.7	18.7	0.05	0	1465.4	20.6	0	0	1
2	1454.8	2.9	0.05	0	1462.9	14.4	0.05	0	1464.8	19.0	0.05	0	1465.3	20.3	0	0	2
3	1456.3	4.2	0.7	0	1463.0	14.6	0.05	0	1464.9	19.2	0.05	0	1465.3	20.3	0	0	3
4	1458.1	6.2	1.0	0	1463.0	14.6	0.05	0	1464.9	19.2	0.05	0	1465.3	20.3	0	0	4
5	1458.7	7.0	0.4	0	1463.1	14.8	0.05	0	1465.0	19.5	0.05	0	1465.3	20.3	0	0	5
6	1459.2	7.7	0.3	0	1463.1	14.8	0.05	0	1465.0	19.5	0.05	0	1465.3	20.3	0	0	6
7	1459.5	8.2	0.3	0	1463.2	15.1	0.05	0	1465.0	19.5	0.05	0	1465.3	20.3	0	0	7
8	1460.5	9.8	0.8	0	1463.2	15.1	0.05	0	1465.0	19.5	0.05	0	1465.3	20.3	0	0	8
9	1460.9	10.4	0.3	0	1463.3	15.3	0.05	0	1465.1	19.8	0.05	0	1465.2	20.0	0	0	9
10	1461.2	11.0	0.3	0	1463.4	15.5	0.05	0	1465.1	19.8	0.05	0	1465.2	20.0	0	0	10
11	1461.4	11.4	0.2	0	1463.5	15.8	0.05	0	1465.1	19.8	0.05	0	1465.2	20.0	0	0	11
12	1461.6	11.7	0.2	0	1463.5	15.8	0.05	0	1465.1	19.8	0.05	0	1465.2	20.0	0	0	12
13	1461.7	11.9	0.1	0	1463.6	16.0	0.05	0	1465.2	20.0	0.05	0	1465.2	20.0	0	0	13
14	1461.8	12.1	0.1	0	1463.6	16.0	0.05	0	1465.2	20.0	0.05	0	1465.2	20.0	0	0	14
15	1462.0	12.5	0.1	0	1463.7	16.2	0.05	0	1465.2	20.0	0.05	0	1465.2	20.0	0	0	15
16	1462.0	12.5	0.1	0	1463.7	16.2	0.05	0	1465.2	20.0	0.05	0	1465.1	19.8	0	0	16
17	1462.0	12.5	0.1	0	1463.7	16.2	0.05	0	1465.2	20.0	0.05	0	1465.1	19.8	0	0	17
18	1462.1	12.7	0.1	0	1463.8	16.4	0.05	0	1465.3	20.3	0.05	0	1465.1	19.8	0	0	18
19	1462.2	12.9	0.1	0	1463.8	16.4	0.05	0	1465.3	20.3	0.05	0	1465.1	19.8	0	0	19
20	1462.2	12.9	0.1	0	1463.9	16.7	0.05	0	1465.3	20.3	0.05	0	1465.0	19.5	0	0	20
21	1462.3	13.1	0.05	0	1463.9	16.7	0.05	0	1465.3	20.3	0.05	0	1465.0	19.5	0	0	21
22	1462.4	13.3	0.05	0	1463.9	16.7	0.05	0	1465.3	20.3	0.05	0	1465.0	19.5	0	0	22
23	1462.5	13.6	0.05	0	1463.9	16.7	0.05	0	1465.3	20.3	0	0	1464.9	19.2	0	0	23
24	1462.5	13.6	0.05	0	1464.0	16.9	0.05	0	1465.3	20.3	0	0	1464.9	19.2	0	0	24
25	1462.6	13.8	0.05	0	1464.0	16.9	0.05	0	1465.3	20.3	0	0	1464.8	19.0	0	0	25
26	1462.7	14.0	0.05	0	1464.1	17.2	0.25	0	1465.4	20.6	0	0	1464.8	19.0	0	0	26
27	1462.7	14.0	0.05	0	1464.3	17.7	0.3	0	1465.4	20.6	0	0	1464.7	18.7	0	0	27
28	1462.8	14.2	0.05	0	1464.4	17.9	0.1	0	1465.4	20.6	0	0	1464.7	18.7	0	0	28
29					1464.5	18.2	0.1	0	1465.4	20.6	0	0	1464.6	18.5	0	0	29
30					1464.5	18.2	0.1	0	1465.4	20.6	0	0	1464.6	18.5	0	0	30
31					1464.6	18.5	0.1	0					1464.5	18.2	0	0	31
TOTAL			5.80	0			2.20	0			1.1	0			0	0	
Inf. Ac. Ft.			11.5				4.3				2.1				0	20.6	
Outf. Ac. Ft.				0				0				0			0 + (2.4)	0+(2.4)	
Maximum Mean Daily Inflow			1.00				0.25				0.15				0	1.0	
Minimum Mean Daily Inflow			0				0				0				0	0	
Storage Change			+11.5				+4.3				+2.1				-2.4	18.2	

REMARKS Inflows are net and are computed from storage change. ( )= Loss due to percolation and evaporation. [Mean for period. ½ Year

Max. W. S. Elev.	1465.4	feet on 4/26-5/1/39 Storage	20.6	Acre Feet	RECORDS COLLECTED BY	COMPUTATIONS Date
Min. W. S. Elev.	1445.0	feet at ~~or~~ various times Storage	0	Acre Feet	W.T.Lind Dam Tender	Gage Hts. copied J.A.H.
Max. Peak Inf.	1.4	C.F.S. from midnight on 2-3-39	to 4:00 a.m. on 2-4-39		O.L.Brewster Hydrographer	Storage applied J.A.H.
Max. Peak Outf. Est.	8.0	C.F.S. from ~~at~~ at 5:00p.m. on 9-16-39	to empty ~~or~~ reservoir		H.A.van der Goot Hydrographer	Inf. & Outf. computed J.A.H.
						Checked C.C.G.

Gage heights and storages as of midnight on day shown.

F. C. Dist. Form 66 Revised 600 5/29

Storages based on U.S.S.C.S. survey of May 1936.

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Daily Gage Height in feet and Operation Record of LIVE OAK Dam

In/On Live Oak Creek for the Year Ending September 30, 1939

Continuous Water Stage Recorder Au

Drainage Area 2.30 Square Miles. Capacity of Reservoir 227.5 Ac. Ft. at Spillway Elev. 1497.0 Ft.

Gage Heights Read at various times.

Day	JUNE Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	JULY Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	AUGUST Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	SEPTEMBER Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Day
1	1464.5	18.2	0	0	1461.9	12.3	0	0	1458.2	6.4	0	0	1455.8	3.7	0	0	1
2	1464.4	17.9	0	0	1461.8	12.1	0	0	1458.1	6.2	0	0	1455.7	3.6	0	0	2
3	1464.4	17.9	0	0	1461.6	11.7	0	0	1458.0	6.1	0	0	1455.7	3.6	0	0	3
4	1464.3	17.7	0	0	1461.5	11.6	0	0	1457.8	5.9	0	0	1455.6	3.5	0	0	4
5	1464.3	17.7	0	0	1461.4	11.4	0	0	1457.7	5.7	0	0	1455.6	3.5	0	0	5
6	1464.2	17.4	0	0	1461.3	11.2	0	0	1457.6	5.6	0	0	1455.5	3.5	0	0	6
7	1464.1	17.2	0	0	1461.2	11.0	0	0	1457.5	5.5	0	0	1455.5	3.5	0	0	7
8	1464.0	16.9	0	0	1461.1	10.8	0	0	1457.4	5.4	0	0	1455.5	3.5	0	0	8
9	1464.0	16.9	0	0	1461.0	10.6	0	0	1457.3	5.3	0	0	1455.4	3.4	0	0	9
10	1463.9	16.7	0	0	1460.9	10.4	0	0	1457.2	5.1	0	0	1455.4	3.4	0	0	10
11	1463.8	16.4	0	0	1460.7	10.1	0	0	1457.1	5.0	0	0	1455.4	3.4	0	0	11
12	1463.7	16.2	0	0	1460.6	9.9	0	0	1457.0	4.9	0	0	1455.3	3.3	0	0	12
13	1463.6	16.0	0	0	1460.5	9.8	0	0	1457.0	4.9	0	0	1455.3	3.3	0	0	13
14	1463.5	15.8	0	0	1460.4	9.6	0	0	1456.9	4.8	0	0	1455.2	3.2	0	0	14
15	1463.4	15.5	0	0	1460.3	9.4	0	0	1456.8	4.7	0	0	1452.8	1.7	0	0.8	15
16	1463.3	15.3	0	0	1460.1	9.1	0	0	1456.7	4.6	0	0	1445.0	0	0	0.8	16
17	1463.2	15.1	0	0	1460.0	8.9	0	0	1456.7	4.6	0	0		0	0	0	17
18	1463.2	15.1	0	0	1459.9	8.8	0	0	1456.6	4.5	0	0		0	0	0	18
19	1463.1	14.8	0	0	1459.7	8.5	0	0	1456.5	4.4	0	0		0	0	0	19
20	1463.0	14.6	0	0	1459.6	8.3	0	0	1456.5	4.4	0	0		0	0	0	20
21	1462.9	14.4	0	0	1459.5	8.2	0	0	1456.4	4.3	0	0		0	0	0	21
22	1462.8	14.2	0	0	1459.4	8.0	0	0	1456.3	4.2	0	0		0	0	0	22
23	1462.7	14.0	0	0	1459.2	7.7	0	0	1456.3	4.2	0	0	DRY	0	0	0	23
24	1462.6	13.8	0	0	1459.1	7.6	0	0	1456.2	4.1	0	0		0	0	0	24
25	1462.5	13.6	0	0	1459.0	7.4	0	0	1456.1	4.0	0	0		0	0	0	25
26	1462.4	13.3	0	0	1458.9	7.3	0	0	1456.1	4.0	0	0		0	0	0	26
27	1462.3	13.1	0	0	1458.8	7.1	0	0	1456.0	3.9	0	0		0	0	0	27
28	1462.2	12.9	0	0	1458.6	6.9	0	0	1456.0	3.9	0	0		0	0	0	28
29	1462.1	12.7	0	0	1458.5	6.8	0	0	1455.9	3.8	0	0		0	0	0	29
30	1462.0	12.5	0	0	1458.4	6.6	0	0	1455.8	3.7	0	0	RESERVOIR	0	0	0	30
31					1458.3	6.5	0	0	1455.8	3.7	0	0					31
TOTAL			0	0			0	0			0	0			0	1.6	
Inf. Ac. Ft.			0				0				0				0	20.6	
Outf. Ac. Ft.			(5.7)				(6.0)				(2.8)				3.2+(0.5)	3.2+(17.4)	
Maximum Mean Daily Inflow			0				0				0				0	1.0	
Minimum Mean Daily Inflow			0				0				0				0	0	
Storage Change			-5.7				-6.0				-2.8				-3.7+*(0.5)	0	

REMARKS ( )= Loss due to percolation and evaporation. [Mean for period. Yearly Totals

Max. W. S. Elev.	1465.4	feet on 4/26-5/1/39 Storage	20.6	Acre Feet	RECORDS COLLECTED BY	COMPUTATIONS Date
Min. W. S. Elev.	1445.0	feet at ~~or~~ various times Storage	0	Acre Feet	W.T.Lind Dam Tender	Gage Hts. copied J.A.H.
Max. Peak Inf.	1.4	C.F.S. from midnight on 2-3-39	to 4:00 a.m. on 2-4-39		O.L.Brewster Hydrographer	Storage applied J.A.H.
Max. Peak Outf. Est.	8.0	C.F.S. from ~~at~~ at 5:00 p.m. on 9-16-39	to drain reservoir		H.A.van der Goot Hydrographer	Inf. & Outf. computed J.A.H.
						Checked C.C.G.-H.A.V.

Gage heights and storages as of midnight on day shown.

PACOIMA DAM

F. C. Dist. Form 68 Revised 600 5/39

Storage based on Map 64-T-11 with corrections for debris loss following 3-2-38.

Daily Gage Height in feet and Operation Record of PACOIMA Dam

In Pacoima Canyon for the Year Ending September 30, 1939.

Drainage Area 27.8 Square Miles. Capacity of Reservoir 5004.3 Ac. Ft. at Spillway Elev. 1950.0 Ft.

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Continuous Water Stage Recorder Au

Gage Heights Read daily.

Day	OCTOBER Gage Height	OCTOBER Acre Ft. Storage	OCTOBER C.F.S. Inflow	OCTOBER C.F.S. Outflow	NOVEMBER Gage Height	NOVEMBER Acre Ft. Storage	NOVEMBER C.F.S. Inflow	NOVEMBER C.F.S. Outflow	DECEMBER Gage Height	DECEMBER Acre Ft. Storage	DECEMBER C.F.S. Inflow	DECEMBER C.F.S. Outflow	JANUARY Gage Height	JANUARY Acre Ft. Storage	JANUARY C.F.S. Inflow	JANUARY C.F.S. Outflow	Day
1			0.3	0.3			0.6	0.6	1762.4	E 0.6	E 0.4	E 0.1	1830.6	716.2	9.0	10.8	1
2			0.3	0.3			0.6	0.6	1762.5	1.2	0.4	0.1	1830.4	712.6	9.0	10.6	2
3			0.3	0.3			0.6	0.6	1762.6	1.8	0.4	0.1	1830.3	710.8	8.7	9.6	3
4			0.5	0.5			0.6	0.6	1762.9	2.4	0.4	0.1	1830.3	710.8	9.6	9.6	4
5			1.4	1.4			0.6	0.6	1763.1	3.0	0.4	0.1	1832.6	752.0	27.4	6.6	5
6			1.2	1.2			0.5	0.5	1763.4	3.6	0.4	0.1	1833.8	773.9	21.0	10	6
7			0.7	0.7			0.5	0.5	1763.7	4.2	0.4	0.1	1833.9	775.7	17.5	16.6	7
8			0.4	0.4			0.5	0.5	1763.8	4.8	0.4	0.1	1833.9	775.7	16.6	16.6	8
9			0.4	0.4			0.5	0.5	1764.0	5.4	0.4	0.1	1833.5	768.4	16.4	20	9
10			0.4	0.4			0.6	0.6	1764.4	6.0	0.4	0.1	1831.2	726.9	14.0	35	10
11			0.4	0.4			0.5	0.5	1764.6	6.5	0.4	0.1	1828.0	670.7	20.7	49	11
12			0.4	0.4			0.5	0.5	1765.3	7.1	0.4	0.1	1824.8	616.8	18.8	46	12
13	STORAGE		0.4	0.4	STORAGE		0.5	0.5	1765.7	E 7.7	E 0.4	0.1	1821.5	563.2	18.0	45	13
14			0.4	0.4			0.6	0.6	1769.9	11.9	2.2	0.1	1818.1	510.2	17.3	44	14
15			0.4	0.4			0.5	0.5	1777.3	52.6	20.6	0.1	1814.6	458.3	16.8	43	15
16			0.4	0.4			0.4	0.4	1781.5	83.7	15.8	0.1	1813.0	435.3	18.4	30	16
17			0.4	0.4			0.5	0.5	1783.7	101.8	9.2	E 0.1	1812.3	425.4	9.0	14	17
18			0.4	0.4			0.5	0.5	1797.5	238.7	69.2	0.2	1809.2	382.6	4.5	26	18
19	NO		0.4	0.4	NO		0.5	0.5	1811.1	408.7	86.0	0.2	1805.1	329.4	7.1	34	19
20			0.4	0.4			0.5	0.5	1821.0	555.3	74.1	0.2	1801.1	279.3	1.8	27	20
21			1.3	1.3			0.5	0.5	1826.9	652.0	48.8	0.1	1802.8	300.9	16.9	6	21
22			0.7	0.7			0.5	0.5	1829.2	691.6	28.5	8.5	1805.1	329.4	14.4	0.1	22
23			0.6	0.6			0.4	0.4	1829.2	691.6	24.0	24	1806.8	351.1	11.1	0.1	23
24			0.6	0.6			0.4	0.4	1829.5	696.8	15.8	13.2	1808.2	369.4	9.3	0.1	24
25			0.6	0.6			0.4	0.4	1830.1	707.3	15.5	10.2	1809.4	385.5	8.2	0.1	25
26			0.6	0.6			0.4	0.4	1830.6	716.2	14.7	10.2	1810.6	401.8	8.3	0.1	26
27			0.6	0.6			0.4	0.4	1830.9	721.5	12.3	9.6	1811.7	417.0	7.8	0.1	27
28			0.6	0.6			0.4	0.4	1831.1	725.1	12.0	10.2	1812.7	431.0	7.1	0.1	28
29			0.6	0.6			0.4	0.4	1831.0	723.3	9.3	10.2	1813.7	445.2	7.3	0.1	29
30			0.6	0.6			0.5	0.5	1830.9	721.5	9.8	10.7	1814.9	462.6	8.9	0.1	30
31			0.6	0.6					1830.8	719.7	9.9	10.9	1816.2	481.7	9.7	0.1	31
TOTAL			17.3	17.3			14.9	14.9			482.9	120.1			390.6	510.6	
Inf. Ac. Ft.			34.3				29.6				957.8				774.7	1796.4	
Outf. Ac. Ft.				34.3				29.6				238.2			1012.8	1314.9	
Maximum Mean Daily Inflow			1.4				0.6				86.0				27.4	86.0	
Minimum Mean Daily Inflow			0.3				0.4				0				1.8	0	
Storage Change			0				0				+719.7				-238.0	481.7	

REMARKS: Outflows as per gaging Sta. 118. Inflows computed from storage change. E= Estimate. ½ Year

Max. W. S. Elev.	1845.25 feet on 5-15-39	Storage 998.1 Acre Feet	RECORDS COLLECTED BY		COMPUTATIONS	Date
Min. W. S. Elev.	Dry feet on various times	Storage 0 Acre Feet	R.E.Waddicor	Dam Tender	Gage Hts. copied	J.A.H.
Max. Peak Inf.	145.2 C.F.S. from 7:00 a.m. on 12-19-38	to 8:00 a.m. on 12-19-38	J.L.Luce	Hydrographer	Storage applied	J.A.H.
Max. Peak Outf.	Est. 66 C.F.S. from 9:30 a.m. on 1-20-39	to 10:00 a.m. on 1-20-39		Hydrographer	Inf. & Outf. computed	J.A.H.
	Gage heights and storages as of midnight on day shown.				Checked	C.C.G.

F. C. Dist. Form 68 Revised 600 5/39

Storages based on Map 64-T-11 with correction for debris loss following 3-2-38.

Daily Gage Height in feet and Operation Record of PACOIMA Dam

In Pacoima Canyon for the Year Ending September 30, 1939.

Drainage Area 27.8 Square Miles. Capacity of Reservoir 5004.3 Ac. Ft. at Spillway Elev. 1950.0 Ft.

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Continuous Water Stage Recorder Au

Gage Heights Read daily.

Day	FEBRUARY Gage Height	FEBRUARY Acre Ft. Storage	FEBRUARY C.F.S. Inflow	FEBRUARY C.F.S. Outflow	MARCH Gage Height	MARCH Acre Ft. Storage	MARCH C.F.S. Inflow	MARCH C.F.S. Outflow	APRIL Gage Height	APRIL Acre Ft. Storage	APRIL C.F.S. Inflow	APRIL C.F.S. Outflow	MAY Gage Height	MAY Acre Ft. Storage	MAY C.F.S. Inflow	MAY C.F.S. Outflow	Day
1	1817.3	498.2	8.4	0.1	1841.7	925.4	7.1	6.1	1841.2	915.5	8.4	8.4	1842.1	933.4	2.1	0.1	1
2	1818.2	511.8	7.0	0.1	1841.8	927.4	6.2	5.2	1841.3	917.5	9.4	8.4	1842.4	939.5	3.2	0.1	2
3	1819.6	533.3	10.9	0.1	1841.7	925.4	5.8	6.8	1841.3	917.5	8.3	8.3	1842.6	943.6	2.2	0.1	3
4	1821.3	560.0	13.6	0.1	1841.4	919.5	5.6	8.6	1841.4	919.5	9.0	8.0	1842.8	947.7	2.1	0.1	4
5	1822.6	580.8	10.6	0.1	1841.2	915.5	6.4	8.4	1841.3	917.5	6.8	7.8	1843.1	953.8	3.2	0.1	5
6	1823.8	600.2	9.8	0.1	1841.0	911.5	5.8	7.8	1841.2	915.5	6.8	7.8	1843.3	957.9	2.2	0.1	6
7	1825.1	621.8	11.0	0.1	1840.8	907.5	5.6	7.6	1841.1	913.5	6.8	7.8	1843.5	961.9	2.1	0.1	7
8	1827.0	653.7	16.2	0.1	1840.6	903.5	5.4	7.4	1840.9	909.5	5.8	7.8	1843.7	966.0	2.2	0.1	8
9	1828.5	679.4	13.1	0.1	1841.1	913.5	11.7	6.7	1840.7	905.5	5.8	7.8	1843.9	970.1	2.1	0.1	9
10	1829.9	703.8	12.4	0.1	1843.7	966.0	33.0	6.5	1840.7	905.5	5.5	5.5	1844.1	974.2	2.2	0.1	10
11	1831.3	728.6	12.6	0.1	1843.3	957.9	16.9	21	1841.2	915.5	5.5	0.5	1844.3	978.3	2.2	0.1	11
12	1832.5	750.2	11.0	0.1	1842.8	947.7	14.9	20	1841.7	925.4	5.3	0.3	1844.5	982.5	2.2	0.1	12
13	1833.7	772.0	11.1	0.1	1842.2	935.5	13.4	19.6	1842.3	937.5	6.1	0	1844.8	988.7	3.2	0.1	13
14	1834.8	792.4	10.3	0.1	1841.6	923.4	12.9	19.0	1842.7	945.6	5.3	1.2	1845.1	995.0	3.3	0.1	14
15	1835.9	812.8	10.4	0.1	1841.1	913.5	12.4	17.4	1842.7	945.6	5.7	5.7	1845.1	995.0	3.5	3.5	15
16	1836.9	831.8	9.7	0.1	1840.6	903.5	12.4	17.4	1842.6	943.6	4.7	5.7	1844.9	990.8	2.7	4.8	16
17	1837.8	848.9	8.7	0.1	1840.0	891.6	11.4	17.4	1842.5	941.6	4.7	5.7	1844.7	986.7	2.6	4.7	17
18	1838.7	866.3	8.9	0.1	1839.4	879.9	11.5	17.4	1842.4	939.5	4.5	5.6	1844.4	980.4	1.5	4.7	18
19	1839.6	883.8	8.9	0.1	1838.8	868.3	11.5	17.4	1842.3	937.5	4.6	5.6	1844.2	976.3	2.6	4.7	19
20	1840.5	901.6	9.1	0.1	1838.4	860.5	9.3	13.2	1842.1	933.4	3.5	5.6	1843.9	970.1	1.6	4.9	20
21	1840.8	907.5	7.5	4.5	1838.2	856.6	7.6	9.6	1842.0	931.4	4.6	5.6	1843.7	966.0	1.8	3.8	21
22	1840.9	909.5	8.2	7.2	1838.0	852.7	7.7	9.6	1841.8	927.4	3.6	5.6	1843.5	961.9	1.3	3.4	22
23	1841.0	911.5	8.2	7.2	1838.1	854.6	9.1	8.2	1841.7	925.4	4.6	5.6	1843.2	955.8	2.0	5.1	23
24	1841.1	913.5	8.1	7.1	1838.2	856.6	8.1	7.1	1841.5	921.5	3.7	5.7	1843.8	967.7	1.0	5.1	24
25	1841.3	917.5	8.6	6.6	1838.4	860.5	9.0	7.0	1841.4	919.5	3.6	4.8	1842.4	939.5	1.0	5.1	25
26	1841.4	919.5	6.9	5.9	1839.1	874.1	12.0	5.2	1841.3	917.5	3.3	4.3	1842.0	931.4	1.0	5.1	26
27	1841.5	921.5	7.2	6.2	1840.4	899.6	13.6	0.7	1841.2	915.5	3.5	4.5	1841.6	923.4	1.1	5.1	27
28	1841.6	923.4	8.2	7.2	1841.0	911.5	11.0	5.0	1841.3	917.5	3.1	2.1	1841.2	915.5	1.1	5.1	28
29					1841.1	913.5	9.7	8.7	1841.6	923.4	3.2	0.2	1841.0	911.5	0.5	2.5	29
30					1841.2	915.5	9.7	8.7	1841.9	929.4	3.1	0.1	1841.1	913.5	1.0	0	30
31					1841.2	915.5	8.6	8.6					1841.2	915.5	1.0	0	31
TOTAL			276.8	54.1			325.3	329.3			159.0	152.0			62.0	69.0	
Inf. Ac. Ft.			549.0				645.2				315.4				123.0	342.90	
Outf. Ac. Ft.				107.3				653.2				301.5			136.9	251.38	
Maximum Mean Daily Inflow			16.2				33.0				9.4				3.2	86.0	
Minimum Mean Daily Inflow			7.0				5.4				3.1				0.5	0	
Storage Change			+441.7				-7.9				+13.9				-13.9	91.55	

REMARKS: Outflows as per gaging Sta. 118. Inflows computed from storage change. ¾ Year

Max. W. S. Elev.	1845.25 feet on 5-15-39	Storage 998.1 Acre Feet	RECORDS COLLECTED BY		COMPUTATIONS	Date
Min. W. S. Elev.	Dry feet on various times	Storage 0 Acre Feet	R.E.Waddicor	Dam Tender	Gage Hts. copied	J.A.H.-C.C.G.
Max. Peak Inf.	145.2 C.F.S. from 7:00 a.m. on 12-19-38	to 8:00 a.m. on 12-19-38	J.L.Luce	Hydrographer	Storage applied	C.C.G.-J.A.H.
Max. Peak Outf.	Est. 66 C.F.S. from 9:30 a.m. on 1-20-39	to 10:00 a.m. on 1-20-39		Hydrographer	Inf. & Outf. computed	J.A.H.
	Gage heights and storages as of midnight on day shown.				Checked	C.C.G.

F. C. Dist. Form 68 Revised 600 5/39

Storages based on Map 64-T-11 with correction for debris loss following 3-2-38.

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Daily Gage Height in feet and Operation Record of PACOIMA Dam

In Pacoima Canyon for the Year Ending September 30, 1939

Continuous Water Stage Recorder Au

Drainage Area 27.8 Square Miles. Capacity of Reservoir 5004.3 Ac. Ft. at Spillway Elev. 1950.0 Ft. Gage Heights Read daily.

Day	JUNE Gage Height	JUNE Acre Ft. Storage	JUNE C.F.S. Inflow	JUNE C.F.S. Outflow	JULY Gage Height	JULY Acre Ft. Storage	JULY C.F.S. Inflow	JULY C.F.S. Outflow	AUGUST Gage Height	AUGUST Acre Ft. Storage	AUGUST C.F.S. Inflow	AUGUST C.F.S. Outflow	SEPTEMBER Gage Height	SEPTEMBER Acre Ft. Storage	SEPTEMBER C.F.S. Inflow	SEPTEMBER C.F.S. Outflow	Day
1	1841.3	917.5	0.6	0	1837.1	835.6	0.2	0	1831.4	730.4	0.1	0	1821.6	564.8	0	2.1	1
2	1841.4	919.5	0.6	0	1837.1	835.6	0.2	0	1831.4	730.4	0.1	0	1820.6	549.0	0	7.9	2
3	1841.5	921.5	0.6	0	1837.1	835.6	0.2	0	1831.4	730.4	0.1	0	1819.5	531.8	0	7.9	3
4	1841.6	923.4	0.6	0	1837.1	835.6	0.2	0	1831.2	726.9	0.1	1.3	1818.5	516.4	0	7.8	4
5	1841.6	923.4	0.6	0	1837.2	837.5	0.2	0	1830.6	716.2	0.1	5.6	1818.1	510.2	0	3.4	5
6	1841.7	925.4	0.6	0	1837.2	837.5	0.2	0	1830.0	705.5	0.1	6.1	1817.9	507.2	0	0.9	6
7	1841.7	925.4	0.6	0	1837.2	837.5	0.2	0	1829.7	700.3	0.1	2.8	1817.7	504.2	0	2.0	7
8	1841.8	927.4	0.6	0	1836.8	829.9	0.2	3.4	1829.7	700.3	0.1	0	1817.3	498.2	0	2.6	8
9	1841.6	923.4	0.6	2.7	1836.3	820.4	0.2	5.6	1829.7	700.3	0.1	0	1816.9	492.2	0	3.3	9
10	1841.1	913.5	0.6	4.9	1836.0	814.7	0.2	2.2	1829.7	700.3	0.1	0	1816.5	486.2	0	2.8	10
11	1840.6	903.5	0.6	5.6	1836.1	816.6	0.2	0	1829.5	696.8	0.1	1.6	1816.2	481.7	0	2.5	11
12	1840.1	893.6	0.6	5.5	1836.1	816.6	0.2	0	1828.6	681.1	0.1	7.7	1815.9	477.2	0	2.3	12
13	1839.6	883.8	0.6	5.5	1836.1	816.6	0.2	0	1827.7	665.6	0.1	8.2	1815.6	472.9	0	2.3	13
14	1839.1	874.1	0.5	5.5	1835.9	812.8	0.1	1.4	1827.4	660.5	0.1	3.5	1815.3	468.5	0	2.3	14
15	1838.5	862.4	0.5	5.5	1835.3	801.7	0.1	5.7	1827.4	660.5	0.1	0	1815.0	464.1	0	2.3	15
16	1838.0	852.7	0.5	5.5	1834.7	790.5	0.1	5.7	1827.4	660.5	0.1	0	1814.7	459.7	0	2.2	16
17	1837.5	843.2	0.5	5.5	1834.5	786.8	0.1	2.5	1827.4	660.5	0.1	0	1814.4	455.3	0	2.2	17
18	1837.0	833.7	0.5	5.5	1834.5	786.8	0.1	0	1827.1	655.4	0.1	2.1	1814.1	451.0	0	2.1	18
19	1836.8	829.9	0.4	2.6	1834.5	786.8	0.1	0	1826.2	640.1	0.1	8.0	1813.9	448.1	0	1.6	19
20	1836.9	831.8	0.4	0.1	1834.5	786.8	0.1	0	1825.5	625.1	0	7.8	1813.8	446.7	0	1.7	20
21	1836.9	831.8	0.4	0.1	1834.4	784.9	0.1	1.6	1825.0	620.1	0	3.4	1813.0	435.3	0	5.2	21
22	1836.9	831.8	0.4	0.1	1833.7	772.0	0.1	6.1	1825.0	620.1	0	0	1812.1	422.5	0	5.6	22
23	1836.9	831.8	0.4	0.1	1833.2	762.9	0.1	5.6	1825.0	620.1	0	0	1811.7	417.0	0	3.1	23
24	1836.9	831.8	0.4	0.1	1832.9	757.5	0.1	2.5	1824.9	618.4	0	0.1	1812.0	421.1	3.2	1.7	24
25	1837.0	833.7	0.4	0.1	1832.9	757.5	0.1	0	1824.6	613.5	0	2.4	1813.8	446.7	14.6	1.7	25
26	1837.0	833.7	0.4	0.1	1832.9	757.5	0.1	0	1823.6	597.0	0	8.6	1814.4	455.3	6.0	1.7	26
27	1837.0	833.7	0.4	0.1	1833.0	759.3	0.1	0	1822.5	579.2	0	8.6	1814.4	455.3	1.9	1.9	27
28	1837.0	833.7	0.4	0.1	1832.8	755.7	0.1	1.2	1822.1	572.7	0	3.5	1814.2	452.4	0.8	2.2	28
29	1837.0	833.7	0.3	0	1832.2	744.7	0.1	5.6	1822.0	571.1	0	0.4	1814.0	449.5	0.7	2.2	29
30	1837.1	835.6	0.3	0	1831.6	734.0	0.1	5.8	1821.9	569.5	0	1.2	1813.7	445.2	0	2.2	30
31					1831.4	730.4	0.1	2.5	1821.9	569.5	0	0.1					31
TOTAL			14.9	55.2			4.4	57.4			1.9	83.0			27.2	89.9	
Inf. Ac. Ft.			29.6				8.7				3.8				54.0	352.1	
Outf. Ac. Ft.				109.5				113.9				164.6			178.3	308.1	
Maximum Mean Daily Inflow			0.6				0.2				0.1					86.0	
Minimum Mean Daily Inflow			0.4				0.1				0					0	
Storage Change			-79.9				-105.2				-160.9				-124.3	+44.2	

REMARKS: Outflows as per gaging Sta. 118. Inflows computed from storage change. Mean for period. Yearly Totals

Max. W. S. Elev.	1845.25	feet on 5-15-39	Storage 998.1	Acre Feet	RECORDS COLLECTED BY		COMPUTATIONS	Date
Min. W. S. Elev.	Dry	feet on various times	Storage 0	Acre Feet	R.E.Waddicor	Dam Tender	Gage Hts. copied	J.A.H.-C.C.G.
Max. Peak Inf.	145.2	C.F.S. from 7:00 a.m. on 12-19-38	to 8:00 a.m. on	12-19-38	J.L.Luce	Hydrographer	Storage applied	C.C.G.-J.A.H.
Max. Peak Outf.	Est. 66	C.F.S. from 9:30 a.m. on 1-20-39	to 10:00 a.m. on	1-20-39		Hydrographer	Inf. & Outf. computed	J.A.H.
							Checked	J.A.H.-C.C.G.

Gage heights and storages as of midnight on day shown.

PUDDINGSTONE DAM

F. C. Dist. Form 68 Revised 600 5/39

Storages based on original reconnaissance survey.

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Daily Gage Height in feet and Operation Record of PUDDINGSTONE Dam

In Puddingstone Creek for the Year Ending September 30, 1939

Continuous Water Stage Recorder Rational to January 27,1939.

Drainage Area 33.1 Square Miles. Capacity of Reservoir 17398 Ac. Ft. at Spillway Elev. 970.0 Ft. Gage Heights Read daily.

Day	OCTOBER Gage Height	OCTOBER Acre Ft. Storage	OCTOBER C.F.S. Inflow	OCTOBER C.F.S. Outflow	NOVEMBER Gage Height	NOVEMBER Acre Ft. Storage	NOVEMBER C.F.S. Inflow	NOVEMBER C.F.S. Outflow	DECEMBER Gage Height	DECEMBER Acre Ft. Storage	DECEMBER C.F.S. Inflow	DECEMBER C.F.S. Outflow	JANUARY Gage Height	JANUARY Acre Ft. Storage	JANUARY C.F.S. Inflow	JANUARY C.F.S. Outflow	Day
1	946.70	8471.4	0	7.2	941.45	6984.7	0	5.3	939.95	6563.2	0	3.3	941.75	7069.6	12.9	•1.0	1
2	946.65	8457.3	0	7.1	941.40	6970.5	0	5.3	939.90	6552.4	0	3.3	941.85	7098.0	12.9	1.0	2
3	946.50	8414.8	0	21.4	941.35	6956.4	0	5.4	939.85	6541.5	0	3.3	941.95	7126.2	12.9	1.0	3
4	946.30	8358.2	0	26.7	941.35	6956.4	0	5.4	939.85	6541.5	0	•1.0	942.00	7140.4	8.2	1.0	4
5	946.15	8315.7	0	26.7	941.30	6942.2	0	7.1	939.80	6530.7	0	3.2	942.15	7182.9	22.4	1.0	5
6	945.95	8259.1	0	26.7	941.25	6928.0	0	7.2	939.80	6530.7	0	3.3	942.20	7197.0	8.1	1.0	6
7	945.75	8202.4	0	26.7	941.20	6913.8	0	7.2	939.75	6519.9	0	3.3	942.25	7211.2	8.1	1.0	7
8	945.55	8145.8	0	26.7	941.15	6899.7	0	7.1	939.70	6509.1	0	3.3	942.25	7211.2	1.0	1.0	8
9	945.40	8103.3	0	26.7	941.10	6885.5	0	7.1	939.70	6509.1	0	3.3	942.35	7239.6	15.4	1.0	9
10	945.20	8046.6	0	26.7	941.05	6871.4	0	7.1	939.65	6498.2	0	4.1	942.50	7282.0	22.3	1.0	10
11	945.05	8004.2	0	26.7	941.00	6857.2	0	7.2	939.60	6487.4	0	4.1	942.65	7324.4	22.4	1.0	11
12	944.85	7947.6	0	26.7	940.95	6843.0	0	7.2	939.60	6487.4	0	4.1	942.75	7352.8	15.5	1.0	12
13	944.65	7890.9	0	26.6	940.90	6828.9	0	7.1	939.55	6476.6	0	4.1	942.85	7381.2	15.4	1.0	13
14	944.50	7848.4	0	26.6	940.85	6814.8	0	7.1	939.55	6476.6	2.0	E 2.0	942.90	7395.3	4.1	1.0	14
15	944.30	7791.8	0	26.6	940.80	6800.6	0	8.9	939.65	6498.2	11.9	•1.0	942.90	7395.3	4.1	1.0	15
16	944.15	7749.3	0	26.6	940.70	6772.2	0	9.0	939.65	6498.2	1.0	1.0	942.90	7395.3	4.1	1.0	16
17	943.95	7692.7	0	26.6	940.65	6758.1	0	8.9	939.65	6498.2	1.0	1.0	942.90	7395.3	4.0	1.0	17
18	943.75	7636.0	0	26.6	940.60	6743.9	0	8.9	940.20	6630.6	67.8	1.0	942.90	7395.3	4.0	1.0	18
19	943.55	7579.4	0	26.6	940.55	6729.8	0	7.2	940.90	6828.9	101.0	1.0	942.95	7409.5	4.0	1.0	19
20	943.35	7522.8	0	26.6	940.50	6715.6	0	7.1	941.30	6942.2	28.1	1.0	943.00	7423.6	4.0	1.0	20
21	943.20	7480.2	0	26.6	940.45	6701.5	0	9.5	941.45	6984.7	22.4	1.0	943.10	7451.9	15.3	1.0	21
22	943.00	7423.6	0	26.6	940.40	6687.3	0	9.5	941.50	6998.8	8.1	1.0	943.10	7451.9	1.0	1.0	22
23	942.80	7367.0	0	26.6	940.30	6659.0	0	9.5	941.55	7013.0	8.2	1.0	943.10	7451.9	1.0	1.0	23
24	942.60	7310.3	0	26.6	940.25	6644.8	0	7.2	941.60	7027.1	8.1	1.0	943.10	7451.9	1.0	1.0	24
25	942.40	7253.7	0	26.6	940.20	6630.6	0	7.1	941.60	7027.1	1.0	1.0	943.10	7451.9	1.0	1.0	25
26	942.20	7197.0	0	26.6	940.15	6616.5	0	7.1	941.65	7041.3	8.1	1.0	943.10	7451.9	1.0	1.0	26
27	942.05	7154.6	0	26.6	940.10	6602.3	0	6.8	941.65	7041.3	1.0	1.0	943.10	7451.9	1.0	1.0	27
28	941.85	7098.0	0	26.6	940.05	6588.2	0	6.7	941.70	7055.4	2.8	1.0	943.10	7451.9	1.0	1.0	28
29	941.65	7041.3	0	26.6	940.00	6574.0	0	6.7	941.70	7055.4	2.8	1.0	943.10	7451.9	1.0	1.0	29
30	941.50	6998.8	0	19.4	939.95	6563.2	0	6.7	941.70	7055.4	2.8	•1.0	943.15	7466.1	8.2	•1.0	30
31	941.50	6998.8	0	E 2.0					941.70	7055.4	2.8	1.0	943.15	7466.1	1.0	•1.0	31
TOTAL			0	749.6			0	219.6			310.9	62.7			238.1	31.0	
Inf. Ac. Ft.			0				0				616.7				472.3	1089.0	
Outf. Ac. Ft.				1486.8				435.6				124.4			615.2	1083	
Maximum Mean Daily Inflow			0				0				101.0				22.4	101.0	
Minimum Mean Daily Inflow			0				0				0				1.0	0	
Storage Change			-1486.8				-435.6				+492.2				+410.7	1019.5	

REMARKS: Outflows computed from storage change and operation records. E = Estimate. Mean for period. ½ Year

Max. W. S. Elev.	946.75	feet on 10-1-38	Storage 8485.6	Acre Feet	RECORDS COLLECTED BY		COMPUTATIONS	Date
Min. W. S. Elev.	931.00	feet on 9-24-39	Storage 4628.4	Acre Feet	F.A.Pollard	Dam Tender	Gage Hts. copied	J.A.H.
Max. Peak Inf.	101.0	C.F.S. from mean daily on 12-19-38	to	on	W.T.Lind	Hydrographer	Storage applied	J.A.H.
Max. Peak Outf.	26.7	C.F.S. from mean daily on 9/4-12/39	to	on		Hydrographer	Inf. & Outf. computed	J.A.H.
							Checked	C.C.G.-H.A.V.

Gage heights and storage as of midnight on day shown. •=Estimated evaporation and leakage loss.

PUDDINGSTONE DAM (CONT.)

F. C. Dist. Form 68 Revised 600 5/39

Storages based on original reconnaissance survey.

Daily Gage Height in feet and Operation Record of PUDDINGSTONE Dam

On Puddingstone Creek for the Year Ending September 30, 1939.

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Continuous Water Stage Recorder Au, installed May 20, 1939.

Drainage Area 33.1 Square Miles. Capacity of Reservoir 17398 Ac. Ft. at Spillway Elev. 970.0 Ft. Gage Heights Read daily.

Day	FEBRUARY				MARCH				APRIL				MAY				Day
	Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	
1	943.15	7466.1	1.0	• 1.0	943.50	7565.2	1.0	• 1.0	943.80	7650.2	2.5	• 1.0	943.45	7551.0	0	7.2	1
2	943.15	7466.1	1.0	1.0	943.50	7565.2	1.0	1.0	943.85	7664.4	2.5	1.0	943.40	7536.9	0	7.2	2
3	943.35	7522.8	29.6	1.0	943.50	7565.2	1.0	1.0	943.85	7664.4	2.4	1.0	943.35	7522.8	0	7.2	3
4	943.50	7565.2	22.4	1.0	943.50	7565.2	1.0	1.0	943.85	7664.4	2.4	1.0	943.30	7508.6	0	7.2	4
5	943.50	7565.2	3.4	1.0	943.50	7565.2	1.0	1.0	943.85	7664.4	2.4	• 1.0	943.25	7494.4	0	7.1	5
6	943.50	7565.2	3.4	1.0	943.50	7565.2	1.0	1.0	943.85	7664.4	0	1.5	943.20	7480.2	0	7.1	6
7	943.55	7579.4	3.3	1.0	943.50	7565.2	1.0	1.0	943.85	7664.4	0	1.5	943.15	7476.1	0	7.1	7
8	943.55	7579.4	0.7	1.0	943.50	7565.2	1.0	1.0	943.85	7664.4	0	1.5	943.10	7451.9	0	7.1	8
9	943.55	7579.4	0.7	1.0	943.50	7565.2	1.0	1.0	943.80	7650.2	0	1.5	943.05	7437.8	0	7.1	9
10	943.55	7579.4	0.7	1.0	943.60	7593.5	8.2	1.0	943.80	7650.2	0	1.5	943.00	7423.6	0	7.1	10
11	943.55	7579.4	0.7	1.0	943.60	7593.5	8.1	1.0	943.80	7650.2	0	1.5	942.90	7395.3	0	9.1	11
12	943.55	7579.4	0.7	1.0	943.60	7593.5	3.0	1.0	943.75	7636.0	0	1.5	942.85	7381.2	0	9.1	12
13	943.55	7579.4	0.7	1.0	943.60	7593.5	2.4	1.0	943.75	7636.0	0	1.5	942.80	7367.0	0	9.1	13
14	943.50	7565.2	0.7	1.0	943.60	7593.5	2.4	1.0	943.70	7621.8	0	1.5	942.75	7352.8	0	9.1	14
15	943.50	7565.2	0.7	1.0	943.65	7607.7	2.4	1.0	943.70	7621.8	0	1.5	942.70	7338.6	0	9.1	15
16	943.50	7565.2	0.7	1.0	943.65	7607.7	2.4	1.0	943.70	7621.8	0	1.6	942.65	7324.5	0	9.1	16
17	943.50	7565.2	0.7	1.0	943.70	7621.8	2.4	1.0	943.70	7621.8	0	1.6	942.60	7310.3	0	9.1	17
18	943.45	7551.1	0.7	1.0	943.70	7621.8	2.4	1.0	943.65	7607.7	0	1.6	942.55	7296.2	0	9.0	18
19	943.45	7551.1	0.7	1.0	943.70	7621.8	2.4	1.0	943.60	7593.5	0	1.6	942.50	7282.0	0	9.0	19
20	943.45	7551.1	0.7	1.0	943.70	7621.8	2.4	1.0	943.60	7593.5	0	1.6	942.40	7253.7	0	9.0	20
21	943.45	7551.1	0.6	1.0	943.75	7636.0	2.4	1.0	943.60	7593.5	0	1.6	942.35	7239.6	0	9.0	21
22	943.50	7565.2	0.6	1.0	943.75	7636.0	2.4	1.0	943.60	7593.5	0	1.6	942.25	7211.2	0	9.0	22
23	943.50	7565.2	0.6	1.0	943.75	7636.0	2.4	1.0	943.60	7593.5	0	1.6	942.20	7197.0	0	9.0	23
24	943.50	7565.2	0.6	1.0	943.75	7636.0	2.4	1.0	943.60	7593.5	0	1.6	942.15	7182.9	0	9.0	24
25	943.50	7565.2	0.6	1.0	943.75	7636.0	2.4	1.0	943.60	7593.5	0	1.6	942.05	7154.5	0	9.0	25
26	943.50	7565.2	0.6	1.0	943.80	7650.2	2.4	1.0	943.60	7593.5	0	1.6	942.00	7140.4	0	4.9	26
27	943.50	7565.2	0.6	1.0	943.80	7650.2	2.4	1.0	943.60	7593.5	0	1.6	941.95	7126.2	0	4.8	27
28	943.50	7565.2	0.6	• 1.0	943.80	7650.2	2.4	1.0	943.60	7593.5	0	1.6	941.95	7126.2	0	4.8	28
29					943.80	7650.2	2.4	1.0	943.55	7579.4	0	7.1	941.90	7112.1	0	4.8	29
30					943.80	7650.2	2.4	1.0	943.50	7565.2	0	7.2	941.90	7112.1	0	1.0	30
31					943.80	7650.2	2.4	• 1.0					941.90	7112.1	0	1.0	31
TOTAL			28.0	28.0			73.9	31.0			12.2	55.1			0	228.4	
Inf. Ac. Ft.			154.7				146.6				24.2				0	1414.5	
Outf. Ac. Ft.				55.5				61.5				109.3			453.0	2787.6	
Maximum			29.6				8.2				2.5				0	101.0	
Mean Daily Inflow																	
Minimum			0.6				1.0				0				0	0	
Mean Daily Inflow																	
Storage Change			+99.1				+85.0				-85.0				-453.1	-1373.5	

REMARKS: Outflows computed from storage and operation records. • Estimated leakage and evaporation loss. Mean for period. ½ Year

Max. W. S. Elev.	946.75 feet on 10-1-38 Storage 8485.6 Acre Feet	RECORDS COLLECTED BY		COMPUTATIONS	Date
Min. W. S. Elev.	931.00 feet on 9-24-39 Storage 4626.4 Acre Feet	F.A.Pollard	Dam Tender	Gage Hts. copied	J.A.H.
Max. Peak Inf.	101.0 C.F.S. from mean daily on 12-19-38 to on	W.T.Lind	Hydrographer	Storage applied	J.A.H.
Max. Peak Outf.	26.7 C.F.S. from mean daily on 9/4-12/39 to on		Hydrographer	Inf. & Outf. computed	J.A.H.
	Gage heights and storage as of midnight on day shown.			Checked	C.C.G.-H.A.V.

F. C. Dist. Form 68 Revised 600 5/39

Storages based on original reconnaissance survey.

Daily Gage Height in feet and Operation Record of PUDDINGSTONE Dam

On Puddingstone Creek for the Year Ending September 30, 1939.

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Continuous Water Stage Recorder Au

Drainage Area 33.1 Square Miles. Capacity of Reservoir 17398 Ac. Ft. at Spillway Elev. 970.0 Ft. Gage Heights Read daily.

Day	JUNE				JULY				AUGUST				SEPTEMBER				Day
	Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	
1	941.85	7098.0	0	7.1	939.75	6519.9	0	9.1	937.00	5924.8	0	5.5	933.65	5199.8	0	12.3	1
2	941.80	7083.8	0	7.2	939.65	6498.2	0	9.1	936.90	5903.2	0	10.9	933.55	5178.2	0	12.3	2
3	941.75	7069.6	0	7.1	939.60	6487.4	0	9.1	936.80	5881.5	0	10.9	933.40	5145.8	0	12.3	3
4	941.70	7055.4	0	9.3	939.55	6476.7	0	5.4	936.70	5859.9	0	10.9	933.30	5124.1	0	12.2	4
5	941.65	7041.2	0	9.3	939.50	6465.8	0	5.6	936.60	5838.2	0	10.9	933.20	5102.5	0	10.9	5
6	941.55	7013.0	0	9.3	939.40	6444.2	0	10.9	936.50	5816.6	0	10.9	933.10	5080.8	0	10.9	6
7	941.50	6998.8	0	9.3	939.30	6422.5	0	10.9	936.45	5805.8	0	9.6	933.00	5059.2	0	12.0	7
8	941.45	6984.7	0	9.3	939.20	6400.9	0	10.9	936.35	5784.2	0	9.6	932.90	5037.6	0	12.0	8
9	941.35	6956.4	0	9.3	939.15	6390.0	0	5.5	936.25	5762.5	0	9.5	932.80	5015.9	0	12.0	9
10	941.30	6942.2	0	9.3	939.05	6368.4	0	10.9	936.15	5740.9	0	9.5	932.65	4983.4	0	12.0	10
11	941.25	6928.0	0	9.3	938.95	6346.8	0	10.9	936.00	5708.4	0	12.7	932.55	4961.8	0	12.0	11
12	941.15	6899.7	0	9.2	938.85	6325.1	0	10.9	935.90	5686.8	0	12.8	932.45	4940.2	0	10.9	12
13	941.10	6885.5	0	9.2	938.75	6303.5	0	10.9	935.80	5665.1	0	12.7	932.35	4918.5	0	12.2	13
14	941.00	6857.2	0	14.3	938.70	6292.7	0	9.1	935.70	5643.5	0	10.9	932.20	4886.1	0	12.3	14
15	940.95	6843.1	0	7.1	938.60	6271.0	0	9.1	935.60	5621.8	0	11.0	932.10	4864.4	0	12.3	15
16	940.90	6828.9	0	7.2	938.50	6249.4	0	9.1	935.50	5600.2	0	10.9	932.00	4842.8	0	12.3	16
17	940.80	6800.6	0	14.2	938.40	6227.8	0	10.9	935.40	5578.6	0	10.9	931.85	4810.3	0	14.8	17
18	940.75	6786.4	0	7.2	938.30	6206.1	0	10.9	935.30	5556.9	0	10.9	931.75	4788.7	0	14.8	18
19	940.65	6758.1	0	14.3	938.25	6195.3	0	5.4	935.20	5535.3	0	10.9	931.60	4756.2	0	14.8	19
20	940.60	6743.9	0	7.1	938.15	6173.7	0	10.9	935.05	5502.8	0	14.1	931.45	4723.8	0	14.8	20
21	940.55	6729.7	0	7.2	938.05	6152.0	0	11.0	934.95	5481.2	0	14.1	931.35	4702.1	0	14.8	21
22	940.45	6701.4	0	14.3	937.95	6130.4	0	10.9	934.80	5448.7	0	14.0	931.20	4669.7	0	14.8	22
23	940.35	6673.2	0	14.2	937.85	6108.7	0	10.9	934.65	5416.2	0	14.0	931.05	4637.2	0	14.9	23
24	940.25	6644.8	0	14.3	937.75	6087.1	0	10.9	934.55	5394.6	0	14.0	931.10	4648.0	18.3	12.8	24
25	940.20	6630.6	0	7.2	937.65	6065.4	0	10.9	934.45	5373.1	0	14.0	931.65	4767.0	63.1	3.1	25
26	940.10	6602.3	0	10.7	937.55	6043.8	0	10.9	934.30	5340.5	0	14.0	931.65	4767.0	0	1.1	26
27	940.05	6588.1	0	10.7	937.45	6022.2	0	10.9	934.20	5318.9	0	10.9	931.65	4767.0	0	1.1	27
28	939.95	6563.2	0	6.3	937.35	6000.5	0	10.9	934.10	5297.2	0	10.9	931.65	4767.0	0	1.1	28
29	939.95	6563.2	0	6.2	937.25	5978.9	0	10.9	934.00	5275.6	0	12.7	931.60	4756.2	0	1.1	29
30	939.85	6541.5	0	11.0	937.15	5957.3	0	10.9	933.90	5254.0	0	12.7	931.60	4756.2	0	1.1	30
31					937.05	5935.7	0	10.9	933.75	5221.5	0	12.8					31
TOTAL			0	287.7			0	305.4			0	360.1			814	316.0	
Inf. Ac. Ft.			0				0				0				1615	1576.0	
Outf. Ac. Ft.				570.6				605.8				714.2			626.8	5305.0	
Maximum			0				0				0				63.1	101.0	
Mean Daily Inflow																	
Minimum			0				0				0				0	0	
Mean Daily Inflow																	
Storage Change			-570.6				-605.8				-714.2				-465.3	-3729.4	

REMARKS: Outflows computed from storage change and operation records. Mean for period. Yearly Totals

Max. W. S. Elev.	946.75 feet on 10-1-38 Storage 8485.6 Acre Feet	RECORDS COLLECTED BY		COMPUTATIONS	Date
Min. W. S. Elev.	931.00 feet on 9-24-39 Storage 4626.4 Acre Feet	F.A.Pollard	Dam Tender	Gage Hts. copied	J.A.H.
Max. Peak Inf.	101.0 C.F.S. from mean daily on 12-19-38 to on	W.T.Lind	Hydrographer	Storage applied	J.A.H.
Max. Peak Outf.	26.7 C.F.S. from mean daily on 9/4-12/39 to on		Hydrographer	Inf. & Outf. computed	J.A.H.
	Gage heights and storage as of midnight on day shown.			Checked	C.C.G.-H.A.V.

PUDDINGSTONE DIVERSION DAM

F. C. Dist. Form 68 Revised 600 5/39

Storages based on L.A.C.F.C.D. survey of March 1938; corr. for debris loss of 2.5 A.F.

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Daily Gage Height in feet and Operation Record of PUDDINGSTONE DIVERSION Dam

In/On San Dimas Creek for the Year Ending September 30, 1939.

Continuous Water Stage Recorder Au

Drainage Area 2.57 Square Miles. Capacity of Reservoir 47.6 Ac. Ft. at Spillway Elev. 1152.5 Ft.

Gage Heights Read at various times.

Day	OCTOBER				NOVEMBER				DECEMBER				JANUARY				Day
	Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	
1	1145.5	5.4	1.5	1.5	1145.5	5.4	2.4	2.4	1145.5	5.4	2.5	2.5	1145.6	5.6	9.5	9.4	1
2	1145.5	5.4	1.4	1.4	1145.5	5.4	2.2	2.2	1145.5	5.4	2.6	2.6	1145.7	5.9	16	15.6	2
3	1145.5	5.4	1.4	1.4	1145.5	4.9	2.3	2.6	1145.5	5.4	2.4	2.4	1145.7	5.9	20	20	3
4	1145.5	5.4	1.4	1.4	1145.3	4.9	2.3	2.3	1145.5	5.4	2.2	2.2	1145.7	5.9	7	7	4
5	1145.5	5.4	1.5	1.5	1145.0	4.2	2.4	2.7	1145.5	5.4	2.2	2.2	1145.7	5.9	2.5	2.5	5
6	1145.5	5.4	1.6	1.6	1144.8	3.8	2.5	2.5	1145.6	5.6	2.1	2.0	1145.6	5.6	6	6.2	6
7	1145.5	5.4	1.7	1.7	1145.3	4.9	2.3	1.6	1145.6	5.6	2.0	2.0	1145.5	5.4	4.7	4.6	7
8	1145.5	5.4	1.7	1.7	1145.4	5.2	2.3	2.1	1145.6	5.6	1.5	1.5	1145.5	5.4	0.7	0.7	8
9	1145.4	5.2	1.9	2.0	1145.4	5.2	2.3	2.3	1145.6	5.6	1.	1.4	1145.8	6.1	12	11.6	9
10	1145.1	4.4	2.0	2.4	1145.5	5.4	2.5	2.4	1145.6	5.6	1.4	1.4	1145.8	6.1	22	22	10
11	1144.7	3.6	1.9	2.3	1145.5	5.4	2.6	2.6	1145.6	5.6	1.4	1.4	1145.7	5.9	20	20.1	11
12	1144.3	2.9	1.8	2.2	1145.5	5.4	2.4	2.4	1145.4	5.2	1.5	1.7	1145.7	5.9	18	18	12
13	1145.0	4.2	2.0	1.3	1145.5	5.4	2.4	2.4	1142.7	0.2	2.0	4.5	1145.6	5.6	12	12.2	13
14	1145.5	5.4	2.2	1.6	1145.5	5.4	2.6	2.6	1145.6	5.6	0.27	0	1145.5	5.4	4.9	5.0	14
15	1145.5	5.4	2.9	2.5	1145.5	5.4	2.4	2.4	1145.5	5.4	0.3	0.4	1145.5	5.4	2.2	2.2	15
16	1145.5	5.4	2.5	2.5	1145.5	5.4	2.3	2.3	1145.0	4.2	0.4	1.0	1145.5	5.4	4.5	4.5	16
17	1145.5	5.4	2.5	2.6	1145.5	5.4	2.0	2.0	1144.9	4.0	0.4	0.5	1145.6	5.6	4.1	4.0	17
18	1145.0	4.2	2.4	3.0	1144.6	3.4	1.8	2.8	1145.6	5.6	0.6	0	1145.6	5.6	4.5	4.5	18
19	1145.5	5.4	2.2	1.6	1145.5	5.4	1.7	0.7	1145.7	5.9	2.8	2.8	1145.6	5.6	4.1	4.1	19
20	1145.4	5.2	2.0	2.1	1145.1	4.4	1.5	2.0	1145.7	5.9	2.6	2.6	1145.5	5.4	2.7	2.6	20
21	1145.2	4.7	2.0	2.3	1145.5	5.4	1.7	1.2	1145.6	5.6	2.0	2.0	1145.5	5.4	0.9	0.9	21
22	1144.8	3.8	2.0	2.4	1145.5	5.4	1.5	1.5	1145.6	5.6	1.3	1.3	1145.5	5.4	0.6	0.6	22
23	1144.6	3.4	2.0	2.2	1145.4	5.2	1.5	1.6	1145.6	5.6	.8	.8	1145.5	5.4	0.4	0.4	23
24	1144.5	3.2	2.0	2.1	1145.5	5.4	1.6	1.5	1145.6	5.6	6	6	1145.4	5.2	0.4	0.5	24
25	1144.5	3.2	1.9	1.9	1145.2	4.7	1.6	2.0	1145.6	5.6	5	5	1145.3	4.9	0.3	0.5	25
26	1145.3	4.9	1.7	0.9	1145.3	4.9	1.7	1.6	1145.6	5.6	7	7	1145.1	4.4	0.3	0.5	26
27	1145.4	5.2	1.7	1.5	1145.5	5.4	1.7	1.4	1145.6	5.6	6	6	1144.9	4.0	0.3	0.5	27
28	1145.1	4.4	1.8	2.2	1145.4	5.2	1.6	1.9	1145.6	5.6	5	5	1145.1	° 4.4	0.4	0.2	28
29	1144.9	4.0	2.0	2.2	1145.5	5.4	1.6	1.7	1145.5	5.4	4.2	4.3	1145.2	° 4.8	0.4	0.2	29
30	1145.5	5.4	2.2	1.5	1145.5	5.4	1.9	1.9	1145.5	5.4	4.3	4.3	1145.4	5.2	0.5	0.3	30
31	1145.5	5.4	2.1	2.1					1145.5	5.4	4.4	4.4	1145.5	5.4	0.6	0.5	31
TOTAL			60.0	60.0			61.5	61.8			166.7	166.7			182.5	182.5	
Inf. Ac. Ft.			119.0				122.6				330.6				362.0	934.2	
Outf. Ac. Ft.				119.0				122.6				330.6			362.0	934.2	
Maximum Mean Daily Inflow			2.9				2.6				2.80				22.0	28.0	
Minimum Mean Daily Inflow			1.4				1.5				0.3				0.3	0.3	
Storage Change			0				0				0				0	0	

REMARKS: Inflows as per U.S.G.S. gaging station U 10. 0 = Computed from outflow and storage change. ½ Year

Max. W. S. Elev.	1145.74	feet on 12-17-38	Storage	6.0	Acre Feet	RECORDS COLLECTED BY	
Min. W. S. Elev.	Dry	feet on various times	Storage	0	Acre Feet	W.T.Lind	Dam Tender
Max. Peak Inf.	23	C.F.S. from U.S.G.S.sta. on 1-10-39	to		on	H.A.van der Goot	Hydrographer
Max. Peak Outf.	Est. 30±	C.F.S. from	on 12-19-38	to	on		Hydrographer

COMPUTATIONS Date
Gage Hts. copied J.A.H.
Storage applied J.A.H.
Inf. & Outf. computed J.A.H.
Checked C.C.G.

Gage heights and storages as of midnight on day shown.
Outflows include percolation and evaporation loss. ° = Storage interpolated; communication to well cut-off.

F. C. Dist. Form 68 Revised 600 5/39

Storages based on L.A.C.F.C.D. survey of March 1938; corr. for debris loss of 2.5 A.F.

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Daily Gage Height in feet and Operation Record of PUDDINGSTONE DIVERSION Dam

In/On San Dimas Creek for the Year Ending September 30, 1939.

Continuous Water Stage Recorder Au

Drainage Area 2.57 Square Miles. Capacity of Reservoir 47.6 Ac. Ft. at Spillway Elev. 1152.5 Ft.

Gage Heights Read at various times.

Day	FEBRUARY				MARCH				APRIL				MAY				Day
	Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	
1	1145.4	5.2	0.4	0.5	1145.5	5.4	4.0	4.0	1145.5	5.4	2.5	2.5			0	0	1
2	1145.3	4.9	0.4	0.6	1145.5	5.4	3.9	3.9	1145.5	5.4	2.6	2.6			0	0	2
3	1145.5	5.4	1.2	0.9	1145.5	5.4	3.8	3.6	1145.5	5.4	2.5	2.5			0	0	3
4	1145.5	5.4	1.4	1.4	1145.5	5.4	3.7	3.7	1145.5	5.4	2.5	2.5			0	0	4
5	1145.5	5.4	0.9	0.9	1145.5	5.4	3.5	3.5	1145.5	5.4	1.7	1.7			0	0	5
6	1145.5	5.4	0.8	0.8	1145.5	5.4	3.5	3.5	1145.4	5.2	0.6	0.9			0	0	6
7	1145.5	5.4	0.7	0.7	1145.5	5.4	3.3	3.3	1145.1	4.4	0.6	0.9			0	0	7
8	1145.5	5.4	1.4	1.4	1145.5	5.4	3.2	3.2	1145.0	4.2	0.6	0.9			0	0	8
9	1145.5	5.4	0.8	0.8	1145.5	5.4	3.1	3.1	1144.9	4.0	0.6	0.9			0	0	9
10	1145.4	5.2	0.8	0.9	1145.5	5.4	2.4	2.4	1144.5	3.2	0.6	0.9			0	0	10
11	1145.5	5.4	0.7	0.6	1145.5	5.4	4.1	4.1	1144.0	2.3	0.6	0.9			0	0	11
12	1145.5	5.4	0.7	0.7	1145.5	5.4	4.0	4.0	1143.5	1.5	0.6	0.9	DRY		0	0	12
13	1145.5	5.4	0.6	0.6	1145.5	5.4	4.1	4.1	1143.0	0.6	0.6	0.9			0	0	13
14	1140.8	0	0.6	3.3	1145.5	5.4	4.1	4.1	1142.5	0	0.6	0.9			0	0	14
15	1140.2	0	0.6	0.6	1145.5	5.4	5	5			0.5	0.5	RESERVOIR	NO STORAGE	0	0	15
16	1139.9	0	0.5	0.5	1145.5	5.4	4.4	4.4			0.5	0.5			0	0	16
17	1139.4	0	0.5	0.5	1145.5	5.4	4.4	4.4			0.5	0.5			0	0	17
18	1139.3	0	0.6	0.6	1145.5	5.4	4.4	4.4			0.5	0.5			0	0	18
19	1139.5	0	0.6	0.6	1145.5	5.4	4.4	4.4			0.5	0.5			0	0	19
20	1145.6	5.6	4.0	1.2	1145.5	5.4	3.5	3.5			0.6	0.6			0	0	20
21	1145.6	5.4	5	3.1	1145.5	5.4	2.5	2.5			0.6	0.6			0	0	21
22	1145.5	5.4	3.8	3.8	1145.5	5.4	2.4	2.4			* 0	0			0	0	22
23	1145.5	5.4	3.8	3.8	1145.5	5.4	2.4	2.4			0	0			0	0	23
24	1145.5	5.4	3.7	3.7	1145.5	5.4	2.4	2.4			0	0			0	0	24
25	1145.5	5.4	4.7	4.7	1145.5	5.4	2.4	2.4			0	0			0	0	25
26	1145.5	5.4	4.9	4.9	1145.5	5.4	2.6	2.6			0	0			0	0	26
27	1145.5	5.4	4.5	4.5	1145.5	5.4	2.9	2.9			0	0			0	0	27
28	1145.5	5.4	4.4	4.4	1145.5	5.4	2.6	2.6			0	0			0	0	28
29					1145.5	5.4	2.5	2.5			0	0			0	0	29
30					1145.5	5.4	2.5	2.5			0	0			0	0	30
31					1145.5	5.4	2.5	2.5							0	0	31
TOTAL			53.0	53.0			104.5	104.5			20.9	23.6			0	0	
Inf. Ac. Ft.			105.1				207.3				41.5				0	1286.1	
Outf. Ac. Ft.				105.1				207.3				46.8			0	1293.4	
Maximum Mean Daily Inflow			5.0				4.4				2.6				0	28.0	
Minimum Mean Daily Inflow			0.4				2.4				0				0	0	
Storage Change			0				0				-5.4				0	-5.4	

REMARKS: Inflows as per U.S.G.S. gaging station U 10. Outflows include evaporation and percolation loss. (= Mean for period. ⅝ Year

Max. W. S. Elev.	1145.74	feet on 12-17-38	Storage	6.0	Acre Feet	RECORDS COLLECTED BY	
Min. W. S. Elev.	Dry	feet on various times	Storage	0	Acre Feet	W.T.Lind	Dam Tender
Max. Peak Inf.	23	C.F.S. from U.S.G.S.sta. on 1-10-39	to		on	H.A.van der Goot	Hydrographer
Max. Peak Outf.	Est. 30±	C.F.S. from	on 12-19-38	to	on		Hydrographer

COMPUTATIONS Date
Gage Hts. copied J.A.H.
Storage applied J.A.H.
Inf. & Outf. computed J.A.H.
Checked C.C.G.

Gage heights as of midnight on day shown.
° Evaporation and percolation loss only. * Pumping started from San Dimas Creek; diverting inflow from Puddingstone Diversion.

PUDDINGSTONE DIVERSION DAM (CONT.)

F. C. Dist. Form 68 Revised 600 5/39

Storages based on L.A.C.F.C.D. survey of March 1938; correction for debris loss of 2.5 A.F.

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Daily Gage Height in feet and Operation Record of PUDDINGSTONE DIVERSION Dam

In / On San Dimas Creek for the Year Ending September 30, 1939

Drainage Area 2.57 Square Miles. Capacity of Reservoir 47.6 Ac. Ft. at Spillway Elev. 1152.5 Ft.

Continuous Water Stage Recorder Au

Gage Heights Read at various times.

Day	JUNE Gage Height	JUNE Acre Ft. Storage	JUNE C.F.S. Inflow	JUNE C.F.S. Outflow	JULY Gage Height	JULY Acre Ft. Storage	JULY C.F.S. Inflow	JULY C.F.S. Outflow	AUGUST Gage Height	AUGUST Acre Ft. Storage	AUGUST C.F.S. Inflow	AUGUST C.F.S. Outflow	SEPTEMBER Gage Height	SEPTEMBER Acre Ft. Storage	SEPTEMBER C.F.S. Inflow	SEPTEMBER C.F.S. Outflow	Day
1			0	0			0	0			0	0			0	0	1
2			0	0			0	0			0	0			0	0	2
3			0	0			0	0			0	0			0	0	3
4			0	0			0	0			0	0			0	0	4
5			0	0			0	0			0	0			0	0	5
6			0	0			0	0			0	0			0	0	6
7			0	0			0	0			0	0			0	0	7
8			0	0			0	0			0	0			0	0	8
9			0	0			0	0			0	0			0	0	9
10			0	0			0	0			0	0			0	0	10
11			0	0			0	0			0	0			0	0	11
12	DRY		0	0	DRY		0	0	DRY		0	0	DRY		0	0	12
13			0	0			0	0			0	0			0	0	13
14	RESERVOIR	STORAGE	0	0	RESERVOIR	STORAGE	0	0	RESERVOIR	STORAGE	0	0	RESERVOIR	STORAGE	0	0	14
15			0	0			0	0			0	0			0	0	15
16			0	0			0	0			0	0			0	0	16
17			0	0			0	0			0	0			0	0	17
18		NO	0	0		NO	0	0		NO	0	0		NO	0	0	18
19			0	0			0	0			0	0			0	0	19
20			0	0			0	0			0	0			0	0	20
21			0	0			0	0			0	0			0	0	21
22			0	0			0	0			0	0			0	0	22
23			0	0			0	0			0	0			0	0	23
24			0	0			0	0			0	0			0	0	24
25			0	0			0	0			0	0			0	0	25
26			0	0			0	0			0	0			0	0	26
27			0	0			0	0			0	0			0	0	27
28			0	0			0	0			0	0			0	0	28
29			0	0			0	0			0	0			0	0	29
30			0	0			0	0			0	0			0	0	30
31							0	0			0	0					31
TOTAL			0	0			0	0			0	0			0	0	
Inf. Ac. Ft.			0				0				0				0	12881	
Outf. Ac. Ft.				0				0				0			0	12934	
Maximum Mean Daily Inflow			0				0				0				0	280	
Minimum Mean Daily Inflow			0				0				0				0	0	
Storage Change			0				0				0				0	-54	

REMARKS — Yearly Totals

Max. W. S. Elev.	1145.74	feet	on 12-17-38	Storage 6.0	Acre Feet		
Min. W. S. Elev.	Dry	feet	on various times	Storage 0	Acre Feet		
Max. Peak Inf.	23	C.F.S. from	U.S.G.S. stage	on 1-10-39	to	on	
Max. Peak Outf.	Est. 30±	C.F.S. from		on 12-19-38	to	on	

Gage heights and storage as of midnight on day shown.

RECORDS COLLECTED BY

W.T.Lind	Dam Tender
H.A.van der Goot	Hydrographer
	Hydrographer

COMPUTATIONS — Date

Gage Hts. copied	J.A.H.
Storage applied	J.A.H.
Inf. & Outf. computed	J.A.H.
Checked	C.C.G.

SAN DIMAS DAM

F. C. Dist. Form 68 Revised 600 5/39

Storages based on U.S.F.S. survey and F.C. silt survey following 3-2-38.

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Daily Gage Height in feet and Operation Record of SAN DIMAS Dam

In / On San Dimas Canyon for the Year Ending September 30, 1939.

Drainage Area 15.9 Square Miles. Capacity of Reservoir 1155.1 Ac. Ft. at Spillway Elev. 1462.0 Ft.

Continuous Water Stage Recorder Au

Gage Heights Read daily.

Day	OCTOBER Gage Height	OCTOBER Acre Ft. Storage	OCTOBER C.F.S. Inflow	OCTOBER C.F.S. Outflow	NOVEMBER Gage Height	NOVEMBER Acre Ft. Storage	NOVEMBER C.F.S. Inflow	NOVEMBER C.F.S. Outflow	DECEMBER Gage Height	DECEMBER Acre Ft. Storage	DECEMBER C.F.S. Inflow	DECEMBER C.F.S. Outflow	JANUARY Gage Height	JANUARY Acre Ft. Storage	JANUARY C.F.S. Inflow	JANUARY C.F.S. Outflow	Day
1			1.5	1.5			2.4	2.4			2.5	2.5	1411.0	118.0	1 4.0	C 9.4	1
2			1.4	1.4			2.2	2.2			2.6	2.6	1408.7	98.5	1 4.0	C 13.9	2
3			1.4	1.4			2.3	2.3			2.4	2.4	1405.2	72.7	4.0	M 17.0	3
4			1.4	1.4			2.3	2.3			2.2	2.2	1404.7	69.5	4.1	5.7	4
5			1.5	1.5			2.4	2.4			2.2	2.2	1401.1	110.2	20.5	0	5
6			1.6	1.6			2.3	2.3			2.1	2.1	1411.0	118.0	10.5	6.5	6
7			1.7	1.7			2.3	2.3			2.0	2.0	1411.6	123.4	7.0	4.3	7
8			1.7	1.7			2.3	2.3			1.5	1.5	1412.8	134.4	5.5	0	8
9			1.9	1.9			2.3	2.3			1.4	1.4	1410.6	116.3	5.2	14.3	9
10			2.0	2.0			2.5	2.5			1.4	1.4	1406.4	80.9	5.0	M 22.8	10
11	DRY		1.9	1.9			2.6	2.6			1.4	1.4	1401.7	51.7	4.9	1 19.7	11
12			1.8	1.8			2.4	2.4			1.5	1.5	1396.6	26.2	5.1	M 17.9	12
13		STORAGE	2.0	2.0		STORAGE	2.4	2.4		STORAGE	2.0	2.0	1392.9	13.6	4.0	10.4	13
14	RESERVOIR		2.2	2.2			2.6	2.6	1361.0	0.6	2.8	2.5	1393.5	15.3	3.8	2.9	14
15			2.9	2.9			2.4	2.4	1390.7	8.6	4.0	0	1394.6	18.7	1 3.6	2.1	15
16			2.5	2.5			2.3	2.3	1393.2	14.4	3.0	0	1395.0	20.0	1 3.7	3.1	16
17			2.6	2.6			2.0	2.0	1394.8	19.3	2.4	0	1394.9	19.7	1 3.7	3.8	17
18		NO	2.4	2.4		NO	1.8	1.8	1401.8	52.3	16.7	0	1394.7	19.0	1 3.6	4.0	18
19			2.2	2.2			1.7	1.7	1409.5	105.1	42.6	16.0	1394.4	18.0	1 3.6	4.1	19
20			2.0	2.0			1.5	1.5	1412.7	133.4	38.3	M 24.0	1395.2	20.7	1 3.5	2.1	20
21			2.0	2.0			1.7	1.7	1412.2	126.8	17.9	20.3	1400.1	42.9	11.2	0	21
22			2.0	2.0			1.5	1.5	1412.1	127.9	10.3	10.7	1402.6	56.8	7.0	0	22
23			2.0	2.0			1.5	1.5	1412.2	126.8	6.5	6.1	1404.3	67.0	5.1	0	23
24			2.0	2.0			1.6	1.6	1412.5	131.6	6.0	4.6	1405.6	75.4	4.3	0	24
25			1.9	1.9			1.6	1.6	1412.6	134.4	5.4	3.9	1406.6	83.8	4.2	0	25
26			1.7	1.7			1.7	1.7	1412.6	132.5	4.8	5.6	1407.9	92.1	4.2	0	26
27			1.7	1.7			1.7	1.7	1412.4	130.7	4.2	5.1	1409.0	100.9	4.4	0	27
28			1.8	1.6			1.8	1.8	1412.3	129.6	1 4.2	C 4.7	1410.0	109.3	4.1	0	28
29			2.0	2.0			1.8	1.8	1412.2	128.6	1 4.1	C 4.6	1410.8	116.3	4.0	0	29
30			2.2	2.3			1.9	1.9	1412.2	128.8	1 4.1	C 4.1	1412.1	127.9	5.6	0	30
31			2.1	2.1					1412.2	128.8	1 4.1	C 4.1	1413.2	138.1	5.2	0	31
TOTAL			60.0	60.0			61.8	61.8			206.6	141.7			168.7	164.0	
Inf. Ac. Ft.			119.0				122.6				409.8				334.6	986.0	
Outf. Ac. Ft.				119.0				122.6				281.1			325.3	848.0	
Maximum Mean Daily Inflow			2.9				2.6				42.6				20.5	42.6	
Minimum Mean Daily Inflow			1.4				1.5				1.4				3.5	1.4	
Storage Change			0				0				+128.8				+9.3	+138.1	

REMARKS — Outflows from U.S.G.S. records and dam operation reports. I = Interpolated. C = Computed. M = Measured. | Mean for period. — ½ Year

Max. W. S. Elev.	1442.3	feet	on 4-28-39	Storage 560.0	Acre Feet		
Min. W. S. Elev.	1380.8	feet	on various times	Storage 0	Acre Feet		
Max. Peak Inf.	80.5	C.F.S. from	2:00 p.m. on 1-5-39	to 4:00 p.m.	on 1-5-39		
Max. Peak Outf.	24	C.F.S. from	8:00 a.m. on 12-19-38	to 3:56 p.m.	on 12-21-38		

Gage heights and storages as of midnight on day shown.

RECORDS COLLECTED BY

G.W.Rogers	Dam Tender
W.T.Lind	Hydrographer
C.L.Brewster	Hydrographer

COMPUTATIONS — Date

Gage Hts. copied	C.C.G.-J.A.H.
Storage applied	C.C.G.-J.A.H.
Inf. & Outf. computed	J.A.H.
Checked	J.A.H.-C.C.G.

F. C. Dist. Form 68 Revised 800 5/39

Storages based on U.S.F.S. survey and F.C. silt survey following 3-2-36.

Daily Gage Height in feet and Operation Record of SAN DIMAS Dam

In San Dimas Canyon for the Year Ending September 30, 19 39

Drainage Area 15.9 Square Miles. Capacity of Reservoir 1155.1 Ac. Ft. at Spillway Elev. 1462.0 Ft.

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Continuous Water Stage Recorder Au

Gage Heights Read daily.

Day	FEBRUARY Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	MARCH Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	APRIL Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	MAY Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Day
1	1414.1	146.7	[4.1	0	1430.6	349.7	3.5	3.4	1436.0	473.4	3.7	2.0	1442.1	555.3	2.3	3.0	1
2	1414.9	154.5	4.2	0	1430.6	349.7	3.5	3.4	1436.6	443.8	7.2	2.0	1442.0	553.0	2.3	3.0	2
3	1416.5	170.7	8.1	0	1430.7	351.1	3.5	3.4	1436.9	447.2	4.4	2.0	1442.0	553.0	2.3	3.0	3
4	1417.9	185.4	7.4	0	1430.7	351.1	3.5	3.4	1437.2	454.4	4.0	1.0	1441.9	552.8	2.3	3.0	4
5	1419.0	197.5	6.1	0	1430.7	351.1	3.5	3.4	1437.5	459.9	2.7	0	1441.9	550.8	2.3	3.0	5
6	1419.9	207.6	5.1	0	1430.7	351.1	3.5	3.4	1437.8	465.3	2.7	0	1441.8	548.5	2.3	3.0	6
7	1420.9	219.2	5.9	0	1430.8	352.6	3.5	3.4	1438.1	471.0	2.7	0	1441.8	548.5	2.3	3.0	7
8	1422.8	242.5	11.7	0	1430.8	352.6	3.5	3.4	1438.4	476.8	2.7	0	1441.7	546.3	2.3	3.0	8
9	1423.9	256.7	7.2	0	1431.2	358.5	5.7	2.8	1438.7	482.7	2.8	0	1441.6	544.0	2.3	3.0	9
10	1424.6	268.6	6.0	0	1432.0	370.3	7.8	1.8	1439.0	488.5	2.6	0	1441.6	544.0	2.4	3.0	10
11	1425.7	280.7	6.1	0	1432.1	371.8	5.0	4.3	1439.2	492.6	2.8	0	1441.5	541.8	2.4	3.8	11
12	1426.5	291.7	5.5	0	1432.2	373.3	5.1	4.3	1439.5	498.8	3.1	0	1441.3	537.3	2.5	4.2	12
13	1427.2	301.3	4.9	0	1432.2	373.3	4.3	4.3	1439.8	505.0	3.2	0	1441.2	535.1	2.6	4.2	13
14	1427.8	311.1	4.9	0	1432.2	373.3	3.6	4.3	1440.2	513.4	4.2	0	1441.1	532.8	2.7	4.2	14
15	1428.5	319.6	4.5	0	1432.0	370.3	3.7	4.3	1440.5	519.9	3.3	0	1441.0	530.6	2.8	4.2	15
16	1429.1	328.0	4.2	0	1432.0	370.3	3.7	4.3	1440.7	524.2	2.1	0	1440.9	528.5	2.8	4.2	16
17	1429.6	335.2	3.7	0	1431.9	368.8	3.7	4.3	1440.9	528.5	2.2	0	1440.8	526.3	2.9	4.2	17
18	1430.0	340.9	3.6	0	1431.8	367.3	3.6	4.3	1441.1	532.8	2.2	0	1440.7	524.2	2.9	4.2	18
19	1430.6	349.7	3.7	0	1431.7	365.9	3.6	4.3	1441.3	537.3	2.2	0	1440.5	519.9	3.0	4.2	19
20	1430.7	351.1	1 3.7	C 3.0	1431.9	368.8	4.6	3.2	1441.5	541.8	2.3	0	1440.2	513.4	3.0	5.6	20
21	1430.6	349.7	3.6	4.3	1432.1	371.8	3.5	2.0	1441.7	546.3	2.3	0	1439.9	507.0	2.9	6.2	21
22	1430.7	351.1	3.5	3.4	1432.2	373.3	2.8	2.0	1441.9	550.8	2.3	0	1439.6	500.9	2.9	6.2	22
23	1430.8	352.6	3.6 M	3.4	1432.3	374.9	2.8	2.0	1442.0	553.0	2.6	1.5	1439.3	494.7	2.9	6.2	23
24	1430.8	352.6	3.5	3.4	1432.4	376.4	2.8	2.0	1442.1	555.3	2.9	2.3	1439.0	488.5	2.9	6.2	24
25	1430.8	352.6	3.5	3.4	1432.6	379.4	3.5	2.0	1442.2	557.6	2.9	2.3	1438.6	480.7	2.9	6.2	25
26	1430.7	351.1	3.5	3.4	1433.1	387.1	5.9	2.0	1442.2	557.6	2.9	2.3	1438.2	472.9	2.9	6.2	26
27	1430.7	351.1	3.5	3.4	1434.1	402.6	9.8	2.0	1442.2	557.6	2.8	2.3	1437.8	465.3	2.9	6.2	27
28	1430.7	351.1	3.5	3.4	1434.8	413.7	7.6	2.0	1442.3	560.0	2.8	2.4	1437.4	458.0	2.7	6.2	28
29					1435.2	420.2	5.2	2.0	1442.2	557.6	2.8	3.0	1437.0	450.7	2.6	6.2	29
30					1435.5	425.2	4.6	2.0	1442.2	557.6	2.8	3.0	1436.6	443.8	2.5	6.2	30
31					1435.8	430.1	4.4	2.0					1436.3	438.6	2.4	6.2	31
TOTAL			138.5	31.1			135.5	95.7			90.4	26.1			81.2	141.2	
Inf. Ac. Ft.			274.7				268.8				179.3				161.1	186.9	
Outf. Ac. Ft.				61.7				189.8				51.8			280.1	143.4	
Maximum Mean Daily Inflow			11.7				9.8				7.2				3.0	4.2	
Minimum Mean Daily Inflow			3.4				2.8				2.3				2.3	1.4	
Storage Change			+213.0				+79.0				+127.5				-119.0	+43.6	

REMARKS: Outflows from U.S.G.S. records and dam operation records. [= Mean for period. I = Interpolated. C = Computed. % Year

Max. W. S. Elev.	1442.3 feet on 4-28-39	Storage 560.0 Acre Feet	RECORDS COLLECTED BY		COMPUTATIONS	Date
Min. W. S. Elev.	1380.8 feet on various times	Storage 0 Acre Feet	G.W.Rogers	Dam Tender	Gage Hts. copied	C.C.G.-J.A.H.
Max. Peak Inf.	80.5 C.F.S. from 2:00 p.m. on 1-5-39	to 4:00 p.m. on 1-5-39	W.T.Lind	Hydrographer	Storage applied	C.C.G.-J.A.H.
Max. Peak Outf.	24.0 C.F.S. from 8:00 a.m. on 12-19-38	to 3:56 p.m. on 12-21-38	C.L.Brewster	Hydrographer	Inf. & Outf. computed	J.A.H.
					Checked	J.A.H.-C.C.G.

Gage heights and storage as of midnight on day shown. M = Measured.

F. C. Dist. Form 68 Revised 800 5/39

Storages based on U.S.F.S. survey and F.C. silt survey following 3-2-36.

Daily Gage Height in feet and Operation Record of SAN DIMAS Dam

In San Dimas Canyon for the Year Ending September 30, 19 39

Drainage Area 15.9 Square Miles. Capacity of Reservoir 1155.1 Ac. Ft. at Spillway Elev. 1462.0 Ft.

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Continuous Water Stage Recorder Au

Gage Heights Read daily.

Day	JUNE Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	JULY Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	AUGUST Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	SEPTEMBER Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Day
1	1435.8	430.1	2.4	5.5	1421.7	228.9	1.0	3.5	1408.0	92.9	0.4	2.3	1398.6	35.2	0.3	0.9	1
2	1435.4	423.5	2.4	5.5	1421.3	224.0	1.0	3.4	1407.5	89.1	0.4	2.3	1398.4	34.3	0.3	0.9	2
3	1435.0	416.9	2.3	6	1420.9	219.2	1.0	3.4	1407.1	86.0	0.4	2.2	1398.2	33.3	0.3	0.9	3
4	1434.6	410.5	2.3	6	1420.6	215.7	1.0	3.4	1406.6	82.4	0.4	2.2	1397.9	31.9	0.3	0.9	4
5	1434.2	404.2	2.3	6	1420.2	211.0	1.0 M	3.4	1406.2	79.5	0.4	2.1	1397.7	31.0	0.3	0.9	5
6	1433.7	396.4	2.3	6	1419.8	206.5	0.8	3.4	1405.7	76.1	0.4	2.1	1397.5	30.1	0.3	0.9	6
7	1433.3	390.2	2.3	6	1419.4	202.0	0.8	3.3	1405.3	73.4	0.4	2.0	1397.2	28.7	0.3	0.9	7
8	1432.8	382.5	2.3	6	1419.0	197.5	0.8	3.2	1404.9	70.8	0.4	2.0	1397.0	27.8	0.3 M	0.9	8
9	1432.3	374.9	2.3	6	1418.7	193.2	0.8	3.1	1404.4	67.6	0.4	1.9	1396.7	26.6	0.3	0.9	9
10	1431.8	367.3	2.2	6	1418.2	188.7	0.8	3.1	1404.0	65.1	0.4 M	1.9	1396.5	25.8	0.3	0.9	10
11	1431.3	359.9	2.2	6	1417.8	184.4	0.7	3.0	1403.5	62.1	0.4	1.6	1396.5	25.8	0.3	0.3	11
12	1430.8	352.6	2.2	6	1417.4	180.1	0.7	2.9	1403.2	60.9	0.4	1.0	1396.6	26.2	0.3	0	12
13	1430.2	343.8	2.2	6	1416.9	174.9	0.7	2.8	1403.0	59.1	0.4	1.0	1396.7	26.6	0.3	0	13
14	1429.7	336.6	2.2	6	1416.4	169.7	0.7 M	2.8	1402.8	58.0	0.4	1.0	1396.7	26.6	0.3	0	14
15	1429.2	329.5	2.1	6	1416.0	165.5	0.4	2.8	1402.6	56.8	0.4	1.0	1396.8	27.0	0.3	0	15
16	1428.6	321.0	2.1	6	1415.5	160.5	0.4	2.7	1402.3	55.1	0.4	1.0	1396.8	27.0	0.3	0	16
17	1428.1	313.9	2.1	6	1415.0	155.5	0.4	2.6	1402.1	54.0	0.4	1.0	1396.9	27.4	0.2	0	17
18	1427.6	306.9	2.1	6	1414.6	151.6	0.4 M	2.6	1401.9	52.8	0.4 M	1.0	1397.0	27.8	0.2	0	18
19	1427.0	298.5	2.1	6	1414.1	146.7	0.4	2.6	1401.7	51.7	0.4	1.0	1397.1	28.3	0.2	0	19
20	1426.5	291.7	2.0	5.5	1413.6	141.9	0.4	2.6	1401.5	50.6	0.4	1.0	1397.2	28.7	0.2	0	20
21	1425.9	283.4	1.3	5.5	1413.2	138.1	0.4	2.6	1401.3	49.5	0.4	1.0	1397.3	29.2	0.2	0	21
22	1425.4	276.6	1.3	4.5	1412.7	133.4	0.4	2.6	1401.1	48.4	0.4	1.0	1397.4	29.6	0.2	0	22
23	1424.1	272.6	1.3	3.8	1412.2	128.8	0.4	2.5	1400.8	46.7	0.4	1.0	1397.5	30.1	0.2	0	23
24	1424.7	267.2	1.3	3.8	1411.7	124.3	0.4	2.5	1400.6	45.6	0.4	1.0	1399.2	38.2	4.1	0	24
25	1424.3	262.0	1.3	3.8	1411.3	120.7	0.4 M	2.5	1400.3	44.0	0.4	1.0	1408.4	96.1	29.2	0	25
26	1423.9	256.7	1.2	3.8	1410.7	115.4	0.4	2.5	1400.1	42.9	0.3	0.9	1411.4	121.6	12.9	0	26
27	1423.5	251.5	1.2	3.8	1410.3	111.9	0.3 M	2.5	1399.8	41.4	0.3	0.9	1412.2	128.8	3.6	0	27
28	1423.1	246.3	1.1	3.8	1409.1	106.8	0.3	2.5	1399.5	39.8	0.3	0.9	1412.8	134.4	2.8	0	28
29	1422.7	241.3	1.1	3.8	1409.3	103.4	0.3	2.5	1399.3	38.8	0.3	0.9	1413.2	138.1	1.9	0	29
30	1422.2	235.0	1.1	4.1	1408.8	99.3	0.3	2.4	1399.0	37.2	0.3	0.9	1413.5	141.0	1.4	0	30
31					1408.4	96.1	0.3	2.4	1398.8	36.2	0.3	0.9					31
TOTAL			56.6	159.2			18.1	88.1			11.8	42.0			62.1	9.3	
Inf. Ac. Ft.			112.3				35.9				23.4				123.2	216.7	
Outf. Ac. Ft.				315.8				174.7				83.3			18.4	202.3	
Maximum Mean Daily Inflow			2.4				1.0				0.4				29.2	42.6	
Minimum Mean Daily Inflow			1.1				0.3				0.3				0.2	0.2	
Storage Change			-203.6				-138.9				-59.9				+104.8	+141.0	

REMARKS: Outflows are from U.S.G.S. records and operation reports. [= Mean for period. M = Measured. Yearly Totals

Max. W. S. Elev.	1442.3 feet on 4-28-39	Storage 560.0 Acre Feet	RECORDS COLLECTED BY		COMPUTATIONS	Date
Min. W. S. Elev.	1380.8 feet on various times	Storage 0 Acre Feet	G.W.Rogers	Dam Tender	Gage Hts. copied	J.A.H.-C.C.G.
Max. Peak Inf.	80.5 C.F.S. from 2:00 p.m. on 1-5-39	to 4:00 p.m. on 1-5-39	W.T.Lind	Hydrographer	Storage applied	J.A.H.-C.C.G.
Max. Peak Outf.	24.0 C.F.S. from 8:00 a.m. on 12-19-38	to 3:56 p.m. on 12-21-38	C.L.Brewster	Hydrographer	Inf. & Outf. computed	J.A.H.-C.C.G.
					Checked	J.A.H.-C.C.G.

Gage heights and storages as of midnight on day shown.

Outflows interpolated between measurements beginning July 15,1939.

SAN GABRIEL DAM NO. 1

F. C. Dist. Form 68 Revised 600 5/50

Storages based on L.A.C.F.C.D. survey of October 1938.

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Daily Gage Height in feet and Operation Record of SAN GABRIEL Dam #1

In San Gabriel Canyon for the Year Ending September 30, 1939

Continuous Water Stage Recorder Au

Drainage Area 202 Square Miles. Capacity of Reservoir 47191 Ac. Ft. at Spillway Elev. 1453.0 Ft. Gage Heights Read daily.

Day	OCTOBER				NOVEMBER				DECEMBER				JANUARY				Day
	Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	
1	1264.30*	53	51	51	1272.20	462	54	52	1272.15	477	54	54	1290.30	1889	124	346	1
2	1264.25	53	50	50	1272.15	464	54	53	1272.15	477	54	54	1285.40	1420	125	332	2
3	1264.20	52	52	52	1272.15	466	54	53	1272.15	477	55	55	1284.20	1299	189	221	3
4	1264.15	52	56	56	1272.15	469	54	52	1272.15	477	53	53	1284.10	1307	323	354	4
5	1264.10	52	54	54	1272.15	471	53	52	1272.15	477	52	52	1278.70	987	359	475	5
6	1264.05	51	53	54	1272.15	472	52	52	1272.15	477	51	51	1284.10	1270	218	199	6
7	1264.00	51	54	54	1272.15	474	55	54	1272.15	477	50	50	1286.30	1505	186	133	7
8	1263.95	51	53	53	1272.15	474	54	54	1272.15	477	49	49	1290.40	1899	163	0	8
9	1263.90	50	53	54	1272.15	475	55	54	1272.15	477	49	49	1293.80	2242	146	0	9
10	1263.85	50	52	52	1272.15	476	52	52	1272.15	477	49	49	1296.60	2534	127	0	10
11	1263.80	50	52	52	1272.15	476	52	52	1272.15	477	50	50	1299.05	2796	118	0	11
12	1263.75	49	51	51	1272.15	477	53	52	1272.15	477	47	47	1293.60	2221	112	383	12
13	1263.70	49	49	49	1272.15	477	52	52	1272.15	477	48	48	1291.00	1958	96	227	13
14	1263.70	49	51	51	1272.15	477	51	51	1272.20	479	55	54	1293.40	2201	96	0	14
15	1263.65	48	60	61	1272.15	477	54	54	1277.40	681	145	22	1295.45	2413	94	0	15
16	1263.65*	48	56	56	1272.15	477	56	56	1281.20	895	114	0	1291.20	1978	87	287	16
17	1255.60	100	55	28	1272.15	477	56	56	1281.80	996	78	31	1293.40	2201	91	0	17
18	1263.70	184	53	11	1272.15	477	55	55	1280.00	958	0 492	511	1295.50	2419	88	0	18
19	1267.25	253	52	17	1272.15	477	55	55	1286.00	1477	1178	916	1295.40	2408	85	96	19
20	1269.65	316	51	19	1272.15	477	57	57	1282.20	1149	691	856	1293.00	2160	87	184	20
21	1271.40	372	50	22	1272.15	477	56	56	1277.00	835	439	597	1293.80	2242	123	92	21
22	1272.25	406	49	32	1272.15	477	55	55	1279.60	964	317	252	1296.40	2513	111	0	22
23	1272.25	413	50	46	1272.15	477	54	54	1280.30	1007	0 227	205	1296.30	2503	95	92	23
24	1272.30	422	51	47	1272.15	477	56	56	1283.30	1196	196	124	1294.30	2293	93	184	24
25	1272.35	430	70	66	1272.15	477	56	56	1284.60	1308	175	131	1296.40	2513	91	0	25
26	1272.35	436	73	70	1272.15	477	54	54	1282.30	1165	165	232	1296.20	2492	85	88	26
27	1272.35	442	70	67	1272.15	477	54	54	1284.50	1315	147	88	1291.90	2048	84	276	27
28	1272.30	448	66	64	1272.15	477	55	55	1286.30	1505	145	66	1294.00	2262	86	0	28
29	1272.25	450	66	64	1272.15	477	55	55	1289.90	1849	139	0	1295.90	2461	83	0	29
30	1272.20	453	59	57	1272.15	477	53	53	1293.00	2160	129	0	1295.90	2461	90	88	30
31	1272.20	458	54	52					1295.60	2429	125	0	1297.90	2672	94	0	31
TOTAL			1716	1512			1626	1616			5618	4746			3949	4057	
Inf. Ac. Ft.			3404				3225				11143				7833	25605	
Outf. Ac. Ft.				2999				3205				9414			8047	23665	
Maximum			73				57				1178				359	1178	
Mean Daily Inflow																	
Minimum			49				51				47				83	47	
Mean Daily Inflow																	
Storage Change			+405				+19		+1952-(223 A.F.debris)				+243-(457 A.F.debris)		+2619 -**		
REMARKS																	½ Year

Max. W. S. Elev.	1330.6	feet	on	9-30-39	Storage	5793	Acre Feet	RECORDS COLLECTED BY		COMPUTATIONS	Date
Min. W. S. Elev.	1263.6	feet	on	11-18-38	Storage	48	Acre Feet	R.H.Harrison	Dam Tender	Gage Hts. copied	H.A.V.-J.A.H.
Max. Peak Inf.	2775	C.F.S. from	2:00 a.m.	on 12-19-38	to	3:00 a.m.	on 12-19-38	T.A.Cooper	Hydrographer	Storage applied	H.A.V.-J.A.H.
Max. Peak Outf.	3047***	C.F.S. from	7:05 a.m.	on 5-11-39	to	8:35 a.m.	on 5-11-39		Hydrographer	Inf. & Outf. computed	H.V.-J.A.H.
										Checked	J.A.H.-C.O.G.

Gage heights and storage as of midnight on day shown. C = Computed from storage change. *** Discharge to test valves.
* Gage heights below coffer dam only - balance shows gage heights above coffer dam only. ** Less 680 A.F. of debris.
Oct.1 to 23 (incl.) outflows computed from storage changes and inflows interpolated from measurements.
Oct.24 to Dec.14 (incl.) inflows " " " " outflows " " "
Dec.15 to Jan.31 (incl.) inflows computed from streamflow stations and outflows as indicated by discharge meters or weir box records-storages in error due to debris encroachment.

F. C. Dist. Form 68 Revised 600 5/50

Storages based on L.A.C.F.C.D. survey of October 1938.

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Daily Gage Height in feet and Operation Record of SAN GABRIEL Dam #1

In San Gabriel Canyon for the Year Ending September 30, 1939

Continuous Water Stage Recorder Au

Drainage Area 202 Square Miles. Capacity of Reservoir 47191 Ac. Ft. at Spillway Elev. 1453.0 Ft. Gage Heights Read daily.

Day	FEBRUARY				MARCH				APRIL				MAY				Day
	Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	
1	1299.65	2860	95	0	1298.90	2779	95	98	1307.80	3771	118	124	1328.70	5986	100	121	1
2	1301.30	3041	91	0	1298.75	2763	90	98	1309.25	3938	208	124	1328.45	5935	95	121	2
3	1303.30	3262	111	0	1298.60	2747	90	98	1310.10	4037	175	125	1328.25	5893	99	120	3
4	1305.25	3480	110	0	1298.40	2726	88	98	1310.70	4107	160	125	1328.00	5845	93	117	4
5	1306.95	3674	98	0	1298.20	2704	87	98	1311.15	4160	153	126	1327.75	5804	96	117	5
6	1308.60	3863	95	0	1298.50	2737	87	72	1311.55	4207	150	126	1327.50	5750	90	117	6
7	1304.60	3407	94	323	1298.85	2774	87	67	1311.90	4248	146	126	1327.20	5703	91	115	7
8	1298.45	2731	138	479	1299.20	2812	87	68	1312.10	4272	139	126	1327.90	5792	88	43	8
9	1299.50	2845	148	91	1299.90	2888	107	69	1312.30	4296	138	126	1328.65	5891	87	37	9
10	1299.35	2828	143	151	1301.30	3041	166	88	1312.60	4331	135	118	1325.30	5431	88	E 320	10
11	1299.25	2817	145	151	1301.25	3035	105	108	1312.95	4373	133	112	1312.95	3826	91	E 900	11
12	1299.20	2812	149	151	1301.05	3013	96	108	1313.30	4415	134	112	1313.05	3808	89	98	12
13	1299.00	2790	140	151	1300.75	2980	92	108	1313.80	4475	143	113	1309.30	3358	93	320	13
14	1299.10	2801	131	126	1301.30	3041	140	109	1314.20	4523	138	114	1306.00	2973	93	287	14
15	1299.20	2812	106	100	1304.70	3418	299	109	1314.45	4553	129	114	1303.90	2729	86	209	15
16	1299.25	2817	102	100	1306.40	3611	206	109	1314.60	4572	124	114	1302.10	2567	88	170	16
17	1299.30	2823	102	99	1305.10	3463	89	164	1314.70	4584	120	114	1302.15	2535	85	101	17
18	1299.30	2823	99	99	1303.90	3329	91	158	1315.55	4688	166	114	1302.10	2511	85	97	18
19	1299.30	2823	98	98	1303.40	3273	98	127	1317.60	4943	244	115	1301.20	2414	82	131	19
20	1299.30	2823	98	98	1303.10	3240	111	127	1319.30	5158	223	115	1298.40	2126	77	222	20
21	1299.25	2817	94	97	1303.10	3240	107	107	1320.80	5351	214	116	1295.35	1839	75	220	21
22	1299.20	2812	94	96	1303.20	3251	111	106	1322.50	5576	229	116	1292.25	1554	74	218	22
23	1299.35	2828	92	84	1301.90	3107	104	176	1324.85	5894	277	117	1288.85	1278	76	215	23
24	1299.25	2817	92	98	1301.00	3008	103	153	1327.30	6242	294	118	1285.20	998	72	213	24
25	1299.20	2812	96	98	1300.80	2986	103	114	1329.50	6568	285	121	1282.85	826	70	157	25
26	1299.10	2801	92	98	1301.05	3013	127	114	1329.50	6568	121	121	1281.80	760	69	102	26
27	1299.00	2790	91	97	1302.25	3145	181	114	1329.30	6537	105	121	1279.15	657	68	120	27
28	1298.95	2784	94	97	1304.60	3407	246	114	1329.25	6529	117	121	1276.70	542	65	123	28
29					1306.10	3576	199	114	1329.15	6514	114	121	1272.35	458	66	108	29
30					1306.90	3668	118	71	1328.95	6484	106	121	1272.30	431	65	E 79	30
31					1307.90	3783	109	51					1272.30	411	66	E 76	31
TOTAL			3338	2982			3819	3315			4938	3576			2562	5394	
Inf. Ac. Ft.			6026				7575				9794				5082	54082	
Outf. Ac. Ft.				5915				6575				7093			10699	53947	
Maximum			148				299				294				100	1178	
Mean Daily Inflow																	
Minimum			91				87				105				65	47	
Mean Daily Inflow																	
Storage Change			+1120				+999				+2701				-5617	+358-**	
REMARKS	Inflows computed from storage change and outflows from 2-1-39 to 4-30-39. E = Estimated.																½ Year

Max. W. S. Elev.	1330.6	feet	on	9-30-39	Storage	5793	Acre Feet	RECORDS COLLECTED BY		COMPUTATIONS	Date
Min. W. S. Elev.	1263.6	feet	on	11-18-38	Storage		Acre Feet	R.H.Harrison	Dam Tender	Gage Hts. copied	H.A.V.-J.A.H.
Max. Peak Inf.	2663	C.F.S. from	2:00 a.m.	on 12-18-38	to	4:00 a.m.	on 12-18-38	T.A.Cooper	Hydrographer	Storage applied	H.A.V.-J.A.H.
Max. Peak Outf.	***3047	C.F.S. from	7:05 a.m.	on 5-11-39	to	8:35 a.m.	on 5-11-39		Hydrographer	Inf. & Outf. computed	H.V.-J.A.H.
										Checked	J.A.H.-C.O.G.

Gage heights and storage as of midnight on day shown. Storages computed from streamflow records from 5-1-39 to 5-1-39.
* Storage corrected for 456 A.F. debris loss on 5-1-39.
** +456 A.F. less 680 A.F. debris loss or 224 A.F. Note: 680 A.F. = error in original storage values.
*** Discharge made to test valves.

F. C. Dist. Form 68 Revised 600 5/39

Beginning 6-1-39 storages based on volumetric computations - (Table #IV)

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Daily Gage Height in feet and Operation Record of SAN GABRIEL Dam#1

In San Gabriel Canyon for the Year Ending September 30, 1939

Continuous Water Stage Recorder Au

Drainage Area 202 Square Miles. Capacity of Reservoir 47191 Ac. Ft. at Spillway Elev. 1453.0 Ft.

Gage Heights Read daily.

Day	JUNE Gage Height	JUNE Acre Ft. Storage	JUNE C.F.S. Inflow	JUNE C.F.S. Outflow	JULY Gage Height	JULY Acre Ft. Storage	JULY C.F.S. Inflow	JULY C.F.S. Outflow	AUGUST Gage Height	AUGUST Acre Ft. Storage	AUGUST C.F.S. Inflow	AUGUST C.F.S. Outflow	SEPTEMBER Gage Height	SEPTEMBER Acre Ft. Storage	SEPTEMBER C.F.S. Inflow	SEPTEMBER C.F.S. Outflow	Day
1	1272.35	385	64	77	1272.2	281	41	41	1276.78	455	°32	32	1290.50	1255	24	0	1
2	1272.35	371	62	69	1272.2	281	40	40	1276.72	454	31	32	1291.10	1298	23	0	2
3	1272.35	361	61	66	1272.2	281	38	38	1276.66	451	31	32	1291.70	1343	23	0	3
4	1272.35	349	60	66	1272.2	281	38	38	1276.61	449	31	32	1292.29	1387	23	0	4
5	1272.35	340	61	65	1272.2	281	38	38	1276.55	447	31	32	1292.89	1432	23	0	5
6	1272.35	333	59	63	1272.2	281	38	38	1276.50	445	31	32	1293.27	1460	24	8	6
7	1272.35	327	56	59	1272.2	281	40	40	1276.44	442	31	32	1293.09	1447	26	32	7
8	1272.35	321	55	58	1272.2	281	38	38	1276.53	443	31	30	1292.90	1432	26	33	8
9	1272.35	315	55	58	1272.2	281	38	38	1276.61	447	30	29	1292.70	1418	27	33	9
10	1272.35	311	53	55	1272.2	281	37	37	1276.63	448	30	29	1292.53	1404	27	33	10
11	1272.35	307	53	55	1272.2	281	37	37	1276.63	449	29	29	1292.51	1403	29	30	11
12	1272.35	304	51	52	1272.2	281	36	36	1276.63	449	29	29	1292.52	1404	29	28	12
13	1272.35	301	50	52	1272.2	280	36	37	1276.60	448	29	29	1292.51	1403	28	28	13
14	1272.35	298	48	50	1272.2	280	35	35	1276.57	447	28	29	1292.44	1398	28	30	14
15	1272.35	295	50	51	1272.2	280	37	37	1276.52	445	28	29	1292.30	1388	29	33	15
16	1272.35	294	52	53	1272.2	280	37	37	1278.08	480	27	11	1292.10	1372	26	33	16
17	1272.35	292	51	52	1272.2	280	35	35	1279.52	529	27	0	1291.89	1357	26	33	17
18	1272.35	291	51	51	1272.2	280	35	35	1280.53	582	27	0	1291.69	1342	26	33	18
19	1272.35	289	48	49	1272.2	280	35	35	1281.32	638	26	0	1291.50	1328	26	33	19
20	1272.35	288	47	48	1272.2	280	35	35	1282.08	689	26	0	1291.33	1315	27	33	20
21	1272.35	287	49	49	1272.2	280	34	34	1282.82	738	26	0	1291.33	1315	34	33	21
22	1272.35	287	46	46	1272.2	280	34	34	1283.60	787	26	0	1291.28	1312	32	33	22
23	1272.35	286	44	45	1272.2	280	33	33	1284.35	836	25	0	1291.20	1306	31	33	23
24	1272.35	286	44	44	1274.6	323	*33	11	1285.11	885	25	0	1293.45	1474	118	33	24
25	1272.30	285	46	46	1277.7	383	*30	0	1285.85	932	25	0	1318.40	4012	1328	35	25
26	1272.30	285	43	43	1279.3	439	*29	0	1286.56	979	25	0	1325.65	5015	531	39	26
27	1272.30	283	43	44	1278.4	450	*31	26	1287.28	1029	25	0	1327.60	5316	191	39	27
28	1272.25	282	42	42	1277.7	456	*35	32	1287.95	1074	24	0	1328.95	5528	146	39	28
29	1272.25	282	41	41	1277.25	468	*38	32	1288.60	1120	24	0	1329.96	5693	127	39	29
30	1272.25	281	42	43	1277.05	459	*28	32	1289.23	1164	24	0	1330.60	5793	96	39	30
31					1276.95	458	*31	32	1289.83	1207	24	0					31
TOTAL			1527	1592			1100	1011			858	468			3144	815	
Inf. Ac. Ft.			3029				2182				1702				6236	67231	
Outf. Ac. Ft.				3158				2005				928			1617	61655	
Maximum Mean Daily Inflow			64				41				32				1328	1328	
Minimum Mean Daily Inflow			42				28				24				23	23	
Storage Change			-130				+177				+749 + 25(evap.loss)				+4586 + 35 (evap.loss)	5740 -°°	

Yearly Totals

REMARKS: Outflows as indicated by venturi rating or stream flow records. Inflows computed from storage changes.

Max. W. S. Elev.	1330.6	feet on 9-30-39	Storage 5793	Acre Feet		
Min. W. S. Elev.	1263.6	feet on 11-18-38	Storage 48	Acre Feet		
Max. Peak Inf.	2775	C.F.S. from 2:00 a.m. on 12-19-38	to 3:00 a.m. on 12-19-38			
Max. Peak Outf.	3047 °°°	C.F.S. from 7:05 a.m. on 5-11-39	to 8:35 a.m. on 5-11-39			

RECORDS COLLECTED BY: R.H.Harrison, Dam Tender; T.A.Cooper, Hydrographer; Hydrographer

COMPUTATIONS: Gage Hts. copied H.A.V.-J.A.H. Storage applied H.A.V.-J.A.H. Inf. & Outf. computed H.V.-J.A.H. Checked C.C.G.

Gage heights and storage as of midnight on day shown. * Inflows computed from measured outflows.

° Inflows corrected for evaporation loss beginning 8-1-39.

°° -224 A.F. debris + 60 A.F.evap.loss = -164 A.F.

°°° Discharge made to test valves.

SAN GABRIEL DAM NO. 2

F. C. Dist. Form 68 Revised 600 5/39

Storage based on L A.C.F.C.D. survey of January 1936 and silt survey following 3-2-38 with 100 A.F. added to allow for sluicing.

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Daily Gage Height in feet and Operation Record of SAN GABRIEL Dam #2

In San Gabriel Canyon - West Fork for the Year Ending September 30, 1939.

Continuous Water Stage Recorder None

Drainage Area 40.4 Square Miles. Capacity of Reservoir 10887. Ac. Ft. at Spillway Elev. 2385.0 Ft.

Gage Heights Read daily.

Day	OCTOBER Gage Height	OCTOBER Acre Ft. Storage	OCTOBER C.F.S. Inflow	OCTOBER C.F.S. Outflow	NOVEMBER Gage Height	NOVEMBER Acre Ft. Storage	NOVEMBER C.F.S. Inflow	NOVEMBER C.F.S. Outflow	DECEMBER Gage Height	DECEMBER Acre Ft. Storage	DECEMBER C.F.S. Inflow	DECEMBER C.F.S. Outflow	JANUARY Gage Height	JANUARY Acre Ft. Storage	JANUARY C.F.S. Inflow	JANUARY C.F.S. Outflow	Day
1	2194.8	226	1 4.2	1.1	2180.0	0 °°	6.7	6.7	2180.0	0	4.8	4.8	2267.3	1276.5	18.7	28.0	1
2	2197.6	292	1 4.2	0.9	2180.0	0	6.1	6.1	2180.0	0	4.5	4.5	2266.8	1258.1	16.1	25.4	2
3	2175.0	159	4.3	11.0	2180.0	0	5.6	5.6	2180.0	0	4.7	4.7	2260.3	1030.6	1 17.6	01323	3
4	2180.7	183	4.3	3.1	2180.0	0	5.0	5.0	2180.0	0	4.9	4.9	2245.5	591.1	19.2	240.7	4
5	2189.2	260	4.3	0.4	2180.0	0	4.8	4.8	2180.0	0	5.1	5.1	2246.6	625.4	114.3	97.0	5
6	2193.9	338	4.4	0.5	2180.0	0	4.6	4.6	2180.0	0	5.2	5.2	2238.3	415.5	28.3	134.1	6
7	2197.4	413	4.4	0.6	2180.0	0	4.4	4.4	2180.0	0	5.2	5.2	2235.5	363.0	25.5	51.9	7
8	2200.4	488	4.4	0.6	2180.0	0	4.4	4.4	2180.0	0	5.3	5.3	2233.7	315.4	22.2	46.2	8
9	2202.8	566	4.5	0.6	2180.0	0	4.4	4.4	2180.0	0	5.3	5.3	2233.7	315.4	28.1	28.1	9
10	2205.1	641	4.5	0.7	2180.0	0	4.4	4.4	2180.0	0	5.5	5.5	2234.5	332.2	23.7	15.3	10
11	2207.1	716	4.5	0.7	2180.0	0	4.4	4.4	2180.0	0	5.6	5.6	2235.0	342.8	23.7	18.3	11
12	2208.9	794	4.6	0.7	2180.0	0	4.4	4.4	2180.0	0	5.8	5.8	2236.3	370.8	21.8	7.7	12
13	2210.6	871	4.6	0.7	2180.0	0	4.3	4.3	2180.0	0	5.8	5.8	2238.3	415.5	23.3	0.8	13
14	2212.2	945	4.6	0.9	2180.0	0	4.3	4.3	2180.0	0	5.8	5.8	2240.3	462.0	24.4	0.9	14
15	2213.6	1024	4.7	0.7	2180.0	0	4.2	4.2	2230.0	2432	123.1	0.5	2241.9	500.3	20.2	0.9	15
16	2215.3	1099	4.7	0.9	2180.0	0	4.2	4.2	2234.5	3322	45.8	0.9	2243.3	535.0	18.5	1.0	16
17	2216.6	1175	4.7	0.9	2180.0	0	4.8	4.8	2236.6	3775	24.0	1.2	2244.7	570.5	19.0	1.1	17
18	2217.7	1252	4.8	0.9	2180.0	0	5.3	5.3	2260.6	1040.7	338.4	4.0	2246.0	604.0	18.0	1.1	18
19	2218.7	1333	4.8	0.7	2180.0	0	5.0	5.0	2266.0	1228.7	424.8	330.0	2247.1	633.5	16.0	1.2	19
20	2219.5	1413	4.8	0.8	2180.0	0	4.7	4.7	2272.8	1487.8	227.1	96.5	2248.2	663.2	16.2	1.2	20
21	2220.1	1494	4.8	0.7	2180.0	0	4.4	4.4	2272.2	1463.8	123.2	135.3	2250.9	739.1	39.6	1.3	21
22	2220.7	1571	4.9	1.0	2180.0	0	4.6	4.6	2271.5	1436.3	66.8	80.7	2253.0	800.6	32.4	1.4	22
23	2221.3	1651	4.9	0.9	2180.0	0	4.8	4.8	2271.6	1440.2	48.8	46.8	2254.5	845.7	24.2	1.5	23
24	2222.6	1609	4.9	7.0	2180.0	0	5.0	5.0	2271.2	1424.6	35.5	43.4	2255.8	885.6	21.6	1.5	24
25	2215.9	1290	4.9	21.0	2180.0	0	5.2	5.2	2270.5	1409.1	31.2	39.0	2256.9	920.2	19.1	1.6	25
26	2208.5	993	5.0	23.0	2180.0	0	5.2	5.2	2270.4	1393.5	26.5	34.3	2257.9	951.9	17.6	1.6	26
27	2201.5	695	5.0	20.0	2180.0	0	5.2	5.2	2269.9	1374.1	23.3	33.1	2258.9	984.5	18.0	1.6	27
28	2189.8	357	5.0	19.0	2180.0	0	5.1	5.1	2269.3	1351.4	21.5	33.0	2259.8	1014.0	16.5	1.6	28
29	2180	357	5.0	5.0	2180.0	0	5.1	5.1	2268.8	1332.5	23.4	38.9	2260.8	1047.5	18.6	1.7	29
30	2180	363	1 5.1	4.8	2180.0	0	5.1	5.1	2268.3	1313.6	22.5	32.0	2261.9	1084.5	20.5	1.7	30
31	2180	336 °°	E 5.1	6.5					2267.8	1294.9	20.7	30.2	2262.9	1119.1	19.2	1.7	31
TOTAL			144.9	136.3			145.7	145.7			1701.1	1047.3			761.8	85.4	
Inf. Ac. Ft.			287.4				289.0				3372.1				1511.0	5459.5	
Outf. Ac. Ft.				270.3				289.0				2077.3			1686.7	4323.3	
Maximum Mean Daily Inflow			5.1				6.7				424.8				114.3	424.8	
Minimum Mean Daily Inflow			4.2				4.2				4.5				16.0	4.2	
Storage Change			+171				-33.5 + 33.5°°				+1294.9				-175.8	+1102.6+336°°	

½ Year

REMARKS: Outflows as per station F209R from 10-1-38 to 12-14-38(incl.). Outflows from valve operation records from 12-14-38 to 1-31-39.

Max. W. S. Elev.	2287.5	feet on 3-14-39	Storage 2140.8	Acre Feet		
Min. W. S. Elev.	Dry	feet on various times	Storage	Acre Feet		
Max. Peak Inf.	1360	C.F.S. from 8:00 a.m. on 9-25-39	to 10:00 a.m. on 9-25-39			
Max. Peak Outf.	1160	C.F.S. from 10:00 a.m. on 9-25-39	to 12:00 n. on 9-25-39			

RECORDS COLLECTED BY: Ben Harrison, Dam Tender; E.K.De Vore, Hydrographer; E.W.Godfrey, Hydrographer

COMPUTATIONS: Gage Hts. copied J.A.H.-H.A.V. Storage applied J.A.H.-H.A.V. Inf. & Outf. computed J.H.-H.A.V. Checked H.A.V.-J.A.H.-C.G.

Gage heights and storages as of midnight on day shown. C = Computed. I = Interpolated. E = Estimate.

* Storage computed from flow records. °° Debris loss - reservoir dry, storage corrected on 11-1-38.

SAN GABRIEL DAM NO. 2 (CONT.)

F. C. Dist. Form 68 Revised 600 5/39

Storages based on L.A.C.F.C.D. survey of January 1936 and silt survey following 3-2-38 with 100 A.F. added to allow for sluicing.

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Daily Gage Height in feet and Operation Record of SAN GABRIEL Dam #2

In San Gabriel Canyon - West Fork for the Year Ending September 30, 1939

Continuous Water Stage Recorder None

Drainage Area 40.4 Square Miles. Capacity of Reservoir 10887 Ac. Ft. at Spillway Elev. 2385.0 Ft.

Gage Heights Read daily.

Day	FEBRUARY Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	MARCH Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	APRIL Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	MAY Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Day
1	2263.6	1150.4	17.6	1.8	2278.0	1702.7	14.4	2.5	2277.2	1668.9	19.0	2.0		647	1 9.9	6.7	1
2	2264.6	1178.7	16.1	1.9	2278.6	1728.7	14.3	2.5	2278.2	1711.4	23.5	2.0		721	1 9.7	6.0	2
3	2265.7	1218.0	21.8	1.9	2279.1	1750.4	13.6	2.6	2279.1	1750.4	21.4	1.8		794	9.5	26.0	3
4	2266.8	1258.1	22.2	2.0	2279.6	1772.1	13.5	2.6	2280.0	1789.5	21.6	1.9		818	9.2	13.0	4
5	2267.8	1294.9	20.6	2.1	2280.1	1794.0	13.7	2.6	2280.7	1820.8	17.8	2.0		859	9.0	12.0	5
6	2268.9	1336.3	23.1	2.2	2280.6	1816.4	13.9	2.6	2281.3	1847.7	15.9	2.3		895	8.8	12.0	6
7	2270.1	1381.8	25.1	2.2	2281.1	1838.7	12.9	2.7	2281.9	1874.5	16.0	2.5		948	8.6	11.0	7
8	2270.2	1385.7	30.4	28.4	2281.5	1856.6	12.8	2.8	2282.5	1902.1	16.4	2.5		96	8.4	11.0	8
9	2269.5	1359.0	24.0	37.4	2282.9	1920.6	35.2	2.9	2283.0	1925.3	14.0	2.3		58	8.1	10.0	9
10	2269.0	1340.1	24.9	34.5	2284.7	2004.9	45.5	3.0	2283.5	1948.4	14.2	2.5		27	7.9	9.5	10
11	2267.9	1298.5	24.5	45.5	2285.7	2052.7	27.2	3.1	2283.9	1968.9	13.0	2.7		0	1 7.7	9.0	11
12	2266.7	1254.4	21.8	44.0	2286.5	2091.6	22.6	3.0	2284.3	1985.8	11.2	2.7			7.5	7.5	12
13	2265.6	1214.4	17.6	37.8	2287.2	2126.0	20.4	3.0	2285.0	2019.3	19.7	2.8			7.0	7.0	13
14	2265.9	1225.1	21.2	15.8	2284.6	2000.2	18.0	81.5	2285.6	2047.9	17.6	3.2			5.5	5.5	14
15	2267.0	1255	22.2	1.8	2275.8	1610.0	1 19.8	216.5	2286.0	2067.0	12.7	3.0			6.0	6.0	15
16	2268.0	1302.2	20.3	1.8	2273.1	1499.9	1 18.5	74.0	2286.4	2086.7	12.9	3.0			6.0	6.0	16
17	2269.0	1340.1	20.8	1.7	2273.9	1531.9	18.2	2.1	2286.8	1952.8*	12.7	2.8			6.5	6.5	17
18	2270.1	1381.8	22.7	1.7	2274.7	1564.7	18.7	2.1	2283.6	1807.0	1 12.5	86			7.0	7.0	18
19	2271.0	1416.9	19.5	1.8	2275.5	1597.6	18.7	2.1	2278.5	1589.4	1 12.3	122			7.0	7.0	19
20	2271.8	1448.0	17.5	1.8	2276.3	1630.9	18.8	2.1	2273.5	1375.4	12.1	120			7.5	7.5	20
21	2272.7	1483.8	20.0	1.9	2277.0	1660.5	17.1	2.1	2268.8	1184.8	11.9	108			8.0	8.0	21
22	2273.5	1515.9	18.2	2.0	2277.8	1694.3	19.1	2.1	2262.3	950.1	11.7	130			8.5	8.5	22
23	2274.2	1544.1	16.3	2.1	2278.5	1724.4	17.3	2.1	2252.3	655.5	11.5	158			9.0	9.0	23
24	2275.0	1577.1	17.0	2.2	2279.2	1754.8	17.4	2.1	2237.7	336.8	11.3	174			8.0	8.0	24
25	2275.6	1601.7	16.5	2.3	2279.8	1780.8	15.2	2.1	2212.0	71.2	11.1	145			7.5	7.5	25
26	2276.2	1626.7	15.0	2.4	2280.8	1825.3	24.4	2.0	2212.0	69.1	10.9	12			6.5	6.5	26
27	2276.9	1656.2	17.4	2.5	2280.3	1802.9	25.7	36.9	2216.0	84.3	10.7	5.0			6.5	6.5	27
28	2277.5	1681.6	15.3	2.5	2276.3	1630.9	16.4	103.2	2210.3	55.6	10.5	25			6.0	6.0	28
29					2274.8	1568.8	18.5	49.8	2210.8	58.1	1 10.3	9			6.0	6.0	29
30					2275.6	1601.7	18.6	2.0	2210.6	58.4	1 10.1	10.0			5.5	5.5	30
31					2276.4	1635.1	18.8	2.0							5.5	M 5.5	31
TOTAL			569.6	286.0			599.2	622.7			426.5	1144.0			233.8	263.2	
Inf. Ac. Ft.			11298				11885				8459				4637	9087.4	
Outf. Ac. Ft.				5673				12351				22691			5220	8916.8	
Maximum Mean Daily Inflow			30.4				45.5				23.5				9.9	424.8	
Minimum Mean Daily Inflow			15.0				12.8				10.1				5.5	4.2	
Storage Change			+5625				-465		-1576.7 + 153.6 *						-58.4	-16.5 +**	

REMARKS: Outflows: From valve discharge records 2-1 to 3-31-39; as per station F209R 3-31 to 5-31-39. (= Mean for period. ½ Year

Max. W. S. Elev.	2287.5	feet on 3-14-39	Storage 2140.8	Acre Feet		
Min. W. S. Elev.	Dry	feet on various times	Storage	Acre Feet		
Max. Peak Inf.	1360	C.F.S. from 8:00 a.m. on 9-25-39	to 10:00 a.m. on 9-25-39			
Max. Peak Outf.	1160	C.F.S. from 10:00 a.m. on 9-25-39	to 12:00 n. on 9-25-39			

RECORDS COLLECTED BY		COMPUTATIONS	Date 7-6-39
Ben Harrison	Dam Tender	Gage Hts. copied	J.A.H.
E.K.De Vore	Hydrographer	Storage applied	J.A.H.
E.W.Godfrey	Hydrographer	Inf. & Outf. computed	J.A.H.
		Checked	H.A.V.-J.A.H.-C.O.

Gage heights and storages as of midnight on day shown. * Corrected for debris loss of 153.6 A.F. on April 17, 1939.
** 33.6 A.F. debris loss in October 1938 and 153.6 in April = 187.2 A.F. i = Interpolated. M = Measured.
From 4-17 to 5-11-39 storages computed from interpolated inflows and outflows as per station F209R.

F. C. Dist. Form 68 Revised 600 5/39

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Daily Gage Height in feet and Operation Record of SAN GABRIEL Dam #2

In San Gabriel Canyon - West Fork for the Year Ending September 30, 1939

Continuous Water Stage Recorder None

Drainage Area 40.4 Square Miles. Capacity of Reservoir 10887 Ac. Ft. at Spillway Elev. 2385.0 Ft.

Gage Heights Read daily.

Day	JUNE Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	JULY Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	AUGUST Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	SEPTEMBER Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Day
1		0	5.5	5.5			2.5	2.5			1.7	1.7			1.2	1.2	1
2		0	5.5	5.5			2.4	2.4			1.7	1.7			1.2	1.2	2
3		0	5.5	5.5			2.4	2.4			1.8	1.8			1.2	1.2	3
4		0	5.5	5.5			2.3	2.3			1.8	1.8			1.1	1.1	4
5		0	5.5	5.5	*		2.2	2.2	*		1.7	1.7	*		1.1	1.1	5
6	*	0	6.0	6.0			2.2	2.2			1.7	1.7			1.1	1.1	6
7		0	5.5	5.5			2.2	2.2			1.6	1.6			1.2	1.2	7
8	2169	0	5.5	5.5	2169		2.3	2.3	2169		1.6	1.6	2169		1.2	1.2	8
9		0	5.0	5.0			2.4	2.4			1.5	1.5			1.1	1.1	9
10		0	4.8	4.8	=		2.5	2.5	=		1.4	1.4	=		1.1	1.1	10
11	DRY	0	4.6	4.6	DRY		2.5	2.5	DRY		1.4	1.4	DRY		1.0	1.0	11
12		0	4.4	4.4			2.5	2.5			1.4	1.4			1.0	1.0	12
13		0	4.3	4.3			2.5	2.5			1.4	1.4			1.1	1.1	13
14		0	4.6	4.6			2.5	2.5			1.5	1.5			1.1	1.1	14
15		0	5.0	5.0			2.5	2.5			1.5	1.5			1.2	1.2	15
16		0	5.5	5.5			2.5	2.5			1.4	1.4			1.1	1.1	16
17		0	5.0	5.0			2.5	2.5			1.3	1.3			1.0	1.0	17
18		0	4.7	4.7			2.5	2.5			1.3	1.3			0.9	0.9	18
19		0	4.4	4.4			2.4	2.4			1.2	1.2			0.9	0.9	19
20		0	4.1	4.1			2.3	2.3			1.2	1.2			1.0	1.0	20
21		0	3.9	3.9			2.2	2.2			1.2	1.2			1.0	1.0	21
22		0	3.8	3.8			2.2	2.2			1.2	1.2			1.1	1.1	22
23		0	3.7	3.7			2.1	2.1			1.2	1.2	2169.0	0	1.1	1.1	23
24		0	3.4	3.4			2.1	2.1			1.2	1.2	2219.0	E 70	7.6 3	4.1 0	24
25		0	3.2	3.2			2.0	2.0			1.4	1.4	2214.0	150	67.2 9	68.3 0	25
26		0	3.0	3.0			2.0	2.0			1.2	1.2	2206.0	35	11.7 4	12.5 0	26
27		0	2.8	2.8			2.0	2.0			1.2	1.2	2201.5	60	43.7	31.0	27
28		0	2.7	2.7			2.0	2.0			1.2	1.2	2212.5	45	28.4	36.0	28
29		0	2.7	2.7			1.9	1.9			1.2	1.2	2203.5	25	19.9	30	29
30		0	2.6	2.6			1.8	1.8			1.2	1.2	2200.2	E 20	16.5	19	30
31							1.7	1.7			1.2	1.2					31
TOTAL			132.7	132.7			70.1	70.1			43.5	43.5			1000.1	990.0	
Inf. Ac. Ft.			2632				1390				863				1983.7	1155.9.6	
Outf. Ac. Ft.				2632				1390				863			1963.6	1136.8.9	
Maximum Mean Daily Inflow			6.0				2.5				1.8						
Minimum Mean Daily Inflow			2.6				1.7				1.2						
Storage Change			0				0				0				+20.0	+3.5 + **	

REMARKS: Outflows as per station F209R. E = Estimated. Yearly Totals

Max. W. S. Elev.	2287.5	feet on 3-14-39	Storage 2140.8	Acre Feet		
Min. W. S. Elev.	Dry	feet on various times	Storage 0	Acre Feet		
Max. Peak Inf.	1360	C.F.S. from 8:00 a.m. on 9-25-39	to 10:00 a.m. on 9-25-39			
Max. Peak Outf.	1160	C.F.S. from 10:00 a.m. on 9-25-39	to 12:00 n. on 9-25-39			

RECORDS COLLECTED BY		COMPUTATIONS	Date
Ben Harrison	Dam Tender	Gage Hts. copied	J.A.H.
E.K.De Vore	Hydrographer	Storage applied	J.A.H.
E.W.Godfrey	Hydrographer	Inf. & Outf. computed	J.A.H.
		Checked	O.O.G.

Gage heights and storage as of midnight on day shown. ** Total debris loss subtracted from storage = 187.2 A.F.

BIG SANTA ANITA DAM

F. C. Dist. Form 68 Revised 800 5/39

Storage based on U.S.S.C.S. survey of July 1938.

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Daily Gage Height in feet and Operation Record of BIG SANTA ANITA Dam

In Big Santa Anita Canyon for the Year Ending September 30, 1939

On

Drainage Area 10.6 Square Miles. Capacity of Reservoir 688.4 Ac. Ft. at Spillway Elev. 1316.0 Ft.

Continuous Water Stage Recorder Au

Gage Heights Read daily.

Day	OCTOBER Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	NOVEMBER Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	DECEMBER Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	JANUARY Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Day
1			1.8	1.8			2.6	2.6			2.2	2.2	12502	1535	42	133	1
2			1.8	1.8			2.4	2.4			2.1	2.1	12474	1382	42	119	2
3			1.9	1.9			2.2	2.2			2.1	2.1	12481	1420	44	82	3
4			1.9	1.9			2.1	2.1			2.1	2.1	12499	1519	C 50	0	4
5			1.9	1.9			2.1	2.1	DRY		2.1	2.1	12282	2021	C 253	0	5
6			1.9	1.9			2.0	2.0			2.1	2.1	12398	2124	80	28	6
7			1.9	1.9			2.0	2.0			2.0	2.0	12547	1801	65	228	7
8			1.9	1.9			2.0	2.0			2.0	2.0	12454	1277	55	319	8
9			1.9	1.9			2.0	2.0			2.0	2.0	12326	664	55	364	9
10			1.9	1.9			2.2	2.2			2.1	2.1	12194	161	45	302	10
11	DRY		1.9	1.9	DRY		2.2	2.2			2.2	2.2	12122	11	48	124	11
12			1.9	1.9			2.1	2.1			2.2	2.2	12169	91	C 40	0	12
13			1.9	1.9			2.1	2.1			2.1	2.1	12192	154	44	12	13
14			1.9	1.9			2.1	2.1			2.7	2.7	12210	214	42	12	14
15			1.9	1.9			2.1	2.1	11985		4.0	4.0	12226	270	42	14	15
16			2.0	2.0			2.1	2.1	11983		6.5	6.5	12240	320	42	16	16
17			2.0	2.0			2.1	2.1	11989		3.9	3.9	12254	372	41	15	17
18	RESERVOIR	NO STORAGE	2.0	2.0	RESERVOIR	NO STORAGE	2.0	2.0	12200	180	C 420	329	12262	403	41	25	18
19			2.0	2.0			2.0	2.0	12331	685	C 460	206	12270	433	41	26	19
20			1.9	1.9			2.0	2.0	12456	1287	E 450	146	12280	475	41	21	20
21			1.9	1.9			2.0	2.0	12564	1887	C 302	0	12337	712	C 122	02	21
22			1.9	1.9			2.0	2.0	12528	1685	120	221	12381	914	C 102	0	22
23			1.8	1.8			2.0	2.0	12501	1530	90	169	12412	1064	C 76	0	23
24			1.8	1.8			2.0	2.0	12517	1622	75	28	12436	1184	C 60	0	24
25			1.8	1.8			2.0	2.0	12543	1776	C 77	0	12459	1303	C 60	0	25
26			1.8	1.8			2.0	2.0	12564	1906	C 66	0	12479	1409	C 54	0	26
27			1.9	1.9			2.0	2.0	12555	1850	55	83	12497	1508	C 50	0	27
28			2.0	2.0			2.0	2.0	12536	1734	49	108	12512	1593	55	13	28
29			2.0	2.0			2.0	2.0	12535	1728	46	49	12522	1651	50	20	29
30			2.2	2.2			2.1	2.1	12535	1728	44	44	12537	1740	60	15	30
31			2.5	2.5					12533	1715	42	48	12548	1807	55	22	31
TOTAL			59.8	59.8			62.5	62.5			274.0	187.5			1898	1852	
Inf. Ac. Ft.			1186				1239				5435				3765	11625	
Outf. Ac. Ft.				1186				1239				3719			3673	9817	
Maximum Mean Daily Inflow			2.0				2.6				4.6.0				253	460	
Minimum Mean Daily Inflow			1.8				2.0				20				40	18	
Storage Change			0				0				+1715				+92	+1807	

REMARKS Inflows from U.S.G.S. records. Outflows computed from storage change. C = Computed. E = Estimated.

Max. W. S. Elev.	1289.5	feet	on 9-25-39	Storage 435.0	Acre Feet			½ Year
Min. W. S. Elev.	1198±	feet	on various times	Storage 0	Acre Feet			
Max. Peak Inf.	159.3	C.F.S. from 1:00 a.m.	on 12-19-38	to 2:00 a.m.	on 12-19-38			
Max. Peak Outf.	50 Est.	C.F.S. from 3:00 a.m.	on 9-26-39	to 10:00 a.m.	on 9-27-39			

Gage heights and storages as of midnight on day shown.

RECORDS COLLECTED BY

J. R. Propst	Dam Tender	
W. T. Lind	Hydrographer	
	Hydrographer	

COMPUTATIONS Date

Gage Hts. copied	C.C.G.- J.A.H
Storage applied	C.C.G.- J.A.H
Inf. & Outf. computed	C.C.G.
Checked	C.C.G.-J.A.H.-H.A.V

F. C. Dist. Form 68 Revised 800 5/39

Storage based on U.S.S.C.S. Survey of July 1938

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Daily Gage Height in feet and Operation Record of BIG SANTA ANITA Dam

In Big Santa Anita Canyon for the Year Ending September 30, 1939

On

Drainage Area 10.8 Square Miles. Capacity of Reservoir 688.4 Ac. Ft. at Spillway Elev. 1316.0 Ft.

Continuous Water Stage Recorder Au

Gage Heights Read Daily

Day	FEBRUARY Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	MARCH Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	APRIL Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	MAY Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Day
1	12552	1831	4.9	3.7	12561	1887	4.8	1.7	12622	2282	4.8	3.1	12765	3304	2.9	1.7	1
2	12551	1825	4.8	5.1	12567	1925	4.6	2.7	12630	2326	5.5	2.8	12768	3327	2.9	1.8	2
3	12563	1900	7.5	3.7	12572	1957	4.6	2.9	12634	2363	4.8	3.6	12772	3357	2.7	1.2	3
4	12575	1976	7.5	3.7	12576	1982	4.6	3.4	12638	2390	4.8	3.3	12776	3388	2.6	1.0	4
5	12580	2006	6.5	4.9	12582	2021	4.6	2.6	12642	2417	4.6	3.2	12780	3419	2.7	1.1	5
6	12590	2006	6.5	6.5	12588	2059	4.4	2.5	12644	2431	4.4	3.7	12785	3458	2.9	1.0	6
7	12570	1944	6.5	9.7	12594	2098	4.4	2.4	12645	2436	4.1	3.8	12790	3496	2.9	1.0	7
8	12574	1970	11.0	9.7	12594	2098	4.4	4.4	12650	2472	3.9	2.2	12795	3535	2.7	0.7	8
9	12570	1944	8.5	9.8	12596	2114	9.5	8.9	12656	2524	3.8	1.0	12799	3566	2.6	1.0	9
10	12557	1862	8.0	12.1	12598	2124	7.5	6.8	12664	2569	3.8	1.7	12802	3590	2.6	1.4	10
11	12545	1789	8.0	11.7	12559	1875	5.5	18.1	12670	2611	3.8	1.7	12807	3629	2.7	0.8	11
12	12547	1801	7.5	7.3	12538	1746	5.5	12.0	12676	2653	3.8	1.7	12811	3653	2.7	1.4	12
13	12547	1801	7.5	7.3	12540	1758	4.9	4.3	12683	2702	4.4	1.7	12815	3693	2.9	0.9	13
14	12547	1801	7.0	7.4	12544	1782	4.6	3.4	12690	2752	4.1	1.7	12820	3732	2.9	1.0	14
15	12546	1795	7.0	7.4	12549	1813	4.4	2.8	12699	2817	C 41	0.9	12824	3764	2.9	1.2	15
16	12541	1764	6.5	7.4	12552	1831	4.2	3.3	12706	2863	C 33	0.7	12828	3796	2.9	1.3	16
17	12536	1734	6.5	8.0	12555	1850	4.1	3.1	12711	2903	3.4	1.7	12832	3828	2.7	1.1	17
18	12534	1721	6.5	7.1	12558	1869	4.1	3.2	12716	2940	3.4	1.7	12836	3861	2.7	1.1	18
19	12532	1709	6.5	7.1	12561	1887	4.1	3.2	12721	2976	3.2	1.7	12840	3893	2.7	1.0	19
20	12532	1709	6.0	6.0	12563	1900	4.1	3.4	12724	2996	3.1	1.7	12843	3917	2.6	1.4	20
21	12531	1703	6.0	6.3	12566	1919	3.9	3.0	12727	3020	3.1	1.7	12846	3948	2.4	1.2	21
22	12532	1709	5.5	5.2	12569	1938	3.8	2.8	12732	3057	3.2	1.4	12849	3966	2.5	1.3	22
23	12535	1726	5.5	4.6	12571	1950	3.5	2.9	12736	3086	3.4	1.6	12852	3990	2.5	1.3	23
24	12537	1740	5.5	4.9	12574	1970	3.4	2.4	12740	3116	3.4	1.6	12854	4007	2.4	1.5	24
25	12539	1752	5.5	4.9	12577	1989	3.4	2.4	12745	3154	3.2	1.7	12856	4023	2.4	1.6	25
26	12542	1770	5.0	4.1	12594	2098	C 79	E 2.4	12749	3184	3.1	1.7	12859	4048	2.4	1.1	26
27	12544	1782	4.9	4.3	12617	2249	C 100	E 2.4	12753	3214	3.0	1.7	12861	4064	2.4	1.6	27
28	12551	1825	4.9	2.7	12622	2282	6.0	4.4	12756	3236	2.9	1.7	12863	4081	2.4	1.6	28
29					12620	2269	5.5	6.1	12759	3259	2.9	1.7	12865	4098	2.4	1.5	29
30					12616	2242	4.9	6.3	12762	3281	2.9	1.8	12867	4114	2.5	1.7	30
31					12617	2249	4.8	4.4					12870	4139	2.9	1.6	31
TOTAL			183.5	182.6			156.0	*134.6			112.2	60.2			82.4	39.1	
Inf. Ac. Ft.			364.0				309.4				225				1634	2221.1	
Outf. Ac. Ft.				362.2				267.0				1194			776	1807.1	
Maximum Mean Daily Inflow			11.0				10.0				5.5				2.9	46.0	
Minimum Mean Daily Inflow			4.8				3.4				2.9				2.4	1.8	
Storage Change			+1.8				+42.4				+1032				+85.8	+412.1	

REMARKS Inflows from U.S.G.S. records. Outflows computed from storage change. C=Computed E= Estimated [=Mean for period.

Max. W. S. Elev.	1289.5	feet	on 9-25-39	Storage 435.0	Acre Feet			½ Year
Min. W. S. Elev.	1198±	feet	on various times	Storage no storage	Acre Feet			
Max. Peak Inf.	159.3	C.F.S. from 1:00 A.M.	on 12-19-38	to 2:00 A.M.	on 12-19-38			
Max. Peak Outf.	50 Est.	C.F.S. from 3:00 A.M.	on 9-26-39	to 10:00 A.M.	on 9-27-39			

Gage Heights and storage as of Midnight on day shown.

RECORDS COLLECTED BY

J. R. Propst	Dam Tender	
W. T. Lind	Hydrographer	
	Hydrographer	

COMPUTATIONS Date

Gage Hts. copied	C.C.G.-J.A.H.
Storage applied	C.C.G.-J.A.H.
Inf. & Outf. computed	C.C.G.
Checked	C.C.G.-J.A.H.-H.A.V.

BIG SANTA ANITA DAM (CONT.)

F. C. Dist. Form 88 Revised 600 5/39

Storage based on U.S.G.S. Survey of July 1938

Daily Gage Height in feet and Operation Record of BIG SANTA ANITA Dam

In Big Santa Anita Canyon for the Year Ending September 30, 1939

Drainage Area 10.8 Square Miles. Capacity of Reservoir 656.4 Ac. Ft. at Spillway Elev. 1316.0 Ft.

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Continuous Water Stage Recorder Au

Gage Heights Read Daily

Day	JUNE Gage Height	JUNE Acre Ft. Storage	JUNE C.F.S. Inflow	JUNE C.F.S. Outflow	JULY Gage Height	JULY Acre Ft. Storage	JULY C.F.S. Inflow	JULY C.F.S. Outflow	AUGUST Gage Height	AUGUST Acre Ft. Storage	AUGUST C.F.S. Inflow	AUGUST C.F.S. Outflow	SEPTEMBER Gage Height	SEPTEMBER Acre Ft. Storage	SEPTEMBER C.F.S. Inflow	SEPTEMBER C.F.S. Outflow	Day
1	1287.3	416.4	2.6	1.3	1288.7	428.2	1.3	1.3	1285.7	403.1	0.9	1.4	1279.8	355.8	0.4	1.7	1
2	1287.5	418.1	2.5	1.7	1288.6	427.3	1.3	1.8	1285.6	402.3	0.9	1.4	1279.5	353.5	0.5	1.7	2
3	1287.7	419.8	2.4	1.5	1288.6	427.3	1.4	1.4	1285.5	401.5	0.9	1.4	1279.2	351.2	0.5	1.7	3
4	1287.9	421.5	2.5	1.7	1288.5	426.5	1.6	2.0	1285.4	400.7	0.8	1.4	1278.9	348.8	0.5	1.7	4
5	1288.1	423.1	2.6	1.8	1288.5	426.5	1.6	1.6	1285.2	399.0	0.8	1.4	1278.6	346.5	0.5	1.7	5
6	1288.3	424.8	2.6	1.7	1288.5	426.5	1.6	1.6	1285.1	398.2	0.8	1.4	1278.3	344.2	0.5	1.7	6
7	1288.5	426.5	2.5	1.6	1288.5	426.5	1.6	1.6	1285.0	397.4	0.9	1.4	1277.9	341.1	0.6	1.7	7
8	1288.7	428.2	2.2	1.4	1288.4	425.7	1.4	1.8	1284.6	395.8	0.9	1.4	1277.6	338.8	0.6	1.6	8
9	1288.9	429.9	2.0	1.1	1288.4	425.7	1.4	1.4	1284.7	395.0	0.8	1.3	1277.3	336.5	0.5	1.6	9
10	1289.0	430.7	1.9	1.6	1288.4	425.7	1.2	1.2	1284.6	394.2	0.8	1.3	1277.0	334.2	0.5	1.7	10
11	1289.1	431.6	1.7	1.3	1288.3	424.8	1.1	1.5	1284.4	392.5	0.8	1.3	1276.7	331.9	0.5	1.9	11
12	1289.1	431.6	1.7	1.7	1288.2	424.0	1.0	1.4	1284.3	391.7	0.7	1.3	1276.3	328.9	0.7	1.9	12
13	1289.1	431.6	1.6	1.6	1288.1	423.1	0.9	1.4	1284.1	390.1	0.7	1.4	1276.0	326.6	0.6	1.9	13
14	1289.1	431.6	1.7	1.7	1288.1	423.1	0.9	0.9	1283.9	388.5	0.7	1.4	1275.6	323.6	0.7	1.9	14
15	1289.2	431.6	1.7	1.7	1288.0	422.3	0.8	1.2	1283.8	387.7	0.8	1.4	1275.3	321.4	0.6	1.9	15
16	1289.2	432.4	1.6	1.2	1287.9	421.5	0.9	1.3	1283.6	386.1	0.7	1.4	1275.0	319.1	0.5	1.9	16
17	1289.2	432.4	1.6	1.6	1287.6	418.9	0.9	2.2	1283.4	384.4	0.7	1.4	1274.7	316.9	0.5	1.9	17
18	1289.2	432.4	1.5	1.5	1287.3	416.4	0.9	2.1	1283.3	383.6	0.7	1.4	1274.3	313.9	0.5	1.9	18
19	1289.2	432.4	1.4	1.4	1287.2	415.6	0.9	1.4	1283.1	382.0	0.7	1.4	1274.0	311.6	0.5	1.8	19
20	1289.2	432.4	1.4	1.4	1287.0	413.9	0.8	1.6	1283.0	381.2	0.7	1.4	1273.6	308.6	0.5	1.8	20
21	1289.2	432.4	1.3	1.6	1286.8	412.2	0.8	1.7	1282.8	379.6	0.7	1.5	1273.2	305.7	0.5	1.8	21
22	1289.1	431.6	1.4	1.6	1286.7	411.4	0.8	1.2	1282.6	378.0	0.7	1.5	1272.8	302.7	0.5	1.8	22
23	1289.0	430.7	1.4	1.6	1286.6	410.6	0.8	1.2	1282.4	376.4	0.6	1.6	1272.5	300.6	0.5	1.6	23
24	1288.9	429.9	1.5	1.6	1286.5	409.8	0.8	1.2	1282.3	375.6	0.6	1.6	1274.2	313.1	14.0	7.7	24
25	1288.8	429.0	1.5	1.6	1286.3	408.1	0.8	1.2	1282.1	374.0	0.6	1.7	1289.5	435.0	74.0	12.6	25
26	1288.7	428.2	1.4	1.6	1286.3	408.1	0.8	1.2	1281.7	370.8	0.6	1.7	1285.3	399.9	27.0	44.7	26
27	1288.8	429.0	1.3	1.6	1286.3	408.1	0.8	1.2	1281.3	367.7	0.5	1.7	1278.6	346.5	7.5	34.4	27
28	1288.6	429.0	1.3	1.5	1286.2	407.3	0.8	1.2	1281.0	365.3	0.5	1.7	1273.0	304.2	4.9	26.2	28
29	1288.7	428.2	1.3	1.5	1286.1	406.4	0.8	1.2	1280.7	362.9	0.5	1.7	1269.1	275.9	3.9	18.2	29
30	1288.7	428.2	1.2	1.5	1286.0	405.6	0.9	1.2	1280.3	359.8	0.4	1.7	1267.6	265.3	3.5	8.6	30
31					1285.9	404.8	0.9	1.1	1280.0	357.4	0.4	1.7					31
TOTAL			53.3	46.1			32.5	44.3			21.8	45.7			147.2	193.6	
Inf. Ac. Ft.			105.7				64.5				43.2				292.0	272.5	
Outf. Ac. Ft.				91.4				87.9				90.6			38.4.0	246.1.0	
Maximum Mean Daily Inflow			2.6				1.6				0.9				74.0	74.0	
Minimum Mean Daily Inflow			1.2				0.8				0.4				0.4	0.4	
Storage Change			+14.3				-23.4				-47.4				-92.1	-26.5.3	

REMARKS: Inflows from U.S.G.S. records. Outflows computed from storage change. ‡=Mean for period. — Yearly Totals

Max. W. S. Elev.	1289.5 feet on 9-25-39	Storage 435.0 Acre Feet	RECORDS COLLECTED BY		COMPUTATIONS	Date
Min. W. S. Elev.	1198 ‡ feet on various times	Storage no storage Acre Feet	J. R. Propst	Dam Tender	Gage Hts. copied	C.G.G.-J.A.H.
Max. Peak Inf.	159.3 C.F.S. from 1:00A.M. on 12-19-38	to 2:00A.M. on 12-19-39	W. T. Lind	Hydrographer	Storage applied	C.G.G.-J.A.H.
Max. Peak Outf.	50 Est. C.F.S. from 3:00A.M. on 9-26-39	to 10:00A.M. on 9-27-39		Hydrographer	Inf. & Outf. computed	C.G.G.
Gage heights and storage as of midnight on day shown.					Checked	C.G.G.-J.A.H.-H.A.V.

SAWPIT DAM

F. C. Dist. Form 88 Revised 600 5/39

Storages based on rating table #IV - Map 54 T 2- Corrected following 3-2-38.

Daily Gage Height in feet and Operation Record of SAWPIT Dam

In Sawpit Canyon for the Year Ending September 30, 1939

Drainage Area 3.27 Square Miles. Capacity of Reservoir 319.7 Ac. Ft. at Spillway Elev. 1360.0 Ft.

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Continuous Water Stage Recorder Au

Gage Heights Read daily.

Day	OCTOBER Gage Height	OCTOBER Acre Ft. Storage	OCTOBER C.F.S. Inflow	OCTOBER C.F.S. Outflow	NOVEMBER Gage Height	NOVEMBER Acre Ft. Storage	NOVEMBER C.F.S. Inflow	NOVEMBER C.F.S. Outflow	DECEMBER Gage Height	DECEMBER Acre Ft. Storage	DECEMBER C.F.S. Inflow	DECEMBER C.F.S. Outflow	JANUARY Gage Height	JANUARY Acre Ft. Storage	JANUARY C.F.S. Inflow	JANUARY C.F.S. Outflow	Day
1			0.05	0.05			0.05	0.05			0	0	1307.4	51.4	0.3	0	1
2			0.05	0.05			0.05	0.05			0	0	1307.6	51.8	0.2	0	2
3			0.05	0.05			0.05	0.05			0	0	1307.7	52.1	0.2	0	3
4			0.05	0.05			0.05	0.05			0	0	1307.9	52.6	0.2	0	4
5			0.05	0.05			0.05	0.05			0	0	1310.2	58.3	4.3	E 1.5	5
6			0.05	0.05			0.05	0.05			0	0	1310.2	58.3	2.1	2.1	6
7			0.05	0.05			0	0			0	0	1310.2	58.3	1.3	1.3	7
8			0.05	0.05			0	0			0	0	1310.2	58.3	1.2	1.2	8
9			0.05	0.05			0	0	DRY	DRY	0	0	1310.2	58.3	1.1	1.1	9
10			0.05	0.05			0	0			0	0	1310.1	58.1	0.8	0.9	10
11			0.05	0.05			0	0			0	0	1310.0	57.8	0.6	0.7	11
12			0.05	0.05			0	0			0	0	1310.0	57.8	0.5	0.5	12
13	DRY	DRY	0.05	0.05	DRY	DRY	0	0			0	0	1310.0	57.8	0.4	0.4	13
14			0.05	0.05			0	0			0	0	1310.0	57.8	0.3	0.3	14
15			0.05	0.05			0	0			0	0	1310.0	57.8	0.3	0.3	15
16			0.05	0.05			0	0			0	0	1310.0	57.8	0.3	0.3	16
17			0.05	0.05			0	0			0	0	1310.0	57.8	0.3	0.3	17
18			0.05	0.05			0	0	1283.5	6.1	3.1	0	1310.0	57.8	0.3	0.3	18
19			0.05	0.05			0	0	1291.6	18.6	6.3	0	1310.0	57.8	0.3	0.3	19
20			0.05	0.05			0	0	1298.1	30.8	6.1	0	1310.0	57.8	0.3	0.3	20
21			0.05	0.05			0	0	1301.4	37.6	3.5	0	1310.3	58.6	1.9	1.5	21
22			0.05	0.05			0	0	1303.1	41.3	1.8	0	1310.3	58.6	1.9	1.9	22
23			0.05	0.05			0	0	1304.1	43.6	1.2	0	1310.1	58.1	0.6	0.9	23
24			0.05	0.05			0	0	1304.9	45.5	0.9	0	1310.0	57.8	0.5	0.6	24
25			0.05	0.05			0	0	1305.5	46.9	0.7	0	1310.0	57.8	0.3	0.3	25
26			0.05	0.05			0	0	1306.0	48.0	0.6	0	1310.0	57.8	0.3	0.3	26
27			0.05	0.05			0	0	1306.3	48.7	0.4	0	1310.0	57.8	0.3	0.5	27
28			0.05	0.05			0	0	1306.5	49.2	0.3	0	1310.0	57.8	0.6	0.6	28
29			0.05	0.05			0	0	1306.8	49.9	0.3	0	1310.1	58.1	0.6	0.2	29
30			0.05	0.05			0	0	1307.0	50.4	0.2	0	1310.1	58.1	0.5	0.8	30
31			0.05	0.05					1307.2	50.9	0.3	0	1310.0	57.8	0.7	0.8	31
TOTAL			1.55	1.55			0.3	0.3			25.7	0			23.5	20.0	
Inf. Ac. Ft.			3.1				0.6				50.9				46.6	101.2	
Outf. Ac. Ft.				3.1				0.6				0			39.7	43.4	
Maximum Mean Daily Inflow			0.05				0.05				6.3				4.3	6.3	
Minimum Mean Daily Inflow			0.05				0				0				0.2	0	
Storage Change			0				0				+50.9				+6.9	+57.8	

REMARKS: Outflows as indicated by U.S.G.S. station and operation records. ‡ Mean for period. E = Estimate. — ½ Year

Max. W. S. Elev.	1311.2 feet on various times	Storage 60.9 Acre Feet	RECORDS COLLECTED BY		COMPUTATIONS	Date
Min. W. S. Elev.	1275 feet on various times	Storage 0 Acre Feet	M.L.Packer and A.E.Marshall	Dam Tender	Gage Hts. copied	C.G.G.
Max. Peak Inf.	16.7 C.F.S. from mean daily on 9-25-39	to on	W.T.Lind	Hydrographer	Storage applied	J.A.H.
Max. Peak Outf.	16.0 C.F.S. from mean daily on 9-25-39	to on	R.E.Lindsay	Hydrographer	Inf. & Outf. computed	H.A.V.
Gage heights and storage as of midnight on day shown.					Checked	C.G.G.-J.A.H.

F. C. Dist. Form 68 Revised 600 5/39

Storages based on rating table #IV - Map 54 T 2 - Corrected following 3-2-38.

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Daily Gage Height in feet and Operation Record of SAWPIT Dam

In / On Sawpit Canyon for the Year Ending September 30, 1939

Continuous Water Stage Recorder Au

Drainage Area 3.27 Square Miles. Capacity of Reservoir 319.7 Ac. Ft. at Spillway Elev. 1360.0 Ft.

Gage Heights Read daily.

Day	FEBRUARY Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	MARCH Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	APRIL Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	MAY Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Day
1	13101	581	0.5	0.3	13101	581	0.2	0.2	13101	581	0.4	0.4	13102	583	0.1	0.1	1
2	13101	581	0.2	0.2	13101	581	0.2	0.2	13101	581	1.1	1.1	13102	583	0.1	0.1	2
3	13102	583	1.4	1.3	13101	581	0.2	0.2	13101	581	0.5	0.5	13102	583	0.1	0.1	3
4	13102	583	2.2	2.2	13100	578	0.2	0.2	13102	583	0.4	0.3	13102	583	0.1	0.1	4
5	13102	583	1.3	1.3	13100	578	0.2	0.2	13101	581	0.2	0.3	13102	583	0.1	0.1	5
6	13101	581	0.9	1.0	13101	581	0.2	0.2	13101	581	0.3	0.3	13102	583	0.1	0.1	6
7	13100	578	0.4	0.6	13101	581	0.1	0.1	13101	581	0.2	0.2	13102	583	0.1	0.1	7
8	13102	583	2.7	2.4	13101	581	0.2	0.2	13101	581	0.2	0.2	13102	583	0.05	0.1	8
9	13101	581	1.3	1.4	13086	543	0.1	2.0	13101	581	0.2	0.2	13102	583	0.05	0.1	9
10	13101	581	0.5	0.5	13070	504	0.3	2.3	13102	583	0.2	0.2	13102	583	0.05	0.05	10
11	13102	583	0.7	0.6	13072	509	0.3	0	13102	583	0.2	0.2	13102	583	0.05	0.05	11
12	13101	581	0.3	0.4	13074	514	0.2	0	13102	583	0.2	0.2	13103	586	0.05	0.05	12
13	13101	581	0.3	0.3	13076	518	0.2	0	13100	578	0.1	0.3	13103	586	0.05	0.05	13
14	13102	583	0.3	0.2	13077	521	0.2	0	13100	578	0.1	0.1	13103	586	0.05	0.05	14
15	13102	583	0.3	0.3	13078	523	0.1	0	13100	578	0.1	0.1	13103	586	0.05	0.05	15
16	13101	581	0.2	0.4	13079	526	0.1	0	13101	581	0.2	0	13103	586	0.05	0.05	16
17	13100	578	0.2	0.3	13080	528	0.1	0	13101	581	0.1	0.1	13103	586	0.05	0.05	17
18	13100	578	0.2	0.2	13082	533	0.3	0	13101	581	0.1	0.1	13103	586	0.05	0.05	18
19	13100	578	0.2	0.2	13083	536	0.1	0	13101	581	0.1	0.1	13102	583	0.05	0.05	19
20	13100	578	0.2	0.2	13084	538	0.1	0	13102	583	0.2	0.1	13102	583	0.05	0.05	20
21	13100	578	0.3	0.3	13085	541	0.2	0	13102	583	0.1	0.1	13102	583	0.05	0.05	21
22	13100	578	0.3	0.3	13087	546	0.2	0	13102	583	0.2	0.2	13102	583	0.05	0.05	22
23	13100	578	0.3	0.3	13088	548	0.1	0	13102	583	0.2	0.2	13101	581	0.05	0.05	23
24	13101	581	0.3	0.3	13089	551	0.2	0	13102	583	0.1	0.1	13101	581	0.05	0.05	24
25	13101	581	0.3	0.2	13090	553	0.1	0	13102	583	0.1	0.1	13100	578	0.05	0.05	25
26	13100	578	0.3	0.3	13078	523	0.9	2.4	13102	583	0.1	0.1	13101	581	0.05	0.05	26
27	13101	581	0.2	0.2	13091	556	2.0	0.4	13102	583	0.1	0.1	13101	581	0.05	0.05	27
28	13101	581	0.2	0.2	13092	576	1.0	0	13102	583	0.1	0.1	13101	581	0.05	0.05	28
29					13101	581	0.7	0.4	13102	583	0.1	0.1	13101	581	0.05	0.05	29
30					13101	581	0.4	0.4	13102	583	0.1	0.1	13101	581	0.05	0.05	30
31					13101	581	0.3	0.3					13101	581	0.05	0.05	31
TOTAL			16.5	16.4			9.7	9.7			6.3	6.2			1.9	2.0	
Inf. Ac. Ft.			32.7				19.2				12.5				3.8	16.9	
Outf. Ac. Ft.				32.5				19.2				12.3			4.0	11.4	
Maximum			2.7				2.0				1.1				0.1	6.3	
Mean Daily Inflow			0.2				0.1				0.1				0.05	0	
Minimum Mean Daily Inflow			0.2				0				0.1				0.05	0	
Storage Change			+0.3								+0.2				-0.2	+58.1	

REMARKS: Outflows as indicated by U.S.G.S. stations and operation records. Mean for period.

Max. W. S. Elev. 1311.2 feet on various times Storage 60.9 Acre Feet

Min. W. S. Elev. 1275 feet on various times Storage 0 Acre Feet

Max. Peak Inf. 16.7 C.F.S. from mean daily on 9-25-39 to on

Max. Peak Outf. 16.0 C.F.S. from mean daily on 9-25-39 to on

Gage heights and storage as of midnight on day shown.

RECORDS COLLECTED BY

M.L.Packer and A.E.Marshall Dam Tender

W.T.Lind Hydrographer

R.E.Lindsay Hydrographer

COMPUTATIONS Date

Gage Hts. copied C.C.G.

Storage applied J.A.H.

Inf. & Outf. computed H.A.V.

Checked C.C.G.-J.A.H.

F. C. Dist. Form 68 Revised 600 5/39

Storages based on rating table #IV - Map 54 T 2 - Corrected following 3-2-38.

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Daily Gage Height in feet and Operation Record of SAWPIT Dam

In / On Sawpit Canyon for the Year Ending September 30, 1939

Continuous Water Stage Recorder Au

Drainage Area 3.27 Square Miles. Capacity of Reservoir 319.7 Ac. Ft. at Spillway Elev. 1360.0 Ft.

Gage Heights Read daily.

Day	JUNE Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	JULY Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	AUGUST Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	SEPTEMBER Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Day
1	13102	583	0.05	0.05	13100	578	0	0	13095	566	0	0	13088	548	0	0	1
2	13102	583	0.05	0.05	13100	578	0	0	13095	566	0	0	13088	548	0	0	2
3	13102	583	0.05	0.05	13100	578	0	0	13094	563	0	0	13088	548	0	0	3
4	13102	583	0.05	0.05	13100	578	0	0	13094	563	0	0	13088	548	0	0	4
5	13102	583	0.05	0.05	13100	578	0	0	13094	563	0	0	13088	548	0	0	5
6	13102	583	0.05	0.05	13100	578	0	0	13094	563	0	0	13087	546	0	0	6
7	13101	581	0.05	0.05	13100	578	0	0	13094	563	0	0	13087	546	0	0	7
8	13101	581	0.05	0.05	13100	578	0	0	13093	561	0	0	13087	546	0	0	8
9	13101	581	0.05	0.05	13100	578	0	0	13093	561	0	0	13087	546	0	0	9
10	13101	581	0.05	0.05	13100	578	0	0	13093	561	0	0	13087	546	0	0	10
11	13101	581	0.05	0.05	13100	578	0	0	13093	561	0	0	13087	546	0	0	11
12	13101	581	0.05	0.05	13100	578	0	0	13093	561	0	0	13087	546	0	0	12
13	13101	581	0	0	13100	578	0	0	13093	561	0	0	13087	546	0	0	13
14	13101	581	0	0	13098	573	0	0	13093	561	0	0	13086	543	0	0	14
15	13101	581	0	0	13098	573	0	0	13092	558	0	0	13086	543	0	0	15
16	13101	581	0	0	13097	571	0	0	13092	558	0	0	13086	543	0	0	16
17	13101	581	0	0	13097	571	0	0	13092	558	0	0	13086	543	0	0	17
18	13101	581	0	0	13097	571	0	0	13092	558	0	0	13086	543	0	0	18
19	13101	581	0	0	13097	571	0	0	13092	558	0	0	13085	541	0	0	19
20	13101	581	0	0	13097	571	0	0	13092	558	0	0	13085	541	0	0	20
21	13101	581	0	0	13097	571	0	0	13091	556	0	0	13085	541	0	0	21
22	13101	581	0	0	13096	568	0	0	13091	556	0	0	13085	541	0	0	22
23	13101	581	0	0	13096	568	0	0	13091	556	0	0	13085	541	0	0	23
24	13101	581	0	0	13096	568	0	0	13091	556	0	0	13102	583	5.4	3.3	24
25	13101	581	0	0	13096	568	0	0	13090	553	0	0	13107	596	16.7	16.0	25
26	13101	581	0	0	13096	568	0	0	13090	553	0	0	13103	586	7.0	7.5	26
27	13101	581	0	0	13096	568	0	0	13090	553	0	0	13102	583	1.1	1.3	27
28	13101	581	0	0	13096	568	0	0	13090	553	0	0	13101	581	0.3	0.4	28
29	13100	578	0	0	13096	568	0	0	13089	551	0	0	13101	581	0.2	0.2	29
30	13100	578	0	0	13096	568	0	0	13089	551	0	0	13101	581	0.2	0.2	30
31					13095	566	0	0	13089	551	0	0					31
TOTAL			0.6	0.6			0	0			0	0			30.9	28.9	
Inf. Ac. Ft.			1.2				0				0				61.3	231.2	
Outf. Ac. Ft.			1.2+*0.3				0+*1.2				0+*1.5				57.3+*1.0	169.3+*4.0	
Maximum			0.05				0				0				16.7	16.7	
Mean Daily Inflow			0				0				0				0	0	
Minimum Mean Daily Inflow			0				0				0				+3.0	+58.1	
Storage Change			-0.3				-1.2				-1.5						

REMARKS: Outflows as indicated by U.S.G.S. station and operation records. Mean for period. *=Monthly evaporation and perc. loss. Yearly Totals

Max. W. S. Elev. 1311.2 feet on various times Storage 60.9 Acre Feet

Min. W. S. Elev. 1275 feet on various times Storage 0 Acre Feet

Max. Peak Inf. 16.7 C.F.S. from mean daily on 9-25-39 to on

Max. Peak Outf. 16.0 C.F.S. from mean daily on 9-25-39 to on

Gage heights and storage as of midnight on day shown.

RECORDS COLLECTED BY

M.L.Packer and A.E.Marshall Dam Tender

W.T.Lind Hydrographer

R.E.Lindsay Hydrographer

COMPUTATIONS Date

Gage Hts. copied J.A.H.-C.C.G.

Storage applied C.C.G.

Inf. & Outf. computed H.A.V.

Checked C.C.G.

THOMPSON CREEK DAM

F. C. Dist. Form 68 Revised 600 5/29

Storages based on L.A.C.F.C.D. survey of 1932.

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Daily Gage Height in feet and Operation Record of THOMPSON CREEK Dam

In / On Thompson Creek for the Year Ending September 30, 19 39

Continuous Water Stage Recorder None

Drainage Area 3.9 Square Miles. Capacity of Reservoir 812 Ac. Ft. at Spillway Elev. 1640.0 Ft. Gage Heights Read at various times.

Day	OCTOBER Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	NOVEMBER Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	DECEMBER Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	JANUARY Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Day
1	1578.8	3.5	0		1574.9	0.6	0		1572.0	0	0	0	1576.0	1.1	0.05	0.05	1
2	1578.7	3.4	0		1574.8	0.5	0		1572.0	0	0	0	1576.0	1.1	0.05	0.05	2
3	1578.6	3.3	0		1574.6	0.5	0		1572.0	0	0	0	1576.0	1.1	0.05	0.05	3
4	1578.5	3.2	0		1574.5	0.5	0		1572.0	0	0	0	1576.0	1.1	0.05	0.05	4
5	1578.4	3.0	0		1574.4	0.4	0		1572.0	0	0	0	1576.6	1.5	0.2	0.05	5
6	1578.3	2.9	0		1574.3	0.4	0		1572.0	0	0	0	1576.6	1.5	0.05	0.05	6
7	1578.2	2.8	0		1574.2	0.4	0		1572.0	0	0	0	1576.6	1.5	0.05	0.05	7
8	1578.1	2.7	0		1574.1	0.3	0		1572.0	0	0	0	1576.6	1.5	0.05	0.05	8
9	1577.9	2.5	0		1574.0	0.3	0		1572.0	0	0	0	1576.6	1.5	0.05	0.05	9
10	1577.8	2.4	0		1573.8	0.3	0		1572.0	0	0	0	1576.5	1.4	0.05	0.05	10
11	1577.6	2.3	0		1573.7	0.2	0		1572.0	0	0	0	1576.4	1.4	0.05	0.05	11
12	1577.5	2.2	0		1573.6	0.2	0		1572.0	0	0	0	1576.3	1.3	0.05	0.05	12
13	1577.3	2.0	0		1573.5	0.2	0		1572.0	0	0	0	1576.3	1.3	0.05	0.05	13
14	1577.2	1.9	0		1573.4	0.2	0		1572.0	0	0	0	1576.3	1.3	0.05	0.05	14
15	1577.1	1.8	0		1573.3	0.2	0		1572.0	0	0	0	1576.4	1.4	0.05	0.05	15
16	1576.9	1.6	0		1573.2	0.1	0		1572.0	0	0	0	1576.4	1.4	0.05	0.05	16
17	1576.8	1.6	0		1573.0	0.1	0		1572.0	0	0	0	1576.4	1.4	0.05	0.05	17
18	1576.6	1.5	0		1573.0	0.1	0		1572.0	0	0	0	1576.5	1.4	0.05	0.05	18
19	1576.5	1.4	0		1573.0	0.1	0		1572.5	0.1	0	0	1576.5	1.4	0.05	0.05	19
20	1576.3	1.3	0		1573.0	0.1	0		1573.2	0.1	0	0	1576.6	1.5	0.05	0.05	20
21	1576.2	1.2	0		1573.0	0.1	0		1575.5	0.9	0.5	0	1577.3	2.0	0.3	0.05	21
22	1576.1	1.2	0		1573.0	0.1	0		1575.9	1.1	0.1	0.05	1577.5	2.2	0.1	0.05	22
23	1576.0	1.1	0		1573.0	0.1	0		1576.0	1.1	0.05	0.05	1577.5	2.2	0.05	0.05	23
24	1575.9	1.1	0		1573.0	0.1	0		1576.0	1.1	0.05	0.05	1577.4	2.1	0.05	0.05	24
25	1575.8	1.0	0		1573.0	0.1	0		1576.0	1.1	0.05	0.05	1577.4	2.1	0.05	0.05	25
26	1575.7	1.0	0		1573.0	0.1	0		1576.0	1.1	0.05	0.05	1577.4	2.1	0.05	0.05	26
27	1575.5	0.9	0		1573.0	0.1	0		1576.0	1.1	0.05	0.05	1577.3	2.0	0.05	0.05	27
28	1575.4	0.8	0		1573.0	0.1	0		1576.0	1.1	0.05	0.05	1577.3	2.0	0.05	0.05	28
29	1575.3	0.8	0		1573.0	0.1	0		1576.0	1.1	0.05	0.05	1577.3	2.0	0.05	0.05	29
30	1575.2	0.7	0		1573.0	0.1	0		1576.0	1.1	0.05	0.05	1577.6	2.4	0.3	0.05	30
31	1575.0	0.6	0						1576.0	1.1	0.05	0.05	1578.2	2.8	0.2	0.05	31
TOTAL			0	*1.5			0	*0.3			1.00	*0.50			2.4	*1.5	
Inf. Ac. Ft.			0				0				2.0				4.8	*6.8	
Outf. Ac. Ft.				*3.0				*0.5				*1.0			*3.0	*7.5	
Maximum Mean Daily Inflow			0				0				0.5				0.3	0.5	
Minimum Mean Daily Inflow			0				0				0				0	0	
Storage Change			-3.0				-0.5				+1.0				+1.7	-0.8	

REMARKS * Percolation and evaporation loss. (Mean for period.

Max. W. S. Elev.	1581.7	feet	on 2/20-2/28/39	Storage 8.5	Acre Feet		
Min. W. S. Elev.	Dry	feet	on various times	Storage 0	Acre Feet		
Max. Peak Inf.	1.1	C.F.S. from	7:00 p.m. on 1-30-39	to 9:00 p.m.	on 1-30-39		
Max. Peak Outf.		C.F.S. from	on	to	on		

RECORDS COLLECTED BY

	Dam Tender
W.T.Lind	Hydrographer
H.A.van der Goot	Hydrographer

COMPUTATIONS Date

Gage Hts. copied	J.A.H.-C.C.G.
Storage applied	J.A.H.-C.C.G.
Inf. & Outf. computed	J.A.H.
Checked	C.C.G.

Gage heights and storages as of midnight on day shown.
Inflows computed from storage change and estimated percolation loss.

F. C. Dist. Form 68 Revised 600 5/29

Storages based on L.A.C.F.C.D. survey of 1932.

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Daily Gage Height in feet and Operation Record of THOMPSON CREEK Dam

In / On Thompson Creek for the Year Ending September 30, 19 39

Continuous Water Stage Recorder None

Drainage Area 3.9 Square Miles. Capacity of Reservoir 812 Ac. Ft. at Spillway Elev. 1640.0 Ft. Gage Heights Read at various times.

Day	FEBRUARY Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	MARCH Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	APRIL Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	MAY Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Day
1	1578.5	3.2	0.2	0.05	1581.6	8.3	0.1	0.1	1580.7	6.5	0		1578.0	2.6	0		1
2	1578.6	3.3	0.1	0.05	1581.6	8.3	0.1	0.1	1580.7	6.5	0		1577.9	2.5	0		2
3	1578.9	3.6	0.2	0.05	1581.6	8.3	0.1	0.1	1580.6	6.3	0		1577.8	2.4	0		3
4	1579.7	4.8	0.6	0.05	1581.6	8.3	0.1	0.1	1580.5	6.1	0		1577.7	2.3	0		4
5	1580.0	5.2	0.3	0.05	1581.6	8.3	0.1	0.1	1580.4	5.9	0		1577.6	2.2	0		5
6	1580.1	5.4	0.2	0.05	1581.6	8.3	0.1	0.1	1580.3	5.7	0		1577.6	2.2	0		6
7	1580.5	6.1	0.5	0.05	1581.6	8.3	0.1	0.1	1580.2	5.6	0		1577.5	2.2	0		7
8	1580.8	6.6	0.3	0.05	1581.6	8.3	0.1	0.1	1580.2	5.6	0		1577.4	2.1	0		8
9	1580.9	6.8	0.2	0.1	1581.6	8.3	0.1	0.1	1580.1	5.4	0		1577.4	2.1	0		9
10	1581.0	7.0	0.2	0.1	1581.6	8.3	0.1	0.1	1580.0	5.2	0		1577.3	2.0	0		10
11	1581.1	7.2	0.2	0.1	1581.6	8.3	0.1	0.1	1579.9	5.1	0		1577.2	1.9	0		11
12	1581.2	7.4	0.2	0.1	1581.5	8.1	0.05	0.1	1579.8	4.9	0		1577.1	1.8	0		12
13	1581.3	7.6	0.2	0.1	1581.5	8.1	0.05	0.1	1579.7	4.8	0		1577.1	1.8	0		13
14	1581.4	7.8	0.2	0.1	1581.5	8.1	0.05	0.1	1579.6	4.6	0		1577.0	1.7	0		14
15	1581.5	8.1	0.2	0.1	1581.4	7.8	0.05	0.1	1579.5	4.5	0		1577.0	1.7	0		15
16	1581.6	8.3	0.2	0.1	1581.4	7.8	0.05	0.1	1579.4	4.3	0		1576.9	1.6	0		16
17	1581.6	8.3	0.1	0.1	1581.4	7.8	0.05	0.1	1579.3	4.2	0		1576.9	1.6	0		17
18	1581.6	8.3	0.1	0.1	1581.4	7.8	0.05	0.1	1579.2	4.0	0		1576.8	1.6	0		18
19	1581.6	8.3	0.1	0.1	1581.3	7.6	0.05	0.1	1579.1	3.9	0		1576.7	1.5	0		19
20	1581.7	8.5	0.2	0.1	1581.3	7.6	0.05	0.1	1579.0	3.7	0		1576.7	1.5	0		20
21	1581.7	8.5	0.1	0.1	1581.3	7.6	0.05	0.1	1578.9	3.6	0		1576.6	1.5	0		21
22	1581.7	8.5	0.1	0.1	1581.2	7.4	0.05	0.1	1578.8	3.5	0		1576.5	1.4	0		22
23	1581.7	8.5	0.1	0.1	1581.1	7.2	0.05	0.1	1578.7	3.4	0		1576.4	1.3	0		23
24	1581.7	8.5	0.1	0.1	1581.1	7.2	0.05	0.1	1578.7	3.4	0		1576.4	1.3	0		24
25	1581.7	8.5	0.1	0.1	1581.0	7.0	0.05	0.1	1578.6	3.3	0		1576.3	1.3	0		25
26	1581.7	8.5	0.1	0.1	1581.0	7.0	0.05	0.1	1578.5	3.2	0		1576.2	1.2	0		26
27	1581.7	8.5	0.1	0.1	1581.0	7.0	0.05	0.1	1578.4	3.0	0		1576.2	1.2	0		27
28	1581.7	8.5	0.1	0.1	1580.9	7.0	0.05	0.1	1578.3	2.9	0		1576.1	1.2	0		28
29					1580.9	6.8	0.05	0.1	1578.2	2.8	0		1576.0	1.1	0		29
30					1580.8	6.6	0.05	0.1	1578.1	2.7	0		1576.0	1.1	0		30
31					1580.8	6.6	0.05	0.1					1575.9	1.1	0		31
TOTAL			5.3	*2.4			2.1	*3.1			0	*2.0			0	*0.8	
Inf. Ac. Ft.			10.5				4.2				0				0	21.5	
Outf. Ac. Ft.				*4.8				*6.1				*4.0			*1.6	*24.0	
Maximum Mean Daily Inflow			0.6				0.1				0				0	0.6	
Minimum Mean Daily Inflow			0.1				0.05				0				0	0	
Storage Change			+5.7				-1.9				-3.9				-1.6	-2.5	

REMARKS * Percolation and evaporation loss. Inflows computed from storage change and estimated percolation.

Max. W. S. Elev.	1581.7	feet	on 2/20-2/28/39	Storage 8.5	Acre Feet		
Min. W. S. Elev.	Dry	feet	on various times	Storage 0	Acre Feet		
Max. Peak Inf.	1.1	C.F.S. from	7:00 p.m. on 1-30-39	to 9:00 p.m.	on 1-30-39		
Max. Peak Outf.		C.F.S. from	on	to	on		

RECORDS COLLECTED BY

	Dam Tender
W.T.Lind	Hydrographer
H.A.van der Goot	Hydrographer

COMPUTATIONS Date

Gage Hts. copied	J.A.H.-C.C.G.
Storage applied	J.A.H.-C.C.G.
Inf. & Outf. computed	J.A.H.
Checked	

Gage heights and storages as of midnight on day shown.

F. C. Dist. Form 68 Revised 600 5/29

Storages based on L.A.C.F.C.D. survey of 1932.

DAM OPERATION RECORD
LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Daily Gage Height in feet and Operation Record of THOMPSON CREEK Dam

In / On Thompson Creek for the Year Ending September 30, 1939

Continuous Water Stage Recorder None

Drainage Area 3.9 Square Miles. Capacity of Reservoir 812 Ac. Ft. at Spillway Elev. 1640.0 Ft. Gage Heights Read at various times.

Day	JUNE Gage Height	JUNE Acre Ft. Storage	JUNE C.F.S. Inflow	JUNE C.F.S. Outflow	JULY Gage Height	JULY Acre Ft. Storage	JULY C.F.S. Inflow	JULY C.F.S. Outflow	AUGUST Gage Height	AUGUST Acre Ft. Storage	AUGUST C.F.S. Inflow	AUGUST C.F.S. Outflow	SEPTEMBER Gage Height	SEPTEMBER Acre Ft. Storage	SEPTEMBER C.F.S. Inflow	SEPTEMBER C.F.S. Outflow	Day
1	1575.7	1.0	0				0				0				0		1
2	1575.7	1.0	0				0				0				0		2
3	1575.6	0.9	0				0				0				0		3
4	1575.6	0.9	0				0				0				0		4
5	1575.5	0.9	0				0				0				0		5
6	1575.5	0.9	0				0				0				0		6
7	1575.4	0.8	0				0				0				0		7
8	1575.3	0.8	0				0				0				0		8
9	1575.3	0.8	0				0				0				0		9
10	1575.2	0.7	0				0				0				0		10
11	1575.2	0.7	0				0				0				0		11
12	1575.1	0.7	0				0				0				0		12
13	1575.1	0.7	0				0				0				0		13
14	1575.0	0.6	0				0				0				0		14
15	1575.0	0.6	0				0				0				0		15
16	1574.9	0.6	0				0				0				0		16
17	1574.9	0.6	0				0				0				0		17
18	1574.9	0.6	0				0				0				0		18
19	1574.8	0.5	0				0				0				0		19
20	1574.8	0.5	0				0				0				0		20
21	1574.7	0.5	0				0				0				0		21
22	1574.7	0.5	0				0				0				0		22
23		0.4	0				0				0				0		23
24		0.4	0				0				0				0		24
25		0.3	0				0				0				0		25
26		0.3	0				0				0				0		26
27		0.2	0				0				0				0		27
28		0.2	0				0				0				0		28
29		0.1	0				0				0				0		29
30		0	0				0				0				0		30
31							0				0						31
TOTAL			0	*0.6			0	0			0	0			0	0	
Inf. Ac. Ft.			0				0				0				0	21.4	
Outf. Ac. Ft.				*1.2				0				0			0	*2.2	
Maximum Mean Daily Inflow			0				0				0				0	0.6	
Minimum Mean Daily Inflow			0				0				0				0	0	
Storage Change			-1.1				0				0				0	-3.6	

RESERVOIR DRY — NO STORAGE — NO WATER DISCHARGE — ESTIMATED STORAGE

REMARKS * Percolation and evaporation loss. Yearly Totals

Max. W. S. Elev.	1581.7 feet	on 2/20-2/28/39	Storage 8.5	Acre Feet		
Min. W. S. Elev.	Dry feet	on various times	Storage 0	Acre Feet		
Max. Peak Inf.	1.1 C.F.S. from	7:00 p.m. on 1-30-39	to 9:00 p.m.	on 1-30-39		
Max. Peak Outf.	None C.F.S. from	on	to	on		

Gage heights and storages as of midnight on day shown.

RECORDS COLLECTED BY

	Dam Tender
W.T.Lind	Hydrographer
H.A.van der Goot	Hydrographer

COMPUTATIONS Date

Gage Hts. copied	J.A.H.-C.C.G.
Storage applied	J.A.H.-C.C.G.
Inf. & Outf. computed	J.A.H.
Checked	C.C.G.

BIG TUJUNGA DAM NO. 1

F. C. Dist. Form 68 Revised 600 5/29

Storages based on volumetric computations during current period.

DAM OPERATION RECORD
LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Daily Gage Height in feet and Operation Record of BIG TUJUNGA Dam #1

In / On Big Tujunga Canyon for the Year Ending September 30, 1939

Continuous Water Stage Recorder Au

Drainage Area 81.3 Square Miles. Capacity of Reservoir 4488.0 Ac. Ft. at Spillway Elev. 2290.0 Ft. Gage Heights Read daily

Day	OCTOBER Gage Height	OCTOBER Acre Ft. Storage	OCTOBER C.F.S. Inflow	OCTOBER C.F.S. Outflow	NOVEMBER Gage Height	NOVEMBER Acre Ft. Storage	NOVEMBER C.F.S. Inflow	NOVEMBER C.F.S. Outflow	DECEMBER Gage Height	DECEMBER Acre Ft. Storage	DECEMBER C.F.S. Inflow	DECEMBER C.F.S. Outflow	JANUARY Gage Height	JANUARY Acre Ft. Storage	JANUARY C.F.S. Inflow	JANUARY C.F.S. Outflow	Day
1			6.0	6.0			6.3	6.3			7.6	7.6	2171.2	153.7	•21.3	**1.5	1
2			6.2	6.2			6.4	6.4			7.6	7.6	2173.7	183.7	16.6	**1.5	2
3			6.4	6.4			6.5	6.5			7.2	7.2	2173.9	186.2	17.1	1.5.9	3
4			6.7	6.7			6.3	6.3			6.9	6.9	2172.7	171.4	16.6	2.4	4
5			6.9	6.9			6.1	6.1			6.9	6.9	2177.8	238.7	63.9	3.0	5
6			7.1	7.1			5.9	5.9			6.5	6.5	2176.6	224.6	40.9	4.8	6
7			7.0	7.0			5.7	5.7			6.2	6.2	2174.6	195.1	26.1	4.1	7
8			6.9	6.9			5.5	5.5			6.2	6.2	2172.0	163.0	24.9	4.1	8
9			6.8	6.8			6.2	6.2			6.2	6.2	2172.0	163.0	24.0	2.4	9
10			6.6	6.6			6.9	6.9			6.2	6.2	2172.0	163.0	22.0	2.2	10
11			6.5	6.5			7.1	7.1			6.2	6.2	2171.8	160.7	20.8	2.2	11
12			6.4	6.4			7.3	7.3			6.2	6.2	2171.6	158.4	20.8	2.2	12
13			6.3	6.3			7.5	7.5			6.2	6.2	2171.2	153.7	19.7	2.2	13
14			6.3	6.3			7.6	7.6			12.7	12.7	2170.7	148.1	19.1	2.2	14
15			6.3	6.3			7.6	7.6	2167.5	114.5	104.7	47.0	2170.1	141.4	18.7	2.2	15
16			6.3	6.3			6.2	6.2	2165.5	95.8	39.6	4.9	2171.7	159.5	19.8	1.0.7	16
17			6.3	6.3			6.9	6.9	2163.7	80.4	26.2	3.4	2174.7	196.4	19.5	**0.9	17
18			6.3	6.3			6.9	6.9	2177.3	231.6	185.3	10.9	2176.9	225.9	15.7	0.8	18
19			6.3	6.3			7.6	7.6	2200.0	644.9	327.3	11.9	2179.2	259.1	17.5	0.8	19
20			6.3	6.3			6.9	6.9	2196.0	560.7	•202.6	24.5	2181.2	289.8	16.3	0.8	20
21			6.2	6.2			7.6	7.6	2178.8	253.2	•108.0	26.3	2184.8	348.8	30.6	0.9	21
22			6.2	6.2			7.6	7.6	2164.0	82.8	•84.0	17.0	2187.6	398.1	26.0	1.1	22
23			6.1	6.1			7.2	7.2	2158.0	E 20.0	•44.4	7.6	2190.0	442.4	23.2	0.9	23
24			6.0	6.0			7.9	7.9	2145.0	*0	•27.9	3.8	2191.9	478.8	19.3	0.9	24
25			5.9	5.9			7.9	7.9	Dry	*0	27.7	3.5	2193.7	514.2	18.7	0.9	25
26			5.9	5.9			7.5	7.5	"	*0	27.7	3.7	2195.4	548.5	18.2	0.9	26
27			5.8	5.8			7.2	7.2	"	*0	•27.7	2.0	2197.1	583.5	18.6	0.9	27
28			5.9	5.9			6.9	6.9	2150	7.9	27.7	2.2	2198.6	615.0	16.6	0.8	28
29			6.0	6.0			7.2	7.2	2157	35.2	27.6	6.7	2200.2	649.2	18.1	0.8	29
30			6.1	6.1			7.9	7.9	2162	67.0	22.3	3.1	2201.9	686.2	19.4	**0.8	30
31			6.2	6.2					2167.5	114.5	•22.3	**1.5	2203.6	723.9	19.8	0.8	31
TOTAL			196.2	196.2			208.3	208.3			1431.8	1374.1			689.8	38.2.6	
Inf. Ac. Ft.			389.2				413.2				2839.9				1368.2	5010.5	
Outf. Ac. Ft.				389.2				413.2				2725.5			738.9	4236.8	
Maximum Mean Daily Inflow			7.1				7.9				327.3				63.5	327.3	
Minimum Mean Daily Inflow			5.8				5.5				6.2				16.3	5.5	
Storage Change			0				0				+1145				+6094	+723.9	

RESERVOIR DRY — NO STORAGE — SLUICING

REMARKS Outflows as per Sta. 168. (= Mean for period. ** Gate leakage. E = Estimated. • Flow probably bulked by mud and debris. ½ Year

Max. W. S. Elev.	2253.1 feet	on 6-11-39	Storage 2343.2	Acre Feet		
Min. W. S. Elev.	1445.0 feet	on various times	Storage 0	Acre Feet		
Max. Peak Inf.	665.7 C.F.S. from	1:00 A.M. on 12-19-38	to 2:00 A.M.	on 12-19-38		
Max. Peak Outf.	424.0 C.F.S. from	at 11:30A.M on 12-23-38	to	on		

Gage heights and storage as of midnight on day shown.

RECORDS COLLECTED BY

D.J.Robertson	Dam Tender
L.J.Turner	Hydrographer
	Hydrographer

COMPUTATIONS Date 12-15-39

Gage Hts. copied	C.C.G.-J.A.H.
Storage applied	R.E.L.
Inf. & Outf. computed	R.E.L.
Checked	C.C.G.

BIG TUJUNGA DAM NO. 1 (CONT.)

F. C. Dist. Form 68 Revised 600 5/39

Storages based on volumetric computations during current period.

Daily Gage Height in feet and Operation Record of BIG TUJUNGA Dam #1

In Big Tujunga Canyon for the Year Ending September 30, 1939

Drainage Area 81.3 Square Miles. Capacity of Reservoir 4488.0 Ac. Ft. at Spillway Elev. 2290.0 Ft.

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Continuous Water Stage Recorder Au

Gage Heights Read daily

Day	FEBRUARY Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	MARCH Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	APRIL Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	MAY Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Day
1	2205.0	7556	168	** 0.8	2232.4	15287	143	5.7	2238.6	17500	168	30	2246.1	20430	83	49	1
2	2206.4	7879	171	0.8	2233.2	15561	147	** 0.9	2238.4	17426	233	27	2246.3	20513	83	49	2
3	2208.0	8256	199	0.9	2234.0	15839	149	0.8	2238.1	17314	223	28	2246.5	20595	83	52	3
4	2209.7	8668	215	0.8	2234.8	16121	151	0.9	2237.8	17204	225	28	2246.7	20677	83	52	4
5	2211.3	9065	208	0.7	2235.6	16405	151	0.8	2237.3	17020	187	28	2246.9	20760	83	40	5
6	2212.7	9420	186	0.7	2236.3	16657	136	** 0.9	2236.7	16801	169	28	2247.2	20885	83	23	6
7	2214.1	9782	189	0.7	2236.5	16729	157	12.1	2236.5	16729	164	20	2247.5	21010	83	23	7
8	2215.9	10259	249	0.8	2236.2	16620	155	21.0	2237.1	16947	138	28	2247.7	21094	83	23	8
9	2217.4	10667	213	0.8	2237.1	16947	357	19.2	2237.6	17130	118	26	2247.9	21177	83	23	9
10	2218.9	11084	219	0.8	2238.6	17575	439	12.2	2238.1	17314	119	26	2248.2	21304	82	23	10
11	2220.3	11482	208	0.8	2239.0	17649	257	22	2238.6	17500	122	28	2248.5	21430	82	23	11
12	2221.7	11888	213	0.8	2239.2	17724	258	22	2239.1	17687	122	28	2248.7	21515	82	25	12
13	2223.0	12273	202	0.8	2239.3	17762	249	23	2239.6	17875	123	28	2249.2	21728	126	18	13
14	2224.3	12667	207	0.8	2239.4	17800	249	23	2240.2	18102	145	31	2249.6	21899	104	18	14
15	2225.6	13068	210	0.8	2239.4	17800	220	22	2240.6	18331	147	31	2249.9	22027	83	18	15
16	2226.9	13476	213	0.8	2239.4	17800	220	22	2241.2	18484	113	33	2250.2	22157	75	18	16
17	2228.1	13859	203	0.9	2239.3	17762	211	23	2241.7	18677	113	35	2250.5	22286	75	18	17
18	2229.3	14249	205	0.9	2239.1	17687	192	23	2242.1	18832	113	35	2250.6	22416	75	20	18
19	2230.4	14612	193	1.0	2238.9	17612	192	23	2242.5	18988	113	35	2250.9	22460	74	29	19
20	2231.5	14981	197	** 1.1	2238.7	17537	193	23	2242.8	19106	112	35	2251.1	22547	74	26	20
21	2231.9	15116	172	10.4	2238.5	17463	192	23	2243.1	19224	103	35	2251.3	22635	65	26	21
22	2232.0	15150	194	17.7	2238.3	17388	193	23	2243.4	19342	102	35	2251.5	22722	65	26	22
23	2232.0	15150	177	17.7	2238.0	17277	174	23	2243.8	19501	102	35	2251.7	22810	65	26	23
24	2232.1	15184	201	18.3	2238.1	17314	186	16.8	2244.3	19701	102	38	2251.8	22854	65	26	24
25	2232.1	15184	196	19.6	2237.7	17167	186	26	2244.6	19821	102	38	2252.0	22942	64	28	25
26	2231.9	15116	175	21.0	2237.4	17057	195	25	2244.9	19942	102	41	2252.1	22986	64	35	26
27	2231.9	15116	200	20.0	2237.5	17094	268	25	2245.1	20023	102	44	2252.2	23031	64	44	27
28	2231.9	15116	165	16.5	2237.5	17094	250	25	2245.4	20145	102	43	2252.2	23031	64	43	28
29					2238.0	17277	198	10.5	2245.7	20267	102	43	2252.3	23076	64	46	29
30					2238.9	17612	178	11.0	2245.9	20348	102	43	2252.4	23120	64	49	30
31					2239.3	17762	186	11.0					2252.5	23164	64	49	31
TOTAL			5448	157.7			6432	509.8			3988	2684			2387	967	
Inf. Ac. Ft.			11004				12758				7910				47348	86211	
Outf. Ac. Ft.				3128				10112				5324			19188	63350	
Maximum Mean Daily Inflow			249				439				223				126	3273	
Minimum Mean Daily Inflow			165				136				102				64	55	
Storage Change			+7877				+2646				+2586				+28164	+23164	

REMARKS Outflows as per Sta. 168. (= Mean for period. * Flow probably bulked by mud and debris. ** Gate leakage. ½ Year

Max. W. S. Elev.	2253.1	feet on	6-11-39	Storage	2343.2	Acre Feet	RECORDS COLLECTED BY		COMPUTATIONS	Date 12-18-39
Min. W. S. Elev.	1445.0	feet on	Various times	Storage	0	Acre Feet	D.J.Robertson	Dam Tender	Gage Hts. copied	C.G.G.-J.A.H.
Max. Peak Inf.	665.7	C.F.S. from	1:00 A.M. on 12-19-38	to	2:00 A.M. on 12-19-38		L.J.Turner	Hydrographer	Storage applied	R.E.L.
Max. Peak Outf.	424.0	C.F.S. from	Max at 11:30A.M on 12-23-38	to		on		Hydrographer	Inf. & Outf. computed	R.E.L.
Gage height and storage as of midnight on day shown.									Checked	C.G.G.

F. C. Dist. Form 68 Revised 600 5/39

Storage based on volumetric computations during current period.

Daily Gage Height in feet and Operation Record of BIG TUJUNGA Dam #1

In Big Tujunga Canyon for the Year Ending September 30, 1939

Drainage Area 81.3 Square Miles. Capacity of Reservoir 4488.0 Ac. Ft. at Spillway Elev. 2290.0 Ft.

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Continuous Water Stage Recorder Au

Gage Heights Read daily

Day	JUNE Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	JULY Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	AUGUST Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	SEPTEMBER Gage Height	Acre Ft. Storage	C.F.S. Inflow	C.F.S. Outflow	Day
1	2252.6	28209	50	4.8	2252.4	23120	27	3.8	2250.7	22373	13	2.4	2223.9	12545	28	23	1
2	2252.6	28209	50	3.5	2252.3	23076	27	3.8	2250.7	22373	14	2.4	2222.5	12124	29	24	2
3	2252.7	23254	50	3.3	2252.3	23076	27	4.1	2250.6	22330	14	3.1	2221.1	11713	29	24	3
4	2252.8	23298	50	3.5	2252.2	23031	27	4.1	2250.5	22286	14	2.6	2219.6	11282	29	24	4
5	2252.8	23298	50	3.5	2252.2	23031	27	4.6	2250.5	22286	14	2.4	2218.1	10861	29	24	5
6	2252.9	23342	50	3.8	2252.1	22986	27	4.2	2250.4	22243	14	2.4	2216.7	10476	29	24	6
7	2253.0	23387	49	4.1	2252.1	22986	26	3.3	2249.8	21984	14	14.2	2215.2	10072	29	24	7
8	2253.0	23387	49	4.0	2252.0	22942	26	3.3	2248.9	21600	14	20	2213.7	9678	30	23	8
9	2253.0	23387	49	3.8	2252.0	22942	26	3.3	2248.1	21261	14	20	2212.2	9292	30	23	9
10	2253.0	23387	49	4.1	2252.0	22942	26	3.3	2247.2	20885	14	20	2210.7	8915	30	22	10
11	2253.0	23387	44	4.1	2251.9	22898	15	3.5	2246.3	20513	14	20	2209.2	8546	30	22	11
12	2253.0	23387	43	4.6	2251.9	22898	15	3.5	2245.5	20186	14	19.6	2207.5	8138	30	22	12
13	2253.0	23387	43	4.9	2251.8	22854	15	3.2	2244.6	19821	14	19.6	2206.0	7786	30	22	13
14	2253.0	23387	43	4.9	2251.8	22854	15	2.6	2243.5	19382	14	23	2204.2	7374	30	24	14
15	2253.0	23387	43	4.6	2251.7	22810	15	2.6	2242.3	18910	14	26	2202.2	6928	30	24	15
16	2253.0	23387	43	4.1	2251.7	22810	15	2.6	2241.1	18446	19	26	2200.1	6471	28	24	16
17	2253.0	23387	43	4.3	2251.6	22766	15	2.4	2239.9	17988	19	26	2198.3	6087	28	22	17
18	2253.0	23387	43	4.3	2251.6	22766	15	2.4	2238.7	17537	19	26	2196.3	5669	28	23	18
19	2253.0	23387	43	4.6	2251.5	22722	15	2.4	2237.4	17057	19	26	2194.2	5242	28	25	19
20	2252.9	23342	43	4.9	2251.4	22679	14	3.0	2236.2	16620	19	25	2192.7	4944	28	21	20
21	2252.9	23342	39	4.9	2251.4	22679	13	2.6	2234.9	16156	19	25	2191.1	4633	28	15.4	21
22	2252.9	23342	38	4.8	2251.3	22635	13	2.6	2233.6	15700	19	25	2188.7	4182	28	24	22
23	2252.8	23298	38	4.1	2251.2	22591	13	2.4	2232.4	15287	19	25	2186.9	3854	28	23	23
24	2252.8	23298	38	4.3	2251.2	22591	13	2.4	2231.1	14846	20	24	2188.1	4071	25.5	14.5	24
25	2252.8	23298	38	4.6	2251.2	22591	13	2.4	2230.3	14579	20	12.1	2208.2	8304	21.6	2.6	25
26	2252.7	23254	38	4.9	2251.1	22547	13	2.4	2229.6	14348	20	11.0	2211.5	9065	42.6	4.3	26
27	2252.7	23254	36	5.2	2251.0	22503	13	3.0	2228.8	14086	20	15.3	2211.9	9216	16.3	8.7	27
28	2252.6	23209	38	5.9	2251.0	22503	13	2.4	2228.0	13827	20	15.3	2211.5	9115	10.0	15.1	28
29	2252.5	23164	38	4.6	2250.9	22460	13	2.4	2227.2	13571	20	15.3	2209.9	8717	9.0	29	29
30	2252.5	23164	38	3.8	2250.9	22460	13	2.4	2226.4	13318	20	14.2	2206.9	7996	7.6	44	30
31					2250.8	22416	12	2.4	2225.3	12974	20	19.2					31
TOTAL			1308	130.8			557	93.4			521	5281			3937	6447	
Inf. Ac. Ft.			2594				1105				1033				7809	9905.2	
Outf. Ac. Ft.				2594				1853				10475			1278.7	9105.9	
Maximum Mean Daily Inflow			50				27				20				216.1	327.3	
Minimum Mean Daily Inflow			38				12				13				2.8	1.2	
Storage Change			0				-748				-9442				-497.8	+7996	

REMARKS Outflow as per Sta. 168. (= Mean for period. Yearly Totals

Max. W. S. Elev.	2253.1	feet on	6-11-39	Storage	2343.2	Acre Feet	RECORDS COLLECTED BY		COMPUTATIONS	Date 12-18-39
Min. W. S. Elev.	1445.0	feet on	various times	Storage	0	Acre Feet	D.J.Robertson	Dam Tender	Gage Hts. copied	C.G.G.-J.A.H.
Max. Peak Inf.	665.7	C.F.S. from	1:00 A.M. on 12-19-38	to	2:00 A.M. on 12-19-38		L.J.Turner	Hydrographer	Storage applied	R.E.L.
Max. Peak Outf.	424.0	C.F.S. from	Max at 11:30A.M on 12-23-38	to		on		Hydrographer	Inf. & Outf. computed	R.E.L.
Gage heights and storage as of midnight on day shown.									Checked	C.G.G.

RUNOFF RECORDS

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

Hydraulic Division

RUNOFF RECORDS

Season 1938-39

Foreword:

With the inception of flood control construction and conservation in Los Angeles County, the need for more comprehensive hydraulic data became apparent. The District commenced collecting stream flow records by establishing fourteen stations on various streams and channels in 1927. Various additional stations were added, moved, or abandoned as the need for particular records increased or diminished and as funds were available. The records of the majority of the original fourteen stations continue uninterruptedly since 1927.*

Purpose:

The collection of streamflow data has three general purposes: (1) Dam Operation, (2) Design and (3) Conservation.

Complete hydrologic data is necessary in order to properly determine and correlate rainfall, runoff and dam outflow. It also provides the information necessary to determine the adequacy of present flood control and conservation structures as well as to properly plan for future construction. The development of agriculture and the growth of communities demand this type of data in order to develop an adequate program of conservation and determine the available water supply.

Extent and Type of Record:

This report contains complete or partial records of 56 recorder stations operated by the Flood Control District and of 13 recorder stations operated by the U.S.G.S. Water Resources Branch with the cooperation of the Flood Control District. The locations of all stations are shown on Map No. III, page 60.

The stations are located on various natural and constructed channels. Due to the shifting bottoms at many locations, the reliability of the records depends largely on the number of measurements made during each storm.

* Records prior to 1927 on some streams are available in either the office of the U.S.G.S. Water Resources Branch or in the office of the State Division of Water Resources. Reference to these records, if available, can be found under "Station Descriptions," herein published.

The types of control sections are listed below in order of predominance.

(1) Natural controls - shifting sand and gravel, or permanent rock.

(2) Concrete lined or riprap channels with no definite control point.

(3) Artificial controls - concrete, placed rock, flumes and weirs.

The water stage is recorded by various types of automatic recorders usually mounted over a concrete or corrugated iron pipe stilling well. The type of recorder used at a station is determined by the importance of the particular record, gage height range required and the practicability of frequent access by a district hydrographer.

Type of Recorders in Use.

Type.	No. in Use.	Time - Duration.
AU	20	continuous
*HCF	26	continuous
Stevens (Type A)	2	continuous
Stevens (Type L)	5	weekly or daily
Rational (Horizontal)	1	weekly
Rational (Duplex)	1	12 days or daily
Lietz (Horizontal)	1	continuous

* The H.C.F. recorder was developed in the District's Hydraulic Division to furnish a low-cost accurate continuous water stage recorder.

Records Presented:

(1) "Station Description" gives the pertinent data regarding location, drainage areas, channels and controls, available measurements, recorders, regulation, diversions, available records, extremes of discharge, accuracy of records and operation.

(2) "List of Measurements" gives all the actual meter measurements together with observed water stage, areas of cross-section, and mean velocities. These lists include 3,031 measurements taken by the District during 1938-39 at recorder stations.

(3) "Mean Daily Runoff Tabulation" gives mean daily runoff in second-feet; total monthly and yearly runoff in second-foot days and acre-feet.

(4) "Hydrographs" show a curve of instantaneous flow versus time for the larger storms of the period. In general, the storm producing the peak flow of the season at the maximum number of stations was selected so that hydrographs on a major stream system might be compared. More than one storm hydrograph was plotted in some instances where the magnitude or volume varied enough to be considered of sufficient interest.

Records of 387 measurements taken at various staff gage stations are also included herein. These measurements are correlated with the water stage at an established metering section. Included in this type of record are the measurements of "Rising Water at Whittier Narrows" which are taken weekly, at established staff gage stations.

In addition to the above, the report includes 500 miscellaneous measurements taken in various drainage areas throughout the County. These data were collected as additional information and are insufficient to determine mean daily flow.

Two sets of percolation measurements taken in Little Dalton Wash are shown.

Cooperation:

Certain records included in this report were obtained with the cooperation of the U.S.G.S., Water Resources Branch and the United States Engineer Department, Los Angeles Office.

Responsibility:

The collection of the field data was the responsibility of the following district hydrographers:

District	Name
1 A	T. A. Cooper assisted by E. K. Devore E. W. Godfrey, G. Brown and G. H. Middleton
1 B & 3	R. E. Lindsay assisted by P. A. Haig
2	C. L. Brewster
4	E. S. Bonadiman
5 A & 5 B	T. E. Moon assisted by C. C. Andren
6	C. E. Bollinger
8	L. J. Turner
7, 9 & 10	J. W. Luce assisted by W. D. Miller

The compilation of the records was performed under the direction of H. A. vanderGoot with the assistance of W. E. Cole, and the above mentioned hydrographers.

All field and office work was under the direct supervision of W. J. Wood, Assistant Chief Hydraulic Engineer.

Runoff Summary:

The rainfall and runoff for the 1938-1939 season were generally below normal until the storm of September 25th. This storm accounted for 27% of the seasonal rainfall and brought the

season's total to 108% of normal. Table I on page 56 summarizes all available yearly runoff records.

In general, the September 25th storm produced a low percentage of runoff in the mountain areas while in many instances, it produced the maximum flow of the season in the lower reaches of the valley channels. This was due to the dry condition of the pervious mountain watersheds and the large percentage of impervious area in populated centers of the valley. Hydrographs are published for this storm in those cases where the records are sufficient to establish the flow and no serious regulation is effected by dams above the station. This storm should be of interest as it shows the runoff occasioned by comparatively high intensities from dry watersheds. Table II, showing the maximum flows for each year of record and comparing the storm of September 25th, 1939 with the previous record storms, is published on page 57.

Limitations:

(1) Descriptions of certain stations are published without records. The records are available in the office of the Hydraulic Division of the Los Angeles County Flood Control District unless otherwise noted.

(2) Certain recorder station records are insufficient to determine the flow with reasonable accuracy for all periods. Such periods are noted under the "Station Descriptions" and are estimated by various methods. In general, "Estimated by Comparison" consists of establishing the flow by comparison with rainfall and previous records or with similar drainage areas; "Estimated by Interpolation" consists of interpolating missing or unreliable gage height records or discharges between known records. Reliability of such estimates necessarily depends upon knowledge of the characteristics of the particular record and judgement in making the proper comparisons or interpolations.

(3) Only meter measurements and quantities determined by float velocities taken with depth soundings are published; other determinations are omitted.

(4) The "Mean Daily Runoff Tabulations" are qualified under "Accuracy" in the Station Descriptions showing those periods that were estimated.

(5) In those cases where stations were moved, the records of the various locations were combined when no appreciable change in drainage area occurred; otherwise they are shown as separate records.

(6) The legend used in plotting the hydrographs has the following significance:

The solid line indicates the portion of the hydrograph lying below the maximum meter measurement taken during the period of the storm, unless the control was stable and other measurements applicable.

The dash line indicates computed flow based on water stage records and the stage discharge relation determined by float measurements or extrapolation.

The dotted line indicates estimated flow for periods when the water stage record was lost or was considered unreliable.

Legend:

Prefix F - indicates stations owned and operated by the Los Angeles County Flood Control District.

Prefix U - indicates stations owned and operated by U.S.G.S., Water Resources Branch.

Prefix P - indicates stations operated by the District and formerly operated by the Pasadena Water Department.

Prefix L - indicates station operated by the District and formerly operated in cooperation with the Little Rock Palmdale Irrigation Company.

Suffix R - indicates recorder stations.

Suffix S - indicates staff gage stations.

Suffix B or C etc. indicates that the station has been moved.
B - represents second location and
C - represents third location, etc.

Inc. - indicates incomplete yearly totals. No records of less than three complete consecutive months are totaled. Such totals are consecutive between the dates indicated above the yearly total.

TABLE I

RUNOFF IN ACRE-FEET AT RECORDER STATIONS

1927-28 to 1938-39

F.C. No.	Station Location	Drainage Area Sq. Mi.	1927 1928	1928 1929	1929 1930	1930 1931	1931 1932	1932 1933	1933 1934	1934 1935	1935 1936	1936 1937	1937 1938	1938 1939
F102R	ALHAMBRA EAST WASH at S.P.R.R. Main Line	6.85				871	1010							
F103R	ALHAMBRA WEST WASH at S.P.R.R. Main Line	3.5				675	756							
F81B-R	ALHAMBRA WASH at Emerson Place	12.4								1690	*0			
F81R	ALHAMBRA WASH at Garvey Ave. bridge	12.85			628	1480	1940	1680	5820	*691	1420			
F81C-R	ALHAMBRA WASH at Gladys Ave.	14.2									*0	3880	5520	2990
F81D-R	ALHAMBRA WASH above Short St.	14.5									*186	40680	52500	28490
F38B-R	BALLONA CREEK at Sawtelle Blvd.	111												
F38R	BALLONA CREEK at Centinela Blvd.	112	*3930	14900	13480	18520	21790	15810	20630	24870	*13270			
F150R	BENEDICT CANYON near Oakhurst St.							582	1220					
F235R	BENEDICT CANYON STORM DRAIN at Wesley St.	6.96								0	0			
F2R	BROWNS CANYON CREEK at Devonshire Ave.	14.3		*0	0	554	693					439	2120	75
F111B-R	BIG TUJUNGA CREEK above Edison Rd.	67								9600	2330	19440	45600	7920
F111R	BIG TUJUNGA CREEK at Edison Road	67				1440	10250	2600	3090					
F110R	BIG TUJUNGA - FOX CREEK above mouth	9.4				235	2510	565	710	1180	775	3810		
F168R	BIG TUJUNGA CREEK below Big Tujunga Dam #1	81.7						4180	4290	10760	5470	25860	*9610	9110
F213R	BIG TUJUNGA CREEK below submerged dam	106						7590	7700	14840	7640	36260	83960	13640
F20R	BIG TUJUNGA WASH at Stonehurst Ave.	148					*741	4500	3760	10110	4220	35580	*5940	
F105R	BIG TUJUNGA - WEST WASH at Magnolia Blvd.	Split				0	78	0	25	0	8.9	51		.4
F105B-R	BIG TUJUNGA - EAST WASH at Chandler Blvd.	Split									*1.0			
F106R	BIG TUJUNGA - EAST WASH at Magnolia Blvd.	Split				91	4170	413	1440	528	*492	2720	*2140	
F186R	CENTINELA CREEK at Centinela Blvd. near Jefferson	5.17						534	895	1620	509			
F37R	COMPTON CREEK at Rosecrans Ave.	21.7	*1230	2270	2520	2400	3220	1780	2560	4170	2920	6240	*6850	
F37B-R	COMPTON CREEK near Greenleaf Dr.	30.3												5150
F41R	COYOTE CREEK below P.E. Bridge near Artesia	110			699	568	2690	457	3890	3850	1150			
F41B&41C-R	COYOTE CREEK at Del Amo Street	110										13680	15070	4250
F62R	CURSON CANYON Upper Canyon-Hollywood	.07		0	0	0	0							
F53R	DUME CREEK at Roosevelt Hwy.	8.8			*218	127	726	81	2270	176	202	1900		31
F104B-R	EATON WASH at Broadway	17.3				*314								
F104R	EATON WASH at Ellis Lane	18.4					946	564	1990	543	866	1300	4170	718
F65R	LITTLE DALTON CREEK at mouth of canyon	3.3		*58	85	30	449	75	482	495	465	1430	2660	
F65B-R	LITTLE DALTON CREEK above mouth of canyon	2.7												207
L1R	LITTLE ROCK CREEK above Little Rock Dam	49				3610	*16730	4180	3770	17640	3320	21950	*4690	2364
F67B-R	LITTLE SANTA ANITA CREEK below Sierra Madre Dam	2.4										835	2350	65
F67R	LITTLE SANTA ANITA CREEK below Sierra Madre Dam	2.5		*40	8.5	7.8	211	93	83	276	*141			
F19R	LITTLE TUJUNGA CREEK at Foothill Blvd.	21.			0	57	1870	514	819	455	929	4760	8960	504
F31R	LIVE OAK CREEK near mouth of canyon	2.6	*0	0	0	0	207	.16	228	0	.2	429	794	.6
F5R	LOS ANGELES RIVER at Van Nuys Blvd.	157		*720	1230	3680	6330	4440	5540	3150	1570	10920	*18330	12970
F124R	LOS ANGELES RIVER at Vineland Ave.	400				*8370	12830	8370	11560	6260	4060			
F7R	LOS ANGELES RIVER at Universal City	408		13040	16660									
F266R	LOS ANGELES RIVER at Mariposa St.	430												*20390
F57R	LOS ANGELES RIVER at Figueroa St.	510			*1660	3950	15240	10640	29810	12550	5770	24470		
F57B-R	LOS ANGELES RIVER below Dayton Ave.	510											132600	42360
F34R	LOS ANGELES RIVER at Stewart & Gray Rd.	614	*6690	9830	9730	13450	25620	17020	38330	29170	14920	48630		
F34 B-R	LOS ANGELES RIVER at Firestone Blvd.	614											201300	78440
F36R	LOS ANGELES RIVER at Willow St., L.B.	Split		*9340	12310	14400								
F150R	LOS ANGELES RIVER at State St., L.B.	Split					50960	22890	67860	40470	20470	91110	408000	82750
F100R	MAIN SPREADING CANAL at mouth of S.G. Cn.	Regulated			*7580	3550	16230	7680	8760	*22345	13360	22280	20220	
	AZUSA DUARTE TUNNEL DIVERSION	Regulated						6331	6540	17525	12827	30640	27780	
F130R	MALIBU CREEK at Crater Camp	103				*1920	14670	9190	12370	6220	2310	23940	34100	4630
F112R	MILL CREEK above junction with Big Tuj. Cr.	21.1				139	2190	294	308					
F22R	MONROVIA CREEK above jct. with Sawpit Cr.	1.9	*70	57	55	43	184	86	187	173	208	456	1430	155
F195R	MONROVIA STORM DRAIN near Peck Rd.	4.5							433	292	307	539	1130	579
F181R	MONTEBELLO S.D. at outlet into Rio Hondo	9.6					*1120	592	1910	1650	889			981
F46R	NIGGER SLOUGH at Wilmington Ave.	66			2300	1460	4030	1780	2300					
F115B-R	PACOIMA CREEK flume below Pacoima Dam	28.2								*3960	3030	14540	22740	3080
F115R	PACOIMA CREEK Parshall flume below Pacoima Dam	28.4					8400	1790	2540	*1180				
F16R	PACOIMA WASH at Parthenia St.	50.6			57	105	485	28	157	106	271	356	*1130	377
F40R	PUDDINGSTONE CREEK below Puddingstone Dam	33.1	*32	30	30	23	81	38		44	36	198	4810	1330
F192R	RIO HONDO at Lower Azusa Rd.	Split					*12710	3800	8110	8160	3400	27960	174300	1570
F64R	RIO HONDO above Mission Bridge	Split		15980	13430	16410	47560	19650	28970	29230	20700	50900	209300	30650
F45R	RIO HONDO at Stewart & Gray Rd.	Split	*269	2460	2000	1900	19920	4450	17030	6000	4220	26870	172100	9540
F83R	RIO HONDO SLOUGH at San Gabriel Blvd.				12290	11820	12120	11720	9030	9140	9810	10840	*14220	16320
F107R	RUBIO WASH at Las Tunas Blvd. Bridge	12*				1110								
F82R	RUBIO WASH at Broadway	13			1060		1490	1110	2580					
F82B-R	RUBIO WASH at Broadway	13								1770	1280			
F82C-R	RUBIO WASH at Glendon Way	13.4										2803	4180	2370
F151R	SAN ANTONIO CREEK at mouth of cn.	28				*201	7800	111	630	6840	1640	22570	42300	1430
F33R	SAN ANTONIO SPDG. GROUNDS mouth of cn.	Regulated		34	410									
F228R	SAN GABRIEL R. - W. FORK above S.G. Dam #2	14.4								10900	4200	19050	*837	
F227R	SAN GABRIEL R. - W. FORK above S.G. Dam #2	15.4								5930	1810	8980	*547	
F251R	SAN GABRIEL R. - W. FORK below S.G. Dam #2									*2900	6730			
F209R	SAN GABRIEL R. - W. FORK below S.G. Dam #2	41								19700	7090	33580	58920	11360
F97R	SAN GABRIEL R. - W. FORK below S.G. Dam #2	49			7790	6740	26420	10190	12050					
F99R	SAN GABRIEL R. BEAR CR. above West Fork	26			7660	4500	16620	6600	5470	*1030	*420			
F99B-R	SAN GABRIEL R. BEAR CR. above West Fork	27.9									*5980	27440	*2670	
F98R	SAN GABRIEL R. N. FORK above mouth	18.8			2970	2500	8600	3600	3260	8140	4310	16750	*4260	
P3R	SAN GABRIEL R. W. FORK above Forks	102				14630	55360	23990	24990	56110	23070	96590	*171900	33660
P1R	SAN GABRIEL R. W. FORK above Forks	106	15180	14960	18470									
P2R	SAN GABRIEL R. E. FORK at Camp Bonita	58.2	15680	17670	21640	15200	53410							
F96R	SAN GABRIEL R. E. FORK below Cattle Cn.	78.4			24850	19020	67910	21260	23480					
P4B-R	SAN GABRIEL R. E. FORK above Forks	86.2												*27550
P4R	SAN GABRIEL R. E. FORK above Forks	91.4						*18990	34230	61840	29590	107400	150800	*4040
F233R	SAN GABRIEL R. near Roberts Relay Station	201								127100	53410	*26350		
F26R	SAN GABRIEL R. at Edison Intake	202	34430	36160	46830	35690	132550	48710	62910	127400	53180	*182600		
F250R	AZUSA CONDUIT at sand box weir	Regulated								*36610	30540	19740	11160	4280
F220R	AZUSA CONDUIT at N. Portal #4 tunnel	Regulated							19770	46570	29500	21030	11910	
F190R	SAN GABRIEL RIVER at Foothill Blvd.	230					*76220	11400	14690	59220	15300	117400	*50820	10850
F191R	SAN GABRIEL RIVER at San Bernardino Blvd.						*961	999						
F261R	SAN GABRIEL RIVER near Elliot Ave.	Split										*6790		5790
F263R	SAN GABRIEL RIVER at Beverly Blvd.	Split										*31720	94810	24620
F63R	SAN GABRIEL RIVER at Whittier Blvd.	Split		2850	3490	2490	13060	3040	16950	12190	4590	*2520		
F237R	SAN GABRIEL RIVER at Telegraph Rd. Bridge	Split								4700	1750			
F262R	SAN GABRIEL RIVER at Florence Ave.	Split										*5120		*2540
F42R	SAN GABRIEL RIVER at Spring St., L.B.	Split	0	0	0	0	6560	809	12370	2380	1190	13510	88020	1080
F48R	SAN JOSE CREEK at Workman-Mill Rd.	85		*310	821	531	4030	1070	7610	3860	1390	9600	15450	3440
F119R	SANTA ANITA CREEK below Santa Anita Dam										2530	7920	*1850	
F21R	SANTA ANITA CREEK below Santa Anita Dam	11.2	1160	1260	964	1160	3880		2800	3990				
F260R	SANTA ANITA CREEK above Jct. with L. S. A. Cr.	12.9										6450	*1230	
F260B-R	SANTA ANITA CREEK at Foothill Blvd.	19.2											*2220	*1680
F193R	SANTA ANITA WASH below Arrow Highway	18.4							870	193	156	2090	*682	
F194R	SAWPIT WASH above Arrow Highway							26		51				
F92R	SANTA CLARA RIVER at old highway bridge	355			793	1890	4280	488	1600	1090	1590	4850	26900	
F92B-R	SANTA CLARA RIVER at Highway #99	355												10410
F185R	SEPULVEDA CREEK at Charnock Rd.	25.7						2180	2540	2950	2920	*5010	*4440	2170
F43R	SYCAMORE UPPER S.D. at Solway St.	2.7	*63	77	160	40	415				*40			139
F44R	SYCAMORE LOWER S.D. at Adams Square	6.2	*103	*253	353	190	611	283	1780	1110	*36	*1760		992
F54R	TOPANGA CREEK at Highway bridge above mouth	18			*647	705	3590	2240	6420	1360	1490	6620	15310	
F244R	VERDUGO CHANNEL at Don Carlos St.	18.7								*620	463			
F9R	VERDUGO S.D. at Glen Oaks Blvd.	22.5		*140	274	145	713	295						
F252R	VERDUGO CHANNEL at Estelle Ave.	22.4										*1560	5450	1420
F47R	WALNUT CREEK at Covina Blvd.	99		*112	526	210	2820	530	6310	1920	1670	4300	12610	1010

* Incomplete-partial year

TABLE II

PEAK FLOW AT RECORDER STATION FOR EACH SEASON OF RECORD

F. C. No.	Station Location	1927 1928	1928 1929	1929 1930	1930 1931	1931 1932	1932 1933	1933 1934	1934 1935	1935 1936	1936 1937	1937 1938	1938 1939	1938 1939	Sept. 25, 1939
F102R	ALHAMBRA EAST WASH at S.P.R.R. Main Line				930 4-26	625 11-27									
F103R	ALHAMBRA WEST WASH at S.P.R.R. Main Line				648 4-26	455 11-27									
F81B-R	ALHAMBRA WASH at Emerson Place								2280 1-5						
F81R	ALHAMBRA WASH Garvey Ave. bridge			1870 3-14	1530 2-3	1120 1-31	1850 1-19	4890 1-1							
F81C-R	ALHAMBRA WASH at Gladys Ave.									1700 2-12					
F81D-R	ALHAMBRA WASH above Short St.										1180 2-6	3090 2-28	3670 3-2	1760 1-5	750
F36B-R	BALLONA CREEK at Sawtelle Blvd.										8080 2-14	15280 2-28	19000 3-2	9900 12-17	9200
F38R	BALLONA CREEK at Centinela Blvd.	1100 5-8	4990 3-10	4460 1-11	6280 4-26	6310 12-28	7000 1-19	11300 1-1	11200 4-8	8070 2-12					
F150R	BENEDICT CANYON near Oakhurst St.						317 1-29	813 1-1							
F235R	BENEDICT CANYON STORM DRAIN at Wesley St.								N.D.	248 2-12					
F111B-R	BIG TUJUNGA CREEK above Edison Rd.						324 1-19	1520 1-1	640 4-8	159 2-12	1030 2-6	2480 3-1	N.D. 3-2	543 12-19	400
F111R	BIG TUJUNGA CREEK at Edison Rd.				216 2-5	3910 2-8									
F110R	BIG TUJUNGA - FOX CREEK above mouth				7. 2-4	400 2-8	115 1-19	215 1-1	314 10-18	410 2-2	270 12-27	N.D. 3-1	N.D. 3-2		
F168R	BIG TUJUNGA CREEK below Big Tujunga Dam #1						58 1-19	44 1-1	547 4-8	101 11-18	385 2-16	N.D. 3-1	*33000 3-2	424 12-23	23
F213R	BIG TUJUNGA CREEK below submerged dam						1390 1-19	1450 1-1	671 4-8	494 2-2	495 12-27	1180 3-1	*50000 3-2	380 12-20	117
F20R	BIG TUJUNGA WASH at Stonehurst Ave.					N. D.	2260 1-19	3750 1-1	615 4-8	628 2-12		1300 3-1	*64000 3-2		
F105R	BIG TUJUNGA - WEST WASH at Magnolia Blvd.				N.D.	46 12-28	0	145 1-1	0	15 2-12	53 2-6	N.D. 3-1	N.D. 3-2	1.1 1-21	0.5
F106B-R	BIG TUJUNGA - EAST WASH at Chandler Blvd.											1880 3-1	N.D. 3-2	N.D.	N.D.
F106R	BIG TUJUNGA - EAST WASH at Magnolia Blvd.				56 2-3	1380 2-9	429 1-19	3110 1-1	352 1-5	400 2-12	681 2-6				
F2R	BROWNS CANYON CREEK at Devonshire St.			0	8 4-26	152 2-9				N.D.	140 2-14	94 3-1	*1100 3-2	63 12-18	0
F186R	CENTENILLA CREEK at Centinela Blvd.						297 1-19	570 1-1	1590 3-2	1170 2-14					
F37R	COMPTON CREEK at Rosecrans Ave.		924 3-10	580 3-14	678 4-26	757 1-31	740 1-19	960 1-1	850 4-8	824 2-12	1220 2-6	1540 3-1	N.D. 3-2		
F37B-R	COMPTON CREEK near Greenleaf Dr.													2150 9-25	2150
F41R	COYOTE CREEK below P.E.Bridge near Artesia			91 1-15	218 2-5	799 2-9	283 1-30	2020 1-1	3190 12-13	486 2-12					
41C-R	COYOTE CREEK at Del Amo Street										4190 2-6	1940 3-1	3610 3-2	1660 9-25	1660
F62R	CURSON CANYON Upper Canyon - Hollywood	0	0	0	0										
F53R	DUMM CREEK at Roosevelt Highway			426 1-15	205 2-4	425 12-28	110 1-19	2750 12-31	409 1-5	206 2-14	624 2-6	N.D. 3-1	N.D. 3-2	115 9-25	115
F104B-R	EATON WASH at Broadway				359 4-26										
F104R	EATON WASH at Ellis Lane					184 2-8	399 1-19	2180 1-1	609 1-5	414 2-12	400 12-27	670 2-28	*1900 3-2	738 1-5	240
F65R	LITTLE DALTON CREEK at mouth of canyon		N.D.	28 5-3	6. 4-26	72 1-31	25 1-19	201 1-1	69 4-8	118 2-11	140 12-31				
F65B-R	LITTLE DALTON CREEK above mouth of canyon											391 3-1	*960 3-2	36 1-5	3.0
L1R	LITTLE ROCK CREEK above Little Rock Dam				430 4-26	2200 2-8	66 3-9	N.D.	925 2-5	261 2-23	1550 2-6	N.D. 3-1	*17000 3-2	N.D.	1100
F67B-R	LITTLE SANTA ANITA CREEK below Sierra Madre Dam										109 12-27	135 3-1	*620 3-2	132 12-18	140

TABLE II (Cont)

PEAK FLOW AT RECORDER STATION FOR EACH SEASON OF RECORD

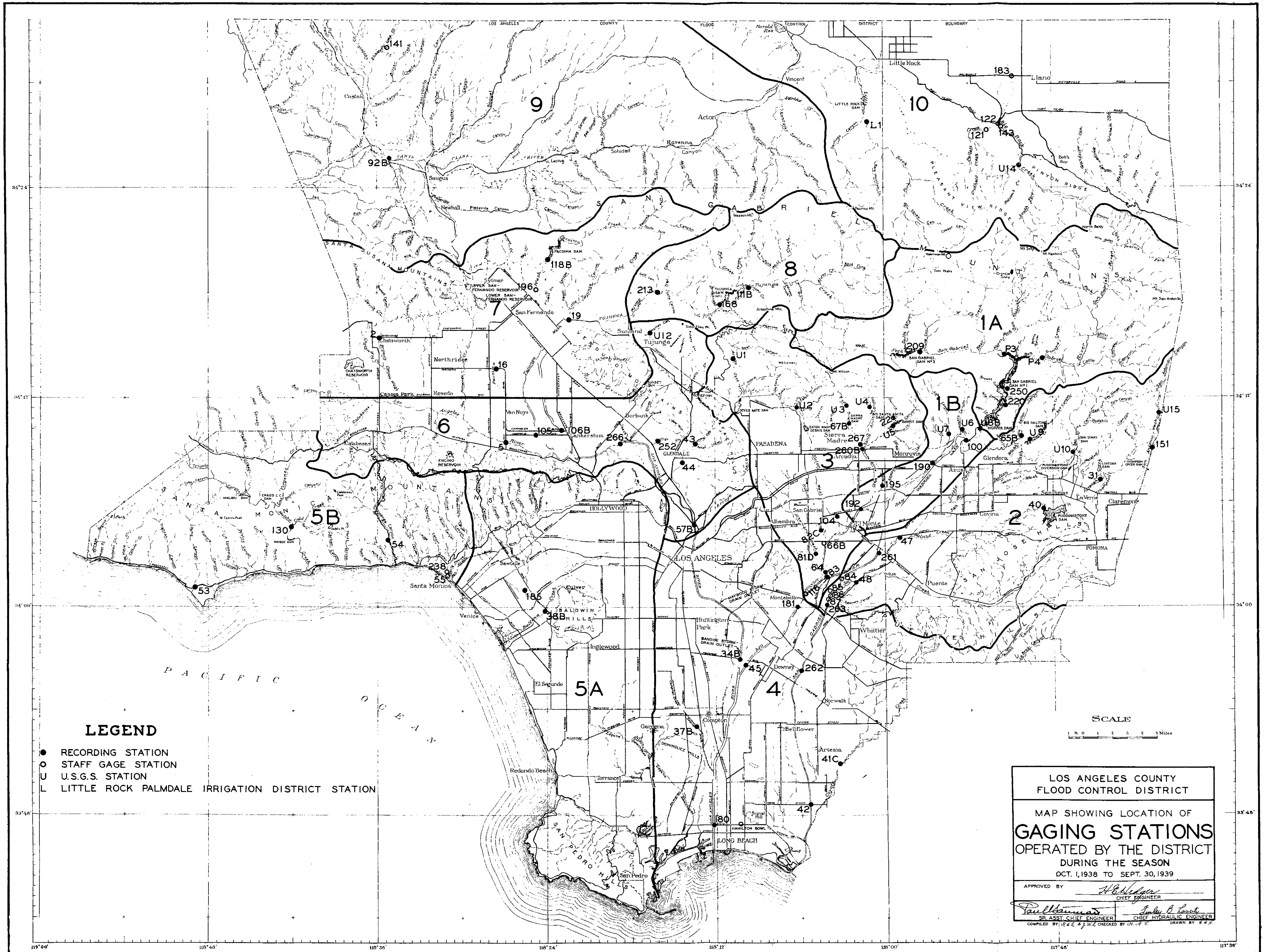
F. C. No.	Station Location	1927 1928	1928 1929	1929 1930	1930 1931	1931 1932	1932 1933	1933 1934	1934 1935	1935 1936	1936 1937	1937 1938	1937 1938	1938 1939	Sept.25, 1939
F67R	LITTLE SANTA ANITA CREEK below Sierra Madre Dam		N.D.	2.4 3-15	9.0 4-26	38 2-9	90 1-19	39 12-31	32 4-8	16 2-11					
F19R	LITTLE TUJUNGA CREEK at Foothill Blvd.			0	30 2-4	660 2-9	450 1-19	1360 1-1	89 12-13	653 2-2	964 2-14	1140 3-1	*8500 3-2	175 3-9	8
F31R	LIVE OAK CREEK near mouth of canyon	N.D.	0	0	0	22 2-8	0.2 1-20	35 12-29	0	0.6 2-12	29 2-14	37 3-1	257 3-2	0.9 9-16	0.1
F5R	LOS ANGELES RIVER at Van Nuys Blvd.		127 4-4	389 3-15	1300 2-4	2000 2-8	1720 1-19	7380 1-1	886 1-5	286 2-12	2630 2-14	3220 3-1	*12000 3-2	2980 12-15	1330
F124R	LOS ANGELES RIVER at Vineland Ave.				1240 2-4	1630 2-8	2080 1-19	9140 1-1	1020 1-5	261 2-12	2770 2-14	3200 3-1	*37700 3-2		
F7R	LOS ANGELES RIVER at Universal City		427 11-14	231 3-15											
F266R	LOS ANGELES RIVER at Mariposa St.													N.D.	620
F57R	LOS ANGELES RIVER at Figueroa St.			500 3-15	4540 2-4	3020 2-8	5780 1-19	22000 1-1	*2400 4-8	2540 3-30	2410 2-6	9920 3-1	*68000 3-2		
F57B-R	LOS ANGELES RIVER below Dayton Ave.													3710 1-5	*3000
F34R	LOS ANGELES RIVER at Stewart & Gray Rd.	1120 2-4	2010 11-14	2210 3-15	4360 2-4	4780 2-8	7070 1-19	29400 1-1	10400 1-5	5730 2-12	*10000 12-30	18500 3-1	*79000 3-2		
F34B-R	LOS ANGELES RIVER at Firestone Blvd.													10800 9-25	10800
F36R	LOS ANGELES RIVER at Willow St., Long Beach		2870 3-10	1670 3-15	3700 2-3										
F180R	LOS ANGELES RIVER at State St., Long Beach					8380 2-9	8710 1-19	37500 1-1	11000 4-8	10400 2-12	20500 2-14	23300 3-1	*99000 3-2	17300 9-25	17300
F130R	MALIBU CREEK at Crater Camp				743 2-4	3100 2-9	4460 1-19	9650 1-1	N.D.	147 2-23	2760 2-14	5960 3-1	*10000 3-2	331 12-20	330
F112R	MILL CREEK above Big Tujunga Creek				1.7 4-26	512 2-9	20 1-19	179 1-1							
F22R	MONROVIA CREEK above Sawpit Creek	0.8 2-4	7. 3-10	6 1-15	13 4-26	24 2-9	58 1-19	108 1-1	109 4-8	78 2-2	81 12-27	97 3-1	N.D. 3-2	23 9-25	23
F195R	MONROVIA STORM DRAIN at Peck Rd.						N.D.	554 1-1	429 1-5	369 2-2	383 10-18	436 3-1	*1200 3-2	667 1-5	200
F181R	MONTEBELLO STORM DRAIN at outlet into Rio Hondo					531 1-31	713 1-19	1360 1-1	1140 1-5	374 2-14	N.D.	N.D. 3-1	*1400 3-2	690 9-25	690
F118B-R	PACOIMA CREEK flume below F. C. Dam								174 8-21	153 5-13	233 2-18	166 3-1	685 3-2	51. 1-20	0.9
F118R	PACOIMA CREEK Parshall flume below Pacoima Dam			9.6 9-29	4.0 2-14	75 2-16	81 4-13	54 1-26							
F16R	PACOIMA WASH at Parthenia St.			70 1-11	270 2-4	477 2-8	60 1-16	305 1-1	70 1-5	98 2-23	159 2-6	319 3-1	*2400 3-3	258 12-15	34
F40R	PUDDINGSTONE CREEK below Puddingstone Dam	0.6 2-4	2. 12-13	1.4 5-3	0.9 4-26	15 2-9	33 1-29	N.D.	4.3 10-17	13 2-12	18 2-6	15 3-1	38 3-2	25 10-30	3.0
F192R	RIO HONDO at Lower Azusa Rd.					N.D.	5160 1-20	5860 1-1	604 4-8	391 2-11	*1030 2-20	4000 3-1	*31000 3-2	680 1-5	130
F64R	RIO HONDO above Mission Bridge		2400 11-14	1260 3-15	4040 2-3	6320 2-9	4410 1-19	*11800 1-1	3560 4-8	2890 2-12	4600 3-15	5670 3-1	*28000 3-2	5220 12-18	2550
F45R	RIO HONDO at Stewart & Gray Rd.	N.D.	912 4-4	743 3-15	841 2-4	4610 2-9	2730 1-19	*16000 1-1	3450 4-8	3160 2-12	4800 2-14	7600 3-1	*24400 3-3	5260 12-18	3230
F83R	RIO HONDO SLOUGH at San Gabriel Blvd.			20 2-3	49 2-4	44 2-8	51 1-29	166 1-1	32 4-8	38 2-12	84 2-14	91 3-1	N.D. 3-2	118 9-25	118
F107R	RUBIO WASH at Las Tunas Blvd. Bridge				1690 2-3										
F82R	RUBIO WASH at Broadway			661 3-14		798 11-27									
F82B-R	RUBIO WASH at Broadway						1510 1-16	2070 12-31	1680 10-17	1370 2-22					
F82C-R	RUBIO WASH at Glendon Way										1180 12-27	1480 2-28	*2400 3-2	1720 1-5	580
F151R	SAN ANTONIO CREEK at mouth of canyon				98 4-26	405 2-8	167 1-19	200 1-1	212 4-8	208 2-11	238 2-14	1220 3-1	*23400 3-2	280 9-25	280
F33R	SAN ANTONIO SPDG. GROUNDS at mouth of canyon		17. 3-10	19 5-3											
F228R	SAN GABRIEL RIVER - W. FORK above S. G. Dam #2							1850 1-1	755 4-8	570 2-12	1220 12-27				

TABLE II (Contd)

PEAK FLOW AT RECORDER STATION FOR EACH SEASON OF RECORD

F. C. No.	Station Location	1927 1928	1928 1929	1929 1930	1930 1931	1931 1932	1932 1933	1933 1934	1934 1935	1935 1936	1936 1937	1937 1938	1937 1938	1938 1939	Sept.25 1939
F227R	SAN GABRIEL RIVER - W. FORK above S. G. Dam #2							1560 1-1	288 4-8	204 2-12	367 2-6				
F251R	SAN GABRIEL RIVER - W. FORK below S. G. Dam #2									*41 2-17					
F209R	SAN GABRIEL RIVER - W. FORK below S. G. Dam #2							4400 1-1	1260 12-13	45 2-17	752 2-14	N.D. 3-1	*25000 3-2	1190 9-25	1190
F97R	SAN GABRIEL RIVER - W. FORK below S. G. Dam #2			206 3-14	751 4-26	2700 2-8	2890 1-19	4840 1-1							
F99R	SAN GABRIEL RIVER BEAR CREEK above W. Fork			108 5-3	527 4-26	1510 2-9	566 1-19	1600 1-1	N.D.						
F99B-R	SAN GABRIEL RIVER BEAR CREEK above W. Fork									410 2-12	736 2-14		*12500 3-2		
F98R	SAN GABRIEL RIVER N. FORK above mouth			18 5-3	16 4-26	223 2-8	126 1-19	276 1-1	111 4-8	85 2-2	198 3-13	N.D.	N.D.		
P3R	SAN GABRIEL RIVER W. FORK above Forks				1530 4-26	3790 2-9	3460 1-19	5320 1-1	1840 4-8	752 2-12	2000 2-14	3460 3-1	*34000 3-2	2530 9-25	2530
P1R	SAN GABRIEL RIVER W. FORK above Forks	1590 2-4	775 4-4	301 3-15											
P2R	SAN GABRIEL RIVER E. FORK at Camp Bonita	267 2-4	448 3-10	122 5-3	267 4-26	3340 2-8									
F96R	SAN GABRIEL RIVER E. FORK below Gattle Canyon			108 5-16	777 4-26	4700 2-8	310 1-19	4200 1-1							
P4R	SAN GABRIEL RIVER E. FORK above Forks						335 1-19	8500 1-1	1080 4-8	1290 2-11	2180 2-14	N.D. 3-1	*46000 3-2		
P4B-R	SAN GABRIEL RIVER E. FORK above Forks													716 12-18	N.D.
F233R	SAN GABRIEL RIVER near Roberts Relay Sta.								4850 4-8	1530 2-12	N.D.				
F28R	SAN GABRIEL RIVER at Edison Intake	1830 2-4	990 3-10	799 5-3	2900 4-26	9110 2-9	7550 1-19	18000 1-1	4770 4-8	*1330 2-12	4240 2-14				
F190R	SAN GABRIEL RIVER at Foothill Blvd.					N.D.	10000 1-19	5550 1-1	1080 8-8	572 2-2	2050 2-19	2530 3-1	*62000 3-2	267 1-5	82
F191R	SAN GABRIEL RIVER at San Bernardino Blvd.					N.D.	949 1-19	796 1-1			6970 2-14	7920 3-1	*22700 3-2	2100 9-25	2100
F263R	SAN GABRIEL RIVER at Beverly Blvd.									3400 2-12					
F63R	SAN GABRIEL RIVER at Whittier Blvd.		297 3-10	5760 1-11	404 2-4	3830 2-9	1450 1-29	22000 1-1	5400 10-17	3400 2-12					
F237R	SAN GABRIEL RIVER at Telegraph Rd. Bridge							N.D.	5850 10-17		N.D.		N.D. 3-2	1380 9-25	1380
F262R	SAN GABRIEL RIVER at Florence Ave.									1910 2-12	4560 2-14	7370 3-1	*27000 3-2	956 12-19	620
F42R	SAN GABRIEL RIVER at Spring St., Long Beach	0	0	0	0	4490 2-9	2250 1-20	15000 1-1	3390 10-17	1010 2-12	4070 2-14	2900 3-1	9350 3-2	1950 9-25	1950
F48R	SAN JOSE CREEK at Workman-Mill Rd.		77 3-10	264 1-15	323 2-4	1540 2-9	825 1-29	13100 1-1	2450 10-17	N.D.	141 2-15	N.D. 3-1	N.D. 3-2		
F119R	SANTA ANITA CREEK below Santa Anita Dam								53 2-16						
F21R	SANTA ANITA CREEK below Santa Anita Dam	16 2-5	10 9-11	3.6 4-12	9 2-20	112 12-28	N.D.	431 1-1	N.D.		174 2-15	800 3-1	N.D. 3-2		
F260R	SANTA ANITA CREEK above Jct. with L.S.A. Cr.													128 1-5	47
F260B-R	SANTA ANITA CREEK at Foothill Blvd.									31 2-16	117 12-27		N.D. 3-2		
F193R	SANTA ANITA WASH below Arrow Hwy.						N.D.	399 1-1	197 4-8						
F194R	SAWPIT WASH above Arrow Hwy.						22 1-19	N.D.	45 4-8	833 2-23	3410 12-27	1570 3-1	*24000 3-2		
F92R	SANTA CLARA RIVER at old highway Bridge			193 3-15	2310 2-17	2090 2-9	618 1-19	3870 1-1	608 1-5					4620 12-15	550
F92B-R	SANTA CLARA RIVER at Highway #99									1810 2-12	1980 2-14	3220 2-28	*3140 3-2	1080 9-25	1080
F185R	SEPULVEDA CREEK at Charnock Rd.						834 1-29	1150 12-31	1560 4-8	252 3-30	N.D.		N.D. 3-2	74 1-5	6.3
F43R	SYCAMORE UPPER S.D. at Solway St.	25 2-3	62 3-10	24 3-14	20 2-4	58 2-9	N.D.	N.D.	N.D.	607 3-30	365 12-27	547 2-28	*2800 3-2	314 1-5	290
F44R	SYCAMORE LOWER STORM DRAIN at Adams Square	34 2-3	904 11-14	51 5-3	212 2-3	191 11-27	401 1-19	1150 1-1	591 1-5	528 2-22	1130 3-15	6630 2-28	*9300 3-2	N.D.	N.D.
F54R	TOPANGO CREEK at Highway br. above mouth			340 3-14	386 2-4	1250 2-8	1430 1-19	4510 12-31	1200 1-5	289 2-12					
F244R	VERDUGO CHANNEL at Don Carlos St.								1020 1-5		768 12-27	1390 2-28	*4400 3-2	520 1-5	320
F9R	VERDUGO STORM DRAIN at Glen Oaks Blvd.		56 4-4	80 5-3	46 4-26	145 2-9	391 1-19	N.D.		2450 2-12	1980 2-6	3450 3-1	4290 3-2	751 12-18	284
F252R	VERDUGO CHANNEL at Estelle Ave.														
F47R	WALNUT CREEK at Covina Blvd.		302 3-10	900 1-11	123 2-4	1780 2-9	748 1-19	8060 1-1	2340 10-17						

N.D. Indicates Not Determined.
* Indicates Estimate.


LOS ANGELES COUNTY FLOOD CONTROL DISTRICT BOUNDARY
LEGEND
RECORDING STATION
STAFF GAGE STATION
U U.S.G.S. STATION
L LITTLE ROCK PALMDALE IRRIGATION DISTRICT STATION
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
MAP SHOWING LOCATION OF
GAGING STATIONS
OPERATED BY THE DISTRICT
DURING THE SEASON
OCT. 1, 1938 TO SEPT. 30, 1939
APPROVED BY
CHIEF ENGINEER
SR. ASST. CHIEF ENGINEER
CHIEF HYDRAULIC ENGINEER
SCALE
5 Miles
PACIFIC OCEAN
SANTA SUSANA MOUNTAINS
SAN GABRIEL MOUNTAINS
SANTA MONICA MOUNTAINS
VERDUGO MOUNTAINS
SAN JOSE HILLS
PUENTE HILLS
BALDWIN HILLS
SAN PEDRO HILLS
DOMINGUEZ HILLS
PLEASANT VIEW RIDGE
PINYON RIDGE
1A
1B
2
3
4
5A
5B
6
7
8
9
10
LOS ANGELES
PASADENA
GLENDALE
HOLLYWOOD
LONG BEACH
Santa Monica
Venice
Inglewood
El Segundo
Redondo Beach
Torrance
Gardena
Compton
San Pedro
Huntington Park
Downey
Norwalk
Bellflower
Artesia
Whittier
Montebello
Puente
Alhambra
San Gabriel
El Monte
Covina
Azusa
Glendora
Monrovia
Arcadia
Sierra Madre
San Dimas
La Verne
Claremont
POMONA
Burbank
Lankershim
Van Nuys
Reseda
Canoga Park
Northridge
Chatsworth
San Fernando
Sylmar
Sunland
Tujunga
Montrose
Calabasas
Sawtelle
Culver
Saugus
Newhall
Castaic
Acton
Ravenna
Soledad
Lang
Vincent
Little Rock
Llano
Signal Hill
HAMILTON BOWL
PACOIMA DAM
SAN GABRIEL DAM Nº 1
SAN GABRIEL DAM Nº 2
MORRIS DAM
BIG DALTON DAM
SAN DIMAS DAM
PUDDINGSTONE DAM
PUDDINGSTONE DIVERSION DAM
LIVE OAK DAM
THOMPSON CREEK DAM
DEVILS GATE DAM
EATON WASH DEBRIS DAM
SIERRA MADRE DAM
BIG SANTA ANITA DAM
SAWPIT DAM
SUNSET DAM
TUJUNGA DAM Nº 1
LITTLE ROCK DAM
MALIBU DAM
CRAGS C.C. DAM
RINDGE DAM
CHATSWORTH RESERVOIR
ENCINO RESERVOIR
UPPER SAN FERNANDO RESERVOIR
LOWER SAN FERNANDO RESERVOIR
MAYWOOD STORM DRAIN OUTLET
BANDINI STORM DRAIN OUTLET
141
92B
118B
196
213
111B
168
19
2
16
105
106B
5
266
252
43
44
57B
U1
U2
U3
U4
U5
U6
U7
U9
U10
U12
U14
U15
L1
122
121
143
183
209
P3
P4
250
220
22
67B
267
260B
190
195
192
104
82C
66B
81D
64
83
84
85
86
87
116
263
181
261
47
48
100
65B
68B
151
31
40
130
54
53
238
55
185
38B
34B
45
262
37B
41C
42
80
34°24′
34°12′
34°00′
33°48′
119°00′
118°48′
118°36′
118°24′
118°12′
118°00′
117°48′
117°36′

MAP III

RECORDER STATION RECORDS

STATION F81D-R

ALHAMBRA WASH Near Short Street

LOCATION:

On the left (east) side of channel about 250 feet above Short Street and 2650 feet below Garvey Avenue.
Abandoned stations F81R, F81B-R, and F81C-R were 2650 feet, 4050 feet, and 1750 feet, respectively, upstream from station F81D-R.

DRAINAGE AREA:

14.5 square miles.

CHANNEL AND CONTROL:

Channel-concrete 12.7 feet deep by 40 feet wide.
The invert is 0.5 feet below bottom of vertical side walls.
Channel forms control.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows measured from footbridge at station.

RECORDER:

Installed September 2, 1936, in F.C. standard type house over a 3.25 ft. x 4.0 ft. concrete stilling well.
An Au continuous recorder was in service from October 1, 1938 to September 30, 1939.

REGULATION:

None.

DIVERSIONS:

None.

RECORDS AVAILABLE:

At station F81R January 14, 1930 to September 30, 1934.
At station F81B-R October 1, 1934 to February 25, 1935.
At station F81C-R February 25, 1935 to April 27, 1936.
At station F81B-R April 27, 1936 to May 22, 1936.
At station F81D-R September 2, 1936 to September 30, 1939.

EXTREMES OF DISCHARGE:

1938-1939
Maximum 1760 second-feet January 5.
Minimum no flow most of year.
1929-1939 (at Stations F81R, F81B-R, F81C-R, F81D-R)
Maximum 4890 second-feet January 1, 1934.
Minimum no flow most of each year.

ACCURACY:

Fair.
Estimated by interpolation: February 5 and 6.

OPERATION:

Located and operated and recorder house constructed by the Los Angeles County Flood Control District; the stilling well and communication channel were constructed by U. S. Engineer Department.

F. C. D. FORM 10A 500 8-38

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F81D-R

DISCHARGE MEASUREMENTS OF ALHAMBRA WASH

AT OR NEAR Short Street DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Present Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
56	12-15	Lindsay-Ingram	14.0	1.55	1.11	.14	1.7		.6	5	0	128P / 135P	FC 13
57	12-18	Haig-Tscharner	37.6	20.38	5.24	.74	107.		.6	12	-.21	317A / 333A	FC 38
58	12-19	" "	24.0	3.79	3.34	.41	19.		.6	8	-.02	127P / 135P	"
59	3-10	Haig-Tscharner	23.0	7.77	2.90	.42	23.		.6	6	-.02	158A / 207A	"

F. C. Dist. Form 52

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

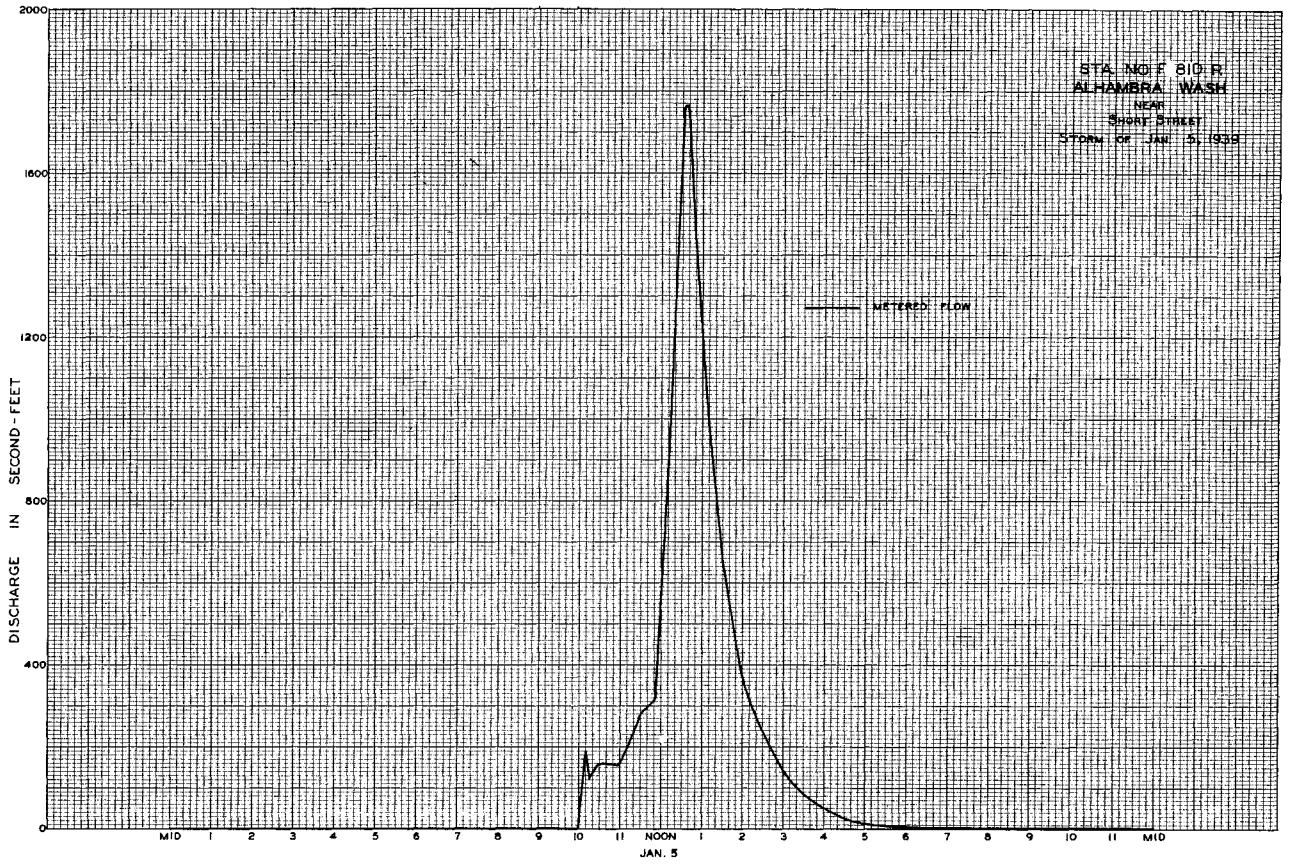
Sta. No. F81D-R

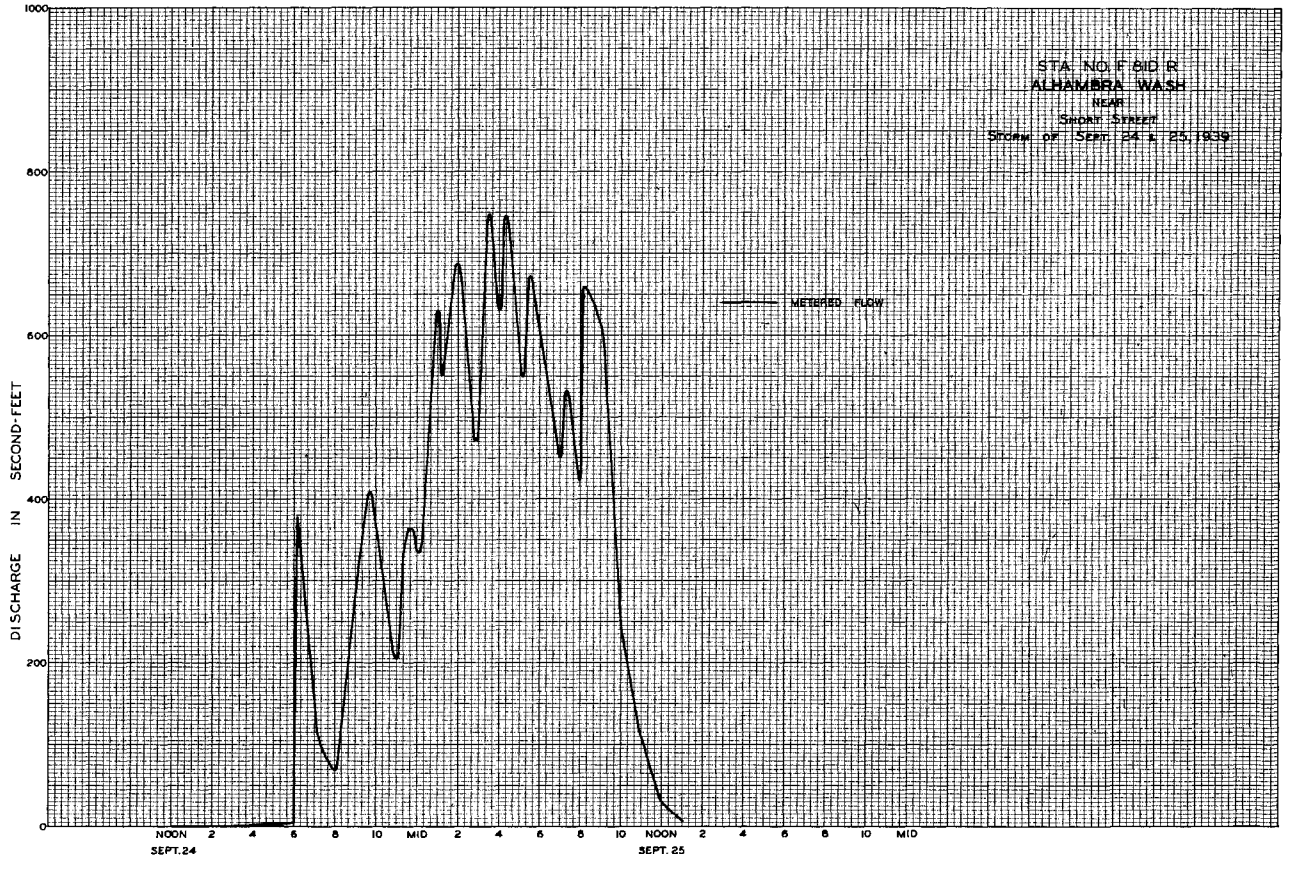
Daily discharge, in second-feet of ALHAMBRA WASH near Short Street for the year ending September 30, 19 39

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0	+	+	+	4.1	+	0.1	0	+	+
2	0	0	0	+	+	1.2	1.4	0.1	0.8	0	+	+
3	0	0	0	0.1	44	1.4	0.1	0.1	2.4	0	+	+
4	0	0	0	0.1	10	+	0.1	+	2.4	0	+	0
5	0	0	0	117	E 0.1	+	0.4	+	2.0	0	+	+
6	0	0	0	0.7	E 0.1	1.8	0.1	+	2.4	0	+	0.1
7	0	0	0	+	0.1	0.6	+	+	1.7	+	+	0.1
8	0	0	0	+	17	2.4	+	+	1.7	+	0.1	+
9	0	0	0	+	0.1	29	+	+	0.2	+	0.2	+
10	0	0	0	+	1.0	5	0.1	+	+	+	0.2	+
11	0	0	0	+	+	+	0.5	+	+	+	0.3	+
12	0	0	0	+	+	+	0.3	+	0	0.2	0.2	+
13	0	0	0	+	0.1	0.1	0.1	1.4	0.1	+	+	0.1
14	0	0	40	+	0.2	0.1	0.1	0.2	0.1	+	0	+
15	0	0	180	+	1.2	2.8	+	0.1	0.2	0.1	+	+
16	0	0	10	+	1.5	2.7	+	0.1	0.2	+	+	+
17	0	0	22	+	0.3	2.8	0.1	0.1	+	+	+	0
18	0	0	288	+	+	0.1	+	0.2	0	0.1	+	+
19	0	0	90	+	0.1	0.1	0.1	0.2	0	0.1	+	+
20	0	0	90	+	0.2	1.3	0.1	0.1	0	0.1	+	0.1
21	0	0	2.3	104	0.1	0.4	0.1	+	0.1	0.2	+	+
22	0	0	+	0.2	0.1	0.4	0.1	0.1	+	+	0.1	+
23	0	0	+	+	0.1	0.1	+	0.3	0	+	0.1	+
24	0	0	+	+	0.1	0.1	0.1	0.1	0	+	0.1	62
25	0	0	+	+	+	0.1	0.5	0.1	0	+	+	260
26	0	0	+	+	+	14	0.5	0.1	0	0.1	+	14
27	0	0	+	+	+	20	0.5	+	0	0.1	+	+
28	0	0	+	+	+	0.1	0.5	+	0	0.1	+	+
29	0	0	0.3	+		0.1	+	+	0	0.1	+	+
30	0	0	0.1	23		0.1	+	+	0	0.1	+	+
31	0		+	0.1		0.1		+		+	+	
	0	0	722.7	245.2	76.4	86.9	22.5	3.3	14.4	1.3	1.3	336.4
MEAN	0	0	23.3	7.91	2.72	2.80	.75	.11	.48	.04	.04	11.2
ACRE-FEET	0	0	1430	486	151	172	45	6.6	29	2.6	2.6	667

Remarks: + indicates discharge 0.05 sec. ft. or less.
E-discharge estimated - see station description.

YEAR OR PERIOD MEAN 4.14
ACRE-FEET 2990


STA. NO. F 81D R
ALHAMBRA WASH
NEAR
SHORT STREET
STORM OF JAN. 5, 1938
METERED FLOW
DISCHARGE IN SECOND-FEET
2000
1600
1200
800
400
0
MID 1 2 3 4 5 6 7 8 9 10 11 NOON 1 2 3 4 5 6 7 8 9 10 11 MID
JAN. 5


STA. NO. F 81D R
ALHAMBRA WASH
NEAR
SHORT STREET
STORM OF SEPT. 24 & 25, 1939
METERED FLOW
DISCHARGE IN SECOND-FEET
1000
800
600
400
200
0
NOON 2 4 6 8 10 MID 2 4 6 8 10 NOON 2 4 6 8 10 MID
SEPT. 24
SEPT. 25

STATION F38B-R

BALLONA CREEK at Sawtelle Boulevard

LOCATION:

On the downstream end of center pile bent of Sawtelle Boulevard bridge over Ballona Creek near Culver City. Former station F38R was at Centinela Boulevard, 1 mile downstream.

DRAINAGE AREA:

111 square miles.

CHANNEL AND CONTROL:

Channel-heavy adobe overlaid with coarse gravel, and sand,with rock paved levees on a 3 to 1 slope. Channel forms control.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows measured from cable car above station.

RECORDER:

Installed at station F38R February 27, 1928. Recorder removed April 27, 1936.
Installed at station F38B-R May 14, 1936 in an F. C. standard recorder house over an 18 inch diameter, corrugated iron pipe stilling well. An Au continuous recorder was in service from October 1, 1938 to September 30, 1939.

REGULATION:

Stone Canyon Reservoir, Upper and Lower Franklin Canyon Reservoirs, Hollywood Reservoir and Silver Lake Reservoir.

DIVERSIONS:

Some small diversions for irrigation.

RECORDS AVAILABLE:

At station F38R:
February 27, 1928 to April 27, 1936.
At station F38B-R:
May 14, 1936 to September 30, 1939.

EXTREMES OF DISCHARGE:

1938-1939
Maximum 9900 second-feet December 17.
Minimum no flow June 23.
1928-1939(Stations F38R and F38B-R)
Maximum 19000 second-feet March 2, 1938.
Minimum no flow at various times.

ACCURACY:

Fair. Well frequently obstructed by sand following storms.
Estimated by interpolation: December 16, 18, 19, January 6, and 22.

OPERATION:

Located and constructed by the Los Angeles County Flood Control District and operated in co-operation with the U. S. Engineer Department and with the U.S.G.S. Water Resources Branch.

F. C. D. FORM 104 500 6-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F38B-R

DISCHARGE MEASUREMENTS OF BALLONA CREEK

AT Sawtelle Boulevard DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Factor Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
180	10-6	Moon	16.5	6.86	1.19	2.46	8.2		.6	7	0	805A / 825A	FC 22
181	10-13	"	14.0	4.41	.95	2.36	4.2		.6	7	0	1011A / 1021A	"
182	10-20	"	14.5	4.71	.89	2.35	4.2		.6	7	-.01	936A / 950A	"
183	10-27	"	14.0	5.00	.95	2.36	4.8		.6	6	0	1005A / 1015A	"
184	11-3	"	14.0	5.00	.62	2.33	3.1		.6	6	-.06	1000A / 1010A	"
185	11-10	"	13.5	4.57	.58	2.34	2.6		.6	6	0	1123A / 1135A	"
186	11-17	"	13.0	4.43	.92	2.35	4.1		.6	5	-.02	1015A / 1020A	"
187	11-23	"	13.5	4.92	1.00	2.41	4.9		.6	6	+.02	300P / 310P	"
188	12-1	"	13.7	5.88	1.20	2.46	7.1		.6	6	0	950A / 1000A	"
189	12-8	"	13.0	4.51	.96	2.39	4.4		.6	5	0	955A / 1000A	"
190	12-14	"	47.0	52.0	1.90	3.18	99.		.6	11	-.05	1227P / 1240P	"
191	12-14	Moon-Andren	72.0	126.0	2.90	4.10	365.		.6	5	-	1140P / 1150P	-
192	12-15	Moon	39.0	29.5	2.42	2.98	71.		.6	6	-.04	142P / 155P	FC 22
193	12-15	Moon-Finney	110.	310.	5.70	8.60	1770.		.6	5	-.20 +.30	412P / 434P	"
194	12-15	U.S.E.D. #2	118.	752.	8.34	10.35	6270.		.6	10	+0.4 -2.4	620P / 727P	35633
195	12-16	Moon	22.0	10.3	1.28	2.40	13.		.6	7	-.01 -.50	302P / 314P	FC 22
196	12-18	Moon-Mellen	93.0	314.	4.83	6.64	1510.		.6	5	+.30	125A / 150A	"

F. C. D. FORM 104 500 6-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F38B-R

DISCHARGE MEASUREMENTS OF BALLONA CREEK

AT Sawtelle Boulevard DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Factor Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
197	12-18	U.S.E.D. #3	93.	295.	6.09	6.27	1800.		.6	9	-.77	755A / 825A	35633
198	12-18	U.S.E.D. #4	94.	338.	6.35	6.48	2150.		.6	9	-1.65	455P / 535P	"
199	12-18	U.S.E.D. #5	104.	453.	7.74	7.61	3510.		.6	10	+.20 -.40	800P / 835P	"
200	12-18	Moon-Mellen	91.0	271.	5.15	6.85	1400.		.6	5	+1.50	923P / 940P	"
201	12-18	U.S.E.D. #6	114.	705.	8.25	9.42	5820.		.6	11	+.85 -.20	1006P / 1043P	"
202	12-19	U.S.E.D. #7	110.	584.	8.00	8.60	4670		.6	11	+1.97 -.20	540A / 611A	"
203	12-19	U.S.E.D. #8	111.	579.	7.95	8.80	4610.		.6	11	+.02 -.83	617A / 646A	35633
204	12-19	Moon-Mellen	103.	404.	6.83	7.90	2760.		.6	6	-1.00	650A / 703A	FC 22
205	12-19	U.S.E.D. #9	103.	509.	6.59	7.38	3360.		.6	10	-1.23	425P / 449P	35633
206	12-19	Moon-Middleton	58.5	42.9	2.51	3.07	108.		.6	7	-.05	937P / 948P	FC 22
207	12-20	" "	63.0	75.9	2.76	3.48	212.		.6	7	+.40	930A / 940A	"
208	12-20	U.S.E.D. #10	80.0	183.	4.81	5.22	882.		.6	8	-.35	229P / 250P	35633
209	12-21	Moon-Middleton	24.0	10.8	1.81	2.52	20.		.6	6	-.04	840A / 850A	FC 22
210	12-22	Moon	21.0	7.64	1.49	2.42	11.		.6	5	+.05	1000A / 1008A	"
211	12-29	"	16.0	5.51	.96	2.25	5.4		.6	6	0	945A / 955A	"
212	1-5	Moon-Middleton	82.	216.	5.08	5.32	1090.		.6	6	+.40	1012A / 1037A	"
213	1-5	U.S.E.D. #11	108.	593.	7.48	8.60	4430.		.6	10	+1.0 -.43	1232P / 110P	35633
214	1-6	Moon-Middleton	19.3	7.93	1.13	2.39	9.1		.6	6	0	847A / 857A	FC 22
215	1-12	Moon	18.4	6.91	.94	2.34	6.5		.6	7	0	1121A / 1134A	"
216	1-19	"	19.0	6.35	.82	2.31	5.2		.6	9	-.02	1026A / 1037A	"
217	1-21	"	82.	186.	4.01	5.45	747.		.6	5	-.70	510A / 532A	"
218	1-21	U.S.E.D. #12	117.	634.	8.55	9.30	5420		.6	12	-.50	709A / 746A	35633
219	1-21	U.S.E.D. #13	101.	395.	6.92	7.15	2730.		.6	10	+.10 -.10	1025A / 1052A	"
220	1-21	U.S.E.D. #14	93.	351.	6.27	6.60	2200.		.6	10	-.30	352P / 411P	"
221	1-26	Moon	19.0	6.53	1.09	2.38	7.1		.6	8	0	1225P / 1235P	FC 22
222	1-30	Moon-Middleton	87.0	287.	4.81	5.76	1380.		.6	6	-.40	700P / 726P	"
223	2-2	Moon	17.9	5.28	1.29	2.35	6.8		.6	7	-.02	1135A / 1146A	"
224	2-3	U.S.E.D. #15	105.	462.	7.29	7.81	3360.		.6	10	-.05	705A / 740A	35633
225	2-3	U.S.E.D. #16	88.	267.	4.62	5.69	1230.		.6	9	-.55	843A / 901A	"
226	2-3	Moon-Middleton	70.0	131.	2.87	3.97	389.		.6	7	-.25	1019A / 1037A	FC 22
227	2-4	Moon-Middleton	43.0	24.6	1.99	2.74	49.		.6	9	0	1029A / 1039A	FC 22
228	2-9	Moon	27.0	7.61	1.28	2.37	9.7		.6	10	-.02	1035A / 1050A	"
229	2-10	"	43.0	19.7	1.98	2.59	39.		.6	10	+.08	922A / 937A	"
230	2-16	"	13.0	3.69	1.30	2.25	4.8		.6	4	0	1015A / 1020A	"
231	2-23	"	10.0	3.19	1.14	2.20	3.6		.6	5	0	1033A / 1040A	"
232	3-2	"	10.0	2.89	.90	2.20	2.7		.6	5	0	935A / 940A	"
233	3-9	"	43.0	26.1	2.19	2.68	57.		.6	9	0	948A / 1003A	"
234	3-9	U.S.E.D. #17	103.	461.	6.79	7.80	3130.		.6	10	-1.30	950P / 1011P	35633
235	3-10	Moon-Middleton	43.0	18.9	1.47	2.54	28.		.6	9	0	920A / 934A	FC 22
236	3-16	Moon	9.0	3.95	1.36	2.27	5.4		.6	7	-.02	944A / 954A	"
237	3-23	"	10.0	5.11	1.84	2.34	9.4		.6	5	0	1015A / 1025A	"
238	3-26	"	53.	77.5	2.86	3.49	222.		.6	7	+.04	131P / 141P	"
239	3-26	Moon-Kinney	70.	98.5	3.22	3.84	319.		.6	5	-.15	522P / 532P	"
240	3-27	Moon-Middleton	69.	84.7	3.30	3.63	280.		.6	5	+.03	610A / 620A	"
241	3-27	" "	70.	134.	4.13	4.30	553.		.6	7	+.08 -.06	725A / 740A	"
242	3-27	" "	29.	14.6	1.95	2.47	27.		.6	7	0	223P / 230P	"
243	3-30	Moon	13.0	5.08	1.32	2.22	6.7		.6	6	0	841A / 849A	"
244	4-2	"	16.0	6.10	1.49	2.26	9.1		.6	6	0	428P / 437P	"
245	4-6	"	11.0	4.75	.85	2.20	4.0		.6	5	0	900A / 905A	"
246	4-13	"	13.0	7.34	1.46	2.33	11.		.6	7	0	957A / 1007A	"
247	4-20	"	11.0	6.05	.97	2.24	5.9		.6	6	-.01	922A / 931A	"
248	4-27	"	20.5	7.36	1.64	2.32	12.		.6	9	0	512P / 525P	"
249	5-4	"	12.0	6.18	.53	2.18	3.3		.6	7	0	955A / 1005A	"
250	5-11	"	11.0	6.79	1.28	2.27	8.7		.6	8	0	921A / 935A	"

F. C. D. FORM 104 500 8-38

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F38B-R

DISCHARGE MEASUREMENTS OF BALLONA CREEK

AT Sawtelle Boulevard NEAR DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Curve Diff.	RSHM	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
251	5-18	Moon	21.5	12.8	1.54	2.43	30.		.6	9	-.04	936A / 953A	FC 22
252	5-25	"	9.0	5.25	.61	2.24	3.2		.6	7	0	947A / 1000A	"
253	5-31	"	10.0	5.86	.73	2.25	4.3		.6	7	+.02	936A / 948A	"
254	6-8	"	9.0	4.88	.81	2.25	4.0		.6	7	0	1048A / 1057A	"
255	6-15	"	8.0	4.42	.78	2.20	3.4		.6	6	0	959A / 1009A	"
256	6-22	"	10.0	5.38	.98	2.28	5.3		.6	8	0	1145A / 1158A	"
257	6-29	"	14.5	6.12	1.01	2.33	6.2		.6	8	-.06	947A / 958A	"
258	7-6	Bonadiman	16.	4.11	.70	2.19	2.9		.6	5	0	1000A / 1010A	FC 40
259	7-13	"	14.	3.24	.66	2.20	2.1		.6	4	0	1100A / 1110A	"
260	7-20	Moon	10.0	4.26	.69	2.19	3.0		.6	7	-.02	1032A / 1042A	FC 22
261	7-27	"	10.0	4.82	.75	2.24	3.6		.6	7	0	1022A / 1030A	"
262	8-3	"	10.0	4.45	.66	2.24	2.9		.6	8	-.02	922A / 936A	"
263	8-10	"	10.5	5.19	1.06	2.31	5.5		.6	8	-.06	856A / 909A	"
264	8-17	"	22.0	13.63	1.93	2.65	26.		.6	9	-.06	1032A / 1047A	"
265	8-24	"	22.0	16.57	2.26	2.78	37.		.6	9	0	928A / 940A	"
266	8-31	"	10.0	5.81	1.34	2.36	7.8		.6	7	+.01	1123A / 1131A	"
267	9-7	"	9.5	5.07	.83	2.30	4.2		.6	7	+.05	1107A / 1119A	"
268	9-14	"	8.5	3.99	.82	2.22	3.3		.6	8	0	910A / 920A	"
269	9-21	"	21.0	16.19	2.10	2.71	34.		.6	8	+.34	559P / 610P	"
270	9-25	"	129.0	904.5	7.00	11.33	6338.		.6	7	+.65	625A / 707A	FC 36
271	9-25	"	125.0	896.0	9.32	10.94	8350.	Surf.	.6	9	-1.50	809A / 902A	"
272	9-26	"	27.	20.25	1.43	2.44	29.		.6	10	0	906A / 919A	"
273	9-28	"	11.	5.85	1.56	2.08	9.1		.6	8	0	938A / 949A	"

Y. C. Dec. Form 13

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

Sta. No. F38B-R

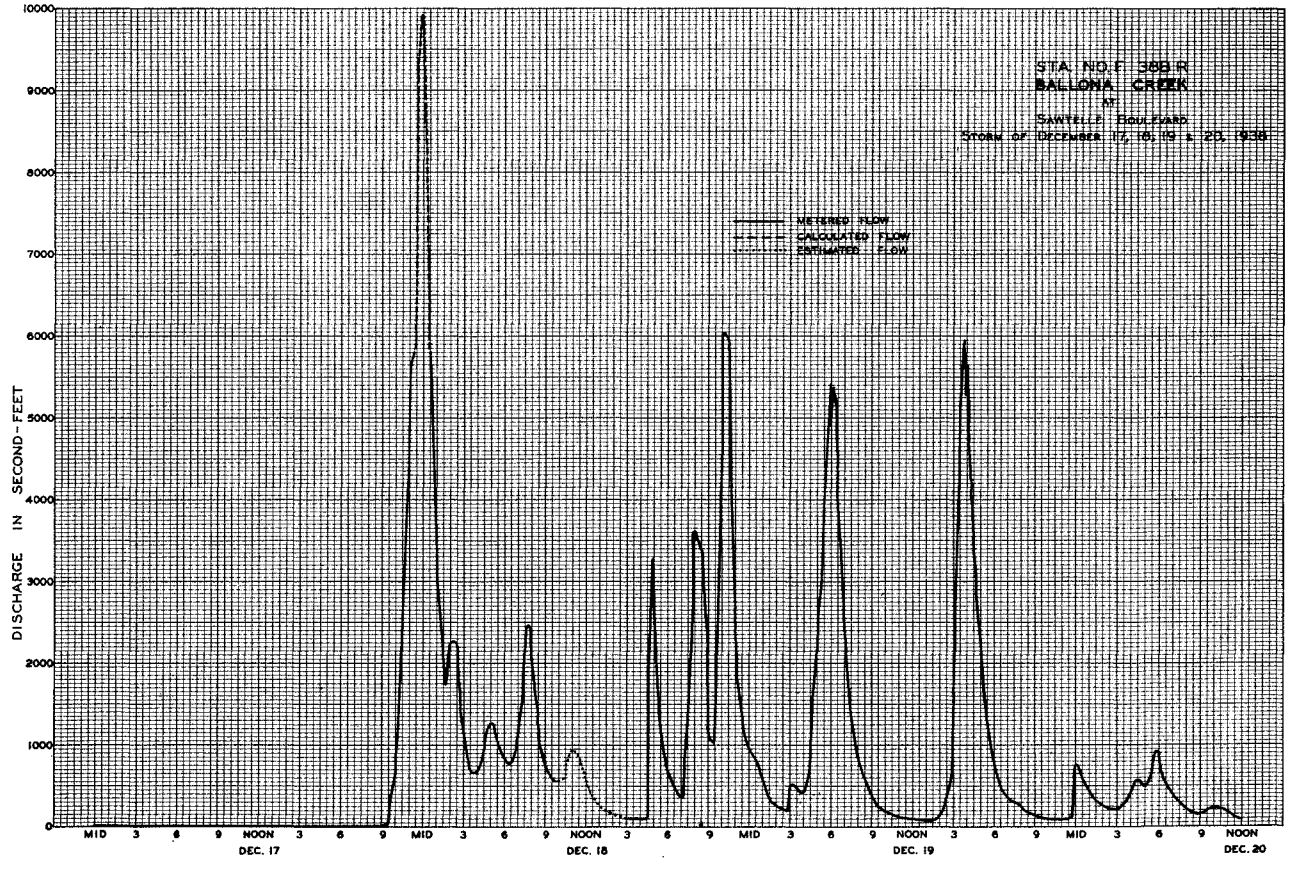
for the year ending September 30, 19 39

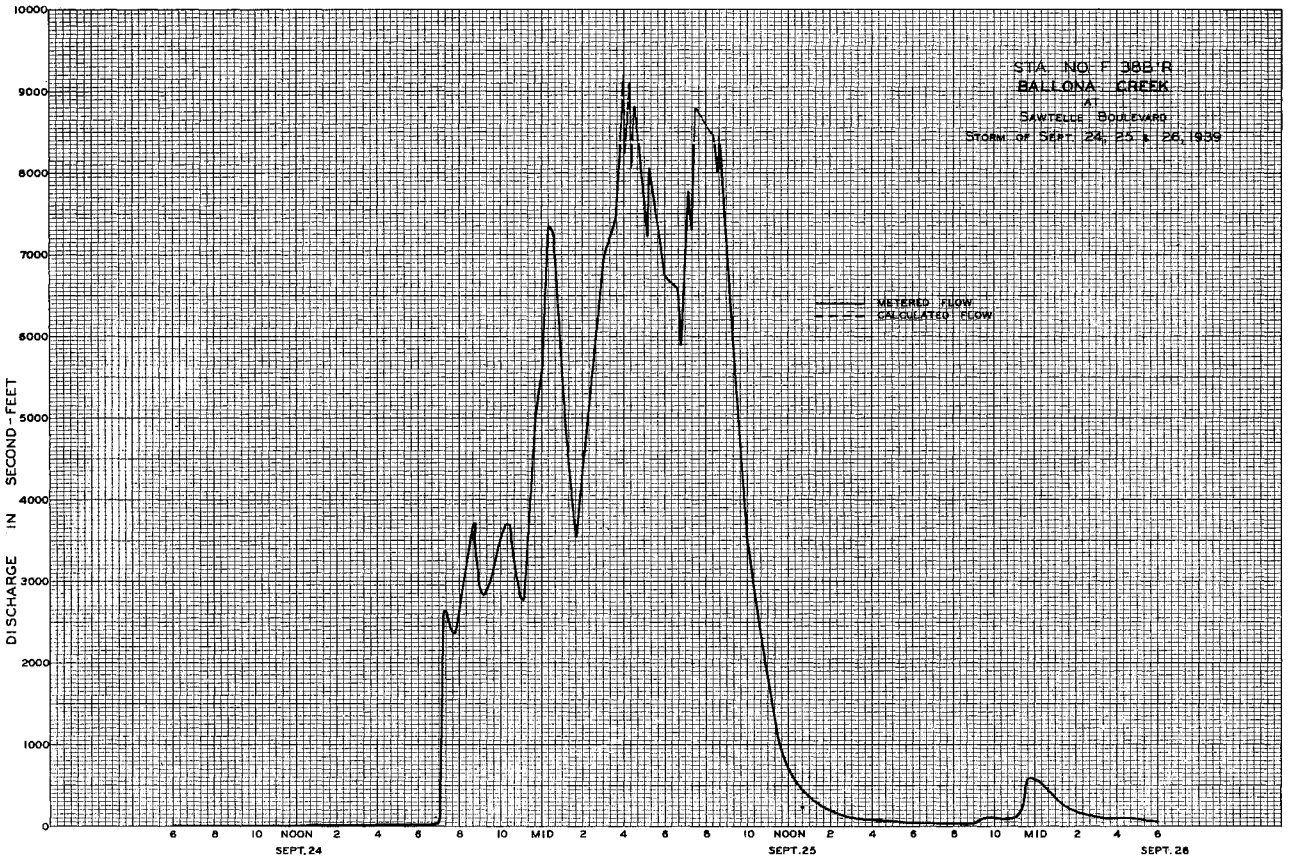
Daily discharge, in second-feet of BALLONA CREEK at Sawtelle Boulevard.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.3	3.9	7	5	10	4.6		10	6	7	11	6.5
2	3.2	3.9	7	11	65	5	8	8	7	5	8.5	7
3	3.7	4.6	6.5	5.5	390	11	51	5	7	6	7.5	6
4	5.5	5	4.6	6.5	71	18	6	9.5	5.5	7	8	6
5	7	5.5	6	42.5	37	37	6	8.5	6	8	6	8.5
6	7	4.3	6	9.5	8	46	5	7	8.5	9	3.6	7
7	6.5	3.9	5.5	6.5	9.5	53	5.5	4.3	8.5	9	11	6.5
8	6.5	4.3	5.5	8	88	59	6	9	6.5	8.5	10	6.5
9	7	3.9	4.6	8	9	399	6	9	7	5.5	12	6.5
10	7	3.9	5.5	8	22	79	8	11	8	8	11	3.9
11	6.5	3.9	9	7	9.5	59	9	7	8.5	7	8.5	5.5
12	5	4.3	5.5	8	8	50	8.5	11	8	6.5	5.5	5.5
13	5	3.6	5	9	9	24	7	9.5	7	4.3	3.9	5.5
14	5	5	2.6	9	8.5	13	10	7	7	6.5	6.5	5.5
15	5	5	10.3	7	8	12	8	12	7	5.5	6.5	8.5
16	4.6	5.5	6.2 E	7	5.5	9	5.5	18	6	9	5	5.5
17	5	5.5	4.4 E	6.5	5	11	7	7	7	8.5	13	5.5
18	5	6	14.9 E	6.5	7	11	7	9.5	8	6.4	6.5	6.5
19	5	5	10.5 E	5.5	5.5	5.5	7	9	5.9	3.9	4.6	12
20	6.5	4.6	3.2 E	5.5	6	5.5	9	5.5	5.5	5.5	4.6	9.5
21	8.5	5	4.2	13.4 E	5	6.5	10.5	5	1.8	5.5	11	12
22	6	6.5	8.5	3.2 E	4.6	8	8.5	7	2.1	5.5	11	9.5
23	4.6	6	4.3	1.4	4.6	7	8	8.5	2.1	4.3	10	8.5
24	5	3.9	4.3	1.0	6	9.5	10	6.5	2.9	5	13	6.8
25	6	5	3.6	8.5	6.5	9.5	12	4.6	4.3	5.5	2.5	3.0
26	5.5	5	3.9	8	4.3	6.2	10	8.7	2.5	7	6.5	6.4
27	6	5	5.5	8	4.6	8.9	10	7	1.8	6	10	9
28	5.5	5	5.5	8	5.5	8	9	6	4.3	9	11.5	9.5
29	5.5	6	5.5	7		7.5	8.5	6	9.5	9.5	8.5	6.5
30	4.3	5.5	6	13.2		6.5		7	12	7.5	4.3	12
31	4.6		6	17		6.5		7		10	6	
	171.8	145.6	4823.8	2150.0	735.1	1129.6	278.5	257.4	179.2	210.4	261.9	402.9
Mean	5.54	4.85	156	69.4	26.2	36.4	9.28	8.30	5.97	6.79	8.45	134
Acre-Feet	341	289	9570	4260	1460	2240	552	511	355	417	519	7980

Mean for Year or Period: 39.4 Acre-Feet: 28490

Remarks: E indicates discharge estimated - see station description.





STATION F111B-R

BIG TUJUNGA CREEK above Edison Road

LOCATION:

On the right (northwest) bank 400 feet above Edison Road, about 4 miles above Big Tujunga Dam No. 1. Former Station F111R was about 300 feet downstream.

DRAINAGE AREA:

67 square miles.

CHANNEL AND CONTROL:

Channel-gravel and boulders.
No artificial control.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows measured from cable car at station.

RECORDER:

Installed on November 30, 1930 to Station F111R; removed August 17, 1932.
Installed on September 15, 1932 at Station F111B-R in a standard F. C. type house over a 24 inch diameter corrugated iron pipe stilling well.
An Au continuous recorder was in service from October 1, 1938 to September 30, 1939.

REGULATION:

None.

DIVERSIONS:

None.

RECORDS AVAILABLE:

At Station F111R:
November 30, 1930 to August 17, 1932.
At Station F111B-R:
September 15, 1932 to September 30, 1939.

EXTREMES OF DISCHARGE:

1938-1939
Maximum 543 second-feet December 19.
Minimum .8 second-foot at various times.
1930-1939 (Stations F111R and F111B-R)
Maximum not determined March 2, 1938.
Minimum no flow at various times.

ACCURACY:

Fair.
Estimated by interpolation: December 24 to 27, and February 16 to 22.

OPERATION:

Located, constructed and operated by the Los Angeles County Flood Control District in co-operation with the U.S.G.S. Water Resources Branch.

F. C. D. FORM 104 500 8-38

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F111B-R

DISCHARGE MEASUREMENTS OF BIG TUJUNGA CREEK

AT OR NEAR above Edison Road DURING THE YEAR ENDING SEPTEMBER 30, 1939

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET.	DISCHARGE SEC. FT.	Rating Factors Eff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
174	10-6	Lind	9.1	3.82	1.29	6.09	4.9		.6	10	0	852A 903A	FC19
175	10-13	Turner	8.5	4.01	1.06	6.08	4.2		.6	8	0	945A 956A	"
176	10-20	"	9.0	4.03	1.16	6.10	4.7		.6	8	0	1150A 1159A	FC5
177	10-27	"	8.8	3.71	1.15	6.08	4.3		.6	8	0	200P 210P	"
178	11-3	"	9.0	4.06	1.30	6.10	5.3		.6	9	0	155P 208P	"
179	11-10	"	9.0	4.16	1.35	6.11	5.6		.6	9	0	130P 140P	"
180	12-2	Bollinger	9.0	4.25	1.30	6.13	5.5		.6	8	0	1157A 1205P	FC6
181	12-7	"	9.4	4.15	1.20	6.13	5.0		.6	8	0	1019A 1027A	"
182	12-21	Bollinger-Lewis	32.0	21.	3.00	6.85	63.		.6	8	0	1248P 100P	FC31
183	12-27	Bollinger	18.4	10.12	1.76	6.21	18.		.6	11	0	333P 343P	FC6
184	1-3	Turner	19.0	5.87	2.16	6.29	13.		.6	10	0	107P 122P	FC5
185	1-10	"	18.0	7.30	2.33	6.28	17.		.6	10	0	200P 210P	"
186	1-18	"	19.0	5.29	2.43	6.37	13.		.6	10	0	920A 930A	"
187	1-24	"	19.0	6.27	2.64	6.42	17.		.6	10	0	255P 307P	"
188	2-1	"	19.0	6.01	2.56	6.40	15.		.6	11	0	1110A 1125A	"

L. C. D. FORM 104 500 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F111B-R

DISCHARGE MEASUREMENTS OF BIG TUJUNGA CREEK

AT above Edison Road DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Current (per cent)	Method	MEAS SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
189	2-7	Turner	19.0	6.08	2.70	6.42	16.		.6	11	0	1040A 1050A	FC 5
190	2-15	"	18.5	7.21	2.80	6.32	20.		.6	10	0	945A 955A	"
191	2-23	"	17.0	6.97	2.18	6.22	15.		.6	10	0	1015A 1025A	"
192	3-2	"	17.0	6.25	1.89	6.15	12.		.6	10	0	950A 1000A	"
193	3-9	"	16.8	6.49	1.86	6.14	12.		.6	10	0	130P 140P	"
194	3-10	"	19.0	10.08	2.58	6.38	26.		.6	11	0	1110A 1120A	"
195	3-16	"	17.7	8.21	2.23	6.22	18.		.6	10	0	1015A 1027A	"
196	3-23	"	17.5	6.85	1.98	6.16	14.		.6	10	0	1120A 1130A	"
197	3-27	Turner-Gorsline	18.5	9.93	2.57	6.32	26.		.6	10	0	1140A 1152A	"
198	3-30	Turner	17.0	7.32	1.99	6.15	15.		.6	10	0	1015A 1025A	FC 5
199	4-6	"	17.0	6.35	1.91	6.15	12.		.6	10	0	950A 1000A	"
200	4-13	"	17.0	5.55	1.84	6.12	10.		.6	10	0	950A 1000A	"
201	4-18	"	17.0	5.71	1.60	6.05	9.1		.6	10	0	1135A 1145A	"
202	4-28	"	17.0	5.06	1.40	6.01	7.1		.6	10	0	1155A 1205P	"
203	5-5	"	17.0	4.97	1.46	5.99	7.3		.6	10	0	1005A 1015A	"
204	5-12	"	15.0	5.06	1.43	5.98	7.2		.6	8	0	945A 955A	"
205	5-19	"	14.5	4.96	1.29	5.96	6.4		.6	8	0	1045A 1055A	"
206	5-26	"	9.0	3.25	1.40	5.88	4.6		.6	10	0	250P 300P	"
207	6-1	Moon	8.5	3.08	1.25	5.86	3.8		.6	8	0	152P 202P	FC 23
208	6-8	Turner	8.5	2.99	1.24	5.85	3.7		.6	9	0	1215P 1225P	FC 5
209	6-15	"	7.5	2.65	1.32	5.84	3.5		.6	8	0	915A 925A	"
210	6-21	"	7.5	2.71	1.20	5.84	3.2		.6	8	0	955A 1005A	"
211	6-29	"	7.5	2.55	.91	5.79	2.3		.6	8	0	950A 1000A	"
212	7-5	Bollinger	7.3	2.70	.89	5.78	2.4		.6	8	0	1210P 1217P	FC 6
213	7-27	Turner-Miller	8.0	2.46	.69	5.74	1.7		.6	8	0	1050A 1100A	FC 5
214	8-21	Turner	7.0	1.84	.59	5.70	1.1		.6	7	0	200P 210P	"
215	9-27	"	16.0	5.25	2.56	6.54	13.		.6	9	0	1205P 1215P	"

F. C. Dist. Form 58

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

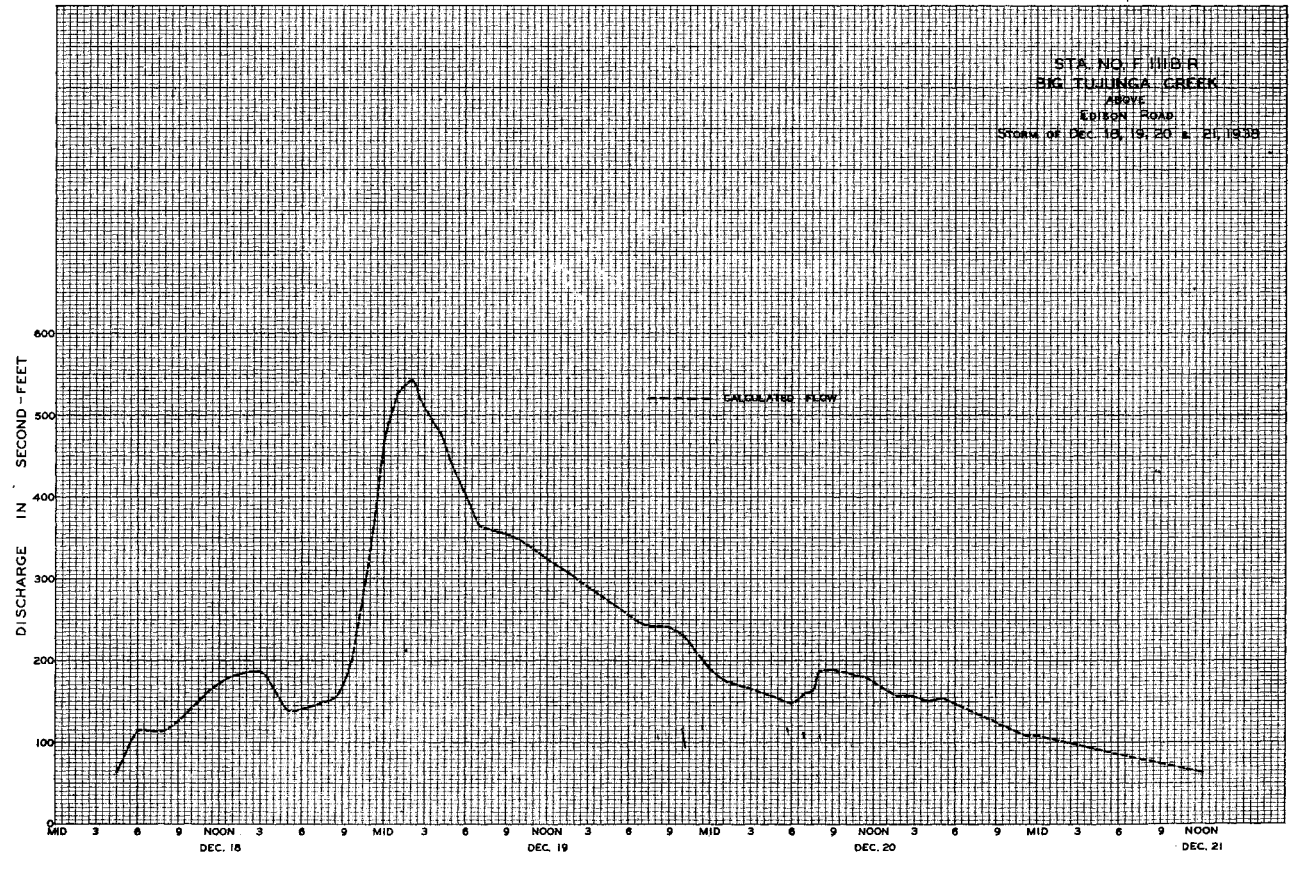
Sta. No. F111B-R

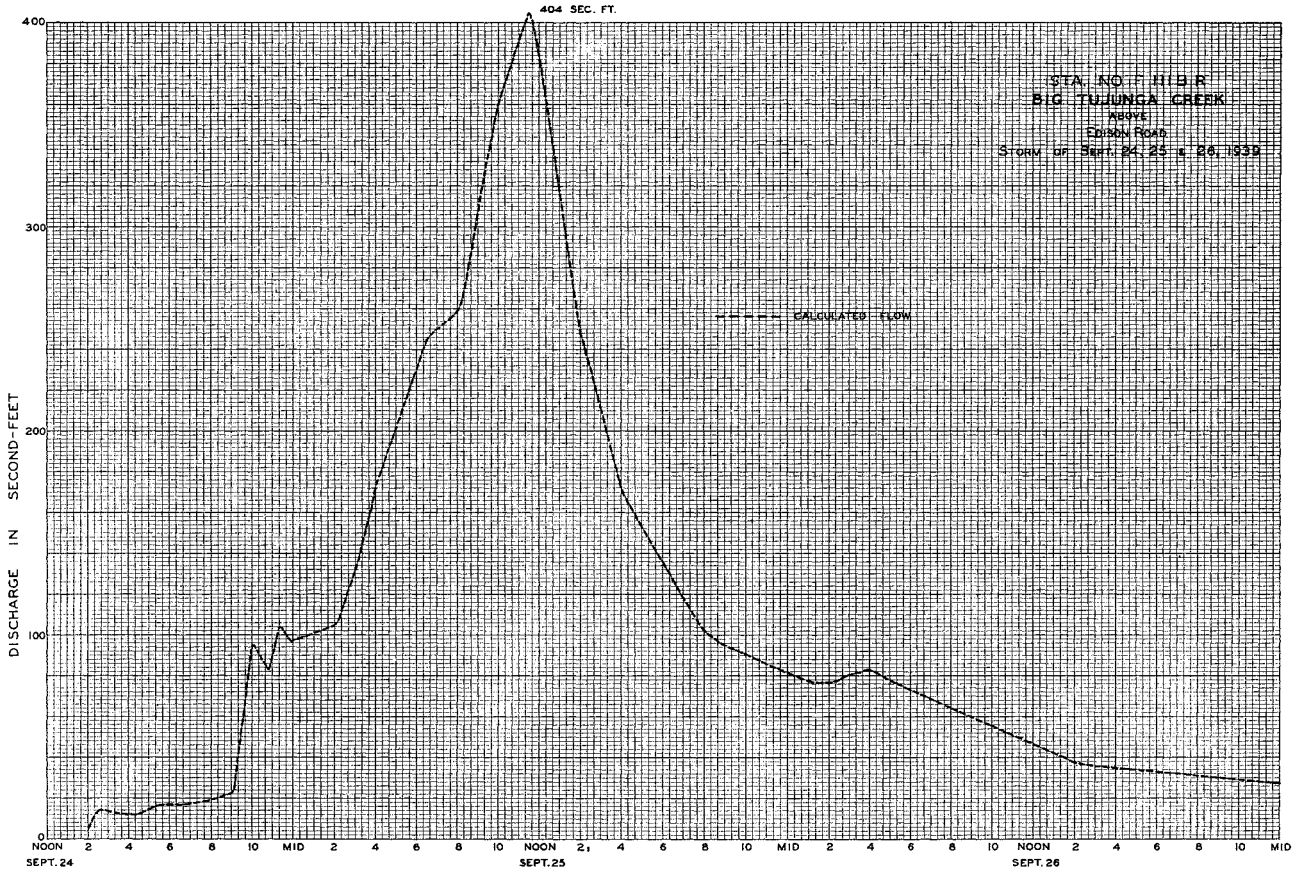
Daily discharge, in second-feet of BIG TUJUNGA CREEK above Edison Road for the year ending September 30, 1939

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.8	5	5.5	14	16	12	14	7	4.2	1.8	1.4	10
2	3.8	5	5	13	15	11	18	7	3.4	1.8	1.4	10
3	4.0	5	5	12	16	11	16	6.5	3.2	2.0	1.4	11
4	4.0	5	4.8	13	17	11	14	6.5	3.2	2.2	1.4	12
5	4.2	4.8	4.8	51	16	11	12	6.5	3.4	2.2	1.2	14
6	4.5	4.8	4.5	34	15	11	12	7	3.8	2.2	1.2	15
7	4.8	4.8	4.8	28	16	11	12	6.5	3.5	2.2	1.4	15
8	4.8	5	5	25	20	11	11	6	3.2	2.0	1.2	15
9	4.2	5	5	21	19	21	11	6	3.2	1.9	1.1	14
10	4.2	5	6	18	20	34	9.5	6	3.0	1.9	1.1	14
11	3.8	5.5	6	18	20	22	9.5	6.5	2.8	1.9	1.1	15
12	3.6	5.5	6	20	20	22	8.5	7	2.5	1.8	1.0	15
13	4.2	5.5	6	19	19	22	10	9	2.4	1.8	0.9	18
14	4.2	5	9.5	18	19	20	11	8.5	2.5	1.6	0.9	15
15	5	5	8.4	17	20	18	10	7.5	2.5	1.6	0.9	15
16	5	5.5	4.2	16	E	19	9	7	3.0	1.5	0.9	14
17	5	5.5	2.6	14	E	18	9	6.5	3.0	1.5	1.0	14
18	5	5	1.45	13	E	17	8.5	6	2.8	1.6	1.1	15
19	4.8	5	3.45	13	E	16	8.5	6	2.4	1.5	1.1	14
20	4.2	5	1.54	13	E	17	8.5	6	2.4	1.5	1.1	19
21	4.2	5	2.0	15	E	15	7.5	6	2.6	1.5	1.1	18
22	4.2	5	7.1	21	16	15	7.5	6	2.2	1.5	1.0	16
23	4.2	5	2.8	20	16	14	8	6	2.2	1.5	1.1	15
24	4.2	5	2.6	17	15	13	8	5.5	2.2	1.4	1.2	16
25	4.0	5	2.2	15	15	12	7.5	5	2.2	1.4	1.2	197
26	4.0	4.8	2.0	15	14	16	7	5	2.2	1.4	1.2	52
27	4.0	4.8	1.9	15	13	24	7	4.8	2.2	1.4	1.1	14
28	4.0	4.8	1.7	15		20	7	4.5	2.2	1.4	1.0	8.5
29	4.5	5	1.5	15		17	7	4.5	2.0	1.5	0.9	6.5
30	4.5		1.5	15		14	7	4.5	1.9	1.4	0.9	5.5
31	4.5		1.5	16		13		4.5		1.4	0.9	
	1326	1508	1649	574	475	505	295.5	191.8	82.5	52.5	34.4	333.1

MEAN	4.28	5.03	37.6	18.5	17.0	16.3	9.85	6.19	2.75	1.69	1.11	11.1	
ACRE FEET	263	299	2310	1140	942	1000	586	380	164	104	68	661	MEAN 10.9
													YEAR OR PERIOD ACRE FEET 7920

Remarks: E indicates discharge estimated - see station description.





STATION F168R

BIG TUJUNGA CREEK below Big Tujunga Dam #1

LOCATION:

On the right (northwest) side of Big Tujunga Creek, 2800 feet below Big Tujunga Dam No. 1, and about 12 miles northeast of Sunland.

DRAINAGE AREA:

81.7 square miles.

CHANNEL AND CONTROL:

Channel-gravel and boulders.
No artificial control.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows measured from cable car above station.

RECORDER:

Installed on November 8, 1932. Washed out during the March 2, 1938 storm.
Installed on May 31, 1938 in a standard F. C. type concrete house over a 4 ft. x 4 ft. concrete well in approximately the same location as the old well.
An Au continuous recorder was in service from October 1, 1938 to September 30, 1939.

REGULATION:

Flow partially regulated by Big Tujunga Dam No. 1.

DIVERSIONS:

None.

RECORDS AVAILABLE:

Stream measurements from December 8, 1931 to November 7, 1932 and January 20, 1938 to May 29, 1938; recorder records from November 8, 1932 to January 13, 1938 and from May 31, 1938 to September 30, 1939.

EXTREMES OF DISCHARGE:

1938-1939
Maximum 424 second-feet, December 23.
Minimum 0.7 second-foot various times.
1932-1939
Maximum 33000 second-feet, estimated, March 2, 1938.
Minimum no flow several days in October, 1936.

ACCURACY:

Fair.
Due to excessive silt content, during periods of slucing at the dam, communication to stilling well was poor.
Estimated by interpolation: October 1 to November 7 (inclusive). November 11, 12, 13, 26 and 27. December 2 to 14 and 21, 22.

OPERATION:

Located, constructed and operated by the Los Angeles County Flood Control District.

F. C. D. FORM 104 500 8-38

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F168R

DISCHARGE MEASUREMENTS OF BIG TUJUNGA CREEK

AT OR NEAR below Big Tujunga Dam No. 1 DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Tenths Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
263	10-6	Lind	8.0	3.77	1.88	4.80	7.1		.6	9	+.01	202P 215P	FC 19
264	10-13	Lind-Turner	8.0	3.77	1.69	4.78	6.3		.6	9	+.01	138P 147P	"
265	10-20	Turner	8.0	3.70	1.69	4.78	6.3		.6	8	0	310P 320P	FC 5
266	10-27	"	7.9	3.37	1.71	4.77	5.8		.6	8	0	945A 955A	"
267	11-3	"	8.0	3.62	1.79	4.81	6.5		.6	8	0	1010A 1020A	"
268	11-10	"	8.0	3.72	1.86	4.83	6.9		.6	8	0	940A 948A	"
269	11-17	"	8.0	3.70	1.90	4.84	7.0		.6	8	0	845A 855A	"
270	11-17	"	8.0	3.60	1.82	4.78	6.6		.6	8	0	200P 210P	"
271	11-23	"	8.0	3.54	1.77	4.76	6.3		.6	8	0	1000A 1010A	"
272	12-2	Bollinger	7.8	4.29	1.78	4.83	7.6		.6	9	0	917A 928A	FC 6
273	12-7	"	8.1	4.06	1.48	4.80	6.0		.6	7	-.01	1252P 112P	"
274	12-15	Ealy-Rayle	22.0	12.27	1.33	4.95	16.		.6	11	-	0	FC 30
275	12-15	Bollinger-Lewis	27.0	24.60	3.18	5.69	78.		.6	9	0	1129P 1143P	FC 31
276	12-16	Bollinger	27.0	23.71	2.83	5.63	67.		.6	9	0	659A 713A	"
277	12-16	Bollinger-Lewis	18.0	13.50	1.92	5.05	26.		.6	8	0	150P 200P	"
278	12-17	-	18.0	22.90	1.36	5.04	31.		.-	9	-	1140A	"
279	12-17	Bollinger-Ealy	26.2	22.11	2.93	5.60	65.		.6	10	0	240P 255P	"
280	12-18	Bollinger	50.0	45.95	2.47	5.96	114.		.6	12	-.02	817A 834A	"
281	12-18	Bollinger-DelBose	52.0	54.87	2.29	5.87	126.		.6	15	0	128P 144P	"
282	12-18	" "	54.0	65.20	2.73	6.18	178.		.6	13	-.01	331P 345P	"
283	12-19	Bollinger	10.2	4.54	1.56	4.63	7.1		.6	7	0	1025A 1043A	"
284	12-19	Bollinger-Lewis	48.0	44.29	2.08	5.64	92.		.6	13	-.01	502P 520P	"
285	12-19	" "	54.5	67.70	2.56	6.09	173.		.6	15	-.03	742P 809P	"
286	12-20	" "	57.0	98.90	3.62	6.68	358.		.6	8	0	723A 735A	"
287	12-20	Bollinger-Lewis	53.6	77.23	2.75	6.19	213.		.6	14	0	119P 134P	FC 31
288	12-20	" "	55.3	79.26	2.75	6.18	218.		.6	14	+.01	312P 330P	"
289	12-20	" "	54.0	87.18	3.25	6.42	283.		.6	12	-.01	738P 800P	"
290	12-21	" "	55.0	87.15	3.21	6.47	280.		.6	10	0	430P 455P	"
291	12-22	Bollinger	54.4	61.34	2.34	5.82	144.		.6	12	0	1030A 1055A	"
292	12-22	"	50.5	56.01	2.10	5.78	118.		.6	13	0	353P 413P	"
293	12-24	"	15.5	19.25	2.02	5.08	39.		.6	9	-.01	958A 1009A	"
294	12-27	"	15.8	18.30	1.31	4.94	24.		.6	9	-.01	1141A 1151A	FC 6
295	1-3	Rayle-DelBose	18.0	14.20	1.91	4.95	27.		.6	9	0	550P 610P	FC 31
296	1-4	Turner	33.0	17.97	1.35	4.94	24.		.6	16	0	935A 958A	FC 5
297	1-5	Turner-Lewis	33.0	17.74	1.29	4.92	23.		.6	16	0	345P 404P	"
298	1-5	" "	43.5	36.16	2.13	5.48	77.		.6	15	0	952P 1007P	"
299	1-6	Turner	43.5	36.22	2.19	5.48	79.		.6	15	0	909A 935A	"
300	1-6	Turner-Lewis	35.0	20.22	1.37	5.03	28.		.6	12	0	200P 215P	"
301	1-6	Turner	35.0	23.46	1.73	5.17	41.		.6	12	+.02	510P 522P	"
302	1-9	"	33.0	18.24	1.26	4.93	23.		.6	11	0	935A 947A	"
303	1-11	"	33.0	18.06	1.22	4.90	22.		.6	12	0	315P 330P	"
304	1-17	"	8.5	1.86	.47	4.29	.85		.6	9	0	1150A 1200N	"
305	1-26	"	9.0	1.84	.47	4.29	.85		.6	9	0	1100A 1110A	"
306	2-2	"	9.0	1.88	.40	4.28	.75		.6	9	0	1030A 1040A	"
307	2-8	"				4.28	.75		Vol.	-	0	945A 1000A	-
308	2-9	"	9.0	1.98	.41	4.29	.80		.6	9	0	125P 135P	FC 5
309	2-16	"	8.8	1.86	.40	4.28	.75		.6	9	0	1110A 1120A	"
310	2-21	"	31.2	12.06	.75	4.64	9.0		.6	16	+.01	1040A 1055A	"
311	2-21	Turner	33.0	17.02	1.10	4.84	19.		.6	16	0	100P 120P	FC 5
312	2-23	Turner	33.0	16.54	1.09	4.82	18.		.6	16	0	110P 125P	FC 5
313	2-28	"	33.0	16.03	1.06	4.80	17.		.6	17	0	1030A 1045A	"
314	2-28	"	33.0	14.96	.96	4.76	14.		.6	17	0	120P 140P	"
315	3-2	"	9.0	2.00	.44	4.30	.90		.6	9	0	1225P 1235P	"
316	3-9	"	33.0	17.76	1.20	4.86	21.		.6	17	0	930A 948A	"
317	3-10	"	34.0	18.60	1.24	4.90	23.		.6	17	0	130P 150P	"
318	3-16	"	34.0	18.32	1.20	4.89	22.		.6	17	0	145P 200P	"
319	3-23	"	34.0	19.04	1.20	4.90	23.		.6	17	0	225P 240P	"
320	3-26	"	35.0	20.00	1.27	4.95	25.		.6	17	0	620P 635P	"
321	3-30	"	5.0	2.46	.41	4.32	1.0		.6	6	0	100P 105P	"
322	4-6	"	40.0	22.40	1.25	4.98	28.		.6	19	0	120P 140P	"
323	4-13	"	9.5	5.93	.49	4.50	2.9		.6	9	0	120P 130P	"
324	4-20	"	8.0	6.85	.50	4.54	3.4		.6	9	0	1020A 1030A	"
325	4-20	"	14.0	3.78	.82	4.54	3.1		.6	7	0	1040A 1050A	"
326	4-28	"	10.0	7.65	.57	4.56	4.4		.6	10	0	1020A 1030A	"
327	5-5	"	9.0	5.15	.44	4.44	2.3		.6	9	0	110P 120P	"
328	5-12	"	9.0	4.29	.45	4.40	1.9		.6	9	0	1240P 1250P	"
329	5-19	"	10.0	5.23	.51	4.46	2.7		.6	10	0	140P 150P	"
330	5-26	"	10.0	5.39	.62	4.51	3.4		.6	10	0	1145A 1155A	"
331	6-1	Moon	9.0	3.93	.89	4.48	3.5		.6	8	0	1000A 1012A	FC 22
332	6-8	Turner	10.0	5.84	.60	4.50	3.5		.6	10	0	235P 245P	FC 5
333	6-15	"	10.0	6.49	.67	4.52	4.4		.6	10	0	1205P 1215P	"
334	6-22	"	10.0	5.76	.61	4.51	3.5		.6	10	0	1250P 100P	"
335	6-29	Turner	10.0	6.15	.60	4.50	3.7		.6	10	0	150P 200P	FC 5
336	7-5	Bollinger	10.5	6.15	.61	4.54	3.8		.6	7	0	322P 328P	FC 6
337	7-13	"	9.7	4.05	.67	4.46	2.7		.6	10	0	404P 413P	"
338	7-19	"	8.6	4.80	.56	4.44	2.7		.6	8	0	1114A 1121A	"
339	7-27	Turner	10.0	5.04	.54	4.46	2.7		.6	10	0	225P 232P	FC 5
340	8-3	"	10.0	4.85	.64	4.46	3.1		.6	10	0	420P 430P	"
340A	8-7	Green	14.0	10.63	1.53	4.8	16.		.6	14	0	940A 1000A	FC 31
340B	8-7	"	13.0	14.18	2.04	5.0	29.		.6	13	0	1255P 1255P	"
340C	8-7	"	13.0	13.24	1.51	4.88	20.		.6	13	0	250P 315P	"
340D	8-7	"	12.0	13.05	1.51	4.88	20.		.6	12	0	650P 712P	"
340E	8-9	"	26.4	14.19	1.45	4.88	21.		.6	17	0	115P 145P	"
341	8-10	Turner	27.5	14.22	1.46	4.88	21.		.6	15	0	1030A 1048A	FC 5
342	8-13	Green	26.4	14.75	1.45	4.87	21.		.6	24	0	205P 245P	"
343	8-14	"	26.5	17.07	1.58	4.96	27.		.6	20	0	1050A 1135A	"
344	8-15	"	26.5	16.43	1.57	4.96	26.		.6	27	0	725A 810A	"
345	8-17	Turner	27.0	17.29	1.55	4.96	27.		.6	15	0	1140A 1200N	FC 5
346	8-19	Green	26.3	16.47	1.53	4.96	25.		.6	27	+.01	1045A 1130A	FC 31
347	8-22	"	26.3	17.00	1.49	4.95	25.		.6	27	0	355P 617P	"
348	8-24	Turner	27.0	16.92	1.47	4.94	25.		.6	14	0	1145A 1205P	FC 5
349	8-27	Robertson	26.0	13.2	1.22	4.80	16.		.6	13	0	145P 230P	FC 31
350	8-31	Turner	27.0	15.92	1.41	4.90	22.		.6	14	0	1130A 1150A	FC 5
351	9-1	Robertson	26.0	16.10	1.31	4.90	21.		.6	13	0	930A 950A	FC 31
352	9-1	"	26.0	17.2	1.45	4.94	25.		.6	13	0	215P 245P	"
353	9-8	Bollinger	26.6	16.81	1.46	4.92	24.		.6	15	0	1018A 1031A	FC 6
354	9-13	Bollinger	26.8	17.02	1.35	4.90	23.		.6	14	0	1032A 1045A	FC 6
355	9-14	Robertson	26.0	17.9	1.49	4.96	27.		.6	13	0	120P 150P	FC 31
356	9-19	Robertson-Ealy	26.0	18.3	1.56	4.97	28.		.6	13	0	1140A 1153A	"
357	9-21	Turner	27.0	17.23	1.46	4.93	25.		.6	15	0	240P 300P	FC 5
358	9-26	"	13.0	12.92	1.39	4.85	18.		.6	13	0	420P 435P	"
359	9-26	Robertson Turner	12.4	11.07	.99	4.69	11.		.6	12	-.02	530P 540P	"
360	9-28	Turner	13.0	12.18	1.58	4.86	19.		.6	13	0	1025A 1035A	"

F. C. Dist. Form 52

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

Sta. No. F168R

Daily discharge, in second-feet of BIG TUJUNGA CREEK below Big Tujunga Dam # 1 for the year ending September 30, 19 39

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	E 6.0	E 6.3	7.6	1.5	0.8	5.7	3.0	4.9	4.8	3.8	2.4	2.3
2	E 6.2	E 6.4	E 7.6	1.5	0.8	0.9	2.7	4.9	3.5	3.8	2.4	2.4
3	E 6.4	E 6.5	E 7.2	1.5.9	0.9	0.8	2.8	5.2	3.3	4.1	3.1	2.4
4	E 6.7	E 6.3	E 6.9	2.4	0.8	0.9	2.8	5.2	3.5	4.1	2.6	2.4
5	E 6.9	E 6.1	E 6.9	3.0	0.7	0.8	2.8	4.0	3.5	4.6	2.4	2.4
6	E 7.1	E 5.9	E 6.5	4.8	0.7	0.9	2.8	2.3	3.8	4.2	2.4	2.4
7	E 7.0	E 5.7	E 6.2	4.1	0.7	12.1	2.0	2.3	4.1	3.3	14.2	2.4
8	E 6.9	5.5	E 6.2	4.1	0.8	2.1	2.8	2.3	4.0	3.3	2.0	2.3
9	E 6.8	6.2	E 6.2	2.4	0.8	19.2	2.6	2.3	3.8	3.3	2.0	2.3
10	E 6.6	6.9	E 6.2	2.2	0.8	12.2	2.6	2.3	4.1	3.3	2.0	2.2
11	E 6.5	E 7.1	E 6.2	2.2	0.8	2.2	2.8	2.3	4.1	3.5	2.0	2.2
12	E 6.4	E 7.3	E 6.2	2.2	0.8	2.2	2.8	2.5	4.6	3.5	19.6	2.2
13	E 6.3	E 7.5	E 6.2	2.2	0.8	2.3	2.8	1.8	4.9	3.2	19.6	2.2
14	E 6.3	7.6	E 12.7	2.2	0.8	2.3	3.1	1.8	4.9	2.6	2.3	2.4
15	E 6.3	7.6	4.7	2.2	0.8	2.2	3.1	1.8	4.6	2.6	2.6	2.4
16	E 6.3	6.2	4.9	10.7	0.8	2.2	3.3	1.8	4.1	2.6	2.6	2.4
17	E 6.3	6.9	3.4	0.9	0.9	2.3	3.5	1.8	4.3	2.4	2.6	2.2
18	E 6.3	6.9	10.9	0.8	0.9	2.3	3.5	2.0	4.3	2.4	2.6	2.3
19	E 6.3	7.6	11.9	0.8	1.0	2.5	3.5	2.9	4.6	2.4	2.6	2.5
20	E 6.3	6.9	24.5	0.8	1.1	2.3	3.5	2.6	4.9	3.0	2.5	2.1
21	E 6.2	7.6	E 26.3	0.9	10.4	2.3	3.5	2.6	4.9	2.6	2.5	15.4
22	E 6.2	7.6	E 17.0	1.1	17.7	2.3	3.5	2.8	4.8	2.6	2.5	2.4
23	E 6.1	7.2	7.6	0.9	17.7	2.3	3.5	2.6	4.1	2.4	2.5	2.3
24	E 6.0	7.9	3.8	0.9	18.3	16.6	3.8	2.6	4.3	2.4	2.4	14.6
25	E 5.9	7.9	3.5	0.9	19.6	2.6	3.8	2.8	4.6	2.4	12.1	2.6
26	E 5.9	E 7.5	3.7	0.9	2.1	2.5	4.1	3.5	4.9	2.4	11.0	4.3
27	E 5.8	E 7.2	2.0	0.9	2.0	2.5	4.4	4.1	5.2	3.0	15.3	8.7
28	E 5.9	6.9	2.2	0.8	16.5	2.5	4.3	4.3	5.9	2.4	15.3	15.1
29	E 6.0	7.2	6.7	0.8		10.5	4.3	4.6	4.6	2.4	15.3	2.9
30	E 6.1	7.9	3.1	0.5		1.0	4.3	4.9	3.8	2.4	14.2	4.4
31	E 6.2		1.5	0.8		11.0		4.9		2.4	19.2	
	1962	2083	1374.1	382.6	157.7	509.8	268.4	96.7	130.8	93.4	528.1	644.7
Mean	6.33	6.94	44.3	12.3	5.63	16.4	8.95	3.15	4.36	3.01	17.0	21.5
Acre-Feet	389	413	2730	759	313	1010	532	192	259	185	1050	1280

Remarks: E indicates discharge estimated - see station description.

Year or Period Mean 12.6
Acre-Feet 9110

STATION F213R

BIG TUJUNGA CREEK below submerged dam

LOCATION:

On the left (south) bank of Big Tujunga Creek, 2 miles above mouth of canyon, 7 miles below Big Tujunga Dam No. 1 and about 4 miles northeast of Sunland.
The former U.S.G.S. station U11R was about 1000 feet upstream at the location of a partly constructed and abandoned dam.

DRAINAGE AREA:

106 square miles.

CHANNEL AND CONTROL:

Channel-composed of gravel and boulders.
Channel forms control.
An artificial control 165 feet below the recorder house, was buried during the 1934-1935, 1935-1936 water years by several feet of gravel.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows measured from cable car below station.

RECORDER:

Installed in 1932 in an F. C. standard type house over a 36 inch corrugated iron pipe stilling well.
An Au continuous recorder was in service from October 1, 1938 to September 30, 1939.

REGULATION:

Flow from 81.4 square miles regulated by Big Tujunga Dam No. 1.
Flow from 24.6 square miles unregulated.

DIVERSIONS:

There are two or three small irrigation diversions above the station.

RECORDS AVAILABLE:

October 1, 1932 to September 30, 1939.
(Records at U.S.G.S. Station, Tujunga Creek near Sunland, are available from October 1, 1916 to September 30, 1932).

EXTREMES OF DISCHARGE:

1938-1939
Maximum 380 second-feet, December 20.
Minimum 3.5 second-feet various times.
1932-1939
Maximum 50000 second-feet, estimated, March 2, 1938.
Minimum 0.8 second-foot November 18, 1936.

ACCURACY:

Fair.
Estimated by interpolation: December 27, 28, and 29. January 16 and 17. Communication to well sanded on a few occasions.

OPERATION:

Constructed and operated by the Los Angeles County Flood Control District in co-operation with the U.S. G.S. Water Resources Branch.

F. C. D. FORM 104 500 6-38

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F213R

DISCHARGE MEASUREMENTS OF BIG TUJUNGA CREEK

AT OR NEAR below submerged dam DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Failure Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
												325P	
167	10-6	Lind	9.0	7.95	1.12	7.00	9.		.6	9	0	335P	FC 19
												255P	
168	10-13	Lind-Turner	9.3	8.58	.98	6.98	8.4		.6	9	0	305P	"
												400P	
169	10-17	Turner	11.2	9.68	1.06	7.06	10.		.6	10	0	412P	FC 5
												430P	
170	10-20	"	10.8	8.76	1.15	6.99	10.		.6	10	0	445P	"
												815A	
171	10-27	"	11.0	8.23	1.12	6.97	9.2		.6	10	0	830A	"
												755A	
172	11-3	"	11.0	8.72	1.15	7.01	10.		.6	10	0	810A	"
												840A	
173	11-10	"	11.0	9.04	1.13	7.00	10.		.6	10	0	852A	"
												828A	
174	11-23	"	11.2	9.62	1.06	7.07	10.		.6	10	0	840A	"
												1100A	
175	12-2	Luce	9.3	9.43	1.08	7.06	10.		.6	9	0	1115A	FC 39
												251P	
176	12-7	Bollinger	13.5	8.98	.96	7.06	8.6		.6	10	0	304P	FC 6
												120A	
177	12-15	Skelly-Luce	51.0	54.50	3.46	8.39	189.		.6	11	+.12	135A	FC 39
												725A	
178	12-15	Luce-Skelly	34.5	29.59	2.16	7.87	64.		.6	11	+.01	735A	"
												740A	
179	12-15	" "	34.5	32.20	2.25	7.89	73.		.6	11	+.02	750A	"
												1230P	
180	12-15	" "	34.0	25.68	1.90	7.67	53.		.6	11	-.01	1240P	"
												510P	
181	12-15	Skelly-Luce	38.0	38.29	2.72	8.04	104.		.6	12	+.04	525P	"
												906P	
182	12-15	Luce-Skelly	52.0	42.64	3.67	8.32	156.		.6	13	-.01	920P	"
												825A	
183	12-16	" "	39.0	38.17	2.26	8.01	86.		.6	13	0	835A	"
												340A	
184	12-18	" "	37.0	34.32	2.34	7.94	80.		.6	9	-.04	345A	"
												840A	
185	12-18	" "	39.0	39.20	2.39	8.08	94.		.6	11	0	850A	"
												1010A	
186	12-18	" "	54.0	53.61	3.59	8.56	192.		.6	12	0	1025A	"
												930A	
187	12-19	Luce	40.0	71.00	3.97	9.02	274.		.6	8	-.19	945A	FC 41
												945A	
188	12-19	Luce-Skelly	38.0	66.00	3.63	8.75	239.		.6	8	0	1000A	"
												945P	
189	12-19	" "	58.0	59.22	3.11	8.63	184.		.6	15	-.02	1000P	FC 39
												1245A	
190	12-20	Miller-Skelly	37.0	64.25	3.18	8.66	194.		.6	8	0	105A	FC 41
												945A	
191	12-20	Luce-Skelly	42.0	80.60	4.31	9.36	348.		.6	9	-.02	1000A	FC 41
												235P	
192	12-20	Luce	40.0	74.50	4.35	9.13	324.		.6	8	-.06	255P	"
												1045A	
193	12-21	Miller-Miller	38.0	75.60	4.05	8.99	306.		.6	8	-.02	1100A	FC 35
												1100A	
194	12-21	" "	38.0	73.20	4.14	8.99	303.		.6	8	-.02	1115A	"
												113P	
195	12-28	Bollinger	32.2	30.74	1.80	7.70	55.		.6	12	-.13	135P	FC 6
												404P	
196	12-29	Luce-Luce	13.5	8.82	1.62	7.13	14.		.6	8	+.03	410P	FC 39
					Est.		Est.					600P	
197	1-5	Luce-Rutherford	34.5	32.51	2.00	7.76	65.		Est	11	0	605P	-

F. C. D. FORM 104 800 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F213R

DISCHARGE MEASUREMENTS OF BIG TUJUNGA CREEK

NEAR below submerged dam DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Parent Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
198	1-12	Turner	30.0	16.44	1.87	7.48	31.		.6	16	0	255P / 310P	FC 5
199	1-17	"	19.5	6.42	1.32	7.04	8.5		.6	11	0	330P / 340P	"
200	1-21	Luce-Luce	18.5	12.19	1.43	7.24	17.		.6	9	0	1000A / 1010A	FC 39
201	1-21	" "	18.0	13.42	1.84	7.33	25.		.6	8	0	315P / 335P	"
202	1-26	Turner	18.0	6.16	1.27	7.01	7.8		.6	9	0	320P / 330P	FC 5
203	2-2	"	18.0	6.32	1.24	7.00	7.8		.6	9	0	330P / 340P	"
204	2-9	"	19.0	7.75	1.29	7.08	10.		.6	10	0	330P / 340P	"
205	2-16	"	19.0	6.60	1.17	7.02	7.8		.6	10	0	325P / 335P	"
206	2-23	"	20.5	13.20	1.86	7.37	25.		.6	11	0	330P / 340P	"
207	3-2	"	15.5	6.50	1.30	7.03	8.4		.6	9	0	755A / 807A	"
208	3-9	"	20.5	14.98	1.68	7.38	25.		.6	11	0	740A / 755A	"
209	3-9	Luce	55.0	73.92	2.74	8.63	203.		.6	15	0	1030P / 1045P	FC 39
210	3-10	"	29.0	19.57	1.77	7.52	35.		.6	10	0	750A / 805A	"
211	3-10	Turner	21.0	15.81	2.16	7.58	34.		.6	11	+.01	435P / 450P	FC 5
212	3-16	"	20.5	16.77	1.79	7.44	30.		.6	11	+.01	740A / 752A	"
213	3-23	"	20.5	16.80	1.74	7.43	29.		.6	11	0	745A / 757A	"
214	3-27	"	21.0	21.45	1.84	7.55	39.		.6	11	0	430P / 440P	"
215	3-30	Turner	14.0	8.91	1.30	7.10	12.		.6	8	0	745A / 755A	FC 5
216	4-6	"	21.0	19.81	1.72	7.49	34.		.6	9	0	750A / 805A	"
217	4-13	"	14.0	9.64	1.04	7.04	10.		.6	8	0	745A / 755A	"
218	4-18	"	14.0	8.68	.93	7.00	8.1		.6	8	0	315A / 325A	"
219	4-28	"	14.5	9.04	1.02	7.03	9.3		.6	8	0	745A / 755A	"
220	5-5	"	14.5	8.72	.99	7.00	8.6		.6	8	0	745A / 755A	"
221	5-12	Turner	14.0	7.58	.84	6.95	6.4		.6	8	0	755A / 805A	FC 5
222	5-19	"	13.0	6.71	.88	6.92	5.9		.6	8	0	905A / 915A	"
223	5-26	"	12.5	6.44	.94	6.92	6.0		.6	7	0	845A / 855A	"
224	6-1	Moon	14.8	7.36	.85	6.96	6.3		.6	8	0	900A / 912A	FC 22
225	6-8	Turner	13.0	6.87	.81	6.93	5.6		.6	8	0	745A / 755A	FC 5
226	6-15	"	13.0	6.67	.85	6.94	5.7		.6	8	0	730A / 740A	"
227	6-22	"	13.0	6.80	.84	6.94	5.7		.6	8	0	915A / 925A	"
228	6-28	"	13.5	6.39	.81	6.88	5.2		.6	8	0	340P / 350P	"
229	7-5	Bollinger	15.2	7.39	.77	6.87	5.7		.6	8	0	855A / 903A	FC 6
230	7-13	"	14.8	8.37	.51	6.83	4.3		.6	9	0	745A / 752A	"
231	7-19	"	14.7	6.09	.63	6.79	3.9		.6	7	0	1010A / 1019A	"
232	7-27	Turner-Miller	13.2	5.01	.68	6.79	3.4		.6	8	0	353P / 358P	FC 5
233	8-3	Turner	13.0	5.04	.69	6.80	3.5		.6	8	0	525P / 535P	"
234	8-10	"	14.9	13.54	1.54	7.26	21.		.6	9	0	825A / 835A	"
235	8-17	"	17.0	16.21	1.73	7.36	28.		.6	9	0	1020A / 1030A	"
236	8-24	"	20.0	17.28	1.45	7.34	25.		.6	12	0	920A / 935A	"
237	8-28	"	19.2	14.54	1.09	7.20	16.		.6	11	0	830A / 845A	"
238	8-31	"	19.5	14.46	1.16	7.20	17.		.6	11	0	935A / 950A	"
239	9-5	Bollinger	20.0	17.97	1.27	7.34	23.		.6	12	+.01	933A / 945A	FC 6
240	9-8	"	21.6	21.83	1.18	7.34	26.		.6	13	0	855A / 907A	"
241	9-11	"	19.5	23.27	.99	7.36	23.		.6	10	0	1100A / 1109A	"
242	9-13	"	30.3	26.82	.82	7.34	22.		.6	14	0	1220P / 1235P	"
243	9-19	Turner	20.5	17.12	1.16	7.32	20.		.6	11	0	845A / 900A	FC 5
244	9-21	"	15.7	14.23	.95	7.14	13.		.6	10	0	910A / 920A	"
244A	9-25	Luce-Miller	32.5	47.39	1.76	7.97	83.		.6	9	+.01	845A / 855A	FC 39
244B	9-25	Miller	32.0	32.74	1.17	7.56	38.		.6	10	+.08	410P / 430P	FC 35
245	9-26	Herkomer Bollinger-	33.0	25.30	.89	7.37	22.		.6	14	0	150P / 205P	FC 6
246	9-28	Turner	20.0	20.41	.90	7.26	18.		.6	11	0	815A / 825A	FC 5

F. C. Dist. Form 52

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

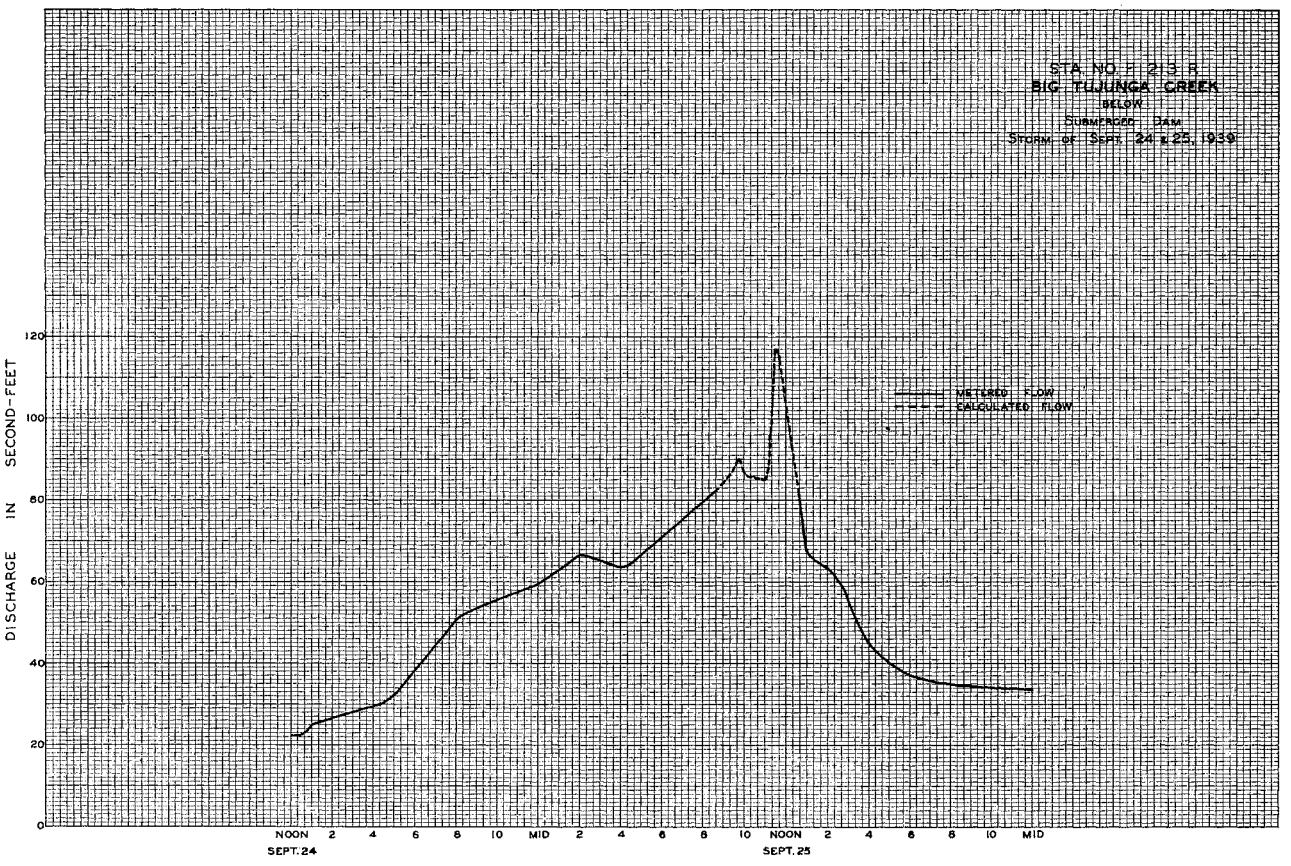
Sta. No F213R

Daily discharge, in second-feet of BIG TUJUNGA CREEK below submerged dam, for the year ending September 30, 19 39

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7	9.5	10	11	8.5	17	38	9	6	4.9	3.5	22
2	7.5	10	10	10	8	8.5	36	9	6	4.9	3.5	23
3	8	10	10	16	10	8	35	9	5.5	5	3.5	23
4	8	10	9.5	29	11	7	34	9	5.5	5.5	3.8	23
5	8.5	10	9	62	10	7	34	8.5	5.5	5.5	3.8	22
6	8.5	9	9	63	9	6.5	34	6	5.5	5.5	3.8	23
7	9	9.5	8.5	59	9	12	32	6	5.5	5	8	24
8	9.5	10	8.5	55	12	24	13	6	5.5	4.9	19	26
9	9.5	10	9	42	10	48	11	6	5.5	4.6	20	24
10	9	10	9	32	9.5	44	11	6	5.5	4.4	21	24
11	8.5	11	8	33	9.5	37	10	6	5.5	4.4	21	23
12	8.5	10	8.5	31	9.5	33	10	6.5	5.5	4.4	21	22
13	8	10	9	30	8.5	32	10	6	6	4.4	21	21
14	9	10	13	31	8.5	32	10	6	6	4.2	22	23
15	9.5	11	103	30	8	31	9.5	6	6	4.2	27	24
16	9.5	10	81	E 23	8	30	9.5	6	6.5	4.0	28	24
17	9.5	10	59	E 9	8	30	8.5	5.5	6.5	4.0	28	23
18	9.5	10	166	8	8	28	8.5	5.5	6.5	4.0	28	23
19	10	10	213	7.5	8	29	8	6	6.5	3.8	27	22
20	10	10	282	7	8	30	8	6	6.5	3.8	27	24
21	9.5	10	316	18	11	30	8	6	6	4.0	26	15
22	9.5	11	237	12	24	30	8	6	6	3.8	26	22
23	9.5	9.5	164	9.5	25	30	8	6	5.5	3.5	25	22
24	9.5	9.5	102	9	26	24	8.5	6	5.5	3.5	25	31
25	9	9.5	79	8.5	26	32	8	6	5.5	3.5	21	61
26	9	10	75	8	27	34	8	5.5	5.5	3.5	14	26
27	9	10	E 65	8	27	41	8.5	4.6	5.5	3.5	15	19
28	9	10	E 54	8	24	36	9	5.5	5	3.8	16	21
29	9	10	E 14	7.5		28	9	6	4.9	3.8	16	30
30	9	10	12	9.5		12	9	6	4.9	3.8	15	45
31	9.5		12	9.5		13		6.5		3.5	18	
	278.0	299.5	2165.0	696.0	371.0	804.0	454.0	198.1	171.8	131.6	556.9	755
MEAN	8.97	9.98	60.9	22.4	13.2	25.9	15.1	6.39	5.73	4.25	18.0	25.2
ACRE-FEET	551	594	4290	1380	736	1590	900	393	341	261	1100	1500

Remarks: E indicates discharge estimated - see station description.

YEAR OR PERIOD MEAN 18.8 ACRE FEET 13640



STATION F105R

BIG TUJUNGA - WEST WASH at Magnolia Boulevard.

LOCATION:

On the downstream side of Magnolia Boulevard bridge, about 2 miles west of North Hollywood.

DRAINAGE AREA:

Indeterminate due to a natural split which divides the Big Tujunga Wash into two branches.

CHANNEL AND CONTROL:

Channel-loose sand.
No artificial control.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows measured from highway bridge.

RECORDER:

Installed August, 1930 in a box type house over an 18 inch diameter corrugated iron pipe stilling well. Washed out in March 2, 1938 flood.
Reinstalled on October 17, 1938 in an F. C. type house over a 21 inch diameter corrugated iron pipe stilling well.
A Stevens type L recorder was in service from October 17, 1938 to September 30, 1939.

REGULATION:

Flow partially regulated by Big Tujunga Dam No. 1, by Haines Debris Basin and by Hansen Dam (under construction).
The amount of the total flow going to the west wash and the amount going to the east wash is controlled by a natural split 5 miles above the stations.

DIVERSIONS:

Some water diverted for irrigation, near mouth of Big Tujunga Canyon.

RECORDS AVAILABLE:

August, 1930 to February 17, 1938 and October 17, 1938 to September 30, 1939.

EXTREMES OF DISCHARGE:

1938-1939
Maximum 1.1 second-feet January 21.
Minimum no flow most of year.
1930-1939
Maximum not determined March 2, 1938.
Minimum no flow most of year.

ACCURACY:

Poor.
Flow negligible during most of year.
Monthly total estimated for October.

OPERATION:

Located, constructed and operated by the Los Angeles County Flood Control District.

F. C. D. FORM 104 800 6-38

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F105R

DISCHARGE MEASUREMENTS OF BIG TUJUNGA CREEK - WEST WASH

AT Magnolia Boulevard DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Present Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
5	1-21	Bollinger-Koch	5.1	1.30	.82	6.96	1.1		.6	.4	0	1059A / 1106A	FC 6

F. C. Dist. Form 59

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

Sta. No F106R

Daily discharge, in second-feet of BIG TUJUNGA - WEST WASH at Magnolia Boulevard ..for the year ending September 30, 1939

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0	0	0	0	0	0	0	0	0	0	0
2		0	0	0	0	0	0	0	0	0	0	0
3		0	0	0	0	0	0	0	0	0	0	0
4		0	0	0	0	0	0	0	0	0	0	0
5		0	0	0	0	0	0	0	0	0	0	0
6		0	0	0	0	0	0	0	0	0	0	0
7		0	0	0	0	0	0	0	0	0	0	0
8		0	0	0	0	0	0	0	0	0	0	0
9		0	0	0	0	+	0	0	0	0	0	0
10		0	0	0	0	0	0	0	0	0	0	0
11		0	0	0	0	0	0	0	0	0	0	0
12		0	0	0	0	0	0	0	0	0	0	0
13		0	0	0	0	0	0	0	0	0	0	0
14		0	0	0	0	0	0	0	0	0	0	0
15		0	0	0	0	0	0	0	0	0	0	0
16		0	0	0	0	0	0	0	0	0	0	0
17		0	0	0	0	0	0	0	0	0	0	0
18	° 0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0 .1	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0 .1
26	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0		0	0	0	0	0	0	0
30	0	0	0	0		0	0	0	0	0	0	0
31	0		0	0		0		0		0	0	
	0	0	0	0 .1	0	+	0	0	0	0	0	0 .1
MEAN	0	0	0	+	0	+	0	0	0	0	0	+
ACRE-FEET	0	0	0	0.20	0	+	0	0	0	0	0	0.20

Remarks: ° see station description.

YEAR OR PERIOD — MEAN 0.001 — ACRE-FEET 0.40

STATION F106B-R

BIG TUJUNGA EAST WASH at Chandler Boulevard

LOCATION:

On the downstream end of most easterly pier of Chandler Boulevard (north) bridge. North Hollywood.

DRAINAGE AREA:

Indeterminate due to a natural split which divides the Big Tujunga Wash into two branches.

CHANNEL AND CONTROL:

Channel-loose sand.
No artificial control.

DISCHARGE MEASUREMENTS:

Low flows measured by wading near gage.
High flows measured from highway bridge.

RECORDER:

Installed August 1930 at Station F106R at Magnolia Blvd. Removed March 1936 due to new bridge construction. Installed temporarily March 1936 at Station F106B-R at Chandler Blvd. Removed July 1936. Reinstalled August 1936 at Station F106R. Removed March 2, 1938 before bridge washed out.
Reinstalled September 25, 1939 at Station F106B-R at Chandler Blvd. in an F. C. standard type house over a 21 inch diameter corrugated iron pipe stilling well. An H.C.F. continuous recorder was in service from September 25, 1939 to September 30, 1939.

REGULATION:

Flow partially regulated by Big Tujunga Dam No. 1, by Haines Debris Basin, and by Hansen Dam (under construction). The amount of flow going into the west wash is controlled by a natural split 5 miles above the station.

DIVERSIONS:

Some water diverted for irrigation, near the mouth of Big Tujunga Canyon.

RECORDS AVAILABLE:

At Station F106R
August 1930 to March 18, 1936.
August 20, 1936 to March 2, 1938.
At Station F106B-R
March 20, 1936 to July 29, 1936.
September 25, 1939 to September 30, 1939.

EXTREMES OF DISCHARGE:

1930-1939
Maximum not determined March 2, 1938.
Minimum no flow most of year.
Note: No record for 1938-1939.

OPERATION:

Located, constructed, and operated by the Los Angeles County Flood Control District.

REMARKS:

Record for 1938-1939 not published as the station was in operation for only 5 days in September.

STATION F2R

BROWNS CANYON WASH at Devonshire Avenue, Chatsworth

LOCATION:

On the downstream end of the partition between right section and the middle section of the 3 section concrete culvert under Devonshire Avenue.

DRAINAGE AREA:

14.3 square miles.

CHANNEL AND CONTROL:

Channel-A three section concrete culvert with sand and gravel above and below culvert.
Cutting and filling at the upper end of the culvert varies the distribution of the flow between the 3 sections.
At approximately gage height 2.5 feet; flow overtops the channel 100 feet above upstream end of culvert and by-passes the station.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows measured from highway bridge.

RECORDER:

Installed December 11, 1928 in a box type house over an 18 inch diameter, corrugated iron pipe stilling well.
Recorder removed August 27, 1932.
Recorder reinstalled October 2, 1935.
Vertical Rational recorder was in service from October 1, 1938 to February 3, 1939.
An H.O.F. continuous recorder was in service from February 3, 1939 to September 30, 1939.

REGULATIONS AND DIVERSIONS:
OR

Twin Lakes Dams.

RECORDS AVAILABLE:

December 11, 1928 to August 27, 1932 and from October 2, 1935 to September 30, 1939.

1938-39
Maximum 63 second-feet, estimated, December 18.
Minimum no flow most of year.
1929-1932, 1936-1939
Maximum 1100 second-feet, estimated, March 2, 1938.
Minimum no flow most of each year.

Note: (The March 2, 1938 maximum does not include overflow which by-passed the station).

ACCURACY:

Poor.
Occasionally no communication for low flows.
Estimated by extrapolation, December 14 and February 7.

OPERATION:

Located, constructed and operated by the Los Angeles County Flood Control District.

F. C. D. FORM 104 500 6-38

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F 2 R

DISCHARGE MEASUREMENTS OF BROWNS CANYON WASH

AT MEAS Devonshire Avenue DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Permit. Shift.	Method	MEAS SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
												930A	
26	12-18	Miller	16.3	8.52	2.03	.19	17.		.6	9	-.02	950A	FC35
												1000A	
27	12-18	"	16.2	8.36	2.08	.18	17.		.6	9	0	1015A	35
												1005A	
28	12-19	"	8.4	1.19	1.65	.10	2.		.6	8	-.01	1020A	35
												930A	
29	12-20	"	14.5	6.71	1.76	.19	12.		.6	8	-.02	950A	35
												1100A	
30	1-21	"	10.2	2.20	.94	.10	2.1		.6	7	0	1110A	35
												1020A	
31	2-9	Luca	2.0	.33	.60	.04	.2		.6	4	-	1025A	39

F. C. Dist. Form 58

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

Sta. No. F2R

Daily discharge, in second-feet of BROWNS CANYON WASH at Devonshire Avenue., for the year ending September 30, 19 39

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	1.4	0	0	0	0	0	0	0
4	0	0	0	0	1.7	0	0	0	0	0	0	0
5	0	0	0	0	0.5	0	0	0	0	0	0	0
6	0	0	0	0	0.2	0	0	0	0	0	0	0
7	0	0	0	0	E 0.1	0	0	0	0	0	0	0
8	0	0	0	0.3	6	0	0	0	0	0	0	0
9	0	0	0	0.1	0.3	0	0	0	0	0	0	0
10	0	0	0	0	0.2	0	0	0	0	0	0	0
11	0	0	0	0	0.1	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	E 0.2	0	0	0	0	0	0	0	0	0
15	0	0	3.6	0	0	0	0	0	0	0	0	0
16	0	0	3.1	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	5.5	0	0	0	0	0	0	0	0	0
19	0	0	1.2	0	0	0	0	0	0	0	0	0
20	0	0	8.5	0	0	0	0	0	0	0	0	0
21	0	0	0.4	2.8	0	0	0	0	0	0	0	0
22	0	0	0	1.3	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0		0	0	0	0	0	0	0
30	0	0	0	0		0	0	0	0	0	0	0
31	0		0	0		0		0		0	0	
	0	0	22.5	4.5	10.5	0	0	0	0	0	0	0
MEAN	0	0	0.73	0.15	0.38	0	0	0	0	0	0	0
ACRE-FEET	0	0	45	8.9	21	0	0	0	0	0	0	0

Remarks: E indicates discharge estimated - see station description.

YEAR OR PERIOD MEAN 0.193
ACRE-FEET 75

STATION F37B-R

COMPTON CREEK near Greenleaf Drive

LOCATION:

On the left (east) bank of the concrete channel, 120 feet South of the center line of Greenleaf Drive extended and about one and one half miles Southwest of Compton.

DRAINAGE AREA:

30.3 square miles.

CHANNEL AND CONTROL:

Channel-rectangular, concrete, 13.0 feet deep and 60 feet wide. Invert is 1.05 feet below bottom of vertical side walls.
Channel forms control.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows measured from cable car below gage.

RECORDER:

Installed January 22, 1928 at Station F37R at Rosecrans Avenue. Removed June 9, 1938 due to new channel construction by the U.S. Engineer Department.
Installed October 3, 1938 in a concrete house over a 4.0 ft. x 3.2 ft. concrete stilling well. An H. C. F. recorder was in service from Oct. 3, 1938 to September 30, 1939.

REGULATION:

None.

DIVERSION:

None.

RECORDS AVAILABLE:

At Station F37R
January 22, 1938 to June 9, 1938.
At Station F37B-R
October 3, 1938 to September 30, 1939.

EXTREMES OF DISCHARGE:

1938-1939
Maximum 2145 second-feet September 25.
Minimum no flow at various times.
1928-1939 (Stations F37R and F37B-R)
Maximum not determined, overflowed banks March 2, 1938.
Minimum no flow at various times.

ACCURACY:

Fair.
Estimated by extrapolation at various times during low flows due to communication being obstructed by sand.

OPERATION:

Located and constructed by the United States Engineer Department and operated by the Los Angeles County Flood Control District in conjunction with the United States Engineer Department.

F. C. D. FORM 104 500 8-38

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F37B-R

DISCHARGE MEASUREMENTS OF COMPTON CREEK

at near Greenleaf Drive DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
1	12-15	Jackman Bonadiman-	59.	29.07	0.89	0.72	26.		.6	7	0	610A / 633A	FC 40
2	12-15	U.S.E.D. #1	60.	50.4	1.84	1.00	93.		.6	7	+.08	1125A	35632
3	12-15	U.S.E.D. #2	60.	48.7	1.75	1.02	85.		.6	7	-.04	1153A	"
4	12-15	U.S.E.D. #3	60.	145.	5.00	2.58	730.		.6	8	-.15	718P	"
5	12-16	Jackman Bonadiman-	57.5	17.54	0.24	0.49	4.2		.6	6	0	1100A / 1110A	FC 40
6	12-18	U.S.E.D. #4	60.	174.	5.86	3.13	1020.		.6	8	-.14	1229A	35632
7	12-18	U.S.E.D. #5	60.	107.	4.03	1.95	432.		.6	9	-.28	902A	"
8	12-19	Jackman Bonadiman-	60.	189.2	6.50	3.39	1230.		.6	8	-.12	630A / 650A	FC 40
9	12-20	" "	54.	32.3	0.87	0.77	28.		.6	6	0	1135A / 1150A	"
10	12-29	Bonadiman	17.	1.02	0.20	0.43	0.21		Surf	4	0	1045A	"
11	1-6	"	59.	20.	0.31	0.52	6.3		.6	5	0	1014A / 1025A	"
12	1-21	U.S.E.D. #6	60.	166.	5.13	2.95	851.		.6	8	-.24	801A	35632
13	1-21	U.S.E.D. #7	60.	119.	4.22	2.13	502.		.6	8	-.10	1138A	"
14	1-22	Bonadiman	57.5	15.1	0.13	0.46	2.0		.6	6	0	1231P / 1235P	FC 40
15	1-30	U.S.E.D. #8	60.	81.	2.98	1.51	242.		.6	12	-.18	846P	35632
16	2-3	U.S.E.D. #9	60.	134.	4.53	2.32	607.		.6	8	-.20	907A	"
17	2-3	U.S.E.D. #10	60.	93.	3.13	1.71	290.		.6	8	-.20	1013A	"
18	2-4	Jackman Bonadiman-	59.	24.3	0.74	0.59	18.		.6	6	+.02	212P / 217P	FC 40
19	2-4	" "	59.	23.75	0.72	0.61	17.		.6	7	+.02	217P / 224P	"
20	2-8	Bonadiman	60.	46.32	1.61	0.96	75.		.6	9	-.06	908A / 930A	"
21	2-9	"	14.	2.52	0.56	0.41	1.4		.6	4	0	1000A / 1008A	"
22	2-23	"	12.	1.20	0.50	0.42	.60		.6	2	0	1040A	"
23	3-2	"	14.	2.28	0.41	0.42	.95		.6	4	0	1020A / 1025A	"
24	3-10	Jackman Bonadiman-	60.	66.7	2.23	1.27	149.		.6	6	-.10	1255A	"
25	3-10	Bonadiman	59.	18.4	0.37	0.52	6.8		.6	6	0	922A / 944A	FC 40
26	3-10	U.S.E.D. #11	60.	123.	4.10	2.21	496.		.6	8	-.18	1055P	35632
27	3-16	Bonadiman	14.	1.52	0.36	0.42	0.55		.6	3	0	937A / 940A	FC 40
28	3-23	"	12.	0.72	0.30	0.43	0.22		.6	2	0	1005A	"
29	3-27	"	60.	65.35	2.20	1.25	144.		.6	6	-.10	920A / 940A	"
30	3-30	"	16.	1.60	0.44	0.42	0.7		.6	3	0	932A	"
31	4-13	"	12.	1.92	0.15	0.45	.29		.6	3	0	952A	"
32	4-20	"	12.	1.84	0.08	0.45	.14		.6	3	0	1100A	"
33	4-27	"	12.	2.16	0.13	0.43	.27		.6	3	0	1000A	"
34	5-4	"	4.	0.20	0.30	0.40	.06		.6	2	0	1007A	"
35	5-11	"	10.	0.70	0.21	0.40	0.15		.6	2	0	920A	"
36	5-18	"	10.	0.80	0.30	0.40	0.24		.6	2	0	900A	"
37	7-27	"	10.	1.12	0.50	0.43	0.55					1009A / 1016A	"
38	9-25	Jackman Bonadiman-	60.	185.	6.53	3.25	1210.		.6	7	+.10	155A / 215A	"
39	9-26	" "	58.5	20.42	0.26	0.35	5.3		.6	4	0	130P / 135P	"

F. C. Dist. Form 59

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

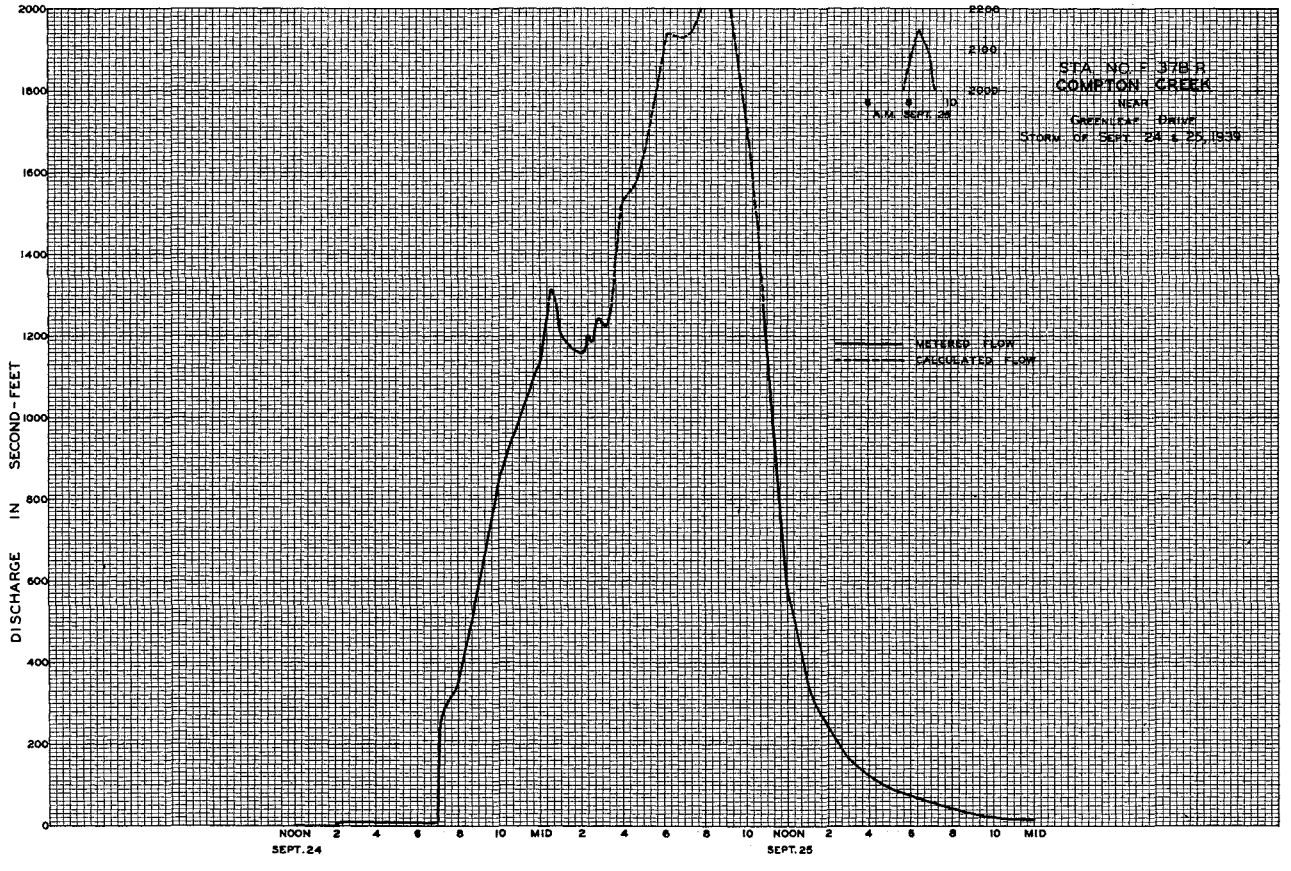
Sta. No. F37B-R

Daily discharge, in second-feet of COMPTON CREEK near Greenleaf Drive, for the year ending September 30, 19 39

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	E 0.4	0.6	0.1	0.2	E 1.1	1.1	0	0.1	0.2	0.1	0.6	0.3
2	E 0.4	0.4	0	0.6	E 1.1	0.7	0.4	0.1	0.2	0.1	0.8	0.6
3	0.4	0.4	0.3	0.1	90	0.6	0	0.1	0.1	0	1.8	0.4
4	0.4	0.4	0	0.1	43	0.7	0.1	0.1	0.2	0	1.4	E 0.4
5	0.4	0.5	0	56	2.8	1.4	0	0.1	0.1	0.2	1.4	E 0.4
6	0.5	0.4	0	15	0.8	0.7	0	0	0.1	0.1	0.7	E 0.4
7	0.6	0.3	0	0.6	2.8	1.1	0	0	0.1	0	0.3	E 0.4
8	0.6	0.2	0.2	0.2	32	0.8	0.1	0	0.2	0.1	0.6	E 0.4
9	0.7	0.2	0.2	0.3	1.4	54	0.2	0.1	0.3	0.1	0.4	E 0.4
10	0.8	0.2	0.2	0.2	3.3	23	0.2	0	0.2	0	0.4	E 0.4
11	0.8	0.2	0.1	+	2.5	E 0.6	0.2	0	0	0	0.4	E 0.3
12	0.8	0.2	0	+	0.7	E 0.6	0.2	0.2	0.1	0	0.1	E 0.3
13	0.8	0.2	0.1	+	0.7	E 0.6	0.2	0.2	0	0.2	0.6	E 0.3
14	1.1	0.2	14	+	0.8	E 0.6	0.2	0.2	0	0.2	0.3	E 0.3
15	0.8	0.2	164	E +	0.7	E 0.6	0.2	0.2	0	0.2	0.2	E 0.3
16	1.1	0.2	8	E +	0.7	E 0.6	0.1	0.1	0.1	0.2	0.5	E 0.3
17	1.1	0.2	21	E +	E 0.6	0.6	0.1	0.2	0.2	0.1	0.6	E 0.3
18	0.8	0.2	263	E +	E 0.6	0.5	0.1	0.2	0.2	0.1	1.1	E 0.3
19	0.8	0	266	E +	E 0.5	0.4	0	0.2	0.1	0	0.7	0.3
20	0.8	0.1	83	E +	E 0.4	0.4	0.1	0.1	0.3	0	0.6	0.7
21	0.7	0.2	44	214	E 0.3	0.3	0.2	0.1	0.4	0	0.2	0.6
22	0.8	0.2	0.6	3.3	E 0.2	0.2	0.2	0.2	0.5	0.3 E	0.3	0.6
23	0.8	0.2	0.6	1.1	E 0.2	0.2	0.2	0.1	0.4	0	0.6	0.7
24	1.1	0	0.6	0.6	0.2	0.2	0.2	0.1	0.3	0	0.6	154
25	1.1	0	0.3	0.7	0.3	0.3	0.2	0	0.2	0.6	0.3	837
26	1.1	0	0.2	0.6	0.4	E 5.5	0.2	0.3	0.2	0.6	E 0.8	16
27	0.7	0	0.1	0.5	0.6	E 39	0.2	0.2	0.2	0.5	E 0.4	E 0.3
28	0.8	0	0.2	0.6	0.6	0.2	0.2	0.2	0.1	0.7	E 0.3	E 0.2
29	0.6	0	0.3	E 0.6		0.2	0.2	0.5	0.2	0.7	0.4	E 0.2
30	0.6	0	0.6	E 23		0	0.1	0.5	0.1	0.2	E 0	
31	0.6		0.4	E 2.2		0		0.5		0.2		
	230	5.9	868.1	320.5	189.1	135.7	4.3	5.4	5.3	5.5	17.7	1017.1
Mean	0.74	0.20	28.1	10.3	6.75	4.38	0.14	0.17	0.18	0.18	0.57	33.9
Acre-Feet	46	12	1720	636	375	269	8.5	11	11	11	35	2020

Remarks: + indicates discharge 0.05 sec. ft. or less.
E indicates discharge estimated - see station description.

Year or Period: Mean 7.12; Acre-Feet 5150



STATION F41C-R

COYOTE CREEK at Del Amo Street

LOCATION:

Station F41C-R, on the right (west) abutment and downstream side of the Del Amo Street (formerly Anaheim Street) highway bridge, 30 feet above the upstream side of Pacific Electric Railroad trestle, and 2.5 miles southeast of Artesia.

DRAINAGE AREA:

110 square miles.

CHANNEL AND CONTROL:

Channel-clay, covered by tules during the summer months only.
No artificial control.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows measured from upstream side of P.E. Railroad trestle.

RECORDER:

Installed January 14, 1930 at Station F41R.
Moved to Station F41B-R on October 30, 1936.
Removed on February 17, 1937.
Installed February 18, 1937 at Station F41C-R in a box type house over an 18 inch diameter, corrugated iron pipe stilling well.
An Au continuous recorder was in service from October 1, 1938 to September 30, 1939.

REGULATION:

None.

DIVERSIONS:

None.

RECORDS AVAILABLE:

At Station F41R:
Stream measurements taken from December 1, 1928 to January 14, 1930.
Recorder records from January 14, 1930 to October 30, 1936.
At Station F41B-R:
October 30, 1936 to February 17, 1937.
At Station F41C-R:
February 18, 1937 to September 30, 1939.

EXTREMES OF DISCHARGE:

1938-1939 (Station F41C-R)
Maximum 1660 second-feet, estimated September 25.
Minimum no flow for several months.
1929-1939 (Stations F41R, F41B-R and F41C-R)
Maximum 4190 second-feet (at Station F41B-R) February 6, 1937.
Minimum no flow at times each year.

ACCURACY:

Good.
Several days of no flow estimated.
Estimated by comparison: September 25

OPERATION:

Located, constructed and operated by the Los Angeles County Flood Control District.

F. C. D. FORM 104 500 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F41C-R

DISCHARGE MEASUREMENTS OF COYOTE CREEK

AT Del Amo St. DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
75	10-28	Bonadiman	3.	0.60	0.64	3.44	0.38		.6	2	0	1110A	FC 40
												1141P	
76	11-23	"	2.	0.45	0.82	3.32	0.37		.6	2	0	145P	"
												1025A	
77	12-2	"	3.	0.74	1.28	3.54	0.95		.6	2	0	1027A	"
		Jackman										1040A	
78	12-15	Bonadiman-	2.	0.60	1.23	3.48	0.75		.6	2	0	1042A	"
79	12-16	" "	5.	1.70	1.28	3.68	2.2		.6	2	0	320P	
												230P	
80	12-18	" "	Two Channels			4.02	13.		.6	7	0	245P	"
												1200P	
81	12-19	" "	76.	285.35	2.85	7.45	812.		.6	7	-.10	1215P	"
												400P	
82	12-19	" "	63.	205.1	2.83	6.39	580.		.6	6	-.02	407P	"
												550A	
83	12-20	" "	45.	82.9	2.47	4.94	205.		.6	7	-.01	600A	"
												600A	
84	12-20	" "	45.	75.6	2.49	4.92	188.		.6	7	-.01	610A	"
												330P	
85	12-20	" "	47.	80.35	1.82	4.80	147.		.6	6	0	345P	"
												905A	
86	12-21	" "	52.	75.20	1.95	4.76	146.		.6	8	0	925A	"
87	12-28	Bonadiman	4.	0.84	1.36	3.43	1.1		.6	2	0	1100A	"
88	1-5	"	3.	0.76	1.68	3.48	1.3		.6	2	0	1030A	"
												310P	
89	1-6	"	Two Channels			4.26	37.		.6	9	0	325P	"
												400P	
90	1-12	"	4.	1.00	1.40	3.46	1.4		.6	2	0	403P	"
91	1-19	"	4.	1.08	1.44	3.46	1.6		.6	2	0	229P	"
		Jackman										900A	
92	1-22	Bonadiman-	Two Channels			4.18	27.		.6	10	0	910A	"
93	1-26	Bonadiman	4.	2.72	0.50	3.48	1.4		.6	2	0	230P	"
		Jackman										417P	
94	2-3	Bonadiman-	50.	86.7	1.89	4.94	164.		.6	7	+.02	425P	"
												448P	
95	2-3	" "	51.	91.6	1.99	4.96	183.		.6	9	0	453P	"
												945A	
96	2-4	" "	49.	69.82	1.86	4.55	130.		.6	9	0	1000A	"
												1000A	
97	2-4	" "	49.	63.19	1.63	4.56	103.		.6	11	0	1010A	"
98	2-8	Bonadiman	4.	1.30	2.68	3.60	3.5		.6	2	0	107P	"
99	2-16	Bonadiman	4.	1.12	1.96	3.48	2.2		.6	2	0	1245P	FC 40
												150P	
100	2-23	"	4.	1.08	1.89	3.50	2.0		.6	2	0	152P	"
101	3-3	"	4.	1.00	1.86	3.48	1.9		.6	2	0	1030A	"
102	3-9	"	4.	1.00	1.60	3.42	1.6		.6	2	0	200P	"
												326P	
103	3-16	"	4.	.84	1.81	3.48	1.5		.6	2	0	328P	"
104	3-23	"	4.	.92	1.96	3.49	1.8		.6	2	0	310P	"
105	3-30	"	4.	.96	1.50	3.50	1.4		.6	2	0	100P	"
106	4-6	"	4.	.72	1.44	3.42	1.0		.6	2	0	100P	"
107	4-20	"	4.	.60	1.20	3.36	0.7		.6	2	0	300P	"
108	4-27	"	3.	.44	1.27	3.30	0.55		.6	2	0	235P	"
109	5-4	"	3.	.24	.58	3.23	0.14		.6	2	0	230P	"
110	5-11	"	3.	.36	.89	3.25	0.3		.6	2	0	230P	"
111	5-18	"	3.	.44	1.54	3.36	0.7		.6	2	0	255P	"
112	6-1	"	3.	.44	1.23	3.30	0.55		.6	2	0	920A	"
113	6-8	"	1.	.08	0.61	3.16	.05		.6	2	0	300P	"
114	7-5	"	3.	0.72	1.19	3.44	0.9		.6	2	0	130P	"
		Jackman										355P	
115	9-25	Bonadiman-	85.	345.15	2.66	9.12	920.		.6	7	-.05	405P	"
												605P	
116	9-26	" "	41.	69.85	.53	4.56	37.		.6	5	-.04	610P	"
												834A	
117	9-28	Bonadiman	6.	5.29	.78	3.72	4.1		.6	4	0	846A	"

F. C. Dist. Form 58

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

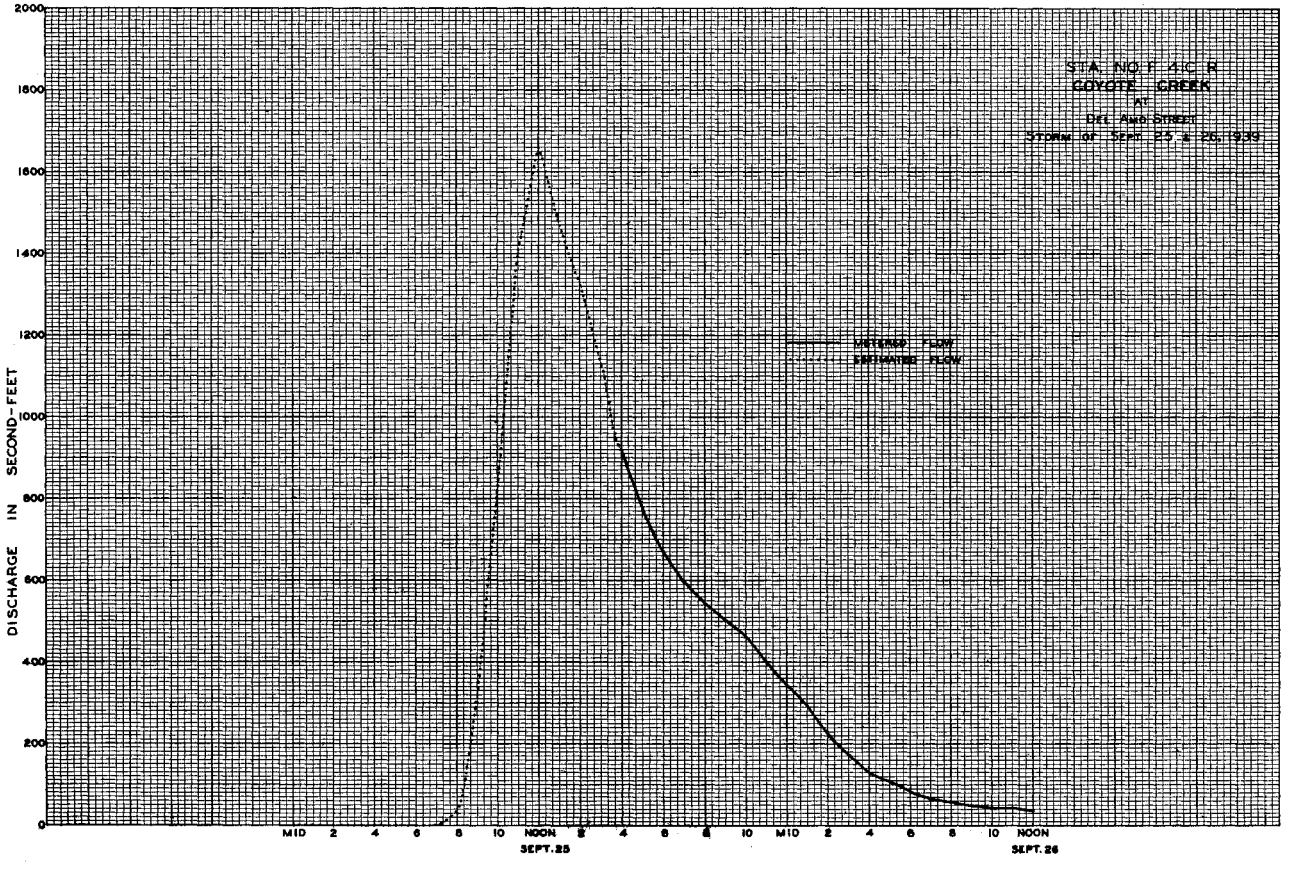
Sta. No. F410-R

Daily discharge, in second-feet of COYOTE CREEK at Del Amo Street, for the year ending September 30, 19 39

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0.3	1.2	1.8	7.5	1.9	0.8	0.5	0.5	0.2	0	0
2	0	0.8	0.8	1.6	3.0	1.9	1.3	0.3	0.5	0.6	0	0
3	+	1.3	1.0	1.3	6.5	1.9	1.4	0.1	0.4	0.8	0	0
4	0.1	1.0	1.3	1.2	11.4	2.2	1.4	0.2	0.2	0.8	0	0
5	0.1	1.2	1.3	2.4	4.3	2.0	1.2	0.4	0.1	1.0	0	0
6	0.1	1.4	1.3	3.8	1.5	2.2	1.0	0.5	0.1	1.2	0	0
7	0.1	0.7	1.0	1.4	6.5	2.2	0.7	0.5	0.1	1.3	0	0
8	0.5	0.5	0.6	4.0	4.0	1.9	0.7	0.4	+	1.4	0	0
9	0.5	1.2	0.6	2.7	4.7	1.9	0.6	0.3	0.1	0.6	E 0	0
10	0.1	2.4	0.5	2.0	4.4	3.2	0.6	0.3	0.1	0.3	E 0	0
11	+	2.4	0.1	1.9	3.2	3.7	0.6	0.3	0.1	0.2	E 0	0
12	+	2.4	0.1	1.9	2.7	4.0	0.7	0.5	0.1	0.6	E 0	0
13	0.6	1.9	0.6	1.9	2.7	2.7	0.8	0.6	0.1	0.3	E 0	0
14	0.5	1.9	0.6	1.8	2.4	2.2	1.0	0.8	0.1	0.1	E 0	0
15	0.8	1.6	0.7	1.8	2.2	1.8	1.0	1.2	0.1	+	E 0	0
16	0.5	2.0	1.9	2.0	2.4	1.4	1.0	1.0	0.1	0	E 0	0
17	0.1	2.0	1.6	1.4	2.2	1.3	0.7	0.7	0.1	0	E 0	E 0
18	+	0.5	1.0	1.4	1.9	1.4	0.5	0.7	+	0	E 0	E 0
19	0.1	0.1	4.8.7	1.8	2.2	1.4	0.6	0.7	0	0	E 0	E 0
20	0.1	0.5	1.8.9	2.2	2.2	1.6	0.7	0.8	0	0	E 0	E 0
21	0.1	1.6	1.1.7	7	2.0	1.4	1.4	0.6	0	0	E 0	E 0
22	0.1	1.0	3.4	2.4	1.9	1.4	1.8	0.4	0	0	E 0	E 0
23	0.1	0.5	1.4	8	2.0	1.6	2.0	0.1	0.1	+	E 0	E 0
24	0.1	0.6	6.5	2.0	1.9	1.6	1.4	0.1	0.3	+	E 0	E 0
25	0.1	1.3	3.4	1.3	1.9	1.2	1.0	+	0.8	+	E 0	E 5.5.2
26	0.1	0.3	2.2	1.8	1.9	1.3	0.8	+	0.6	0	E 0	7.8
27	0.3	0.1	1.3	1.8	1.8	1.6	0.6	+	0.2	0	E 0	1.4
28	0.5	0.7	1.0	1.8	1.9	1.9	0.7	+	0.3	0	E 0	3.4
29	0.6	1.0	1.3	1.6		2.0	0.6	0.1	0.2	0	E 0	1.0
30	0.2	1.0	1.8	1.8		1.8	0.5	0.1	0.1	0	E 0	0.4
31	0.4		1.6	3.4		1.3		0.3		0	0	
	6.8	3.4.2	8.8.5.3	1.4.1.6	3.0.6.5	5.9.9	2.8.1	1.2.5	5.4	9.4	0	6.4.8.8
MEAN	0.22	1.14	28.6	4.57	10.9	1.93	0.94	0.40	0.18	0.30	0	21.6
ACRE-FEET	13	68	1760	281	608	119	56	25	11	19	0	1290

Remarks: E indicates discharge estimated - see station description.
+ indicates discharge 0.05 sec. ft. or less.

YEAR OR PERIOD — MEAN 5.86 — ACRE-FEET 4250



STATION F53R

DUME CREEK at Roosevelt Highway

LOCATION:

On the downstream side of Roosevelt Highway bridge, near Dume Point about 1/4 mile from Pacific Ocean, 22 miles west of Santa Monica.

DRAINAGE AREA:

8.8 square miles.

CHANNEL AND CONTROL:

Channel-sand and gravel.
No artificial control.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows measured from highway bridge.

RECORDER:

Installed January 15, 1930. Removed November 26, 1937 due to construction of new bridge. Reinstalled November 3, 1938 in a F.C. standard house over a 21 inch diameter galvanized iron pipe stilling well.
A Stevens continuous recorder was in service from November 3, 1938 to September 30, 1939.

REGULATION:

None.

DIVERSIONS:

None.

RECORDS AVAILABLE:

January 15, 1930 to November 26, 1937.
November 3, 1938 to September 30, 1939.

EXTREMES OF DISCHARGE:

1938-1939
Maximum 115 second-feet September 25.
Minimum no flow for several months.
1930-1939
Maximum not determined March 2, 1938.
Minimum no flow at times each year.

ACCURACY:

Fair.

OPERATION:

Located, constructed and operated by the Los Angeles County Flood Control District.

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

Sta. No. F53R

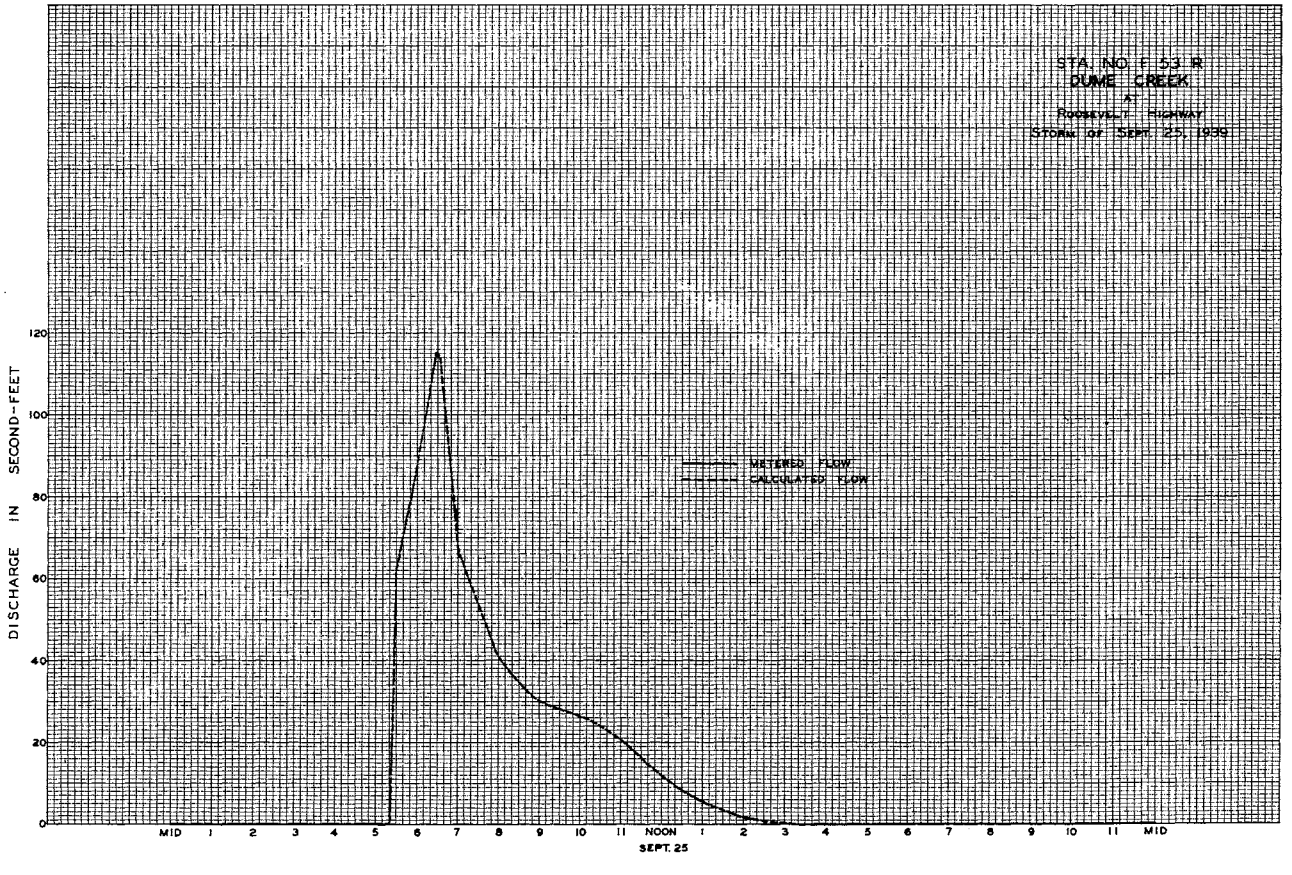
Daily discharge, in second-feet of DUME CREEK at Roosevelt Highway, for the year ending September 30, 1939

F. C. Dist. Form 52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	2.3	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	+	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	1.3
26	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0
Mean	0	0	+	0.07	0.01	0	0	0	0	0	0	0.4
Acre-feet	0	0	+	4.6	0.4	0	0	0	0	0	0	26

Remarks: + indicates discharge 0.05 sec. ft. or less.

Year 1938-1939 Mean 0.04 Acre-feet 31.0



STATION F104R

EATON WASH at Ellis Lane

LOCATION:

Attached to center pier on downstream side of Ellis Lane bridge (formerly Sunset Avenue) NEAR El Monte.

DRAINAGE AREA:

18.4 square miles.

CHANNEL AND CONTROL:

Channel-sand and gravel.
No artificial control.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows measured from upstream side of bridge.

RECORDER:

Installed October 1, 1930. Removed December, 1930 due to bridge construction.
Reinstalled November 10, 1931 in an F. C. standard type house over an 18 inch corrugated iron pipe stilling well.
An H.C.F. continuous recorder was in service from October 1, 1938 to September 30, 1939.

REGULATION:

Flow partially regulated by Eaton Dam.

DIVERSIONS:

The Pasadena Water Department diverts some water just above the mouth of Eaton Canyon.

RECORDS AVAILABLE:

October 1, 1930 to September 30, 1939. From December 28, 1930 to November 10, 1931, the recorder was located at Broadway (now designated as Station F104B-R)

EXTREMES OF DISCHARGE:

1938-1939
Maximum 738 second-feet, January 5.
Minimum no flow most of year.
1930-1939
Maximum 1900 second-feet, estimated March 2, 1938.
Minimum no flow most of each year.

ACCURACY:

Fair.
Estimated by extrapolation on partial days due to communication being obstructed by sand following high flows.

OPERATION:

Located, constructed and operated by the Los Angeles County Flood Control District.

F. C. D. FORM 104 500 8-38

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F104R

DISCHARGE MEASUREMENTS OF EATON WASH

at Ellis Lane. DURING THE YEAR ENDING SEPTEMBER 30, 1939

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Refile Parshall Diff.	Right	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
69	12-15	Lindsay-Ingram	14.0	4.31	4.08	3.14	18.		.6	6	0	245A / 252A	FC 13
70	12-15	" "	17.0	8.04	3.62	2.88	29.		.6	6	-.06	710A / 720A	"
71	12-18	" "	17.0	6.61	3.93	2.90	26.		.6	7	0	240A / 250A	"
72	12-18	Haig-Tscharner	13.0	2.49	1.81	2.78	4.5		.6	6	0	416A / 426A	FC 38
73	12-18	" "	21.0	19.20	5.38	3.32	103.		.6	8	+.08	1010A / 1015A	"
74	12-18	" "	14.6	6.59	3.41	2.62	22.		.6	8	-.05	128P / 135P	"
75	12-18	" "	Two Channels			4.53	374.		.6	19	-.34	945P / 1025P	"
76	12-19	" "	Three Channels			3.06	1.4		.6	11	-.07	1145A / 1153A	"
77	12-20	Lindsay-Ingram	21.0	4.9	3.00	3.44	15.		.6	8	-.01	144P / 150P	FC 28
78	1-5	" "	25.0	12.09	4.62	3.78	56.		.6	9	+.27	1222P / 1229P	"
79	1-5	Haig-Tscharner	4.0	.96	1.56	3.13	1.5		.6	4	0	503P / 513P	FC 38
80	1-21	Lindsay-Ingram	10.0	3.60	3.03	3.28	11.		.6	5	-.03	831A / 837A	FC 13
81	1-21	Haig-Tscharner	9.8	4.11	2.64	3.26	11.		.6	7	+.03	937A / 942A	FC 38
82	1-21	Lindsay-Ingram	11.0	7.05	4.18	3.42	29.		.6	5	0	1142A / 1146A	FC 13
83	1-21	" "	18.0	12.03	3.92	3.50	47.		.6	6	+.03	431P / 437P	"
84	1-21	Haig-Tscharner	25.6	21.30	3.86	3.66	82.		.6	7	+.01	544P / 553P	FC 38
85	1-21	Lindsay-Ingram	20.0	7.68	3.48	3.44	27.		.6	6	-.01	716P / 721P	FC 13
86	1-21	" "	3.5	.99	2.13	3.12	2.1		.6	3	-.04	855P / 900P	"
87	1-30	" "	6.5	1.97	2.39	3.06	4.6		.6	3	-.03	813P / 817P	"
88	2-3	" "	17.0	7.36	3.53	3.32	26.		.6	6	-.04	829A / 832A	FC 28
89	2-3	Haig-Tscharner	9.6	3.14	2.52	3.02	7.9		.6	6	-.01	1005A / 1010A	FC 38
90	2-3	Lindsay-Ingram	4.0	.77	1.61	2.90	1.2		.6	3	0	344P / 348P	FC 28
91	2-3	Haig-Tscharner	2.3	.56	1.25	2.85	.70		.6	4	-.02	421P / 425P	FC 38
92	2-3	" "	0.7	.12	.33	2.64	.04		.6	2	0	747P / 749P	"
93	2-8	Haig-Tscharner	7.0	1.22	.77	2.68	.95		.6	6	-.04	644A / 650A	FC 38
94	3-10	" "	8.0	2.48	1.13	2.72	2.8		.6	6	+.01	110A / 117A	"
95	3-26	Lindsay-Ingram	9.5	2.83	.93	2.80	2.6		.6	5	0	410P / 416P	FC 28
96	3-27	Haig-Tscharner	6.5	2.12	1.13	2.72	2.4		.6	6	-.03	906A / 912A	FC 38
97	9-24	Lindsay	12.5	4.18	2.04	3.10	8.5		.6	6	0	940P / 946P	FC 28
98	9-25	Lindsay-Ingram	25.0	14.63	4.19	3.38	61.		.6	8	+.05	1238A / 1244A	"
99	9-25	" "	34.0	33.75	6.15	4.09	208.		.6	6	+.02	526A / 535A	"
100	9-25	" "	31.	21.99	4.96	3.72	109.		.6	8	0	746A / 757A	"
101	9-25	Haig-Koch	29.	27.53	5.66	4.09	156.		.6	8	-.16	1015A / 1021A	FC 33

F. C. Dist. Form 59

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

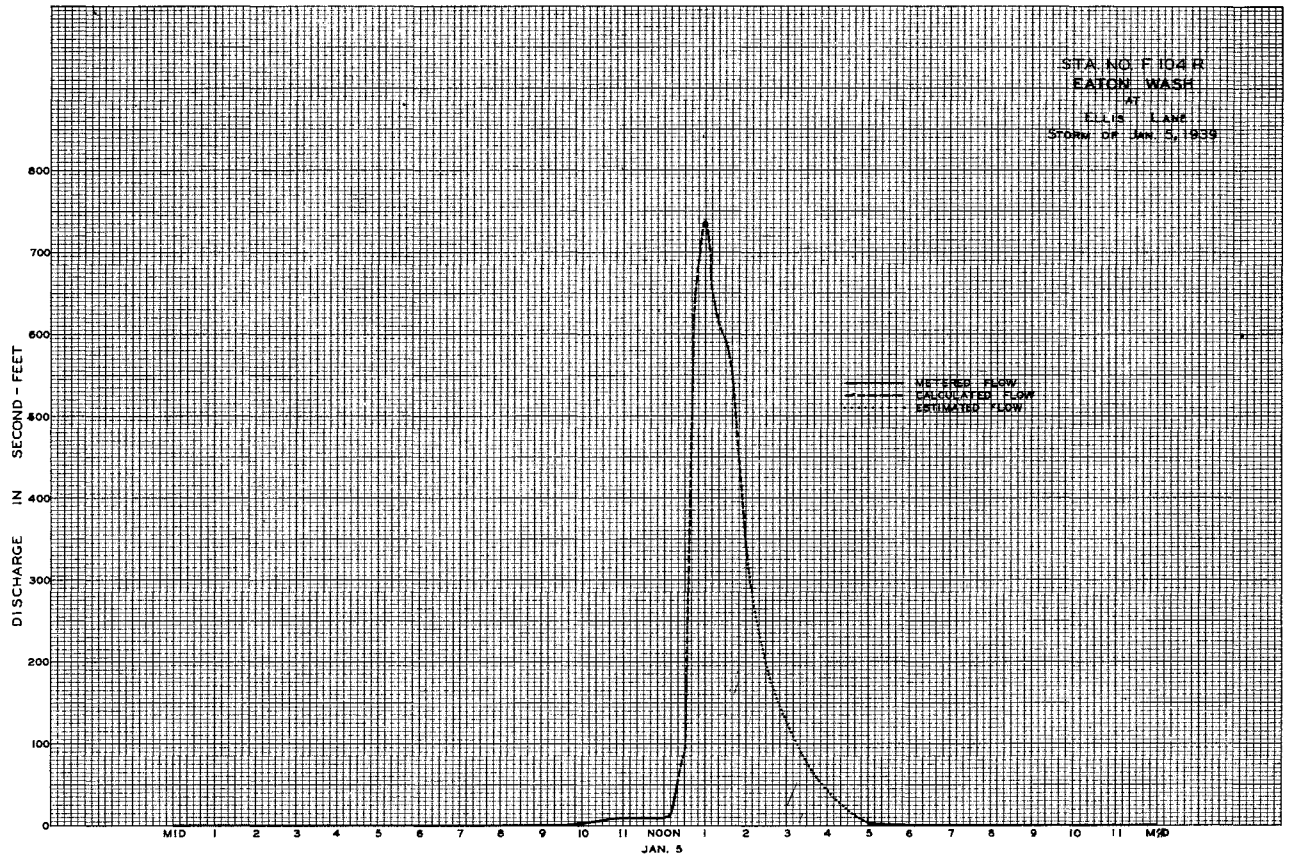
Sta. No. F104R

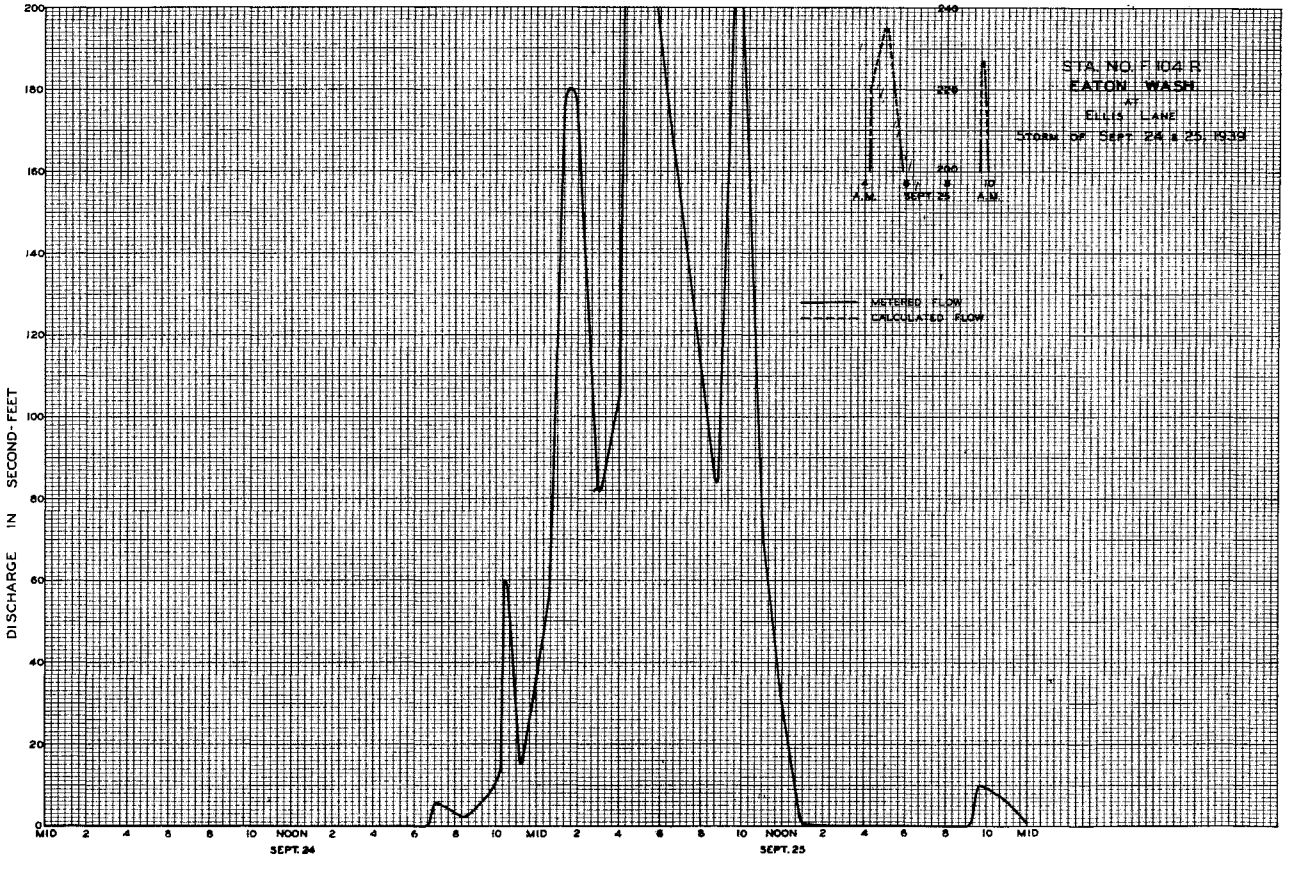
Daily discharge, in second-feet of EATON WASH at Ellis Lane, for the year ending September 30, 1939

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0	0	0	0	+	0	0	0	0	0
2	0	0	0	0	0	0	0.7	0	0	0	0	0
3	0	0	0	0	5	0	0	0	0	0	0	0
4	0	0	0	0	1.3	0	0	0	0	0	0	0
5	0	0	0	5.8	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0.3	0	0	0	0	0	0	0
9	0	0	0	0	0	1.8	0	0	0	0	0	0
10	0	0	0	0	0	0.2	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	+	0	0	0	0	0	0	0	0	0
14	0	0	1.5	0	0	0	0	0	0	0	0	0
15	0	0	1.6	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	1.0	0	0	0	0	0	0	0	0	0
18	0	0	7.7	0	0	0	0	0	0	0	0	0
19	0	+	6.6	0	0	0	0	0	0	0	0	0
20	0	0	3.7	0	0	0	0	0	0	0	0	0
21	0	0	0.4	1.5	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	3.2
25	0	0.2	0	0	0	0	0	0	0	0	0	70
26	0	+	0	0	0	0.3	0	0	0	0	0	4.4
27	0	0	0	0	0	1.5	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0
29	+	0	0	0		0	0	0	0	0	0	0
30	0	0	0	1.3		0	0	0	0	0	0	0
31	0		0	0		0		0		0	0	
	+	0.2	198.9	74.3	6.6	3.8	0.7	0	0	0	0	77.6
MEAN	+	+	6.41	2.40	.24	.12	.02	0	0	0	0	2.69
ACRE-FEET	+	.40	394	147	13	7.5	1.4	0	0	0	0	154

Remarks: + indicates discharge 0.05 sec. ft. or less.

YEAR OR PERIOD MEAN 0.992 ACRE-FEET 718


STA. NO. F 104 R
EATON WASH
AT
ELLIS LANE
STORM OF JAN. 5, 1939
DISCHARGE IN SECOND - FEET
METERED FLOW
CALCULATED FLOW
ESTIMATED FLOW
MID 1 2 3 4 5 6 7 8 9 10 11 NOON 1 2 3 4 5 6 7 8 9 10 11 MID
JAN. 5


STA. NO. F 104 R
EATON WASH
AT
ELLIS LANE
STORM OF SEPT. 24 & 25, 1939
DISCHARGE IN SECOND-FEET
METERED FLOW
CALCULATED FLOW
MID 2 4 6 8 10 NOON 2 4 6 8 10 MID 2 4 6 8 10 NOON 2 4 6 8 10 MID
SEPT. 24
SEPT. 25

STATION F65B-R

LITTLE DALTON CREEK above mouth of canyon

LOCATION:

On the left (east) bank about 120 feet above Glendora Mountain Road crossing, 3/4 mile above mouth of canyon and about 5 miles northeast of Glendora.

DRAINAGE AREA:

2.7 square miles.

CHANNEL AND CONTROL:

Channel-rock and gravel with wire mat rip rap on sides.
Control-rubble and concrete checks in channel bottom.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows measured from bridge crossing below station.

RECORDER:

Installed January 1929 at StationF65R at mouth of canyon (drainage area-3.3 square miles). Removed November 23, 1938.
Reinstalled November 30, 1938 at Station F65B-R in a F.C. standard recorder house over a 21 inch diameter corrugated iron pipe stilling well.
An H.C.F. continuous recorder was in servios from November 30, 1938 to September 30, 1939.

REGULATION:

None.

DIVERSIONS:

Glendora Consolidated Mutual Water Co.

RECORDS AVAILABLE:

At Station F65R
January 28, 1929 to November 23, 1938.
At Station F65B-R
November 30, 1938 to September 30, 1939.

EXTREMES OF DISCHARGE:

1938-1939
Maximum 36 second-feet January 5.
Minimum no flow for several months.
1929-1939
Maximum 960 second-feet, estimated, March 2, 1938.

ACCURACY:

Fair.

OPERATION:

Located, constructed and operated by the Los Angeles County Flood Control District with co-operation of the U.S.G.S. Water Resources Branch.

F. C. D. FORM 104 500 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F65B-R

DISCHARGE MEASUREMENTS OF LITTLE DALTON CREEK

AT above mouth of Canyon DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
1	12-15	Brewster	0.5	.11	1.27	.79	.14		.6	1	0	330P / 332P	FC 8
2	12-18	Brewster-Pettis	4.0	1.12	4.88	1.28	5.5		.6	4	0	725A / 735A	"
3	12-19	Brewster-Pettis	7.0	4.28	3.41	1.51	15.		.6	5	0	320A / 330A	"
4	12-19	" "	6.0	2.80	2.99	1.40	8.4		.6	5	0	730A / 740A	"
5	12-19	" "	5.0	1.86	1.85	1.12	3.4		.6	5	0	1110A / 1118A	"
6	12-20	" "	6.0	2.62	2.48	1.30	6.5		.6	5	-.01	740A / 750A	"
7	12-20	" "	10.0	2.56	1.73	1.15	4.4		.6	5	0	215P / 221P	"
8	12-22	" "	4.0	.96	.91	.90	.85		.6	4	0	330P / 335P	"
9	12-29	Brewster	4.0	.74	.50	.83	.37		.6	4	0	218P / 224P	"
10	1-5	Brewster-Pettis	8.0	5.43	3.43	1.79	19.		.6	5	+.02	300P / 310P	"
11	1-9	Brewster	4.0	.68	1.26	.38	.85		.6	4	0	925A / 930A	"
12	1-12	"	4.0	.78	.83	.37	.65		.6	4	0	133P / 139P	"
13	1-19	"	1.5	.46	.96	.36	.44		.6	3	0	230P / 235P	"
14	1-21	"	5.0	1.28	1.51	.56	1.9		.6	5	+.02	1139A / 1145A	"
15	1-26	"	1.5	.46	.76	.44	.35		.6	3	0	330P / 335P	"
16	2-2	"	1.5	.36	1.25	.39	.45		.6	3	0	320P / 326P	"
17	2-3	Brewster-Pettis	5.0	1.12	1.28	.46	1.4		.6	5	0	1036A / 1042A	"
18	2-8	Brewster	8.0	3.54	1.57	.80	5.6		.6	5	-.04	402A / 408A	"
19	2-9	"	4.0	.92	1.34	.43	1.2		.6	4	0	230P / 235P	"
20	2-16	"	1.5	.62	.94	.38	.60		.6	3	0	205P / 210P	"
21	2-23	"	1.5	.56	.93	.37	.50		.6	3	0	255P / 300P	"
22	3-2	"	1.5	.43	.95	.37	.41		.6	3	0	300P / 304P	"
23	3-9	"	1.5	.41	.98	.38	.40		.6	3	.0	300P / 305P	"
24	3-9	"	7.0	2.29	1.83	.61	4.2		.6	5	-.02	1052P / 1100P	"
25	3-16	Brewster	1.5	.41	.73	.36	.30		.6	3	0	220P / 224P	FC 8
26	3-23	"	1.5	.51	.63	.37	.32		.6	3	0	330P / 335P	"
27	3-27	Brewster-Pettis	6.0	1.79	1.60	.62	2.9		.6	4	+.01	820A / 826A	"
28	3-27	" "	4.0	1.22	.84	.50	1.0		.6	4	-.01	155P / 200P	"
29	3-30	Brewster	1.5	.52	.96	.40	.50		.6	3	0	300P / 305P	"
30	4-6	"	1.5	.44	.98	.39	.43		.6	3	0	150P / 155P	"
31	4-13	"	1.0	.32	1.22	.36	.39		.6	2	0	250P / 254P	"
32	4-20	"	1.0	.21	1.05	.32	.22		.6	2	0	305P / 310P	"
33	4-27	"	1.0	.24	1.08	.35	.26		.6	2	0	230P / 234P	"
34	5-11	"	1.0	.24	.83	.27	.20		.6	2	0	400P / 405P	"
35	5-25	"	0.5	.12	.25	.21	.03		.6	1	0	232P / 235P	"
36	9-24	"	1.0	.25	1.32	.46	.33		.6	2	0	805A / 808A	"
37	9-25	"	4.0	.94	1.79	.60	1.7		.6	4	0	555A / 601A	"
38	9-25	Brewster-Pettis	3.0	.54	1.39	.48	.75		.6	3	0	435P / 439P	"
39	9-26	Brewster	1.0	.24	1.67	.44	.40		.6	2	0	1012A / 1015A	"

F. C. Dist. Form 52

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

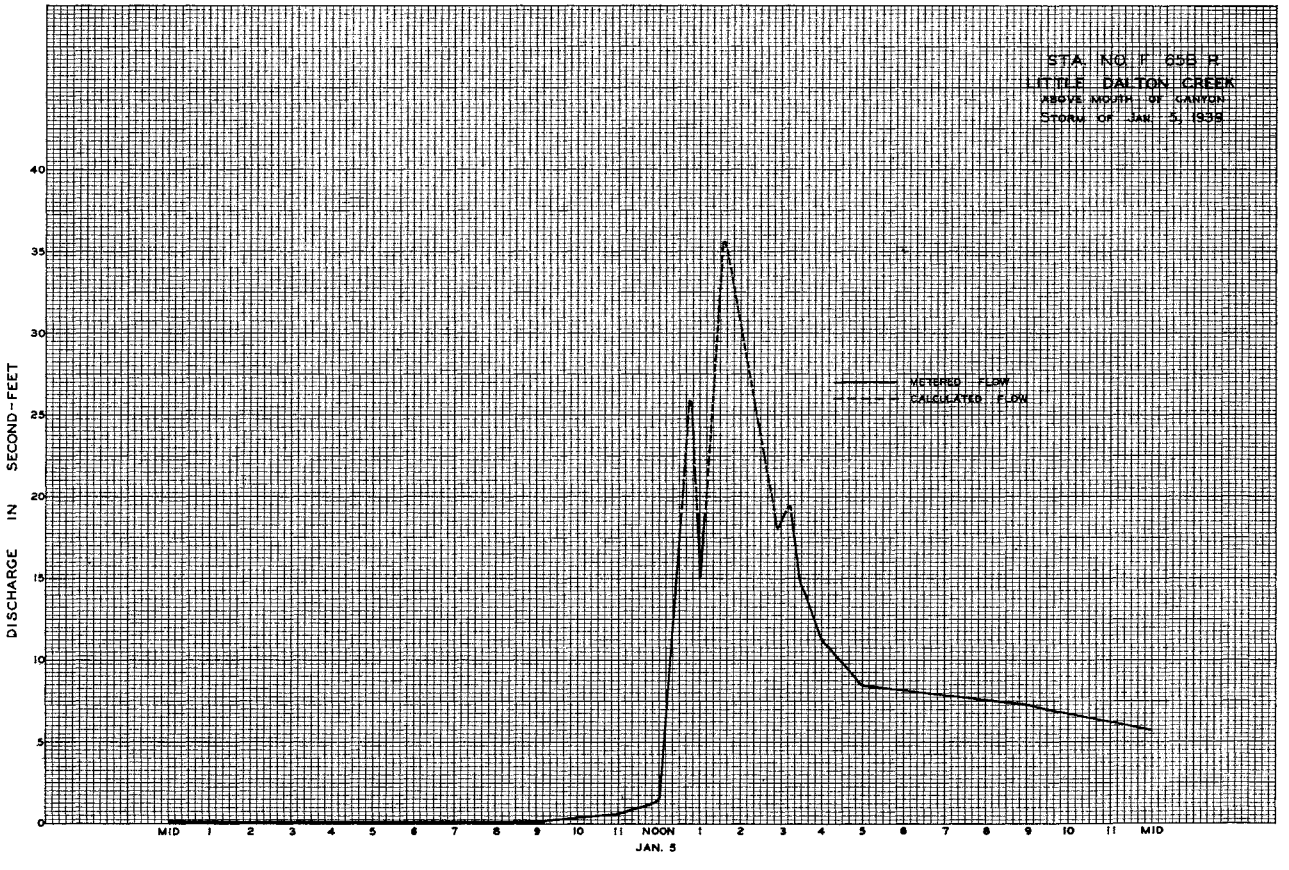
F65R and
Sta. No. F65B-R

Daily discharge, in second-feet of LITTLE DALTON CREEK above mouth of canyon, for the year ending September 30, 1939

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0	0.1	0.4	0.4	0.5	0.2	0	0	0	0
2	0	0	0	0.2	0.4	0.4	0.8	0.2	0	0	0	0
3	0	0	0	0.2	1.1	0.5	0.7	0.2	0	0	0	0
4	0	0	0	0.2	1.1	0.4	0.7	0.2	0	0	0	0
5	0	0	0	6	1.1	0.4	0.6	0.2	0	0	0	0
6	0	0	0	2.8	1.0	0.4	0.5	0.3	0	0	0	0
7	0	0	0	1.0	1.0	0.4	0.4	0.3	0	0	0	0
8	0	0	0	0.9	2.0	0.4	0.4	0.2	0	0	0	0
9	0	0	0	0.8	1.3	0.8	0.4	0.2	0	0	0	0
10	0	0	0	0.8	1.2	1.5	0.4	0.2	0	0	0	0
11	0	0	0	0.7	1.1	0.4	0.4	0.2	0	0	0	0
12	0	0	0	0.7	1.0	0.3	0.4	0.2	0	0	0	0
13	0	0	0	0.7	0.9	0.4	0.4	0.2	0	0	0	0
14	0	0	+	0.7	0.8	0.4	0.5	0.4	0	0	0	0
15	0	0	0.3	0.6	0.7	0.4	0.4	0.4	0	0	0	0
16	0	0	0.2	0.6	0.6	0.3	0.4	0.3	0	0	0	0
17	0	0	+	0.5	0.6	0.3	0.4	0.3	0	0	0	0
18	0	0	7	0.3	0.6	0.3	0.3	0.3	0	0	0	0
19	0	0	5.5	0.4	0.6	0.4	0.3	0.2	0	0	0	0
20	0	0	3.8	0.6	0.6	0.4	0.3	0.2	0	0	0	0
21	0	0	1.1	1.0	0.5	0.4	0.2	0.2	0	0	0	0
22	0	0	0.9	0.1	0.4	0.3	0.3	0.2	0	0	0	0
23	0	0	0.8	0.1	0.4	0.3	0.4	0.2	0	0	0	0
24	0	0	0.7	0.4	0.6	0.3	0.4	0.1	0	0	0	0.1
25	0	0	0.6	0.4	0.5	0.3	0.4	+	0	0	0	1.5
26	0	0	0.5	0.4	0.5	0.9	0.4	0	0	0	0	0.5
27	0	0	0.4	0.4	0.4	1.4	0.3	0	0	0	0	0.2
28	0	0	0.4	0.4	0.4	0.8	0.3	0	0	0	0	+
29	0	0	0.4	0.4		0.5	0.2	0	0	0	0	0
30	0	0	0.4	0.7		0.5	0.2	0	0	0	0	0
31	0		0.2	0.4		0.4		0		0		
	0	0	23.2	23.5	21.8	15.4	12.3	5.6	0	0	0	2.3
MEAN	0	0	0.75	0.76	0.78	0.50	0.41	0.18	0	0	0	0.08
ACRE-FEET	0	0	46	47	43	31	24	11	0	0	0	4.6

Remarks: + indicates discharge 0.05 sec. ft. or less.
° recorder installed at station F65B-R.

YEAR OR PERIOD — MEAN 285 — ACRE-FEET 207



STATION L1R

LITTLE ROCK CREEK above Little Rock Dam

LOCATION:

On the right (east) bank about 2 miles above Little Rock Palmdale Irrigation District's Dam and approximately 1000 feet upstream from the junction of Little Rock and Santiago Creeks.

DRAINAGE AREA:

49.0 square miles.

CHANNEL AND CONTROL:

Channel-gravel and boulders.
Control-artificial control with notch for low flows, buried under sand and gravel during current period.

DISCHARGE MEASUREMENTS:

Low flows measured by wading near gage.
High flows measured from cable car above gage.

RECORDER:

Installed September, 1930. Washed out during March 2, 1938 storm.
Reinstalled March 31, 1939 in an F.C. standard type house over a 4.0 ft.x 4.0 ft. rubble masonry stilling well.
An Au continuous recorder was in service from March 31, 1939 to September 30, 1939.

REGULATION:

None.

DIVERSIONS:

None.

RECORDS AVAILABLE:

October 1, 1930 to September 30, 1938.

EXTREMES OF DISCHARGE:

1938-1939
Maximum not determined, record incomplete.
Minimum not determined, record incomplete.
1930-1939
Maximum 17000 second-feet, estimated, March 2, 1938.
Minimum no flow at times each year.

ACCURACY:

Poor.
Low flows frequently estimated due to poor communication.

OPERATION:

Originally located and installed by Little Rock Palmdale Irrigation District. Reinstalled by the Los Angeles County Flood Control District March 31, 1939. Operated by the Los Angeles County Flood Control District in co-operation with the U.S.G.S. Water Resources Branch.

F. C. D. FORM 104 800 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. L 1 R

DISCHARGE MEASUREMENTS OF LITTLE ROCK CREEK

AT above Little Rock Dam DURING THE YEAR ENDING SEPTEMBER 30, 1939

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
31	10-29	Luce	4.2	1.09	1.20	-	1.3		.6	5	-	325P / 340P	FC 39
32	11-18	"	5.7	1.78	1.26	-	2.2		.6	6	-	1145A / 1155A	39
33	12-7	"	5.0	1.72	1.08	-	1.9		.6	5	-	1045A / 1057A	39
34	2-11	"	10.3	5.73	2.60	-	15.		.6	7	-	930A / 940A	39
35	3-10	" M.Luce	11.5	6.61	3.35	-	22.		.6	7	-	510P / 530P	39
36	3-27	Wood	16.6	11.61	3.26	-	38.		.6	9	-	1202P / 1216P	42
37	3-31	Wood-Fredrick	17.1	10.16	3.64	-	25.		.6	10	-	210P / 226P	42
38	3-31	" "	7.1	4.11	2.84	-	12.		.6	7	-	240P / 248P	42
39	4-16	Luce	14.5	11.02	1.92	3.20	21.		.6	9	0	420P / 435P	39
40	5-20	"	12.0	5.34	1.07	3.00	5.7		.6	7	0	545P / 555P	39
41	6-28	"	5.2	1.00	.64	2.66	.6		.6	6	0	345P / 355P	39
42	7-27	"	2.0	.23	.74	2.48	.17		.6	3	0	1250P / 1255P	39
43	8-15	"	1.3	.12	.58	2.46	.07		.6	4	0	1115A / 1120A	39
44	9-22	"	1.7	.23	.70	2.51	.16		.6	4	0	510P / 515P	39

F. C. Dist. Form 52

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

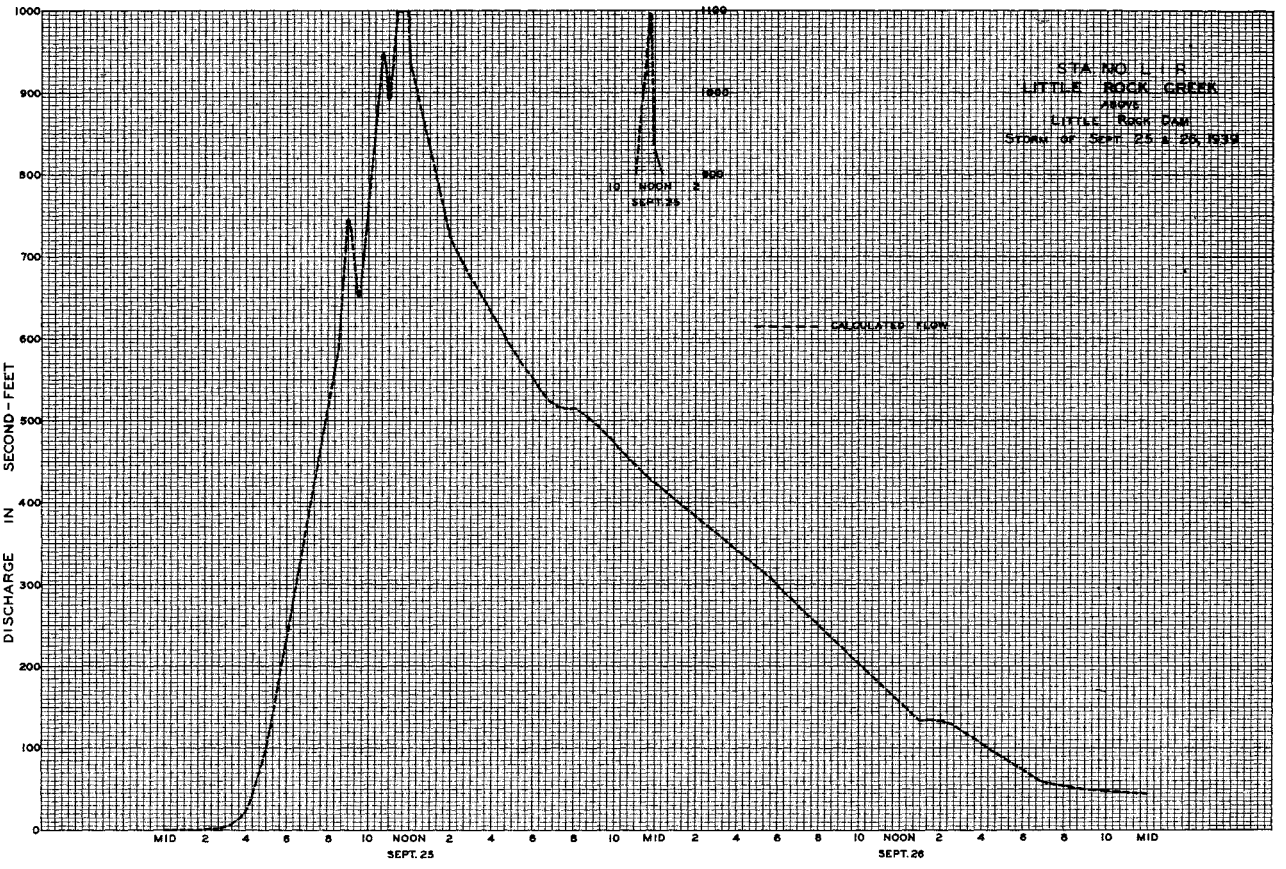
Sta. No. L1R

Daily discharge, in second-feet of LITTLE ROCK CREEK above Little Rock Dam., for the year ending September 30, 1939

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1								9.5	5	1.3	0.3	E +
2								9.5	4.4	1.2	0.3	E +
3								9.5	4.2	1.3	0.3	E 0.1
4								9.5	3.6	1.8	0.4	E 0.1
5								8.5	3.0	2.2	0.3	E 0.1
6								8.5	2.6	2.8	0.4	E +
7								8	1.4	2.4	0.4	E +
8								7.5	1.4	1.9	0.4	E +
9								7.5	E 0.5	2.2	0.4	E +
10								7	E 0.5	1.8	0.5	E +
11								7	E 0.5	1.0	0.4	E +
12								7	E 0.5	0.5	0.3	E +
13								7.5	1.9	E 0.1	0.3	E +
14								7.5	1.8	E 0.1	0.2	E +
15								7.5	1.9	E 0.1	0.2	E +
16								7	1.8	E 0.1	0.2	E +
17							19	6.5	1.6	E 0.1	0.2	E +
18							18	6	1.6	E 0.1	0.2	E +
19							17	6	1.3	E 0.1	0.2	E +
20							16	5.5	1.3	E 0.1	0.3	E +
21							16	5.5	1.2	E 0.1	0.2	E 0.6
22							15	5.5	1.0	E 0.1	0.2	E 0.3
23							14	5.5	0.7	E 0.1	0.2	E 0.2
24							14	5.5	0.6	0.1	0.2	0.6
25							13	5.5	0.5	0.3	0.3	4.7 3
26							12	5.5	0.7	0.4	0.3	1.9 0
27							11	5.5	0.6	0.5	0.2	2.2
28							10	5.5	0.7	0.6	0.2	7
29							9	5	1.0	0.2	0.1	6
30							9	5	1.3	0.2	E 0.1	5.5
31								5		0.3	E 0.1	
							193 (4/17-30)	211.5	49.1	24.1	8.3	705.5
MEAN							(4/17-30)	6.82	1.64	0.78	0.27	23.5
ACRE-FEET							383	420	97	48	16	1400

Remarks: E indicates discharge estimated - see station description.
+ indicates discharge 0.05 sec. ft. or less.

YEAR OR PERIOD MEAN ACRE-FEET 2360 (4/17-9/30)



STATION F67B-R

LITTLE SANTA ANITA CREEK below Sierra Madre Dam

LOCATION:

On the left (east) bank of Little Santa Anita Creek about 270 feet below Sierra Madre Dam and about 1-1/4 miles northeast of Sierra Madre.

DRAINAGE AREA:

2.4 square miles.

CHANNEL AND CONTROL:

Channel-rubble masonry, depth 7.5 feet, width 24.6 feet at top and 22.5 feet at bottom. Channel forms control.

DISCHARGE MEASUREMENTS:

Low flows measured by wading near station. High flows measured from foot bridge 30 feet above station.

RECORDER:

Installed January 28, 1929 at Station F67R about 1000 feet downstream from present location.
Removed May 20, 1936.
Reinstalled May 21, 1936 in a 4 ft x 3 ft. combination concrete stilling well and house. Stevens type L recorder was in service October 1, 1936 to September 30, 1939.

REGULATION:

The 30 inch gate valve in the Sierra Madre Dam remains open except in emergency conditions.

DIVERSIONS:

Underground and surface flow developed and diverted by Sierra Madre Water Department.

RECORDS AVAILABLE:

At Station F67R January 28, 1929 to May 20, 1936.
At Station F67B-R May 21, 1936 to September 30, 1939.

EXTREMES OF DISCHARGE:

1938-1939
Maximum 132 second-feet December 18.
Minimum no flow several months during year.
1929-1939
Maximum 620 second-feet, estimated, March 2, 1938.
Minimum no flow several months during year.

ACCURACY:

Poor.
Communication poor during channel construction in November, December, January and February.
Gage heights and discharges frequently estimated.

OPERATION:

Located, constructed and operated by the Los Angeles County Flood Control District.

F. C. D. FORM 104 500 8-38

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F 67 B-R

DISCHARGE MEASUREMENTS OF LITTLE SANTA ANITA CREEK

at above below Sierra Madre Dam DURING THE YEAR ENDING SEPTEMBER 30, 1939

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Current Met.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
82	12-18	Lindsay, Ingram	5.0	1.19	2.05	.80	2.4		.6	5	0	245P / 253P	FC28
83	12-18	" "	Two channels			1.23	15.		.6	8	+.02	935P / 944P	"
84	12-19	" "	5.0	2.42	2.98	.96	7.2		.6	5	0	850A / 855A	FC13
85	12-20	" "	5.0	1.66	3.37	.98	5.6		.6	5	0	1010A / 1017A	"
86	1-5	Lindsay, Ingram	6.5	.77	3.58	.97	2.8		.6	4	-.02	718P / 723P	FC28
87	1-6	Haig	1.2	.10	.60	-	..06		.6	3	0	138P / 141P	FC38
88	1-21	Lindsay, Ingram	2.8	.55	1.36	1.16	.75		.6	4	-.01	352P / 356P	FC13
89	9-25	" "	8.5	1.47	5.45	0.00	8.0		.6	6	0	152A / 158A	FC28
90	9-25	" "	18.0	3.97	7.68	.10	31.0		.6	7	+.04	936A / 940A	"
91	9-25	Lindsay	Two channels			.01	5.		.6	6	0	239P / 248P	"

F. C. Dist. Form 18

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

Sta. No. F67B-R

Daily discharge, in second-feet of LITTLE SANTA ANITA CREEK below Sierra Madre Dam, for the year ending September 30, 1939

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	+	0	0	+	+	0	0	0	0	0
2	0	0	0	0	0	E +	+	0	0	0	0	0
3	0	0	0	0	E 0.5	+	+	0	0	0	0	0
4	0	0	0	0	0	+	+	0	0	0	0	0
5	0	0	0	2.4	0	+	+	0	0	0	0	0
6	0	0	0	E 0.1	E 0.1	+	0	0	0	0	0	0
7	0	0	0	E 0.1	0	+	0	0	0	0	0	0
8	0	0	0	E 0.1	E 0.1	+	0	0	0	0	0	0
9	0	0	0	E +	E 0.1	+	0	0	0	0	0	0
10	0	0	0	E +	E +	E +	0	0	0	0	0	0
11	0	0	0	E +	E +	+	0	0	0	0	0	0
12	0	0	0	E +	E +	+	0	0	0	0	0	0
13	0	0	0	E +	E +	+	0	0	0	0	0	0
14	0	0	0	E +	E +	+	0	0	0	0	0	0
15	0	0	0	E +	E +	+	0	0	0	0	0	0
16	0	0	0	E +	E +	E +	0	0	0	0	0	0
17	0	0	0	E +	E +	+	0	0	0	0	0	0
18	0	0	3.8	E +	+	+	0	0	0	0	0	0
19	0	0	6.5	E +	+	+	0	0	0	0	0	0
20	0	0	5.5	E +	+	0	0	0	0	0	0	0
21	0	0	1.5	0.6	+	0	0	0	0	0	0	0
22	0	0	0.4	0.1	+	0	0	0	0	0	0	0
23	0	0	+	E +	E +	0	0	0	0	0	0	0
24	0	0	0	E +	+	0	0	0	0	0	0	+
25	0	0	0	E +	+	0	0	0	0	0	0	8
26	0	0	0	0	+	0	0	0	0	0	0	3.0
27	0	0	0	0	+	+	0	0	0	0	E +	
28	0	0	0	E +	+	+	0	0	0	0	E +	
29	0	0	0	0	+	+	0	0	0	0	E 0	
30	0	0	0	E +		E +	0	0	0	0	0	0
31	0		0	0		+		0		0	0	
	0	0	17.7	3.4	0.8	+	+	0	0	0	0	11.0
MEAN	0	0	0.57	0.11	0.03	+	+	0	0	0	0	0.37
ACRE-FEET	0	0	35	6.7	1.6	+	+	0	0	0	0	22

Remarks: + indicates discharge 0.05 sec. ft. or less.
E indicates discharge estimated - see station description.

YEAR OR PERIOD — MEAN 0.090 — ACRE FEET 65.3

STATION F267R

LITTLE SANTA ANITA CREEK at Woodland Avenue

LOCATION:

On the left (northeast) bank about 20 feet east of the intersection of Woodland Avenue and First Street and about one mile North of Arcadia.

DRAINAGE AREA:

4.15 square miles.

CHANNEL AND CONTROL:

Channel-rectangular concrete, 6 feet deep and 10 feet wide.
Channel forms control.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows measured from footbridge at station.

RECORDER:

Installed December 30, 1938 in a box type house over an 18 inch diameter corrugated iron pipe stilling well.
A Stevens type L recorder was in service from December 30, 1938 to September 30, 1939.

REGULATION:

Partially regulated by Sierra Madre Dam.
Usual regulation effects high flows only.

DIVERSIONS:

Underground and surface flow developed and diverted by Sierra Madre Water Department.
Flow also diverted about one mile above station for Spreading in Sierra Madre Spreading Grounds.

RECORDS AVAILABLE:

From December 30, 1938 to September 30, 1939.

EXTREMES OF DISCHARGE:

1938-1939
Maximum not determined.
Minimum no flow most of year.

ACCURACY:

Poor.
Communication to stilling well was very unreliable due to excessive sand in channel.

REMARKS:

This station record is not published due to insufficient reliable records during this period.

OPERATION:

Located, constructed and operated by the Los Angeles County Flood Control District.

F. C. D. FORM 104 500 6-38

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F267R

DISCHARGE MEASUREMENTS OF LITTLE SANTA ANITA CREEK

AT Woodland Ave. DURING THE YEAR ENDING SEPTEMBER 30, 1939

NO.	DATE	MADE BY		WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Factor Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
1	12-18	Lindsay-Ingram		10.0	4.92	7.15	-	35.		.6	5	-	1015P / 1020P	FC 28
2	1-5	"	"	10.0	2.92	6.70	.61	20.		.6	5	+.06	1147A / 1153A	"
3	1-5	"	"	5.0	.35	1.06	.12	.37		.6	2	-.03	700P / 705P	"
4	9-25	"	"	10.0	1.82	2.07	.20	3.8		.6	7	0	123A / 151A	"
5	9-25	"	"	10.0	3.89	9.32	.46	36.		.6	7	+.09	855A / 900A	"
6	9-25	"	"	10.0	6.13	6.92	.74	42.		.6	7	0	907A / 912A	"

STATION F19R

LITTLE TUJUNGA CREEK at Foothill Boulevard

LOCATION:

On downstream end of second pier from left (east) abutment of Foothill Boulevard bridge, 4 miles east of San Fernando.

DRAINAGE AREA:

21.0 square miles.

CHANNEL AND CONTROL:

Channel-sand and silt.
No artificial control.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows measured from highway bridge.

RECORDER:

Installed December, 1926 in an F. C. standard type house over an 18 inch diameter corrugated iron pipe stilling well.
An H.C.F. continuous recorder was in service from October 1, 1935 to September 30, 1939.

REGULATION:

None.

DIVERSIONS:

None.

RECORDS AVAILABLE:

December 26, 1926 to September 30, 1939.

EXTREMES OF DISCHARGE:

1935-1939
Maximum 175 second-feet, March 9.
Minimum no flow part of year.
1929-1939
Maximum 8500 second-feet, estimated, March 2, 1938.
Minimum no flow part of each year.

ACCURACY:

Poor.
Low flows frequently interpolated or estimated due to communication being obstructed by sand.

OPERATION:

Located, constructed and operated by the Los Angeles County Flood Control District in co-operation with the U.S.G.S. Water Resources Branch.

F. C. D. FORM 104 300 8-38

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F19R

DISCHARGE MEASUREMENTS OF LITTLE TUJUNGA CREEK

AT Foothill Blvd. DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Period Diff.	Shifted	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
110	12-14	Luce	16.2	7.76	3.84	2.10	30.		.6	8	-.10	850P 900P	FC 39
111	12-15	Luce-Skelly	22.0	15.36	6.93	2.33	106.		.6	8	-.06	155A 210A	"
112	12-15	Luce	20.5	7.68	4.65	2.07	36.		.6	7	-.05	245A 255A	"
113	12-15	Luce-Skelly	5.8	1.45	2.09	1.95	3.0		.6	5	0	835A 840A	"
114	12-15	" "	4.0	.75	1.47	1.91	1.1		.6	4	0	143P 148P	"
115	12-15	" "	16.5	6.75	3.65	2.05	24.		.6	7	0	1105P 1110P	"
116	12-16	" "	4.5	.71	1.13	1.86	.8		.6	5	0	930A 935A	"
117	12-18	" "	21.0	13.69	4.94	2.26	68.		.6	8	+.02	1220A 1240A	"
118	12-18	" "	18.0	8.21	4.25	2.16	35.		.6	9	0	245A 250A	"
119	12-18	" "	22.0	15.90	8.35	2.46	133.		.6	8	+.03	740A 750A	"
120	12-18	" "	20.0	15.70	6.88	2.43	108.		.6	8	+.02 -.05	745A 755A	"
121	12-18	" "	14.5	4.38	3.91	2.01	17.		.6	8	-.02	235P 240P	"
122	12-19	" "	22.0	16.97	7.08	2.50	120.		.6	8	+.05	745A 805A	"
123	12-19	" "	19.5	9.91	4.07	2.17	40.		.6	9	-.01	1100A 1110A	"
124	12-20	" "	19.2	6.94	3.92	2.04	27.		.6	10	0	845A 855A	"
125	12-21	Miller-Miller	13.3	3.01	2.66	1.95	8.0		.6	8	-.01	110P 120P	FC 35
126	1-5	Luce	14.6	5.13	3.63	2.05	19.		.6	8	-.02	510P 517P	FC 39
127	1-12	"	1.0	.08	.50	1.85	.04		.6	2	0	1220P 1225P	"
128	1-21	Luce-B.Luce	13.0	3.48	2.70	1.98	9.4		.6	7	0	905A 912A	"
129	1-21	" "	13.5	3.96	2.81	1.99	11.		.6	7	+.02	130P 135P	"
130	1-23	Miller	5.8	.61	1.65	1.94	1.0		.6	6	0	130P 140P	FC 35
131	1-27	Luce	1.8	.13	.62	1.86	.08		.6	2	0	1230P 1233P	FC 39
132	2-7	Miller	5.9	.56	1.04	1.95	.58		.6	6	0	245P 300P	FC 35
133	2-9	Luce	5.0	.78	1.67	1.96	1.3		.6	6	0	215P 220P	FC 39
134	2-16	Luce	1.7	.19	1.58	1.86	.30		.6	4	0	120P 125P	FC 39
135	2-22	"	1.5	.20	1.15	1.87	.23		.6	3	0	1045A 1050A	"
136	3-2	"	1.8	.17	1.24	2.51	.21		.6	4	0	235P 238P	"
137	3-9	"	31.0	21.08	4.78	3.33	101.		.6	11	+.22	1015P 1040P	"
138	3-10	"	34.0	25.29	5.57	3.40	141.		.6	10	+.16 -.06	1201A 1215A	"
139	3-10	"	10.5	2.61	3.21	2.77	8.4		.6	5	0	855A 912A	"
140	3-23	"	2.1	.16	1.00	2.22	.16		.6	3	0	445P 450P	"
141	3-30	"	2.6	.36	1.28	2.50	.46		.6	4	0	130P 135P	"
142	4-13	"	2.2	.25	1.28	2.53	.32		.6			1235P 1250P	"
143	9-24	Luce-B.Luce	2.0	.31	1.74	2.48	.55		.6	4	-.01	1155P 1200P	"
144	9-25	Luce-Miller	5.5	1.37	3.88	2.67	5.3		.6	7	-.02	945A 955A	"

F. C. Dist. Form 19

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

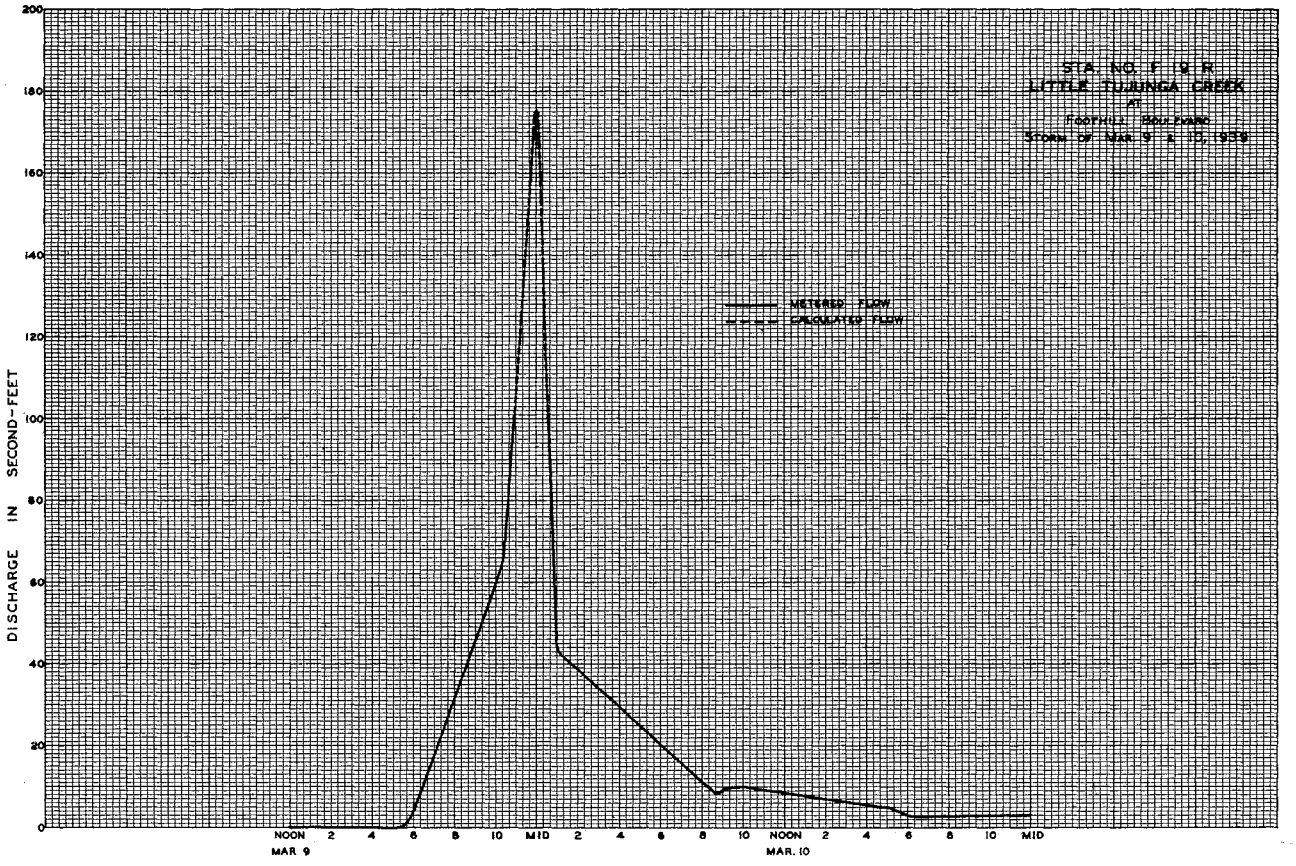
Sta. No. F19R

Daily discharge, in second-feet of LITTLE TUJUNGA CREEK at Foothill Boulevard, for the year ending September 30, 19 39

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0	0	+	E 0.2	E 0.4	+	0	0	0	0
2	0	0	0	0	+	E 0.1	E 0.4	+	0	0	0	0
3	0	0	0	0	1.5	0.1	E 0.3	+	0	0	0	0
4	0	0	0	0	E +	0.1	E 0.3	+	0	0	0	0
5	0	0	0	1.3	E 0.2	0.1	E 0.2	+	0	0	0	0
6	0	0	0	E 0.8	E 0.3	+	+	+	0	0	0	0
7	0	0	0	E 0.3	E 1.0	+	+	+	0	0	0	0
8	0	0	0	E 0.2	3.2	+	+	+	0	0	0	0
9	0	0	0	E 0.2	3.2	1.5	E 0.1	0	0	0	0	0
10	0	0	0	E 0.1	E 6	1.7	0	0	0	0	0	0
11	0	0	0	E +	3.2	E 1.7	0	0	0	0	0	0
12	0	0	0	E +	E 1.5	E 1.0	+	0	0	0	0	0
13	0	0	0	E 0	E 1.0	E 0.5	0.2	+	0	0	0	0
14	0	0	3.2	0	E 0.8	E 0.2	0.1	+	0	0	0	0
15	0	0	2.2	0	E 0.5	E 0.1	0.3	+	0	0	0	0
16	0	0	3.6	0	E 0.4	0	0.2	0	0	0	0	0
17	0	0	1.2	0	E 0.4	0	0.3	0	0	0	0	0
18	0	0	4.0	0	E 0.4	0	+	+	0	0	0	0
19	0	0	3.4	0	E 0.2	0	+	+	0	0	0	0
20	0	0	2.5	0	E 0.2	0	+	+	0	0	0	0
21	0	0	7	11	E +	0	+	+	0	0	0	0
22	0	0	1.4	E 9	+	0.1	+	+	0	0	0	0
23	0	0	E 0.5	E 0.6	0.6	0.2	E 0.1	0	0	0	0	0
24	0	0	E 0.4	0.1	E 0.4	0.1	0.1	0	0	0	0	8.6
25	0	0	E 0.3	0.1	E 0.2	+	0.2	0	0	0	0	2.4
26	0	0	E 0.2	+	E 0.2	0.3	0.2	0	0	0	0	0.6
27	0	0	E 0.1	0.1	E 0.2	7	0.2	0	0	0	0	0
28	0	0	0	0.1	E 0.2	E 1.1	+	0	0	0	0	0
29	0	0	0	0.1		E 0.6	+	0	0	0	0	0
30	0	0	0	0.2		E 0.4	+	0	0	0	0	0
31	0		0	0.1		E 0.4		0		0	0	
	0	0	138.9	36.0	25.8	46.3	3.6	+	0	0	0	3.6
Mean	0	0	4.58	1.19	0.92	1.49	0.11	+	0	0	0	0.10
Acre-Feet	0	0	276	71	51	92	7.1	+	0	0	0	6.0

Remarks: + indicates discharge 0.05 sec. ft. or less.
E indicates discharge estimated - see station description.

Year or Period Mean 0.596
Acre-Feet 504



STATION F31R

LIVE OAK CREEK near mouth of canyon

LOCATION:

On the right (west) bank of stream near mouth of canyon, about 1/2 mile below Live Oak Dam, and about 2 miles northeast of La Verne.

DRAINAGE AREA:

2.6 square miles.

CHANNEL AND CONTROL:

Channel-sand, gravel and rocks.
Control-concrete with a 2 feet Cipelletti weir 12 inches deep.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows measured from bridge below Station.

RECORDER:

Installed January 4, 1928 in F. C. standard type concrete house over a 3 ft x 4 ft. concrete stilling well. An H.C.F. continuous recorder was in service from October 1, 1935 to September 30, 1939.

REGULATION:

Flow regulated by Live Oak Dam.

DIVERSIONS:

None.

RECORDS AVAILABLE:

January 4, 1928 to September 30, 1939.

EXTREMES OF DISCHARGE:

1935-1939
Maximum 0.9 second-feet September 16.
Minimum no flow for most of year.
1928-1939
Maximum 257 second-feet March 2, 1938.
Minimum no flow most of each year.

ACCURACY:

Fair.

OPERATION:

Located, constructed, and operated by the Los Angeles County Flood Control District.

REMARKS:

Flow negligible during entire season. Mean daily flow 0.1 second-feet on September 16, 25 and 26.
Total yearly runoff 0.6 acre feet.

STATION F5R

LOS ANGELES RIVER at Van Nuys Boulevard

LOCATION:

On the downstream end of center pier of Van Nuys Boulevard bridge, about 2 miles south of Van Nuys.

DRAINAGE AREA:

157 square miles.

CHANNEL AND CONTROL:

Channel-natural, adobe overgrown with weeds during summer months.
No artificial control.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows measured from upstream side of highway bridge.

RECORDER:

Installed December 19, 1928 in an F. C. standard type house over a 21 inch diameter, corrugated iron pipe stilling well.
Removed March 2, 1938. Reinstalled April 28, 1938.
An H.C.F. continuous recorder was in service from October 1, 1938 to September 30, 1939.

REGULATION:

Partially regulated by Chatsworth Reservoir, Upper and Lower San Fernando Reservoirs, Twin Lakes Dams, Encino Reservoir and several small dams in various mountain tributaries.

DIVERSIONS:

Several diversions for irrigation on the mountain tributaries.
Several water supply reservoirs divert flow.

RECORDS AVAILABLE:

December 19, 1928 to March 2, 1938 and from April 28, 1938 to September 30, 1939.

EXTREMES OF DISCHARGE:

1938-1939
Maximum 2950 second-feet, December 15, 1938.
Minimum 1.7 second-feet, September 11, 1939.
1928-1939
Maximum 12000 second-feet, estimated, March 2, 1938.
Minimum flow negligible at various times.

ACCURACY:

Fair.

OPERATION:

Located, constructed and operated by the Los Angeles County Flood Control District.

F. C. D. FORM 104 500 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F5R

DISCHARGE MEASUREMENTS OF LOS ANGELES RIVER

AT Van Nuys Blvd. DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Current Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	MEAN	END	METER NO.
111	10-6	Bollinger	8.8	6.53	.90	6.11	5.9		.6	9	0	1043A	1051A	FC 6
112	10-13	"	8.7	7.23	.83	6.08	6.		.6	8	+.01	207P	215P	"
113	10-20	"	8.1	6.19	1.06	6.13	6.6		.6	9	0	237P	246P	"
114	10-27	"	8.8	6.54	1.09	6.17	7.2		.6	8	0	241P	249P	"
115	11-3	"	8.6	6.74	.97	6.19	6.5		.6	9	0	937A	948A	"
116	11-10	"	15.9	9.56	.67	6.17	6.4		.6	9	0	1027A	1036A	"
117	11-17	Bollinger	16.	10.31	.68	6.15	7.1		.6	8	0	206P	214P	FC 6
118	11-23	"	15.3	6.70	.62	5.98	4.2		.6	9	-.01	1236P	1246P	"
119	12-1	"	16.0	8.47	.68	6.09	5.8		.6	9	0	1216P	1226P	"
120	12-8	"	15.7	8.53	.63	6.09	5.4		.6	12	0	1016A	1030A	"
121	12-14	"	15.5	10.15	.54	6.15	5.5		.6	9	0	148P	156P	"
122	12-16	Koch-Lindstrom	24.7	96.5	.63	7.63	61.		.6 Su	10	-.10	1035A	1102A	"
123	12-18	Koch-Andren	51.7	215.4	2.46	11.35	529.		.6	12	-.30	950P	1025P	"
124	12-20	Koch-Mazor	30.	93.4	1.71	9.10	160.		.6	9	0	400P	415P	"
125	12-29	Bollinger	20.7	27.11	.27	6.72	7.4		.6	8	+.01	525P	534P	"
126	1-12	"	14.2	8.77	.92	6.73	8.		.6	8	0	413P	420P	"
127	1-19	"	14.1	6.95	1.31	6.72	9.1		.6	8	0	200P	210P	"
128	1-21	Bollinger-Koch	41.7	232.4	3.31	12.02	769.		.6	9	+.05	1145A	1210P	"
129	1-21	" "	49.	276.	4.63	12.90	1270.		Fl.	3	0	320P	330P	"
130	1-26	Bollinger	10.0	6.88	1.78	6.67	12.		.6	9	0	1114A	1124A	"
131	2-2	"	19.5	11.56	.81	6.60	9.3		.6	11	0	420P	430P	"
132	2-3	"	22.5	30.38	1.36	7.36	41.		.6	10	-.07	325P	340P	"
133	2-9	Bollinger	20.	13.46	.75	6.62	10.		.6	11	0	133P	143P	FC 6
134	2-16	"	20.	14.2	.70	6.59	10.		.6	11	0	310P	321P	"
135	2-23	"	18.5	12.4	.74	6.63	9.2		.6	10	0	117P	127P	"
136	3-2	"	18.8	12.24	.76	6.58	9.3		.6	10	0	102P	112P	"
137	3-9	"	18.0	11.55	.75	6.58	8.5		.6	10	0	223P	233P	"
138	3-16	"	19.0	11.34	.78	6.52	8.9		.6	12	0	155P	204P	"
139	3-23	"	18.7	11.92	.77	6.53	9.1		.6	12	0	212P	222P	"
140	3-30	"	18.5	11.20	.74	6.52	8.3		.6	10	0	142P	150P	"
141	4-6	"	18.6	11.52	.75	6.48	8.6		.6	11	0	933A	944A	"
142	4-13	"	18.0	7.40	.50	6.29	3.2		.6	11	0	138P	149P	"
143	4-20	"	18.0	6.74	.42	6.25	2.9		.6	9	0	1138A	1145A	"
144	4-27	"	8.8	5.46	.54	6.24	2.9		.6	6	0	120P	127P	"
145	5-4	"	7.4	3.50	.81	6.25	2.8		.6	8	0	135P	143P	"
146	5-11	"	8.1	3.51	1.09	6.30	3.8		.6	6	0	255P	303P	"
147	5-18	"	7.8	3.13	.93	6.26	2.9		.6	7	0	130P	138P	"
148	5-25	"	7.9	3.18	.81	6.26	2.6		.6	7	0	253P	301P	"
149	6-1	"	8.0	3.32	.99	6.30	3.2		.6	7	0	157P	205P	"
150	6-8	"	7.5	3.40	.75	6.26	2.6		.6	8	-.01	1119P	1127P	"
151	6-15	"	7.5	2.71	.78	6.26	2.1		.6	7	0	1231P	1238P	"
152	6-22	"	7.2	2.80	.77	6.27	2.2		.6	8	-.01	1000A	1010A	"
153	6-29	"	7.8	2.82	.85	6.26	2.4		.6	7	0	942A	950A	"
154	7-6	"	7.6	2.70	.81	6.25	2.2		.6	9	0	1035A	1045A	"
155	7-20	"	7.5	2.60	.69	6.28	1.8		.6	9	0	945A	952A	"
156	8-3	"	7.9	3.51	.90	6.35	3.2		.6	7	0	119P	126P	"
157	8-16	Luce	4.1	2.41	1.37	6.33	3.3		.6	6	0	1100A	1110A	FC 39
158	8-23	"	4.0	2.94	1.40	6.34	4.1		.6	5	0	820A	830A	"
159	9-7	Bollinger	7.8	2.83	.66	6.25	1.9		.6	9	0	127P	137P	FC 6
160	9-21	"	20.2	8.25	.23	6.22	1.9		.6	9	0	1040A	1052A	"
161	9-25	Bollinger-Herkomer	27.2	79.62	1.30	8.86	103.		.6	5	+.13	105A	125A	"
162	9-25	Bollinger-Herkomer	61.7	408.	1.84	13.75	750.		surf	11	-.20	1150A	1218P	"
163	9-28	Bollinger	16.5	9.90	.29	6.30	2.8		.6	7	0	158P	210P	"

F. C. Dist. Form 58

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

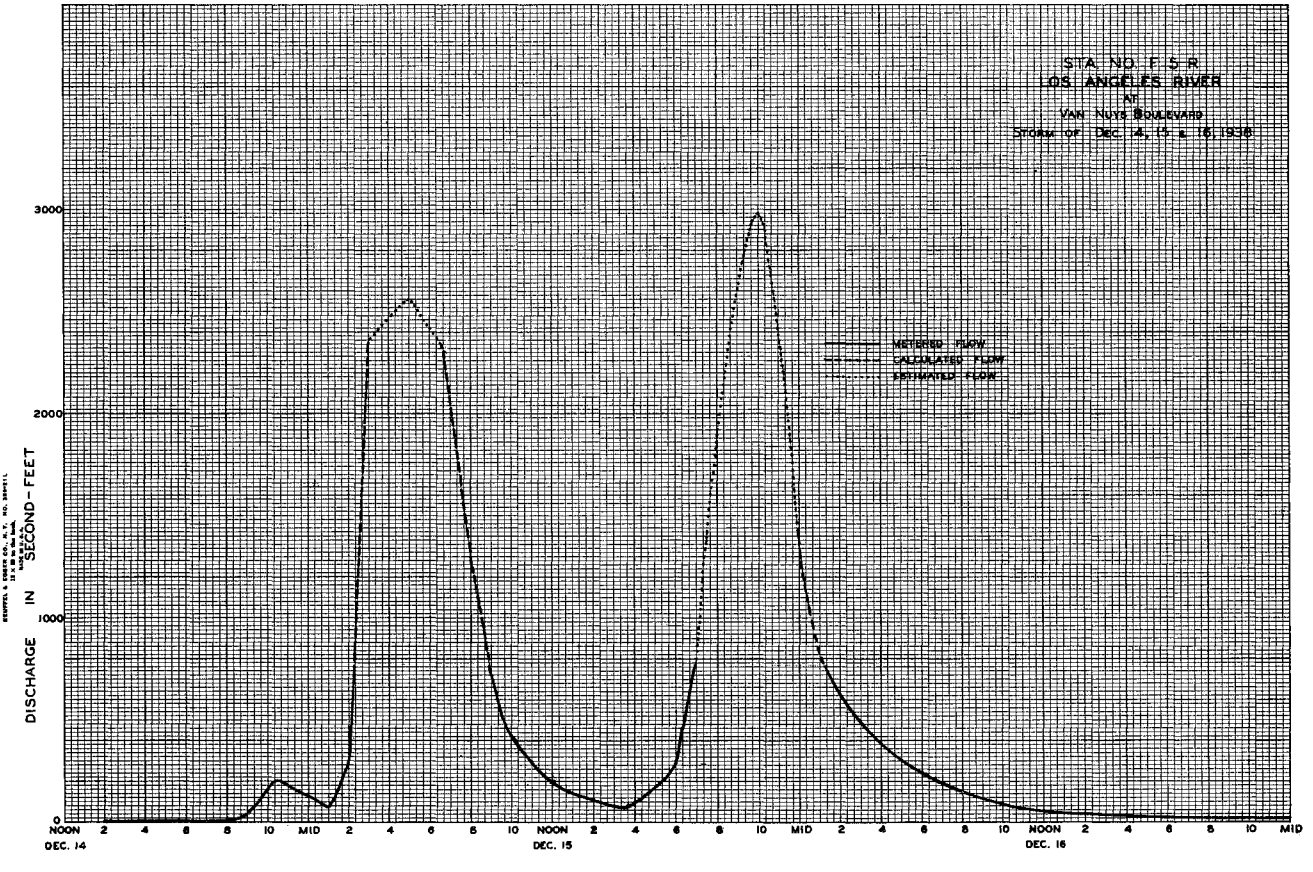
Sta. No. F5R

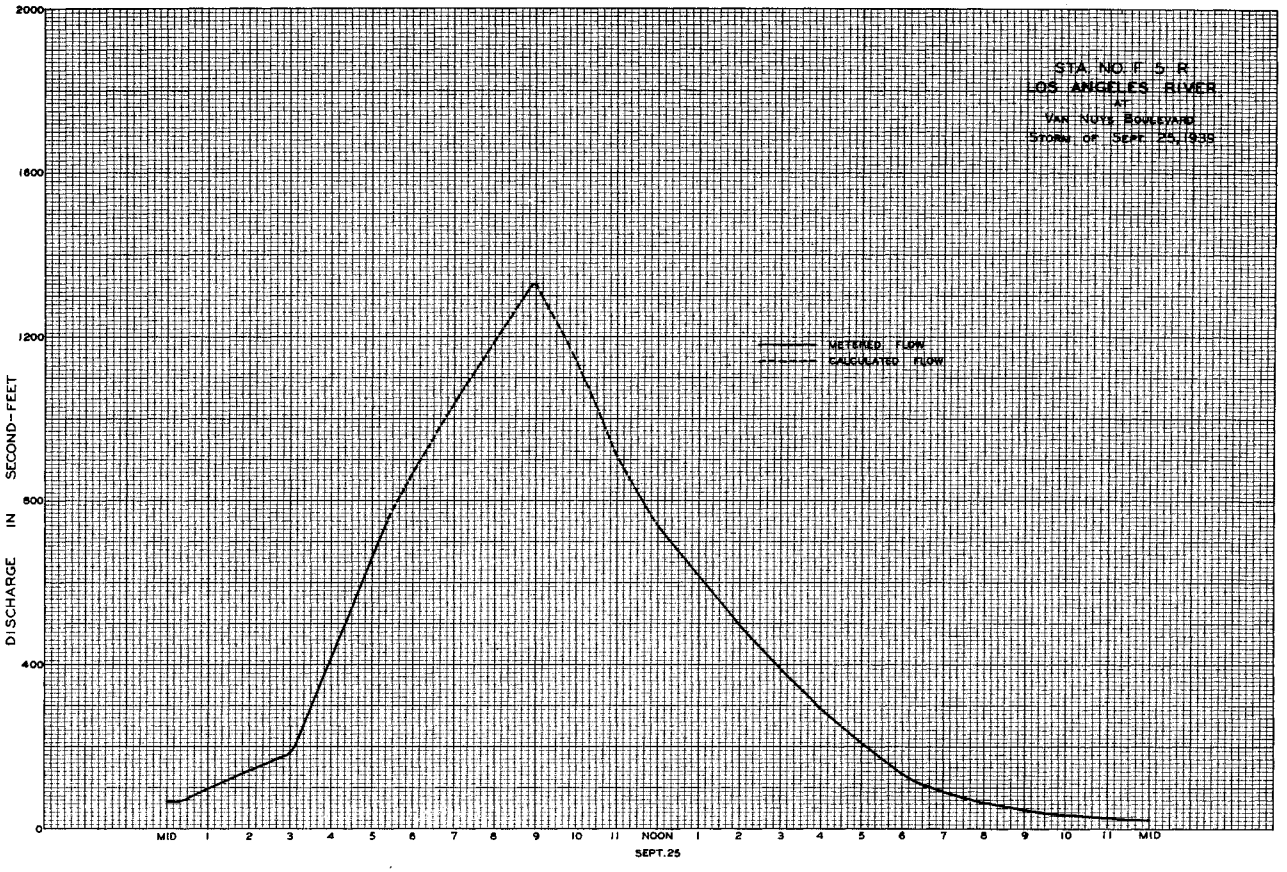
Daily discharge, in second-feet of LOS ANGELES RIVER at Van Nuys Boulevard., for the year ending September 30, 1939

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6	6	6	7.5	10	9.5	8	2.8	2.9	2.2	2.5	2.5
2	6.5	6.5	5.5	7	9	9.5	9.5	2.7	2.7	2.2	2.8	2.2
3	6.5	6.5	6	7	37	9.5	9	2.9	2.8	2.3	2.9	2.2
4	6.5	6.5	5.5	7	16	9.5	8.5	2.9	2.7	2.4	2.5	2.2
5	6	6.5	5.5	74	11	9	8.5	3.0	2.6	2.2	2.7	2.2
6	6	6	5.5	12	9.5	9	8	3.0	2.6	2.2	2.6	2.2
7	5.5	6	5	8.5	11	9.5	8	3.1	2.6	2.2	2.8	1.9
8	4.3	6	5	9	12	9	7.5	3.3	2.6	2.2	2.6	1.9
9	4.3	6	5	8	10	28	7	3.5	2.4	2.2	2.6	1.9
10	5.5	6.5	5	8	10	22	7	3.4	2.2	2.1	2.6	1.8
11	5	6.5	5	8	10	9	6.5	3.7	2.1	2.0	2.5	1.8
12	5.5	6.5	5	8	9.5	9	3.3	3.6	2.2	2.1	2.7	1.8
13	5.5	6.5	5	11	9.5	9	3.1	3.5	2.2	1.9	3.0	1.8
14	6	6.5	23	18	10	9.5	3.0	3.4	2.2	1.9	3.1	1.8
15	6	6.5	1110	19	10	9.5	3.0	3.2	2.1	2.2	2.6	1.9
16	6.5	7	335	20	10	9.5	3.0	3.0	2.2	2.2	2.9	2.1
17	6.5	7	31	21	10	9.5	3.0	3.0	2.2	1.8	2.8	1.8
18	7	7	1180	14	11	9	2.9	3.0	2.2	1.8	2.9	1.8
19	7	7	220	9	11	9	2.9	2.8	2.3	1.8	3.0	2.0
20	6.5	7	636	8.5	9.5	9	2.8	2.8	2.2	1.8	3.2	1.9
21	6	6.5	44	355	9.5	9.5	2.6	2.6	2.2	1.9	3.3	2.2
22	3.8	4.6	13	57	9.5	9.5	2.7	2.5	2.2	1.9	3.4	1.9
23	3.7	4.2	11	15	9	9.5	2.7	2.5	2.3	1.9	3.9	1.9
24	3.7	4.3	9	13	8.5	9	2.6	2.4	2.6	2.0	3.7	1.9
25	3.7	4.5	9	13	9	9	2.7	2.7	2.6	2.2	3.8	4.60
26	3.8	4.8	9	10	9	9.5	2.7	2.5	2.6	2.2	3.4	11.
27	6.5	6	10	8	9	9	2.7	2.5	2.3	2.1	3.3	4.6
28	6.5	6	9	11	9.5	8.5	2.8	2.6	2.3	2.2	3.0	3.1
29	6.5	6	7.5	11		8.5	2.8	2.6	2.3	2.6	3.0	2.6
30	7	5.5	7	11		8	2.8	2.8	2.3	2.5	2.7	2.5
31	6.5		7.5	11		8.5		2.8		2.6	2.4	
	1763	1824	3740.0	799.5	3090	315.0	141.6	91.4	71.7	65.8	91.2	54.85
MEAN	5.69	6.08	121	25.8	11.0	10.2	4.72	2.95	2.39	2.12	2.94	18.3
ACRE-FEET	350	362	7420	1590	613	625	281	181	142	131	181	1090

Remarks: E indicates discharge estimated.- see station description.

YEAR OR PERIOD — MEAN 17.9 — ACRE-FEET 12970





STATION F266R

LOS ANGELES RIVER at Mariposa Street

LOCATION:

On the left (north) bank about sixty feet east from the center line of Mariposa Street extended, and about 2 miles southeast of Burbank.

DRAINAGE AREA:

430 square miles.

CHANNEL AND CONTROL:

Channel-rectangular concrete 130 feet wide by 15 feet deep. Bottom forms a trapezoidal section 34 feet by 82 feet by 1.25 feet. Channel forms control.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows measured from equestrian bridge above station.

RECORDER:

Installed December 20, 1938 in a standard concrete house over a 4 ft. x 4.3 ft. concrete stilling well. An H.C.F. recorder was in service from December 20, 1938 to September 30, 1939.

REGULATION AND DIVERSIONS OR

Partially regulated by Chatsworth Reservoir, Upper and Lower San Fernando Reservoirs, Twin Lakes Dam, Encino Reservoir, Pacoima Dam, Big Tujunga Dam and several small dams in various mountain tributaries.

DIVERSIONS:

Several irrigation diversions in the mountain tributaries, other flow is diverted at the several water supply reservoirs, and the L.A.W.D. diverts flow for spreading above the station.

RECORDS AVAILABLE:

From December 20, 1938 to September 30, 1939.

EXTREMES OF DISCHARGE:

December 20, 1938 to September 30, 1939.
Maximum 1012 second-feet January 21.
Minimum 12 second-feet September 16,17.

ACCURACY:

Fair for high flows.
Poor for low flows due to communication being obstructed by sand and insufficient low flow measurements.

OPERATION:

Located and constructed by the United States Engineer Department and operated in co-operation with the Los Angeles County Flood Control District.

F. C. D. FORM 104 500 8-38

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F 266 R

DISCHARGE MEASUREMENTS OF LOS ANGELES RIVER

AT Mariposa Street DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Diff.	Shifts	MEAN SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
1	12-21	Koch, Mazor	95.5	29.0	2.44	0.66	71.		.6 Sur	21	0	345P / 410P	FC6
2	12-29	Bollinger	Two channels			0.48	106.		.6	15	0	400P / 427P	"
3	4-13	"	36.0	8.04	1.39	.50	11.		.6	10	0	342P / 400P	"
4	4-20	"	10.3	5.17	3.65	.47	19.		.6	11	-	1036A / 1052A	"
5	4-27	"	30.0	9.20	1.80	.62	17.		.6	8	-	322P / 333P	"
6	5-4	"	36.0	10.13	4.30	.51	44.		.6	10	-	308P / 324P	"
7	5-11	"	Two channels			0.46	33.		.6	17	-	415P / 440P	"
8	5-18	"	"	"		.36	18.		.6	15	-	340P / 400P	"
9	5-25	"	"	"		.32	20.		.6	16	-	435P / 450P	"
10	6-1	"	"	"		.32	20.		.6	20	-	338P / 400P	"
11	6-8	"	52.5	15.0	1.34	.31	20.		.6	14	0	242P / 257P	"
12	6-15	"	52.0	15.2	1.11	.32	17.		.6	15	-	325P / 340P	"
13	6-22	"	100.	19.0	1.08	.32	21.		.6	17	0	112P / 132P	"
14	6-29	"	65.0	16.3	1.27	.35	21.		.6	16	-	245P / 258P	"
15	7-6	"	64.8	15.9	1.12	.33	18.		.6	17	0	200P / 220P	"
16	7-14	"	65.0	15.1	1.03	.30	16.		.6	15	0	418P / 435P	"
17	7-20	"	65.0	16.1	.93	.33	15.		.6	16	0	100P / 120P	"
18	7-27	"	Two channels			.33	16.		.6	22	0	1110A / 1135A	"
19	8-3	"	"	"		.32	16.		.6	22	0	300P / 323P	"
20	8-10	"	"	"		.30	15.		.6 Sur	23	0	225P / 245P	"
21	8-16	Luce	56.5	7.54	1.27	.33	19.		.6	16	0	205P / 225P	FC39
22	8-23	"	60.0	15.2	1.25	.32	19.		.6	17	0	1050A / 1110A	"
23	8-31	Bollinger	Two channels			.32	17.		.6	19	0	210P / 232P	FC6
24	9-7	"	"	"		.30	19.		.6	17	0	400P / 419P	"
25	9-14	Bollinger	Two channels			0.28	13.		.6	23	0	300P / 320P	FC6
26	9-21	"	Three channels			.32	16.		.6	22	0	215P / 240P	"
27	9-24	Herkomer, Bollinger, Herkomer,	109.	65.8	2.63	.72	173.		.6	10	+.01	920P / 942P	"
28	9-26	Bollinger	95.5	36.5	2.06	.30	75.		.6	10	0	1006A / 1018A	"
29	9-28	Bollinger	90.	18.3	1.29	.20	23.		.6	9	0	340P / 350P	FC6

F. C. Dist. Form 53

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

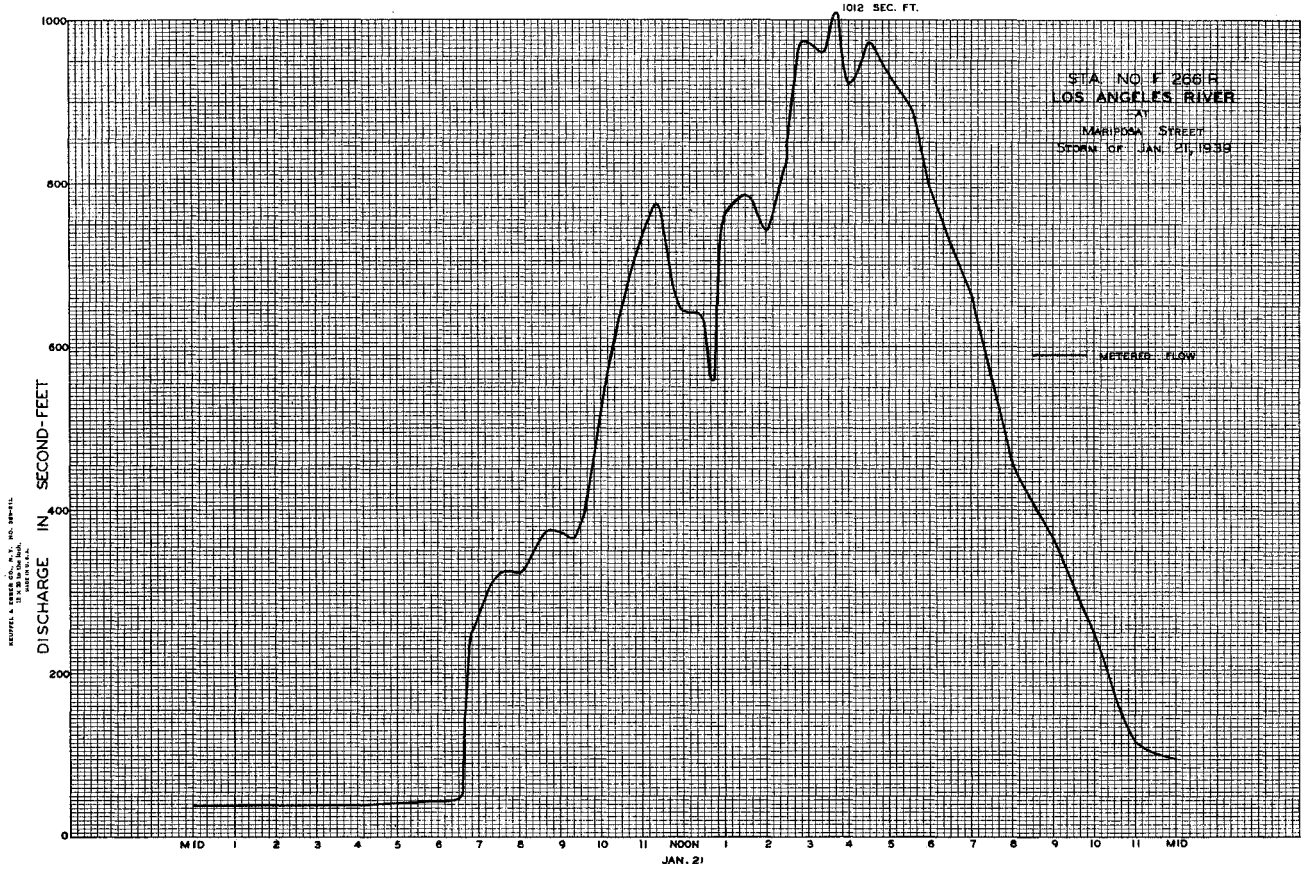
Sta. No. F266R

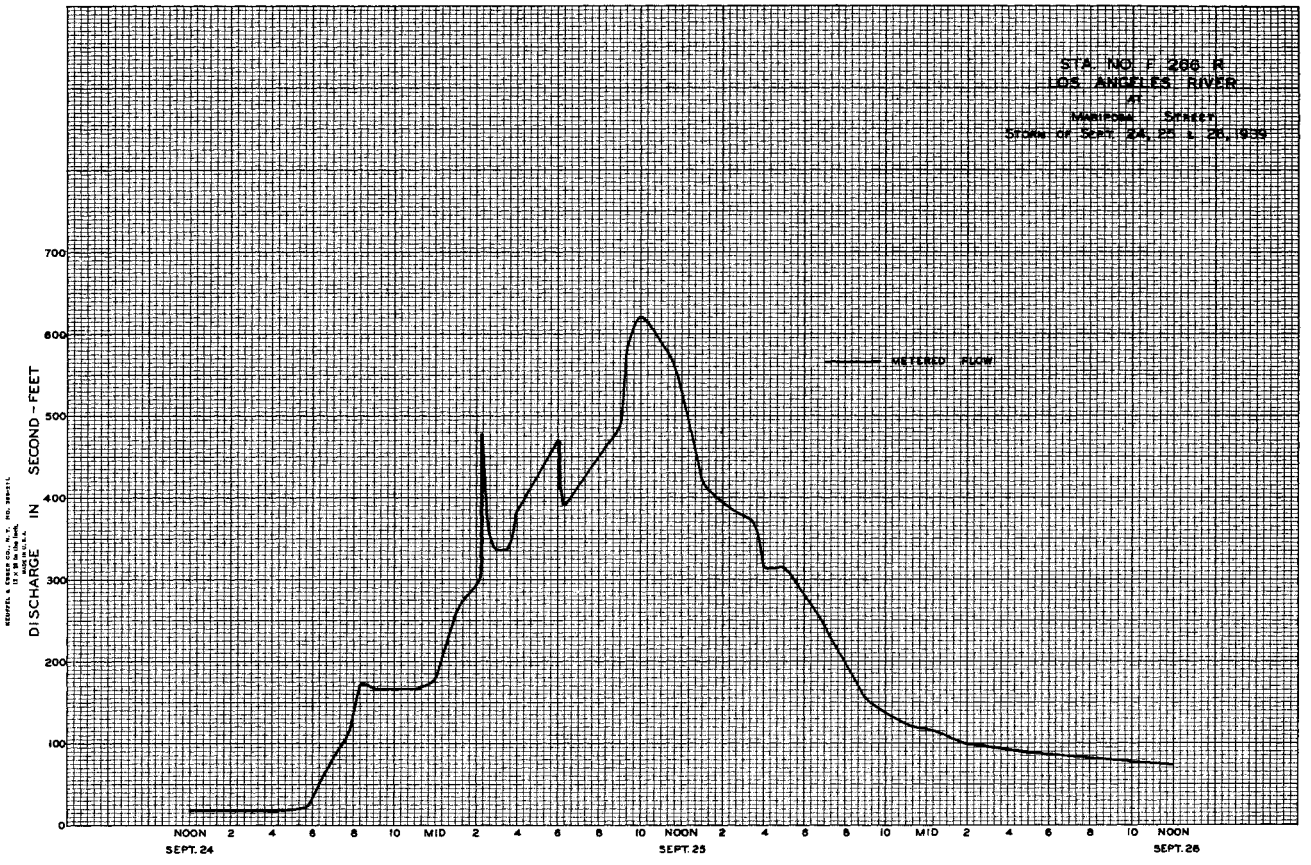
Daily discharge, in second-feet of LOS ANGELES RIVER at Mariposa Street, for the year ending September 30, 1939

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1				92	40	47	51	32	18	20	14	14
2				89	40	47	40	36	17	20	14	17
3				89	65	47	40	41	17	17	17	15
4				89	45	51	40	44	17	23	15	17
5				27	40	44	40	44	18	23	15	17
6				60	40	47	40	41	18	18	17	18
7				60	50	44	40	41	18	18	18	18
8				55	45	160	40	36	20	17	18	17
9				47	40	130	40	36	27	18	18	17
10								36	14	18	17	14
11				47	41	45	30	34	14	17	15	14
12				47	41	45	32	32	12	17	14	15
13				51	40	51	21	34	15	17	14	14
14				54	40	51	11	27	17	17	14	14
15				60	40	44	12	27	17	15	14	14
16				60	40	44	12	30	17	17	17	12
17				54	40	41	12	30	18	17	18	12
18				54	45	41	12	18	18	15	15	14
19				47	50	39	12	18	18	15	15	14
20				47	57	41	18	18	20	15	15	17
21			77	423	57	39	23	17	20	14	17	17
22			60	85	54	39	39	17	20	12	17	18
23			54	63	54	41	47	18	23	12	17	49
24			51	47	47	39	44	23	25	15	17	351
25			54	44	41	44	36	20	25	15	17	71
26			57	47	44	47	25	20	23	15	15	34
27			63	44	44	54	17	20	23	15	14	34
28			77	44	47	54	20	17	20	15	15	23
29			104	45		51	25	17	20	14	15	23
30			104	45		51	25	17	20	14	15	20
31			96	40		51	27	18		14	15	
			(12/21-31)	2356	1264	1563	875	862	559	510	490	931
MEAN				76.0	45.1	50.4	29.2	27.8	18.6	17.0	15.8	31.0
ACRE FEET			1580	4670	2510	3100	1740	1710	1110	1010	972	1850

Remarks: E indicates discharge estimated - see station description.
• recorder installed.

MEAN ACRE FEET 28.0 (12/21-9/30) — YEAR OR PERIOD 20390





STATION F57B-R

LOS ANGELES RIVER below Dayton Avenue (formerly Figueroa St.)

LOCATION:

On the right (west) bank 450 feet above the junction with the Arroyo Seco.
The former Station F57R was 167 feet upstream at the Dayton Avenue Bridge.

DRAINAGE AREA:

510 square miles.

CHANNEL AND CONTROL:

Channel-sand, silt and rocks, a concrete channel was under construction by the United States Engineer Department during the latter half of this period. No artificial control.

DISCHARGE MEASUREMENTS:

Low flow measured by wading.
High flows measured from cable car underneath Dayton Avenue bridge.

RECORDER:

Installed May 26, 1938 in an F. C. standard type house over an 18 inch diameter corrugated iron pipe stilling well.
An H.C.F. recorder was in service from October 1, 1938 to April 5, 1939. Station F57B-R was removed April 5, 1939 during construction of a new concrete channel.

REGULATION AND DIVERSIONS:
OR

Twin Lakes Dams, Chatsworth Reservoir, Upper and Lower San Fernando Reservoirs, Encino Reservoir, Pacoima Dam, Big Tujunga Dam, several debris basins, and a dam on a tributary to Limekiln Creek.
The L.A.W.D. spills surplus flow into the channel from water developed in the Griffith Park area.

DIVERSIONS:

Several irrigation diversions in the mountain tributaries; other flow is diverted at the several water supply reservoirs, and the L.A.W.D. diverts flow for spreading.

RECORDS AVAILABLE:

December, 1929 to May 26, 1938 at Station F57R.
May 26, 1938 to April 5, 1939.
April 5, 1939 to September 30, 1939, bi-weekly measurements.

EXTREMES OF DISCHARGE:

1938-1939
Maximum 3710 second-feet, January 5.
Minimum not determined.
1929-1939 (Stations F57R and F57B-R)
Maximum 68000 second-feet, estimated, March 2, 1938.
Minimum no flow at times each year from 1929-1930 to 1933-1934.

ACCURACY:

Fair for low flows.
Poor for high flows due to poor measuring section.
Record interpolated between measurements beginning April 5, 1939.

OPERATION:

Located, and constructed by the United States Engineer Department and the Los Angeles County Flood Control District, and operated by the Los Angeles County Flood Control District with co-operation of the U.S.G.S. Water Resources Branch and the U. S. Engineer Department.

F. C. D. FORM 104 500 8-38

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F57B-R

DISCHARGE MEASUREMENTS OF LOS ANGELES RIVER

FT. below Dayton Ave. DURING THE YEAR ENDING SEPTEMBER 30, 1939

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
33	10-3	Bollinger	17.0	20.79	1.83	7.43	38.		.6	10	-.06	837A / 848A	FC 6
34	10-6	"	17.4	20.45	1.81	7.38	37.		.6	10	-.01	322P / 327P	"
35	10-10	"	17.5	20.59	1.85	7.36	38.		.6	11	0	933A / 944A	"
36	10-13	"	16.7	20.04	1.85	7.36	37.		.6	10	0	1124A / 1134A	"
37	10-17	"	17.4	19.92	1.96	7.35	39.		.6	11	0	918A / 931A	"
38	10-20	"	17.7	20.68	1.97	7.36	41.		.6	11	+.01	912A / 925A	"
39	10-24	"	17.1	17.64	1.98	7.26	35.		.6	11	0	1015A / 1026A	"
40	10-27	"	16.5	20.21	1.83	7.32	37.		.6	10	0	834A / 846A	"
41	10-31	"	17.1	21.87	1.92	7.41	42.		.6	12	0	1017A / 1029A	"
42	11-3	"	17.3	21.96	1.96	7.40	43.		.6	12	-.01	150P / 203P	"
43	11-7	"	17.5	19.76	1.77	7.32	35.		.6	10	-.02	842A / 852A	"
44	11-10	"	17.0	18.94	1.79	7.26	34.		.6	11	-.04	204P / 214P	"
45	11-14	"	17.7	22.54	1.73	7.30	39.		.6	10	+.02	345P / 355P	"
46	11-17	"	17.3	23.16	1.51	7.26	35.		.6	11	+.01	354P / 405P	"
47	11-23	"	17.4	22.38	1.52	7.28	34.		.6	12	0	156P / 212P	"
48	12-1	"	35.7	25.86	1.31	7.29	34.		.6	17	0	232P / 250P	"
49	12-8	"	12.4	15.61	2.24	7.30	35.		.6	12	-.01	134P / 157P	"
50	12-11	"	19.7	9.05	1.10	6.65	10.		.6	12	0	1124A / 1136A	"
51	12-14	"	40.4	35.73	1.06	7.42	38.		.6	13	-.03	1020A / 1034A	"
52	12-15	Bollinger-Koch	Two Channels			9.78	765.		.6	7	-.53	1215A / 1240A	"
53	12-15	" "	87.0	200.8	3.19	10.50	641.		.6	8	-.60	444A / 508A	"
54	12-15	" "	90.	257.8	5.78	10.38	1490.		.6	8	-.15	1050A / 1107A	"
55	12-16	Koch-Lindstrom	95.	320.	5.74	11.15	1840.		.6	9	-.50	130A / 152A	"
56	12-18	" "	91.	266.3	4.52	10.25	1200.		.6	9	-.25	125A / 146A	"
57	12-18	U.S.E.D.	96.	353.	4.79	11.40	1680.		.6			144P	USED
58	12-18	"	93.	346.	5.22	11.15	1800.		.6			208P	"
59	12-18	"	88.	242.	4.62	10.02	1120.		.6			343P	"
60	12-18	"	101.	427.	4.86	11.68	2080.		.6			1150P	"
61	12-20	Koch-Mazor	96.	351.	4.38	10.90	1540.		.6	9	-.30	1212P / 1234P	FC 6
62	12-21	" "	40.	38.7	2.72	6.11	105.		.6	12	-.04	110P / 113P	"
63	12-29	Bollinger	44.5	39.48	2.84	6.12	112.		.6	13	0	1131A / 1148A	"
64	1-3	"	48.7	37.32	2.84	6.16	106.		.6	14	+.01	952A / 1016A	"
65	1-5	Bollinger-Koch	98.	341.1	10.88	11.15	3710.		.6	8	+1.1	1218P / 1234P	"
66	1-5	" "	94.	226.4	4.37	10.20	990.		.6	8	-.60	233P / 245P	"
67	1-10	Bollinger	40.5	27.32	2.52	5.68	69.		.6	11	0	1222P / 1235P	"
68	1-19	"	46.1	39.04	2.0	5.72	78.		.6	14	0	410P / 430P	"
69	1-21	Bollinger-Koch	90.	242.6	3.64	9.20	884.		.6	9	0	755A / 810A	"
70	1-21	" "	94.	289.2	4.99	10.70	1440.		.6	9	0	540P / 554P	"
71	1-26	Bollinger	43.5	31.5	2.42	5.48	76.		.6	13	+.01	330P / 345P	"
72	2-2	"	43.7	29.6	2.26	5.55	67.		.6	16	0	1147A / 1206P	"
73	2-9	"	44.5	46.6	1.59	5.57	74.		.6	16	0	328P / 353P	"
74	2-16	"	46.0	37.2	1.46	5.55	54.		.6	13	-.02	512P / 525P	"
75	2-23	"	46.7	35.9	1.83	5.83	66.		.6	18	0	1012A / 1028A	"
76	3-2	"	46.4	33.3	2.08	5.80	69.		.6	16	0	1027A / 1043A	"
77	3-9	"	45.8	29.8	1.81	5.60	54.		.6	17	0	1127A / 1145A	"
78	3-9	Herkomer Bollinger-	90.	228.3	4.33	8.85	989.		.6	7	-.90	1120P / 1149P	"
79	3-16	Odekirk Bollinger-	24.8	31.8	1.93	4.98	62.		.6	16	0	1050A / 1110A	"
80	3-23	Bollinger	43.7	31.3	1.85	5.06	58.		.6	20	-.01	905A / 927A	"
81	3-27	Herkomer Bollinger-	44.2	46.15	1.90	5.49	88.		.6	14	-.02	922A / 937A	FC 6
82	3-30	Bollinger	44.	34.2	1.83	5.01	63.		.6	17	0	1020A / 1040A	"
83	4-5	"	25.	24.6	1.84	4.96	45.		.6	14	0	1026A / 1043A	"
84	4-10	"	25.2	23.1	1.89	4.96	44.		.6	13	0	500P / 515P	"
85	4-13	"	15.5	6.47	2.03	-	13.		.6	8	-	535P / 545P	"
86	4-17	"	26.5	8.30	1.84	-	15.		.6	11	-	537P / 553P	"
87	4-20	"	34.5	11.0	1.39	-	15.		.6	12	-	700P / 715P	"
88	4-24	"	15.5	8.42	2.50	-	21.		.6	10	-	445P / 455P	"
89	4-27	"	26.5	8.59	1.28	-	11.		.6	11	-	418P / 428P	"
90	5-1	"	23.8	18.05	1.81	-	33.		.6	11	-	455P / 510P	"
91	5-4	"	26.5	15.7	1.84	-	29.		.6	11	-	428P / 442P	"
92	5-8	"	24.5	15.3	2.29	-	35.		.6	11	-	526P / 538P	"
93	5-11	"	24.2	12.8	1.95	-	25.		.6	12	-	531P / 543P	"
94	5-15	"	12.6	9.54	2.17	-	21.		.6	8	-	502P / 512P	"
95	5-18	"	22.7	8.64	2.39	-	21.		.6	10	-	442P / 451P	"
96	5-22	"	24.3	11.53	2.60	-	30.		.6	11	-	435P / 445P	"
97	5-25	"	25.3	11.23	1.81	-	20.		.6	11	-	539P / 550P	"
98	5-29	"	17.8	10.95	2.16	-	24.		.6	11	-	431P / 442P	"
99	6-1	"	14.2	8.44	2.25	-	19.		.6	9	-	435P / 445P	"
100	6-5	"	14.0	6.55	1.86	-	12.		.6	8	-	438P / 446P	"
101	6-8	"	14.2	6.88	1.71	-	12.		.6	8	-	345P / 355P	"
102	6-12	"	11.7	5.34	1.97	-	11.		.6	8	-	427P / 435P	"
103	6-15	"	12.0	6.21	2.16	-	13.		.6	8	-	423P / 431P	"
104	6-19	"	13.0	6.12	1.68	-	10.		.6	9	-	242P / 252P	"
105	6-22	Bollinger	17.1	6.5	1.40	-	9.1		.6	9	-	228P / 238P	FC 6
106	6-26	"	16.5	4.49	1.95	-	8.8		.6	11	-	342P / 352P	"
107	6-29	"	16.8	4.46	1.65	-	7.4		.6	9	-	343P / 351P	"
108	7-6	"	16.8	4.76	1.40	-	6.7		.6	11	-	403P / 413P	"
109	7-10	"	17.0	4.75	1.79	-	8.5		.6	11	-	530P / 540P	"
110	7-14	"	17.1	5.11	1.33	-	6.8		.6	11	-	518P / 528P	"
111	7-17	"	17.1	4.25	1.21	-	5.1		.6	10	-	420P / 429P	"
112	7-20	"	12.4	4.71	1.41	-	6.6		.6	10	-	234P / 244P	"
113	7-24	"	14.0	4.82	1.21	-	5.8		.6	8	-	505P / 515P	"
114	7-27	"	17.2	4.49	1.35	-	6.0		.6	12	-	302P / 315P	"
115	7-31	"	11.9	4.33	1.41	-	6.1		.6	10	-	427P / 437P	"
116	8-3	"	12.3	4.56	1.34	-	6.1		.6	9	-	402P / 410P	"
117	8-7	"	12.3	4.39	1.39	-	6.1		.6	9	-	512P / 521P	"
118	8-10	"	12.2	4.57	1.49	-	6.8		.6	10	-	330P / 340P	"
119	8-16	Luce	5.2	4.16	1.62	-	6.6		.6	6	-	255P / 305P	FC 39
120	8-18	"	6.5	4.54	1.53	-	7.0		.6	6	-	330P / 345P	"
121	8-21	"	10.0	4.48	1.62	-	7.3		.6	7	-	830A / 845A	"
122	8-23	"	10.0	4.48	1.69	-	7.6		.6	6	-	100P / 110P	"
123	8-25	"	6.0	4.34	1.53	-	6.6		.6	5	-	320P / 330P	"
124	8-28	Bollinger	12.0	5.13	1.39	-	7.1		.6	9	-	515P / 525P	FC 6
125	8-31	"	11.7	3.99	1.21	-	4.8		.6	10	-	320P / 330P	"
126	9-5	"	12.0	4.88	1.31	-	6.4		.6	9	-	1200N / 1210P	"
127	9-7	"	12.0	4.88	1.33	-	6.0		.6	9	-	455P / 503P	"
128	9-11	"	12.5	4.88	1.26	-	6.2		.6	8	-	137P / 145P	"
129	9-14	Bollinger	12.2	3.84	1.35	-	5.2		.6	8	-	411P / 419P	FC 6
130	9-18	"	11.7	3.60	1.04	-	3.8		.6	7	-	435P / 441P	"
131	9-21	"	11.9	4.67	1.36	-	6.3		.6	7	-	326P / 335P	"
132	9-26	"	Two Channels			-	124.		.6	16	-	1105A / 1126A	"
133	9-28	"	15.5	11.18	2.60	-	29.		.6	8	-	435P / 443P	"

F. C. Dist. Form 53

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

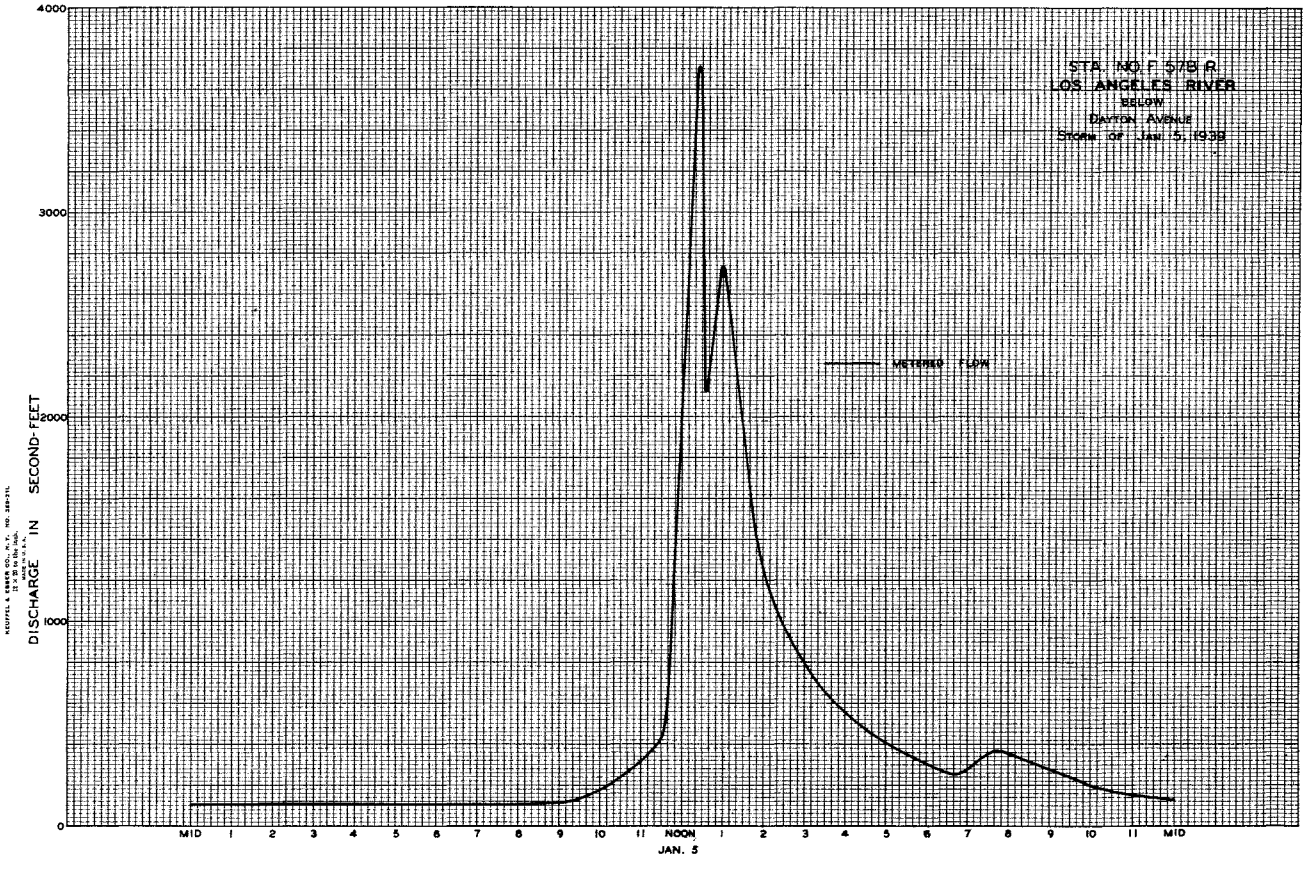
Sta. No. F57B-R

Daily discharge, in second-feet of LOS ANGELES RIVER below Dayton Avenue, for the year ending September 30, 1939

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	38	43	33	110	68	62	64	33	19	7	6	5
2	39	42	34	109	68	69	62	31	17	7	6	5.5
3	39	43	33	107	120	68	49	30	16	7	6	5.5
4	38	39	32	107	79	58	48	29	14	7	6	6
5	38	35	33	461	71	57	E45	30	12	7	6	6.5
6	37	34	33	89	71	60	45	32	12	6.5	6	6
7	37	31	33	75	72	57	45	33	12	7	6	6
8	36	28	33	82	88	57	45	35	12	7	6	6
9	36	32	26	77	74	224	44	32	11	8	7	6
10	37	33	18	68	74	139	44	28	11	8.5	7	6
11	36	34	11	68	69	58	34	25	11	8	7	6
12	34	34	17	70	67	58	23	24	11	7.5	6.5	6
13	37	37	28	72	65	62	13	23	11	7	6.5	5.5
14	36	39	139	78	57	65	14	22	12	7	6.5	5
15	37	37	1240	82	56	63	14	21	13	6	6.5	4.8
16	36	36	425	83	55	62	15	21	13	5.5	6.5	4.5
17	38	35	169	83	54	61	15	21	12	5	7	4.1
18	37	35	1670	82	56	60	15	21	11	5.5	7	3.8
19	39	36	655	77	58	59	15	23	10	6	7	4.6
20	40	35	634	78	64	60	15	25	10	6.5	7	5.5
21	41	36	119	838	65	58	16	28	9.5	6.5	7.5	6.5
22	36	35	86	133	65	59	18	30	9	6	7.5	6.5
23	34	34	78	81	67	58	19	27	9	6	7.5	6.5
24	36	33	78	82	54	58	21	24	9	6	7	123
25	39	33	77	80	54	58	18	20	9	6	6.5	1950
26	37	34	78	79	53	77	14	21	9	6	7	318
27	37	33	78	80	54	70	11	22	8.5	6	7	77
28	39	35	86	82	56	63	16	23	8	6	7	29
29	39	34	115	81		62	22	24	7.5	6	6	27
30	40	34	112	99		62	27	22	7.5	6	5.5	25
31	41		110	70		56		21		6	4.8	
	1164	1059	6313	3763	1854	2140	846	801	336.0	202.5	202.8	2676.8
MEAN	37.5	35.3	204	121	66.2	69.0	28.2	25.8	11.2	6.53	6.54	89.2
ACRE-FEET	2310	2100	12520	7460	3680	4240	1680	1590	666	402	402	5310

Remarks: E indicates estimate beginning April 5 - see station description.

YEAR OR PERIOD — MEAN 58.5 — ACRE-FEET 42360



STATION F34B-R

LOS ANGELES RIVER at Firestone Boulevard

LOCATION:

On the downstream end of the fifth pier from the right (west) end of Firestone Boulevard bridge, about 3 miles west of Downey.

DRAINAGE AREA:

614 square miles.

CHANNEL AND CONTROL:

Channel-sand and silt, about 340 feet wide with 3:1 riprapped slopes.
No artificial control.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows measured from upstream side of bridge.

RECORDER:

Installed April 11, 1938, in F.C. standard type house over an 18 inch diameter, corrugated iron pipe stilling well.
An Au continuous recorder was in service from October 1, 1938 to September 30, 1939.

REGULATION:

Flow is subject to same regulation as station F57B-R. In addition the flow is partially regulated by Devils Gate Dam, and by various debris basins in the Montrose and Altadena areas.

DIVERSIONS:

Several irrigation diversions in the mountain tributaries; some flow is diverted at several water supply reservoirs and the L.A.W.D. diverts flow for spreading. The City of Pasadena diverts water from the Arroyo Seco.

RECORDS AVAILABLE:

At Station F34R
March 1, 1928 to April 11, 1938. (For previous records see State of California, Division of Water Rights Bulletin No.5.)
At Station F34B-R
April 11, 1938 to September 30, 1939.

EXTREMES OF DISCHARGE:

1938-1939
Maximum 10760 second-feet, September 25.
Minimum no flow at various times.
1928-1939 (Stations F34R and F34B-R)
Maximum 79000 second-feet, estimated, March 2, 1938.
Minimum no flow at various times.

ACCURACY:

Poor due to badly shifting control.
Communication usually obstructed by sand at low flows following storms.
Discharges interpolated for partial days:
November 7 and 8; December 19 to 21; January 7 to 11 and 22; April 5; May 12 to 18; June 2 to 8 and 14,15; August 28; September 5 to 7, 25,26, 29,30.

OPERATION:

Located and constructed by the Los Angeles County Flood Control District, and operated by the Los Angeles County Flood Control District with cooperation of the U.S. Engineer Department and the U.S.G.S. Water Resources Branch.

F. C. D. FORM 104 500 6-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F34B-R

DISCHARGE MEASUREMENTS OF LOS ANGELES RIVER

At Firestone Boulevard. DURING THE YEAR ENDING SEPTEMBER 30, 1939

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Format Dist.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
34	10-6	Bonadiman	Two Channels			4.87	46.		.6	8	0	850A / 910A	FC 40
35	10-13	"	48.	28.50	1.78	4.90	51.		.6	8	0	1000A / 1025A	"
36	10-20	"	35.	24.05	2.19	4.94	53.		.6	7	0	917A / 932A	"
37	10-27	"	Two Channels			4.91	48.		.6	12	0	820A / 840A	"
38	11-3	"	"	"		4.84	52.		.6	12	0	950A / 1020A	"
39	11-10	"	39.	23.33	1.55	4.84	36.		.6	7	0	857A / 925A	"
40	11-17	"	Three Channels			4.84	45.		.6	12	0	810A / 845A	"
41	11-23	"	Two Channels			4.86	44.		.6	14	0	900A / 928A	"
42	12-1	"	36.	22.44	2.10	4.86	47.		.6	6	0	830A / 845A	"
43	12-8	"	45.	22.76	1.68	4.84	38.		.6	9	0	819A / 840A	"
44	12-15	Jackman Bonadiman -	357.	269.6	3.28	5.68	884.		.6	12	-.05	500A / 530A	"
45	12-15	Bonadiman	358.	531.8	3.96	5.88	2110.		.6	11	-.06	1240P / 100P	"
46	12-15	Jackman Bonadiman -	347.	523.6	4.44	5.88	2320.		.6	10	0	500P / 530P	"
47	12-15	U.S.E.D. #1	358.	487.	4.10	5.78	2000.		.6	11	0	542P / 612P	35662
48	12-15	U.S.E.D. #2	358.	703.	5.42	6.00	3810.		.6	11	+.10 -.10	711P / 743P	"
49	12-15	U.S.E.D. #3	358.	666.	4.33	5.97	2880.		.6	10	-.10	1026P / 1108P	35662
50	12-16	Jackman Bonadiman -	170.	163.2	3.21	5.17	524.		.6	10	0	955A / 1010A	FC 40
51	12-18	" "	355.	622.5	5.19	6.08	3230.		.6	10	-.05	100A / 115A	"
52	12-18	" "	358.	754.5	5.39	5.98	4070.		.6	10	+.17	710A / 730A	"
53	12-18	" "	360.	816.	4.89	6.06	3990.		Sur. .6	11	+.03	1005A / 1020A	"
54	12-19	" "	Two Channels				2900.		Sur .6	8		530A / 545A	"
55	12-20	" "	360.	872.8	5.76	5.79	5030.		Sur. .6	13	-.02	1235P / 105P	"
56	12-21	" "	115.	122.4	3.92	4.63	368.		.6	8	0	245P / 255P	"
57	12-22	Bonadiman	117.	85.1	2.08	4.57	177.		.6	9	0	310P / 325P	FC 40
58	12-29	"	76.	51.80	2.15	4.56	111.		.6	10	-.01	920A / 945A	"
59	1-5	Gratjan Bonadiman-	390.	935.	6.18	6.55	5350.		.6	11	-.10	232P / 300P	"
60	1-5	U.S.E.D. #4	360.	716.	8.04	6.20	5770		.6	16	+.42	310P / 351P	35618
61	1-6	Bonadiman	85.	196.6	1.82	4.27	358.		.6	5	0	902A / 915A	FC 40
62	1-12	"	76.	46.20	1.50	4.22	70.		.6	10	0	825A / 855A	"
63	1-19	"	80.	45.8	1.81	4.30	83.		.6	12	0	840A / 900A	"
64	1-21	Jackman Bonadiman-	Two Channels			5.90	3040.		.6	12	-.08	720A / 745A	"
65	1-21	" "	360.	607.7	5.21	5.85	3160.		.6	14	-.06	1212P / 1247P	"
66	1-22	" "	100.	98.5	2.71	4.18	266.		.6	8	0	231P / 250P	"
67	1-26	Bonadiman	64.	41.6	1.78	4.13	74.		.6	10	0	826A / 850A	"
68	2-2	"	Two Channels				70.		.6	11	0	821A / 840A	"
69	2-3	Jackman Bonadiman-	258.	420.2	4.93	5.62	2070.		.6	8	+.05	900A / 915A	"
70	2-3	" "	150.	152.8	3.60	4.41	549.		.6	9	+.02	204P / 210P	"
71	2-4	Bonadiman	95.	78.55	1.57	4.23	124.		.6	8	0	316P / 335P	"
72	2-8	"	187.	217.3	2.71	4.80	589.		.6	10	-.12	746A / 807A	"
73	2-9	"	43.	43.1	1.96	4.21	85.		.6	10	0	850A / 910A	"
74	2-16	"	68.	47.7	1.57	4.12	75.		.6	7	0	830A / 850A	"
75	2-23	"	Two Channels			4.14	73.		.6	14	0	846A / 908A	"
76	3-2	"	Three Channels			4.20	80.		.6	17	0	822A / 850A	"
77	3-9	"	"		"	4.21	65.		.6	15	0	851A / 916A	"
78	3-9	Jackman Bonadiman-	358.	552.5	5.12	5.78	2830.		.6	11	-.09	1100P / 1210A	"
79	3-10	Bonadiman	113.	137.1	2.56	4.14	350.		.6	9	-.02	817A / 838A	"
80	3-16	Bonadiman	Three Channels			4.12	78.		.6	16	0	755A / 823A	FC 40
81	3-23	"	Two Channels			4.15	68.		.6	17	0	830A / 857A	"
82	3-27	"	155.	195.2	3.52	4.81	687.		.6	12	-.02	758A / 814A	"
83	3-30	"	87.	45.71	1.62	4.11	74.		.6	11	+.02	821A / 840A	"
84	4-2	"	360.	119.25	1.83	4.42	218.		.6	10	0	1002A / 1025A	"
85	4-6	"	Two Channels			4.16	59.		.6	16	0	810A / 835A	"
86	4-13	"	14.	15.33	1.76	4.07	27.		.6	6	0	820A / 840A	"
87	4-20	"	45.	19.34	1.20	4.12	23.		.6	10	0	913A / 930A	"
88	4-27	"	57.	27.55	1.10	4.12	30.		.6	10	0	832A / 900A	"
89	5-4	"	Two Channels			4.16	43.		.6	14	0	835A / 900A	"
90	5-11	"	40.	19.41	1.24	4.04	24.		.6	10	0	832A / 850A	"
91	5-18	"	37.	13.28	1.22	3.91	16.		.6	9	+.01	855A / 915A	"
92	5-25	"	47.	23.49	1.11	4.03	26.		.6	11	0	830A / 855A	"
93	6-1	"	33.	14.86	1.19	4.00	18.		.6	7	0	812A / 828A	"
94	6-8	"	29.	13.47	1.06	4.03	14.		.6	10	0	900A / 917A	"
95	6-15	"	38.	14.70	1.22	4.04	18.		.6	10	0	725A / 745A	"
96	6-22	"	Two Channels			3.98	17.		.6	13	0	100P / 117P	"
97	6-29	"	"		"	4.04	19.		.6	10	0	920A / 940A	"
98	7-5	"	35.	9.82	0.72	4.00	7.		.6	8	0	915A / 930A	"
99	7-12	"	43.	12.7	0.90	4.00	11.		.6	8	0	845A / 900A	"
100	7-20	"	42.	11.84	0.90	3.96	10.		.6	8	0	1010A / 1030A	"
101	7-27	"	Two Channels			3.98	12.		.6	10	0	920A / 945A	"
102	8-3	"	"		"	3.95	9.6		.6	9	0	930A / 945A	"
103	8-10	"	"		"	3.92	12.		.6	10	0	908A / 930A	"
104	8-17	Bonadiman	38.	11.94	0.99	3.94	11.9		.6	8	0	1130A / 1150A	FC 40
105	8-23	T. Moon	Two Channels			3.96	9.2		.6	13	0	1004A / 1025A	FC 22
106	8-30	"	Three Channels			3.96	9.2		.6	16	0	1021A / 1041A	"
107	9-7	Bonadiman	Two Channels			3.97	8.4		.6	9	+.01	920A / 940A	FC 40
108	9-14	"	Three Channels			3.99	8.7		.6	12	0	815A / 840A	"
109	9-21	"	"		"	3.96	14.		.6	13	0	921A / 940A	"
110	9-24	Jackman Bonadiman-	355.	768.25	5.04	6.06	3870.		.6	11	+.42	1130P / 1155P	"
111	9-25	" "	355.	695.8	4.66	6.33	3240.		.6	9	+.01	1210A / 1230A	"
112	9-25	" "	240.	703.75	5.05	5.72	3560.		.6	8	-.12	110P / 130P	"
113	9-26	" "	77.	102.2	2.44	-	250.		.6	10	-	1200N / 1215P	"
114	9-27	Bonadiman	40.	33.50	1.74	-	58.		.6	8	-	837A / 900A	"
115	9-28	"	46.	22.43	1.45	-	33.		.6	9	-	212P / 235P	"

F. C. Dist. Form 52

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

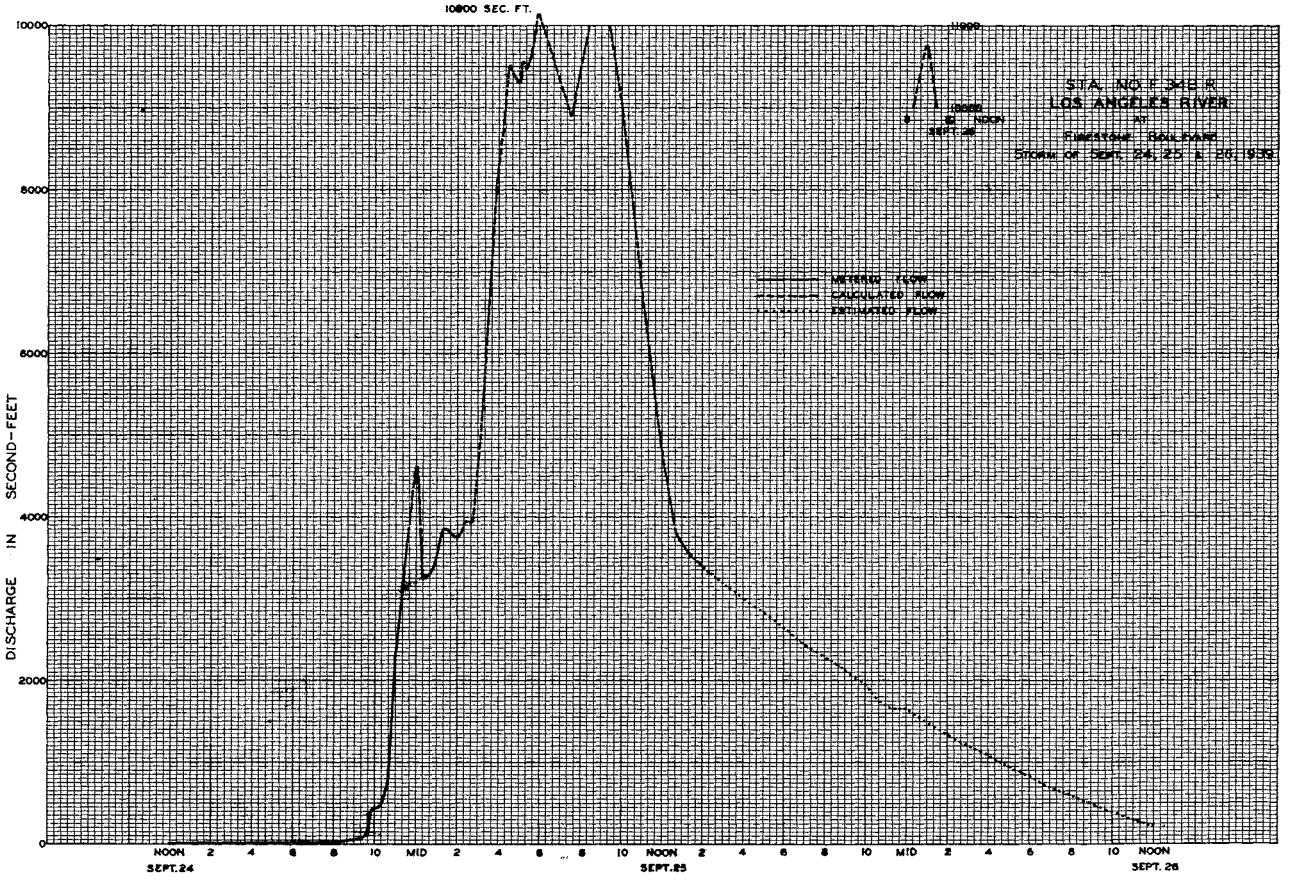
Sta. No. F34B-R

Daily discharge, in second-feet of LOS ANGELES RIVER at Firestone Boulevard for the year ending September 30, 19 39

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	39	56	48	94	77	80	77	20	20	14	14	3.2
2	36	52	42	98	87	84	161	38	E 19	10	12	4.8
3	39	52	29	87	520	74	69	33	E 18	8	10	3.2
4	45	48	26	84	216	56	56	33	E 18	6.5	10	0
5	42	34	29	1510	91	56	E 53	24	E 17	10	6.5	E 3.2
6	45	39	34	358	80	61	50	30	E 16	6.5	1.6	E 8
7	48	E 36	39	E 310	91	56	40	28	E 16	8	6.5	E 6.5
8	48	E 34	39	E 262	168	66	43	30	E 15	8	16	4.8
9	48	34	31	E 214	74	288	43	38	14	8	18	1.6
10	45	36	17	E 166	91	457	43	38	10	4.8	16	0
11	52	31	12	E 118	72	150	43	24	6.5	12	14	0
12	52	36	10	70	61	111	40	E 24	10	10	14	6.5
13	56	27	26	84	74	101	24	E 23	14	8	4.8	4.8
14	65	29	40	105	66	111	22	E 25	E 15	10	6.5	4.8
15	65	26	2110	80	69	91	24	E 25	E 17	8	10	8
16	48	34	1030	98	63	80	20	E 25	18	4.8	4.8	4.8
17	45	45	310	122	61	74	20	E 26	18	4.8	6.5	3.2
18	52	61	3500	122	56	66	26	E 26	14	14	10	1.6
19	52	48	2660 E	87	58	56	22	26	10	10	12	8
20	48	36	2770 E	77	69	56	22	22	16	10	6.5	8
21	39	36	987 E	1700	72	66	22	16	24	12	8	14
22	34	34	133	E 450	61	69	18	30	18	10	10	12
23	24	42	91	150	84	74	22	43	18	8	10	10
24	26	26	84	116	69	77	24	35	12	6.5	18	202
25	39	29	80	122	61	74	26	28	4.8	12	12	5090 E
26	42	36	77	84	58	116	40	26	8	12	10	513 E
27	45	42	72	101	66	215	28	20	14	10	1.6	58
28	42	39	77	94	77	77	22	14	18	10	E 1.6	33
29	48	45	105	80		72	22	10	20	6.5	3.2	E 33
30	48	52	101	232		72	12	4.8	14	6.5	6.5	E 33
31	56		91	98		72		16		8	6.5	
	1413	1175	14700	7373	2692	3158	1134	802.8	4523	276.9	287.1	6083.6
MEAN	45.6	39.2	474.2	237.8	96.1	101.9	37.8	25.9	15.1	8.93	9.26	203
ACRE-FEET	2800	2330	29160	14620	5340	6260	2250	1590	897	549	569	12070

Remarks: E indicates discharge estimated - see station description.

YEAR OR PERIOD MEAN 108.
ACRE FEET 78440



STATION F18OR

LOS ANGELES RIVER at State Street, Long Beach

LOCATION:

On the downstream side of State Street bridge, on the downstream end of 4th pier from east abutment and about 1-3/4 miles from the Pacific Ocean.

DRAINAGE AREA:

Indeterminate due to a natural split near Arrow Highway which divides the San Gabriel River into 2 branches; the west branch known as the Rio Hondo flows into the Los Angeles River; the east branch retains the name San Gabriel River.

CHANNEL AND CONTROL:

Channel-fine sand and silt, 570 feet wide with riprapped levees.
No artificial control.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows measured from upstream side of State Street bridge.

RECORDER:

Installed October 31, 1931, in a box type house over an 18 inch diameter corrugated iron pipe stilling well. F.C. standard house installed 3-17-39. Stevens continuous recorder was in service from October 1, 1938 to September 30, 1939.

REGULATION:

Flow is subject to the same regulation as Station F34B-R. In addition it is partially regulated by Eaton Dam, Sierra Madre Dam, Big Santa Anita Dam, Sawpit Dam, San Gabriel Dams Nos. 1 and 2, and Morrie Dam.

DIVERSIONS:

Several water supply reservoirs in the Los Angeles River Area divert flow.
The City of Pasadena diverts water from the Arroyo Seco, from Eaton Creek, and from the San Gabriel River.
Parties and agencies have various irrigation diversions.
Several agencies divert flow at various locations for spreading.

RECORDS AVAILABLE:

October 31, 1931 to September 30, 1939.

EXTREMES OF DISCHARGE:

1938-1939
Maximum 17,300 second-feet, September 25.
Minimum 2.3 second-feet at various times during summer months.
1931-1939
Maximum 99000 second-feet, estimated, March 2, 1938.
Minimum no flow at various times in 1934.

ACCURACY:

Poor due to badly shifting control.
Communication usually obstructed by sand at low flows following storms.
Discharge frequently interpolated or estimated by comparison.

OPERATION:

Located, constructed and operated by the Los Angeles County Flood Control District in co-operation with the U.S.G.S. Water Resources Branch and the United States Engineer Department.

F. C. D. FORM 104 500 4-38

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F18OR

DISCHARGE MEASUREMENTS OF LOS ANGELES RIVER

AT State Street, Long Beach DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Current Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
173	10-27	Bonadiman	85.	40.	1.02	6.18	41.		.6	10	0	145P / 220P	FC 40
174	11-17	"	42.	32.64	1.10	6.12	36.		.6	7	0	1115A / 1130A	"
175	12-1	"	Two Channels			6.19	68.		.6	9	0	1240P / 100P	"
176	12-15	Jackman Bonadiman-	Two Channels			7.20	799.		.6	16	-.10	715A / 745A	"
177	12-15	Bonadiman	399.	1131.	3.06	7.89	3460.		.6	10	-.14	147P / 218P	"
178	12-15	Jackman Bonadiman-	399.	488.	4.03	7.86	1970.	Surf	.6	9	+.02	740P / 800P	"
179	12-16	" "	181.	430.4	1.75	6.70	751.		.6	12	0	1245P / 110P	"
180	12-18	" "	402.	966.9	3.82	8.05	3690.	Surf	.6	9	0	300A / 330A	"
181	12-18	" "	399.	1311.8	3.80	8.35	4990.		.6	10	0	1100A / 1135A	"
182	12-19	Bonadiman Jackman	402.	1556.	3.07	8.30	4770.		.6	9	+.10	800A / 830A	FC 40
183	12-20	" "	324.	534.2	4.30	7.62	2300.		.6	15	+.16	903A / 930A	"
184	12-20	" "	324.	495.9	3.88	7.70	1920.		.6	8	0	510P / 540P	"
185	12-21	" "	225.	273.2	1.61	7.03	439.	Surf	.6	12	-.02	1045A / 1105A	"
186	12-22	Bonadiman	Two Channels			6.36	132.		.6	10	0	125P / 155P	"
187	12-29	"	Two Channels			6.30	146.		.6	10	0	127P / 205P	"
188	1-5	"	Two Channels			6.48	268.		.6	10	+.04	102P / 125P	"
189	1-5	"	402.	1290.	5.73	8.72	7390.		.6	12	-.24	440P / 518P	"
190	1-6	"	176.6	351.8	1.05	6.83	368.		.6	11	0	1150A / 1215P	"
191	1-12	"	127.6	118.74	0.61	6.00	73.		.6	9	0	140P / 158P	"
192	1-19	"	129.6	134.	1.05	6.20	140.		.6	11	0	1105A / 1125A	"
193	1-21	Jackman Bonadiman-	Two Channels			7.79	3450.		.6	16	-.02	1010A / 1050A	"
194	1-21	" "	" "			8.05	3280.		.6	12	+.06	230P / 300P	"
195	1-22	" "	128.6	356.1	1.12	6.91	400.		.6	9	0	1025A / 1040A	"
196	1-26	Bonadiman	126.6	218.6	0.58	6.20	126.		.6	10	0	1150A / 1215P	"
197	2-2	Bonadiman	75.5	159.4	0.79	6.20	125.		.6	7	0	200P / 230P	FC 40
198	2-3	Jackman Bonadiman-	Two Channels			7.46	2050.		.6	11	+.17	1110A / 1130A	"
199	2-3	" "	186.6	405.6	3.54	7.36	1440.		.6	9	-.04	108P / 115P	"
200	2-4	Bonadiman	130.6	222.4	1.56	6.62	347.		.6	11	0	107P / 130P	"
201	2-8	"	141.	281.9	3.08	6.98	869.		.6	10	0	1035A / 1100A	"
202	2-9	"	78.5	110.8	1.32	6.28	147.		.6	7	0	105P / 128P	"
203	2-16	"	78.5	92.	0.59	6.18	54.		.6	7	0	1000A / 1020A	"
204	2-23	"	76.5	89.18	1.12	6.24	100.		.6	7	0	1127A / 1145A	"
205	3-2	"	85.	88.2	1.18	6.28	104.		.6	8	0	202P / 225P	"
206	3-9	"	89.	92.7	0.85	6.21	78.		.6	8	0	1128A / 1156A	"
207	3-10	Jackman Bonadiman-	402.	696.2	4.21	7.74	2930.		.6	11	+.03	155A / 220A	"
208	3-10	Bonadiman	141.	350.7	1.42	6.89	498.		.6	10	-.02	1027A / 1050A	"
209	3-16	"	124.6	159.32	0.86	6.22	137.		.6	9	0	1100A / 1130A	"
210	3-23	"	120.	77.2	0.93	6.18	72.		.6	9	0	1100A / 1119A	"
211	3-27	"	152.	317.1	3.36	7.08	1060.		.6	11	+.02	1045A / 1110A	"
212	3-30	"	97.	99.8	0.70	6.22	70.		.6	8	0	1000A / 1025A	"
213	4-6	"	78.5	97.7	0.83	6.17	81.		.6	8	0	1012A / 1030A	"
214	4-13	"	78.5	99.45	0.80	6.15	80.		.6	7	0	Noon / 1230P	"
215	4-20	"	27.	17.7	0.82	5.98	14.		.6	7	0	1132A / 1145A	"
216	4-27	"	76.	47.26	0.96	6.18	46.		.6	10	+.01	1040A / 1110A	"
217	5-4	"	40.	28.72	1.16	6.12	33.		.6	7	0	1054A / 1130A	"
218	5-11	"	44.	30.54	0.91	6.07	28.		.6	8	0	1002A / 1030A	"
219	5-18	"	39.5	26.10	0.76	6.03	20.		.6	9	0	1117A / 1140A	"
220	5-25	"	50.5	24.84	0.92	6.03	23.		.6	10	0	1033A / 1100A	"
221	6-1	Bonadiman	40.	25.46	0.83	6.03	21.		.6	11	0	1130A / 1158A	FC 40
222	6-8	"	Two Channels			5.92	10.		.6	9	0	1042A / 1059A	"
223	6-15	"	Two Channels			6.02	19.		.6	10	0	1245P / 110P	"
224	6-22	"	18.	10.76	0.77	5.88	8.3		.6	5	0	904A / 915A	"
225	6-29	"	Two Channels			5.93	11.		.6	10	0	830A / 850A	"
226	7-5	"	13.	9.40	0.69	5.90	6.5		.6	5	0	1043A / 1055A	"
227	7-12	"	14.	8.56	0.70	5.92	6.0		.6	5	0	1100A / 1110A	"
228	7-20	"	21.	11.15	0.59	5.92	6.5		.6	6	0	1112A / 1125A	"
229	7-27	"	17.	9.79	0.70	5.92	7.0		.6	6	0	1100A / 1113A	"
230	8-3	"	20.	8.02	0.72	5.92	6.0		.6	5	0	1105A / 1120A	"
231	8-10	"	28.	12.17	0.60	5.96	7.3		.6	7	0	1100A / 1121A	"
232	8-17	"	20.	7.92	0.92	5.96	7.3		.6	6	0	108P / 128P	"
233	8-23	T. Moon	15.	4.84	0.83	5.92	4.0		.6	8	0	350P / 401P	FC 22
234	8-30	"	12.	3.52	0.59	5.89	2.1		.6	5	-.01	451P / 500P	"
235	9-7	Bonadiman	16.	5.77	0.68	5.97	3.9		.6	5	0	1105A / 1120A	FC 40
236	9-14	"	16.	5.82	0.53	5.95	3.1		.6	4	0	1130A / 1138A	"
237	9-21	"	20.	9.75	0.54	5.94	5.3		.6	5	0	1113A / 1128A	"
238	9-25	Jackman Bonadiman-	402.	1234.	4.35	8.76	5370.		.6	10	+.28	340A / 425A	"
239	9-25	" "	404.	2119.	5.27	10.25	11160.		.6	10	+.10	640A / 710A	"
240	9-25	" "	406.	2715.	6.3	10.63	17100.		.6	10	+.05	1002A / 1044A	"
241	9-26	" "	84.	199.4	2.43	6.48	485.		.6	8	-.05	227P / 255P	"
242	9-28	Bonadiman	24.8	37.31	1.20	5.70	45.		.6	6	0	127P / 140P	"

F. C. Dist. Form 58

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

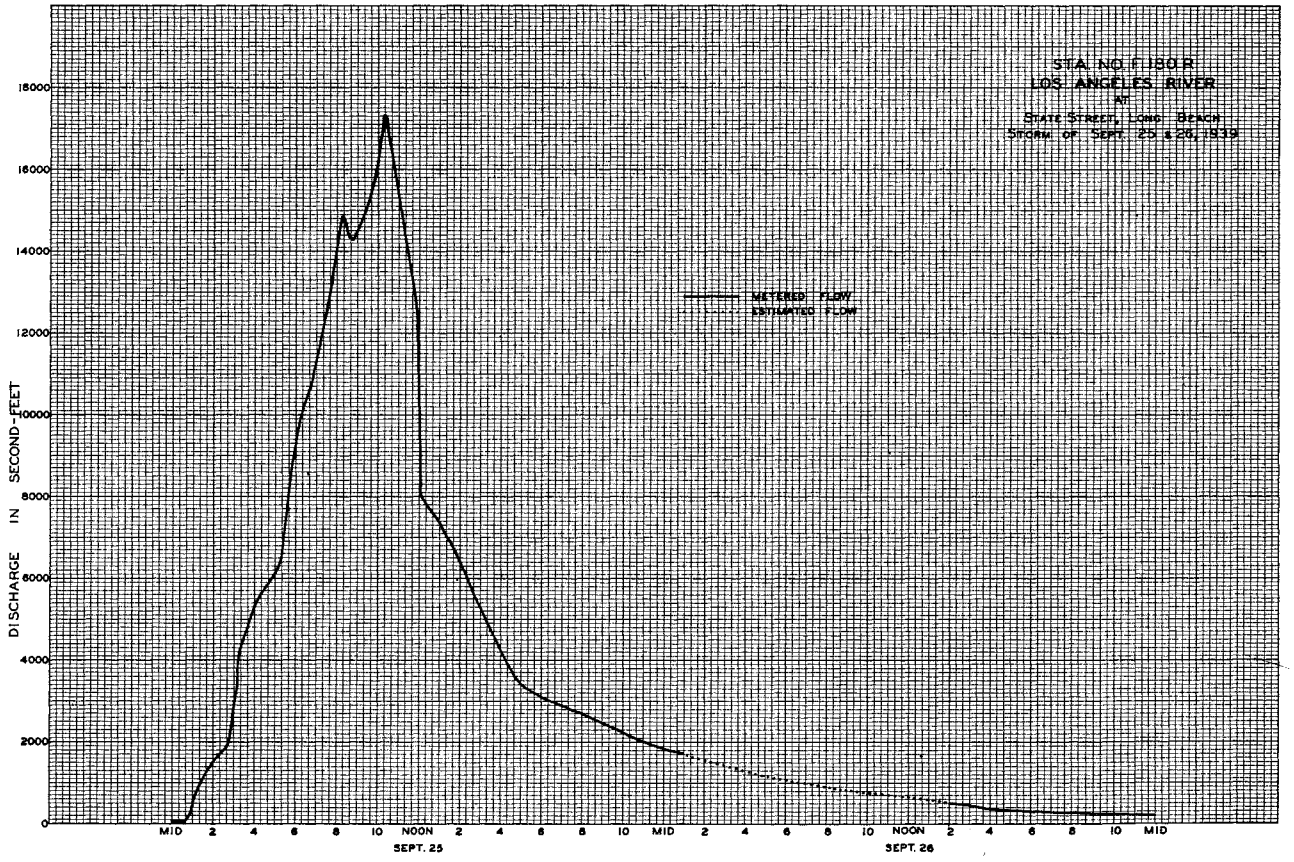
Sta. No. F180R

Daily discharge, in second-feet of LOS ANGELES RIVER at State Street, Long Beach, for the year ending September 30, 19 39

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	53	26	64	123	E 107	E 82	64	14	24	12	6	E 3.5
2	50	30	53	132	E 110	E 89	195	26	25	9.5	6.5	3.5
3	45	33	42	141	710	96	78	40	21	7	6.5	3.8
4	48	35	40	152	425	86	78	33	20	6.5	8	3.8
5	50	E 35	37	1200	96	E 71	75	30	15	6.5	E 7	4.1
6	45	E 35	37	E 446	61	E 75	E 78	35	15	9	6.5	4.1
7	48	E 37	40	216	56	E 75	E 75	28	17	6.5	5.5	4.1
8	45	E 37	40	158	290	E 78	E 71	28	10	6.5	6	3.5
9	E 45	E 37	40	141	168	E 92	71	33	11	6.5	7	4.1
10	E 45	E 37	E 40	E 114	132	802	71	33	14	6.5	7.5	4.1
11	E 42	40	E 40	E 89	114	252	89	28	9.5	6.5	7.5	3.5
12	E 42	28	E 37	E 86	96	E 209	86	28	11	7	7	3.8
13	E 40	26	E 37	82	89	E 180	71	35	12	6.5	6.5	3.8
14	E 40	28	E 37	96	82	E 163	E 23	33	12	7	6.5	3.5
15	E 40	48	1750	123	64	E 146	E 20	21	17	6.5	E 7	3.8
16	E 37	48	E 1230	123	50	E 137	E 16	18	12	6.5	8.5	3.8
17	E 37	37	245	132	45	E 128	E 15	16	14	E 6.5	7.5	4.8
18	E 35	37	3450	141	53	E 118	16	18	9.5	E 6.5	5.5	4.8
19	E 35	40	3660	118	56	E 109	17	21	8.5	6.5	6.5	4.5
20	E 35	37	1550	109	68	E 100	16	23	9.5	6.5	E 6	4.8
21	E 33	33	463	1690	78	E 91	18	17	11	4.5	5	5
22	E 33	40	133	542	89	E 81	18	15	10	6	5	4.1
23	E 33	45	56	196	96	E 72	23	23	10	6	4.8	4.5
24	E 30	42	40	146	89	E 72	20	23	11	E 5.5	5	10
25	E 30	35	24	123	64	E 72	24	23	10	5	5	6220
26	E 28	37	23	126	E 71	100	37	20	10	7.5	4.5	752
27	E 28	37	24	E 115	E 75	410	35	20	11	7	3.8	107
28	28	35	33	E 120	E 78	162	15	17	14	8	3.8	E 45
29	30	42	94	E 110		78	16	15	14	7.5	3.8	E 41
30	28	59	123	E 385		64	17	20	12	E 7	E 3.5	E 37
31	23		128	E 180		61		18		E 6.5	E 3.5	
	1181	1116	13610	7655	3512	4351	1448	752	398.0	2130	182.7	73053
Mean	38.1	37.2	439	247	125	140	48.3	24.3	13.3	6.87	5.89	244
Acre-Feet	2340	2210	27000	15180	6970	8630	2870	1490	789	422	362	14490

Remarks: E indicates discharge estimated - see station description.

Year or Period — Mean 114 — Acre-Feet 82750



STATION F100R

MAIN SPREADING CANAL at mouth of San Gabriel Canyon

LOCATION:

On the right (north) bank of the Spreading Canal at the upstream side of an abandoned railroad bridge, 300 feet east of San Gabriel Canyon Road and about 2 miles north of Azusa.

GENERAL:

This station is on a spreading ditch which receives water from two sources: one is from the City of Pasadena's power house tailrace; the other is by direct diversion from San Gabriel River through a tunnel, known as the SAN GABRIEL-AZUSA-DUARTE TUNNEL DIVERSION, and published herewith.
The total represents the major part of the water spread by the East Side Water Company. Records for Station F100R are not published for 1938-1939 but are available at the office of the Los Angeles County Flood Control District's Hydraulic Division.

CHANNEL AND CONTROL:

Channel-hard packed earth channel.
No artificial control.

DISCHARGE MEASUREMENTS:

All flows measured by wading.

RECORDER:

Installed February 13, 1929, in a box type house over an 18 inch diameter, corrugated iron pipe stilling well.
A Stevens type L recorder was in service from October 1, 1938 to September 30, 1939.

REGULATION:

By diversion gates.

RECORDS AVAILABLE:

Recorder records from February 13, 1929 to September 30, 1939.

ACCURACY:

Good.

OPERATION:

Located, constructed and operated by the Los Angeles County Flood Control District.

REMARKS:

The records for SAN GABRIEL RIVER-AZUSA-DUARTE TUNNEL DIVERSION are published herewith.

F. C. D. FORM 104 900 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F100R

DISCHARGE MEASUREMENTS OF MAIN SPREADING CANAL

AT mouth of San Gabriel Canyon DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Curve Diff.	Rating	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
28	1-19	Lindsay	12.4	18.08	2.27	1.97	41.		=	8	0	1110A 1122A	FC 13
29	3-16	Ingram	12.0	17.73	2.55	2.10	45.		.6	8		400P 415P	FC 28
30	3-23	"	12.5	19.80	2.37	2.12	47.		.6	8		445P 500P	"
31	3-30	"	12.5	19.84	2.49	2.12	49.		.6	8		358P 415P	"
32	4-20	"	12.5	19.12	2.26	2.02	43.		.6	8		431P 447P	"
33	5-4	"	12.5	13.44	1.38	1.53	19.		.6	10	0	505P 515P	"

F. C. Dist. Form 52

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

Sta. No. _____

Daily discharge, in second-feet of SAN GABRIEL RIVER -- AZUSA - DUARTE TUNNEL DIVERSION for the year ending September 30, 19 39

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	68.5	56.6	55.8	74.4	5.5	5.5	6.3	5.1	0	70.5	53.2	25.4
2	68.1	56.6	55.1	74.4	5.2	5.1	7.2	5.1	0	69.9	33.6	25.2
3	68.3	55.9	56.1	74.4	7.5	5.1	6.3	5.1	2.4	69.9	33.2	25.6
4	68.7	55.9	55.4	32.8	6.9	5.1	6.0	5.1	3.6	69.9	33.0	25.6
5	67.7	55.9	55.4	4.0	6.3	5.1	5.7	5.1	3.6	69.5	32.8	25.4
6	67.7	55.3	55.4	5.2	5.7	5.1	5.5	4.8	3.6	68.1	32.6	25.4
7	68.1	54.8	55.4	21.7	5.7	5.1	5.5	5.1	3.6	68.9	32.6	25.2
8	68.1	54.7	55.4	12.4	8.1	5.1	5.5	4.8	3.2	72.8	32.8	25.0
9	68.1	55.0	56.6	8.7	6.9	5.1	5.5	5.0	3.2	74.0	32.6	24.2
10	68.1	55.9	55.0	7.6	22.4	6.6	5.5	0	1.9	74.0	32.6	20.2
11	68.1	56.2	55.6	7.2	61.8	5.5	5.5	0	26.5	74.0	32.4	20.0
12	67.5	55.9	55.6	6.9	68.9	5.2	5.5	0	32.7	75.6	31.8	20.0
13	67.2	55.9	55.6	6.3	53.4	5.2	5.5	0	48.5	77.0	32.0	19.8
14	67.2	55.5	55.6	6.0	20.2	5.7	5.5	0	59.1	76.9	32.0	20.4
15	68.1	55.1	57.7	6.0	8.7	5.7	5.5	0	74.1	75.3	32.0	24.2
16	66.8	55.1	59.4	6.0	7.5	5.7	5.5	0	78.4	75.0	31.4	24.6
17	68.1	54.1	59.4	6.0	6.9	4.2	5.2	0	80.4	75.0	27.0	24.8
18	66.8	55.1	66.8	6.0	6.3	3.4	5.2	3.9	80.4	74.5	26.2	24.6
19	66.0	55.1	66.8	6.0	6.0	3.4	5.2	5.2	80.5	74.2	26.0	24.2
20	64.8	55.1	66.3	5.2	5.7	3.4	5.2	5.2	79.2	73.6	26.2	24.8
21	65.2	55.2	67.3	6.9	5.5	3.4	5.1	3.5	77.2	72.5	26.0	24.6
22	63.7	54.4	67.3	6.3	5.5	3.4	5.1	0	76.2	72.9	26.0	24.6
23	63.7	54.3	71.3	5.7	5.5	5.2	5.1	0	71.2	75.6	25.8	27.4
24	63.7	54.7	71.3	5.5	5.5	6.3	5.1	0	71.2	73.1	25.8	34.8
25	61.4	54.8	71.3	5.5	5.5	6.3	5.1	0	71.2	72.2	25.8	41.0
26	57.2	55.2	71.3	5.5	5.5	7.8	4.8	0	70.8	72.6	25.6	34.2
27	57.2	55.2	72.9	5.5	5.5	9.5	4.8	0	70.7	72.5	25.0	31.7
28	56.6	55.2	73.7	5.5	5.5	7.5	4.8	0	70.7	72.1	25.0	31.1
29	56.2	55.2	73.7	5.5		6.3	4.8	0	70.7	71.6	25.0	29.9
30	56.2	55.2	73.7	6.0		6.0	4.8	0	70.5	71.1	25.0	29.9
31	55.9		73.7	6.0		6.0		0		70.6	25.2	
	2009.0	1659.1	19419	4413	369.6	168.0	1623	63.0	13953	2255.4	926.2	783.8
MEAN	64.8	55.3	62.6	14.2	13.2	5.42	5.41	2.03	46.5	72.8	29.9	26.1
ACRE-FEET	3985	3291	3852	875	733	333	322	125	2767	4473	1837	1555

Remarks:

YEAR OR PERIOD MEAN 33.4
ACRE-FEET 24148

STATION F130R

MALIBU CREEK at Crater Camp

LOCATION:

At upper end of Malibu Gorge, about 1/4 mile downstream from Crater Camp in the Santa Monica Mountains.

DRAINAGE AREA:

103 square miles.

CHANNEL AND CONTROL:

Channel-coarse sand and gravel lined with brush and trees which retard the velocity along the banks during high flows.
No artificial control.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows measured from cable car at station.

RECORDER:

Installed January 17, 1931, in a box type house over an 18 inch diameter, corrugated iron pipe stilling well.
An Au continuous recorder was in service from October 1, 1938 to September 30, 1939.

REGULATIONS AND OR DIVERSIONS:

Lake Sherwood Dam, Lake Eleanor Dam, Malibu Lake Mountain Club Dam and Crags Dam.
Other low dams built for recreational purposes effect the low summer flows.

RECORDS AVAILABLE:

January 17, 1931 to September 30, 1939.

EXTREMES OF DISCHARGE:

1938-1939
Maximum 331 second-feet, December 20.
Minimum no flow at various times.
1930-1939
Maximum 10000 second-feet, estimated, March 2, 1938.
Minimum no flow at various times.

ACCURACY:

Poor.
Communication to stilling well doubtful at various times during low flows.
Interpolated between measurements: October 1 to 29. Gage heights extrapolated for partial days, December 20 and 21.

OPERATION:

Located, constructed and operated by the Los Angeles County Flood Control District in cooperation with the U.S. G.S. Water Resources Branch.

F. C. D. FORM 104 500 8-38

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F130R

DISCHARGE MEASUREMENTS OF MALIBU CREEK

AT Crater Camp DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Bailey Current Bffr.	Rated	MEAS. REC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
77	10-13	Bollinger	5.0	1.33	.30	-	.40		.6	5	-	320P / 326P	FC 6
78	10-27	"	5.5	1.66	.22	-	.36		.6	6	-	119P / 123P	"
79	11-2	"	7.3	3.09	.09	4.03	.29		.6	5	0	221P / 228P	"
80	11-17	"	6.2	2.74	.22	4.08	.60		.6	6	0	1136A / 1143A	"
81	12-1	"	9.5	2.96	.17	4.00	.49		.6	8	+.01	1022A / 1030A	"
82	12-14	"	11.7	3.34	.66	3.79	2.2		.6	8	0	302P / 309P	"
83	12-16	Koch-Lindstrom	39.5	30.7	1.04	4.38	32.		.6	10	-	200P / 209P	"
84	12-20	Koch-Mazor	40.	42.9	1.71	4.60	74.		.6	11	-.01	707P / 718P	"
85	12-28	Bollinger	13.8	3.63	.97	3.92	3.3		.6	6	0	410P / 416P	"
86	1-5	Bollinger-Koch	41.	31.7	1.70	4.48	54.		.6	12	-.01	825P / 838P	"
87	1-12	Bollinger	14.5	5.57	1.42	4.11	7.9		.6	8	0	1116A / 1125A	"
88	1-19	"	14.5	5.06	1.36	4.10	6.9		.6	9	0	1244P / 1254P	"
89	1-21	Bollinger-Koch	40.8	31.5	1.84	4.50	58.		.6	12	-.01	205P / 215P	"
90	1-26	Bollinger	13.8	4.36	1.14	4.08	5.0		.6	9	0	933A / 943A	"
91	2-2	"	14.2	5.68	1.35	4.12	7.6		.6	11	0	258P / 308P	"
92	2-9	"	17.	8.50	1.69	4.18	14.		.6	10	0	1145A / 1157A	"
93	2-16	"	15.2	10.3	1.50	4.16	11.		.6	9	0	133P / 143P	"
94	2-23	"	15.3	6.98	1.42	4.14	9.9		.6	10	0	238P / 248P	"
95	3-2	"	15.0	6.47	1.28	4.12	8.3		.6	11	0	233P / 241P	"
96	3-9	"	15.0	6.64	1.22	4.12	8.1		.6	12	0	345P / 356P	"
97	3-16	"	17.5	7.43	1.89	4.18	14.		.6	10	0	327P / 337P	"
98	3-23	"	16.5	7.77	1.53	4.14	12.		.6	12	0	325P / 336P	"
99	3-30	"	16.7	7.40	1.38	4.16	10.		.6	11	0	257P / 307P	"
100	4-6	"	15.0	6.50	1.23	4.11	8.0		.6	10	0	1143A / 1153A	"
101	4-13	Bollinger	15.0	6.08	1.20	4.11	7.3		.6	11	0	1103A / 1114A	FC 6
102	4-20	"	14.5	5.60	1.09	4.10	6.1		.6	9	0	118P / 126P	"
103	4-27	"	14.5	5.01	1.02	4.10	5.1		.6	10	0	1208P / 1218P	"
104	5-4	"	14.0	3.88	.96	4.08	3.7		.6	9	0	1107A / 1116A	"
105	5-11	"	13.5	3.58	.86	4.07	3.1		.6	8	0	118P / 126P	"
106	5-18	"	14.5	4.65	.80	4.09	3.7		.6	8	0	1127A / 1136A	"
107	5-25	"	13.0	3.78	.60	4.07	2.3		.6	8	0	1243P / 1252P	"
108	6-1	"	13.0	3.25	.62	4.04	2.0		.6	8	0	1243P / 1251P	"
109	6-15	"	9.5	2.46	.55	4.02	1.4		.6	8	0	1021A / 1029A	"
110	6-27	"	9.7	2.29	.36	4.00	.80		.6	8	0	215P / 223P	"
111	8-3	"	3.5	1.14	.29	3.96	.33		Fl.	3	-	925A / 928A	-
112	9-7	"	1.0	.10	.70	3.99	.07		Fl.	8	-	1045A / -	-
113	9-25	Herkomer Bollinger-	47.	43.1	2.98	5.22	128.		.6	9	+.01	325P / 340P	FC 6
114	9-28	Bollinger	17.5	4.65	.85	4.53	4.0		.6	7	0	1215P / 1222P	"

F. C. Dist. Form 58

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

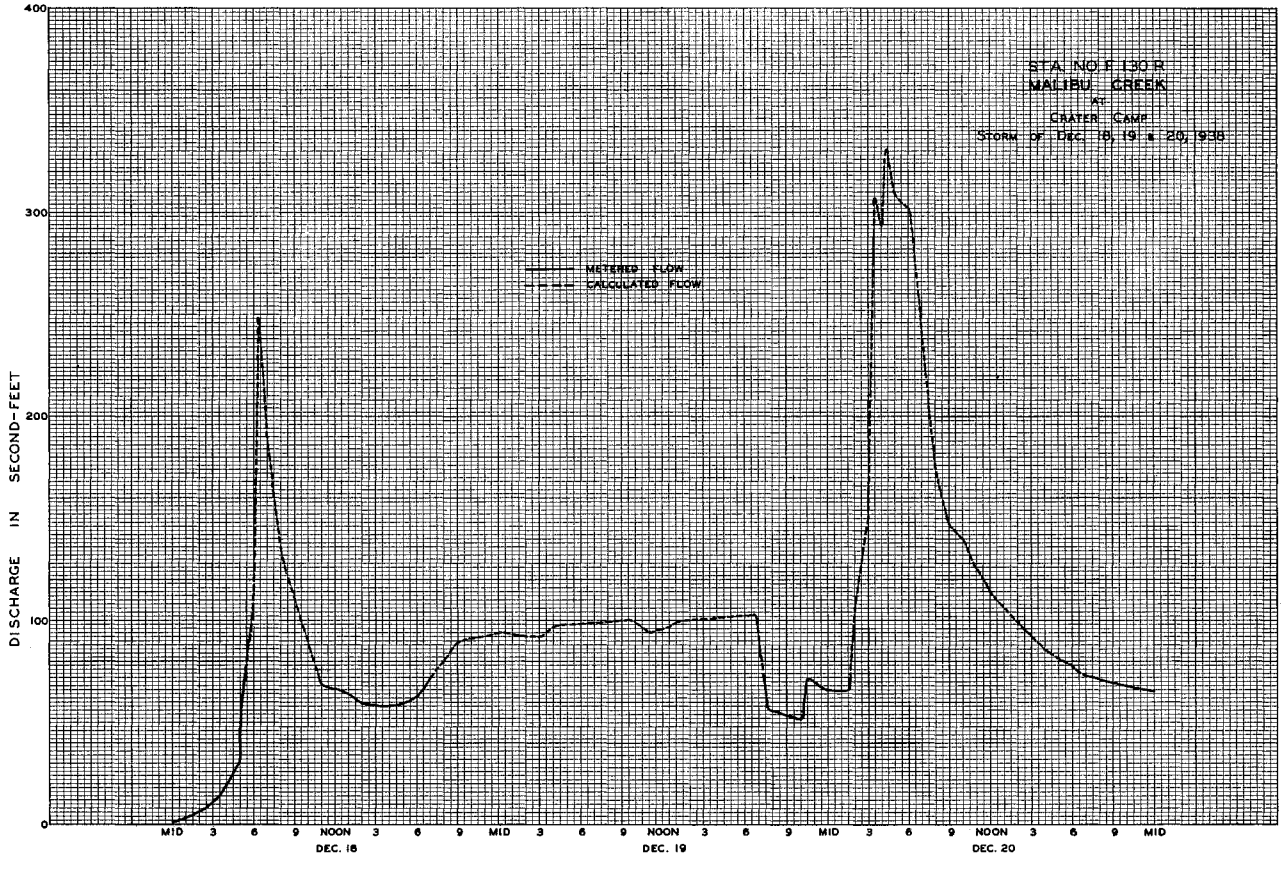
Sta. No. F130R

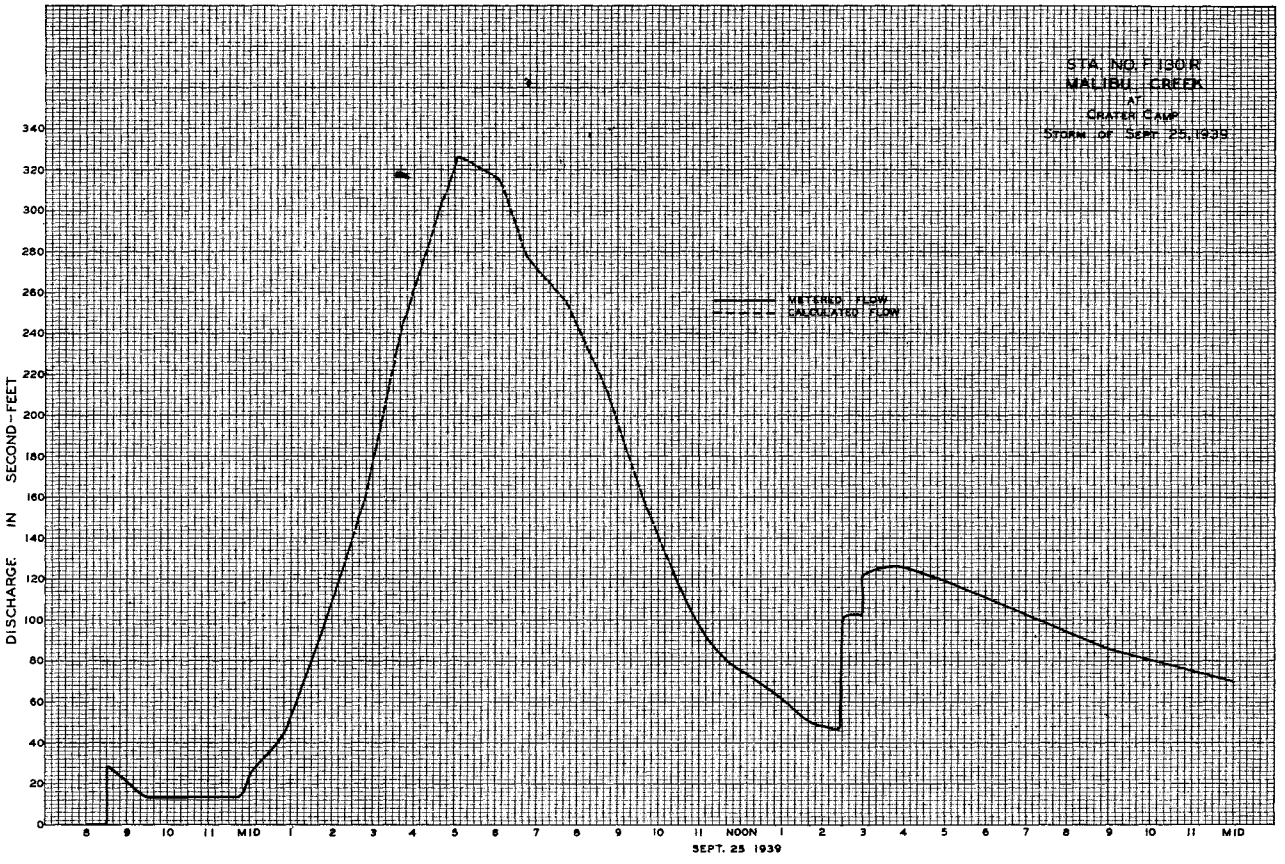
Daily discharge, in second-feet of MALIBU CREEK at Crater Camp for the year ending September 30, 19 39

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	E 0.4	0.6	0.1	2.0	9.5	7	8.5	2.7	1.4	0.6	0.6	0
2	0.4	0.4	0.6	8.5	7	10	2.0	1.4	0.6	0.4	0	
3	0.4	0.4	0.9	0.2	27	8.5	10	2.7	1.4	0.6	0.4	0
4	0.4	0.4	1.4	0.1	34	8.5	9.5	1.4	0.9	0.6	0.4	0
5	0.4	0.4	3.4	57	10	7	8.5	2.0	1.4	0.6	0.6	0
6	0.4	0.4	18	40	15	7	7	2.0	1.4	0.9	0.9	+
7	0.4	2.0	49	14	16	7	7	2.0	1.4	0.9	0.6	+
8	0.4	2.0	42	9.5	18	8.5	7	2.7	1.4	0.6	0.9	0
9	0.4	2.7	7.5	8.5	14	15	8.5	2.7	2.0	0.9	0.9	0
10	0.4	2.0	7.5	7	13	59	7	3.4	1.4	0.9	0.9	0
11	0.4	2.0	0.4	5	13	39	6	3.4	1.4	0.4	0.9	+
12	0.4	1.4	0.4	7	12	28	6	3.4	1.4	0.4	0.6	0
13	0.4	1.4	0.6	8.5	12	20	6	2.0	0.9	0.2	0.2	0
14	0.4	0.9	3.8	8.5	12	17	5	2.7	0.9	0.2	+	0
15	0.4	0.6	51	8.5	12	15	4.3	3.4	0.9	0.2	+	0
16	0.4	0.6	29	8.5	12	13	5	3.4	0.6	0.2	+	0
17	0.4	0.5	4.0	7	12	13	6	3.4	0.6	0.1	0	0
18	0.4	0	72	7	10	13	4.3	3.4	0.6	0.1	0	0
19	0.4	0	90	17	10	12	5	3.4	0.4	0.1	0	0
20	0.4	0	E 132	7.5	12	10	5	3.4	0.4	0.1	0	0
21	0.4	0	E 52	53	12	10	3.4	2.7	0.4	0.1	0	0
22	0.4	0	37	36	10	12	2.7	2.7	0.4	0.1	0	0
23	0.4	0	7	12	9.5	12	3.4	2.0	0.4	0.2	0	0
24	0.4	0	3.4	7	9.5	10	3.4	2.0	0.4	0.1	0	2.4
25	0.4	0	3.4	6	9.5	8.5	3.4	2.0	0.4	0.4	0	139
26	0.4	0	3.4	5	9.5	7	3.4	2.0	0.4	0.4	0	54
27	0.4	0	3.4	5	8.5	6	3.9	2.0	0.6	0.6	0	19
28	0.2	+	3.4	6	7	5	2.0	2.0	0.6	0.6	0	4.3
29	E 1.9	+	3.4	8.5		6	1.7	1.4	0.6	0.4	0	0.9
30	3.4	0.1	3.4	12		10	2.6	0.9	0.6	0.4	0	0.4
31	0.9		3.4	12		9.5		1.4		0.6	0	
	172	18.8	636.6	385.9	357.5	410.5	165.5	76.6	27.0	13.1	8.3	220.0
MEAN	0.55	0.63	20.5	12.4	12.8	13.2	5.52	2.47	0.90	0.42	0.27	7.33
ACRE-FEET	34	37	1260	765	709	814	328	152	54	26	16	436

Remarks: + indicates discharge 0.05 sec. ft. or less.
E indicates discharge estimated - see station description.

YEAR OR PERIOD — MEAN 6.40 — ACRE-FEET 4630





STATION F22R

MONROVIA CREEK 200 ft. above junction with Sawpit Creek

LOCATION:

On the right (south) bank of the creek in Monrovia Canyon, 150 feet above junction with Sawpit Creek, and about 2 1/2 miles north of Monrovia.

DRAINAGE AREA:

1.9 square miles.

CHANNEL AND CONTROL:

Channel-rock and gravel.
Control-former concrete control buried under rock and gravel, natural chennel forms control.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows were unmeasurable until footbridge was replaced in June, 1939.

RECORDER:

Installed November 10, 1927 in F.C. Standard house over 4 ft. x 3 ft. concrete stilling well.
Au continuous recorder in service from October 1, 1938 to September 30, 1939.

REGULATION:

None.

DIVERSIONS:

Monrovia pipe line diverts water above gage.

RECORDS AVAILABLE:

November 10, 1927 to September 30, 1939.

EXTREMES OF DISCHARGE:

1938-1939
Maximum 23. second-feet September 25.
Minimum + at various times.
1927-1939
Maximum not determined March 2, 1938.
Minimum no flow at various times.

ACCURACY:

Fair during low flows.
Poor during high flows due to badly shifting control.
Record estimated by interpolation from December 21 to 28, and June 19 to 21.

OPERATION:

Located, constructed, and operated by the Los Angeles County Flood Control District.

F. C. D. FORM 104 500 6-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F22R

DISCHARGE MEASUREMENTS OF MONROVIA CREEK

AT OR NEAR above junction with Sawpit Creek DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
150	10-6	Lindsay	1.8	.51	.53	3.75	.27		.6	4	0	416P 421P	FC 28
151	10-20	"	2.3	.68	.43	3.77	.29		.6	4	0	925A 929A	FC 13
152	10-27	"	2.4	.67	.31	3.77	.21		.6	5	0	1050A 1056A	"
153	11-3	"	1.2	.32	.81	3.76	.26		.6	2	0	143P 147P	"
154	11-10	"	1.2	.35	.83	3.76	.29		.6	2	0	208P 213P	"
155	11-17	"	1.2	.44	.86	3.82	.38		.6	2	0	927A 930A	"
156	11-23	"	1.2	.34	.73	3.79	.25		.6	2	0	407P 410P	"
157	12-1	"	1.2	.36	.69	3.80	.25		.6	2	0	913A 916A	"
158	12-8	Lindstrom Ingram Lindsay-	1.2	.22	.68	3.85	.15		.6	2	0	931A 934A	FC 28
159	12-15	Lindsay-	3.5	.97	1.24	4.22	1.2		.6	4	0	850A 855A	FC 13
160	12-18	Haig-Tscharner	4.2	1.46	2.85	4.41	4.2		.6	6	-.03	811A 815A	FC 38
161	12-18	Lindsay-Ingram	4.0	1.36	1.76	4.28	2.4		.6	4	0	352P 355P	FC 13
162	12-19	" "	8.5	2.74	1.53	4.23	4.2		.6	5	0	738A 744A	"
163	12-20	" "	9.0	3.24	1.42	4.22	4.6		.6	6	0	907A 912A	"
164	12-21	" "	8.5	2.32	.95	4.14	2.2		.6	6	0	843A 855A	FC 28
165	12-29	Lindsay	4.0	.44	.23	3.88	.10		.6	4	0	430P 436P	"
166	1-5	Lindsay-Ingram	7.5	1.34	.75	4.04	1.0		.6	6	+.01	1117A 1124A	"
167	1-5	" "	5.5	1.48	1.22	4.30	1.8		.6	5	0	524P 530P	"
168	1-6	" "	3.8	.92	1.20	4.21	1.1		.6	5	0	835A 842A	"
169	1-9	Lindsay	2.0	.20	.55	4.06	.11		.6	3	0	142P 146P	"
170	1-12	"	2.3	.18	.50	4.05	.09		.6	4	0	1255P 100P	"
171	1-20	"	1.5	.18	.39	4.04	.07		.6	3	0	923A 927A	FC 13
172	1-21	Lindsay-Ingram	4.0	1.03	1.03	4.20	1.1		.6	5	0	229P 235P	"
173	1-23	Lindsay	3.1	.40	.70	4.09	.28		.6	4	0	933A 937A	"
174	1-26	Lindsay	2.8	.18	.39	4.08	.07		.6	4	0	1133A 1138A	FC 28
175	1-31	"	2.5	.23	.52	4.08	.12		.6	4	0	910A 914A	FC 13
176	2-3	Lindsay-Ingram	3.9	.73	.68	4.21	.50		.6	5	0	233P 239P	FC 28
177	2-9	Lindsay	3.0	.24	.37	4.12	.09		.6	4	0	918A 923A	"
178	2-17	Lindsay	2.0	.17	.35	4.15	.06		.6	4	0	850A 854A	FC 28
179	2-23	"	0.5	.08	.88	4.16	.07		.6	1	0	900A 902A	"
180	3-2	"	0.6	.08	.75	4.14	.06		.6	1	0	918A 921A	"
181	3-9	"	0.6	.10	.90	4.15	.09		.6	1	0	140P 142P	"
182	3-10	Lindsay-Ingram	4.2	.83	.60	4.15	.50		.6	5	0	1123A 1128A	"
183	3-16	Lindsay	0.8	.20	.55	4.06	.11		.6	2	0	943A 946A	FC 13
184	3-23	"	0.7	.14	.64	4.05	.09		.6	1	0	928A 929A	"
185	3-30	"	1.0	.22	.77	4.08	.17		.6	2	0	947A 952A	"
186	4-6	"	1.0	.16	.81	4.05	.13		.6	2	0	847A 850A	FC 28
187	4-13	Ingram	1.6	.26	.38	4.04	.10		.6	3	0	845A 850A	"
188	4-20	"	2.6	.32	.44	4.03	.14		.6	3	0	1055A 1100A	"
189	4-27	Lindsay	1.0	.14	.71	4.02	.10		.6	2	0	1216P 1219P	"
190	5-4	"	1.0	.14	.64	4.00	.09		.6	2	0	116P 119P	"
191	5-11	"	0.6	.07	.71	4.02	.05		.6	1	0	403P 404P	"
192	5-18	"	0.6	.07	1.00	4.04	.07		.6	1	0	512P 514P	"
193	5-25	"	0.7	.08	.75	4.02	.06		.6	1	0	449P 450P	"
194	6-1	"	0.6	.07	.57	4.01	.04		.6	1	0	844A 846A	"
195	6-8	"	0.5	.05	.60	4.02	.03		.6	1	0	1227P 1229P	"
196	6-15	"	0.5	.05	.60	4.03	.03		.6	1	0	116P 118P	"
197	6-22	"	0.5	.05	.80	4.08	.04		.6	1	0	1117A 1118A	"
198	6-29	Ingram	2.3	.19	.21	4.08	.04		.6	3	0	828A 832A	FC 2
199	7-6	Lindsay	0.5	.05	.80	3.96	.04		.6	1	0	902A 904A	FC 28
200	7-12	"	0.5	.05	.60	3.95	.03		.6	1	0	1235P 1237P	"
201	7-28	"	0.5	.05	.60	3.92	.03		.6	1	0	1225P 1226P	"
202	8-10	"	0.5	.04	.50	3.92	.02		.6	1	0	142P 144P	"
203	8-23	Brewster	0.5	.11	.36	3.94	.04		.6	1	0	1230P 1232P	FC 8
204	9-7	Lindsay	0.5	.04	.50	3.92	.02		.6	1	0	745A 747A	FC 28
205	9-21	"	0.5	.05	.60	3.92	.03		.6	1	0	727A 729A	"
206	9-24	Ingram	11.5	3.58	1.83	4.44	6.5		.6	5	0	840P 848P	FC 2
207	9-25	Lindsay-Ingram	11.5	3.07	1.41	4.42	4.3		.6	6	0	240A 245A	FC 28
208	9-25	" "	13.5	5.66	3.16	4.80	18.		.6	7	-.06	1031A 1038A	"
209	9-26	Lindsay	5.0	1.44	.82	4.52	1.2		.6	5	0	824A 832A	"
210	9-28	"	3.5	.57	.53	4.38	.2		.6	5	0	857A 902A	"

F. C. Dist. Form 58

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

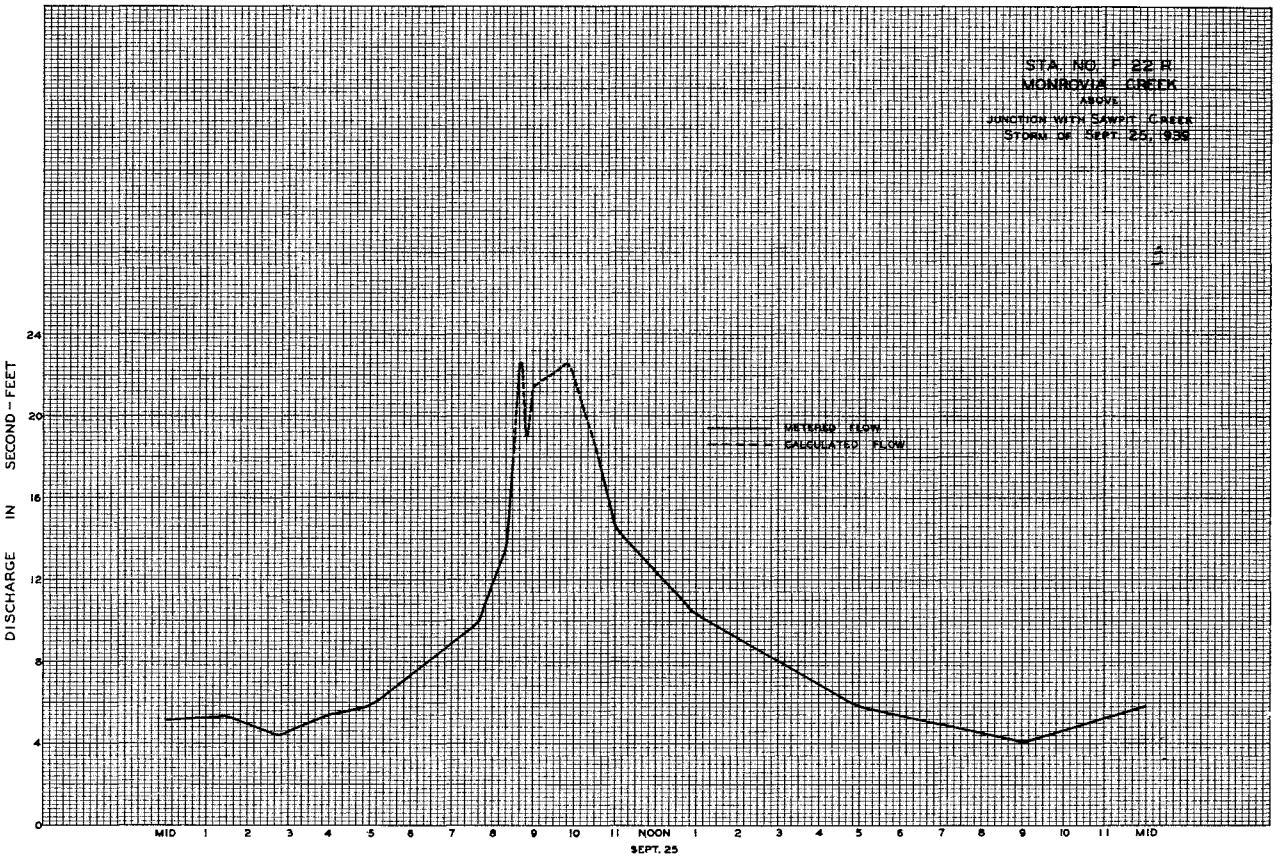
Sta. No. F22R

Daily discharge, in second-feet of MONROVIA CREEK above junction with Sawpit Creek, for the year ending September 30, 19 39

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.3	0.3	0.3	0.1	0.1	+	0.2	0.2	+	+	+	+
2	0.3	0.3	0.2	0.1	0.1	+	0.2	0.1	+	+	+	+
3	0.2	0.3	0.2	0.1	0.3	+	0.2	0.2	+	+	+	+
4	0.2	0.3	0.2	0.1	0.2	+	0.1	0.2	+	+	+	+
5	0.2	0.3	0.2	2.8	+	+	0.1	0.2	+	+	+	+
6	0.3	0.3	0.2	1.0	+	0.1	0.1	0.1	+	+	+	+
7	0.3	0.3	0.2	0.7	+	0.1	0.1	0.1	+	+	+	+
8	0.3	0.3	0.2	0.2	0.3	0.1	0.1	0.1	+	+	+	+
9	0.3	0.3	0.2	0.2	0.1	0.5	0.1	0.1	+	+	+	+
10	0.3	0.3	0.2	0.1	+	0.6	0.1	+	+	+	+	+
11	0.3	0.3	0.2	0.1	+	0.1	0.1	+	+	+	+	+
12	0.3	0.3	0.2	0.1	+	0.1	0.1	+	+	+	+	+
13	0.2	0.3	0.2	0.1	+	0.1	0.1	+	+	+	+	+
14	0.2	0.3	0.3	0.1	+	0.1	0.1	0.1	+	+	+	+
15	0.5	0.7	2.5	0.1	+	0.1	0.2	+	+	+	+	+
16	0.3	1.1	0.6	0.1	+	0.1	0.1	+	+	+	+	+
17	0.3	0.4	0.2	0.1	+	0.1	0.2	+	+	+	+	+
18	0.3	0.3	4.5	0.1	0.1	+	0.2	+	+	+	+	+
19	0.3	0.2	3.9	0.1	0.1	+	0.2	+	E +	+	+	+
20	0.3	0.2	4.4	0.1	0.1	+	0.2	+	E +	+	+	+
21	0.3	0.3	E 1.8	0.8	0.1	+	0.2	E +	+	+	+	+
22	0.3	0.3	E 1.0	0.5	0.1	0.1	0.2	+	+	+	+	+
23	0.3	0.3	E 0.7	0.3	0.1	0.1	0.2	0.1	+	+	+	+
24	0.3	0.3	E 0.5	0.1	+	0.1	0.2	0.1	+	+	+	1.6
25	0.2	0.3	E 0.4	0.1	+	0.1	0.2	0.1	+	+	+	8.5
26	0.2	0.3	E 0.3	0.1	+	0.5	0.2	+	+	+	+	1.9
27	0.2	0.3	E 0.2	+	0.1	1.2	0.1	+	+	+	+	0.6
28	0.2	0.2	E 0.2	0.1	0.1	0.6	0.1	+	+	+	+	0.3
29	0.2	0.2	0.1	0.1		0.2	0.1	+	+	+	+	0.3
30	0.2	0.2	0.1	0.1		0.2	0.1	+	+	+	+	0.2
31	0.2		0.1	0.1		0.2		+		+	+	
	8.3	9.8	24.5	8.7	1.9	5.4	4.4	1.7	+	+	+	13.4
MEAN	.27	.33	.79	.28	.07	.17	.15	.05	+	+	+	.45
ACRE-FEET	16	19	49	17	3.8	11	8.7	3.4	+	+	+	27

Remarks: + indicates discharge 0.05 sec. ft. or less.
E indicates discharge estimated - see station description.

YEAR OR PERIOD MEAN .214
ACRE-FEET 155.



STATION. F195R

MONROVIA STORM DRAIN at Peck Road

LOCATION:

On the left (east) wing wall of approach to concrete outlet channel of Monrovia Storm Drain into Peck Road and about 1 mile south of Monrovia.

DRAINAGE AREA:

4.5 square miles.

CHANNEL AND CONTROL:

Channel-sand and gravel, upstream from stilling well; concrete channel starts at well.
Control-concrete sill at beginning of concrete lined channel - 22.5 ft. wide x 3.2 ft. deep.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows measured by floats near station.

RECORDER:

Installed April 25, 1932, in a box type house over an 18 inch diameter corrugated iron pipe stilling well.
A Stevens type L recorder was in service from October 1, 1938, to September 30, 1939.

REGULATION:

None.

DIVERSIONS:

None.

RECORDS AVAILABLE:

April 25, 1932 to September 30, 1939.

EXTREMES OF DISCHARGE:

1938-1939
Maximum 667. second-feet January 5.
Minimum no flow most of the year.
1932-1939
Maximum 1200 second-feet, estimated, March 2, 1938.
Minimum no flow most of each year.

ACCURACY:

Fair for low flows.
Poor for high flows due to inadequate facilities for measuring.

OPERATION:

Located, constructed and operated by the Los Angeles County Flood Control District.

F. C. D. FORM 104 800 8-38

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F195R

DISCHARGE MEASUREMENTS OF MONROVIA STORM DRAIN

AT Peck Road DURING THE YEAR ENDING SEPTEMBER 30, 1939

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Permit Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
4	12-18	Haig-Tscharner	23.8	11.13	5.27	1.06	59.		.6	12	-.09	842A / 856A	FC 38

F. C. Dist. Form 59

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

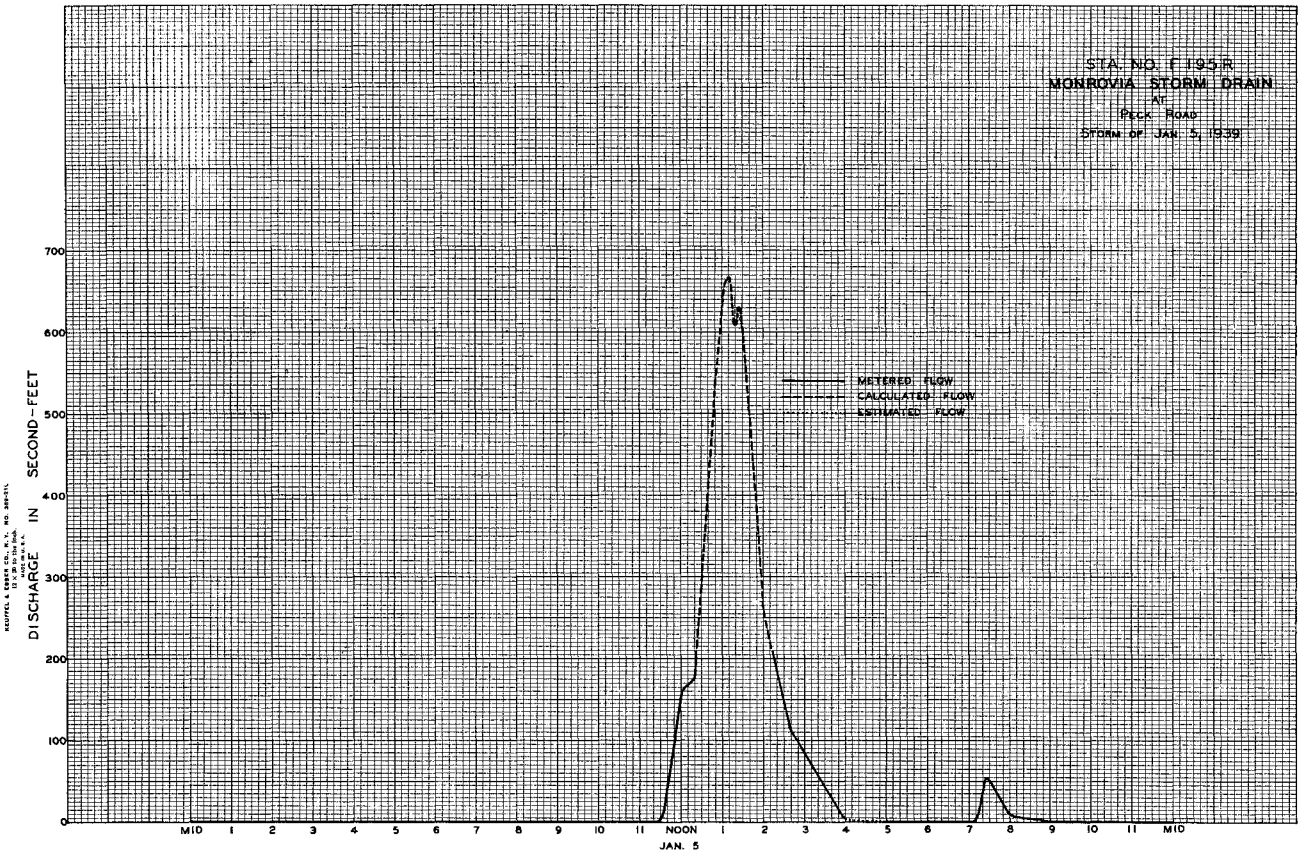
Sta. No. F195R

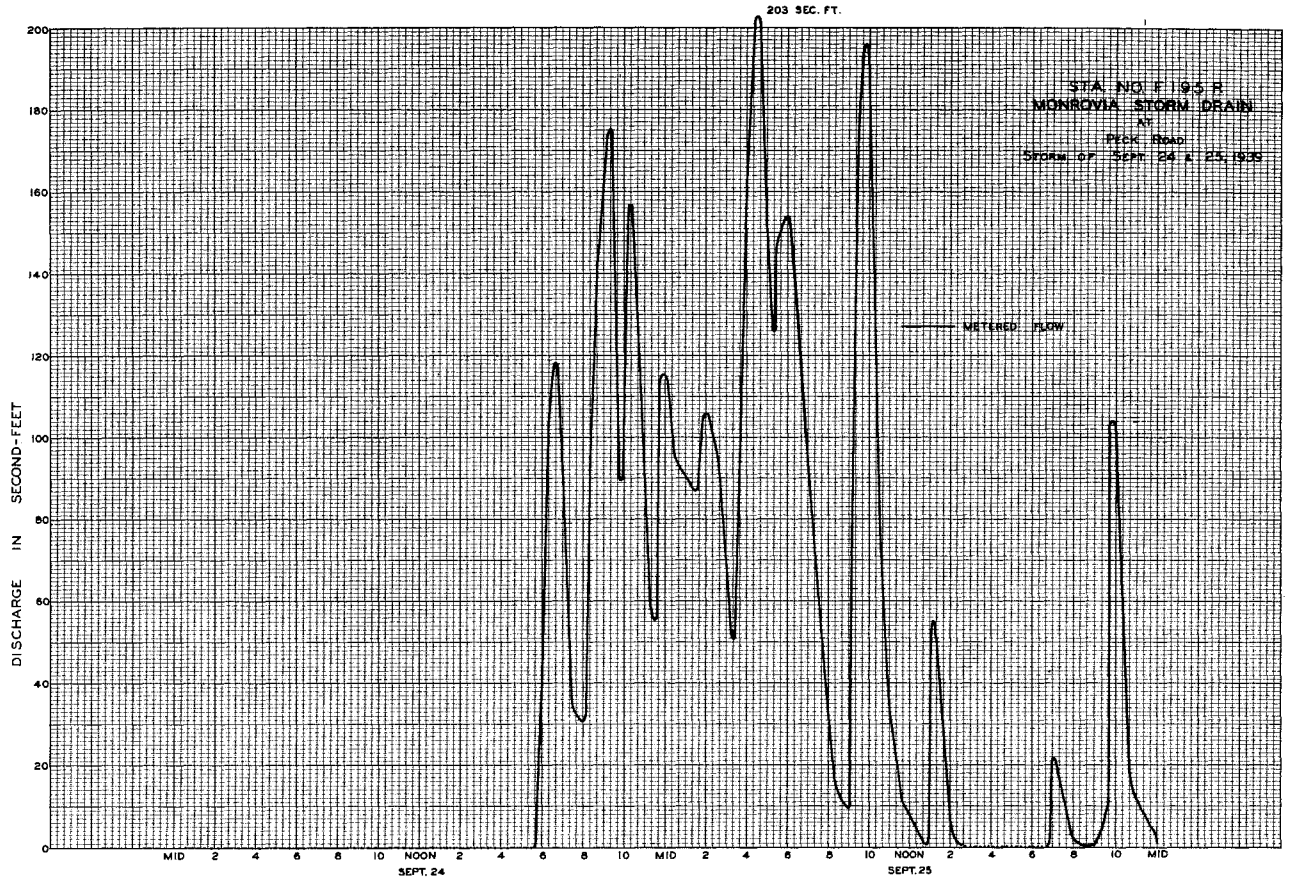
Daily discharge, in second-feet of MONROVIA STORM DRAIN at Peck Road, for the year ending September 30, 19 39

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	1.7	0	0	0	0	0
3	0	0	0	0	11	0	0	0	0	0	0	0
4	0	0	0	0	0.1	0	0	0	0	0	0	0
5	0	0	0	48	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	7	0	0	0	0	0	0	0
9	0	0	0	0	0	9	0	0	0	0	0	0
10	0	0	0	0	0	2.9	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	1.0	0	0	0	0	0	0	0	0	0
15	0	0	9	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	2.4	0	0	0	0	0	0	0	0	0
18	0	0	55	0	0	0	0	0	0	0	0	0
19	0	0	7.5	0	0	0	0	0	0	0	0	0
20	0	0	14	0	0	0	0	0	0	0	0	0
21	0	0	0.5	17	0	0	0	0	0	0	0	4.5
22	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	26
25	0	0	0	0	0	0	0	0	0	0	0	5.4
26	0	0	0	0	0	5	0	0	0	0	0	5
27	0	0	0	0	0	4.6	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0		0	0	0	0	0	0	0
30	0	0	0	6.5		0	0	0	0	0	0	0
31	0		0	0		0		0		0	0	
	0	0	89.4	71.5	18.1	21.5	1.7	0	0	0	0	89.5
Mean	0	0	2.88	2.31	.65	.69	.06	0	0	0	0	2.82
Acre-Feet	0	0	177	142	36	43	3.4	0	0	0	0	178

Remarks:

Year or Period — Mean .799 — Acre-Feet 579





STATION F161R

MONTEBELLO STORM DRAIN at Outlet into Rio Hondo

LOCATION:

On right (south) wing wall of the storm drain outlet, 200 feet east of the east end of Mines Avenue and 220 feet west of west bank of the Rio Hondo near Montebello.

DRAINAGE AREA:

9.6 square miles.

CHANNEL AND CONTROL:

Channel-concrete apron with wing walls below a 14 ft. x 10 ft. concrete covered drain. A drop off exists just below the station.
Channel forms control.
On April 11, 1935 a diversion wall 4 inches high was built across the drain 20 feet above the station.
The stage-discharge relation, during flood flows in the Rio Hondo, is affected by backwater from the Rio Hondo.

DISCHARGE MEASUREMENTS:

Low flows measured by wading at outlet.
High flows measured from head wall at end of covered section.

RECORDER:

Installed January 12, 1932 in a box type house over an 18 inch diameter corrugated iron pipe stilling well.
Stevens type L recorder was in service from October 1, 1938 to January 30, 1939.
An H. C. F. continuous recorder was in service from January 30, 1939 to September 30, 1939.

REGULATION:

None.

DIVERSIONS:

None prior to April 11, 1935.
Subsequent to April 11, 1935 a gated twelve inch pipe diverts the summer flow from a point 20 feet above the station to the Rio Hondo. No diversions during the winter months.

RECORDS AVAILABLE:

January 12, 1932 to September 30, 1939.

EXTREMES OF DISCHARGE:

1938-1939
Maximum 686 second-feet, September 25.
Minimum no flow at various times.
1931-1939
Maximum 1400 second-feet, estimated, March 2, 1938.
Minimum no flow at various times.

ACCURACY:

Poor due to unreliable relationship between inside gage height and discharge.
Estimated by comparison: January 30 to February 6.
Low flows frequently estimated by interpolation.

OPERATION:

Located, constructed, and operated by the Los Angeles County Flood Control District.

F. C. D. FORM 104 500 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F181R

DISCHARGE MEASUREMENTS OF MONTEBELLO STORM DRAIN

AT Outlet into Rio Hondo. DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Curve Diff.	Meter	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
28	12-15	Jordan-Thomsen	14.	8.55	2.53	0.48	22.		.6	9	-.02	1040A / 1055A	FC 21
29	12-18	" "	14.	14.4	6.67	1.24	96.		.6	9	-.06	825A / 835A	"
30	12-18	" "	14.	13.7	6.38	1.15	87.		.6	9	-.02	845A / 900A	"
31	12-18	" "	14.	11.1	6.42	1.00	71.		.6	9	+.10	925A / 940A	"
32	12-18	" "	14.	21.9	9.58	1.78	210.		.6	8	+.10	1015A / 1023A	"
33	12-19	Jackman Bonadiman -	14.	15.25	7.17	1.33	109.		.6	6	-.10	455P / 505P	FC 40
34	12-19	" "	14.	12.5	6.25	1.10	78.		.6	6	-.05	510P / 520P	"
35	12-19	" "	14.	11.05	6.31	0.85	70.		.6	6	-.15	520P / 525P	"
36	12-19	" "	14.	7.45	4.90	0.80	36.		.6	6	-.02	550P / 600P	"
37	2-4	Bonadiman	13.	2.55	1.33	0.27	3.4		.6	5	-.02	750A / 756A	"
38	2-4	"	14.	3.77	1.78	0.40	6.7		.6	7	0	526P / 540P	"
39	2-8	"	14.	4.43	1.95	0.34	8.6		.6	6	-.02	706A / 720A	"
40	3-9	Jackman Bonadiman-	14.	12.0	5.50	0.77	66.		.6	5	-.05	1040P / 1050P	"
41	3-9	" "	14.	11.95	5.34	0.77	64.	Surf	.6	6	-.06	1050P / 1100P	"
42	3-10	Bonadiman	5.	.30	0.63	0.20	.19		.6	2	0	250P / 300P	"
43	3-27	"	14.	10.75	4.86	0.83	57.	Surf	.6	7	-.06	700A / 715A	"
44	9-26	"	9.5	1.58	1.07	0.19	1.7		.6	4	0	824A / 832A	"

F. C. Dist. Form 59

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

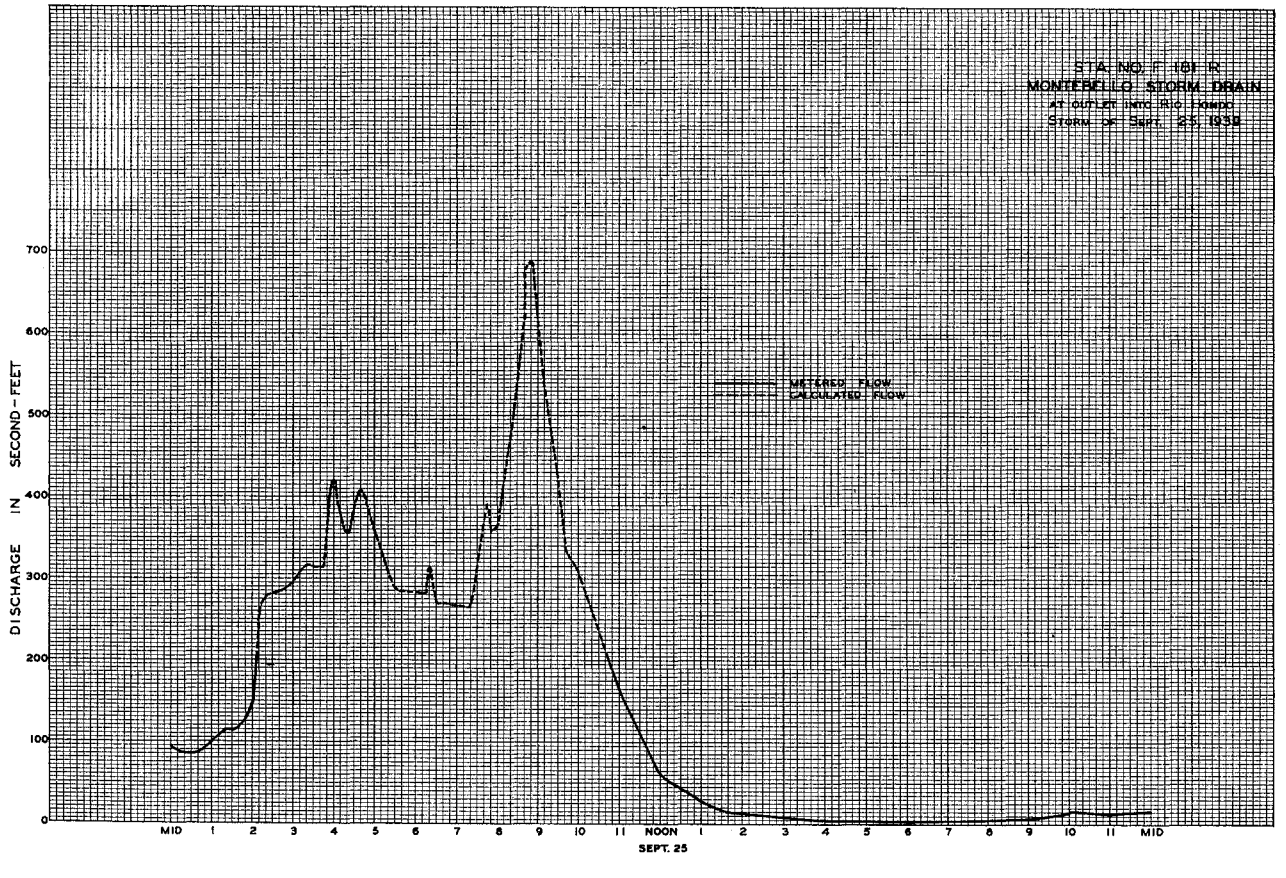
Sta. No. F181R

Daily discharge, in second-feet of MONTEBELLO STORM DRAIN at outlet into Rio Hondo for the year ending September 30, 19 39

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.4	0.2	+	0.1	E 0	0.2	0.6	0.1	+	0.1	0.1	+
2	0.2	0.1	+	+	E 0	0.1	2.1	0.1	+	0.1	0.1	+
3	0.2	0.1	+	+	E 1.2	0.1	0.1	0.1	+	0.1	0.1	+
4	0.2	0.2	+	+	E 2.1	0.1	0.1	0.1	+	0.1	0.1	+
5	0.2	0.1	+	1.9	E 0.1	0.1	+	0.1	+	0.1	0.1	+
6	0.2	+	+	0.5	0.1	0.1	+	0.1	+	0.1	0.1	+
7	0.2	+	+	0.1	0.2	0.1	+	0.1	+	0.1	0.1	+
8	0.1	+	0.1	0.1	2.6	5	+	0.1	+	0.1	0.1	+
9	0.1	+	+	0.1	0.2	1.2	+	0.1	+	0.1	0.1	+
10	0.1	+	+	0.1	0.4	0.4	+	0.1	+	0.1	0.1	+
11	0.1	+	+	0.8	0.8	0.1	+	0.1	+	0.1	0.1	+
12	0.1	+	+	0.1	0.1	+	+	0.1	+	0.1	0.1	+
13	0.1	+	+	0.1	0.2	+	+	0.1	+	0.1	0.1	+
14	0.1	+	+	0.1	0.4	+	+	0.1	+	0.1	0.1	+
15	0.1	+	+	0.1	0.1	+	+	0.1	+	0.1	0.1	+
16	0.1	+	+	0.1	0.1	+	+	0.1	+	0.1	0.1	+
17	0.1	+	+	0.1	0.1	+	+	0.1	+	0.1	0.1	+
18	0.1	+	+	0.1	0.1	+	+	0.1	+	0.1	0.1	+
19	0.1	+	+	0.1	0.1	+	+	0.1	+	0.1	0.1	+
20	0.1	+	+	0.1	0.1	0	+	0.1	+	0.1	0.1	+
21	0.1	+	+	3.8	0.1	0	+	0.1	+	0.1	0.1	+
22	0.1	+	+	0.1	0.1	+	+	0.1	+	0.1	0.1	+
23	0.1	+	+	0.1	0.1	+	+	0.1	+	0.1	0.1	+
24	0.1	+	+	0.1	0.1	+	+	0.1	+	0.1	0.1	+
25	0.1	+	+	0.1	0.2	0	+	0.1	+	0.1	0.1	+
26	0.1	+	+	0.1	0.1	1.3	+	0.1	+	0.1	0.1	9.5
27	0.1	+	+	0	0.2	7.5	+	0.1	+	0.1	0.1	1.8
28	0.1	+	+	0.1	0.2	0.1	+	0.1	+	0.1	0.2	0.1
29	+	+	+	0.1	0.2	0.1	+	0.1	+	0.1	0.2	0.1
30	0.1	+	+	0.5	E 0.1	0.1	+	0.1	+	0.1	0.1	0.1
31	0.1	+	+	0.1	E 0.1	0.1	+	0.1	+	0.1	+	0.1
	3.8	0.6	217.0	65.0	21.0	16.4	4.0	1.3	+	3.3	2.3	159.8
MEAN	0.12	0.02	7.00	2.10	0.75	0.53	0.13	0.04	+	0.11	0.07	5.33
ACRE-FEET	7.5	1.2	430	129	42	33	7.9	2.6	+	6.5	4.6	317

YEAR OR PERIOD — MEAN — ACRE-FEET 981 — 1.35

Remarks: + indicates discharge 0.05 sec. ft. or less.
E indicates discharge estimated - see station description.



STATION F118B-R

PACOIMA CREEK flume below Pacoima Dam

LOCATION:

About 500 feet downstream from Pacoima Dam. Former Station F118R was approximately 450 feet downstream. Former U.S.G.S. Station U13R was approximately 1/3 mile downstream.

DRAINAGE AREA:

28.2 square miles

CHANNEL AND CONTROL:

Channel-sand, gravel and boulders above and below flume.
Control-a ten foot San Dimas type timber flume with a concrete cut-off wall extending down to bed rock.
A V-notch weir, in guides in the 10 foot flume, can be dropped to measure low flows.

DISCHARGE MEASUREMENTS:

From footbridge over flume.

RECORDER:

Installed at Station F118R on March 24, 1933; removed February 1, 1935.
Installed at Station F118B-R on February 9,1935; removed April 28, 1937. Reinstalled June 25,1937 in a box type house over a 2.5 foot x 3.0 foot wooden stilling well.
An H.C.F. continuous recorder was in service from October 1, 1938 to September 30, 1939.

REGULATION:

Regulated by Pacoima Dam.
Stations F118R and F118B-R do not include spillway discharge.
Station U13R was so located that it would have included spillway discharge.

DIVERSIONS:

Water passing over Pacoima Dam spillway enters Pacoima Creek below Station F118B-R.

RECORDS AVAILABLE:

At Station U13R, Pacoima Creek near San Fernando, California at office of U.S. Geological Survey, Water Resources Branch, Los Angeles, from March, 1916 to September, 1929. From October 1, 1929 to March 23, 1933, records based on dam outflow records and gage readings at the Parshall flume below Pacoima Dam. These records are available at the office of the Los Angeles County Flood Control District.
At Station F118R, March 24, 1933 to February 1, 1935.
At Station F118B-R, February 9, 1935 to April 28, 1937, and June 25, 1937 to September 30, 1939.

EXTREMES OF DISCHARGE:

1938-1939
Maximum 51.4 second-feet January 20.
Minimum - at various times.
1929-1939 (Stations F118R, F118B-R, and Parshall flume and dam records)
Maximum 685 second-feet March 2, 1938.
Minimum no flow at various times.
1915-1939 (Stations U13R, F118R, F118B-R, and Parshall flume and dam records)
Maximum 1860 second-feet February 16, 1927 (at Station U13R)
Minimum no flow at various times.

ACCURACY:

Fair for 10 foot flume.
V-notch weir was put into operation at various times during low flows; while pool was filling and head building up, flow was considered constant.
Low flows estimated by extrapolation at various times due to stilling well leakage.

OPERATION:

Located, constructed and operated by the Los Angeles County Flood Control District in co-operation with the U.S.G.S. Water Resources Branch.

F. C. D. FORM 104 500 9-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F 118B-R

DISCHARGE MEASUREMENTS OF PACOIMA CREEK FLUME

MADE below Pacoima Dam DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Diff.	Meter	MEAS SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
												1210P	
66	12-24	Luce	10.	1.71	5.88	.16	10.		.6	7	0	1225P	FC 39
												210P	
67	12-29	Luce-B.Luce	10.	1.61	6.07	.15	9.4		.6	7	0	220P	"
												232P	
68	1-10	Luce	10.	5.74	7.54	.60	43.		.6	7	+.04	243P	"
												1102A	
69	1-12	"	10.	5.17	7.82	.54	40.		.6	7	0	1114A	"
												1045A	
70	1-20	Luce-B.Luce	10.	6.11	7.20	.70	44.		.6	7	-.01	1055A	"

F. C. Dist. Form 58

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

Sta. No. F118B-R

Daily discharge, in second-feet of PACOIMA CREEK flume below Pacoima Dam for the year ending September 30, 19 39

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.3	0.6	E 0.3	10.8	E 0.1	6.1	8.4	0.1	+	E +	+	2.1
2	0.3	0.6	E +	10.8	E 0.1	5.2	8.4	0.1	+	E +	+	7.9
3	0.3	0.6	E +	9.6	E 0.1	6.8	8.3	0.1	+	E +	E +	7.9
4	0.5	0.6	E +	9.6	E 0.1	8.6	8.0	0.1	+	E +	1.3	7.8
5	1.4	0.6	E +	6.6	E 0.1	8.4	7.8	0.1	+	E +	5.6	3.4
6	1.2	0.5	E +	10.2	E 0.1	7.8	7.8	0.1	+	E +	6.1	0.9
7	0.7	0.5	E +	16.6	E 0.1	7.6	7.8	0.1	+	E +	2.8	2.0
8	0.4	0.5	+	16.6	E 0.1	7.4	7.8	0.1	+	3.4	+	2.6
9	0.4	0.5	+	20	E 0.1	6.7	7.6	0.1	2.7	5.6	+	3.3
10	0.4	0.6	+	35	E 0.1	6.5	5.5	0.1	4.9	2.2	E +	2.6
11	E 0.4	0.5	+	49	E 0.1	21	0.5	0.1	5.6	E +	1.6	2.5
12	E 0.4	0.5	+	46	E 0.1	20	0.3	0.1	5.5	+	7.7	2.3
13	E 0.4	0.5	+	45	E 0.1	19.6	+	0.1	5.5	+	8.2	2.3
14	E 0.4	0.6	+	44	E 0.1	19.0	1.2	0.1	5.5	1.4	3.5	2.3
15	E 0.4	0.5	0.2	43	E 0.1	17.4	5.7	3.5	5.5	5.7	+	2.3
16	E 0.4	0.4	0.1	30	E 0.1	17.4	5.7	4.8	5.5	5.7	+	2.2
17	0.4	0.5	+	14.4	0.1	17.4	5.7	4.7	5.5	2.5	+	2.2
18	0.4	0.5	0.2	26	0.1	17.4	5.6	4.7	5.5	+	2.1	2.1
19	0.4	0.5	0.2	34	0.1	17.4	5.6	4.7	2.6	+	8.0	1.5
20	0.4	0.5	0.2	27	0.1	13.2	5.6	4.9	0.1	+	7.8	1.7
21	1.3	0.5	0.1	E 6.0	4.5	9.6	5.6	3.8	0.1	1.6	3.4	5.2
22	0.7	0.5	8.5	E 0.1	7.2	9.6	5.6	3.4	0.1	6.1	+	5.6
23	0.6	0.4	2.4	E 0.1	7.2	8.2	5.6	5.1	0.1	5.6	+	3.1
24	0.6	0.4	13.2	E 0.1	7.1	7.1	5.7	5.1	0.1	2.5	0.1	1.7
25	0.6	0.4	10.2	E 0.1	6.8	7.0	4.8	5.1	0.1	+	2.4	1.7
26	0.6	0.4	10.2	E 0.1	6.0	5.2	4.5	5.1	0.1	+	9.6	1.7
27	0.6	0.4	9.6	E 0.1	6.2	0.7	4.5	5.1	0.1	+	8.6	1.5
28	0.6	0.4	10.2	E 0.1	7.2	5.0	2.1	5.1	0.1	1.2	3.5	2.2
29	0.6	0.4	10.2	E 0.1		8.7	0.2	2.5	E +	5.6	0.4	2.2
30	0.6	0.5	10.6	E 0.1		8.7	0.1	+	E +	5.8	1.2	2.2
31	0.6		10.8	E 0.1		8.6		+		2.5	0.1	
	173		119.0	54.2		152.0			55.2		83.0	
		149		511.2	329.3		69.0			57.4		89.9
MEAN	0.56	0.50	3.84	16.5	1.94	10.6	5.07	2.22	1.84	1.85	2.68	3.00
ACRE-FEET	34	30	236	1010	108	653	301	137	109	114	165	178

Remarks: + indicates discharge 0.05 sec. ft. or less.
E indicates discharge estimated - see station description.

YEAR OR PERIOD MEAN 4.25
ACRE FEET 3080

STATION F16R

PACOIMA WASH at Parthenia Street

LOCATION:

On the downstream side of Parthenia Street bridge on the second pier from west abutment approximately 3 miles northwest of Van Nuys.

DRAINAGE AREA:

50.6 square miles.

CHANNEL AND CONTROL:

Channel-composed of sand and gravel. Weeds and brush along banks.
No artificial control.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows measured from upstream side of highway bridge.

RECORDER:

Installed December 26, 1928, in a box type house over an 18 inch diameter corrugated iron pipe stilling well.
Horizontal Rational 7 day recorder was in service from October 1, 1938 to January 24,1939.
An H.C.F. continuous recorder was in service from January 29, 1939 to September 30, 1939.

REGULATION:

Flow partially regulated by the Pacoima Dam.

DIVERSIONS:

Two small diversions for irrigation near mouth of canyon. Water diverted to the Pacoima Spreading Grounds during spreading operations.

RECORDS AVAILABLE:

December 26, 1928 to September 30, 1939.

EXTREMES OF DISCHARGE:

1938-1939
Maximum 258 second-feet, December 15.
Minimum no flow most of year.
1929-1939
Maximum 2400 second-feet, estimated, March 3, 1938.
Minimum no flow most of each year.

ACCURACY:

Poor due to badly shifting control.

OPERATION:

Located, constructed and operated by the Los Angeles County Flood Control District.

F. C. D. FORM 104 500 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F16R

DISCHARGE MEASUREMENTS OF PACOIMA WASH

AT Parthenia Street. DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Ratios Percent Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
66	12-14	Miller	41.	33.35	4.52	5.61	151.		.6	10	-.04	1030P / 1110P	FC 35
67	12-15	"	57.	45.9	5.10	5.92	234.		.6	13	-.15	215A / 300A	"
68	12-15	"	51.	30.02	3.57	5.53	108.		.6	9	-.35	345A / 415A	"
69	12-15	"	14.5	10.18	3.01	4.63	31.		.6	8	-.07	645A / 700A	"
70	12-15	"	42.5	24.26	3.76	5.09	91.		.6	12	-.05	930P / 1000P	"
71	12-15	"	28.0	12.39	3.54	4.74	44.		.6	10	-.07	1055P / 1110P	"
71A	12-16	Luce	6.5	1.12	.91	4.07	1.0		.6	5	0	1025A / 1030A	FC 39
72	12-18	Miller	53.3	32.55	4.18	5.13	136.		.6	17	+.36	1230A / 100A	FC 35
73	12-18	"	38.3	19.06	4.08	4.85	78.		.6	14	-.07	230A / 310A	"
74	12-18	"	25.8	8.45	2.50	4.41	21.		.6	9	-.02	1115A / 1125A	"
75	12-19	"	20.3	4.93	1.85	4.15	9.		.6	11	-.02	815A / 830A	"
76	12-19	"	11.6	2.71	1.56	4.10	4.2		.6	6	0	1125A / 1135A	"
77	12-19	Miller & Skelly	6.6	1.40	1.47	4.08	2.1		.6	6	0	415A / 425A	"
78	12-20	" "	30.2	16.39	3.84	4.56	63.		.6	10	-.06	750A / 805A	"
79	12-20	Miller	8.70	2.12	1.22	4.07	2.6		.6	8	0	205P / 220P	"
80	12-21	"	4.2	.54	.61	3.97	.3		.6	5	0	900A / 910A	"
81	1-5	"	51.0	29.62	4.64	4.97	138.		.6	14	-.17	140P / 200P	"
82	1-5	"	31.2	15.66	3.71	4.65	58.		.6	11	-.06	245P / 300P	"
83	1-5	"	7.3	1.22	1.10	4.27	1.3		.6	5	0	745P / 800P	"
84	1-21	"	31.7	9.68	2.45	4.54	24.		.6	12	-.02	930A / 945A	"
85	1-21	"	5.8	.86	.85	3.98	.8		.6	6	0	630P / 645P	"
86	2-3	"	12.8	3.83	2.53	4.34	9.7		.6	9	-.06	830A / 840A	"
87	2-3	"	12.5	2.20	1.41	4.21	3.1		.6	8	-.02	915A / 925A	"
88	3-9	"	11.9	3.22	2.05	4.35	6.6		.6	10	-.09	1030P / 1050P	"

F. C. Dist. Form 58

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

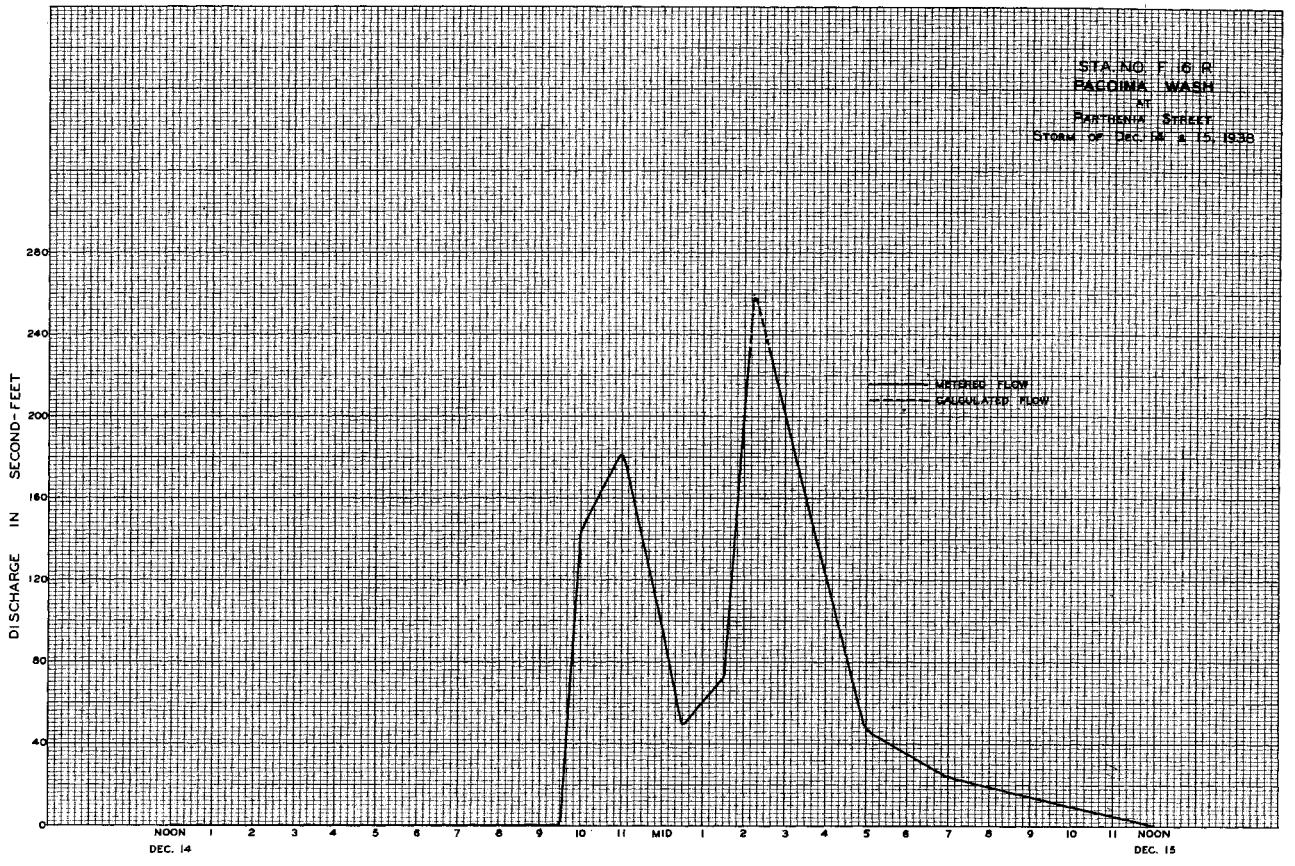
Sta. No. F16R

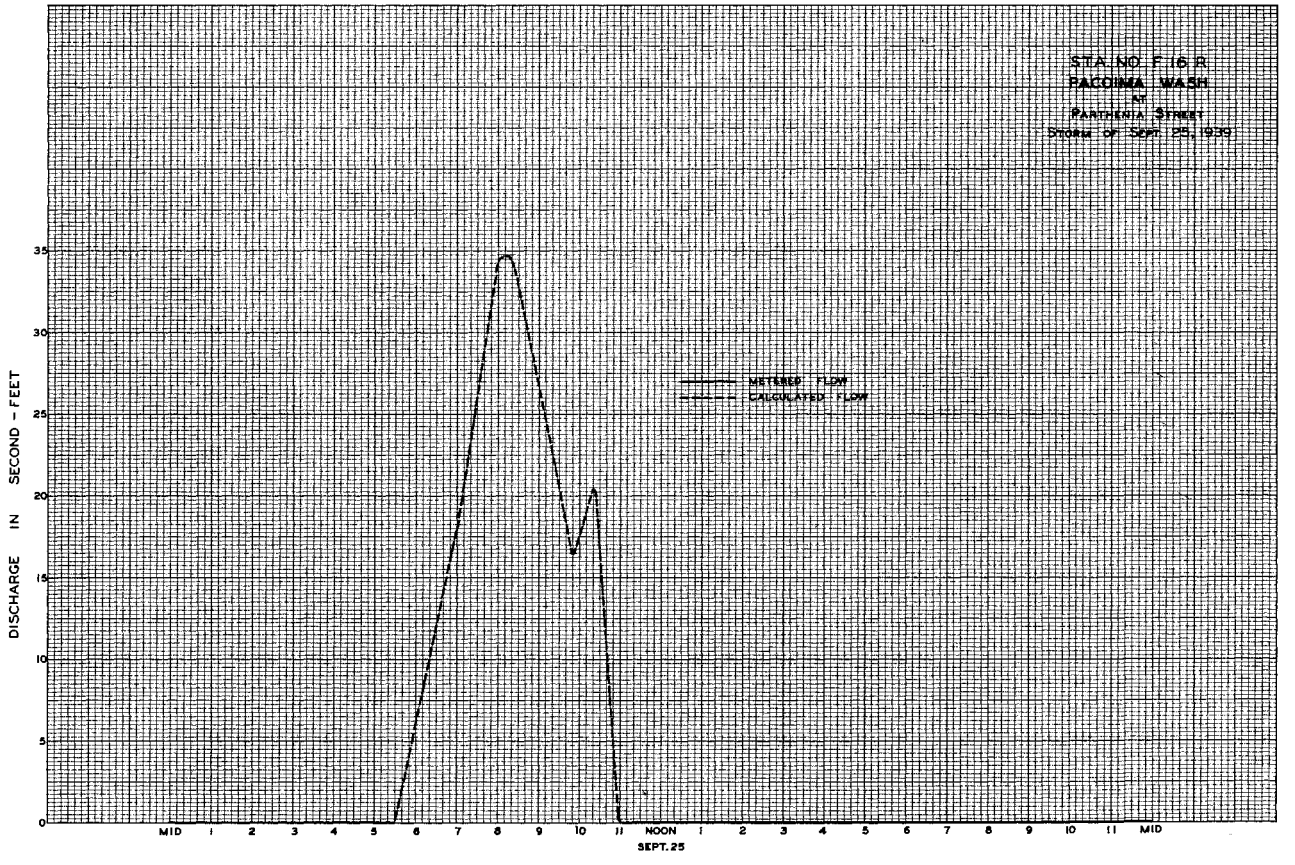
Daily discharge, in second-feet of PACOIMA WASH at Parthenia Street. for the year ending September 30, 19 39

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0.5	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	1.4	0	0	0	0	0	0	0	0
6	0	0	0	1.2	0	0	0	0	0	0	0	0
7	0	0	0	2.4	0	0	0	0	0	0	0	0
8	0	0	0	1.5	0	0	0	0	0	0	0	0
9	0	0	0	1.2	0	0.3	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	+	0	0	0	0	0	0	0	0
13	0	0	0	0.4	0	0	0	0	0	0	0	0
14	0	0	1.4	0	0	0	0	0	0	0	0	0
15	0	0	5.3	0	0	0	0	0	0	0	0	0
16	0	0	4.1	0	0	0	0	0	0	0	0	0
17	0	0	0.2	0	0	0	0	0	0	0	0	0
18	0	0	4.9	0	0	0	0	0	0	0	0	0
19	0	0	4.1	0	0	0	0	0	0	0	0	0
20	0	0	1.7	0	0	0	0	0	0	0	0	0
21	0	0	0.2	1.0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	6	0.2	0	0	0	0	0	0	0	0
24	0	0	7	0.1	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	4.4
26	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0		0	0	0	0	0	0	0
30	0	0	0	0		0	0	0	0	0	0	0
31	0		0	0		0		0		0	0	
	0	0	154.6	31.0	0.5	0.3	0	0	0	0	0	4.4
MEAN	0	0	4.99	1.00	0.02	0.01	0	0	0	0	0	0.15
ACRE-FEET	0	0	306	61	1.0	0.60	0	0	0	0	0	8.7

Remarks: + indicates discharge 0.05 sec. ft. or less.

YEAR OR WATER: MEAN 0.523 ACRE-FEET 377


STA. NO. F 16 R
PACOIMA WASH
AT
PARTHENIA STREET
STORM OF DEC. 14 & 15, 1938
METERED FLOW
CALCULATED FLOW
DISCHARGE IN SECOND-FEET
0
40
80
120
160
200
240
280
NOON
1
2
3
4
5
6
7
8
9
10
11
MID
1
2
3
4
5
6
7
8
9
10
11
NOON
DEC. 14
DEC. 15


STA. NO. F 16 R
PACOIMA WASH
AT
PARTHENIA STREET
STORM OF SEPT. 25, 1939
METERED FLOW
CALCULATED FLOW
DISCHARGE IN SECOND-FEET
0
5
10
15
20
25
30
35
MID
1
2
3
4
5
6
7
8
9
10
11
NOON
1
2
3
4
5
6
7
8
9
10
11
MID
SEPT. 25

STATION F40R

PUDDINGSTONE CREEK below Puddingstone Dam

LOCATION:

On the right (east) bank of Puddingstone Channel about 1000 feet below Puddingstone Dam near San Dimas.

DRAINAGE AREA:

32.7 square miles, including area above diversion dam on San Dimas Creek.

CHANNEL AND CONTROL:

Channel-sand and gravel.
Control-reinforced concrete Cipolletti weir 25 feet on bottom by 3 feet deep with a Cipolletti weir in center 24 inches on bottom by 18 inches deep.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
No facilities for measuring high flows.

RECORDER:

Installed December 28, 1927 in an F.C. Standard Type concrete house over a 3 ft. x 4 ft. concrete stilling well.
A Rational horizontal 7 day recorder was in service from October 1, 1938 to February 15, 1939.
An H.C.F. continuous recorder was in service from February 15, 1939 to September 30, 1939.

REGULATION:

Flow regulated by Puddingstone Dam.

DIVERSIONS AND/OR REGULATIONS:

San Dimas Creek, which is regulated by San Dimas Dam and Puddingstone Diversion Dam, can be diverted to Puddingstone Creek above Puddingstone Dam.

DIVERSIONS:

San Dimas Water Company diverts water above the station.

RECORDS AVAILABLE:

December 28, 1927 to September 30, 1939.

EXTREMES OF DISCHARGE:

1938-1939
Maximum 25.1 second-feet, October 30.
Minimum + at various times.
1929-1939
Maximum 104 second-feet March 7, 1938.
Minimum + at various times.

ACCURACY:

Good.

OPERATION:

Located, constructed and operated by the Los Angeles County Flood Control District.

F. C. D. FORM 104 500 6-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F40R

DISCHARGE MEASUREMENTS OF PUDDINGSTONE CREEK

at ~~Dam~~ below Puddingstone Dam DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Point Diff.	Rating Point Diff.	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
103	10-6	Brewster	12.0	14.02	1.52	1.59	21.		.6	12	0	315P / 330P	FC 8
104	10-13	"	13.0	14.52	1.52	1.63	22.		.6	13	0	400P / 416P	"
105	10-20	"	12.0	13.34	1.37	1.60	18.		.6	12	0	325P / 345P	"
106	10-27	"	12.0	13.73	1.51	1.61	21.		.6	12	0	355P / 415P	"
107	11-3	"	2.0	.47	.45	.15	.21		.6	4	0	315P / 320P	"
108	11-10	Brewster	2.0	.60	.42	.16	.25		.6	3	0	415P / 420P	FC 8
109	11-17	"	2.0	.49	.59	.15	.29		.6	3	0	320P / 325P	"
110	11-23	"	1.5	.42	.43	.12	.18		.6	3	0	400P / 404P	"
111	12-1	"	1.5	.32	.38	.09	.12		.6	3	0	726A / 730A	"
112	12-8	"	1.5	.48	.69	.17	.33		.6	3	0	350P / 355P	"
113	12-15	"	1.5	.45	1.04	.19	.47		.6	3	0	445P / 450P	"
114	12-18	"	9.0	2.69	1.68	.74	4.5		.6	6	-.02	1010P / 1020P	"
115	12-19	"	4.0	.94	1.02	.31	.95		.6	4	0	430P / 435P	"
116	12-22	"	1.5	.37	1.19	.20	.44		.6	3	0	605P / 610P	"
117	12-29	"	2.1	.41	.91	.20	.43		.6	4	0	525P / 530P	"
118	1-5	"	5.0	1.16	.94	.34	1.1		.6	5	0	210P / 215P	"
119	1-12	"	2.0	.55	.73	.20	.40		.6	4	0	245P / 250P	"
120	1-19	"	2.0	.50	.82	.20	.41		.6	4	0	510P / 515P	"
121	1-26	"	1.5	.44	.95	.20	.42		.6	3	0	615P / 620P	"
122	2-2	"	4.0	.74	.58	.20	.43		.6	4	0	535P / 540P	"
123	2-9	"	2.0	.58	.83	.22	.48		.6	4	0	507P / 512P	"
124	2-16	"	2.0	.51	1.08	.22	.55		.6	4	0	500P / 505P	"
125	2-23	"	1.5	.47	1.06	.22	.50		.6	3	0	525P / 530P	"
126	3-2	"	2.0	.59	.86	.26	.50		.6	4	0	524P / 530P	"
127	3-9	Brewster	1.5	.48	.88	.26	.42		.6	3	0	540P / 545P	FC 8
128	3-16	"	1.5	.59	.73	.18	.43		.6	3	0	445P / 450P	"
129	3-23	"	1.5	.54	.69	.18	.37		.6	3	0	545P / 550P	"
130	3-30	"	1.5	.54	.91	.18	.49		.6	3	0	545P / 550P	"
131	4-6	"	1.5	.57	.88	.18	.50		.6	3	0	315P / 320P	"
132	4-13	"	1.5	.41	1.22	.20	.50		.6	3	0	513P / 518P	"
133	4-20	"	1.5	.56	.93	.20	.50		.6	3	0	545P / 550P	"
134	4-27	"	1.5	.57	.84	.18	.48		.6	3	0	415P / 420P	"
135	5-4	"	1.0	.30	.30	.06	.09		.6	2	0	330P / 335P	"
136	5-11	"	1.2	.39	.28	.07	.11		.6	3	0	540P / 545P	"
137	5-18	"	1.5	.40	.30	.07	.12		.6	3	0	345P / 350P	"
138	5-25	"	1.2	.34	.50	.10	.17		.6	3	0	400P / 405P	"
139	6-1	"	1.2	.35	.46	.10	.16		.6	3	0	350P / 355P	"
140	6-8	"	1.5	.45	.56	.13	.25		.6	3	0	425P / 430P	"
141	6-14	"	2.0	.28	.32	.06	.09		.6	3	0	400P / 404P	"
142	6-21	Lindsay-Wright	1.3	.07	.28	.12	.02		.6	2		402P / 404P	FC 28
143	6-29	Brewster	1.5	.37	.46	.08	.17		.6	3	0	440P / 445P	FC 8
144	7-6	"	2.0	.36	.42	.10	.15		.6	4	0	230P / 235P	"
145	7-13	"	0.4	.09	.44	.03	.04		.6	1	0	510P / 515P	"
146	7-20	"	0.5	.13	.38	.04	.05		.6	1	0	545P / 548P	"
147	7-27	"	0.5	.12	.42	.04	.05		.6	1	0	240P / 243P	"
148	8-3	"	0.5	.14	.71	.06	.10		.6	1	0	209P / 213P	"
149	8-10	"	1.0	.24	.83	.11	.20		.6	2	0	220P / 225P	"
150	8-17	"	0.5	.12	.83	.06	.10		.6	1	0	305P / 307P	"
151	8-24	Brewster	1.0	.25	.60	.09	.15		.6	2	0	230P / 235P	FC 8
152	8-31	"	1.0	.18	.67	.08	.12		.6	2	0	210P / 213P	"
153	9-7	"	0.6	.16	.44	.05	.07		.6	1	0	210P / 212P	"
154	9-14	"	0.8	.21	.52	.07	.11		.6	1	0	240P / 244P	"
155	9-21	"	1.5	.30	.70	.11	.21		.6	3	0	135P / 138P	"
156	9-28	"	1.5	.64	.44	.14	.28		.6	3	0	253P / 257P	"

F. C. Dist. Form 5a

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

Sta. No. F40R

Daily discharge, in second-feet of PUDDINGSTONE CREEK below Puddingstone Dam, for the year ending September 30, 19 39

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.2	0.3	0.1	0.4	0.4	0.4	0.5	0.6	0.2	0.2	0.2	0.2
2	0.2	0.2	0.2	0.4	0.4	0.4	0.5	0.4	0.3	0.1	0.2	0.2
3	1.4	0.2	0.4	0.4	1.4	0.5	0.5	0.2	0.2	0.1	0.2	0.1
4	2.1	0.2	0.4	0.4	1.1	0.5	0.5	0.1	0.3	0.2	0.2	0.2
5	2.1	0.2	0.3	0.8	0.6	0.5	0.5	0.1	0.3	0.2	0.2	0.1
6	2.1	0.2	0.2	0.4	0.5	0.5	0.5	0.3	0.3	0.1	0.2	0.1
7	2.1	0.2	0.3	0.4	0.5	0.4	0.5	0.3	0.3	0.1	0.2	0.2
8	2.0	0.2	0.3	0.4	0.6	0.4	0.5	0.3	0.3	0.1	0.2	0.6
9	2.0	0.2	0.3	0.4	0.5	0.4	0.4	0.3	0.2	0.2	0.3	0.5
10	1.9	0.3	0.1	0.3	0.5	0.4	0.4	0.2	0.2	0.1	0.3	0.1
11	2.0	0.2	0.2	0.4	0.5	0.4	0.6	0.2	0.3	0.1	0.2	0.2
12	2.2	0.2	0.3	0.4	0.5	0.4	0.4	0.1	0.3	0.1	0.2	0.2
13	2.2	0.3	0.2	0.4	0.5	0.4	0.5	0.1	0.3	0.1	0.1	0.2
14	2.2	0.3	0.3	0.4	0.5	0.4	0.5	0.1	0.4	0.1	0.1	0.2
15	2.1	0.4	0.4	0.4	0.6	0.4	0.5	0.2	0.4	0.1	0.1	0.1
16	1.9	0.4	0.4	0.4	0.6	0.4	0.5	0.1	0.2	0.1	0.3	0.1
17	1.8	0.3	0.4	0.4	0.6	0.4	0.5	0.1	0.2	0.1	0.1	0.2
18	1.8	0.3	1.5	0.4	0.6	0.4	0.5	0.1	0.6	0.2	0.2	0.2
19	1.8	0.3	1.8	0.4	0.6	0.4	0.5	0.1	0.2	0.3	0.2	0.2
20	1.8	0.4	1.2	0.4	0.6	0.4	0.5	0.2	0.2	0.1	0.2	0.4
21	2.0	0.3	0.6	0.8	0.5	0.4	0.5	0.2	0.1	0.2	0.2	0.5
22	2.1	0.2	0.5	0.6	0.5	0.4	0.6	0.2	0.1	0.1	0.2	0.2
23	2.1	0.2	0.4	0.5	0.5	0.4	0.6	0.2	0.6	0.1	0.2	0.2
24	2.1	0.2	0.4	0.5	0.5	0.4	0.6	0.2	0.2	0.2	0.2	0.5
25	2.1	0.3	0.4	0.5	0.4	0.4	0.5	0.2	0.2	0.4	0.1	1.0
26	2.1	0.3	0.4	0.4	0.4	0.4	0.5	0.2	0.2	0.1	0.2	0.4
27	2.2	0.2	0.4	0.4	0.4	0.4	0.5	0.2	0.2	0.1	0.2	0.4
28	2.3	0.2	0.4	0.4	0.4	0.4	0.4	0.3	0.2	0.4	0.2	0.4
29	2.1	0.2	0.4	0.4		0.4	0.4	0.3	0.2	0.1	0.2	0.3
30	1.5	0.1	0.4	0.6		0.5	0.2	0.3	0.2	0.1	0.2	0.3
31	0.3		0.4	0.5		0.5		0.4		0.2	0.1	
	56 1.7	7.5	14.0	13.9	15.7	13.0	14.6	6.8	7.9	4.7	5.8	8.5
MEAN	18.1	.25	.45	.45	.56	.42	.49	.22	.26	.15	.19	.28
ACRE-FEET	1110	15	28	28	31	26	29	13	16	9.3	12	17

Remarks:

YEAR OR PERIOD — MEAN 1.85 — ACRE-FEET 1330

STATION F192R

RIO HONDO at Lower Azusa Road

LOCATION:

On the downstream end of the extreme westerly pier of Lower Azusa Road bridge, about 1½ miles north of El Monte.

DRAINAGE AREA:

Indeterminate due to a natural split near Arrow Highway which divides the San Gabriel River into 2 branches; the west branch known as the Rio Hondo flows into the Los Angeles River; the east branch retains the name San Gabriel River.

CHANNEL AND CONTROL:

Channel-sand and gravel.
No artificial control.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows measured from cable car below the station.

RECORDER:

Installed March 29, 1932 in a F.C. standard type house over a 21 inch diameter corrugated iron pipe stilling well.
An H.C.F. continuous recorder was in service from October 1, 1938 to September 30, 1939.

REGULATION:

Flow partially regulated by Sierra Madre Dam, Big Santa Anita Dam, Sawpit Dam, San Gabriel Dam Nos. 1 and 2 and Morris Dam.

DIVERSIONS:

The City of Pasadena diverts water from the San Gabriel River.
The City of Monrovia diverts water from Monrovia Creek.
There are also several diversions for irrigation and spreading grounds.

RECORDS AVAILABLE:

February 22, 1932 to March 29, 1932 stream measurements only.
March 29, 1932 to September 30, 1939, recorder records.

EXTREMES OF DISCHARGE:

1938-1939
Maximum 680 second-feet, January 5.
Minimum no flow several months.
1931-1939
Maximum 31000 second-feet, estimated, March 2, 1938.
Minimum no flow at times each year.

ACCURACY:

Poor due to shifting control. At times the stream was in several channels at the recorder. Estimated by comparison with measurements and previous records: October 1 to 6, December 16, 17, and 24 to 29; January 8,11,12, 22 and 23; February 16.
Interpolated between measurements:October 23 to 30.

OPERATION:

Located, constructed, and operated by the Los Angeles County Flood Control District.

F. C. D. FORM 104 500 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F192R

DISCHARGE MEASUREMENTS OF RIO HONDO

AT NEAR Lower Azusa Road DURING THE YEAR ENDING SEPTEMBER 30, 1939

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Period Diff.	Noted	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
167	10-6	Lindsay	4.5	0.99	1.16	2.68	1.2		.6	5	-	312P / 318P	FC 28
168	12-15	Lindsay-Ingram	Two Channels			2.97	22.		.6	8	-.02	213A / 225A	FC 13
169	12-18	Haig-Tscharner	23.5	10.52	2.21	2.78	23.		.6	9	+.16	538A / 546A	FC 38
170	12-18	" "	39.2	27.02	4.15	3.31	112.		.6	10	-.06	930A / 942A	"
171	12-18	Lindsay-Ingram	32.0	16.84	3.18	2.88	54.		.6	9	0	640P / 650P	FC 28
172	12-19	Haig-Tscharner	Two Channels			2.90	42.		.6	16	0	1052A / 1111A	FC 38
173	12-20	Lindsay-Ingram	39.0	17.10	2.07	2.85	35.		.6	10	-.02	545P / 600P	FC 13
174	12-21	" "	14.0	4.71	1.22	2.40	5.7		.6	7	0	240P / 250P	FC 28
175	1-5	Haig-Tscharner	Three Channels			3.33	214.		.6	24	-.02	415P / 438P	FC 38
176	1-6	Lindsay-Ingram	Two Channels			3.08	131.		.6	21	-.01	1113A / 1135A	FC 28
177	1-9	Lindsay	19.0	7.60	1.40	2.63	11.		.6	7	-.01	1032A / 1040A	"
178	1-21	Haig-Tscharner	19.5	7.14	1.87	2.67	13.		.6	10	+.12	910A / 922A	FC 38
179	1-21	Lindsay-Ingram	43.0	16.97	1.54	2.81	26.		.6	11	-.02	132P / 145P	FC 13
180	1-21	" "	13.0	3.40	1.06	2.54	3.6		.6	5	0	920P / 925P	"
181	2-3	Haig-Tscharner	Two Channels			2.87	35.		.6	11	-.06	928A / 943A	FC 38
182	2-3	Lindsay-Ingram	13.0	4.22	1.25	2.56	5.3		.6	6	-.01	328P / 335P	FC 28
183	2-3	Haig-Tscharner	2.0	0.20	0.30	2.34	0.06		.6	2	0	727P / 729P	FC 38
184	2-8	" "	40.0	16.78	1.50	2.82	25.		.6	8	-.08	612A / 622A	"
185	2-8	Ingram-Tscharner	11.0	1.84	0.32	2.38	0.60		.6	4	0	933A / 943A	FC 28
186	3-10	Haig-Tscharner	39.5	14.34	1.27	2.69	18.		.6	8	-.02	1238A / 1248A	FC 38
187	3-26	Lindsay-Ingram	11.0	2.29	0.85	2.52	1.9		.6	5	-.01	605P / 612P	FC 28
188	3-27	Haig-Tscharner	28.0	12.58	2.05	2.78	26.		.6	8	-.03	925A / 932A	FC 38
189	9-24	Lindsay	18.5	7.57	1.16	2.76	8.8		.6	7	0	912P / 921P	FC 28
190	9-24	"	Two Channels			3.14	53.		.6	11	-.03	1020P / 1036P	"
191	9-25	Lindsay-Ingram	Three Channels			3.38	118.		.6	13	+.07	447A / 501A	FC 28
192	9-25	" "	Three Channels			3.08	46.		.6	15	-.08	807A / 822A	"
193	9-25	Lindsay				2.52	2.1		.6	5	+.03	205P / 212P	"
194	9-27	"	Three Channels			2.69	9.0		.6	14	0	1012A / 1028A	"

F. C. Dist. Form 19

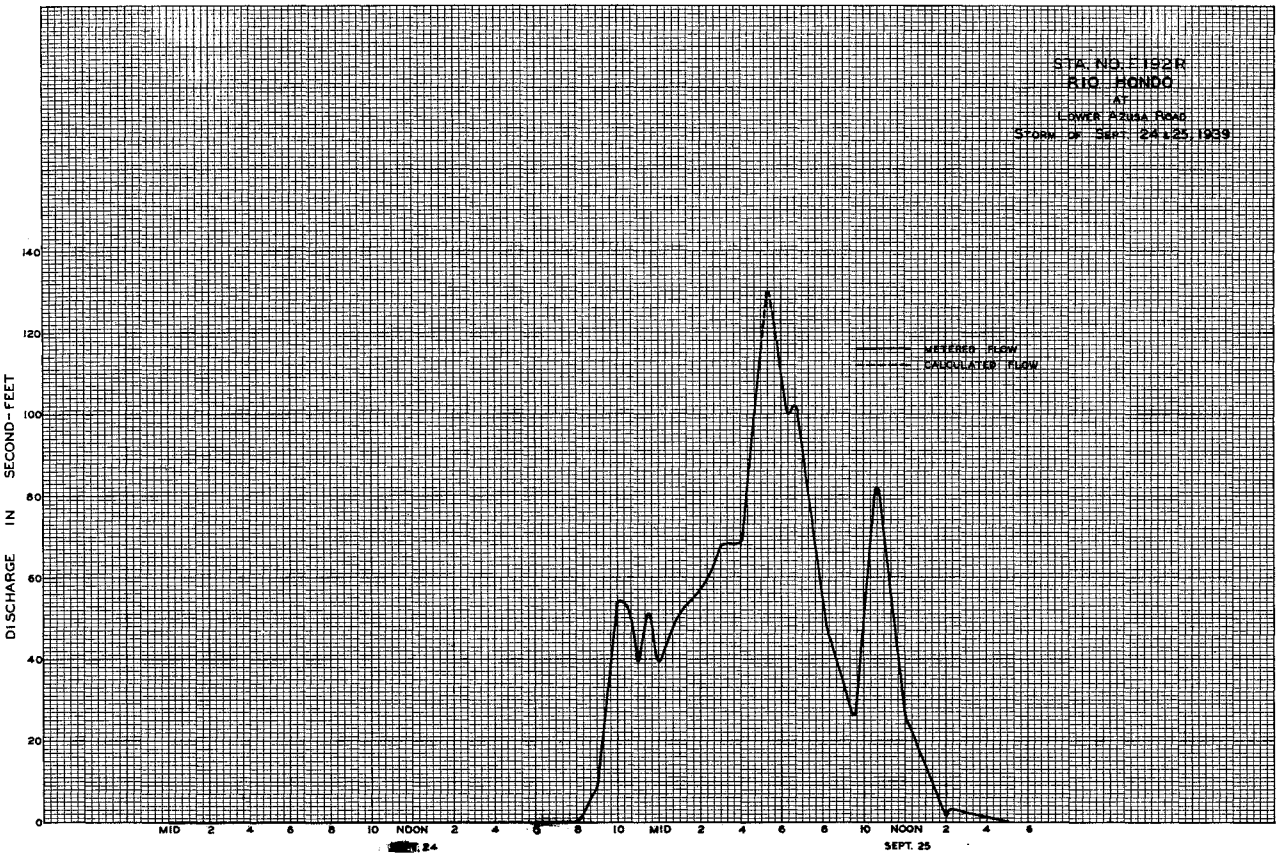
Sta. No. F192R

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

Daily discharge, in second-feet of RIO HONDO at Lower Azusa Road for the year ending September 30, 1939

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3	0	1	2	0	0	+	+	+	0	0	0
2	3	0	1	2	+	1	0	+	+	0	0	0
3	3	0	4	0	6	1	1	+	+	0	0	0
4	3	0	2	2	5	1	+	+	+	0	0	0
5	3	+	0	1	0	+	+	+	+	0	0	0
6	E	+	1	1	0	0	+	+	+	0	0	0
7	8	+	1	2	7	1	+	+	+	0	0	0
8	4	+	2	5	+	2	+	+	+	0	0	0
9	0	+	3	0	+	4	+	+	+	0	0	0
10	0	2	2	2	0	5	+	+	+	0	0	0
11	0	+	1	1	7	+	+	+	0	0	0	0
12	7	+	+	+	+	+	+	+	0	0	0	0
13	3	+	0	+	0	+	+	+	0	0	0	0
14	2	0	1	+	1	+	+	+	0	0	0	0
15	E	1	4	+	6	+	+	+	0	0	0	0
16	3	1	0	+	3	+	+	+	0	0	0	0
17	0	+	E	+	0	+	+	+	0	0	0	0
18	+	1	7	+	0	+	+	+	0	0	0	0
19	0	+	8	+	1	+	+	+	0	0	0	0
20	1	1	5	+	0	+	+	+	0	0	0	0
21	0	+	4	+	0	+	+	+	0	0	0	5
22	+	+	2	+	0	+	+	+	0	0	0	5
23	+	1	1	+	+	+	+	+	0	0	0	5
24	+	0	0	+	+	+	+	+	0	0	0	3
25	+	2	0	+	+	+	+	+	0	0	0	6
26	+	2	0	+	+	+	+	+	0	0	0	8
27	+	1	E	+	1	1	+	+	0	0	0	5
28	+	1	E	+	+	3	+	+	0	0	0	4
29	+	2	E	+	+	2	+	+	0	0	0	9
30	+	+	E	+	+	+	+	+	0	0	0	0
31	0	4	E	+		+		+		0	0	0
	44	21	219.8	469.3	303	105	01	+	+	0	0	54.9
Mean	1.4	.07	7.09	15.1	1.08	.34	+	+	+	0	0	1.83
Acre-Feet	87	4.2	436	932	60	21	.20	+	+	0	Mean	109
											Year or Period	2.17
											Acre-Feet	1570

Remarks: + indicates discharge 0.05 sec. ft., or less.
E indicates discharge estimated - see station description.



STATION F64R

RIO HONDO above Mission Bridge

LOCATION:

On the right (west) side of Rio Hondo, approximately 1000 feet above Mission bridge and two miles northeast of Montebello.
This supplements the station operated from 1923 to 1928 by the State Division of Water Rights.

DRAINAGE AREA:

Indeterminate due to a natural split near Arrow Highway which divides the San Gabriel River into 2 branches; the west branch known as the Rio Hondo flows into the Los Angeles River; the east branch retains the name San Gabriel River.

CHANNEL AND CONTROL:

Channel-sand and silt.
No artificial control.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows measured from cable car 60 feet below station.

RECORDER:

Installed in July, 1928. Removed about 10 P.M., March 2, 1938. Reinstalled on March 6, at the temporary Station F64B-R on Mission Bridge. Removed on March 26, 1938. Reinstalled at Station F64R in a 48 inch diameter, corrugated iron pipe which serves both as a stilling well and house. An Au continuous recorder was in service from October 1, 1938, to September 30, 1939.

REGULATION:

Flow partially regulated by Sierra Madre Dam, Big Santa Anita Dam, Sawpit Dam, San Gabriel Dams, Nos. 1 and 2, Los Flores and Rubio Debris Basins and Eaton Dam.

DIVERSIONS:

The City of Pasadena diverte water from Eaton Creek and from the San Gabriel River.
The City of Monrovia diverts water from Monrovia Creek.
There are also several diversions for irrigation and spreading grounds.

RECORDS AVAILABLE:

July, 1928, to September 30, 1939 (for records prior to July, 1928 see State Division of Water Rights Bulletins). (Records from March 6, 1938 to March 25, 1938 are from Station F 64 B-R).

EXTREMES OF DISCHARGE:

1938-1939
Maximum 5220 second-feet, December 18.
Minimum 6.0 second-feet, July 14.
1928-1939
Maximum 28000 second-feet, estimated, March 2, 1938.
Minimum 0.3 second-feet December 1, 1933.

ACCURACY:

Fair.
Control shifts during high flows.
Estimated by interpolation: January 6 to 12; February 23 to March 4.

OPERATION:

Operated by the Los Angeles County Flood Control District in co-operation with the U.S.G.S. Water Resources Branch.

F. C. D. FORM 104 500 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F64R

DISCHARGE MEASUREMENTS OF RIO HONDO

NEAR above Mission Bridge DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	String Percent Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
269	10-6	Brewster	Two Channels			5.52	14.		.6	12	0	915A / 935A	FC 8
270	10-13	"	26.0	12.42	1.24	5.55	15.		.6	8	0	850A / 904A	"
271	10-20	"	34.0	10.58	1.33	5.56	14.		.6	9	0	850A / 905A	"
272	10-27	"	Two Channels			5.55	15.		.6	11	0	900A / 915A	"
273	11-3	"	38.0	12.74	1.30	5.56	17.		.6	8	0	857A / 913A	"
274	11-10	"	32.0	15.20	1.09	5.58	17.		.6	9	0	906A / 922A	"
275	11-17	"	41.0	13.73	1.26	5.61	17.		.6	11	0	945A / 1000A	"
276	11-23	"	32.0	11.72	1.51	5.62	18.		.6	8	0	956A / 1008A	"
277	12-1	"	37.0	11.30	1.20	5.59	14.		.6	8	0	927A / 942A	"
278	12-8	"	26.0	10.76	1.37	5.59	15.		.6	7	0	922A / 938A	"
279	12-15	Lindsay-Ingram	113.	92.55	4.22	6.01	390.		.6	9	-.22	1257A / 116A	FC 28
280	12-15	" "	138.	107.3	4.05	6.16	435.		.6	7	-.15	355A / 408A	FC 13
281	12-15	" "	145.	288.8	5.92	7.18	1710.		.6	9	+.02 -.24	530A / 549A	FC 28
281A	12-15	Brewster	Two Channels			5.49	73.		.6	11	-.02	1050A / 1110A	FC 8
282	12-15	Lindsay-Ingram	31.0	25.29	2.30	5.44	58.		.6	10	-.05	205P / 215P	FC 28
283	12-16	" "	Two Channels			5.59	44.		.6	11	0	500P / 515P	FC 13
284	12-18	" "	118.	161.9	5.69	6.44	921.		.6	8	-.17	115A / 125A	FC 28
285	12-18	" "	118.	153.0	5.29	6.30	809.		.6	8	-.10	125A / 136A	"
286	12-18	" "	113.	93.2	3.41	5.95	318.		.6	9	+.28	520A / 536A	"
287	12-18	" "	118.	165.6	6.12	6.67	1010.		.6	8	-.06 +.02	744A / 754A	"
288	12-18	" "	123.	173.6	6.17	6.59	1070.		.6	8	-.04	1200P / 1212P	"
289	12-18	Haig, Tscharner	119.	112.3	2.74	5.94	308.	Surf & .6	16	-.05		225P / 249P	FC 38
290	12-19	" "	137.	174.8	6.51	6.57	1140.	.6	10	-.15		1230A / 1250A	"
291	12-19	Anderson-Linden	120.	180.0	4.80	6.51	865.	Surf & .6	17	0		225A / 245A	FC 33
292	12-19	Anderson-Linden	127.	172.7	4.49	6.46	775.	Surf & .6	15	-.06		300A / 340A	FC 33
293	12-19	Anderson-Linden	127.	181.4	4.13	6.57	750.	Surf & .6	17	-.14		725A / 800A	"
294	12-19	" "	132.	170.4	3.65	6.44	623.	Surf & .6	17	-.12		800A / 825A	"
295	12-19	Haig-Tscharner	113.	101.6	2.42	5.96	245.	.6	9	-.04		208P / 223P	FC 38
296	12-19	" "	140.5	237.6	3.76	6.88	891.	.6	14	-.05		456P / 513P	"
297	12-19	Lindsay-Ingram	115.	97.35	1.54	5.90	150.	.6	9	-.09		850P / 912P	FC 28
298	12-20	" "	117.	102.6	2.90	6.21	292.	.6	10	0		318P / 332P	"
299	12-21	" "	70.	37.89	1.52	5.54	58.	.6	10	+.01		435P / 503P	"
300	12-22	Brewster-Pettis	26.0	23.61	2.34	5.46	55.	.6	8	0		1110A / 1122A	FC 8
301	12-29	Brewster	19.0	12.50	1.81	5.42	23.	.6	7	0		930A / 945A	"
302	1-5	Brougham Brewster-	77.0	53.94	1.77	5.78	96.	.6	8	0		850A / 915A	"
303	1-5	Lindsay-Ingram	150.	425.8	9.29	8.10	3960.	.6	9	-.40		103P / 121P	FC 28
304	1-5	" "	150.	386.8	8.39	7.80	3240.	.6	10	-.21		121P / 134P	"
305	1-5	Haig-Tscharner	113.	144.8	2.93	5.98	424.	.6	12	-.02		633P / 654P	FC 38
306	1-6	Lindsay-Ingram	108.	86.15	1.95	5.86	168.	.6	12	+.01		150P / 205P	FC 28
307	1-12	Brewster	24.0	14.36	1.75	5.24	25.	.6	7	0		940A / 952A	FC 8
308	1-19	"	61.0	20.40	1.26	5.34	26.	.6	8	+.01		1010A / 1030A	"
309	1-21	Lindsay-Ingram	113.	131.7	2.77	6.17	366.	.6	10	-.06		907A / 921A	FC 13
310	1-21	Haig-Tscharner	113.	299.6	2.47	6.36	740.	.6	13	-.03		1150A / 1212P	FC 38
311	1-21	" "	113.	150.8	2.93	6.18	442.	.6	13	+.25		422P / 441P	"
312	1-21	Lindsay-Ingram	120.	181.	4.75	6.66	860.	.6	10	+.05 -.01		515P / 530P	FC 28
313	1-21	" "	120.	171.	4.87	6.67	833.	.6	9	+.02 -.03		530P / 544P	"
314	1-21	" "	117.	124.6	2.83	6.02	353.	.6	10	-.06		810P / 825P	"
315	1-23	Lindsay	47.0	27.75	1.86	5.48	52.	.6	10	0		225P / 238P	FC 13

F. C. D. FORM 104 500 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F64R

DISCHARGE MEASUREMENTS OF RIO HONDO

at mouth above Mission Bridge DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Diff.	Rated	GAGE REC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
316	1-26	Brewster	28.0	17.57	1.45	5.32	25.		.6	6	0	940A 952A	FC 8
317	1-30	Lindsay-Ingram	107.	96.95	2.14	6.02	208.		.6	9	-.10	852P 907P	FC 13
318	2-2	Brewster	56.0	21.06	1.27	5.35	27.		.6	7	0	958A 1015A	FC 8
319	2-3	Lindsay, Ingram	110.	127.8	3.71	6.26	474.		.6	9	-.07	901A 912A	FC 28
320	2-3	Haig-Tscharner	109.	111.4	2.79	5.92	311.	Surf	.6	12	-.05	1107A 1124A	FC 38
321	2-3	Lindsay-Ingram	106.	74.5	2.55	5.86	190.		.6	9	+.12	1242P 1250P	FC 28
322	2-3	" "	108.	82.36	2.09	5.77	172.		.6	9	-.02	408P 415P	"
323	2-3	Haig-Tscharner	93.	51.21	1.61	5.51	82.		.6	10	0	902P 920P	FC 38
324	2-8	Lindsay-Ingram	112.	96.1	2.38	6.01	229.		.6	8	-.12	605A 618A	FC 28
325	2-8	Ingram-Tscharner	102.	82.17	1.63	5.69	134.		.6	8	0	807A 823A	"
326	2-9	Brewster	42.0	17.84	1.69	5.37	30.		.6	7	0	931A 945A	FC 8
327	2-16	"	45.0	19.65	1.44	5.40	28.		.6	7	0	915A 930A	"
328	2-23	"	43.0	16.14	1.37	5.33	22.		.6	11	0	935A 950A	"
329	3-2	"	67.0	19.11	1.33	5.38	25.		.6	7	0	1025A 1040A	"
330	3-9	"	39.0	14.55	1.49	5.37	22.		.6	10	0	925A 945A	"
331	3-9	Lindsay-Ingram	120.	214.5	3.39	6.48	728.		.6	9	-.11	1058P 1112P	FC 28
332	3-9	" "	120.	188.2	3.25	6.37	611.		.6	8	-.12	1125P 1135P	FC 28
333	3-10	Haig-Tscharner	107.	97.65	1.29	5.76	126.		.6	15	-.10	235A 258A	FC 38
334	3-10	Ingram	59.0	33.24	1.38	5.38	46.		.6	9	-.01	256P 308P	FC 28
335	3-16	Brewster	66.0	19.24	1.22	5.34	23.		.6	9	0	930A 947A	FC 8
336	3-23	"	60.0	20.00	1.14	5.35	23.		.6	6	0	940A 955A	"
337	3-26	Lindsay-Ingram	107.	71.35	2.10	5.84	150.		.6	10	-.03	455P 507P	FC 28
338	3-27	" "	117.	126.8	3.00	6.32	381.		.6	11	-.03	833A 845A	"
339	3-27	Haig	105.	67.59	1.53	5.67	103.		.6	15	-.02	1228P 1249P	FC 38
340	3-30	Brewster	56.0	16.89	1.21	5.32	20.		.6	7	0	900A 915A	FC 8
341	4-6	"	Two Channels			5.32	19.		.6	9	0	850A 907A	"
342	4-13	"	86.0	22.58	.98	5.35	22.		.6	10	0	855A 915A	"
343	4-20	Brewster	59.0	17.95	1.18	5.28	21.		.6	7	0	855A 910A	FC 8
344	4-27	"	64.0	20.34	1.24	5.39	25.		.6	7	0	835A 850A	"
345	5-4	"	54.0	17.88	1.17	5.31	21.		.6	7	0	848A 900A	"
346	5-11	"	Two Channels			5.24	18.		.6	8	0	845A 900A	"
347	5-18	"	"		"	5.32	18.		.6	10	0	905A 925A	"
348	5-25	"	"		"	5.26	16.		.6	10	0	844A 900A	"
349	6-1	"	"		"	5.26	16.		.6	11	0	900A 918A	"
350	6-8	"	"		"	5.32	17.		.6	11	0	920A 935A	"
351	6-14	"	"		"	5.25	15.		.6	11	0	925A 940A	"
352	6-21	Lindsay-Wright	53.0	11.83	1.01	5.30	12.		.6	12	+.01	1010A 1027A	FC 28
353	6-29	Brewster	Two Channels			5.26	12.		.6	10	0	855A 910A	FC 8
354	7-6	"	"		"	5.26	12.		.6	11	0	830A 845A	"
355	7-13	"	"		"	5.26	13.		.6	10	0	835A 850A	"
356	7-20	"	"		"	5.26	11.		.6	11	0	835A 855A	"
357	7-27	"	"		"	5.20	13.		.6	10	0	855A 915A	"
358	8-3	"	"		"	5.23	10.		.6	10	0	844A 900A	"
359	8-10	"	"		"	5.20	9.8		.6	11	0	856A 914A	"
360	8-17	"	"		"	5.20	9.3		.6	11	0	910A 928A	"
361	8-24	"	"		"	5.20	9.6		.6	12	0	855A 915A	"
362	8-31	"	"		"	5.21	9.9		.6	11	0	855A 910A	"
363	9-7	"	"		"	5.19	9.8		.6	12	0	840A 855A	"
364	9-14	Brewster	22.0	7.72	1.33	5.21	10.		.6	6	0	853A 905A	FC 8
365	9-21	"	27.0	9.21	1.10	5.22	10.		.6	8	0	835A 850A	"
366	9-24	R. Lindsay	128.	164.7	1.90	6.47	312.		.6	11	-.16	730P 755P	FC 28
367	9-24	Lindsay-Ingram	140.	170.2	4.52	6.82	767.		.6	9	+.02	1130P 1148P	"
368	9-25	" "	148.	357.	7.17	7.85	2560.		.6	9	0	608A 625A	"
369	9-25	" "	148.	353.	7.17	7.85	2530.		.6	9	0	625A 640A	"
370	9-25	Haig-Koch	140.	264.7	4.00	7.20	1060.		.6	11	0	1120A 1143A	FC 33
371	9-27	Lindsay	37.0	28.4	1.87	5.42	53.		.6	10	0	1233P 1247P	FC 28
372	9-28	Brewster	26.0	16.86	1.40	5.15	24.		.6	7	0	855A 905A	FC 8

F. C. Dist. Forms 58

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

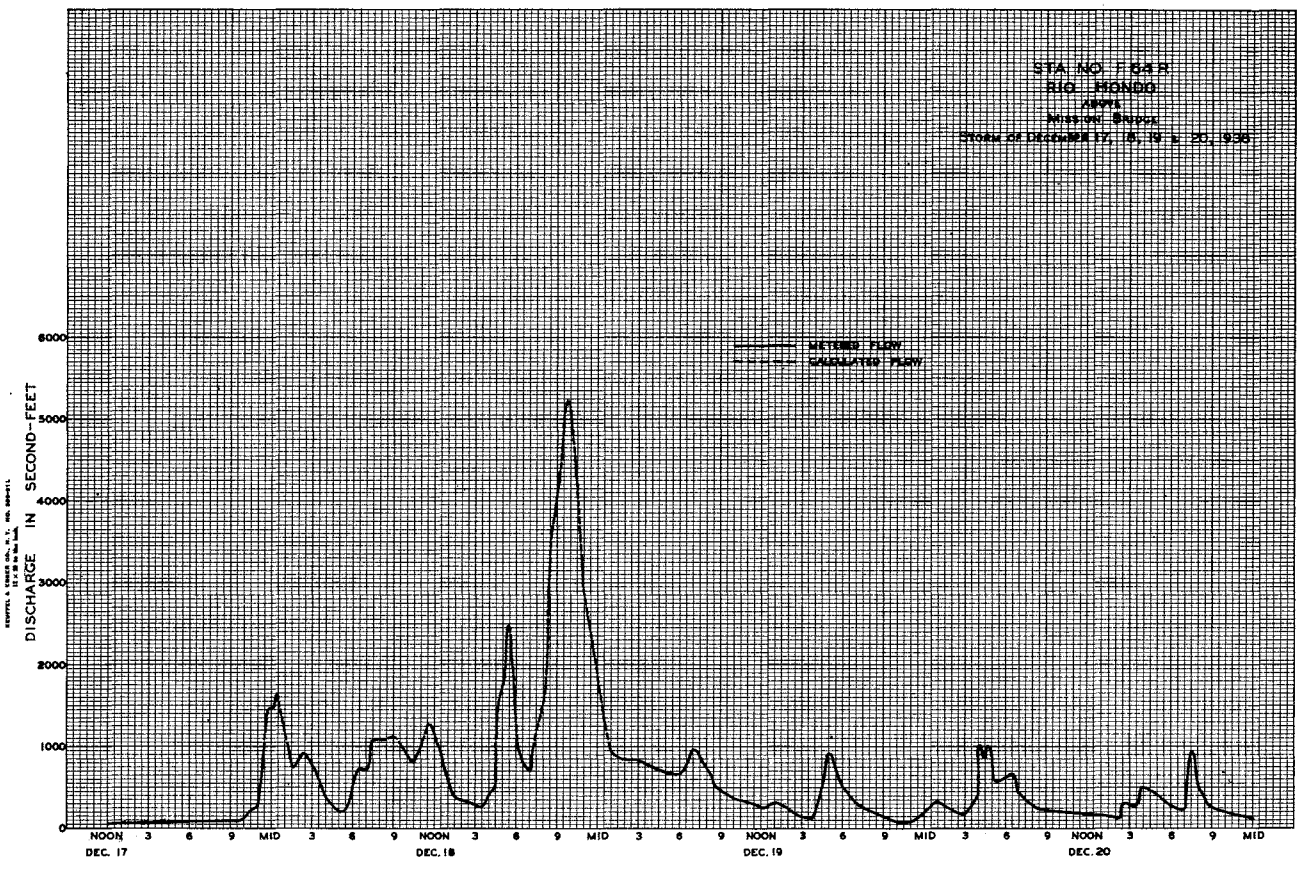
Sta. No. F64R

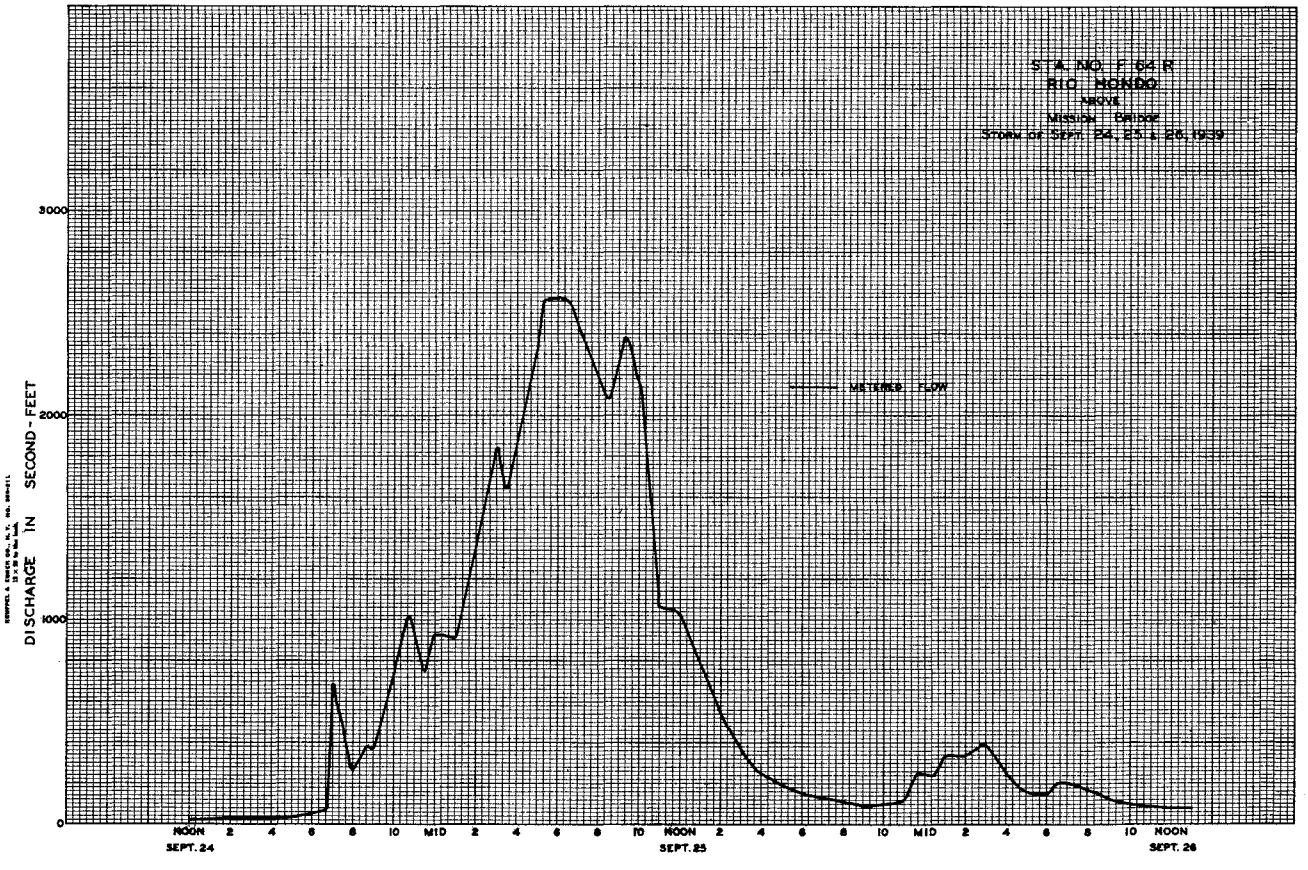
Daily discharge, in second-feet of RIO HONDO above Mission Bridge, for the year ending September 30, 19 39

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	23	17	32	34	E 29	30	27	25	20	23	17
2	22	19	19	34	34	E 29	79	27	30	20	22	22
3	22	22	20	32	184	E 28	30	28	30	20	22	22
4	20	25	20	32	92	E 28	32	28	27	19	20	22
5	20	27	22	615	36	28	30	22	27	22	25	27
6	20	23	22	E 194	39	28	27	22	27	20	22	27
7	23	27	22	E 204	36	27	27	23	23	20	23	23
8	25	23	22	E 82	76	27	25	22	22	20	20	23
9	23	23	23	E 79	39	90	20	27	17	19	22	30
10	22	25	22	E 76	34	61	20	28	19	20	20	25
11	23	25	23	E 73	32	34	19	36	19	19	20	25
12	22	27	25	E 70	34	32	23	34	20	16	23	23
13	20	23	23	67	28	32	28	39	22	19	22	23
14	19	22	68	54	52	28	25	36	23	14	22	23
15	23	20	430	52	43	34	30	30	22	19	22	25
16	22	20	52	49	30	36	32	30	22	19	20	25
17	23	22	96	41	34	36	34	28	19	16	22	22
18	20	20	1280	36	39	34	28	27	16	16	28	20
19	20	22	500	28	30	25	28	28	15	20	28	20
20	17	22	327	30	27	28	30	25	15	20	19	23
21	19	22	77	353	25	28	30	22	14	19	19	23
22	20	22	67	34	32	27	27	25	15	23	17	25
23	22	22	64	28	E 32	32	25	30	15	22	16	25
24	20	22	49	32	E 32	36	23	27	19	23	17	153
25	20	22	43	32	E 31	32	27	27	17	23	19	1060
26	20	25	36	39	E 31	59	27	30	17	25	20	131
27	19	23	39	39	E 30	75	22	34	20	22	16	32
28	20	20	36	36	E 30	36	22	32	19	23	14	46
29	20	20	32	39		30	19	28	19	22	15	39
30	22	19	32	105		28	22	32	20	20	15	36
31	25		32	39		30		25		22	16	
	653	677	3540	2656	1196	1107	841	879	615	622	629	2037
MEAN	21.0	22.6	114	85.7	42.7	35.7	28.0	28.4	20.5	20.1	20.3	67.9
ACRE-FEET	1300	1340	7020	5270	2370	2200	1670	1740	1220	1230	1250	4040

Remarks: E indicates discharge estimated - see station description.

YEAR OR PERIOD MEAN 42.4
ACRE-FEET 30650


STA. NO. F 64 R
RIO HONDO
ABOVE
MISSION BRIDGE
STORM OF DECEMBER 17, 18, 19 & 20, 1938
METERED FLOW
CALCULATED FLOW
DISCHARGE IN SECOND-FEET
6000
5000
4000
3000
2000
1000
0
NOON 3 6 9 MID 3 6 9 NOON 3 6 9 MID 3 6 9 NOON 3 6 9 MID 3 6 9 NOON 3 6 9 MID
DEC. 17
DEC. 18
DEC. 19
DEC. 20


STA. NO. F 64 R
RIO HONDO
ABOVE
MISSION BRIDGE
STORM OF SEPT. 24, 25 & 26, 1939
METERED FLOW
DISCHARGE IN SECOND-FEET
3000
2000
1000
0
NOON 2 4 6 8 10 MID 2 4 6 8 10 NOON 2 4 6 8 10 MID 2 4 6 8 10 NOON
SEPT. 24
SEPT. 25
SEPT. 26

STATION F45R

RIO HONDO at Stewart and Gray Road

LOCATION:

On downstream side of highway bridge on second pier west of left (east) abutment, 1/2 mile upstream from junction of Rio Hondo and Los Angeles River, about 1-1/2 miles west of Downey. This station is at or near the location of the station operated from 1923 to 1928 by the State Division of Water Rights.

DRAINAGE AREA:

Indeterminate due to a natural split near Arrow Highway which divides the San Gabriel River into 2 branches; the west branch known as the Rio Hondo flows into the Los Angeles River; the east branch retains the name San Gabriel River.

CHANNEL AND CONTROL:

Channel-sand between granite riprap levee on east bank and earth levee on right bank.
No artificial control.

DISCHARGE MEASUREMENTS:

Low flows measured by wading near gage.
High flows measured from cable car above station.

RECORDER:

Installed March 1, 1928, in an F. C. standard type house over a 21 inch diameter corrugated iron pipe stilling well.
An Au continuous recorder was in service from October 1, 1938, to September 30, 1939.

REGULATION:

Flow partially regulated by Sierra Madre Dam, Big Santa Anita Dam, Sawpit Dam, San Gabriel Dam Nos. 1 and 2, Morris Dam, Los Flores and Rubio Debris Basins and Eaton Dam.

DIVERSIONS:

The City of Pasadena diverts water from Eaton Creek and from the San Gabriel River. There are also several diversions for irrigation and spreading grounds. The City of Monrovia diverts water from Monrovia Creek.

RECORDS AVAILABLE:

March, 1928 to September 30, 1939. (For records prior to March, 1928, see State Division of Water Rights Bulletins.)

EXTREMES OF DISCHARGE:

1938-1939
Maximum 5260 second-feet, December 18.
Minimum no flow at various times.
1929-1939
Maximum 24400 second-feet, estimated, March 3, 1938.
Minimum no flow at various times.

ACCURACY:

Poor due to badly shifting control, communication frequently obstructed by sand at low flows. Estimated by interpolation: December 21., January 12 to 19.

OPERATION:

Located, constructed and operated by the Los Angeles County Flood Control District in co-operation with the U.S.G.S. Water Resources Branch.

F. C. D. FORM 104 500 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F45R

DISCHARGE MEASUREMENTS OF RIO HONDO

AT Stewart & Gray Road DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
194	10-6	Bonadiman	15.5	9.40	0.95	6.01	9.9		.6	4	0	930A 940A	FC 40
195	10-13	"	8.0	5.96	0.78	5.89	4.6		.6	4	0	1040A 846A	"
196	10-20	"	14.0	7.52	0.68	5.92	5.2		.6	4	0	858A	"
197	10-27	"	14.0	7.84	0.90	5.97	7.0		.6	4	0	1010A 1018A	"
198	11-3	"	4.0	0.90	0.16	5.54	0.14		.6	2	0	840A 843A	"
199	11-10	"	15.	5.14	0.58	5.76	3.0		.6	4	0	1005A 1010A	"
200	11-17	"	11.	5.97	1.17	5.89	7.0		.6	3	0	918A 922A	"
201	11-23	"	15.	6.27	0.75	5.86	4.7		.6	4	0	842A	"
202	12-1	"	8.	5.57	0.97	5.80	5.4		.6	5	0	800A 808A	"
203	12-8	"	12.	7.92	0.82	5.86	6.4		.6	5	0	1025A 1034A	"
204	12-15	"	132.	100.85	0.89	6.58	90.		Sur .6	9	-.08	Noon 1220P	"
205	12-15	Jordan	135.	193.	3.33	7.13	643.		.6	8	-.12	1045P 1110P	FC 21
206	12-16	Bonadiman	14.5	8.48	0.83	5.68	7.0		.6	5	-.04	915A 922A	FC 40
207	12-18	Jackman Bonadiman-	131.	87.40	2.16	6.58	188.		.6	9	0	745A 805A	"
208	12-18	" "	135.	194.75	3.90	7.12	759.		.6	10	+.18	935A 945A	"
209	12-18	Thomsen Jordan-	138.	222.	4.10	7.26	910.		.6	8	-.09	Noon 1215P	FC 21
210	12-19	Jackman Bonadiman-	135.	166.75	4.51	6.72	754.		Sun .6	10	+.04	440A 455A	FC 40
211	12-20	" "	68.	75.20	1.73	6.23	130.		.6	7	0	125P 135P	"
212	12-21	Bonadman Jackman-	25.	14.30	0.70	5.66	10.		.6	5	0	310P 320P	"
213	12-29	Bonadiman	14.	4.20	0.35	5.55	1.4		.6	3	0	840A 848A	"
214	1-5	"	135.	326.8	8.06	7.82	2630.		.6	9	-.03	320P 345P	"
215	1-6	"	85.	52.45	1.61	5.95	85.		.6	6	0	919A 935A	"
216	1-19	"	14.	4.68	2.00	5.18	0.95		.6	4	0	749A 754A	"
217	1-21	Jackman Bonadiman-	25.	13.4	0.83	5.53	11.		.6	6	0	810A 815A	FC 40
218	1-21	Thomsen Jordan-	98.	86.	2.62	6.24	225.		.6	10	+.03	1056A 1110A	FC 21
219	1-21	Jackman Bonadiman-	133.	155.2	3.96	6.53	615.		Sun .6	11	+.02	112P 132P	FC 40
220	1-21	Jordan-Thomsen	130.	128.	3.81	6.54	488.		.6	13	+.03	158P 212P	FC 21
221	1-22	Jackman Bonadiman-	4.5	1.92	0.48	5.54	0.95		.6	3	0	302P	FC 40
222	2-3	Jackman Bonadiman-	31.	15.59	0.70	5.67	11.		.6	5	-.01	930A 935A	FC 40
223	2-3	Jackman Bonadiman-	85.	49.0	2.04	6.08	101.		.6	7	-.01	235P 245P	"
224	2-4	Jackman Bonadiman-	20.	4.38	0.69	5.73	3.0		.6	5	0	400P 410P	"
225	2-8	Bonadiman	20.	5.27	0.97	5.58	4.6		.6	7	0	824A 832A	"
226	2-16	"	6.0	1.05	0.36	5.36	0.38		.6	2	0	812A	"
227	3-10	Jackman Bonadiman-	67.	38.	2.01	5.91	76.		.6	5	-.02	406A 428A	"
228	3-10	Bonadiman	14.	4.30	0.90	5.50	3.9		.6	4	0	1240P 1250P	"
229	3-27	"	85.	56.4	1.44	6.00	81.		.6	8	-.02	201P 224P	"
230	4-2	"	10.	10.46	0.92	5.63	9.6		.6	8	0	1035A 1055A	"
231	4-13	"	9.0	2.06	0.49	5.42	0.90		.6	4	0	756A 807A	"
232	4-20	"	11.	3.03	0.66	5.46	2.0		.6	4	0	839A 844A	"
233	4-27	"	5.	1.82	0.28	5.38	0.5		.6	3	0	800A 805A	"
234	5-4	"	7.	1.40	0.18	5.31	0.26		.6	2	0	755A	"
235	5-11	"	16.	5.11	0.61	5.50	3.1		.6	5	0	805A 815A	"

F. C. D. FORM 104 500 6-56

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F45R

DISCHARGE MEASUREMENTS OF RIO HONDO

AT Stewart & Gray Road DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Tyrrell Diff.	Rated	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	SECTION NO.
236	5-18	Bonadiman	15.	5.08	0.74	5.50	3.8		.6	6	0	810A 821A	FC 40
237	5-25	"	15.	5.55	0.66	5.52	3.7		.6	5	0	751A 800A	"
238	6-1	"	22.	7.42	0.80	5.52	5.9		.6	7	0	738A 750A	"
239	6-8	"	11.	3.79	0.55	5.44	2.1		.6	5	0	822A 835A	"
240	6-15	"	21.	8.03	0.96	5.56	7.7		.6	7	0	830A 840A	"
241	6-22	Bonadiman	8.	1.44	0.40	5.38	0.6		.6	2	0	1133A 1140A	FC 40
242	6-29	"	16.	6.48	0.94	5.54	6.1		.6	4	0	1015A 1021A	"
243	7-5	"	26.	6.76	0.61	5.49	4.1		.6	6	0	844A 900A	"
244	7-12	"	8.	2.44	0.74	5.45	1.8		.6	3	0	801A 805A	"
245	7-20	"	11.	3.35	0.94	5.54	3.2		.6	4	0	906A 912A	"
246	7-27	"	8.	2.05	0.67	5.53	1.4		.6	3	0	840A 845A	"
247	8-3	"	6.5	2.89	0.69	5.49	2.		.6	4	0	842A 847A	"
248	8-10	"	7.5	1.45	0.66	5.44	0.96		.6	3	0	825A 830A	"
249	8-17	"	8.0	1.75	0.46	5.42	0.81		.6	3	0	1100A 1105A	"
250	8-23	T. Moon	4.3	.66	0.50	5.37	0.33		.6	3	+.02	1118A 1125A	FC 22
251	8-30	"	2.5	.76	0.92	5.43	0.70		.6	4	0	1118A 1125A	"
252	9-7	Bonadiman	12.	3.52	0.63	5.54	2.2		.6	4	0	843A 858A	FC 40
253	9-14	"	8.	4.17	0.80	5.55	3.4		.6	4	0	800A 805A	"
254	9-21	"	6.5	1.22	0.25	5.40	0.30		.6	2	0	839A 841A	"
255	9-25	Jordan-Thomsen	137.	423.2	4.54	8.41	1920.		.6	9	+.22	620A 640A	FC 21
256	9-25	" "	137.	423.7	5.19	8.62	2200.		.6	9	+.17	715A 730A	"
257	9-25	" "	139.	460.4	6.34	8.64	2920.		.6	9	-.22	1035A 1053A	"
258	9-25	Jackman Bonadiman	135.	241.8	3.37	7.28	816.		.6	11	-.17	230P 245P	FC 40
259	9-26	" "	Two Channels			5.79	34.		.6	11	0	1030A 1045A	"

F. C. Disc. Form 1a

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

Sta. No. F45R

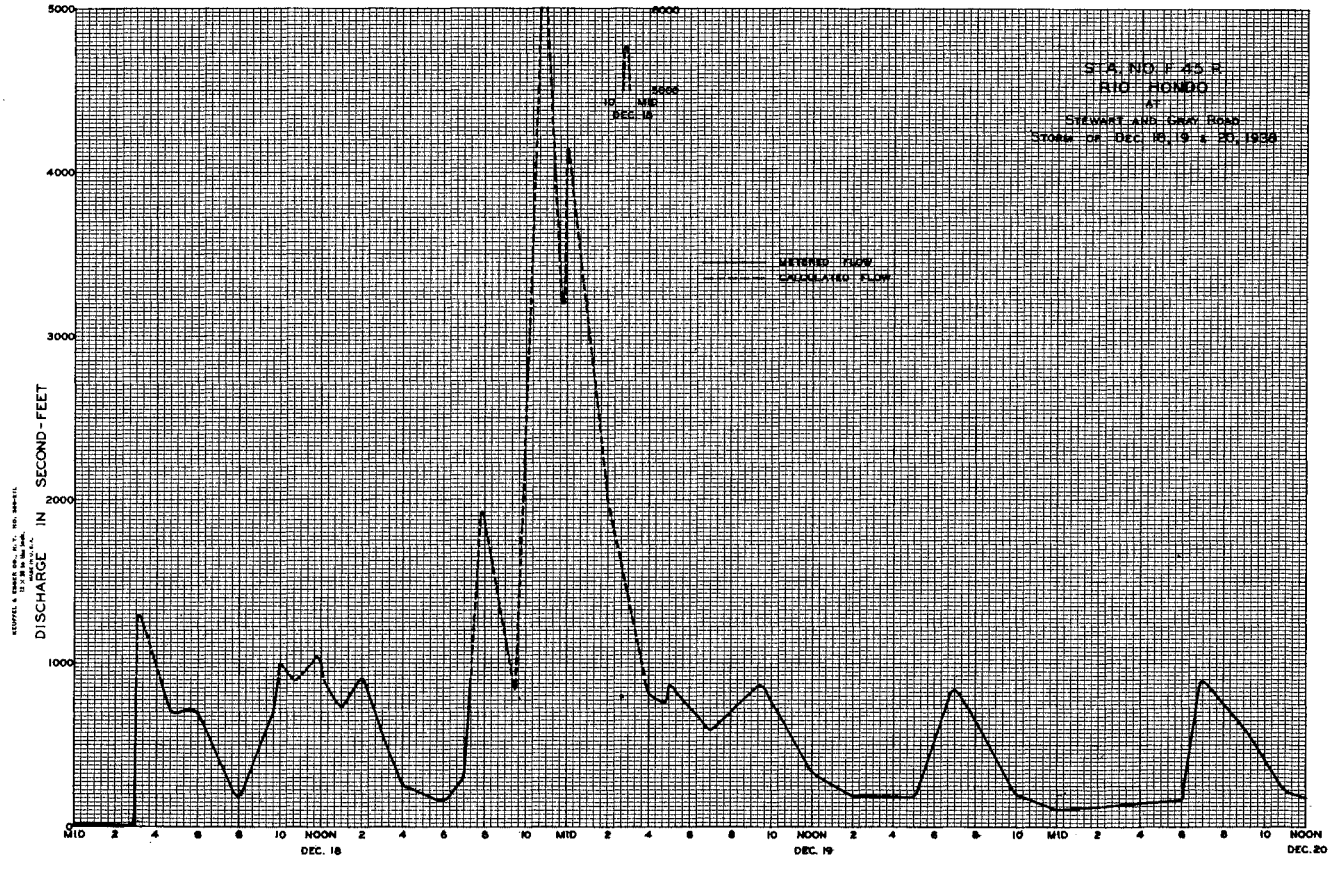
Daily discharge, in second-feet of RIO HONDO at Stewart and Gray Road, for the year ending September 30, 1939

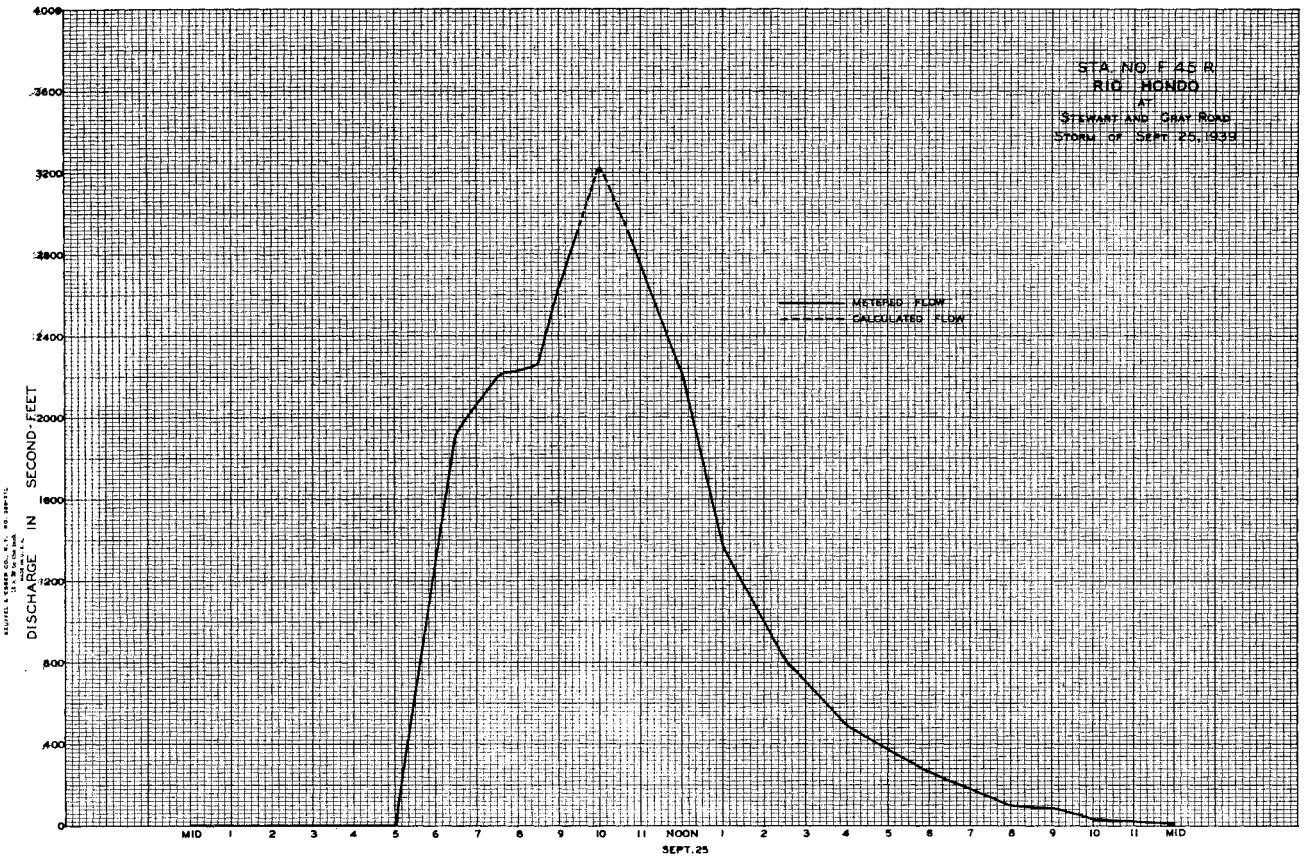
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.8	2.5	7.5	1.2	0	0	0.6	1.2	5.9	4.3	3.2	2.5
2	5.5	2.0	5.5	1.2	0	0	2.1	1.2	5.9	4.5	3.2	2.0
3	5.5	0.8	5.5	1.2	58	0	+ 0.2	0.9	3.9	2.3	2.8	1.9
4	7.5	0.9	8.	1.2	14	0	+	0.6	4.8	2.3	1.7	1.2
5	9.	1.8	4.5	3.7	0	0	+	1.0	3.1	3.2	1.8	2.0
6	7.5	1.4	4.8	6.7	0	0	+ 0.6	1.1	4.3	1.3	3.2	1.6
7	5.5	2.4	5.5	4.8	0	0	0	1.2	2.3	2.0	2.4	1.9
8	7.	3.2	7.5	+ 0.0	0	0	0	1.5	2.3	2.4	1.7	1.5
9	6.5	6.	4.8	0	9.5	0	0	1.3	4.9	2.4	1.4	1.2
10	4.5	6.	4.0	0	0	0	0	1.7	3.1	2.4	1.4	1.2
11	6.	6.5	5.	0	0	18	0.9	1.8	3.7	2.3	1.2	2.7
12	4.5	4.3	5.0	0.1	0	0	0.9	1.3	3.6	1.6	1.0	1.8
13	4.0	7.5	4.3	0.2	0	0	1.4	0.7	2.6	1.9	1.1	0.9
14	5.5	8.	5.	0.2	0	0	0.9	0.2	3.5	1.9	1.1	0.2
15	4.8	7.	2.3	0.2	0	0	1.0	2.4	4.1	2.3	1.8	2.6
16	5.	5.5	4.8	0.3	1.4	0	3.7	2.7	3.7	3.0	1.8	1.6
17	6.	6.	4.8	0.3	0	0	2.4	2.7	2.6	2.2	1.8	1.8
18	6.5	4.3	4.8	0.3	0	0	2.4	3.1	2.2	2.4	1.8	1.5
19	4.0	4.8	7.1	0.4	0	0	1.0	4.3	1.9	2.3	1.7	1.7
20	2.4	4.8	2.8	0.5	0	0	1.7	3.7	2.3	2.3	1.3	0.6
21	4.3	3.7	2.3	2.0	0	0	1.7	3.7	0.6	1.8	0.6	0.5
22	4.8	4.5	+	1.7	0	0	1.8	3.7	0.8	1.3	0.5	0.3
23	4.8	6.5	4.0	+ 0.0	0	0	1.5	2.4	1.3	2.4	0.6	0.3
24	4.8	5.2	0.0	0	0	0	1.5	2.2	1.3	2.2	0.5	0.3
25	4.8	3.7	0.0	0	0	0	1.2	2.0	2.6	3.0	0.3	87.9
26	7.	4.5	0.0	0	0	+	1.2	3.5	2.7	0.4	0.6	18.
27	5.5	5.5	0.0	0.0	0	.28	0.3	3.2	2.7	1.4	1.1	10.2
28	5.	7.	0.3	0.0	0	0.1	1.3	2.0	3.7	1.5	1.5	+
29	4.8	9.5	1.3	0.0	0	+	1.3	2.7	3.7	1.5	0.9	0
30	3.7		1.3	0.6	0	0	1.1	3.2	4.3	2.6	1.5	0
31	1.7		1.2	4.3		0		4.5		2.0	1.4	
	162.6	138.2	240.5	74.2	82.9	46.1	29.7	72.2	83.1	65.8	44.3	93.4

Mean	5.25	4.61	7.7	2.39	2.96	1.49	0.99	2.33	2.77	2.12	1.43	31.1
Acre-Feet	322	274	480	147	164	91	59	143	165	131	88	1850

Year Mean 13.2
Year Total Acre-Feet 9540

Remarks: + indicates discharge 0.05 sec. ft. or less.
E indicates discharge estimated - see station description.





STATION F63R

RIO HONDO SLOUGH at San Gabriel Boulevard

LOCATION:

On the upstream end of the right (west) abutment of the highway bridge, just east of the Rio Hondo, and about 2 miles northeast of Montebello.

DRAINAGE AREA:

Negligible.
Flow is almost entirely from rising water.

CHANNEL AND CONTROL:

Channel-sand, covered with weeds and brush; some cross fences which catch debris.
No artificial control.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows measured from highway bridge.

RECORDER:

Installed June 14, 1930, in a box type shelter house over an 18 inch diameter, corrugated iron pipe stilling well.
Horizontal Rational 7 day recorder, in service October 1, 1938 to September 30, 1939.

REGULATION:

Some water pumped to fish ponds.

DIVERSIONS:

None.

RECORDS AVAILABLE:

Recorder records June 14, 1930 to September 30, 1939.
Some weekly stream measurements were taken prior to installation of recorder.

EXTREMES OF DISCHARGE:

1938-1939
Maximum 118. second-feet September 25.
Minimum not determined.
1930-1939.
Maximum not determined, March 2, 1938.
Minimum 4.8 second-feet October 4, 1934.

ACCURACY:

Fair.
Control conditions effected by unknown parties building obstructions in streambed.
Estimated by interpolation: October 1 to 5.
December 13, 14, and 28. February 7 and 8.
June 18 to September 23.

OPERATION:

Located, constructed and operated by the Los Angeles County Flood Control District in co-operation with the U.S.G.S. Water Resources Branch.

F. C. D. FORM 104 800 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F83R

DISCHARGE MEASUREMENTS OF RIO HONDO SLOUGH

AT San Gabriel Boulevard DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
102	10-6	Brewster	13.0	12.52	1.71	0.42	21.		.6	7	0	945A / 1000A	FC 8
103	10-13	"	13.0	13.05	1.71	0.48	22.		.6	7	0	918A / 930A	"
104	10-20	"	13.0	12.62	1.62	0.44	20.		.6	7	0	915A / 930A	"
105	10-27	"	13.0	13.31	1.69	0.42	22.		.6	7	0	930A / 942A	"
106	11-3	"	13.0	13.06	1.74	0.43 / 6.73	23.		.6	7	0	930A / 947A	"
107	11-10	"	13.0	13.93	1.68	6.73	23.		.6	7	0	940A / 952A	"
108	11-17	"	13.0	12.87	1.73	6.75	22.		.6	7	0	1010A / 1020A	"
109	11-23	"	13.0	12.81	1.65	6.75	21.		.6	7	0	1017A / 1029A	"
110	12-1	"	13.0	12.95	1.61	6.64	21.		.6	7	0	950A / 1005A	"
111	12-8	"	14.0	14.48	1.61	6.62	23.		.6	7	0	945A / 1000A	"
112	12-15	"	13.0	14.13	1.77	6.69	25.		.6	7	0	1125A / 1140A	"
113	12-22	Brewster-Pettis	13.0	15.10	1.84	6.78	28.		.6	7	0	1130A / 1140A	"
114	12-29	Brewster	14.0	14.28	1.71	6.67	24.		.6	7	0	1055A / 1110A	"
115	1-5	Brougham Brewster	14.0	14.44	1.68	6.66	24.		.6	7	0	935A / 945A	"
116	1-12	Brewster	14.0	13.88	1.64	6.67	23.		.6	7	0	1002A / 1014A	"
117	1-19	"	14.0	13.92	1.62	6.66	22.		.6	7	0	1050A / 1105A	"
118	1-26	"	14.0	14.12	1.66	6.68	23.		.6	7	0	1010A / 1025A	"
119	2-2	"	14.0	13.88	1.61	6.66	22.		.6	7	0	1025A / 1040A	"
120	2-9	"	14.0	14.32	1.71	6.68	24.		.6	7	0	958A / 1010A	"
121	2-16	"	14.0	14.56	1.61	6.66	23.		.6	7	0	945A / 955A	"
122	2-23	"	14.0	14.60	1.52	6.62	22.		.6	7	0	1020A / 1032A	"
123	3-2	"	14.0	14.64	1.43	6.62	21.		.6	7	0	1115A / 1130A	"
124	3-9	"	14.0	13.40	1.56	6.61	21.		.6	7	0	1000A / 1015A	"
125	3-16	"	14.0	14.04	1.52	6.60	21.		.6	7	0	1005A / 1017A	"
126	3-23	Brewster	14.0	14.16	1.56	6.66	22.		.6	7	0	1005A / 1017A	FC 8
127	3-30	"	14.0	14.48	1.48	6.67	21.		.6	7	0	928A / 940A	"
128	4-6	"	14.0	14.48	1.54	6.67	22.		.6	7	0	918A / 930A	"
129	4-13	"	14.0	14.08	1.49	6.72	21.		.6	7	0	930A / 942A	"
130	4-20	"	12.0	13.62	1.75	6.69	24.		.6	6	0	920A / 932A	"
131	4-27	"	11.0	13.00	1.83	6.70	24.		.6	6	0	900A / 912A	"
132	5-4	"	11.0	12.59	1.82	6.68	23.		.6	5	0	910A / 920A	"
133	5-11	"	12.0	13.28	1.71	6.68	23.		.6	6	0	915A / 930A	"
134	5-18	"	14.0	14.68	1.60	6.68	23.		.6	7	0	945A / 957A	"
135	5-25	"	14.0	13.84	1.55	6.68	22.		.6	7	0	905A / 917A	"
136	6-1	"	13.0	13.36	1.68	6.66	23.		.6	7	0	926A / 938A	"
137	6-8	"	13.0	12.87	1.75	6.67	23.		.6	7	0	1003A / 950A	"
138	6-14	"	13.0	13.59	1.74	6.65	24.		.6	7	0	950A / 1001A	"
139	6-21	Lindsay-Wright	17.0	28.20	0.67	6.66	19.		.6	6	0	1045A / 1054A	FC 28
140	6-29	Brewster	14.0	13.24	1.55	6.68	20.		.6	7	0	927A / 940A	FC 8
141	7-6	"	13.0	13.88	1.61	6.83	22.		.6	7	0	900A / 913A	"
142	7-13	"	13.0	13.78	1.60	7.10	22.		.6	7	0	900A / 910A	"
143	7-20	"	13.5	14.20	1.56	7.10	22.		.6	7	0	910A / 922A	"
144	7-27	"	13.0	13.78	1.71	6.68	24.		.6	7	0	930A / 945A	"
145	8-3	"	14.0	13.90	1.55	6.78	22.		.6	7	0	905A / 920A	"
146	8-10	"	14.0	12.60	1.57	6.78	20.		.6	7	0	935A / 950A	"
147	8-17	"	13.0	13.19	1.53	6.78	20.		.6	7	0	830A / 845A	"
148	8-24	"	14.0	12.76	1.52	6.50	19.		.6	7	0	930A / 945A	"
149	8-31	"	14.0	12.20	1.53	6.91	19.		.6	7	0	930A / 945A	"
150	9-7	Brewster	14.0	12.72	1.52	6.57	19.		.6	7	0	915A / 930A	FC 8
151	9-14	"	13.0	12.37	1.59	6.73	20.		.6	7	0	922A / 934A	"
152	9-21	"	13.0	11.44	1.68	6.70	19.		.6	7	0	855A / 905A	"
153	9-28	"	14.0	14.76	1.74	6.67	26.		.6	7	0	930A / 940A	"

F. C. Dist. Form 59

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

Sta. No. F83R

Daily discharge, in second-feet of RIO HONDO SLOUGH at San Gabriel Boulevard, for the year ending September 30, 19 39

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	E 20	23	20	24	23	21	21	23	22	20	22	19
2	E 20	23	20	24	22	21	22	23	22	21	22	19
3	E 21	23	22	24	26	20	22	22	22	21	22	19
4	E 21	22	22	24	26	20	22	22	22	22	22	19
5	E 22	22	23	27	25	21	22	22	22	22	22	19
6	22	23	23	26	25	21	22	22	22	22	21	19
7	22	23	23	25	E 25	21	23	24	22	22	21	19
8	22	23	23	25	E 25	21	23	24	22	22	20	19
9	24	23	23	24	25	21	23	22	22	22	20	19
10	24	24	24	23	25	22	22	22	22	22	20	19
11	24	23	24	23	25	21	22	22	23	22	20	20
12	23	23	24	23	25	21	22	22	23	22	20	20
13	22	23	E 25	23	25	21	21	23	23	22	20	20
14	22	23	E 25	22	25	22	21	24	23	22	20	20
15	22	22	26	23	24	22	22	24	23	22	20	20
16	21	22	26	23	24	21	22	24	23	22	20	20
17	20	22	25	22	23	21	22	24	23	22	20	20
18	20	21	43	22	23	22	22	23	E 22	22	20	19
19	20	21	47	22	23	22	22	22	21	22	20	19
20	20	21	40	22	24	22	24	22	20	22	20	19
21	20	21	34	28	23	22	22	22	19	22	19	19
22	20	21	28	27	23	22	23	22	19	22	19	19
23	21	21	27	25	22	22	24	21	19	23	19	E 19
24	21	22	25	25	22	22	23	21	19	23	19	25
25	22	22	25	24	22	22	23	22	20	24	19	77
26	22	22	24	24	22	22	24	23	20	24	19	33
27	22	23	24	23	22	24	24	23	20	24	19	27
28	22	22	E 24	23	21	22	23	23	20	24	19	25
29	22	20	24	23		22	24	24	20	24	19	24
30	22	20	24	24		22	24	24	20	23	19	25
31	23		24	24		21		25		23	19	
	669	664	811	741	665	667	676	706	640	692	621	680
MEAN	21.6	22.1	26.2	23.9	23.8	21.5	22.5	22.8	21.3	22.3	20.0	22.7
ACRE-FEET	1330	1320	1610	1470	1320	1320	1341	1400	1270	1370	1230	1350

Remarks:

YEAR OR PERIOD — MEAN 22.5 — ACRE-FEET 16320

STATION F82C-R

RUBIO WASH at Glendon Way

LOCATION:

On the left (east) side of Rubio Channel 10 feet south of the westerly extension of Glendon Way, Rosemead.

DRAINAGE AREA:

13.4 square miles.

CHANNEL AND CONTROL:

Channel-rectangular concrete 46.1 ft. wide by 10.5 ft. deep to bottom of invert.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows measured from footbridge at station.

RECORDER:

Installed November 6, 1936, in a F.C. standard type house over a 4 ft. x 3 ft. concrete well. An H.C.F. continuous recorder was in service from October 1, 1938 to September 30, 1939.

REGULATION:

Flow partially regulated by Los Flores and Rubio Debris Basins.

DIVERSIONS:

None.

RECORDS AVAILABLE:

November 6, 1936 to September 30, 1939.
(For previous records on Rubio Wash see Stations F82R, F107R, F82B-R in previous reports.)

EXTREMES OF DISCHARGE:

1938-1939
Maximum 1725 second-feet, January 5.
Minimum no flow at various times.
1930-1939 (For Stations F82R, F107R, and F82B-R and F82C-R)
Maximum 2400 second-feet, estimated, March 2, 1938.
Minimum no flow at times each year.

ACCURACY:

Fair.
Estimated: November 26 to December 1.

OPERATION:

Located and operated by the Los Angeles County Flood Control District; the stilling well and communication channel were constructed by U.S. Engineer Department.

F. C. D. FORM 104 800 6-38

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F82C-R

DISCHARGE MEASUREMENTS OF RUBIO WASH

AT NEAR Glendon Way DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Forced Diff.	Method	Mean Sec. No.	G. Ht. Change Total	BEGIN END	METER NO.
32	12-18	Haig-Tscharner	45.8	18.64	9.26	.55	173.		Surf & .6	14	-.02 +.04	230A 248A	FC 38
33	12-19	" "	27.	4.00	6.11	.22	24.		.6	9	-.01	1258P 105P	"
34	1-21	" "	45.	15.21	8.51	.51	129.		.6	12	-.06	828A 841A	FC 38
35	1-21	" "	45.2	17.0	7.40	.58	126.		.6	8	-.04	1106A 1117A	Pitot Tube
36	1-21	" "	45.2	23.87	12.04	.72	287.		.6	8	0	512P 523P	FC 38
37	3-9	Haig	38.	11.40	4.20	.47	48.		.6	6	-.02	846P 905P	"
38	3-9	Haig-Tscharner	45.	15.09	8.50	.59	128.		Vert Vel	6	-.08	1053P 1107P	Pitot Tube
39	3-9	" "	43.	11.37	6.92	.51	79.		"	6	-.08	1111P 1122P	"
40	3-9	" "	42.	8.8	7.84	.45	69.		Surf Float	1	0	1130A	Float
41	3-27	" "	46.2	17.49	8.60	.56	150.		Vert Vel	11	-.09	805A 822A	Pitot Tube
42	3-27	" "	40.	16.2	8.2	.48	133.		Surf Float	2	-	825A 826A	Float
43	3-27	" "	40.	11.65	8.41	.38	98.		.6	8	-.01	831A 839A	FC 38

F. C. Dist. Form 58

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

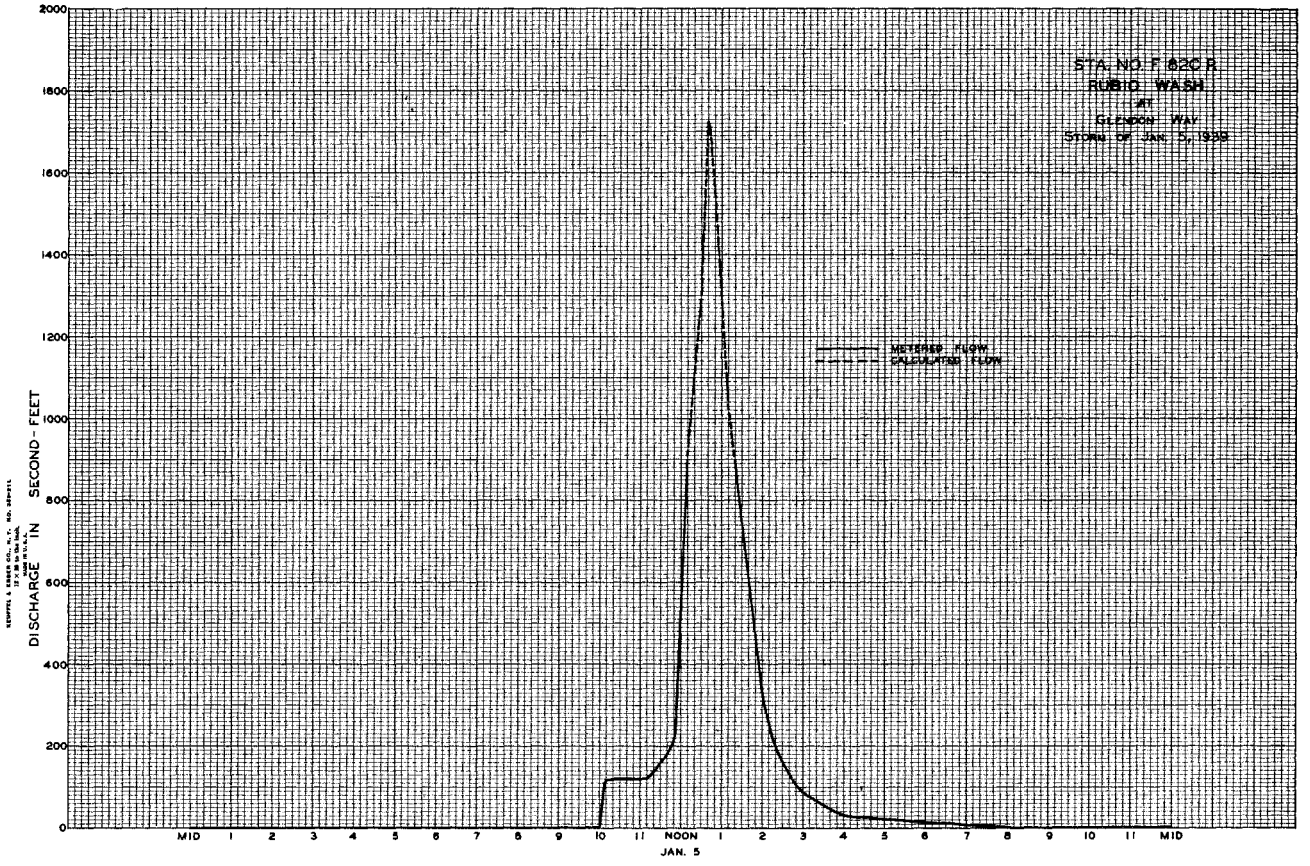
Sta. No F82C-R

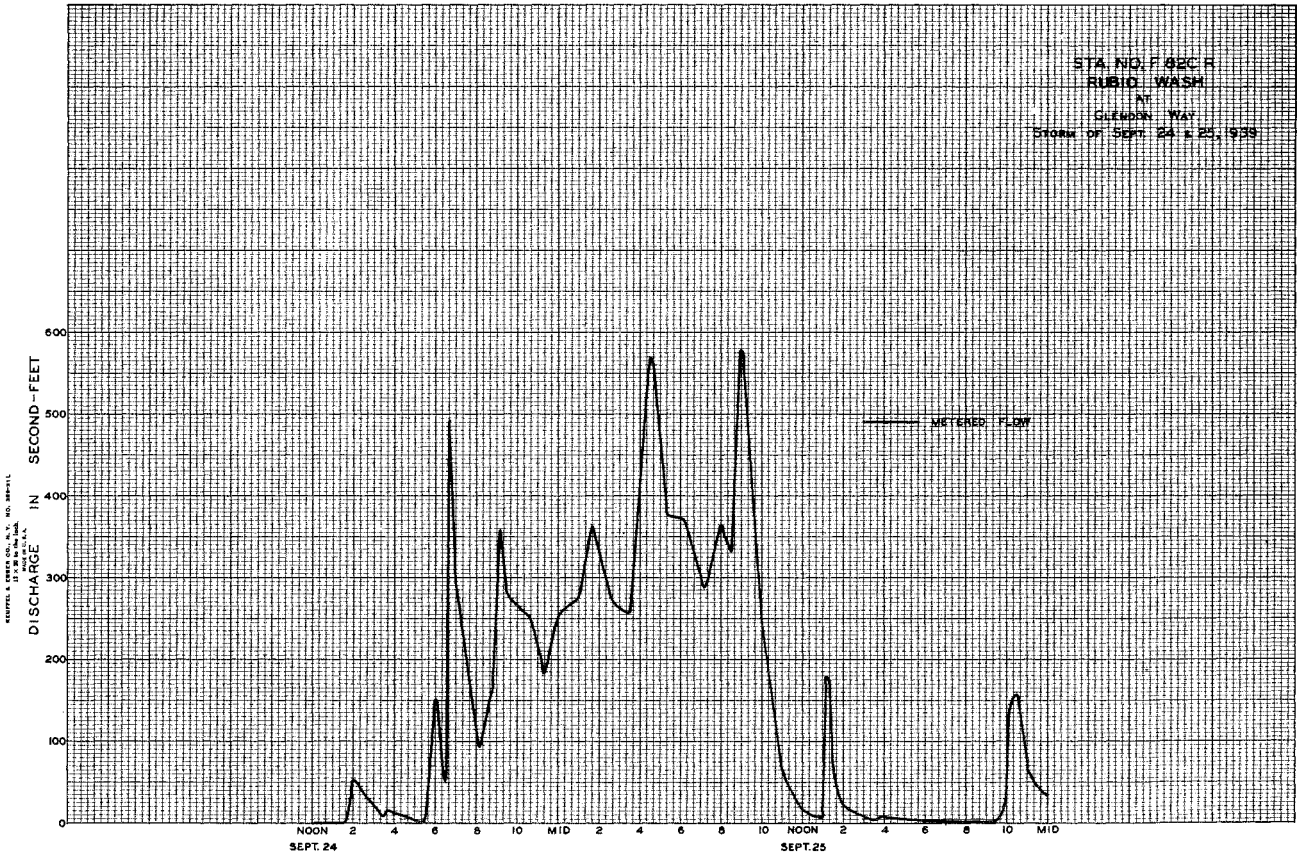
Daily discharge, in second-feet of RUBIO WASH at Glendon Way for the year ending September 30, 19 39

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	+	0.2	E +	+	+	0.1	3.0	3.6	0	+	+	+
2	+	0.1	+	+	+	0.1	8.5	2.6	0	+	+	0
3	+	+	+	+	3.5	0.1	2.4	1.0	0	0	+	0
4	+	+	+	+	6	0.1	1.7	1.2	0	0	+	0
5	+	+	+	1.1.1	0.1	0.1	0.4	+	0	+	+	+
6	+	+	+	1.8	+	0.1	0.1	+	0	+	+	+
7	+	+	+	+	0.2	0.2	0	0	0	+	+	+
8	+	+	+	+	13	0.1	+	+	+	+	+	+
9	+	+	+	+	0.1	2.4	+	0.2	0	+	+	0
10	+	+	+	+	1.6	4.3	+	+	+	+	+	+
11	+	+	+	+	0.1	+	+	+	0	+	+	+
12	+	+	+	+	+	+	0.2	+	0	0	+	+
13	+	+	+	+	+	+	4.0	4.0	+	0	0	+
14	0.1	+	2.1	+	0.1	+	2.4	1.2	+	0	0	0
15	0.2	+	1.3.7	+	0.1	+	+	0.2	0	0	0	0
16	0.1	+	0.4	+	+	+	+	0.2	0	0	0	0
17	+	+	2.0	+	+	+	3.0	0.1	0	+	+	+
18	+	+	2.5.0	+	0.4	+	2.2	+	0	+	+	0
19	+	+	5.9	+	0.4	+	1.3	+	+	+	+	+
20	+	+	6.8	+	0.2	+	0.1	+	0	+	+	+
21	+	+	1.1	7.4	0.2	2.0	0.1	+	+	+	0	+
22	0	0.1	+	0.8	0.2	0.6	+	+	+	+	0	+
23	+	0.1	0	+	0.2	2.1	+	+	+	+	0	+
24	+	+	0	+	0.2	2.0	+	+	0	+	0	6.0
25	+	+	0	+	0.2	+	0.1	+	0	+	0	1.7.0
26	+	E +	0	+	0.2	1.2	+	0.1	0	0.1	0	2.9
27	+	E +	+	+	0.1	1.5	1.0	+	+	+	0	+
28	+	E +	0.2	+	0.1	2.1	0.5	+	+	0.1	0	+
29	+	E +	0.2	+		+	+	+	+	+	0	+
30	0.1	E +	+	1.9		+	+	+	+	+	0	+
31	0.2		0	0.4		1.1		+		+		
	0.7	0.5	5.5.6.9	2.0.7.0	5.8.7	6.6.1	3.1.0	1.4.4	+	0.2	+	2.5.9
MEAN	.02	.02	18.0	6.67	2.10	2.13	1.03	.46	+	.01	+	8.6
ACRE-FEET	1.4	1.0	1105	411	116	131	61	29	+	.40	+	514

Remarks: + indicates discharge 0.05 sec. ft. or less.
E indicates discharge estimated - see station description.

YEAR OR PERIOD MEAN 3.29
ACRE-FEET 2370


STA. NO. F 82C R
RUBIO WASH
AT
GLENDON WAY
STORM OF JAN. 5, 1938
METERED FLOW
CALCULATED FLOW
DISCHARGE IN SECOND-FEET
2000
1800
1600
1400
1200
1000
800
600
400
200
0
MID 1 2 3 4 5 6 7 8 9 10 11 NOON 1 2 3 4 5 6 7 8 9 10 11 MID
JAN. 5


STA. NO. F 82C R
RUBIO WASH
AT
GLENDON WAY
STORM OF SEPT. 24 & 25, 1939
METERED FLOW
DISCHARGE IN SECOND-FEET
600
500
400
300
200
100
0
NOON 2 4 6 8 10 MID 2 4 6 8 10 NOON 2 4 6 8 10 MID
SEPT. 24
SEPT. 25

STATION F151R

SAN ANTONIO CREEK at mouth of canyon

LOCATION:

On the right (west) bank, upstream from all headgates of Pomona Valley Protective Association spreading grounds and about 4 miles northeast of Claremont.

DRAINAGE AREA:

28.0 square miles.

CHANNEL AND CONTROL:

Channel-gravel and boulders.
No artificial control. A former rubble control was buried during the March 1938 storm.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
No facilities for measuring high flows.

RECORDER:

Installed February 20, 1931 in an F. C. standard type house over a 21 inch diameter corrugated iron pipe stilling well.
An H.O.F. continuous recorder was in service from October 1, 1938 to September 30, 1939.

REGULATION:

None.

DIVERSIONS:

Two diversions for irrigation.

RECORDS AVAILABLE:

February 20, 1931 to September 30, 1939.

EXTREMES OF DISCHARGE:

1938-1939
Maximum 282 second-feet, September 25.
Minimum no flow for several months.
1930-1939
Maximum 23400 second-feet, estimated, March 2, 1938.
Minimum no flow for several months each year.

ACCURACY:

Fair.

OPERATION:

Located, constructed and operated by the Los Angeles County Flood Control District.

F. C. D. FORM 104 500 6-38

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F151R

DISCHARGE MEASUREMENTS OF SAN ANTONIO CREEK

AT OR NEAR Mouth of Canyon DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Forest Diff.	Diff.	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
175	12-15	C. Brewster	16.0	11.44	1.57	10.32	18.		.6	7	-.01	710A / 720A	FC 8
176	12-16	"	6.0	4.10	.85	9.92	3.5		.6	5	-.01	940A / 950A	"
177	12-17	"	6.0	3.55	.70	9.84	2.5		.6	6	0	350P / 400P	"
178	12-18	C. Brewster-Pettis	14.0	13.50	2.34	10.60	32.		.6	6	0	815A / 825A	"
179	12-19	" "	34.0	39.68	4.72	11.25	187.		.6	8	-.30	1250A / 110A	"
180	12-19	" "	14.0	14.90	4.48	10.20	67.		.6	7	-.04	830A / 845A	"
181	12-19	" "	10.0	8.65	4.08	9.88	35.		.6	6	-.01	230P / 245P	"
182	12-20	C. Brewster-Pettis	11.0	9.10	3.55	9.82	32.		.6	6	-.01	930A / 940A	FC 8
183	12-20	" "	11.0	9.10	3.51	9.80	32.		.6	6	0	355P / 405P	"
184	12-21	C. Brewster	9.0	3.97	4.41	9.70	18.		.6	5	0	110P / 120P	"
185	12-22	"	8.0	3.80	3.64	9.57	14.		.6	4	0	755A / 805A	"
186	12-23	"	9.0	2.84	2.66	9.42	7.6		.6	5	0	900A / 910A	"
187	12-25	"	4.0	.85	3.33	9.45	2.8		.6	4	0	1030A / 1036A	"
188	12-27	"	5.0	1.08	3.33	9.44	3.6		.6	5	0	900A / 906A	"
189	12-27	"	10.0	2.42	2.89	9.44	7.0		.6	5	-.01	930A / 940A	"
190	12-27	"	5.0	.96	2.04	9.25	2.0		.6	5	0	1050A / 1100A	"
191	12-29	"	4.0	.82	1.58	9.27	1.3		.6	4	0	440A / 446A	"
192	1-3	"	4.0	.92	1.57	9.27	1.4		.6	4	0	1134A / 1140A	"
193	1-5	Brewster-Pettis	12.0	9.50	4.91	10.04	47.		.6	6	-.02	518P / 530P	"
194	1-6	Brewster	9.0	2.09	2.91	9.50	6.1		.6	5	0	400P / 410P	"
195	1-8	"	5.0	1.09	2.20	9.33	2.4		.6	5	0	1115A / 1125A	"
196	1-10	"	5.0	1.24	1.29	9.32	1.6		.6	5	0	944A / 950A	"
197	1-12	"	4.0	.70	2.00	9.28	1.4		.6	4	0	435P / 440P	"
198	1-16	"	4.0	.80	1.50	9.28	1.2		.6	4	0	1024A / 1030A	"
198	1-16	Brewster	4.0	.80	1.50	9.28	1.2		.6	4	0	1024A / 1030A	FC 8
199	1-19	"	4.0	.88	1.14	9.24	1.0		.6	4	0	425P / 430P	"
200	1-21	"	10.0	3.48	2.41	9.55	8.4		.6	6	0	125P / 135P	"
201	1-23	Brewster-Pettis	5.0	1.10	2.00	9.30	2.2		.6	5	0	932A / 940A	"
202	1-26	Brewster	5.0	1.11	1.53	9.29	1.7		.6	4	0	525P / 530P	"
203	2-2	"	4.0	.86	1.28	9.34	1.1		.6	4	0	458P / 505P	"
204	2-3	Brewster-Pettis	6.0	1.65	1.76	9.39	2.9		.6	4	0	1221P / 1230P	"
205	2-7	Brewster	5.0	1.20	1.58	9.37	1.9		.6	5	0	1023A / 1030A	"
206	2-9	"	5.0	1.52	1.58	9.41	2.4		.6	5	0	412P / 420P	"
207	2-14	"	5.0	1.42	1.34	9.35	1.9		.6	5	0	1203P / 1212P	"
208	2-16	"	5.0	1.18	1.35	9.32	1.6		.6	5	0	350P / 356P	"
209	2-21	"	5.0	1.24	1.45	9.34	1.8		.6	5	0	1057A / 1105A	"
210	2-23	"	5.0	1.26	1.11	9.32	1.4		.6	5	0	435P / 443P	"
211	2-28	"	7.0	2.42	1.86	9.50	4.5		.6	5	0	1115A / 1123A	"
212	3-2	"	8.0	2.48	1.69	9.50	4.2		.6	6	0	440P / 450P	"
213	3-7	"	5.0	1.10	1.09	9.33	1.2		.6	5	0	124P / 130P	"
214	3-9	"	5.0	1.24	.89	9.32	1.1		.6	5	0	455P / 502P	"
215	3-14	"	4.0	.86	.99	9.29	.85		.6	4	0	125P / 132P	"
216	3-16	"	4.0	.80	.72	9.25	.60		.6	4	0	415P / 420P	"
217	3-21	"	11.0	4.37	2.98	9.65	13.		.6	7	0	240P / 255P	"
218	3-27	Brewster-Pettis	4.0	.74	.55	9.18	.41		.6	4	0	925A / 930A	"
219	4-13	Brewster	4.0	.82	.67	9.23	.55		.6	4	0	430P / 435P	"
220	4-20	"	3.0	.50	.70	9.12	.35		.6	3	-.01	452P / 458P	"
221	9-25	"	27.0	28.32	7.83	11.26	222.		.6	6	-.03	750A / 800A	"
222	9-25	Brewster-Pettis	Two Channels			10.80	213.		.6	14	0	240P / 255P	FC8
223	9-26	Brewster	24.0	12.66	4.49	10.00	57.		.6	7	0	330P / 345P	"
224	9-27	"	16.0	5.78	4.62	9.86	27.		.6	5	0	220P / 230P	"
225	9-29	"	12.0	3.00	2.79	9.92	8.5		.6	6	0	755A / 805A	"

F. C. Dist. Form 53

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

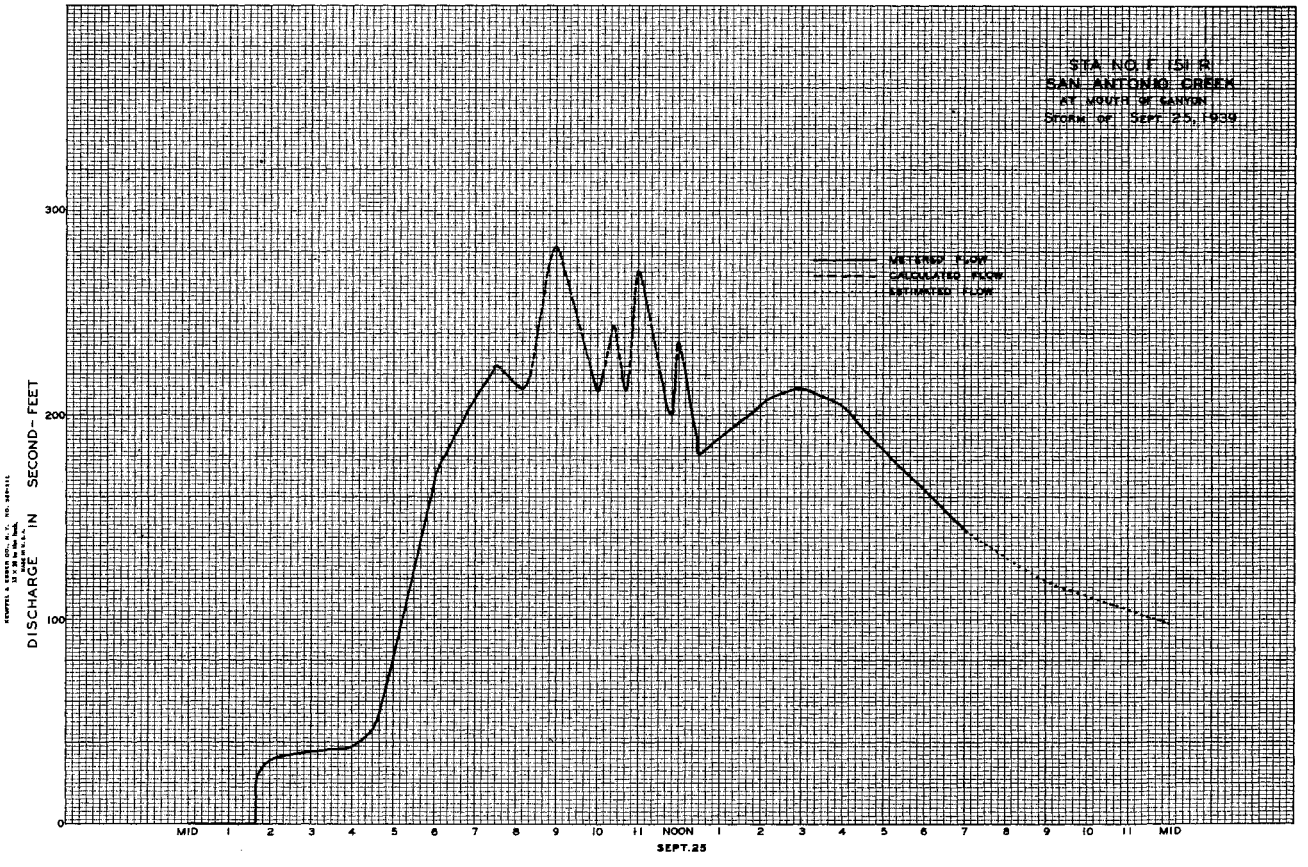
Sta. No F151R

Daily discharge, in second-feet of SAN ANTONIO CREEK at mouth of canyon, for the year ending September 30, 19 39

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0	1.4	1.4	4.5	0	0	0	0	0	0
2	0	0	0	1.5	1.2	4.5	0.1	0	0	0	0	0
3	0	0	0	1.4	3.4	5	0	0	0	0	0	0
4	0	0	0	1.4	2.9	5	0	0	0	0	0	0
5	0	0	0	2.8	2.5	2.9	0	0	0	0	0	0
6	0	0	0	6.5	2.1	1.5	0	0	0	0	0	0
7	0	0	0	5	2.0	1.4	0	0	0	0	0	0
8	0	0	0	2.5	4.5	1.2	0	0	0	0	0	0
9	0	0	0	1.7	2.6	1.5	0	0	0	0	0	0
10	0	0	0	1.5	2.5	2.0	0	0	0	0	0	0
11	0	0	0	1.5	2.5	1.2	0	0	0	0	0	0
12	0	0	0	1.6	2.1	1.2	+	0	0	0	0	0
13	0	0	0	1.4	2.1	1.1	0.4	0	0	0	0	0
14	0	0	0	1.2	2.0	1.0	1.9	0	0	0	0	0
15	0	0	4.4	1.2	1.7	0.9	4.8	0	0	0	0	0
16	0	0	3.7	1.1	1.7	0.8	5	0	0	0	0	0
17	0	0	3.2	1.0	1.8	0.8	5	0	0	0	0	0
18	0	0	2.3	1.0	1.8	0.8	4.8	0	0	0	0	0
19	0	0	6.4	1.1	2.0	1.0	3.1	0	0	0	0	0
20	0	0	3.2	1.2	1.8	5.5	0.7	0	0	0	0	0
21	0	0	1.8	4.0	1.8	1.3	+	0	0	0	0	0
22	0	0	1.1	2.6	1.6	5.5	0.1	0	0	0	0	0
23	0	0	6.5	2.1	1.5	0.4	0.2	0	0	0	0	0
24	0	0	3.2	2.3	1.5	0	0.1	0	0	0	0	0
25	0	0	3.2	2.3	1.8	0	0	0	0	0	0	1.8
26	0	0	4.8	2.1	3.7	0	0	0	0	0	0	6.4
27	0	0	1.7	1.7	4.0	0.4	0	0	0	0	0	28
28	0	0	1.2	1.7	4.5	+	0	0	0	0	0	25
29	0	0	1.4	1.4		0	0	0	0	0	0	10
30	0	0	1.6	1.7		0	0	0	0	0	0	22
31	0		1.4	1.5		0		0		0	0	
	0	0	184.3	866	65.0	63.2	26.1	0	0	0	0	297
MEAN	0	0	5.95	2.79	2.32	2.04	.87	0	0	0	0	9.9
ACRE-FEET	0	0	366	172	129	125	52	0	0	0	0	589

Remarks: + indicates discharge 0.05 sec. ft. or less.

YEAR OR PERIOD — MEAN 1.98 — ACRE-FEET 1430



STATION F209R

SAN GABRIEL RIVER W. FORK below S. G. Dam #2

LOCATION:

On the left (northeast) bank of the West Fork of the San Gabriel River about 7 miles above junction of the East and West Forks and 1/2 mile below San Gabriel Dam No. 2.

DRAINAGE AREA:

41.0 square miles.

CHANNEL AND CONTROL:

Channel-sand, gravel and boulders.
No artificial control until November 21, 1936, when the channel was improved and an artificial control was constructed of material from the channel (sand, gravel and boulders). At several subsequent times during the 1936-1937, 1937-1938 water years work was done on the control.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows measured from cable car below station.

RECORDER:

Installed December 8, 1933. Washed out in the March 2, 1938 storm.
Reinstalled March 10, 1938 in a temporary house over the damaged stilling well. Removed May 30, 1938.
Installed July 8, 1938 in a new F. C. standard type concrete house over a 4 ft. x 4 ft. concrete well in the same location as the old well.
An Au continuous recorder was in service from October 1, 1938 to September 30, 1939.

REGULATION:

Flow partially regulated by the San Gabriel Dam No. 2.

DIVERSIONS:

None.

RECORDS AVAILABLE:

May 26, 1932 to December 8, 1933 stream measurements only.
Recorder records December 8, 1933 to February 21, 1938; March 10, 1938 to May 30, 1938; and July 8, 1938 to September 30, 1939.

EXTREMES OF DISCHARGE:

1938-1939
Maximum 1190 second-feet September 25.
Minimum not determined.
1933-1939
Maximum 25000 second-feet, estimated, March 2, 1938.
Minimum + several times.

ACCURACY:

Fair.
Communication to stilling well frequently obstructed by mud due to sluicing operations at San Gabriel Dam No. 2.
Estimated by comparison; December 13 to 15; September 17 to 19.
Estimated by interpolation and extrapolation; December 19,20, and 28 to January 2, January 7,8 and 12; March 16 and 17; May 3; August 28 to September 1; September 13 to 16.
Interpolated between measurements; November 1 to December 12; January 13 to 23; May 4 to August 24.

OPERATION:

Located, constructed and operated by the Los Angeles County Flood Control District, for measuring outflow from San Gabriel Dam #2.

F. C. D. FORM 104 500 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F209R

DISCHARGE MEASUREMENTS OF SAN GABRIEL RIVER - WEST FORK

AT below San Gabriel Dam No. 2 DURING THE YEAR ENDING SEPTEMBER 30, 1939

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Factor Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
537	10-4	Godfrey	10.0	2.26	2.40	5.98	5.5		.6	9	-	1040A / 1055A	FC 20
538	10-7	"	3.2	.48	1.16	5.71	.55		Float	4	-	1140A / 1150A	-
539	10-11	"	2.0	.56	1.46	5.74	.80		.6	4		1120A / 1130A	FC 20
540	10-14	"	2.4	.71	1.21	5.74	.85		.6	4		1040A / 1050A	"
541	10-15	"	2.6	.56	1.39	5.75	.80		.6	4		225P / 235P	"
542	10-21	"	2.3	.50	1.50	5.73	.75		.6	5		1140A / 1150A	"
543	10-24	Godfrey	14.5	4.96	2.20	5.96	11.		.6	5		910A / 920A	FC 20
544	10-24	"	13.3	6.11	1.78	5.97	11.		.6	8		350P / 405P	"
545	10-24	"	13.3	6.55	1.82	6.10	12.		.6	8		450P / 505P	"
546	10-25	"	14.0	10.6	2.51	6.21	27.		.6	9		830A / 845A	"
547	10-26	"	14.0	10.9	2.14	6.16	23.		.6	9		1110A / 1130A	"
548	10-27	"	14.5	10.9	1.68	6.12	18.		.6	10		350P / 415P	"
549	10-28	"	14.0	10.0	1.70	6.08	17.		.6	9		850A / 905A	"
550	10-28	"	14.5	14.5	2.18	6.27	32.		.6	10		950A / 1010A	"
551	11-1	"	18.0	4.20	1.59	6.36	6.7		.6	9		350P / 405P	"
552	11-4	"	11.0	2.54	1.90	6.43	5.0		.6	7		1130A / 1150A	"
553	11-7	"	8.0	4.50	.97	6.43	4.4		.6	5		310P / 325P	"
554	11-11	"	8.0	3.17	1.39	6.46	4.4		.6	8		1050A / 1110A	"
555	11-16	"	8.0	4.20	1.00	6.30	4.2		.6	8		850A / 910A	"
556	11-18	"	8.0	3.78	1.99	6.44	5.3		.6	8		145P / 200P	"
557	11-21	"	8.0	3.22	1.35	6.63	4.4		.6	8		235P / 250P	"
558	11-25	"	8.0	3.22	1.69	6.52	5.2		.6	8		1020A / 1040A	"
559	11-30	DeVore	9.5	2.94	1.74	6.38	5.1		.6	9		1107A / 1119A	"
560	12-2	"	9.0	2.64	1.71	6.40	4.5		.6	7	-.01	1136A / 1145A	FC 32
561	12-5	Godfrey	7.3	2.38	2.15	6.46	5.1		.6	7		1117A / 1127A	FC 20
562	12-9	DeVore	8.2	2.20	2.40	6.46	5.3		.6	8	0	1014A / 1025A	FC 32
563	12-12	Godfrey	7.9	2.61	2.22	6.43	5.8		.6	8		1130A / 1145A	FC 20
564	12-15	DeVore-DeVore	3.0	.66	.64	6.51	.42		.6	4		905A / 910A	FC 32
565	12-19	DeVore	10.0	5.22	2.64	6.69	14.		.6	5		405A / 414A	"
566	12-19	DeVore-Godfrey	56.0	89.2	5.33	8.47	475.		.6	7		834A / 850A	"
567	12-20	DeVore-DeVore	16.5	8.60	1.23	-	11.		.6	9	-	758A / 802A	"
568	12-20	" "	46.3	53.4	2.12	6.92	113.		.6	10		842A / 853A	"
569	12-20	DeVore	46.8	62.52	2.31	7.16	144.		.6	10	0	1033A / 1044A	"
570	12-21	DeVore-DeVore	47.5	64.86	2.25	7.18	146.		.6	11	0	849A / 901A	"
571	12-21	" "	47.1	55.95	2.06	6.96	115.		.6	10	0	355P / 405P	"
572	12-22	DeVore	47.3	53.68	1.94	6.89	104.		.6	10	0	832A / 845A	"
573	12-22	"	38.0	24.19	1.37	6.25	32.		.6	7	0	242P / 250P	"
574	12-22	"	41.5	31.07	1.58	6.47	49.		.6	9	-.04	325P / 333P	"
574A	12-24	"	41.0	30.31	1.44	6.40	44.		.6	9	0	1057A / 1117A	FC 32
575	12-27	Godfrey	38.2	25.9	1.27	6.28	33.		.6	9	0	1025A / 1045A	FC 20
575A	12-29	DeVore	38.2	25.3	1.30	6.18	33.		.6	11	0	945A / 1006A	FC 32
576	1-3	Godfrey	35.5	20.15	1.14	6.16	23.		.6	7	0	1040A / 1053A	FC 20
577	1-3	"	50.0	55.95	2.12	6.99	118.		.6	10	-.05	120P / 150P	"
578	1-3	"	52.0	85.2	2.78	7.79	237.		.6	6	-.02	300P / 312P	"
579	1-4	DeVore	50.0	90.1	2.72	7.65	246.		.6	10	0	845A / 906A	FC 32
580	1-5	DeVore-DeVore	47.7	87.3	2.38	7.52	208.		.6	11	0	855A / 908A	"
581	1-6	DeVore	48.0	102.2	2.48	7.80	253.		.6	12	0	1012A / 1030A	"
582	1-7	DeVore-DeVore	42.0	35.6	1.51	6.50	54.		.6	9	0	732A / 744A	"
583	1-8	DeVore	39.0	32.4	1.41	6.38	46.		.6	9	-	829A / 842A	FC 32
584	1-9	Godfrey	38.0	32.2	1.39	6.37	45.		.6	8	0	755A / 815A	FC 20
585	1-9	"	34.5	21.4	.84	6.04	18.		.6	7	0	1025A / 1040A	"
586	1-10	"	34.0	21.4	.72	6.02	15.		.6	7	0	810A / 825A	"
587	1-11	DeVore	32.0	18.0	1.02	6.01	18.		.6	9	0	841A / 854A	FC 32
588	1-12	DeVore-DeVore	33.0	18.5	.86	6.01	16.		.6	9	0	833A / 843A	"
589	1-13	DeVore	12.0	4.47	.88	5.62	3.9		.6	8	0	824A / 836A	"
590	1-14	"	5.0	1.60	.79	5.50	1.3		.6	9	-	1015A / 1027A	"
591	1-16	Godfrey	6.0	1.99	.59	5.51	1.2		.6	6	-	855A / 910A	FC 20
592	1-20	DeVore	6.5	1.78	.79	5.52	1.4		.6	6	-	854A / 902A	FC 32
593	1-23	Godfrey	6.3	1.99	.80	5.55	1.6		.6	6	-	1040A / 1050A	FC 20
594	1-27	DeVore	5.0	1.93	.98	5.55	1.9		.6	9	-	927A / 939A	FC 32
595	1-30	Godfrey	6.5	2.06	.85	5.56	1.8		.6	7	-	947A / 1000A	FC 20
596	2-3	DeVore-DeVore	6.7	2.42	.96	5.58	2.3		.6	7	0	1002A / 1011A	FC 32
597	2-6	Godfrey	7.4	3.03	.79	5.59	2.4		.6	7	0	1115A / 1130A	FC 20

F. C. D. FORM 104 500 8-38

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F209R

DISCHARGE MEASUREMENTS OF SAN GABRIEL RIVER - WEST FORK

AT below San Gabriel Dam No. 2 DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
598	2-8	DeVore	39.1	32.7	1.34	6.40	44.		.6	8	0	855A / 905A	FC 32
599	2-9	"	37.7	29.1	1.24	6.28	36.		.6	14	0	1039A / 1101A	"
600	2-10	"	37.6	28.7	1.23	6.26	35.		.6	13	0	129P / 147P	"
601	2-10	"	37.2	27.1	1.22	6.22	33.		.6	8	0	557P / 608P	"
602	2-11	"	40.1	38.0	1.45	6.48	55.		.6	11	0	934A / 952A	"
603	2-12	"	38.7	33.2	1.34	6.37	44.		.6	14	0	919A / 940A	"
604	2-13	Godfrey-Godfrey	38.0	31.4	1.17	6.34	37.		.6	8	0	1025A / 1038A	FC 20
605	2-14	Godfrey	38.1	31.0	1.12	6.30	35.		.6	12	0	850A / 910A	"
606	2-15	DeVore-DeVore	6.0	2.48	.87	5.57	2.2		.6	6	0	952A / 958A	FC 32
607	2-20	Godfrey	5.9	2.66	.63	5.58	1.7		.6	6	0	945A / 1000A	FC 20
608	2-24	DeVore	6.5	2.88	.96	5.59	2.8		.6	10	0	922A / 935A	FC 32
609	2-27	Godfrey	6.0	2.9	.90	5.62	2.6		.6	6	0	1014A / 1022A	FC 20
610	3-3	DeVore	6.4	2.87	1.04	5.63	3.0		.6	6	0	1056A / 1104A	FC 32
611	3-6	Godfrey	6.4	3.37	.82	5.66	2.8		.6	7	0	1010A / 1020A	FC 20
612	3-10	DeVore	7.2	3.47	1.22	5.68	4.2		.6	7	0	849A / 858A	FC 32
613	3-13	Godfrey	7.1	3.61	.98	5.66	3.5		.6	7	0	1010A / 1024A	FC 20
614	3-14	"	49.0	50.7	1.48	6.70	75.		.6	13	0	118P / 142P	"
615	3-14	"	51.5	83.4	1.91	7.32	159.		.6	13	0	315P / 335P	"
616	3-14	"	49.6	92.6	2.04	7.46	188.		.6	13	0	545P / 610P	"
617	3-15	DeVore-Godfrey	49.5	86.0	2.20	7.39	189.		.6	12	0	918A / 934A	FC 32
618	3-15	" "	49.9	98.1	2.68	7.72	262.		.6	8	-.08	1030A / 1040A	FC 20
619	3-15	DeVore-Godfrey	49.2	94.3	2.48	7.63	234.		.6	12	0	1100A / 1116A	"
620	3-16	DeVore	49.6	86.8	2.25	7.48	195.		.6	13	0	734A / 756A	FC 32
621	3-17	"	9.1	4.14	.68	5.60	2.8		.6	8	0	844A / 855A	"
622	3-20	Godfrey	8.4	4.08	.64	5.60	2.6		.6	7	0	1015A / 1027A	FC 20
623	3-24	DeVore	9.2	4.26	.67	5.60	2.8		.6	8	0	816A / 826A	FC 32
624	3-27	Godfrey-DeVore	9.2	4.61	.64	5.63	2.9		.6	9	0	930A / 939A	FC 20
625	3-27	" "	48.3	63.0	1.74	6.94	110.		.6	11	0	456P / 512P	"
626	3-28	Godfrey	47.9	61.3	1.69	6.94	103.		.6	11	0	835A / 855A	"
627	3-29	"	47.9	57.7	1.67	6.88	96.		.6	11	0	820A / 842A	"
628	3-30	DeVore-DeVore	7.8	3.78	.70	5.58	2.6		.6	7	0	800A / 808A	FC 32
629	4-3	Godfrey	6.1	2.9	.59	5.59	1.7		.6	6	0	300P / 310P	FC 20
630	4-7	DeVore	5.3	2.7	.94	5.58	2.5		.6	6	0	817A / 825A	FC 32
631	4-10	Godfrey	5.3	2.60	.92	5.59	2.4		.6	5	0	1020A / 1028A	FC 32
632	4-14	DeVore	5.8	2.86	1.04	5.59	3.0		.6	6	0	909A / 917A	"
633	4-17	Godfrey	5.7	3.27	.89	5.60	2.9		.6	6	0	1033A / 1043A	FC 26
634	4-18	"	49.3	81.2	2.04	7.31	166.		.6	12	0	900A / 922A	FC 26
635	4-18	"	48.5	73.3	1.87	7.16	138.		.6	11	0	1010A / 1027A	"
636	4-18	"	48.6	68.6	1.87	7.08	128.		.6	11	0	1120A / 1132A	"
637	4-19	"	48.1	67.3	1.77	7.03	119.		.6	11	0	820A / 835A	"
638	4-20	DeVore	48.7	62.2	1.95	6.96	121.		.6	11	0	627A / 644A	FC 32
639	4-21	"	48.2	59.4	1.85	6.89	110.		.6	12	0	721A / 739A	"
640	4-22	Godfrey	47.5	56.0	1.80	6.81	101.		.6	11	0	903A / 923A	FC 26
641	4-22	"	49.4	82.1	2.06	7.34	170.		.6	11	0	435P / 455P	"
642	4-24	"	49.2	77.2	1.90	7.23	147.		.6	11	0	842A / 857A	FC 20
643	4-24	"	49.9	96.4	2.29	7.63	221.		.6	11	-.02	135P / 225P	"
644	4-25	DeVore-DeVore	51.1	98.0	2.42	7.65	236.		.6	12	0	645A / 700A	FC 32
645	4-28	DeVore	34.5	20.1	1.15	6.11	23.		.6	11	-.02	554P / 608P	"
646	4-29	"	28.7	16.7	.73	5.84	9.8		.6	11	0	931A / 945A	"
647	4-29	"	7.0	2.58	.68	5.54	1.8		.6	5	-.01	1200N / 1205P	"
648	4-29	DeVore	31.7	18.8	.92	6.05	17.		.6	9	0	1252P / 105P	FC 32
649	5-1	Godfrey	25.0	11.4	.68	5.79	7.7		.6	6	-.01	1003A / 1016A	FC 20
650	5-3	DeVore	49.0	37.8	1.61	-	61.		.6	7	+2.28	215P / 230P	FC 32
651	5-3	"	32.5	10.5	1.41	6.13	15.		.6	8	0	324P / 335P	"
652	5-4	"	20.0	5.15	2.46	6.30	13.		.6	7	0	840A / 851A	"
653	5-11	Godfrey	7.3	3.55	1.84	6.18	6.5		.6	4	-	1045A / 1052A	FC 20
654	5-11	DeVore	11.0	5.27	2.14	6.26	11.		.6	8	-	422P / 434P	FC 32
655	5-14	Godfrey	11.0	3.41	1.61	6.42	5.5	Float		5	-	1050A / 1102A	-
656	5-19	"	6.3	3.50	2.08	6.44	7.2		.6	6	-	825A / 840A	FC 20
657	5-23	"	8.8	3.56	2.50	-	8.9		.6	9	-	856A / 922A	"
658	5-26	"	9.8	3.13	2.11	6.58	6.6		.6	9	-	903A / 917A	"
659	5-31	"	6.4	2.29	2.39	6.78	5.5		.6	6	-	1103A / 1113A	"
660	6-2	"	11.5	2.01	2.62	6.90	5.3	Float		6	-	1004A / 1020A	-
661	6-6	"	8.7	2.02	2.92	7.06	5.9		.6	9	-	1100A / 1113A	FC 20
662	6-9	"	7.8	2.45	2.06	7.18	5.0		.6	7	-	1020A / 1037A	"
663	6-13	"	8.0	2.47	1.73	7.31	4.3		.6	8	-	1125A / 1139A	"
664	6-16	"	9.0	2.09	2.55	7.30	5.3		.6	8	-	938A / 948A	"
665	6-20	"	6.7	1.85	2.21	6.67	4.1		.6	7	-	1150A / 1158A	"
666	6-23	"	6.3	1.89	1.95	6.37	3.7		.6	7	-	838A / 848A	"
667	6-27	"	5.4	1.68	1.68	6.14	2.8		.6	6	-	930A / 940A	"
668	6-30	"	4.4	1.42	1.83	6.08	2.6		.6	4	-	920A / 925A	"
669	7-6	"	5.9	1.62	1.35	6.01	2.2		.6	6	-	950A / 1010A	"
670	7-11	"	5.4	1.54	1.65	6.09	2.5		.6	5	-	900A / 910A	"
671	7-14	"	5.3	1.49	1.66	6.00	2.5		.6	5	-	1040A / 1047A	"
672	7-18	"	5.2	1.58	1.56	5.96	2.5		.6	8	-	940A / 950A	"
673	7-21	"	5.0	1.48	1.50	5.99	2.2		.6	9	-	950A / 1006A	"
674	7-25	"	4.7	1.43	1.42	6.05	2.0		.6	8	-	940A / 957A	"
675	7-28	"	5.6	1.46	1.34	6.08	2.0		.6	9	-	1005A / 1020A	"
676	8-1	"	5.8	1.54	1.10	6.04	1.7		.6	10	-	1035A / 1050A	"
677	8-4	"	6.0	1.49	1.21	5.95	1.8		.6	10	-	1019A / 1033A	"
678	8-8	"	5.7	1.31	1.20	5.99	1.6		.6	9	-	1035A / 1050A	"
679	8-11	Godfrey	4.3	1.03	1.36	5.92	1.4		.6	9	-	1000A / 1016A	FC 20
680	8-15	"	4.0	1.02	1.45	5.96	1.5		.6	8	-	1040A / 1053A	"
681	8-17	DeVore	4.7	.97	1.32	5.92	1.3		.6	8	0	848A / 858A	"
682	8-21	"	4.8	1.10	1.05	5.86	1.2		.6	8	0	810A / 820A	"
683	8-24	"	4.7	1.00	1.24	5.86	1.2		.6	8	0	831A / 843A	"
684	8-28	"	4.7	1.10	1.11	5.84	1.2		.6	8	0	827A / 840A	"
685	9-1	Godfrey	4.4	1.04	1.12	5.85	1.2		.6	9	-	943A / 1004A	"
686	9-6	"	4.4	1.25	.91	5.85	1.1		.6	9	-	918A / 938A	"
687	9-8	"	4.2	1.22	.98	5.85	1.2		.6	9	-	912A / 927A	"
688	9-12	"	4.3	1.04	.98	5.85	1.0		.6	8	-	930A / 950A	"
689	9-15	"	4.5	1.11	1.04	5.85	1.2		.6	9	-	1003A / 1018A	"
690	9-19	"	4.5	.96	1.00	5.84	.95		.6	9	-	920A / 945A	"
691	9-22	"	4.6	1.10	1.00	5.84	1.1		.6	9	-	957A / 1015A	"
692	9-24	"	20.0	6.0	3.10	6.38	19.		.6	4	-	635P / 640P	"
693	9-24	"	49.0	56.8	5.89	7.97	332.		.6	10	+.25	745P / 825P	"
694	9-25	Godfrey-Handt	56.	165.	6.58	9.35	1090.		.6	11	+.26	942A / 1002A	"
695	9-25	" "	55.0	60.9	5.56	7.36	338.		.6	11	-.13	835P / 923P	"
696	9-26	Godfrey	43.0	22.0	2.55	6.26	56.		.6	10	0	845A / 904A	"
697	9-26	"	55.0	55.0	4.88	7.71	268.		.6	11	-.06	1202P / 1216P	"
698	9-27	"	26.0	33.2	.72	6.01	24.		.6	13	0	812A / 837A	"
699	9-27	"	26.5	37.3	.97	6.11	36.		.6	13	0	255P / 315P	"
700	9-29	"	25.0	32.4	1.02	6.07	34.		.6	12	0	1046A / 1112A	"
701	9-30	"	24.0	28.0	.70	5.91	20.		.6	12	0	913A / 1033A	"

F. C. Dist. Form 52

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

Sta. No. F209R

Daily discharge, in second-feet of SAN GABRIEL RIVER-WEST FORK below San Gabriel Dam No. 2 for the year ending September 30, 19 39

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.1	E 6.5	E 5	E 26	2.0	2.5	2.0	6.5	5.5	2.5	1.7	E 1.2
2	0.9	6	E 4.5	E 24	2.0	2.7	2.0	6	5.5	2.4	1.7	1.2
3	1.1	5.5	E 4.7	116	2.3	3.0	1.8	E 26	5.5	2.4	1.8	1.2
4	3.1	5	E 4.9	238	2.3	3.2	1.9	13	5.5	2.3	1.8	1.1
5	0.4	4.8	E 5	104	2.5	3.0	2.0	12	5.5	2.2	1.7	1.1
6	0.5	4.6	E 5	127	2.5	2.7	2.3	12	6	2.2	1.7	1.1
7	0.6	4.4	E 5	E 53	2.3	2.8	2.5	11	5.5	2.2	1.6	1.2
8	0.6	4.4	E 5.5	E 47	2.8	2.8	2.5	11	5.5	2.3	1.6	1.2
9	0.6	4.4	E 5.5	29	3.7	4.0	2.3	10	5	2.4	1.5	1.1
10	0.7	4.4	E 5.5	16	3.3	4.2	2.5	9.5	4.8	2.5	1.4	1.1
11	0.7	4.4	E 5.5	18	4.5	4.0	2.7	9	4.6	2.5	1.4	1.0
12	0.7	4.4	E 6	E 10	4.4	3.5	2.7	7.5	4.4	2.5	1.4	1.0
13	0.7	4.3	E 6	E 3.9	3.8	3.5	2.8	7	4.3	2.5	1.4	E 1.1
14	0.9	4.3	E 6	E 1.3	1.7	84	3.2	5.5	4.6	2.5	1.5	E 1.1
15	0.7	4.2	E 0.5	E 1.2	2.2	209	3.0	6	5	2.5	1.5	E 1.2
16	0.9	4.2	E 0.9	E 1.2	1.9	E 71	3.0	6	5.5	2.5	1.4	E 1.1
17	0.9	4.8	E 1.2	E 1.2	1.8	E 2.8	2.8	6.5	5	2.5	1.3	E 1.0
18	0.9	5.5	E 4.0	E 1.3	1.6	2.8	86	7	4.7	2.5	1.3	E 0.9
19	0.7	5	E 330	E 1.4	1.6	2.7	122	7	4.4	2.4	1.2	E 0.9
20	0.8	4.7	E 96	E 1.4	1.6	2.7	120	7.5	4.1	2.3	1.2	1.0
21	0.7	4.4	136	E 1.5	2.2	2.7	108	8	3.9	2.2	1.2	1.0
22	1.0	4.6	83	E 1.5	2.2	2.7	130	8.5	3.8	2.2	1.2	1.1
23	0.9	4.8	48	E 1.6	2.1	2.8	158	9	3.7	2.1	1.2	1.1
24	7	5	43	1.9	3.0	2.8	174	8	3.4	2.1	E 1.2	E 41
25	21	5	36	1.9	3.0	2.7	145	7.5	3.2	2.0	1.4	E 683
26	23	5	34	1.9	2.8	3.0	12	6.5	3.0	2.0	1.2	E 125
27	20	5	33	1.9	2.7	37	3.0	6.5	2.8	2.0	1.2	31
28	19	5	33	1.8	2.5	102	25	6	2.7	2.0	E 1.2	36
29	5	5	E 33	1.8		52	9	6	2.7	1.9	E 1.2	30
30	4.8	E 5	E 30	1.8		23	10	5.5	2.6	1.8	E 1.2	19
31	6.5		E 28	2.0		22		5.5		1.7	E 1.2	
	136.3	144.6	1043.7	840.5	289.3	629.1	1144.0	263.0	132.7	70.1	43.5	990.0
MEAN	4.40	4.82	33.7	28.0	10.3	20.3	38.1	8.48	4.42	2.26	1.40	33.0
ACRE-FEET	270	287	2070	1670	574	1250	2270	522	263	139	86	1960

Remarks: E indicates discharge estimated - see station description.

YEAR OR PERIOD — MEAN 15.7 — ACRE-FEET 11360

STATION P3R

SAN GABRIEL RIVER W. FORK above Forks

LOCATION:

One-quarter mile above Rincon Ranger Station and 2 miles above East Fork on the right (south) bank of the West Fork of the San Gabriel River about 13½ miles north of Azusa.

DRAINAGE AREA:

102 square miles.

CHANNEL AND CONTROL:

Channel-sand, gravel and boulders.
No artificial control.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows measured from cable car at station.

RECORDER:

Installed December 3, 1930. Removed March 2, 1938. Installed on April 4, 1938 in a temporary recorder house and well in the original location. Removed July 12, 1938 and installed at the temporary station known as Station P3B-R ¼ mile above P3. Removed on September 27, 1938 and reinstalled in the new F. C. standard concrete house over a 4 ft. x 4 ft. concrete well.
An Au continuous recorder was in service from October 1, 1938 to September 30, 1939.

REGULATION:

Flow Partially regulated by San Gabriel Dam No. 2.

DIVERSIONS:

None.

RECORDS AVAILABLE:

December 3, 1930 to September 30, 1939.
(For records prior to December 3, 1930 on file in Los Angeles County Flood Control District office refer to abandoned Station P1R San Gabriel River-W. Fork ¼ mile above Forks; records from July 12, 1938 to September 27, 1938 are from Station P3B-R San Gabriel River W. Fork 400 ft. below North Fork.)

EXTREMES OF DISCHARGE:

1938-1939
Maximum 2530 second-feet, September 25.
Minimum 6.0 second-feet, August 28.
1930-1939 (Stations P1R and P3R)
Maximum 34000 second-feet, estimated, March 2, 1938.
Minimum 0.3 second-feet October 17, 1931.

ACCURACY:

Fair.
Estimated by comparison: October 2 to 5 and 28 to 31.
Estimated by interpolation and extrapolation: November 1, 2, 5, 6, and 11; December 8 to 10; January 14, 31 to February 2.
Interpolated between measurements May 7 to June 8.

OPERATION:

Moved from a previous location by the District for the Pasadena Water Department. This Station was later taken over, reconstructed and operated by the Los Angeles County Flood Control District in co-operation with the U.S.G.S. Water Resources Branch.

F. C. D. FORM 104 500 8-38

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F38R

DISCHARGE MEASUREMENTS OF SAN GABRIEL RIVER - WEST FORK

AT OR NEAR above Forks DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Formula Ref.	Revised	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
404	10-1	Middleton	24.8	9.84	1.85	9.33	18.			.6 13	+.02	928A / 949A	FC 29
405	10-2	"	24.8	9.79	1.85	9.34	18.			.6 13	0	749A / 807A	"
406	10-3	"	24.8	10.46	1.76	9.33	18.			.6 13	-.01	952A / 1011A	"
407	10-4	"	27.5	15.14	1.72	9.51	26.			.6 14	-.02	1033A / 1053A	"
408	10-5	"	25.5	15.12	1.39	9.42	21.			.6 13	0	1018A / 1039A	"
409	10-6	De Vore-Cooper	24.0	14.56	1.34	9.43	19.			.6 13	0	200P / 216P	"
410	10-7	De Vore	24.0	14.62	1.37	9.43	20.			.6 13	0	1136A / 1154A	"
411	10-8	Middleton	24.0	15.26	1.31	9.44	20.			.6 13	0	915A / 934A	"
412	10-9	"	19.8	14.77	1.38	9.44	20.			.6 11	0	758A / 815A	"
413	10-10	"	20.0	14.94	1.35	9.43	20.			.6 11	0	923A / 940A	"
414	10-11	"	20.0	15.24	1.33	9.44	20.			.6 11	0	855A / 914A	"
415	10-12	De Vore	20.6	14.44	1.34	9.41	19.			.6 12	0	1147A / 1205P	"
416	10-13	Middleton	20.0	14.43	1.27	9.42	18.			.6 11	0	958A / 1016A	"
417	10-14	"	20.0	14.55	1.29	9.42	19.			.6 11	0	917A / 934A	"
418	10-15	De Vore	20.7	15.91	1.50	9.48	24.			.6 12	0	220P / 239P	"
419	10-16	"	20.6	15.17	1.42	9.44	22.			.6 12	0	259P / 314P	"
420	10-17	Middleton	20.5	15.46	1.36	9.46	21.			.6 12	0	1015A / 1034A	"
421	10-18	"	20.5	16.02	1.30	9.45	21.			.6 12	0	920A / 938A	"
422	10-19	"	20.5	15.11	1.33	9.44	20.			.6 12	0	910A / 927A	"
423	10-20	"	20.5	15.12	1.29	9.43	19.			.6 12	0	903A / 917A	"
424	10-21	"	20.5	15.03	1.23	9.42	18.			.6 11	0	121P / 137P	"
425	10-22	De Vore	20.9	15.52	1.23	9.42	19.			.6 12	0	853A / 913A	"
426	10-23	"	20.1	14.59	1.33	9.42	19.			.6 12	0	1201P / 1218P	"
427	10-24	Middleton	20.1	14.84	1.24	9.42	18.			.6 11	0	948A / 1008A	"
428	10-25	Cooper Middleton -	20.9	15.92	2.04	9.58	32.			.6 12	0	1000A / 1016A	FC 29
429	10-26	Middleton	28.8	17.22	2.58	9.66	45.			.6 15	0	935A / 959A	"
430	10-27	De Vore	29.4	17.49	2.34	9.64	41.			.6 16	0	1140A / 1208P	"
431	10-28	Middleton	29.6	20.67	2.48	9.69	51.			.6 16	0	148P / 217P	"
432	10-29	"	30.4	22.89	2.94	9.78	67.			.6 16	-.04	1200N / 1220P	"
433	10-30	De Vore	25.2	13.59	1.91	9.51	26.			.6 10	0	1252P / 106P	"
434	10-31	Cooper	22.0	12.96	1.91	9.51	25.			.6 11	0	955A / 1015A	FC 11
435	11-1	Middleton	22.8	12.80	2.08	9.50	27.			.6 12	0	934A / 952A	FC 29
436	11-2	"	25.2	11.60	2.15	9.51	25.			.6 13	0	143P / 204P	"
437	11-3	Cooper Middleton -	24.6	11.55	2.20	9.49	25.			.6 13	0	938A / 958A	"
438	11-4	Cooper	24.4	11.19	2.10	9.49	24.			.6 13	0	940A / 1000A	FC 11
439	11-5	Middleton	24.7	11.21	2.10	9.50	24.			.6 13	0	840A / 858A	FC 29
440	11-6	De Vore-De Vore	25.1	11.0	2.05	9.48	23.			.6 13	0	156P / 209P	"
441	11-7	De Vore	24.9	10.5	2.11	9.48	22.			.6 13	0	246P / 255P	"
442	11-8	Cooper	24.5	11.4	2.05	9.49	23.			.6 13	0	1128A / 1148A	FC 11
443	11-9	Cooper Middleton -	24.7	11.2	2.09	9.49	24.			.6 13	0	1035A / 1055A	FC 29
444	11-10	Middleton	24.8	11.2	2.13	9.50	24.			.6 14	0	854A / 912A	"
445	11-11	De Vore	23.0	10.5	2.30	9.49	24.			.6 12	0	157P / 211P	"
446	11-12	Middleton	24.5	10.7	2.19	9.51	23.			.6 14	0	835A / 856A	"
447	11-13	De Vore	25.0	10.3	2.24	9.50	23.			.6 13	0	143P / 157P	"
448	11-14	"	25.0	10.2	2.19	9.50	22.			.6 13	0	130P / 144P	"
449	11-15	Middleton	24.8	11.1	2.11	9.50	23.			.6 13	0	929A / 948A	"
450	11-16	Cooper Middleton -	24.9	11.0	2.10	9.50	23.			.6 13	0	1020A / 1035A	"
451	11-17	Middleton	24.6	10.7	2.17	9.50	23.			.6 13	0	932A / 954A	FC 29
452	11-18	"	24.5	10.8	2.01	9.49	22.			.6 13	0	910A / 931A	"
453	11-19	"	24.5	11.0	2.07	9.49	23.			.6 13	0	850A / 912A	"
454	11-20	Brown	24.8	11.3	1.97	9.49	22.			.6 13	0	937A / 958A	"
455	11-21	"	24.9	11.3	2.09	9.49	24.			.6 13	0	815A / 835A	"
456	11-22	Middleton	23.4	11.1	2.01	9.50	22.			.6 12	0	939A / 1001A	"
457	11-23	"	24.2	10.9	1.97	9.49	22.			.6 13	0	904A / 930A	"
458	11-24	Cooper	24.5	11.9	1.88	9.48	22.			.6 13	0	1025A / 1045A	FC 11
459	11-25	Middleton	23.5	11.3	2.04	9.50	23.			.6 12	0	1120A / 1142A	FC 29
460	11-26	"	24.5	10.9	1.94	9.49	21.			.6 13	0	1109A / 1135A	FC 29
461	11-27	Brown	24.4	11.3	1.96	9.49	22.			.6 13	0	823A / 843A	"
462	11-28	Cooper	23.8	11.3	1.99	9.48	23.			.6 13	0	1040A / 1100A	FC 11
463	11-29	Middleton	24.0	11.2	1.99	9.49	22.			.6 13	0	1023A / 1042A	FC 29
464	11-30	"	23.8	11.3	1.92	9.49	22.			.6 13	0	931A / 950A	"
465	12-1	"	24.2	11.6	1.88	9.48	22.			.6 13	0	815A / 837A	"
466	12-2	Cooper Middleton -	24.0	11.6	1.92	9.48	22.			.6 13	0	930A / 946A	"
467	12-3	Middleton	24.1	11.9	1.88	9.49	22.			.6 13	0	1025A / 1043A	"
468	12-4	Brown	24.3	11.9	1.81	9.49	22.			.6 13	0	829A / 846A	FC 11
469	12-5	Cooper	23.0	11.4	1.90	9.48	22.			.6 13	0	1000A / 1020A	FC 29
470	12-6	Middleton	23.8	11.6	1.89	9.48	22.			.6 13	0	852A / 914A	"
471	12-7	"	23.7	11.4	1.85	9.48	21.			.6 13	0	1010A / 1032A	FC 11
472	12-8	"	23.8	11.7	1.85	9.48	22.			.6 13	0	928A / 951A	FC 29
473	12-9	"	23.3	11.5	1.90	-	22.			.6 13	-	925A / 946A	"
474	12-10	Middleton	23.8	11.6	1.85	9.48	22.			.6 12	0	848A / 906A	FC 29
475	12-11	Brown	23.8	12.3	1.75	9.49	22.			.6 12	0	847A / 903A	"
476	12-12	Cooper	22.0	11.3	1.91	9.49	22.			.6 12	0	1040A / 1100A	FC 11
477	12-13	Cooper Middleton -	22.3	11.0	1.96	9.49	21.			.6 12	0	1110A / 1130A	FC 29
478	12-14	Middleton	23.7	11.5	1.92	9.50	22.			.6 12	0	927A / 946A	"
479	12-15	Cooper	36.5	27.9	3.62	9.98	101.			.6 13	-0.03	715A / 735A	FC 11
480	12-15	Middleton	40.4	26.0	3.31	9.89	86.			.6 16	-0.02	850A / 910A	FC 29
481	12-15	"	40.0	24.6	3.25	9.87	80.			.6 15	-0.01	933A / 953A	"
482	12-15	"	39.8	24.3	3.07	9.85	75.			.6 15	-0.02	1014A / 1033A	"
483	12-16	"	28.4	24.2	2.58	9.81	62.			.6 14	-.02	914A / 936A	"
484	12-17	"	24.5	21.6	1.54	9.62	33.			.6 13	0	1115A / 1135A	"
485	12-18	Middleton Cooper -	51.0	60.4	5.28	10.53	320.			.6 10	-.02	152P / 245P	FC 11
486	12-19	" "	62.0	94.2	6.97	10.42	657.			.6 10	0	720A / 748A	"
487	12-19	" "	72.0	117.8	8.42	10.67	992.			.6 12	+.04	950A / 1010A	"
488	12-19	" "	72.0	113.	8.84	10.68	997.			.6 12	0	1035A / 1100A	"
489	12-19	" "	67.0	95.4	8.93	10.48	852.			.6 11	0	426P / 442P	"
490	12-20	" "	50.0	73.6	6.96	9.77	512.			.6 8	+.06	750A / 802A	"
491	12-20	" "	59.0	84.4	6.91	10.01	584.			.6 10	-.02	1140A / 1156A	"
492	12-20	" "	59.0	83.6	6.56	9.90	548.			.6 11	-.01	410P / 426P	"
493	12-21	" "	43.0	59.1	6.66	9.33	394.			.6 8	-.01	856A / 910A	"
494	12-21	" "	46.0	55.8	6.37	9.14	355.			.6 8	0	443P / 455P	"
495	12-22	Middleton	40.0	51.4	4.21	8.67	216.			.6 14	-.01	340P / 410P	FC 29
496	12-23	Cooper	36.0	41.3	3.51	8.34	145.			.6 13	0	750A / 810A	"
497	12-24	Middleton	36.3	40.6	2.94	8.28	119.			.6 13	0	843A / 906A	"
498	12-25	Brown	35.5	37.6	2.67	8.17	100.			.6 12	0	1219P / 1238P	FC 29
499	12-26	"	35.4	38.0	2.49	8.13	95.			.6 13	0	922A / 942A	"
500	12-27	Middleton	35.3	35.4	2.29	8.06	81.			.6 16	0	1014A / 1040A	"
501	12-28	"	35.0	34.5	2.38	8.00	82.			.6 16	0	942A / 1004A	"
502	12-29	"	35.1	33.5	2.29	7.95	77.			.6 16	0	941A / 1005A	"
503	12-30	"	34.7	32.3	2.27	7.89	73.			.6 16	0	1058A / 1120A	"
504	12-31	"	34.7	31.6	2.16	7.86	68.			.6 16	0	1052A / 1117A	"
505	1-1	Brown	34.7	33.4	1.98	7.84	66.			.6 17	0	1050A / 1112A	"
506	1-2	"	34.5	32.1	2.17	7.83	70.			.6 17	0	922A / 943A	"
507	1-3	Middleton	34.0	29.9	2.11	7.80	63.			.6 15	0	937A / 1000A	"
508	1-4	"	42.6	63.1	4.20	8.86	265.			.6 15	-.01	1105A / 1129A	"
509	1-5	Cooper Middleton -	42.0	62.2	4.13	8.80	257.			.6 15	+.01	912A / 932A	"
510	1-5	" "	43.7	70.5	4.18	8.92	295.			.6 11	+.08	148P / 204P	"
511	1-5	Middleton Cooper -	50.0	62.6	5.53	9.14	346.			.6 11	-.04	310P / 320P	"
512	1-6	Cooper Middleton -	35.3	33.6	2.02	7.87	68.			.6 12	0	935A / 950A	"
513	1-7	Middleton	38.4	37.8	2.84	8.14	107.			.6 15	0	1205P / 1230P	"
514	1-8	Brown	36.3	39.3	2.43	8.05	95.			.6 18	0	837A / 900A	"
515	1-9	Cooper	35.4	37.6	2.33	8.02	88.			.6 12	0	915A / 935A	"

F. C. D. FORM 104 500 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F3R

DISCHARGE MEASUREMENTS OF SAN GABRIEL RIVER - WEST FORK

AT above Forks DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Current Diff.	Method	MEAS SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
516	1-10	Middleton	35.5	32.0	1.99	7.78	64.		.6	15	0	1015A 1037A	FC 29
517	1-11	Cooper	35.5	36.0	1.62	7.74	58.		.6	13	0	1005A 1021A	FC 11
518	1-12	Cooper Middleton -	35.2	34.7	1.46	7.74	51.		.6	17	0	1103A 1125A	FC 29
519	1-13	" "	34.6	32.0	1.23	7.56	39.		.6	17	0	1105A 1127A	"
520	1-14	Middleton	34.3	31.2	1.26	7.72	39.		.6	16	0	1124A 1148A	"
521	1-15	Brown	34.7	29.8	1.32	7.58	39.		.6	16	0	827A 847A	FC 29
522	1-16	"	34.0	30.2	1.16	7.58	35.		.6	16	0	814A 838A	"
523	1-17	Middleton	33.9	30.4	1.19	7.56	36.		.6	15	0	950A 1014A	"
524	1-18	Brown Middleton -	34.2	30.1	1.12	7.55	34.		.6	16	0	918A 933A	"
525	1-19	Middleton	34.4	30.2	1.03	7.55	31.		.6	15	0	946A 1008A	"
526	1-20	"	34.2	29.7	1.16	7.54	34.		.6	15	0	924A 946A	"
527	1-21	"	35.2	32.6	1.33	7.66	43.		.6	16	+.01	824A 850A	"
528	1-21	"	35.6	34.5	1.43	7.72	49.		.6	16	+.01	1017A 1037A	"
529	1-21	"	36.1	36.6	1.64	7.80	60.		.6	16	+.03	1218P 1242P	"
530	1-21	"	36.6	38.6	1.60	7.85	62.		.6	16	+.01	136P 202P	"
531	1-21	"	36.8	39.1	1.63	7.86	64.		.6	16	0	220P 245P	"
532	1-21	"	37.0	39.9	1.70	7.90	68.		.6	16	+.01	414P 437P	"
533	1-21	Cooper Middleton -	36.8	38.9	1.72	7.89	67.		.6	12	0	855P 910P	"
534	1-22	Brown - Cooper	33.8	35.0	1.35	7.70	47.		.6	13	0	934A 950A	FC 11
535	1-23	Brown	33.8	33.4	1.15	7.64	38.		.6	13	0	828A 845A	"
536	1-24	Middleton	34.4	31.7	1.19	7.60	38.		.6	15	0	928A 953A	FC 29
537	1-25	"	34.4	31.1	1.24	7.58	38.		.6	16	0	1220P 1248P	"
538	1-26	"	34.4	30.3	1.10	7.57	33.		.6	16	0	826A 850A	"
539	1-27	"	34.4	30.6	1.08	7.57	33.		.6	16	0	1118A 1145A	"
540	1-28	"	34.4	30.8	1.11	7.57	34.		.6	16	0	823A 846A	"
541	1-29	Brown	33.5	30.8	1.02	7.56	31.		.6	16	0	822A 841A	"
542	1-30	"	33.5	30.7	.96	7.55	29.		.6	16	-.02	819A 839A	"
543	1-30	Cooper Middleton -	35.3	34.6	1.36	7.68	47.		.6	13	0	225P 249P	"
544	1-31	Middleton Brown -	34.7	31.3	1.09	7.60	34.		.6	16	0	945A 1000A	"
545	2-1	Middleton	34.6	30.2	1.17	7.90	35.		.6	16	0	208P 233P	FC 29
546	2-2	"	34.5	29.6	1.05	7.47	31.		.6	16	0	1008A 1034A	"
547	2-3	Cooper Middleton -	35.6	32.5	1.32	7.56	43.		.6	12	0	912A 927A	"
548	2-3	Middleton	36.1	34.1	1.40	7.60	48.		.6	12	0	318P 338P	"
549	2-4	Cooper Middleton -	35.3	32.5	1.31	7.57	43.		.6	12	0	751A 806A	"
550	2-4	Middleton	35.2	32.2	1.30	7.56	42.		.6	12	0	216P 234P	"
551	2-5	Brown	33.8	32.1	1.20	7.55	39.		.6	16	0	837A 857A	"
552	2-6	"	33.8	31.8	1.07	7.53	34.		.6	16	0	823A 843A	"
553	2-7	Middleton	34.8	31.7	1.21	7.52	38.		.6	17	0	1020A 1042A	"
554	2-7	"	34.8	31.8	1.22	7.51	39.		.6	16	0	304P 324P	"
555	2-8	Cooper	35.5	34.6	1.53	7.62	53.		.6	12	0	500A 525A	"
556	2-8	Middleton	36.1	35.8	1.55	7.64	55.		.6	17	0	825A 846A	"
557	2-8	"	36.0	34.3	1.41	7.62	48.		.6	12	0	1146A 1204P	"
558	2-8	"	37.4	42.1	1.95	7.78	82.		.6	13	0	140P 200P	"
559	2-8	"	37.5	42.4	1.98	7.79	84.		.6	13	0	238P 300P	"
560	2-9	"	37.1	40.0	1.89	7.75	76.		.6	17	0	926A 948A	"
561	2-10	"	37.1	39.5	1.90	7.74	75.		.6	13	0	904A 925A	"
562	2-11	"	37.9	42.6	2.14	7.81	91.		.6	15	0	117P 140P	"
563	2-12	Brown	37.9	42.5	1.98	7.79	84.		.6	14	0	811A 831A	"
564	2-13	"	37.6	41.3	1.97	7.77	81.		.6	14	0	810A 830A	"
565	2-14	Middleton	37.1	40.0	1.87	7.74	75.		.6	16	0	947A 1011A	"
566	2-15	"	34.9	31.8	1.24	7.52	39.		.6	16	0	904A 926A	"
567	2-16	"	34.8	31.7	1.22	7.51	39.		.6	16	0	839A 902A	"
568	2-17	"	34.8	31.6	1.17	7.50	37.		.6	16	0	1051A 1111A	"
569	2-18	Middleton	33.8	31.1	1.16	7.49	36.		.6	16	0	1110A 1133A	FC 29
570	2-19	Brown	33.9	30.6	1.19	7.49	36.		.6	16	0	818A 838A	"
571	2-20	"	33.9	30.5	1.12	7.49	34.		.6	16	0	816A 836A	"
572	2-21	Middleton	33.8	31.0	1.20	7.48	37.		.6	16	0	938A 1002A	"
573	2-22	Brown	33.8	30.5	1.16	7.48	36.		.6	16	0	815A 838A	"
574	2-23	Middleton	33.8	30.4	1.15	7.48	35.		.6	16	0	1225P 1247P	"
575	2-24	"	33.8	30.2	1.16	7.48	35.		.6	17	0	157P 226P	"
576	2-25	"	33.8	30.4	1.14	7.48	35.		.6	16	0	1213P 1238P	"
577	2-26	Brown	33.7	31.2	1.05	7.48	33.		.6	16	0	812A 834A	"
578	2-27	"	33.7	30.0	1.14	7.47	34.		.6	16	0	810A 832A	"
579	2-28	Middleton	33.8	30.2	1.09	7.47	33.		.6	16	0	1138A 1200N	"
580	3-1	"	33.7	29.8	1.13	7.46	34.		.6	16	0	1253P 116 P	"
581	3-2	"	33.7	29.7	1.06	7.46	32.		.6	16	0	1234P 1259P	"
582	3-3	"	33.7	29.6	1.08	7.46	32.		.6	16	0	1109A 1133A	"
583	3-4	"	33.6	29.7	1.08	7.45	32.		.6	16	0	1052A 1117A	"
584	3-5	Brown	33.7	29.7	1.05	7.45	31.		.6	16	0	840A 902A	"
585	3-6	"	33.7	29.6	1.03	7.45	30.		.6	16	0	812A 835A	"
586	3-7	Middleton	33.6	29.4	1.09	7.44	32.		.6	16	0	113P 137P	"
587	3-8	"	33.7	29.7	1.06	7.45	31.		.6	16	0	814A 837A	"
588	3-9	"	33.6	29.5	1.00	7.44	29.		.6	16	0	1129A 1151A	"
589	3-9	"	39.3	42.6	2.56	7.92	109.		.6	13	+0.12	1033P 1052P	"
590	3-10	"	41.9	59.5	3.60	8.35	214.		.6	11	+.02	1208A 1220A	"
591	3-10	"	41.9	57.6	3.77	8.36	218.		.6	11	0	1235A 1252A	"
592	3-10	"	41.3	52.8	3.60	8.29	190.		.6	11	-.04	118A 133A	"
593	3-10	Middleton	36.1	33.3	2.17	7.78	72.		.6	12	-.01	820A 838A	FC 29
594	3-11	"	33.7	26.7	1.63	7.57	44.		.6	16	0	820A 844A	"
595	3-12	Brown	33.5	25.8	1.58	7.54	41.		.6	16	0	819A 840A	"
596	3-13	Cooper	33.8	25.0	1.60	7.52	40.		.6	13	0	910A 930A	"
597	3-14	Brown Middleton and	33.5	25.6	1.54	7.51	39.		.6	16	0	837A 854A	"
598	3-15	Middleton	41.5	55.3	4.24	8.50	234.		.6	14	0	824A 850A	"
599	3-15	"	42.3	60.6	4.72	8.62	286.		.6	12	0	316P 335P	"
600	3-16	"	41.8	58.7	4.53	8.59	266.		.6	14	0	820A 848A	"
601	3-17	Cooper	36.0	21.2	1.77	7.55	38.		.6	12	0	900A 920A	"
602	3-18	Middleton	33.5	20.5	1.87	7.53	38.		.6	15	0	735A 800A	"
603	3-19	Brown	33.8	24.9	1.44	7.54	36.		.6	17	0	810A 830A	"
604	3-20	Cooper	34.0	25.3	1.54	7.56	39.		.6	12	0	835A 855A	"
605	3-21	Brown	34.0	25.5	1.48	7.54	38.		.6	16	0	930A 950A	"
606	3-22	Middleton	34.0	25.8	1.50	7.55	39.		.6	16	0	835A 857A	"
607	3-23	"	33.9	26.3	1.39	7.55	37.		.6	16	0	1224P 1249P	"
608	3-24	Cooper	34.0	27.0	1.42	7.54	39.		.6	13	0	915A 935A	"
609	3-25	Middleton	33.8	26.5	1.39	7.54	37.		.6	16	0	738A 800A	"
610	3-26	Brown	34.0	26.6	1.40	7.55	37.		.6	16	0	833A 854A	"
611	3-26	Middleton	34.2	29.6	1.57	7.64	46.		.6	16	+.01	213P 235P	"
612	3-26	"	34.4	30.6	1.72	7.68	53.		.6	13	+.01	423P 441P	"
613	3-27	"	34.3	29.5	1.64	7.65	48.		.6	13	0	618A 637A	"
614	3-27	Cooper Middleton and	34.4	31.6	1.76	7.71	56.		.6	13	0	856A 916A	"
615	3-27	" "	34.7	32.8	1.85	7.76	61.		.6	13	0	212P 230P	"
616	3-27	" "	34.5	31.8	1.77	7.73	56.		.6	13	0	505P 521P	"
617	3-28	Middleton	39.1	47.7	3.27	8.29	156.		.6	14	0	855A 920A	FC 29
618	3-29	"	39.0	47.6	3.08	8.25	147.		.6	15	0	1125A 1151A	"
619	3-30	"	34.0	28.1	1.66	7.65	47.		.6	16	0	805A 829A	"
620	3-31	Cooper	33.8	28.7	1.50	7.61	43.		.6	13	0	900A 920A	"
621	4-1	Middleton	33.9	28.0	1.45	7.59	41.		.6	16	0	805A 828A	"
622	4-2	Brown	36.8	37.3	2.14	7.91	80.		.6	12	+.02	802A 817A	"
623	4-2	"	36.3	35.1	1.99	7.84	70.		.6	12	0	125P 138P	"
624	4-3	Cooper	34.2	31.8	1.76	7.72	56.		.6	13	0	814A 834A	"
625	4-4	Brown	34.1	30.4	1.63	7.68	50.		.6	16	0	814A 834A	"

F. C. D. FORM 104 500 8-38

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. P3R

DISCHARGE MEASUREMENTS OF SAN GABRIEL RIVER - WEST FORK

at Azusa above Forks DURING THE YEAR ENDING SEPTEMBER 30, 1939

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
626	4-5	Middleton	34.1	30.7	1.60	7.67	49.		.6	16	0	833A / 855A	FC 29
627	4-6	G.H.Middleton M. Middleton	34.0	29.8	1.48	7.63	44.		.6	16	-.01	1225P / 1249P	"
628	4-7	Cooper	33.8	29.2	1.53	7.62	45.		.6	13	0	1010A / 1030A	"
629	4-8	Middleton	33.9	30.1	1.45	7.61	44.		.6	16	0	735A / 758A	"
630	4-9	Brown	33.9	28.1	1.44	7.60	40.		.6	16	0	800A / 819A	"
631	4-10	Cooper	33.8	28.3	1.47	7.58	42.		.6	13	0	755A / 818A	"
632	4-11	Middleton	33.8	28.5	1.35	7.58	39.		.6	16	0	815A / 836A	"
633	4-12	"	33.8	28.3	1.35	7.56	38.		.6	16	0	1221P / 1241P	"
634	4-13	"	33.9	28.9	1.43	7.60	41.		.6	16	0	1204P / 1226P	"
635	4-14	Cooper	33.9	28.5	1.51	7.61	43.		.6	13	0	918A / 938A	"
636	4-15	Middleton	33.8	28.3	1.31	7.58	37.		.6	16	0	1250P / 112P	"
637	4-16	Brown	33.8	27.6	1.38	7.56	38.		.6	16	0	812A / 831A	"
638	4-17	Cooper	33.8	27.4	1.37	7.55	37.		.6	13	0	804A / 824A	"
639	4-18	Brown	33.7	27.1	1.29	7.54	35.		.6	16	0	741A / 800A	"
640	4-18	Brown	39.0	51.6	3.05	8.29	157.		.6	13	0	210P / 228P	FC 29
641	4-19	Middleton	39.0	51.8	3.05	8.30	158.		.6	17	0	1224P / 1248P	"
642	4-20	"	38.8	50.7	2.92	8.24	148.		.6	17	0	1239P / 105P	"
643	4-21	Cooper	38.6	46.9	2.97	8.21	139.		.6	14	0	836A / 856A	"
644	4-22	Middleton	38.3	47.3	2.77	8.15	131.		.6	17	0	740A / 804A	"
645	4-23	Brown	40.1	56.2	3.72	8.48	209.		.6	13	0	754A / 815A	"
646	4-24	Cooper	39.4	54.0	3.58	8.44	193.		.6	14	0	750A / 815A	"
647	4-25	Middleton	42.1	66.1	4.32	8.67	286.		.6	15	-.01	818A / 840A	"
648	4-26	"	36.4	34.2	2.09	7.82	72.		.6	13	-.06	1125A / 1145A	"
649	4-27	"	33.2	24.0	1.33	7.45	32.		.6	16	0	1218P / 1240P	"
650	4-28	Cooper	33.8	27.5	1.60	7.57	44.		.6	13	+.01	810A / 830A	"
651	4-29	Middleton	33.6	25.8	1.39	7.51	36.		.6	16	0	823A / 845A	"
652	4-30	"	33.2	24.2	1.21	7.45	29.		.6	16	0	805A / 825A	"
653	5-1	Cooper	33.6	25.0	1.52	7.50	38.		.6	12	0	835A / 855A	"
654	5-2	Middleton	33.3	24.8	1.39	7.46	34.		.6	17	0	1152A / 1212P	"
655	5-3	"	33.4	24.8	1.34	7.46	33.		.6	16	0	905A / 925A	"
656	5-4	"	33.7	26.3	1.41	7.51	37.		.6	17	0	820A / 843A	"
657	5-5	Cooper	33.5	25.0	1.48	7.49	37.		.6	12	0	800A / 820A	"
658	5-6	Middleton	33.6	25.4	1.35	7.50	34.		.6	17	0	835A / 858A	"
659	5-7	Cooper	33.7	25.2	1.47	7.51	37.		.6	12	0	834A / 854A	"
660	5-8	"	27.8	18.5	1.76	7.47	32.		.6	10	0	205P / 219P	"
661	5-8	"	28.0	18.1	1.77	7.47	32.		.6	13	0	355P / 415P	"
662	5-8	"	28.0	17.9	1.78	7.46	32.		.6	13	0	545P / 605P	"
663	5-8	Cooper	27.9	17.6	1.78	7.46	31.		.6	13	0	1025P / 1040P	FC 29
664	5-9	"	27.6	17.2	2.01	7.48	35.		.6	10	0	810A / 826A	"
665	5-9	"	27.6	17.6	1.93	7.47	34.		.6	10	0	1020A / 1038A	"
666	5-9	"	28.0	16.5	1.94	7.47	32.		.6	13	0	1210P / 1230P	"
667	5-9	"	28.5	16.2	1.99	7.47	32.		.6	13	0	210P / 228P	"
668	5-9	"	28.8	16.0	1.90	7.45	30.		.6	13	0	410P / 430P	"
669	5-10	Middleton	29.2	16.0	2.05	7.48	33.		.6	16	0	1115A / 1137A	"
670	5-11	"	29.4	16.6	2.08	7.48	35.		.6	16	0	820A / 842A	"
671	5-11	"	29.5	16.9	2.09	7.48	35.		.6	16	0	1005A / 1025A	"
672	5-11	"	29.7	16.9	2.11	7.49	36.		.6	15	0	1135A / 1155A	"
673	5-11	"	30.5	16.6	2.20	7.49	37.		.6	16	0	135P / 156P	"
674	5-11	"	30.5	17.4	2.05	7.49	36.		.6	16	+.01	352P / 412P	"
675	5-11	"	30.5	17.2	2.09	7.48	36.		.6	16	0	540P / 600P	"
676	5-12	Cooper	30.2	16.0	2.18	7.49	35.		.6	14	0	824A / 844A	"
677	5-12	"	30.2	14.9	2.34	7.50	35.		.6	15	0	1205P / 1225P	"
678	5-12	"	30.7	14.8	2.32	7.48	34.		.6	15	0	306P / 326P	"
679	5-13	Middleton	30.6	15.0	2.43	7.51	37.		.6	16	0	818A / 840A	FC 29
680	5-13	"	31.1	15.4	2.65	7.55	41.		.6	16	-.01	245P / 306P	"
681	5-14	"	30.5	14.0	2.71	7.54	38.		.6	16	0	850A / 910A	"
682	5-15	Cooper	29.6	12.2	2.95	7.55	36.		.6	14	0	808A / 828A	"
683	5-16	Middleton	29.9	13.5	2.77	7.53	37.		.6	16	0	848A / 910A	"
684	5-17	"	29.4	13.2	2.72	7.52	36.		.6	16	0	855A / 915A	"
685	5-18	"	29.0	12.9	2.67	7.51	34.		.6	16	0	835A / 856A	"
686	5-19	Cooper	28.6	12.2	2.74	7.51	33.		.6	14	0	820A / 840A	"
687	5-20	DeVore	28.0	11.5	2.72	7.48	31.		.6	14	0	150P / 205P	FC 29
688	5-21	DeVore-DeVore	27.9	11.8	2.66	7.49	31.		.6	15	0	920A / 936A	"
689	5-22	Cooper	27.0	10.9	2.91	7.50	32.		.6	14	0	805A / 825A	"
690	5-23	Middleton	27.0	12.1	2.72	7.50	33.		.6	14	0	830A / 850A	"
691	5-24	"	27.2	11.6	2.62	7.49	30.		.6	14	0	830A / 850A	"
692	5-25	"	26.8	11.8	2.38	7.48	28.		.6	14	0	842A / 903A	"
693	5-26	Cooper	26.3	11.0	2.44	7.45	27.		.6	13	0	905A / 925A	"
694	5-27	Middleton	25.3	11.1	2.48	7.44	28.		.6	13	0	920A / 940A	"
695	5-28	DeVore	25.0	9.93	2.34	7.40	23.		.6	14	0	230P / 250P	"
696	5-29	"	25.1	10.6	2.45	7.43	26.		.6	13	0	958A / 1014A	"
697	5-30	Middleton Middleton	24.9	10.1	2.42	7.43	24.		.6	13	0	1230P / 1250P	"
698	5-31	Middleton	24.0	9.70	2.64	7.44	26.		.6	13	0	835A / 855A	"
699	6-1	"	24.1	9.96	2.69	7.48	27.		.6	13	0	837A / 857A	"
700	6-2	Cooper	23.2	9.36	2.82	7.47	26.		.6	12	0	855A / 915A	"
701	6-3	Middleton	22.6	9.32	2.78	7.46	26.		.6	12	0	907A / 925A	"
702	6-4	DeVore	22.2	9.01	2.63	7.44	24.		.6	12	-.01	1208P / 1224P	"
703	6-5	Cooper	21.6	9.11	2.74	7.44	25.		.6	12	0	820A / 844A	"
704	6-6	Middleton	21.7	9.50	2.60	7.43	25.		.6	12	0	834A / 852A	"
705	6-7	"	21.5	9.28	2.51	7.42	23.		.6	12	0	821A / 839A	"
706	6-8	"	21.4	9.23	2.51	7.40	23.		.6	12	0	815A / 833A	"
707	6-9	Cooper	21.5	8.92	2.41	7.39	21.		.6	12	0	914A / 932A	"
708	6-10	Middleton	21.4	9.10	2.34	7.40	21.		.6	12	0	834A / 852A	"
709	6-11	DeVore	21.4	8.55	2.13	7.32	18.		.6	12	0	204P / 221P	"
710	6-12	Cooper	21.3	8.86	2.38	7.36	21.		.6	12	0	825A / 842A	FC 29
711	6-13	Middleton	21.2	8.69	2.26	7.36	20.		.6	12	0	728A / 746A	"
712	6-14	"	21.2	8.75	2.20	7.35	19.		.6	12	0	820A / 838A	"
713	6-15	"	21.2	8.94	2.19	7.37	20.		.6	12	+.01	822A / 840A	"
714	6-16	Cooper	21.5	9.24	2.25	7.37	21.		.6	12	0	840A / 900A	"
715	6-17	DeVore	21.7	9.11	2.19	7.36	20.		.6	12	0	1159A / 1216P	"
716	6-18	DeVore-DeVore	21.5	8.93	2.08	7.33	19.		.6	12	0	143P / 159P	"
717	6-19	Cooper	21.0	8.95	2.20	7.35	20.		.6	11	0	904A / 922A	"
718	6-20	DeVore	21.3	8.91	2.07	7.33	18.		.6	12	-.01	1152A / 1208P	"
719	6-21	"	21.5	8.68	2.00	7.30	17.		.6	12	-.01	137P / 153P	"
720	6-22	Cooper	21.3	9.16	2.05	7.33	19.		.6	12	0	836A / 854A	"
721	6-23	"	21.5	8.63	2.15	7.32	19.		.6	12	0	815A / 833A	"
722	6-24	DeVore	21.2	8.27	1.96	7.29	16.		.6	12	0	208P / 226P	"
723	6-25	"	21.2	8.42	1.97	7.29	17.		.6	12	0	123P / 137P	"
724	6-26	"	21.3	8.12	2.01	7.30	16.		.6	12	0	1142A / 1157A	"
725	6-27	"	21.2	8.26	1.88	7.28	16.		.6	12	0	149P / 205P	"
726	6-28	"	21.2	8.43	1.91	7.28	16.		.6	12	0	1117A / 1132A	"
727	6-29	Cooper	21.0	8.44	1.89	7.28	16.		.6	12	0	815A / 831A	"
728	6-30	"	20.9	8.26	1.86	7.27	15.		.6	12	0	905A / 919A	"
729	7-1	DeVore	20.5	7.72	1.82	7.26	14.		.6	11	0	1205P / 1219P	"
730	7-4	Middleton	20.7	8.37	1.83	7.28	15.		.6	11	0	1142A / 1200N	FC 29
731	7-5	Middleton	20.7	8.73	1.74	7.30	15.		.6	12	0	1217P / 1233P	FC 29
732	7-6	"	20.7	8.62	1.78	7.31	15.		.6	12	0	1210P / 1226P	FC 18
733	7-7	Cooper	20.5	8.51	1.87	7.30	16.		.6	11	0	834A / 848A	FC 29
734	7-8	Middleton	20.4	8.15	1.65	7.27	13.		.6	12	0	1255P / 113P	"

F. C. D. FORM 104 500 8-38

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. P3R

DISCHARGE MEASUREMENTS OF SAN GABRIEL RIVER - WEST FORK

at Mean above Forks DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
735	7-10	Middleton	20.3	8.42	1.78	7.29	15.		.6	11	0	830A / 846A	FC 28
736	7-11	"	17.8	7.30	1.73	7.26	13.		.6	10	0	105P / 121P	"
737	7-12	"	17.3	7.41	1.79	7.25	13.		.6	13	0	1250P / 105P	"
738	7-13	"	17.7	7.19	1.66	7.23	12.		.6	13	0	121P / 138P	"
739	7-14	"	17.6	7.10	1.81	7.26	13.		.6	13	0	804A / 822A	"
740	7-15	"	17.7	7.35	1.77	7.26	13.		.6	13	0	800A / 818A	"
741	7-17	Middleton	17.0	6.95	1.75	7.25	12.		.6	13	0	1255P / 113P	"
742	7-18	"	17.1	7.09	1.72	7.23	12.		.6	13	0	142P / 200P	"
743	7-19	"	17.6	7.17	1.63	7.23	12.		.6	13	0	120P / 138P	"
744	7-20	"	17.4	7.75	1.63	7.24	13.		.6	13	-.01	140P / 158P	"
745	7-21	"	17.5	6.72	1.57	7.21	11.		.6	13	0	120P / 138P	"
746	7-22	"	17.7	8.26	1.47	7.24	12.		.6	13	0	700A / 718A	"
747	7-24	Middleton	18.5	8.23	1.45	7.23	12.		.6	14	0	803A / 821A	"
748	7-25	"	17.4	7.85	1.36	7.20	11.		.6	13	+.01	105P / 125P	"
749	7-26	E.K.DeVore	17.3	7.37	1.51	7.22	11.		.6	10	0	949A / 1003A	FC 32
750	7-27	Middleton	17.4	8.10	1.36	7.20	11.		.6	12	0	602A / 619A	FC 29
751	7-28	Middleton	17.3	7.98	1.40	7.20	11.		.6	13	0	1252P / 112P	FC 11
752	7-29	"	17.5	8.56	1.43	7.21	12.		.6	13	0	755A / 815A	"
753	7-31	"	17.3	8.60	1.33	7.18	11.		.6	13	-.01	1232P / 1252P	"
754	8-1	"	17.3	8.88	1.41	7.20	13.		.6	13	0	815A / 835A	"
755	8-2	"	17.3	8.23	1.29	7.16	11.		.6	13	-.01	204P / 222P	"
756	8-3	"	17.4	8.24	1.34	7.19	11.		.6	13	0	820A / 838A	"
757	8-4	"	17.5	8.39	1.28	7.16	11.		.6	13	0	203P / 221P	"
758	8-7	"	17.4	8.63	1.29	7.17	11.		.6	13	0	110P / 130P	"
759	8-8	"	17.4	8.84	1.30	7.18	11.		.6	13	0	935A / 953A	"
760	8-9	Middleton	17.5	8.91	1.27	7.18	11.		.6	13	0	925A / 943A	FC 11
761	8-10	"	17.5	9.10	1.26	7.17	11.		.6	13	0	928A / 946A	"
762	8-11	"	17.3	8.20	1.16	7.14	9.5		.6	13	0	226P / 244P	"
763	8-14	"	17.2	8.44	1.14	7.14	9.6		.6	13	0	144P / 202P	"
764	8-15	"	17.4	8.76	1.17	7.15	10.		.6	13	0	1026A / 1044A	"
765	8-16	"	17.4	8.93	1.19	7.15	11.		.6	13	0	832A / 850A	"
766	8-17	"	17.3	8.58	1.19	7.14	10.		.6	13	0	1255P / 113P	"
767	8-18	"	17.2	8.22	1.09	7.13	9.0		.6	13	0	245P / 303P	"
768	8-21	"	17.1	8.28	1.10	7.12	9.1		.6	13	0	215P / 233P	"
769	8-22	"	17.3	8.52	1.08	7.14	9.2		.6	13	0	950A / 1008A	"
770	8-23	"	17.3	8.64	1.15	7.14	9.9		.6	13	0	844A / 902A	"
771	8-24	"	17.3	8.65	1.11	7.14	9.6		.6	13	0	830A / 848A	"
772	8-25	"	17.3	7.90	1.05	7.12	8.3		.6	13	0	203A / 221A	"
773	8-28	Middleton	17.2	7.99	1.01	7.11	8.1		.6	13	0	143P / 200P	FC 11
774	8-29	"	17.2	8.43	1.11	7.13	9.4		.6	13	0	830A / 848A	"
775	8-30	"	17.2	8.31	1.12	7.13	9.3		.6	13	+.01	1135A / 1153A	"
776	8-31	"	17.2	7.93	1.03	7.11	8.2		.6	13	0	107P / 125P	"
777	9-7	Cooper	17.2	8.38	1.07	7.13	9.0		.6	12	0	748A / 808A	"
778	9-14	"	17.2	9.83	1.18	7.17	12.		.6	10	0	812A / 828A	"
779	9-21	"	17.2	8.39	1.57	7.19	10.		.6	10	0	735A / 750A	"
780	9-25	Cooper-Brown	87.0	170.5	9.34	10.68	1590.		.6	8	-.03	648A / 720A	FC 29
781	9-25	" "	105.	222.5	9.94	10.95	2210.		.6	9	-.66	925A / 1015A	"
782	9-25	" "	67.0	175.	9.67	10.10	1690.		.6	12	0	124P / 146P	"
783	9-25	" "	67.0	134.	9.64	10.19	1290.		.6	13	+.08	437P / 453P	"
784	9-26	Cooper	63.0	67.8	4.94	9.71	335.		.6	14	-.02	832A / 900A	FC 11
785	9-26	"	63.0	82.0	5.92	10.00	485.		.6	14	-.04	425P / 500P	"
786	9-27	"	33.7	32.9	3.83	9.04	126.		.6	11	-.01	845A / 900A	"
787	9-28	"	29.0	32.5	3.33	9.00	108.		.6	10	0	735A / 750A	"

F. C. Dist. Form 58

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

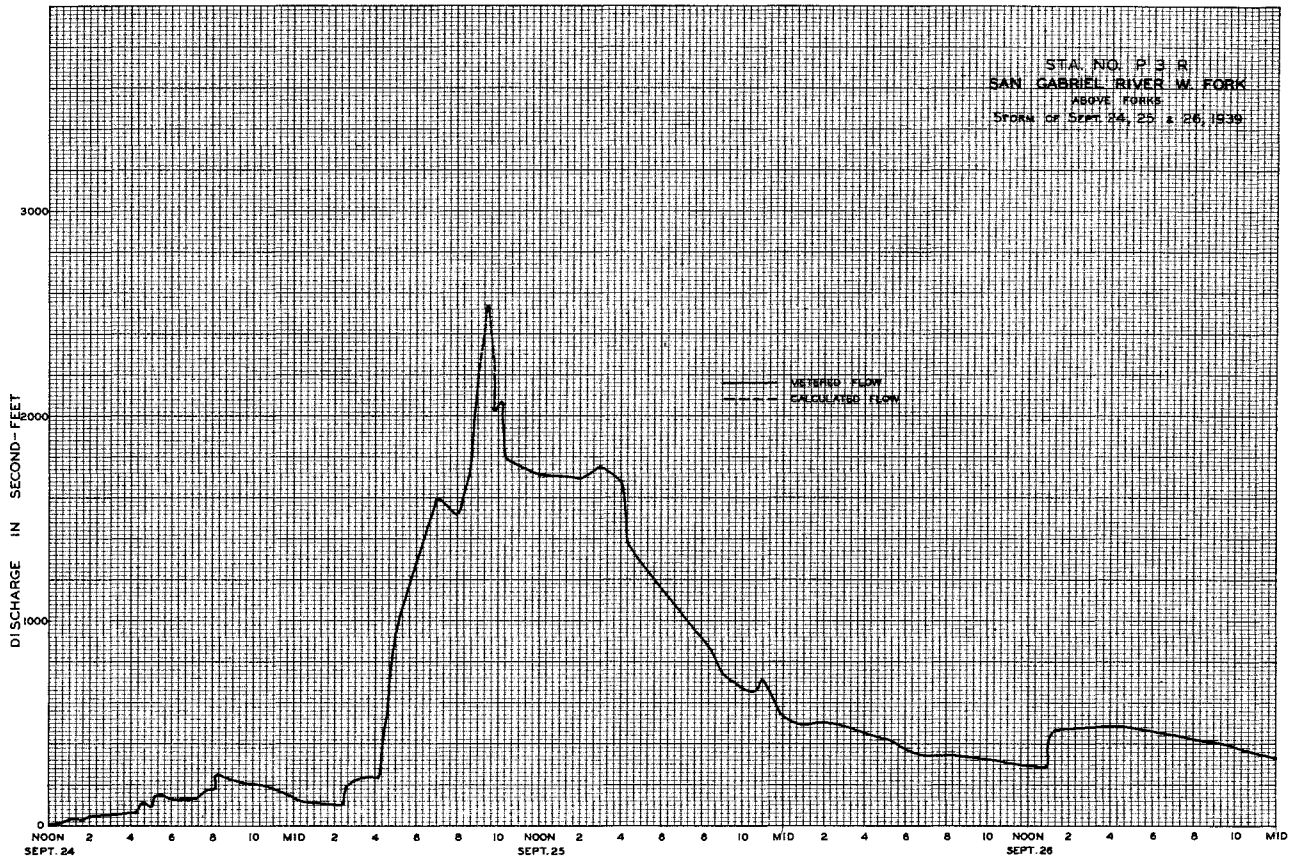
Sta. No. P3R

Daily discharge, in second-feet of SAN GABRIEL RIVER - WEST FORK above Forks for the year ending September 30, 19 39

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17	E 25	22	67	E 35	33	40	37	25	14	10	7.5
2	E 17	E 24	23	68	E 31	32	65	34	24	14	11	7.5
3	E 28	26	23	134	42	32	56	41	24	14	10	7.5
4	E 21	23	22	269	42	31	49	36	22	14	10	8
5	E 18	E 23	22	235	38	31	48	36	24	14	10	8.5
6	19	E 23	22	128	35	30	44	35	23	14	10	8.5
7	20	22	21	113	38	32	44	E 36	21	15	10	8.5
8	20	23	E 21	96	66	31	42	E 33	E 21	13	10	8.5
9	20	E 24	E 21	78	75	41	40	32	20	14	9	8
10	20	E 24	E 21	63	75	80	40	33	19	13	10	8
11	20	E 24	21	57	82	42	38	35	19	12	10	10
12	20	23	22	50	83	39	38	35	19	12	10	10
13	19	23	22	39	79	38	43	38	19	12	9	10
14	19	23	23	E 39	63	90	42	38	18	12	9	10
15	24	23	79	39	38	259	38	36	19	13	9	10
16	22	23	62	35	58	151	37	37	20	13	9	8.5
17	20	23	34	36	37	38	36	36	19	12	10	8.5
18	21	22	350	34	36	37	99	34	19	12	10	8.5
19	20	23	861	32	37	37	156	33	18	12	10	8.5
20	20	23	558	34	36	38	150	32	17	12	10	9.5
21	19	23	375	55	37	38	138	31	18	11	10	10
22	19	23	216	47	36	38	153	32	17	11	8.5	8
23	19	22	142	38	35	38	205	32	18	11	9	8
24	21	23	118	38	36	38	215	30	16	11	8.5	6.5
25	35	23	100	38	35	37	212	28	16	11	8.5	1140
26	43	21	94	34	34	45	47	27	15	10	8	413
27	40	23	81	33	34	74	33	27	15	10	8	139
28	E 41	23	81	34	34	154	51	24	15	10	8	105
29	E 25	22	75	32		115	38	25	15	11	8	87
30	E 26	22	70	35		46	37	25	14	11	8	58
31	E 25		68	E 37		42		26		12	7.5	
	718	692	3670	2065	1287	1807	2274	1014	569	380	288.0	2207.0
MEAN	23.2	23.1	118	66.6	46.0	58.3	75.8	32.7	19.0	12.3	9.29	73.6
ACRE-FEET	1420	1370	7280	4100	2550	3580	4510	2010	1130	754	571	4380

Remarks: E indicates discharge estimated - see station description.

YEAR OR PERIOD MEAN 46.5 ACRE FEET 33660



STATION P4R & P4B-R

SAN GABRIEL RIVER E. FORK above Forks

LOCATION:

On the North bank of the East Fork of the San Gabriel River above the high water line of San Gabriel Dam No. 1, 2½ miles above the West Fork, and 8 miles northeast of Glendora. Former Station P4R was about 1500 feet downstream.

DRAINAGE AREA:

91.4 square miles.

CHANNEL AND CONTROL:

Channel-sand, gravel and boulders. Channel forms control. Rock and Gravel levees were constructed January 20, 1939 to confine flow to north side of channel.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows measured from cable car at gage.

RECORDER:

Installed November 30, 1932 at Station P4R. Moved to Station P4B-R December 10, 1938, and installed in a standard F. C. concrete house over a 4 ft. x 4 ft. concrete stilling well. An Au continuous recorder in service from October 1, 1938 to September 30, 1939.

REGULATION:

None.

DIVERSIONS:

Some water diverted for placer mining.

RECORDS AVAILABLE:

At Stations P4R and P4B-R
November 30, 1932 to September 30, 1939.

EXTREMES OF DISCHARGE:

1938-1939
Maximum 716 second-feet, December 18.
Minimum 13.5 second-feet, September 9.
1932-1939 (Stations P4R and P4B-R)
Maximum 46000 second-feet, estimated by U.S.G.S. March 2, 1938.
Minimum 1.5 second-feet October 1, 1934.

ACCURACY:

Good.
Estimated by interpolation or extrapolation November 16; December 9 and 10; January 5 and 6.
Estimated by comparison September 25 to 27 due to extreme control shift, and insufficient measurements.

OPERATION:

Moved from a previous location by the District for the Pasadena Water Department.
The Station was later taken over, reconstructed and operated by the District in co-operation with the U.S.G.S. Water Resources Branch.

REMARKS:

Records from Station P4R for 1938-1939 are included in P4B-R as any intermediate flow between the two locations was negligible during the period P4R was in operation.

F. C. D. FORM 104 500 8-38

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. P4R

DISCHARGE MEASUREMENTS OF SAN GABRIEL RIVER - EAST FORK

AT above Forks DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Diff.	Shifted	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
671	10-1	DeVore	Two Channels			6.26	33.		.6	17	0	752A / 817A	FC 32
672	10-2	"	"		"	6.25	32.		.6	17	0	1250P / 1160P	"
673	10-3	"	"		"	6.26	33.		.6	17	0	748A / 814A	"
674	10-4	"	"		"	6.26	31.		.6	17	0	833A / 858A	"
675	10-5	"	"		"	6.26	32.		.6	17	0	801A / 829A	"
676	10-6	"	"		"	6.27	33.		.6	17	0	749A / 818A	"
677	10-7	"	"		"	6.27	34.		.6	17	0	839A / 905A	"
678	10-8	"	"		"	6.26	33.		.6	17	0	1026A / 1050A	"

F. C. D. FORM 104 500 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. P4R

DISCHARGE MEASUREMENTS OF SAN GABRIEL RIVER - EAST FORK

at above Forks DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
679	10-9	DeVore-DeVore	"		"	6.26	33.		.6	17	0	1057A / 1118A	"
680	10-10	DeVore	"		"	6.26	31.		.6	17	0	851A / 918A	"
681	10-11	"	"		"	6.26	31.		.6	17	0	905A / 933A	"
682	10-12	"	"		"	6.26	32.		.6	17	0	912A / 945A	"
683	10-13	"	"		"	6.26	30.		.6	17	0	751A / 816A	"
684	10-14	DeVore-DeVore	"		"	6.26	31.		.6	17	0	1056A / 1123A	"
685	10-15	DeVore	"		"	6.30	37.		.6	17	0	809A / 834A	"
686	10-16	"	"		"	6.28	33.		.6	17	0	914A / 938A	"
687	10-17	"	"		"	6.28	34.		.6	17	0	859A / 924A	"
688	10-18	"	"		"	6.27	33.		.6	17	0	908A / 933A	"
689	10-19	"	"		"	6.27	32.		.6	17	0	842A / 907A	"
690	10-20	"	"		"	6.26	32.		.6	17	0	850A / 916A	"
691	10-21	Middleton	"		"	6.26	31.		.6	17	0	1025A / 1054A	FC 34
692	10-22	DeVore	"		"	6.25	30.		.6	17	0	329P / 357P	"
693	10-23	"	"		"	6.25	31.		.6	17	0	955A / 1022A	"
694	10-24	"	"		"	6.25	31.		.6	17	0	1021A / 1047A	"
695	10-25	DeVore	Two Channels			6.25	30.		.6	17	0	1028A / 1053A	FC 34
696	10-26	"	"		"	6.25	31.		.6	17	0	916A / 941A	"
697	10-27	"	"		"	6.25	30.		.6	17	0	924A / 948A	"
698	10-28	Middleton	"		"	6.25	28.		.6	17	0	1005A / 1035A	"
699	10-29	"	"		"	6.26	30.		.6	17	0	945A / 1012A	"
700	10-30	DeVore	"		"	6.26	31.		.6	17	0	1001A / 1027A	"
701	10-31	Cooper	16.0	16.67	1.77	6.26	29.		.6	10	0	145P / 200P	FC 11
702	11-1	DeVore	Two Channels			6.26	31.		.6	17	0	923A / 949A	FC 34
703	11-2	"	"		"	6.26	31.		.6	17	0	1031A / 1055A	"
704	11-3	"	"		"	6.28	31.		.6	17	0	933A / 958A	"
705	11-4	Middleton	"		"	6.28	30.		.6	17	0	925A / 954A	"
706	11-5	"	"		"	6.28	31.		.6	17	0	1012A / 1040A	"
707	11-6	DeVore-DeVore	"		"	6.27	29.		.6	17	0	959A / 1022A	"
708	11-7	DeVore	"		"	6.27	28.		.6	17	0	919A / 945A	"
709	11-8	"	"		"	6.27	29.		.6	17	0	1014A / 1046A	"
710	11-9	"	"		"	6.27	27.		.6	17	0	925A / 949A	"
711	11-11	"	"		"	6.29	28.		.6	17	0	959A / 1023A	"
712	11-12	Middleton	"		"	6.29	29.		.6	17	0	1003A / 1032A	"
713	11-13	DeVore	"		"	6.29	28.		.6	17	0	1002A / 1028A	"
714	11-14	"	"		"	6.29	28.		.6	17	0	924A / 949A	"
715	11-15	"	"		"	6.29	26.		.6	17	0	936A / 1000A	"
716	11-16	DeVore-Brown	"		"	6.29	25.		.6	17	0	947A / 1012A	"
717	11-17	Brown	"		"	6.29	27.		.6	17	0	912A / 937A	"
718	11-18	Brown	Two Channels			6.27	25.		.6	17	0	912A / 938A	FC 34
719	11-19	Middleton	"		"	6.28	27.		.6	17	0	1011A / 1042A	"
720	11-20	Brown	"		"	6.27	29.		.6	17	0	1127A / 1154A	"
721	11-21	Brown-Cooper	"		"	6.27	27.		.6	14	0	1222P / 1240P	"
722	11-22	Brown	"		"	6.27	27.		.6	17	0	945A / 1010A	FC 29
723	11-23	"	"		"	6.27	26.		.6	17	0	844A / 908A	FC 34
724	11-25	Middleton	"		"	6.27	25.		.6	17	0	935A / 1007A	"
725	11-26	"	"		"	6.27	25.		.6	17	0	934A / 1006A	"
726	11-27	Brown	"		"	6.27	27.		.6	17	0	1003A / 1027A	"
727	11-28	"	"		"	6.27	26.		.6	17	0	744A / 808A	"
728	11-29	"	"		"	6.27	26.		.6	17	0	711A / 735A	"
729	11-30	"	"		"	6.27	26.		.6	17	0	714A / 735A	"
730	12-1	"	"		"	6.27	26.		.6	17	0	705A / 728A	"
731	12-2	"	"		"	6.28	27.		.6	17	0	750A / 813A	"
732	12-3	Middleton	"		"	6.28	26.		.6	17	0	854A / 925A	"
733	12-4	Brown	"		"	6.28	27.		.6	17	0	1003A / 1024A	"
734	12-5	"	"		"	6.27	26.		.6	17	0	737A / 800A	"
735	12-7	Middleton	15.8	15.0	1.68	6.27	25.		.6	14	0	200P / 222P	FC 11
736	12-8	Brown	Two Channels			6.27	24.		.6	17	0	355P / 416P	FC 34
737	12-9	"	"		"	6.28	25.		.6	17	0	736A / 800A	"

F. C. D. FORM 104 500 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. P4 R-R

DISCHARGE MEASUREMENTS OF SAN GABRIEL RIVER - EAST FORK

at above Forks DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
1	12-10	Cooper	17.9	14.6	1.59	7.10	23		.6	9	0	400P / 416P	FC34
2	12-11	Brown	Two channels			7.10	26		.6	9	0	1050A / 1102A	"
3	12-12	"	22.6	13.6	1.90	7.11	26		.6	12	0	757A / 817A	"
4	12-13	"	22.7	12.8	2.04	7.11	26		.6	12	0	745A / 804A	"
5	12-14	"	22.7	13.6	1.91	7.11	26		.6	12	0	728A / 745A	"
6	12-15	"	25.7	24.2	3.33	7.53	80		.6	13	-.02	607A / 628A	"
7	12-15	"	25.5	22.6	3.14	7.48	71		.6	13	-.01	829A / 849A	"
8	12-15	"	25.6	24.9	1.93	7.39	48		.6	13	-.01	1234P / 1252P	"
9	12-16	"	25.6	24.1	1.84	7.36	44		.6	13	0	257P / 317P	"
10	12-16	"	25.6	24.8	1.87	7.37	47		.6	13	0	702A / 721A	"
11	12-17	Middleton	24.6	21.6	1.70	7.30	37		.6	13	0	904A / 923A	"
12	12-18	Brown	27.4	37.6	3.08	7.78	116		.6	10	0	805A / 822A	"
13	12-18	"	27.5	38.1	3.07	7.78	117		.6	10	0	908A / 924A	"
14	12-18	"	27.8	39.5	3.30	7.83	130		.6	14	0	1021A / 1042A	"
15	12-18	"	27.5	38.2	3.20	7.78	122		.6	14	-.01	1202P / 1220P	"
16	12-18	"	27.1	36.2	3.02	7.68	109		.6	13	-.01	200P / 220P	"
17	12-18	"	27.0	35.9	3.02	7.65	109		.6	13	0	402P / 420P	"
18	12-19	"	68.0	74.9	4.76	7.77	356		.6	17	-.06	645A / 711A	"
19	12-19	"	66.8	63.6	4.74	7.64	301		.6	14	-.02	845A / 907A	"
20	12-19	"	66.2	56.8	4.61	7.63	262		.6	16	-.01	1042A / 1106A	"
21	12-19	"	Two channels			7.59	223		.6	15	0	1223P / 1250P	"
22	12-19	"	Two channels			7.55	205		.6	15	-.02	207P / 230P	"
23	12-19	"	Two channels			7.53	191		.6	15	-.02	316P / 336P	"
24	12-19	Brown	Two channels			7.50	178		.6	15	0	426P / 445P	FC34
25	12-20	"	"	"		7.85	217		.6	15	+.03	637A / 658A	"
26	12-20	"	"	"		7.87	227		.6	15	-.01	720A / 741A	"
27	12-20	"	"	"		7.87	224		.6	15	+.03	902A / 922A	"
28	12-20	"	65.2	58.0	4.60	7.90	267		.6	15	0	1034A / 1054A	"
29	12-20	"	65.0	59.0	4.67	7.86	276		.6	15	-.03	1152A / 1212P	"
30	12-20	"	Two	channels		7.81	251		.6	15	-.02	1545 / 214P	"
31	12-20	"	"	"		7.89	254		.6	15	+.02	324P / 343P	"
32	12-20	"	65.3	56.5	4.36	7.84	246		.6	15	-.03	424P / 444P	"
33	12-21	"	Two	channels		7.60	145		.6	15	-.01	740A / 800A	"
34	12-21	"	"	"		7.56	136		.6	16	0	1042A / 1103A	"
35	12-21	"	"	"		7.54	131		.6	16	0	113P / 133P	"
36	12-21	"	"	"		7.50	130		.6	16	0	358P / 419P	"
37	12-22	"	"	"		Est 7.43	105		.6	16		740A / 800A	"
38	12-24	Middleton	31.2	19.6	3.24	7.27	63		.6	14	-.01	1043A / 1103A	"
39	12-25	Brown	31.3	19.4	3.41	7.24	66		.6	16	0	243P / 302P	"
40	12-27	"	31.2	19.7	2.99	7.22	59		.6	16	0	858A / 920A	"
41	12-28	"	31.3	18.8	2.93	7.21	55		.6	16	0	735A / 755A	"
42	12-29	"	31.1	19.0	2.97	7.20	56		.6	16	0	738A / 757A	"
43	12-30	Middleton	30.7	17.6	3.03	7.19	53		.6	14	0	905A / 925A	"
44	12-31	"	30.8	17.9	2.82	7.18	51		.6	15	0	900A / 922A	"
45	1-1	Brown	30.1	20.2	2.81		57		.6	15		1203P / 1222P	FC29
46	1-2	"	30.2	18.5	2.97		55		.6	14		1028A / 1047A	"
47	1-3	Brown	30.7	18.5	2.79	7.17	52		.6	16	0	1007A / 1026A	FC34
48	1-4	"	31.2	20.7	2.33	7.16	48		.6	16	0	931A / 950A	"
49	1-5	"	31.3	20.6	2.38	7.16	49		.6	16	0	935A / 955A	"
50	1-5	"	31.6	22.4	2.42	7.21	54		.6	16	+.02	1124A / 1143A	"
51	1-5	"	32.9	27.9	4.45	7.44	124		.6	14	+.10	1253P / 108P	"
52	1-5	"	Two	channels		7.84	239		.6	14	+.17	148P / 205P	"
53	1-5	"	"	"		7.91	225		.6	14	-.02	228P / 246P	"
54	1-5	"	"	"		7.89	216		.6	14	-.03	307P / 327P	"
55	1-5	"	"	"		7.82	189		.6	14	-.04	443P / 501P	"
56	1-6	"	32.0	23.2	3.76	7.48	87		.6	16	0	755A / 814A	"
57	1-7	Middleton	31.2	19.0	3.32	7.39	63		.6	15	0	912A / 936A	"
58	1-8	Brown	31.3	19.0	3.06	7.36	58		.6	15	0	1035A / 1054A	"

F.C.D. FORM 104 1M 8-37

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. P 4 R-R

DISCHARGE MEASUREMENTS OF SAN GABRIEL RIVER - EAST FORK

~~Mx~~ above Forks DURING THE YEAR ENDING SEPTEMBER 30, 1939

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	RATING PERCENT DIFF.	BEG. SD	MEAS SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
59	1-9	Brown	31.5	19.4	3.03	7.35	59		.6	15	0	954A / 1013A	FC 34
60	1-10	"	31.4	19.1	2.94	7.34	56		.6	15	0	923A / 942A	"
61	1-11	Brown-Middleton	31.2	18.9	3.05	7.33	57		.6	15	0	940A / 957A	"
62	1-12	Brown	31.1	19.2	2.87	7.32	55		.6	15	0	1036A / 1055A	"
63	1-13	Middleton	31.0	18.8	3.12	7.32	53		.6	15	0	905A / 928A	"
64	1-14	"	30.4	18.8	2.71	7.30	51		.6	16	0	930A / 955A	"
65	1-15	Brown	28.8	17.5	2.76	7.28	48		.6	11	0	1040A / 1055A	"
66	1-16	"	28.8	17.4	2.63	7.28	46		.6	15	0	1032A / 1052A	"
67	1-17	"	28.0	17.6	2.76	7.29	49		.6	15	0	913A / 933A	"
68	1-18	Brown -Middleton	27.8	17.9	2.70	7.28	48		.6	15	0	1157A / 1212P	"
69	1-19	Brown-Cooper	27.7	17.2	2.73	7.28	47		.6	15	0	1115A / 1131A	"
70	1-20	Brown	27.6	16.8	2.82	7.38	47		.6	13	0	739A / 755A	FC34
71	1-21	Cooper	27.0	16.8	3.24	7.50	61		.6	13	+.01	856A / 916A	"
72	1-21	Brown	32.0	31.1	2.03	7.48	63		.6	15	0	234P / 254P	"
73	1-21	"	32.1	31.1	2.14	7.48	66		.6	14	0	400P / 415P	"
74	1-21	"	32.0	30.4	2.28	7.48	69		.6	14	0	652P / 715P	"
75	1-22	"	31.6	26.7	2.07	7.41	55		.6	15	0	713A / 731A	"
76	1-23	"	30.4	23.3	2.09	7.38	49		.6	15	0	1020A / 1039A	"
77	1-24	"	30.0	22.2	2.16	7.37	48		.6	15	0	950A / 1009A	"
78	1-25	"	30.0	21.4	2.21	7.36	47		.6	15	0	936A / 956A	"
79	1-26	"	30.0	21.0	2.15	7.36	45		.6	15	0	917A / 937A	"
80	1-27	Middleton	29.9	20.2	2.23	7.36	45		.6	15	0	922A / 945A	"
81	1-28	"	30.0	20.5	2.24	7.36	46		.6	15	0	1009A / 1035A	"
82	1-29	Brown	30.0	20.3	2.15	7.36	44		.6	15	0	1010A / 1028A	"
83	1-30	"	Two channels			7.35	43		.6	19	0	1015A / 1039A	"
84	1-30	"	31.2	24.7	2.47	7.47	61		.6	15	0	912P / 930P	"
85	1-31	"	30.4	21.4	2.19	7.38	47		.6	15	0	711A / 734A	"
86	2-1	Brown-Middleton	30.2	21.1	2.16	7.37	46		.6	15	0	925A / 940A	"
87	2-2	Brown	30.0	20.0	2.10	7.36	42		.6	15	0	1010A / 1028A	"
88	2-3	"	30.7	22.3	2.33	7.42	52		.6	15	0	1014A / 1029A	"
89	2-3	"	31.0	22.9	2.45	7.44	56		.6	15	+.01	1253P / 1310P	"
90	2-3	"	31.1	23.4	2.44	7.45	57		.6	15	0	247P / 304P	"
91	2-3	"	31.0	23.2	2.46	7.45	57		.6	15	0	424P / 441P	"
92	2-4	Brown	30.7	21.7	2.35	7.41	51		.6	15	-.01	735A / 752A	FC34
93	2-5	"	30.5	21.0	2.35	7.39	49		.6	15	0	1032A / 1051A	"
94	2-6	"	30.5	20.8	2.33	7.38	48		.6	15	0	1015A / 1034A	"
95	2-7	"	30.4	20.7	2.31	7.38	48		.6	15	0	1003A / 1020A	"
96	2-8	"	32.8	28.5	3.05	7.61	87		.6	11	-.02	601A / 615A	"
97	2-8	"	32.3	27.3	3.00	7.57	82		.6	12	-.02	702A / 715A	"
98	2-8	"	31.7	25.3	2.84	7.53	72		.6	15	0	908A / 927A	"
99	2-8	"	31.2	23.7	2.68	7.50	64		.6	15	0	1130A / 1148A	"
100	2-8	"	Two Channels			7.47	60		.6	19	0	150P / 214P	"
101	2-9	"	30.6	21.0	2.63	7.43	55		.6	15	0	1005A / 1023A	"
102	2-10	Middleton	30.6	19.4	2.73	7.42	53		.6	15	0	1049A / 1108A	"
103	2-11	"	30.4	19.0	2.56	7.41	49		.6	16	0	930A / 951A	"
104	2-12	Brown	30.3	20.2	2.57	7.41	52		.6	15	0	1002A / 1022A	"
105	2-13	"	25.5	19.6	2.95	7.41	58		.6	13	-	906A / 924A	FC29
106	2-14	"	30.4	20.2	2.55	7.42	52		.6	15	0	1011A / 1030A	FC34
107	2-15	"	30.4	20.5	2.58	7.42	53		.6	15	0	930A / 950A	"
108	2-16	"	30.4	20.6	2.55	7.42	53		.6	15	+.01	932A / 952A	"
109	2-17	Middleton	30.2	19.6	2.62	7.42	51		.6	15	0	920A / 940A	"
110	2-18	Middleton	30.0	20.2	2.52	7.41	51		.6	15	0	903A / 925A	FC 34
111	2-19	Brown	30.4	20.3	2.52	7.42	51		.6	15	0	1007A / 1026A	"
112	2-20	"	30.4	20.1	2.56	7.42	52		.6	15	0	1123A / 1140A	"
113	2-21	"	30.5	20.5	2.55	7.42	52		.6	15	0	936A / 957A	"
114	2-22	"	30.5	20.6	2.49	7.42	51		.6	15	0	1012A / 1032A	"
115	2-23	Middleton	30.5	20.0	2.50	7.42	50		.6	15	0	939A / 1002A	"
116	2-24	Middleton	30.5	20.7	2.59	7.42	54		.6	15	0	1108A / 1130A	FC 34
117	2-25	"	30.5	21.0	2.56	7.42	54		.6	15	0	931A / 955A	"
118	2-26	Brown	30.5	21.0	2.49	7.42	52		.6	15	0	1001A / 1021A	"
119	2-27	"	Two channels			7.42	53		.6	20	0	953A / 1013A	"
120	2-28	Middleton	30.5	20.9	2.54	7.41	53		.6	15	0	939A / 1001A	"
121	3-1	"	30.4	20.9	2.48	7.41	52		.6	15	0	938A / 959A	"
122	3-2	"	30.4	20.6	2.50	7.40	52		.6	15	0	935A / 958A	"
123	3-3	"	30.3	20.4	2.42	7.40	49		.6	15	0	920A / 942A	"
124	3-4	"	30.3	20.3	2.47	7.40	50		.6	15	0	913A / 936A	"
125	3-5	Brown	30.3	20.5	2.42	7.39	50		.6	15	0	1052A / 1110A	"
126	3-6	"	30.3	20.6	2.40	7.38	49		.6	15	0	1003A / 1022A	"
127	3-7	Middleton	30.3	20.2	2.43	7.39	49		.6	15	0	1010A / 1031A	"
128	3-8	"	30.3	20.4	2.43	7.39	50		.6	15	0	957A / 1018A	"
129	3-9	"	30.3	20.4	2.36	7.39	48		.6	15		903A / 924A	"
130	3-9	Brown	34.0	29.4	2.99	7.63	88		.6	12	+.06	1050P / 1105P	"
131	3-9	"	34.0	31.7	3.19	7.70	101		.6	12	+.01	1141P / 1200P	"
132	3-10	"	34.0	31.7	3.43	7.72	109		.6	12	0	1214A / 1230A	"
133	3-10	"	34.2	31.7	3.45	7.74	109		.6	12	0	145A / 201A	"
134	3-10	"	31.3	24.0	2.71	7.54	65		.6	12	-.01	713A / 728A	"
135	3-11	Middleton	30.3	20.9	2.59	7.47	54		.6	15	0	959A / 1022A	"
136	3-12	Brown	30.3	20.9	2.49	7.44	52		.6	16	0	1003A / 1023A	"
137	3-13	"	30.3	20.7	2.49	7.44	52		.6	15		904A / 924A	"
138	3-14	Brown-Middleton	30.3	20.4	2.52	7.43	52		.6	15	0	1032A / 1052A	"
139	3-15	Middleton	30.3	20.1	2.48	7.46	50		.6	15	0	1046A / 1108A	"
140	3-16	Middleton	30.3	20.9	2.48	7.46	52		.6	15	0	1045A / 1105A	FC34
141	3-17	"	30.3	21.2	2.55	7.47	54		.6	15	0	1013A / 1036A	"
142	3-18	"	30.3	22.0	2.60	7.48	57		.6	15	0	1000A / 1022A	"
143	3-19	Brown	31.0	22.6	2.64	7.50	60		.6	15	0	954A / 1013A	"
144	3-20	"	31.3	24.0	2.75	7.54	66		.6	15	0	917A / 933A	"
145	3-21	"	31.7	24.5	2.89	7.56	71		.6	15	0	741A / 800A	"
146	3-22	Middleton	31.7	24.3	2.86	7.56	69		.6	16	0	1019A / 1043A	"
147	3-23	"	31.7	24.2	2.87	7.55	69		.6	16	0	1003A / 1025A	"
148	3-24	"	31.6	23.9	2.83	7.54	68		.6	16	0	955A / 1018A	"
149	3-25	"	31.6	24.2	2.81	7.54	68		.6	16	0	1000A / 1023A	"
150	3-26	Brown	31.7	24.9	2.93	7.56	73		.6	15	0	1026A / 1044A	"
151	3-26	"	34.0	28.9	3.23	7.67	94		.6	12	0	648A / 705P	"
152	3-27	"	32.9	27.0	3.00	7.60	81		.6	11	0	636A / 650A	"
153	3-27	"	33.1	28.5	3.17	7.65	90		.6	11	+.01	823A / 835A	"
154	3-27	"	33.5	30.6	3.39	7.69	104		.6	12	+.02	913A / 927A	"
155	3-27	"	33.7	31.1	3.38	7.71	105		.6	12	0	1002A / 1015A	"
156	3-27	"	33.5	30.8	3.38	7.71	104		.6	12	0	1050A / 1105A	"
157	3-27	"	Two channels			7.67	96		.6	16	-.01	140P / 157P	"
158	3-27	"	33.5	31.0	3.47	7.73	108		.6	12	0	302P / 316P	"
159	3-27	"	33.5	30.3	3.44	7.70	104		.6	12	0	408P / 423P	"
160	3-28	"	32.3	25.8	3.03	7.61	78		.6	15	0	702A / 720A	"
161	3-29	Middleton	32.0	23.5	3.09	7.60	73		.6	16	0	925A / 950A	"
162	3-30	"	31.8	23.0	3.10	7.59	72		.6	16	0	1038A / 1103A	"
163	3-31	"	31.6	22.7	3.01	7.58	68		.6	16	0	923A / 947A	"

F.C.D. FORM 104 (M 9-37)

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. P 4 B-R

DISCHARGE MEASUREMENTS OF SAN GABRIEL RIVER - EAST FORK

~~XX~~ above Forks

DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	RATING PERCENT DIFF.	METER NO.	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
164	4-1	Middleton	31.6	23.0	3.03	7.58	70		.6	16	0	1005A 1029A	FC34
165	4-2	Brown	35.5	36.1	4.76	7.94	172		.6	12	0	1000A 1014A	"
166	4-2	"	33.3	34.7	4.66	7.88	162		.6	12	-.01	1141A 1155A	"
167	4-3	"	30.2	27.8	4.41	7.65	122		.6	15	0	912A 934A	"
168	4-4	"	30.4	33.1	3.13	7.54	103		.6	15	0	1144A 1205P	"
169	4-5	Middleton	30.4	29.8	3.27	7.52	98		.6	15	0	1055A 1116A	"
170	4-6	G.H.Middleton M.Middleton	30.3	29.3	3.15	7.50	92		.6	15	0	1003A 1023A	"
171	4-7	Middleton	30.3	29.3	3.45	7.49	101		.6	15	0	942A 1006A	"
172	4-8	"	30.1	27.7	3.38	7.47	94		.6	15	0	958A 1022A	"
173	4-9	Brown	30.0	28.0	3.36	7.46	94		.6	15	0	952A 1008A	"
174	4-10	"	30.0	28.6	3.36	7.46	96		.6	15	0	858A 915A	"
175	4-11	"	30.0	28.9	3.15	7.44	91		.6	15	0	900A 918A	"
176	4-12	Middleton	30.0	28.7	3.18	7.43	91		.6	15	0	925A 946A	"
177	4-13	"	30.0	28.9	3.18	7.42	92		.6	15	0	930A 953A	"
178	4-14	"	30.0	27.6	3.33	7.42	92		.6	15	0	941A 1004A	"
179	4-15	"	30.0	27.4	3.06	7.41	84		.6	15	0	1045A 1106A	"
180	4-16	Brown	30.0	27.2	3.15	7.40	86		.6	15	0	1017A 1036A	"
181	4-17	"	30.0	27.5	2.98	7.39	82		.6	15	0	857A 915A	"
182	4-18	"	29.6	29.2	2.78	7.38	81		.6	15	0	1207P 1226P	"
183	4-19	Middleton	29.8	30.2	2.70	7.38	82		.6	15	0	950A 1012A	"
184	4-20	"	29.8	30.8	2.49	7.38	76		.6	15	0	1016A 1038A	"
185	4-21	"	30.0	31.4	2.42	7.38	76		.6	15	0	945A 1007A	"
186	4-22	Middleton Middleton	30.6	31.3	2.40	7.38	75		.6	15	0	1023A 1041A	"
187	4-23	Brown	30.7	30.2	2.50	7.38	76		.6	15	0	955A 1013A	"
188	4-24	Brown	30.5	30.2	2.54	7.37	77		.6	14	0	841A 900A	FC34
189	4-25	"	30.5	30.1	2.39	7.36	72		.6	14	0	917A 933A	"
190	4-26	Middleton	30.5	30.4	2.27	7.36	69		.6	14	0	935A 956A	"
191	4-27	"	30.5	30.2	2.25	7.34	68		.6	15	0	955A 1017A	"
192	4-28	"	30.5	30.0	2.25	7.33	67		.6	15	0	946A 1005A	"
193	4-29	"	30.5	29.7	2.17	7.32	64		.6	15	0	1042A 1103A	"
194	4-30	"	30.4	29.8	2.25	7.32	67		.6	15	0	950A 1012A	"
195	5-1	Cooper	30.0	27.7	2.72	7.31	64		.6	12	0	1120A 1140A	"
196	5-2	Middleton	30.4	29.5	2.17	7.31	64		.6	15	0	958A 1018A	"
197	5-3	"	30.3	28.9	2.14	7.30	62		.6	15	0	1107A 1129A	"
198	5-4	"	30.0	28.9	2.08	7.29	60		.6	15	0	1045A 1106A	"
199	5-5	Cooper	26.0	21.1	2.75	7.26	58		.6	13	0	130P 150P	FC29
200	5-6	Middleton	29.9	28.1	2.05	7.28	57		.6	15	0	1047A 1109A	FC34
201	5-7	Cooper	25.5	20.3	2.75	7.26	56		.6	13	-	1030A 1050A	FC29
202	5-8	"	29.4	26.4	2.15	7.26	57		.6	13	0	1015A 1035A	FC34
203	5-8	Middleton	29.2	26.8	2.01	7.23	54		.6	15	0	435P 457P	"
204	5-8	"	29.2	26.96	1.99	7.23	54		.6	15	0	530P 551P	"
205	5-8	"	29.2	26.9	2.03	7.23	55		.6	15	0	627P 648P	"
206	5-8	"	29.2	27.1	1.96	7.23	53		.6	15	0	725P 748P	"
207	5-8	"	29.2	27.3	1.97	7.24	54		.6	15	0	828P 850P	"
208	5-8	"	29.2	27.3	1.99	7.24	54		.6	15	0	916P 940P	"
209	5-9	"	29.3	27.4	2.04	7.25	56		.6	15	0	403A 426A	"
210	5-9	"	29.3	27.7	2.07	7.26	57		.6	15	0	520A 542A	"
211	5-9	"	29.5	28.0	1.97	7.26	55		.6	15	0	613A 634A	"
212	5-9	Middleton	29.5	28.0	1.97	7.26	55		.6	15	0	727A 748A	FC34
213	5-9	"	29.5	28.1	2.03	7.26	57		.6	15	0	828A 850A	"
214	5-9	"	29.5	28.3	2.01	7.26	57		.6	15	0	922A 944A	"
215	5-9	"	29.5	28.2	2.06	7.26	58		.6	15	0	1020A 1042A	"
216	5-9	Middleton	29.4	28.0	2.03	7.26	57		.6	15	0	1123A 1146A	FC 34
217	5-9	"	29.3	27.6	2.02	7.25	56		.6	15	0	123P 144P	"
218	5-9	"	29.2	27.7	1.95	7.24	54		.6	15	0	300P 322P	"
219	5-9	"	29.2	27.5	1.88	7.23	52		.6	15	0	430P 452P	"
220	5-10	"	29.4	27.7	1.98	7.25	55		.6	15	0	915A 937A	"
221	5-11	Brown	29.6	28.0	1.99	7.25	56		.6	14	0	615A 635A	"
222	5-11	"	29.6	27.5	1.94	7.25	53		.6	16	0	753A 813A	"
223	5-11	"	29.6	27.7	2.04	7.25	56		.6	13	0	952A 1011A	"
224	5-11	"	29.6	27.6	1.99	7.25	55		.6	13	0	1150A 1210P	"
225	5-11	"	29.6	27.6	2.00	7.25	55		.6	13	0	150P 210P	"
226	5-11	"	29.6	27.7	2.07	7.25	57		.6	13	0	335P 355P	"
227	5-12	Middleton	29.5	28.0	1.98	7.25	56		.6	15	0	905A 928A	"
228	5-12	"	29.5	28.0	1.98	7.24	55		.6	15	0	1105A 1127A	"
229	5-12	"	29.3	27.7	1.91	7.23	53		.6	15	0	105P 127P	"
230	5-12	"	29.2	27.5	1.92	7.21	53		.6	15	0	305P 328P	"
231	5-13	"	29.4	27.8	1.95	7.24	54		.6	15	0	1025A 1047A	"
232	5-14	"	29.4	27.8	1.99	7.24	55		.6	15	0	1027A 1050A	"
233	5-15	Cooper	25.6	19.7	2.58	7.23	51		.6	13	0	940A 1000A	FC29
234	5-16	Middleton	29.2	27.3	1.94	7.22	53		.6	15	0	1022A 1044A	FC34
235	5-17	"	29.3	27.1	1.83	7.21	50		.6	15	0	1100A 1122A	"
236	5-18	Middleton	29.1	26.8	1.90	7.20	51		.6	15	0	1055A 1117A	FC34
237	5-19	Cooper	29.0	25.0	1.92	7.19	48		.6	13	0	1144A 1202P	"
238	5-20	DeVore	29.0	25.9	1.76	7.18	46		.6	13	0	1044A 1105A	"
239	5-21	DeVore - DeVore	28.9	25.2	1.76	7.17	44		.6	14	0	1117A 1138A	"
240	5-22	Cooper	24.0	21.8	1.98	7.17	43		.6	11	0	1130A 1150A	FC29
241	5-23	Middleton	29.0	25.8	1.77	7.17	46		.6	15	0	1045A 1105A	FC34
242	5-24	"	29.0	25.6	1.67	7.15	43		.6	15	0	1042A 1102A	"
243	5-25	"	28.7	24.8	1.71	7.15	42		.6	15	0	1010A 1130A	"
244	5-26	"	28.6	24.7	1.74	7.14	43		.6	14	0	1025A 1045A	"
245	5-27	"	28.7	24.8	1.70	7.14	42		.6	14	0	1145A 1205P	"
246	5-28	DeVore	28.4	24.8	1.67	7.11	41		.6	14	-.01	1124A 1144A	"
247	5-29	"	28.4	24.2	1.64	7.08	40		.6	14	0	236P 258P	"
248	5-30	Middleton	28.5	24.8	1.62	7.11	40		.6	14	0	955A 1015A	"
249	5-31	"	28.4	24.8	1.65	7.11	41		.6	14	0	1050A 1110A	"
250	6-1	"	28.4	24.8	1.57	7.11	39		.6	14	0	1100A 1118A	"
251	6-2	Cooper	17.5	16.7	2.26	chart 7.09	38		.6	9	0	130P 148P	FC29
252	6-3	Middleton	28.1	23.9	1.54	7.08	37		.6	14	0	1202P 1222P	FC34
253	6-4	E.K. DeVore	28.3	24.2	1.60	7.08	39		.6	14	0	1000A 1020A	"
254	6-5	T.A. Cooper	28.3	24.0	1.63	7.08	39		.6	13	0	1142A 1158A	"
255	6-6	G.H.Middleton	28.3	24.4	1.65+	7.12	40		.6	14	0	1102A 1122A	"
256	6-7	"	28.2	24.4	1.52+	7.09	37		.6	14	0	1047A 1107A	"
257	6-8	"	28.1	23.9	1.47	7.07	35		.6	14	0	1132A 1152A	"
258	6-9	"	28.1	24.0	1.48	7.07	36		.6	14	0	1014A 1034A	"
259	6-10	"	28.0	23.8	1.45	7.06	35		.6	14	0	1034A 1054A	"
260	6-11	E.K. DeVore	27.9	23.3	1.48	7.05	35		.6	14	0	951A 1011A	FC34
261	6-12	G.H. Middleton	27.9	23.5	1.40	7.04	33		.6	14	0	946A 1006A	"
262	6-13	"	27.7	23.3	1.42	7.05	33		.6	14	0	947A 1007A	"
263	6-14	"	27.8	23.4	1.39	7.05	32		.6	14	0	1042A 1102A	"
264	6-15	"	27.8	23.4	1.39	7.05	33		.6	14	0	1035A 1055A	"
265	6-16	"	27.8	23.3	1.42	7.05	33		.6	14	0	830A 850A	"
266	6-17	E.K. DeVore	27.8	23.0	1.42	7.04	33		.6	14	0	948A 1010A	"
267	6-18	"	27.7	23.0	1.45	7.03	34		.6	14	0	1012A 1036A	"
268	6-19	"	27.6	22.8	1.41	7.03	32		.6	14	0	950A 1009A	"

F.C.D. FORM 104 1M 8-57

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. P 4 B-R

DISCHARGE MEASUREMENTS OF SAN GABRIEL RIVER - EAST FORK

XX XX XX above Forks DURING THE YEAR ENDING SEPTEMBER 30, 1939

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	RATING PERCENT DIFF.	METH. OD	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
269	6-20	E. K. De Vore	27.6	22.7	1.36	7.02	31		.6	14	0	945A / 1005A	FC 34
270	6-21	"	27.6	22.7	1.41	7.01	32		.6	14	0	1038A / 1058A	"
271	6-22	T.A.Cooper	15.9	15.0	2.04	7.01	31		.6	11	-	1015A / 1035A	FC29
272	6-23	"	28.5	17.9	1.60	7.01	29		.6	13	0	1050A / 1110A	FC34
273	6-24	E.K. DeVore	28.9	18.4	1.55	7.00	29		.6	15	0	1038A / 1102A	"
274	6-25	"	28.9	18.8	1.61	7.00	30		.6	15	0	1004A / 1026A	"
275	6-26	"	26.1	17.8	1.62	7.00	29		.6	14	0	950A / 1011A	"
276	6-27	"	26.2	17.9	1.61	6.99	29		.6	14	0	926A / 944A	"
277	6-28	"	26.1	17.8	1.59	6.98	28		.6	14	0	915A / 934A	"
278	6-29	T.A.Cooper	26.0	17.07	1.63	6.98	28		.6	13	0	1120A / 1136A	"
279	6-30	"	15.9	13.8	1.84	6.97	26		.6	11	-	1100A / 1116A	FC29
280	7-1	E.K. DeVore	26.1	17.7	1.55	6.97	27		.6	14	0	944A / 1004A	FC34
281	7-4	Middleton	26.2	17.0	1.42	6.97	24		.6	13	0	1003A / 1023A	FC18
282	7-5	Middleton	26.3	18.1	1.40	6.99	25		.6	14	0	933A / 953A	FC18
283	7-6	"	26.3	18.1	1.43	6.99	26		.6	14	0	1003A / 1023A	"
284	7-7	Cooper	15.8	13.6	1.98	6.97	27		.6	11	0	1105A / 1121A	FC34
285	7-8	Middleton	26.2	17.8	1.44	6.97	26		.6	14	0	1000A / 1020A	"
286	7-10	Middleton	26.1	17.8	1.37	6.97	24		.6	14	0	1030A / 1050A	FC34
287	7-11	Middleton Middleton	26.2	17.7	1.46	6.96	26		.6	14	0	930A / 947A	"
288	7-12	Middleton	26.1	17.8	1.41	6.95	25		.6	14	0	920A / 940A	"
289	7-13	"	26.1	17.7	1.38	6.95	25		.6	14	0	922A / 942 A	"
290	7-14	"	25.9	17.3	1.34	6.94	23		.6	14	0	1203P / 1224P	"
291	7-15	"	16.2	13.9	1.86	6.96	26		.6	16	0	940A / 1004A	FC11
292	7-17	"	26.1	17.4	1.38	6.95	24		.6	14	0	841A / 900A	FC34
293	7-18	Middleton	26.1	17.5	1.34	6.95	23		.6	14	0	910A / 930A	FC 34
294	7-19	"	26.1	17.6	1.35	6.94	24		.6	14	0	900A / 920A	"
295	7-20	"	26.1	17.4	1.35	6.94	24		.6	14	+.01	905A / 925A	"
296	7-21	"	26.1	17.5	1.34	6.93	23		.6	14	0	907A / 927A	"
297	7-22	"	15.7	13.1	1.75	6.92	23		.6	15	0	830A / 850A	FC29
298	7-24	"	26.2	17.15	1.31	6.93	23		.6	14	0	1202P / 1222P	FC34
299	7-25	"	26.2	17.40	1.32	6.93	23		.6	14	0	929A / 950A	"
300	7-26	"	26.1	17.41	1.29	6.93	22		.6	14	0	915A / 935A	"
301	7-27	"	26.1	17.29	1.30	6.93	23		.6	13	0	950A / 1010A	FC18
302	7-28	"	26.1	17.19	1.28	6.93	22		.6	13	0	1017A / 1036A	FC29
303	7-29	Middleton	15.8	13.03	1.73	6.92	23		.6	15	0	845A / 905A	FC11
304	7-31	"	26.1	17.10	1.26	6.92	22		.6	13	0	940A / 1000A	FC11
305	8-2	"	26.1	16.9	1.16	6.92	20		.6	14	0	900A / 920A	"
306	8-4	"	26.0	16.7	1.18	6.92	20		.6	13	0	923A / 942A	"
307	8-7	"	26.1	17.1	1.13	6.92	19		.6	13	0	930A / 950A	"
308	8-11	"	26.0	16.6	1.11	6.90	18		.6	13	0	1005A / 1023A	"
309	8-14	"	25.9	16.5	1.11	6.88	18		.6	18	0	930A / 949A	"
310	8-18	"	25.8	16.3	1.05	6.88	17		.6	13	0	1015A / 1035A	"
311	8-21	"	25.9	16.4	1.07	6.88	18		.6	13	0	1035A / 1055A	"
312	8-25	"	25.8	16.1	1.11	6.88	18		.6	13	0	903A / 921A	"
313	8-28	"	25.8	16.0	1.07	6.88	17		.6	13	0	1033A / 1051A	"
314	8-31	"	25.7	16.1	1.00	6.87	16		.6	13	0	920A / 938A	"
315	9-7	Cooper	25.7	14.9	1.06	6.86	16		.6	13	0	1046A / 1104A	"
316	9-14	"	26.0	15.8	1.12	6.88	18		.6	13	0	1136A / 1154A	"
317	9-21	"	26.2	16.9	1.23	6.94	21		.6	13	-.01	1042A / 1102A	"
318	9-28	"	26.0	18.2	2.83	6.70	52		.6	13	-.01	1205P / 1225P	"

F. C. Dist. Form 52

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

Sta. No P4R--P4R-R

Daily discharge, in second-feet of SAN GABRIEL RIVER-EAST FORK above Forks for the year ending September 30, 19 39

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	31	31	26	50	45	52	68	63	38	27	20	15
2	31	31	26	50	42	52	135	61	38	26	19	15
3	32	30	28	50	50	50	119	58	37	24	19	16
4	30	29	26	48	52	50	103	57	38	24	19	16
5	33	30	28	E 105	50	50	98	60	38	24	19	16
6	31	29	28	E 84	48	50	92	55	36	24	18	15
7	33	28	26	63	48	50	98	55	35	25	18	15
8	33	29	26	58	65	48	92	55	34	25	17	15
9	32	28	E 26	59	56	53	94	55	35	24	17	14
10	31	28	E* 26	56	54	67	94	55	34	24	17	14
11	31	28	26	54	50	52	91	56	34	25	17	19
12	31	29	25	54	52	54	89	54	32	24	16	18
13	29	28	26	50	48	52	98	55	31	24	17	17
14	31	28	28	50	50	54	92	55	30	23	17	18
15	35	26	55	48	50	48	84	50	31	24	17	17
16	34	26	44	46	52	52	84	51	32	24	16	15
17	33	26	38	48	52	52	80	49	32	23	15	15
18	32	E 27	153	48	50	58	80	51	32	23	15	15
19	32	28	303	47	50	59	79	49	30	23	15	17
20	31	29	215	47	50	65	76	45	30	23	15	17
21	31	28	143	59	52	69	74	44	31	23	15	22
22	31	26	100	56	52	67	76	42	29	22	15	20
23	31	26	78	50	50	69	76	44	27	22	16	18
24	30	25	67	48	54	67	77	42	28	22	17	28
25	30	25	65	46	54	69	71	42	29	23	17	E 190
26	31	25	61	45	52	80	66	42	28	22	17	E 120
27	30	28	58	45	54	93	66	41	28	22	16	E 50
28	29	26	56	46	54	78	68	41	28	22	16	51
29	29	26	56	45		73	64	41	27	23	15	46
30	31	26	52	48		71	66	40	28	21	15	38
31	29		50	50		67		40		21	15	
	968	829	1965	1653	1436	1871	2550	1548	960	726	517	902
MEAN	31.2	27.6	63.4	53.3	51.3	60.4	85.0	49.9	32.0	23.4	16.7	30.1
ACRE-FEET	1920	1640	3900	3280	2850	3710	5060	3070	1900	1440	1030	1790

Remarks: * Station moved from P4R to P4B-R.
E indicates discharge estimated - see station description.

YEAR OR PERIOD MEAN 43.6
ACRE-FEET 31590

STATION F250R

SAN GABRIEL - AZUSA CONDUIT at sand box weir

LOCATION:

On the left (east) side of the sandbox on Azusa Conduit, 12 feet above the 25 foot weir and approximately 100 feet below the 30 foot outlet tunnel at San Gabriel Dam No. 1; approximately 2500 feet below the old Edison (abandoned) Intake, and approximately 3900 feet above Station F220R.

CHANNEL AND CONTROL:

Channel-concrete sandbox. There is a concrete by-pass around the sandbox. There are gates in the sandbox above the 25 foot weir through which water may be passed for sluicing or through which water may be spilled.
Control-25 foot sharp crested weir with two end contractions.
Station F250R gives a record of the flow over the 25 foot weir; Station F220R gives a record of the flow down the Azusa Conduit below the Taintor gate.

RECORDER:

Installed February 14, 1935 in a F. C. standard type house, over a 24 inch corrugated iron pipe stilling well.
An Au continuous recorder was in service from October 1, 1938 to September 30, 1939.

REGULATION:

The flow of the San Gabriel River, available at San Gabriel Dam #1 is partially regulated by San Gabriel Dam No. 2, and, the entire flow into the sandbox is regulated by valve discharge from San Gabriel Dam No. 1.

RECORDS AVAILABLE:

February 14, 1935 to September 30, 1939.
Records for 1938-1939 are not published.
The flow was bypassed back to the river as the Azusa Conduit was inoperative during the entire period due to slides following the March 2, 1938 storm.

EXTREMES OF DISCHARGE:

1938-1939
Maximum 130 second-feet February 23.
Minimum no flow for several months.
February 14, 1935 to September 30, 1938
Maximum 155 second-feet April 8, 1935
Minimum no flow at times each year.

ACCURACY:

Good.

OPERATION:

Located, constructed and operated by the Los Angeles County Flood Control District in co-operation with the Pasadena Water Department.

REMARKS:

Daily flow not published. Records available at the office of the Hydraulic Division of the Los Angeles County Flood Control District.

STATION F220R

SAN GABRIEL - AZUSA CONDUIT at North Portal #4-B Tunnel

LOCATION:

On the west side of opening in concrete conduit connecting tunnels 4-A and 4-B of the Azusa Conduit which diverts water from the San Gabriel River. The station is about 3/4 mile below San Gabriel Dam #1 and 2 miles above Morris Dam.

CHANNEL AND CONTROL:

Station located on short open section of concrete channel.
Channel walls straightened on December 19, 1936.
The flow over the 25 foot weir (Station F250R) may be spilled before reaching Station F220R.
Flow which reaches Station F220R may not pass over, but be by-passed around the 25 foot weir.

DISCHARGE MEASUREMENTS:

From top of opening.

RECORDER:

Installed February 26, 1933, in a F. C. standard type house over a 21 inch diameter corrugated iron pipe stilling well.
No recorder was in service during the 1938-1939 season as the Azusa Conduit was inoperative due to slides following the March 2, 1938 storm.

RECORDS AVAILABLE:

February 26, 1933 to September 30, 1939. (See "Recorder")

EXTREMES OF DISCHARGE:

1938-1939
Maximum no flow record.
Minimum no flow record.
1933-1939
Maximum 100 second-feet April 11, 1935.
Minimum not determined.

NOTE:

Normal discharge is approximately 90 second-feet or less when sufficient water is available.

ACCURACY:

Good.

OPERATION:

Located, constructed and operated by the Los Angeles County Flood Control District in co-operation with the Pasadena Water Department.

REMARKS:

This station will again become operative when repairs to the Azusa Conduit enable the continuance of flow diversion.

STATION F190R

SAN GABRIEL RIVER at Foothill Boulevard

LOCATION:

On the downstream end of the ninth pier east of the west end of bridge, about 2 miles west of Azusa.

DRAINAGE AREA:

230. square miles.

CHANNEL AND CONTROL:

West side of channel is a concrete wall. Bottom is composed of sand, gravel and boulders. East side of channel is a rock and wire levee. No artificial control.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows measured from cable car below the station.

RECORDER:

Installed April 25, 1932. Removed on April 20, 1938, and installed in a 30 inch diameter corrugated iron pipe serving both as a house and as a well.
An Au continuous recorder was in service from October 1, 1938 to September 30, 1939.

REGULATION:

Flow partially regulated by San Gabriel Dam Nos. 1 and 2, and Morris Dam.

DIVERSIONS:

Pasadena diverts water for domestic use.
Water diverted for irrigation and spreading near mouth of San Gabriel Canyon.

RECORDS AVAILABLE:

Stream measurements starting February 22, 1932.
Recorder records April 25, 1932 to September 30, 1939.

EXTREMES OF DISCHARGE:

1938-1939
Maximum 267 second-feet, January 5.
Minimum no flow at various times.
1932-1939
Maximum 62000 second-feet, estimated, March 2, 1938.
Minimum no flow at times each year.

ACCURACY:

Fair.
Flow bypassed station from October 1, 1938 to December 28, 1938. Construction of levee above station at this time reestablished communication.
Interpolated between low flow estimates and measurements October 1, 1938 to December 28, 1938.
Estimated by comparison: December 20 and 21.
March 24 to 29.

OPERATION:

Located, constructed and operated by the Los Angeles County Flood Control District.

F. C. D. FORM 104 500 8-38

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F190R

DISCHARGE MEASUREMENTS OF SAN GABRIEL RIVER

AT OR NEAR Foothill Blvd. DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Passed Diff.	Method	Year Sec. No.	G. Ht. Change Total	BEGIN / END	METER NO.
129	12-20	Lindsay-Ingram	32.0	43.8	1.36	-	60.		.6	8	-	825A / 837A	FC 13
130	12-28	Lindsay	8.0	3.33	0.94	5.80	3.1		.6	5	0	922A / 930A	"
131	12-29	"	7.5	2.87	0.83	5.82	2.4		.6	5	0	1000A / 1007A	FC 28
132	1-5	"	43.0	62.6	1.80	7.16	113.		.6	11	+.01	950A / 1005A	FC 13
133	1-7	"	53.0	75.2	1.99	7.30	149.		.6	12	-.10	1050A / 1107A	FC 28
134	1-19	"	5.0	0.58	0.36	5.50	0.21		.6	4	0	112P / 116P	FC 13
135	1-26	"	6.3	1.74	0.54	5.67	0.80		.6	6	0	1030A / 1037A	FC 28
136	2-9	"	7.5	3.52	1.19	5.92	4.2		.6	6	-	346P / 354P	"
137	2-16	"	26.0	19.7	0.79	6.27	16.		.6	7	0	855A / 903A	"
138	2-23	"	8.3	4.61	1.58	6.05	7.3		.6	6	0	307P / 314P	"
139	3-2	"	8.5	4.40	1.59	6.02	7.0		.6	6	+.01	224P / 231P	"
140	3-9	"	6.5	2.22	0.79	5.77	1.8		.6	6	0	303P / 309P	"
141	3-16	Ingram	4.0	0.76	0.32	5.48	0.24		.6	4	0	1125A / 1140A	"
142	3-23	"	19.0	11.0	0.60	6.14	6.6		.6	5	-	1122A / 1132A	"
143	3-30	"	17.0	11.1	0.46	6.12	5.1		.6	5	-	1125A / 1132A	"
144	4-6	Lindsay	10.5	4.99	0.83	6.08	4.2		.6	5	0	154P / 200P	"
145	4-13	Ingram	18.0	11.3	0.50	6.11	5.6		.6	5	-	110P / 122P	"
146	4-20	"	10.5	3.86	1.26	5.80	4.9		.6	6	-	938A / 950A	"
147	4-27	Lindsay	9.0	2.44	0.83	5.64	2.0		.6	6	-	115P / 123P	"
148	5-9	Lindsay-Ingram	39.0	38.2	1.47	6.76	56.		.6	10	+.01	803P / 815P	FC 2
149	5-10	Brewster-Ingram	70.0	81.6	2.66	7.74	217.		.6	9	0	1223P / 1234P	FC 8
150	5-11	Lindsay	64.5	90.4	2.39	7.76	216.		.6	14	-	1050A / 1115A	FC 28
151	5-13	Ingram	72.	93.3	2.17	7.71	202.		.6	12	0	1000A / 1030A	FC 2
152	5-14	"	66.	84.6	1.97	7.60	166.		.6	11	0	1105A / 1145A	"
153	5-15	Ingram	57.	69.9	2.10	7.47	147.		.6	9	-	1050A / 1115A	FC 2
154	5-16	"	38.	41.1	1.77	6.99	73.		.6	9	0	1050A / 1112A	"
155	5-22	"	56.	67.4	1.94	7.39	130.		.6	11	-	1107A / 1135A	"
156	5-25	Lindsay	49.	63.3	2.23	7.43	141.		.6	13	0	1055A / 1115A	FC 28
157	7-8	Ingram	60.0	64.38	2.05	7.40	132.		.6	9	0	1105A / 1120A	FC 2
158	7-10	"	54.0	69.44	2.12	7.42	147.		.6	10	0	1200P / 1230P	"
159	7-12	Brewster	50.0	73.32	2.33	7.57	171.		.6	13	0	1150A / 1208P	FC 8
160	7-13	Lindsay	65.0	86.37	2.08	7.67	180.		.6	15	0	200P / 230P	FC 28
161	7-14	Ingram	72.0	91.33	2.07	7.66	189.		.6	12	0	1015A / 1050A	FC 2
162	7-17	Ingram	76.0	92.34	2.12	7.69	196.		.6	11	0	950A / 1023A	"
163	7-19	Brewster	58.0	75.45	2.19	7.55	165.		.6	14	0	1035A / 1100A	FC 8
164	7-20	Lindsay	61.0	78.62	2.06	7.55	162.		.6	14	0	205P / 225P	FC 28
165	7-21	Ingram	70.0	81.80	1.99	7.55	163.		.6	12	0	1000A / 1030A	FC 2
166	9-27	Lindsay	7.0	1.42	0.46	5.50	0.65		.6	5	0	912A / 917A	FC 28

F. C. Dist. Form 59

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

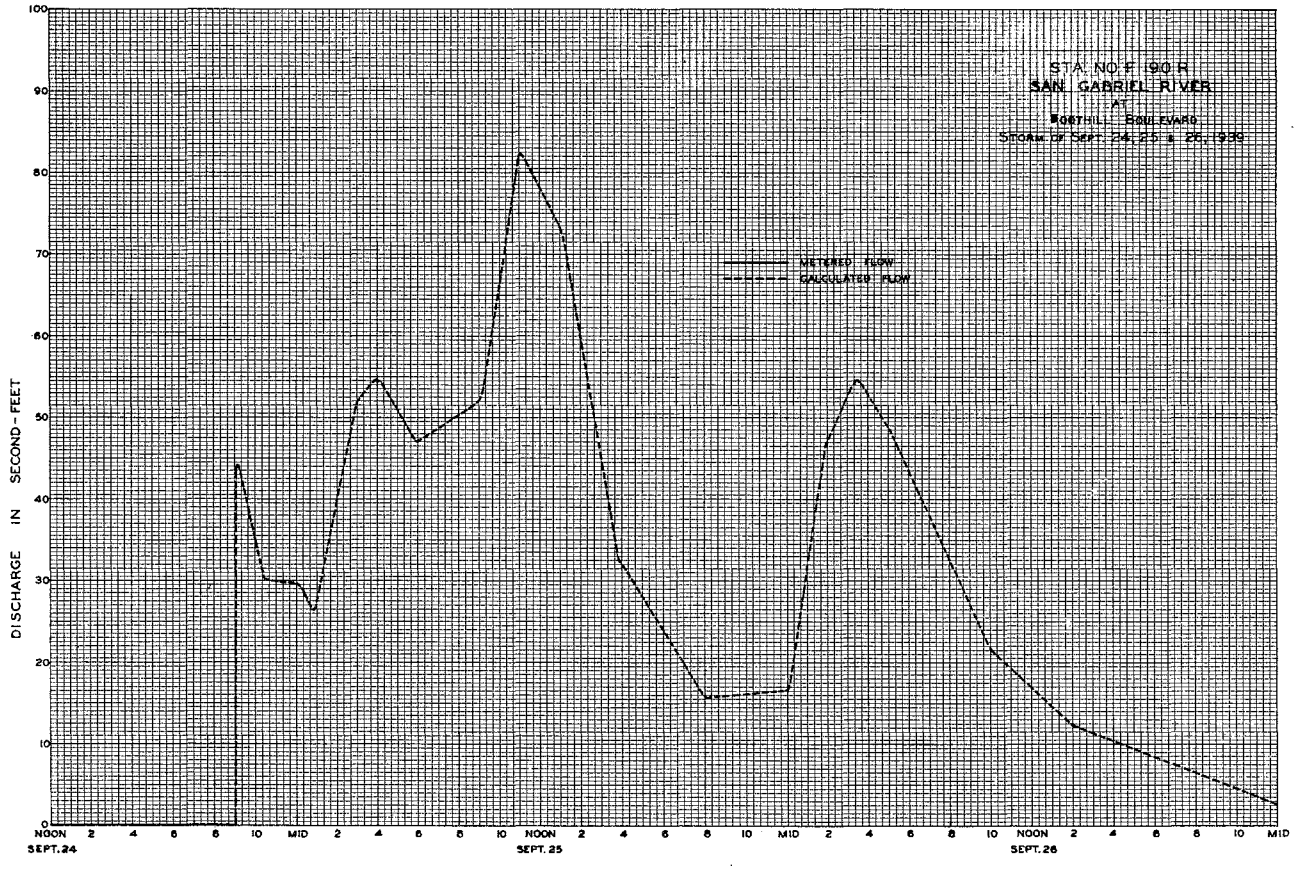
Sta. No. F190R

Daily discharge, in second-feet of SAN GABRIEL RIVER at Foothill Boulevard for the year ending September 30, 19 39

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	E 0	E 0.1	E 0.2	0.5	0.7	6	4.8	2.9	0	0	0	0
2	E 0	E 0.1	E 0.2	0.7	1.2	6.5	5.5	1.5	0	0	0	0
3	E 0	E 0.1	E 0.2	1.2	1.8	6.5	4.6	0.6	0	0	0	0
4	E 0	E 0.1	E 0.2	40	2.1	6	4.8	0	0	0	0	0
5	E 0	E 0.1	E 0.1	154	1.0	5	4.8	+	0	0	0	0
6	E 0	E 0.1	E 0.1	185	0.6	4.4	5.5	0.4	0	0	0	0
7	E +	E 0.1	E 0.1	133	0.5	3.7	4.3	1.8	0	12	0	0
8	E +	E 0.1	E 0.1	0.4	6	2.5	2.4	1.2	0	136	0	0
9	E +	E 0.1	E 0.1	0	4.8	2.1	5.5	28	0	140	0	0
10	E +	E 0.1	E 0.1	0	6	7	6	208	0	138	0	0
11	E +	E 0.1	E 0.1	0	30	3.7	6.5	220	0	162	0	0
12	E +	E 0.1	E 0.1	0	20	4.8	6	217	0	166	0	0
13	E +	E 0.1	E 0.1	0	31	5.5	5.5	189	0	191	0	0
14	E +	E 0.1	E 0.1	0	57	3.6	5.5	160	0	189	0	0
15	E +	E 0.1	E 0.1	0	20	0.2	5.5	178	0	191	0	0
16	E +	E 0.1	E 0.6	0	15	0.3	4.6	76	0	194	0	0
17	E +	E 0.1	E 1.3	0.3	11	0.1	4.8	11	0	183	0	0
18	E +	E 0.1	E 2.0	0.2	10	0	5.5	1.2	0	162	0	0
19	E +	E 0.1	E 4.0	0.2	9.5	0	5.5	0.8	0	162	0	0
20	E +	E 0.1	E 6.0	0.2	9	0	4.8	1.4	0	162	0	0
21	E +	E 0.1	E 5	1.4	8.5	0	4.4	1.8	0	131	0	0
22	E +	E 0.1	E 1.5	1.9	8.5	2.5	4.0	118	0	0.2	0	0
23	E +	E 0.1	0	0.7	7.5	6.5	3.7	127	0	0.1	0	0
24	E +	E 0.1	0	0.6	6.5	E 6	3.5	116	0	0	0	4.0
25	E +	E 0.2	0	0.7	5.5	E 6.5	2.8	138	0	0	0	4.2
26	E +	E 0.2	0	0.8	5	E 6.5	3.1	120	0	0	0	22
27	E 0.1	E 0.2	0	0.7	5.5	E 6	2.4	5	0	0	0	0.8
28	E 0.1	E 0.2	E 3.1	0.4	6	E 5.5	2.4	0	0	0	0	0
29	E 0.1	E 0.2	1.7	0.4		E 5.5	2.5	0	0	0	0	0
30	E 0.1	E 0.2	1.0	0.5		5	3.3	0	0	0	0	0
31	E 0.1		0.5	0.7		4.6		0		0	0	
	0.5	3.6	8.2.6	5245	2902	1225	1345	19246	0	23193	0	68.8
MEAN	.02	.12	2.66	16.9	10.4	3.95	4.48	62.1	0	74.8	0	2.29
ACRE-FEET	.99	7.1	164	1040	576	243	267	3820	0	4600	0	136

Remarks: + indicates discharge 0.05 sec. ft. or less.
E indicates discharge estimated — see station description.

YEAR OR PERIOD — MEAN 15.0 — ACRE-FEET 10850



STATION F261R

SAN GABRIEL RIVER at Elliot Street

LOCATION:

On the left (east) bank 200 feet downstream from the extension of Elliot Street, approximately 2 miles southeast of El Monte.

DRAINAGE AREA:

Indeterminate on account of a natural split near Arrow Highway which divides the San Gabriel River into 2 branches; the east branch known as the Rio Hondo flows into the Los Angeles River; the west branch retains the name San Gabriel River.

CHANNEL AND CONTROL:

Shifting sand and gravel between banks protected by piling and wire mesh.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
No facilities for measuring high flows.

RECORDER:

Installed March 11, 1937, in a box type house over a 21 inch diameter corrugated iron pipe well. A horizontal Lietz recorder was in service from October 1, 1938, to September 30, 1939.

REGULATION:

Flow partially regulated by San Gabriel Dam Nos. 1 and 2, Morris Dam, Big Dalton Dam, San Dimas Dam, Puddingstone Diversion Dam, Puddingstone Dam and Live Oak Dam.

DIVERSIONS:

Water diverted for irrigation and spreading. Pasadena diverts water for domestic use.

RECORDS AVAILABLE:

March 11, 1937 to September 30, 1939.

EXTREMES OF DISCHARGE:

Not determined.

ACCURACY:

Poor.
Frequently estimated comparison and extrapolation or interpolated between measurements due to extreme channel shifts.

OPERATION:

Located and operated by the Los Angeles County Flood Control District in co-operation with the San Gabriel Valley Protective Association.

REMARKS:

Station established primarily to determine percolation losses in the main San Gabriel Basin.

F. C. D. FORM 104 500 8-38

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F261R

DISCHARGE MEASUREMENTS OF SAN GABRIEL RIVER

AT below Elliot Avenue DURING THE YEAR ENDING SEPTEMBER 30, 1939

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	RATING POINT NUM.	STAND	NEAR SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
72	12-22	Lindsay	10.5	1.80	.81	4.05	1.5		.6	6	-	407P / 415P	FC 13
74	1-5	Lindsay-Ingram	56.	35.2	3.51	4.66	123.		.6	8	-.01	424P / 435P	FC 28
73	1-12	Lindsay	8.0	1.54	.82	4.05	1.3		.6	5	0	403P / 410P	FC 13
74	1-26	"	9.0	1.32	.74	4.01	1.0		.6	5	0	218P / 225P	FC 28
75	2-16	"	7.0	1.09	.84	3.88	.90		.6	4	-	1037A / 1045A	"
76	3-2	"	7.5	1.21	1.06	3.88	1.3		.6	6	0	140P / 147P	"
77	3-23	"	7.0	1.38	1.12	3.86	1.6		.6	5	0	207P / 215P	FC 13
78	4-12	Ingram	9.5	1.57	.82	3.86	1.3		.6	5	0	1058A / 1105A	FC 28
79	4-19	"	9.	1.30	.83	3.87	1.1		.6	4	0	1058A / 1103A	"
80	5-10	Brewster	36.0	37.2	3.21	4.78	120.		.6	10	0	245P / 305P	FC 8
81	5-11	Lindsay	Two Channels			4.80	114.		.6	16	0	1220P / 1245P	FC 28
82	5-13	Ingram	46.	40.1	2.98	4.76	120.		.6	10	+.02	1150A / 1220P	FC 2
83	5-14	"	38.	33.7	3.14	4.66	106.		.6	9	0	1255A / 110A	"
84	5-15	"	38.	30.3	2.68	4.52	81.		.6	8	0	100P / 120P	"
85	5-16	"	19.5	13.5	1.83	4.11	25.		.6	7	-	1235P / 1247P	"
86	5-18	Lindsay	8.0	1.34	.94	3.53	1.3		.6	6	0	313P / 318P	FC 28
87	5-22	Ingram	19.5	20.9	2.82	4.40	59.		.6	8	-	1240P / 1255P	FC 2
88	5-25	Lindsay	48.0	26.4	2.83	4.50	75.		.6	13	-	1220P / 1235P	FC 28
89	6-1	"	Two Channels			3.78	1.1		.6	6	-	257P / 305P	"
90	6-8	"	"		"	3.64	1.0		.6	6	0	935A / 942A	"
91	6-15	"	"		"	3.64	.80		.6	5	-	903A / 910A	"
92	6-22	"	"		"	3.63	1.1		.6	5	-	843A / 850A	"
93	6-29	Ingram	"		"	3.62	.70		.6	4	-	155P / 200P	FC 2
94	7-6	Lindsay	"		"	3.64	.60		.6	6	0	140P / 145P	FC 28
95	7-8	Ingram	Two Channels			4.38	45.		.6	12	0	128P / 146P	FC 2
96	7-9	"	40.5	28.9	3.12	4.53	90.		.6	10	-	1052A / 1110A	"
97	7-10	"	28.	23.3	3.00	4.39	70.		.6	8	-	150P / 205P	"
98	7-12	Brewster	22.	24.2	3.22	4.42	78.		.6	7	-.01	345P / 400P	FC 8
98A	7-13	Ingram	53.	.		4.53	104.		.6		-.01	855A / 918A	FC2
99	7-13	Brewster Lindsay-	38.0	30.2	3.58	4.52	108.		.6	11	0	1105A / 1120A	FC 28
100	7-14	Ingram	54.0	38.3	2.70	4.49	103.		.6	11	-.02	147P / 205P	FC 2
101	7-17	"	55.	43.2	2.88	4.45	124.		.6	14	0	208P / 230P	"
102	7-18	- , Turner	44.	34.4	3.18	4.32	110.		.6	16	0	1000A / 1015A	FC 5
103	7-19	Brewster	24.	28.5	3.65	4.29	104.		.6	7	0	140P / 200P	FC 8
104	7-20	Lindsay	34.	29.3	3.55	4.28	104.		.6	13	0	1048A / 1103A	FC 28
105	7-21	Ingram	52.	36.8	2.81	4.26	103.		.6	13	-.01	158P / 217P	FC 2
106	7-28	Lindsay	Two Channels			3.26	1.0		.6	6	0	1115A / 1122A	FC 28
107	8-10	"	4.5	.82	.79	3.29	0.65		.6	5	-	930A / 935A	"
108	8-23	Brewster	4.0	.68	.66	3.26	.45		.6	4	0	935A / 941A	FC 8
109	9-14	Lindsay	4.5	.66	.63	-	.42		.6	5	-	1110A / 1115A	FC 28
110	9-27	"	6.0	1.08	.68	3.09	.80		.6	6	-	233P / 240P	"

F. C. Dist. Form 52

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

Sta. No F261R

Daily discharge, in second-feet of SAN GABRIEL RIVER below Elliot Avenue, for the year ending September 30, 1939

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1				1.0	1.0	1.3	1.5	1.5	1.1	0.6	0.5	0.4
2				1.0	1.0	1.3	1.5	1.5	1.1	1.0	0.8	0.4
3				1.0	20	1.2	1.5	1.5	1.1	0.6	0.6	0.4
4				1.0	15	1.2	1.5	1.5	1.1	0.5	0.6	0.4
5			0.9	1.6	1.0	1.2	1.5	1.5	1.0	0.6	0.7	0.4
6				1.6	1.0	1.5	1.5	1.5	1.0	0.6	0.7	0.4
7				1.2	1.0	1.2	2.0	1.5	1.0	0.6	0.7	0.4
8				1.2	1.0	1.2	2.0	1.5	1.0	37	0.6	0.4
9	0.9	0.9		1.2	1.0	1.7	1.8	1.5	0.8	81	0.6	0.4
10				1.2	1.0	4.1	1.6	96	0.8	76	0.6	0.4
11				1.2	1.0	2.3	2.0	117	0.8	83	0.6	0.4
12				1.2	1.0	2.0	1.0	125	0.6	84	0.6	0.4
13				1.2	1.0	1.5	1.2	111	0.6	101	0.5	0.4
14			1.0	1.2	1.0	1.5	1.2	101	0.8	110	0.5	0.4
15			3.0	1.5	1.0	1.4	1.2	74	0.8	108	0.5	0.4
16			2.0	1.5	4.1	1.2	1.0	29	0.6	116	0.5	0.4
17			2.0	1.5	1.5	1.2	1.0	6	0.6	119	0.5	0.4
18			120	1.5	1.0	1.2	1.2	1.3	0.6	105	0.5	0.4
19			50	1.5	1.2	1.2	1.2	1.3	0.8	102	0.5	0.4
20			4.6	1.5	1.2	1.2	1.2	1.3	0.8	101	0.4	0.4
21			1.5	9	1.2	1.2	1.2	1.3	1.0	100	0.4	0.4
22			1.5	4.0	1.0	1.5	1.2	36	1.0	1.0	0.4	0.4
23			1.5	1.5	1.2	1.5	1.6	64	1.0	1.0	0.4	0.4
24			1.2	1.0	1.2	1.5	1.6	56	0.8	1.0	0.4	0.4
25			1.2	1.0	1.2	1.5	1.6	73	0.8	1.0	0.4	5.0
26			1.0	1.0	1.2	1.5	1.5	71	0.8	1.0	0.4	2.0
27			1.0	1.0	1.3	5	1.5	4.5	0.8	1.0	0.4	0.8
28			1.0	1.0	1.3	2.7	1.5	1.4	0.8	1.0	0.4	0.8
29			1.0	1.0		2.0	1.5	1.3	0.8	1.0	0.4	0.8
30			1.0	1.0		1.5	1.5	1.2	0.6	0.9	0.4	0.8
31			1.0	1.0		1.5		1.1		0.9	0.4	
	27.9	27.0	207.2	62.9	66.6	52.0	44.1	987.2	25.4	1337.3	16.7	64.8
MEAN	0.90	0.90	6.68	2.03	2.38	1.68	1.47	31.8	0.85	43.1	0.54	2.16
ACRE-FEET	55	54	411	125	132	103	87	1960	50	2650	33	129

Remarks: See station description.

YEAR OR PERIOD — MEAN 8.00 — ACRE FEET 5790

STATION F263R

SAN GABRIEL RIVER at Beverly Boulevard

LOCATION:

On the downstream side of the Beverly Boulevard bridge approximately 3/4 mile northeast of Pico.

DRAINAGE AREA:

Indeterminate due to a natural split near Arrow Highway which divides the San Gabriel River into 2 branches; the west branch known as the Rio Hondo flows into the Los Angelee River; the east branch retains the name San Gabriel River.

CHANNEL AND CONTROL:

Channel-sand and silt.
No artificial control.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows measured from cable car above station.

RECORDER:

Installed on February 4, 1937 in a F. C. standard type house over a 21 inch diameter corrugated iron pipe stilling well.
An Au continuous recorder was in service from October 1, 1938 to September 30, 1939.

REGULATION:

Flow partially regulated by San Gabriel Dam Nos. 1 and 2, Morris Dam, Big Dalton Dam, Puddingstone Diversion Dam, Puddingstone Dam, Live Oak Dam and Thompson Creek Dam.

DIVERSIONS:

The City of Pasadena diverts domestic water from the San Gabriel River. There are also several diversions for irrigation and spreading.

RECORDS AVAILABLE:

February 4, 1937 to September 30, 1939.
(For records prior to February 4, 1937 see Station F63R, San Gabriel River at Whittier Boulevard in previous reports.

EXTREMES OF DISCHARGE:

1938-1939
Maximum 2106 second-feet, September 25.
Minimum no flow for various months.
1936-1939
Maximum 22700 second-feet, estimated, March 2, 1938
Minimum no flow for several months.
(For earlier years see Station F63R.)

ACCURACY:

Fair during periods of normal or constant flow.
Poor during storms or fluctuating flow.

OPERATION:

Located and operated by the Los Angeles County Flood Control District in co-operation with the U.S.G.S. Water Resources Branch.

F. C. D. FORM 104 500 8-38

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F263R

DISCHARGE MEASUREMENTS OF SAN GABRIEL RIVER

AT Beverly Blvd. DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Period Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
96	11-10	Brewster	25.0	6.74	1.00	4.31	6.8		.6	7	0	1126A / 1138A	FC 8
97	11-17	"	16.0	3.84	.86	4.24	3.3		.6	5	-.01	115P / 125P	"
98	11-23	"	22.0	6.34	.98	4.25	6.2		.6	6	0	120P / 130P	"
99	12-1	"	26.0	6.64	.76	4.28	5.1		.6	7	0	145P / 157P	"
100	12-8	"	22.0	4.98	.55	4.31	2.7		.6	6	0	1212P / 1224P	"
102	12-15	"	190.0	52.60	1.33	4.50	70.		.6	11	-.03	155P / 210P	"
103	12-18	Lindsay-Ingram	156.0	58.70	1.78	4.62	105.		.6	10	+.01	822A / 836A	FC 13
104	12-18	" "	169.0	104.65	3.09	4.82	323.		.6	12	-.04	1117A / 1133A	FC 28
105	12-19	Anderson-Linden	205.0	274.0	4.15	5.30	1140.		.6	20	+.39	510A / 610A	FC 33
106	12-20	Lindsay-Ingram	110.0	63.95	2.41	4.68	154.		.6	8	0	415P / 423P	FC 28
107	12-22	Brewster-Pettis	69.0	36.48	2.07	4.60	75.		.6	8	0	115P / 135P	FC 8
108	12-29	Brewster	53.0	30.59	1.93	4.54	59.		.6	6	+.01	1240P / 1255P	"
109	1-5	Brougham Brewster-	73.0	49.09	1.52	4.56	74.		.6	8	0	1110A / 1130A	"
110	1-5	Lindsay-Ingram	149.0	56.35	1.77	4.65	100.		.6	13	+.02	243P / 256P	FC 28
111	1-5	Haig-Tscharner	Three Channels			4.88	296.		.6	21	-.04	752P / 820P	FC 38
112	1-6	Lindsay-Ingram	Two Channels			4.57	51.		.6	13	0	225P / 235P	FC 28
113	1-12	Brewster	104.0	34.50	1.51	4.59	52.		.6	11	0	1135A / 1155A	FC 8
114	1-13	Bonadiman	Two Channels			4.60	78.		.6	17	0	804A / 845A	FC 40
115	1-13	"	Two Channels			4.59	68.		.6	18	0	1251P / 125P	"
116	1-19	Brewster	98.0	35.48	1.48	4.55	52.		.6	10	0	1225P / 1245P	FC 8
117	1-21	Haig-Tscharner	Two Channels			4.65	127.		.6	22	-.01	1240P / 112P	FC 38
118	1-26	Brewster	122.0	50.80	1.27	4.56	65.		.6	13	0	1210P / 1235P	FC 8
119	2-2	"	71.0	38.86	1.77	4.58	69.		.6	9	0	120P / 140P	"
120	2-3	Haig-Tscharner	Two Channels			4.90	374.		.6	22	+.01	1147A / 1210P	FC 38
121	2-3	Haig-Tscharner	Three Channels			4.72	261.		.6	15	-.01	1007P / 1035P	FC 38
122	2-9	Brewster	56.0	31.06	2.13	4.51	66.		.6	7	0	1230P / 1245P	FC 8
123	2-16	"	71.0	38.49	1.73	4.55	67.		.6	8	0	1140A / 1155A	"
124	2-23	"	78.0	36.60	1.56	4.55	57.		.6	9	0	110P / 130P	"
125	3-2	"	77.0	29.47	1.63	4.55	48.		.6	9	0	108P / 130P	"
126	3-9	"	79.0	35.80	1.28	4.55	46.		.6	9	0	100P / 120P	"
127	3-10	Lindsay-Ingram	94.0	42.65	1.49	4.60	64.		.6	10	0	215A / 230A	FC 28
128	3-10	Haig-Tscharner	150.0	72.30	1.24	4.62	90.		.6	19	0	429A / 500A	FC 38
129	3-10	Ingram-Lindsay	91.0	40.47	1.38	4.58	56.		.6	12	0	325P / 350P	FC 28
130	3-16	Brewster	93.0	35.86	1.24	4.60	45.		.6	11	0	1212P / 1235P	FC 8
131	3-23	"	76.0	29.78	1.46	4.50	44.		.6	11	0	1230P / 1250P	"
132	3-27	Haig	149.5	63.20	1.25	4.63	79.		.6	21	0	1123A / 1202P	FC 38
133	3-30	Brewster	78.0	39.08	1.38	4.51	54.		.6	9	0	1245P / 105P	FC 8
134	4-6	"	70.0	35.30	1.48	4.51	52.		.6	7	0	1120A / 1132A	"
135	4-13	"	66.0	30.38	1.35	4.51	41.		.6	8	0	1205P / 1220P	"
136	4-20	"	84.0	23.82	1.18	4.42	28.		.6	9	0	1150A / 1205P	"
137	4-27	"	52.0	12.78	.94	4.24	12.		.6	8	-.01	1130A / 1145A	"
138	5-4	"	30.0	6.62	.88	4.34	5.8		.6	8	0	1105A / 1120A	"
139	5-11	"	171.0	71.95	1.59	4.65	114.		.6	18	0	1210P / 1235P	"
140	5-13	Ingram	Three Channels			4.68	116.		.6	17	0	135P / 212P	FC 2
141	5-14	"	Two channels			4.68	98.		.6	15	0	240P / 310P	"
142	5-15	"	Three Channels			4.56	56.		.6	16	0	205P / 225P	"
143	5-16	"	77.0	16.98	1.81	4.44	31.		.6	10	0	245P / 300P	"
144	5-22	Ingram-Brewster	52.0	20.92	1.07	4.46	22.		.6	8	+.01	455P / 505P	"
145	5-24	Brewster	Two Channels			4.50	42.		.6	15	0	145P / 205P	FC 8
146	5-25	"	Two Channels			4.54	50.		.6	13	0	1120A / 1140A	"
147	7-9	"	51.0	25.55	1.70	4.53	43.		.6	7	0	855A / 907A	"
148	7-10	Ingram	Two Channels			4.50	46.		.6	15	0	303P / 325P	FC 2
149	7-12	Brewster	" "			4.59	65.		.6	10	0	435P / 455P	FC 8
150	7-13	Ingram	Two Channels			4.62	82.		.6	20	0	1044A / 1124A	FC 2
151	7-13	Brewster	" "			4.62	80.		.6	13	0	300P / 320P	FC 8
152	7-14	Ingram	" "			4.64	81.		.6	23	0	317P / 358P	FC 2
153	7-17	Ingram	" "			4.69	93.		.6	17	0	318P / 345P	"
154	7-19	Brewster	" "			4.65	71.		.6	15	0	230P / 255P	FC 8
155	7-20	"	" "			4.65	78.		.6	14	0	1230P / 1248P	"
156	7-21	Ingram	" "			4.68	103.		.6	16	0	308P / 335P	FC 2
157	9-25	Haig-Koch	" "			5.65	1730.		.6	26	-.20	111P / 159P	FC 33
158	9-26	Brewster	" "			4.54	79.		.6	11	0	1235P / 105P	FC 8
159	9-28	"	" "			4.48	44.		.6	11	0	1130A / 1147A	"

F. C. Dist. Form 52

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

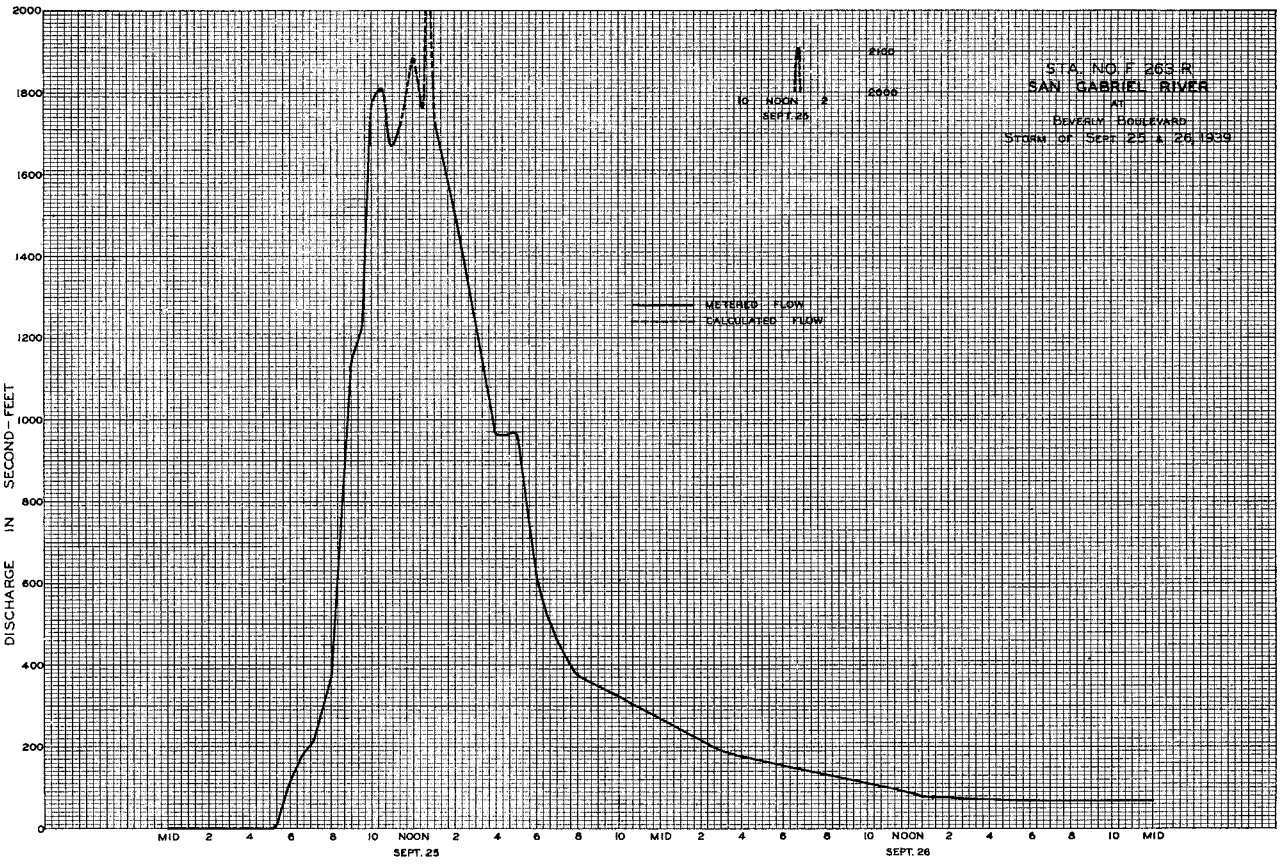
Sta. No. F263R

Daily discharge, in second-feet of SAN GABRIEL RIVER at Beverly Boulevard, for the year ending September 30, 19 39

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	5.5	58	84	49	68	7.5	0	0	0	0
2	0	0	5	58	68	49	68	1.9	0	0	0	0
3	0	0	4.3	46	211	53	63	0	0	0	0	0
4	0	0	4.3	49	211	58	58	3.5	0	0	0	0
5	0	0	2.5	99	111	63	58	6.5	0	0	0	0
6	0	0.4	2.4	53	97	63	63	7	0	0	0	0
7	0	0.9	1.2	46	97	63	73	4.4	0	0	0	0
8	0	1.4	1.4	46	84	53	78	3.0	0	0	0	0
9	0	3.8	0	53	73	53	73	4.2	0	34	0	0
10	0	6.5	0	46	68	68	58	84	0	49	0	0
11	0	4.3	3.4	49	73	58	58	124	0	49	0	0
12	0	2.7	1.2	53	84	49	63	144	0	63	0	0
13	0	4.3	0	58	104	63	58	117	0	78	0	0
14	0	4.7	2.3	42	111	68	21	73	0	84	0	0
15	0	3.8	4.8	46	111	63	32	63	0	84	0	0
16	0	3.4	84	49	78	53	46	32	0	97	0	0
17	0	3.4	68	46	78	53	42	9	0	91	0	0
18	0	4.3	196	49	97	58	38	4.7	0	58	0	0
19	0	4.7	578	53	84	63	38	13	0	68	0	0
20	0	5	182	58	73	58	29	6.5	0	73	0	0
21	0	5.5	97	117	73	58	21	0	0	84	0	0
22	0	6.5	68	111	68	58	24	14	0	26	0	0
23	0	6.5	68	73	68	49	34	63	0	0	0	0
24	0	7.5	58	73	68	46	32	49	0	0	0	0
25	0	9	63	68	78	32	26	46	0	0	0	672
26	0	8	68	68	68	32	19	49	0	0	0	116
27	0	9	68	91	58	58	15	7	0	0	0	68
28	0	8	58	78	58	84	2.4	0	0	0	0	53
29	0	7.5	53	68		73	5	0	0	0	0	32
30	0	7	58	73		63	7.5	0	0	0	0	29
31	0		58	97		63		0		0	0	
	0	128.1	1906.5	1974	2536	1774	1250.9	936.2	0	938	0	970
MEAN	0	4.27	61.5	63.7	90.6	57.2	41.7	30.2	0	30.3	0	32.3
ACRE-FEET	0	254	3780	3920	5030	3520	2480	1860	0	1860	0	1920

Remarks:

YEAR OR PERIOD MEAN 34.0
ACRE-FEET 24620



STATION F262R

SAN GABRIEL RIVER at Florence Avenue (formerly Easy Street)

LOCATION:

On the downstream end of third pier from the east bulkhead of the Florence Avenue bridge about 2 miles east of Downey.

DRAINAGE AREA:

Indeterminate due to a natural split near Arrow Highway which divides the San Gabriel River into two branches; the west branch known as the Rio Hondo, flows into the Los Angeles River; the east branch retains the name San Gabriel River.

CHANNEL AND CONTROL:

Shifting sand bottom between earth levees.
No artificial control.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows measured from upstream side of highway bridge.

RECORDER:

Installed on February 27, 1937 over an 18 inch diameter, corrugated iron pipe stilling well. The recorder was removed on March 2, 1938, and was reinstalled on April 4, 1938. A horizontal Rational recorder was in service from November 23, 1938 to February 14, 1939. An H.C.F. recorder was in service from February 14, 1939 to September 30, 1939.

REGULATION:

Flow partially regulated by San Gabriel Dam Nos. 1 and 2, Morris Dam, Big Dalton Dam, San Dimas Dam, Puddingstone Diversion Dam, Puddingstone Dam, Live Oak Dam and Thompson Creek Dam.

DIVERSIONS:

The City of Pasadena diverts water from the San Gabriel River. There are also several diversions for irrigation and spreading. Variable quantities of irrigation waste returns are recorded at the station.

RECORDS AVAILABLE:

February 27, 1937 to September 30, 1939.
Recorder record lost from August 19, 1938 to November 23, 1938 due to theft of recorder.

EXTREMES OF DISCHARGE:

1938-1939
Maximum 1378. second-feet, September 25.
Minimum no flow at various times.
1927-1939
Maximum not determined.
Minimum no flow at various times.

ACCURACY:

Poor due to badly shifting control.
Estimated: (Occasional flow during period known to be negligible) August 31 to September 13.

OPERATION:

Located and constructed by the Los Angeles County Flood Control District; and operated in co-operation with the San Gabriel Valley Protective Association.

P. C. D. FORM 104 800 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F262R

DISCHARGE MEASUREMENTS OF SAN GABRIEL RIVER

AT Florence Ave. DURING THE YEAR ENDING SEPTEMBER 30, 1939

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Diff.	Rating	SHIFT SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
106	12-2	Bonadiman	6.0	2.12	.94	2.03	2.0		.6	4	0	915A / 922A	FC 40
107	12-18	Jackman Bonadiman-	77.0	50.75	3.03	2.55	154.		.6	5	0	300P / 310P	"
108	12-19	" "	Two Channels			2.82	332.		.6	12	0	105P / 115P	"
109	12-21	" "	27.0	21.15	1.96	2.38	41.		.6	3	0	815A / 825A	"
110	12-22	Bonadiman	8.0	1.30	1.00	2.14	1.3		.6	3	0	1048A / 1100A	"
111	1-5	"	4.0	1.42	1.06	2.00	1.5		.6	2	0	1000A	"
112	1-6	"	9.0	2.43	.36	2.08	.90		.6	3	0	415P	"
113	1-21	Jordan-Thomsen	24.0	12.0	1.74	2.39	21.		.6	10	0	300P / 309P	FC 21
114	1-22	Jackman Bonadiman-	36.0	11.84	1.47	2.46	17.		.6	8	0	827A / 833A	FC 40
115	2-3	" "	Two Channels			2.62	250.		.6	8	0	531P / 555P	"
116	2-4	" "	33.0	23.67	3.13	2.56	74.		.6	8	-.01	858A / 905A	"
117	2-4	" "	33.0	24.03	2.93	2.54	70.		.6	8	-.01	905A / 912A	"
118	2-8	Bonadiman	15.0	4.01	.81	2.28	3.2		.6	4	0	202P / 210P	FC 40
119	2-16	"	8.0	1.18	.47	2.20	.55		.6	3	0	250P / 253P	"
120	3-3	"	11.0	1.88	.78	2.26	1.5		.6	4	0	911A / 918A	"
121	3-10	"	16.	4.54	1.42	2.40	6.4		.6	4	0	1205P / 1211P	"
122	5-15	Brewster	12.0	3.90	1.38	2.50	5.4		.6	6	-.01	1040A / 1050A	FC 8
123	5-15	"	6.0	1.68	1.12	2.32	1.9		.6	6	.04	432P / 440P	"
124	7-5	Bonadiman	9.0	2.69	.74	2.28	2.0		.6	4	0	250P / 300P	FC 40
125	9-25	Jordan-Thomsen	Two Channels			4.00	1100.		.6	20	-.15	230P / 300P	FC 21

F. C. Dist. Form 58

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

Sta No. F262R

for the year ending September 30, 19 39

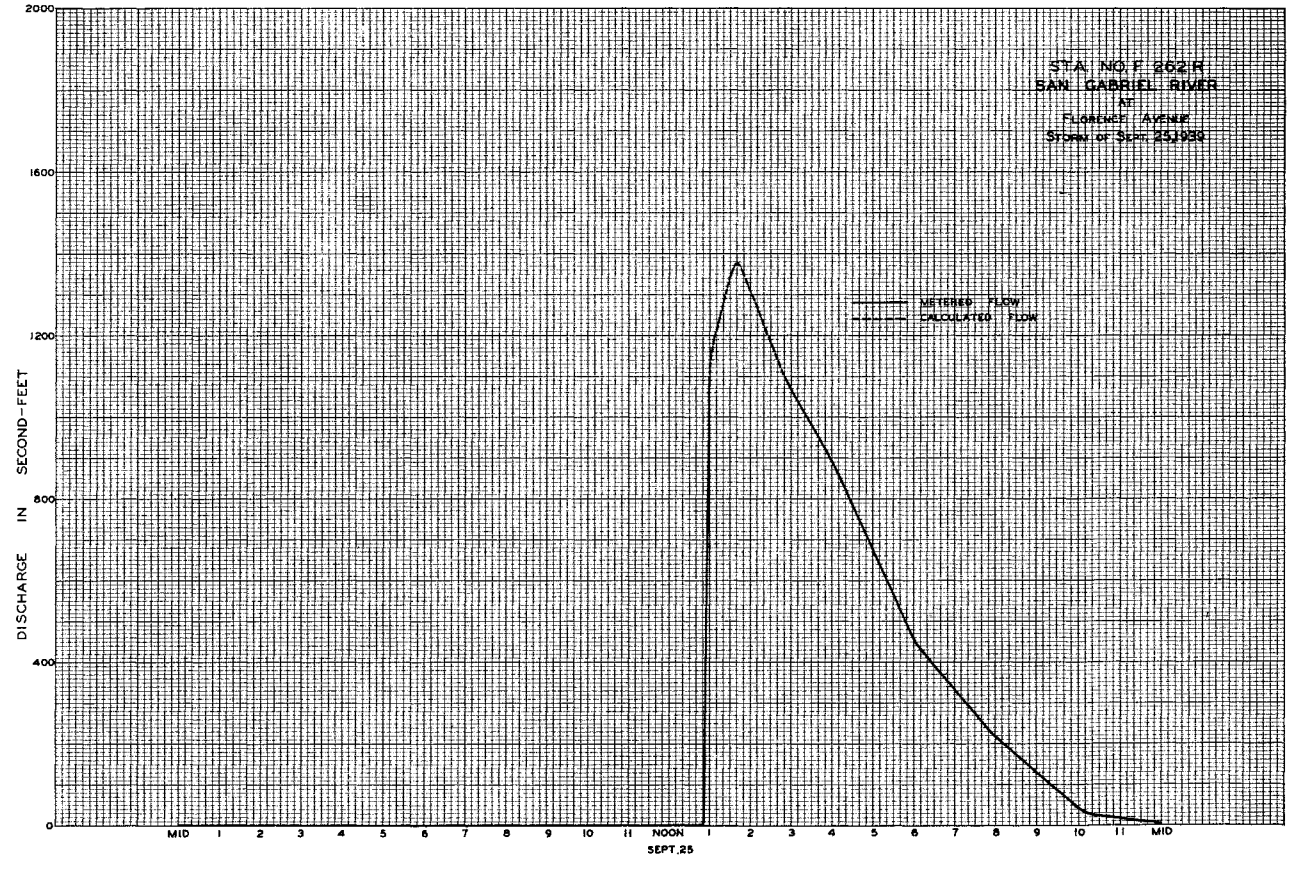
Daily discharge, in second-feet of SAN GABRIEL RIVER at Florence Avenue

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			2.5	0	7	0.3	0.1	+	0	+	0.6	0
2			3.0	0	0	0.5	0	+	0	+	0	0
3			3.0	0	13	0.5	+	+	0	+	0	0
4			0	0	2	+	0	+	+	0	+	0
5			0	6.8	8.4	0	0	+	+	+	+	0
6			+	7.2	8.5	0	0	+	+	+	+	0
7			0	2.0	2.5	0	0	0.4	+	+	+	0
8			0	1.5	1.5	0	+	0.6	0	+	+	0
9			0	1.1	1.0	0	+	0.6	+	+	+	0
10			0	0.6	0.8	3.3	+	+	+	+	+	0
11			0	0.6	1.5	+	+	1.1	+	0	+	0
12			0	0.4	0.2	+	+	1.1	+	0	+	0
13			0	0.4	0.8	+	+	1.1	+	0	+	0
14			0	0.1	2.5	+	+	+	+	0	+	0
15			0	0.2	1.5	+	+	+	+	0	+	0
16			0	0.4	0.3	0	0	1.1	+	0	+	1.1
17			0	0.1	0.6	0	0	1.0	+	0	+	1.0
18			0	0.1	0.1	0	0	1.1	+	0	+	0
19			4.6	0.1	+	0	0	+	+	+	+	0
20			32.5	0.2	0.5	0	+	+	+	+	+	0
21			59	17	0.2	0	0.1	+	0	+	0.3	0
22			37	17	0.1	0	+	+	+	+	+	0
23			0.8	+	0.3	0	0.6	+	+	+	+	0
24			0	0	0.1	0	0.4	+	+	+	+	0
25			0	0	0.3	0	0.2	+	0.2	+	+	2.7
26			0	0	0.3	+	0.8	+	+	+	+	2.4
27		0.2	0	0	0.5	8.5	0.1	+	+	+	+	0.1
28		0.1	0	0	0.4	5	+	+	+	+	+	0
29		+	0	0	+	3.6	+	+	+	+	+	0
30		1.0	0	+	6.2	0.2	1.6	+	+	1.2	0	0
31		2.1	0	62		0		+		1.2	0	
		1.5										
		1.5										
		6.4										
		(11/24-30)										
			473.3	243.8	256.7	219	5.0	23.7	0.2	1.2	1.0	247.9

Mean			15.3	7.86	9.17	0.71	0.17	0.76	0.01	0.04	0.04	8.26	
Acre-Feet			939	484	509	43	9.9	47	0.40	2.4	2.0	492	

Year or Period: Mean 1.12 (11/24-9/30); Acre-Feet 2540 (11/24-9/30)

Remarks: + indicates discharge 0.05 sec. ft. or less.
° indicates recorder installed.
E indicates discharge estimated - see station description.



STATION F42R

SAN GABRIEL RIVER at Spring Street, Long Beach

LOCATION:

On downstream end of second pier from left (east) end of Spring Street bridge about 4 miles east of Signal Hill, Long Beach.
This station is at, or near, the location of the station operated in 1924 by the State Division of Water Rights.

DRAINAGE AREA:

Indeterminate due to a natural split near Arrow Highway which divides the San Gabriel River into 2 branches; the west branch known as the Rio Hondo flows into the Los Angeles River; the east branch retains the name San Gabriel River.

CHANNEL AND CONTROL:

Channel-sand and silt over adobe with earth levees protected by wire mesh.
No artificial control.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows measured from cat-walk on upstream side of bridge.

RECORDER:

Installed February 6, 1928 in a F. C. standard type house over a 21 inch diameter corrugated iron pipe stilling well.
An continuous recorder in service October 1, 1938 to September 30, 1939.

REGULATION:

Flow partially regulated by San Gabriel Dam No. 1, San Gabriel Dam No. 2, Morris Dam, Big Dalton Dam, San Dimas Dam, Puddingstone Diversion Dam, Puddingstone Dam, Live Oak Dam and Thompson Creek Dam.

DIVERSIONS:

The City of Pasadena diverts water from the San Gabriel River. There are also several diversions for irrigation and Spreading.

EXTREMES OF DISCHARGE:

1938-1939
Maximum 956 second-feet December 19.
Minimum no flow most of year.
1927-1939
Maximum 27000 second-feet, estimated March 2, 1938.
Minimum no flow most of each year.

RECORDS AVAILABLE:

February 6, 1928 to September 30, 1939.
(For periods prior to February, 1928 see State Division of Water Rights Bulletins)

ACCURACY:

Poor.

OPERATION:

Operated by the Los Angeles County Flood Control District. Located by the State Division of Water Rights.

F. C. D. FORM 104 500 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F42R

DISCHARGE MEASUREMENTS OF SAN GABRIEL RIVER

AT Spring Street, Long Beach DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
77	12-19	Jackman Bonadiman-	121.	292.	2.32	6.18	679.		.6	11	-.08	1112A / 1136A	FC 40
78	12-19	" "	120.	192.3	1.72	5.76	330.		.6	13	-.03	300P / 315P	"
79	12-20	" "	Two	Channels		4.94	50.		.6	8	0	650A / 700A	"
80	12-20	" "	"	"		4.94	48.		.6	8	0	705A / 715A	"
81	12-20	" "	"	"		5.12	82.		.6	8	0	408P / 425P	"
82	12-21	" "	"	"		4.84	21.		.6	6	0	945A / 955A	"
83	1-6	Bonadiman	10.	1.82	0.72	4.53	1.3		.6	3	0	153P / 157P	"
84	1-22	Jackman Bonadiman-	28.	16.82	0.60	4.69	10.		.6	7	0	920A / 947A	"
85	2-4	" "	120.	113.1	1.13	5.23	128.		.6	14	-.02	1031A / 1050A	"
86	2-4	" "	120.	109.3	1.04	5.20	113.		.6	15	-.04	1105A / 1115A	"
87	9-25	" "	111.	217.5	2.85	6.58	619.		.6	11	+.03	555P / 612P	"
88	9-26	" "	8.5	1.91	.63	4.60	1.2		.6	3	-.01	540P / 545P	"

F. C. Dist. Form 52

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

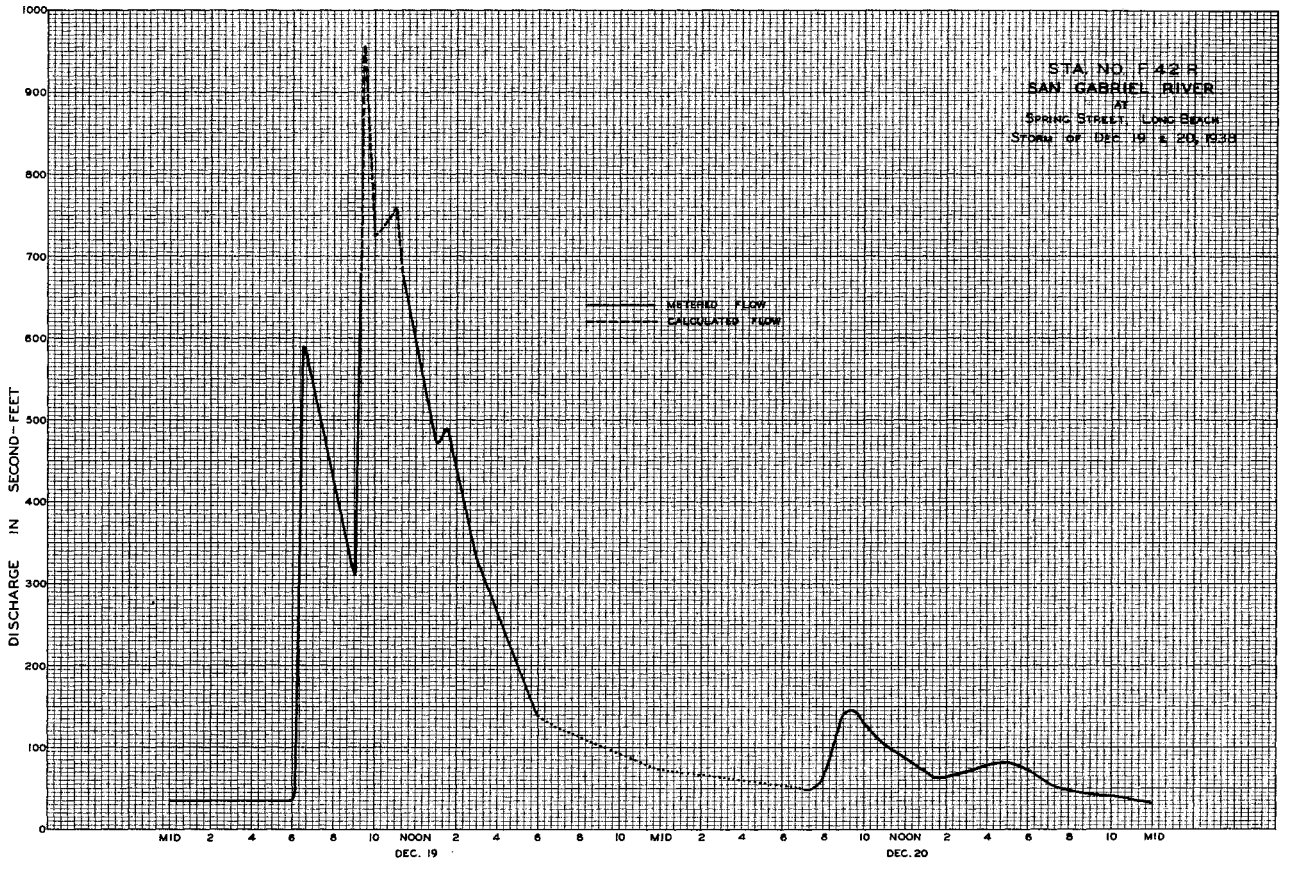
Sta. No F42R

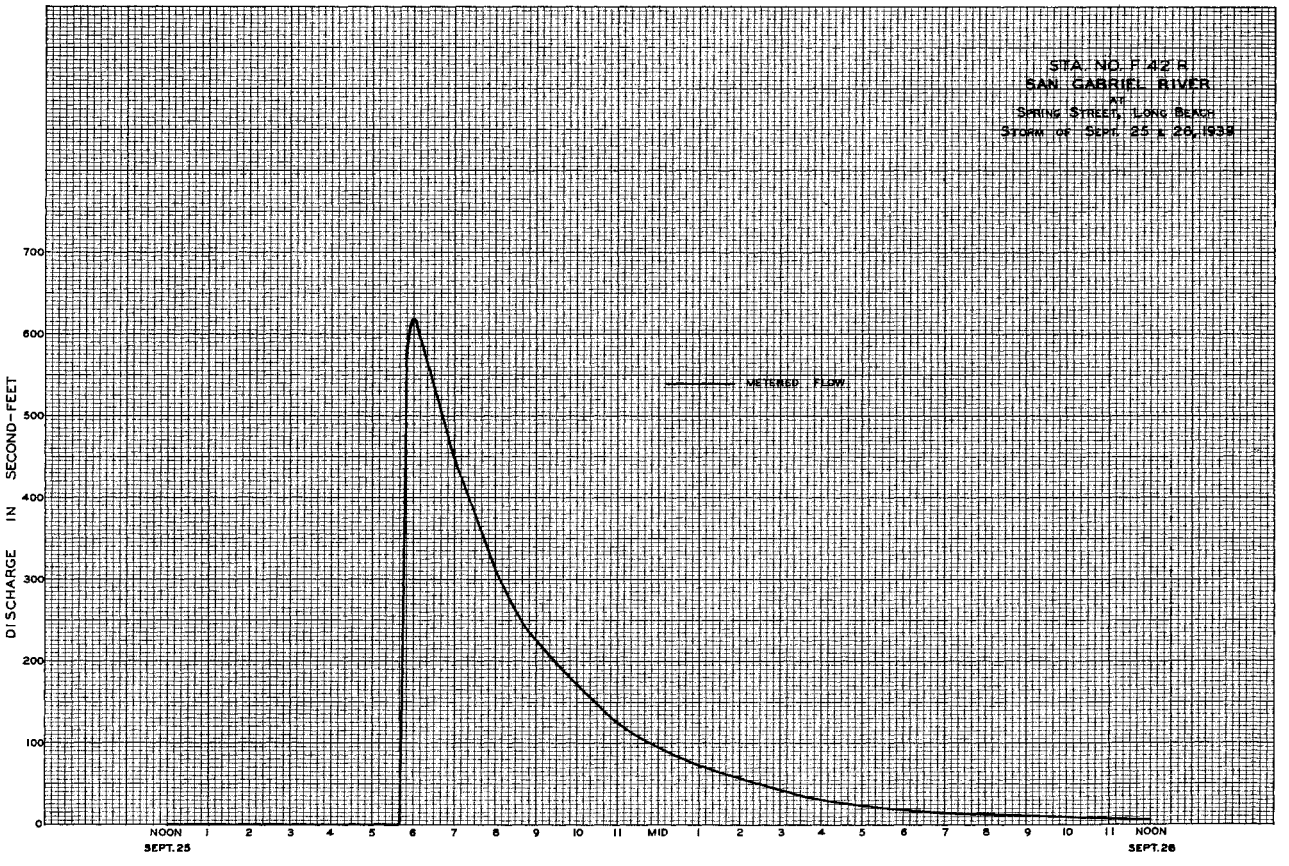
Daily discharge, in second-feet of SAN GABRIEL RIVER at Spring Street, Long Beach, for the year ending September 30, 19 39

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	35	0	0	0	0	0	0	0
4	0	0	0	0	56	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	4.2	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	265	0	0	0	0	0	0	0	0	0
20	0	0	70	0	0	0	0	0	0	0	0	0
21	0	0	22	0	0	0	0	0	0	0	0	0
22	0	0	0	4.3	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	74
26	0	0	0	0	0	0	0	0	0	0	0	16
27	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0		0	0	0	0	0	0	0
30	0	0	0	0		0	0	0	0	0	0	0
31	0		0	0		0		0		0	0	
	0	0	357	8.5	91	0	0	0	0	0	0	90
MEAN	0	0	11.5	0.27	3.2	0	0	0	0	0	0	3.0
ACRE-FEET	0	0	708	17	180	0	0	0	0	0	0	178

Remarks:

YEAR OR PERIOD MEAN 1.50
ACRE FEET 1080


STA. NO. F 42 R
SAN GABRIEL RIVER
AT
SPRING STREET, LONG BEACH
STORM OF DEC. 19 & 20, 1938
METERED FLOW
CALCULATED FLOW
DISCHARGE IN SECOND-FEET
1000
900
800
700
600
500
400
300
200
100
0
MID 2 4 6 8 10 NOON 2 4 6 8 10 MID 2 4 6 8 10 NOON 2 4 6 8 10 MID
DEC. 19
DEC. 20


STA. NO. F 42 R
SAN GABRIEL RIVER
AT
SPRING STREET, LONG BEACH
STORM OF SEPT. 25 & 26, 1938
METERED FLOW
DISCHARGE IN SECOND-FEET
700
600
500
400
300
200
100
0
NOON 1 2 3 4 5 6 7 8 9 10 11 MID 1 2 3 4 5 6 7 8 9 10 11 NOON
SEPT. 25
SEPT. 26

STATION F48R

SAN JOSE CREEK at Workman Mill Road

LOCATION:

On downstream end of first pier from left (south) end of bridge, about 3 miles north of Whittier. This Station is at, or near, the location of the Station operated from 1923 to 1929 by the State Division of Water Rights.

DRAINAGE AREA:

85.0 square miles.

CHANNEL AND CONTROL:

Channel-clay, sand and gravel.
No artificial control.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows measured from cable car below station.

RECORDER:

Installed January 2, 1929 in a F. C. standard type house over an 18 inch diameter corrugated iron pipe stilling well.
An H.C.F. continuous recorder was in service from October 1, 1938 to September 30, 1939.

REGULATION:

Flow partially regulated by Thompson Creek Dam.

DIVERSIONS:

Small diversion for spreading.

RECORDS AVAILABLE:

January 2, 1929 to September 30, 1939.
(For records prior to January 2, 1929 see State Division of Water Rights Bulletins)

EXTREMES OF DISCHARGE:

1938-1939
Maximum 1950 second-feet September 25.
Minimum 0.3 second-feet September 2.
1928-1939
Maximum 13100 second-feet January 1, 1934.
Minimum no flow at various times.

ACCURACY:

Fair.
Estimated by interpolation August 13 to 16.

OPERATION:

Located, constructed and operated by the Los Angeles County Flood Control District in co-operation with the U.S.G.S. Water Resources Branch.

F. C. D. FORM 104 500 8-38

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F48R

DISCHARGE MEASUREMENTS OF SAN JOSE CREEK

AT NEAR Workman Mill Road DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Diff.	Noted	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
169	10-6	Brewster	4.0	.96	.94	1.81	.90		.6	4	0	155P / 202P	FC 8
170	10-13	"	4.0	.86	.83	1.80	.70		.6	4	0	114P / 120P	"
171	10-20	"	4.0	.82	.79	1.80	.65		.6	4	0	200P / 206P	"
172	10-27	"	4.0	1.00	.93	1.81	.95		.6	4	0	115P / 121P	"
173	11-3	"	4.0	.82	.84	1.81	.70		.6	4	0	205P / 211P	"
174	11-10	"	4.0	.96	.77	1.81	.75		.6	4	0	200P / 206P	"
175	11-17	"	4.0	.94	.82	1.82	.75		.6	4	0	200P / 206P	"
176	11-23	"	4.0	.90	1.06	1.80	.95		.6	4	0	200P / 206P	"
177	12-1	"	4.0	1.00	.85	1.81	.85		.6	4	0	115P / 122P	"
178	12-8	"	4.0	1.00	.92	1.81	.90		.6	4	0	1240P / 1246P	"
179	12-15	"	4.0	1.00	1.11	1.86	1.1		.6	4	0	225P / 230P	"
180	12-18	Lindsay-Ingram	Two channels			2.67	120.		.6	13	+.19	855A / 915A	FC 13
181	12-18	" "	"		"	2.83	168.		.6	14	-.02	1046A / 1056A	FC 28
182	12-18	Haig-Tscharner	"		"	2.75	114.		.6	21	+.05	357P / 420P	FC 38
183	12-20	Lindsay-Ingram	18.0	12.62	1.86	2.18	23.		.6	6	0	435P / 445P	FC 28
184	12-22	Brewster-Pettis	10.0	2.88	.78	1.69	2.3		.6	5	0	225P / 235P	FC 8
185	12-28	Brewster	5.0	1.32	.83	1.64	1.1		.6	5	0	120P / 127P	"
186	1-5	Brougham Brewster-	6.0	2.55	1.27	1.70	3.2		.6	4	0	1205P / 1212P	"
187	1-5	Lindsay-Ingram	56.0	34.8	2.35	2.45	82.		.6	11	+.02	317P / 325P	FC 28
188	1-6	Brewster	14.0	3.20	.88	1.67	2.8		.6	7	0	1245P / 1255P	FC 8
189	1-6	Lindsay-Ingram	6.5	2.14	1.21	1.65	2.6		.6	5	0	248P / 255P	FC 28
190	1-12	Brewster	5.0	1.51	.91	1.62	1.4		.6	4	0	1225P / 1232P	FC 8
191	1-19	"	5.0	1.82	1.01	1.64	1.8		.6	5	0	108P / 115P	"
192	1-21	Haig-Tscharner	17.0	7.88	2.11	1.95	17.		.6	7	+.02	134P / 139P	FC 38
193	1-22	Lindsay	6.5	4.07	1.23	1.70	5.0		.6	4	0	1219P / 1225P	FC 13
194	1-26	Brewster	6.0	1.48	.93	1.59	1.4		.6	4	0	113P / 120P	FC 8
195	2-2	"	4.0	2.44	.63	1.60	1.5		.6	4	0	205P / 211P	"
196	2-3	Haig-Tscharner	91.0	72.0	2.96	2.88	213.		.6	12	-.08	1256P / 110P	FC 38
197	2-3	" "	26.0	24.43	1.93	2.37	47.		.6	6	0	1050P / 1058P	"
198	2-9	Brewster	5.0	1.34	.90	1.60	1.2		.6	5	0	120P / 128P	FC 8
199	2-16	"	8.0	1.72	.77	1.58	1.3		.6	4	0	1230P / 1237P	"
200	2-23	"	11.0	2.35	.77	1.62	1.8		.6	5	0	151P / 158P	"
201	3-2	"	11.0	2.68	.76	1.62	2.0		.6	6	0	145P / 153P	"
202	3-9	"	12.0	2.76	.82	1.63	2.3		.6	6	0	130P / 137P	"
203	3-10	Lindsay-Ingram	20.0	10.16	2.10	1.94	21.		.6	7	+.01	150A / 200A	FC 28
204	3-16	Brewster	9.0	1.88	.77	1.60	1.4		.6	4	0	105P / 112P	FC 8
205	3-23	"	9.0	2.07	.81	1.61	1.7		.6	4	0	120P / 126P	"
206	3-27	Haig	12.0	6.16	1.45	1.74	9.		.6	8	0	1045A / 1054A	FC 38
207	3-30	Brewster	11.0	2.92	.74	1.61	2.2		.6	5	0	118P / 125P	FC 8
208	4-6	"	10.0	2.28	.69	1.62	1.6		.6	5	0	1157A / 1203P	"
209	4-13	"	9.0	2.04	.75	1.62	1.5		.6	5	0	1240P / 1250P	"
210	4-20	"	4.0	1.73	.78	1.60	1.4		.6	4	0	1235P / 1241P	"
211	4-27	"	6.0	2.14	.82	1.63	1.7		.6	3	0	1220P / 1226P	"
212	5-4	"	7.0	2.15	.80	1.63	1.7		.6	4	0	144P / 150P	"
213	5-11	"	8.0	3.02	1.17	1.70	3.5		.6	4	0	210P / 217P	"
214	5-18	"	6.0	1.54	.90	1.69	1.4		.6	4	0	140P / 146P	"
215	5-25	"	4.0	1.80	1.01	1.68	1.8		.6	4	0	114P / 120P	"
216	6-1	"	5.0	1.22	1.22	1.73	1.5		.6	5	0	120P / 128P	"
217	6-8	Brewster	9.0	1.88	.85	1.68	1.6		.6	5	0	1232P / 1240P	FC 8
218	6-14	"	9.0	1.96	.67	1.66	1.3		.6	4	0	1230P / 1240P	"
219	6-21	Lindsay	8.5	1.43	.78	1.64	1.1		.6	5	0	205P / 212P	FC 28
220	6-19	Brewster	9.0	1.72	.65	1.67	1.1		.6	4	0	1225P / 1232P	FC 8
221	7-6	"	4.0	1.69	.73	1.68	1.2		.6	4	0	1244P / 1250P	"
222	7-13	"	6.0	2.03	.45	1.65	.90		.6	4	0	345P / 352P	"
223	7-20	"	6.0	1.89	.47	1.66	.90		.6	4	0	402P / 408P	"
224	7-27	"	10.0	2.04	.56	1.68	1.1		.6	5	0	1210P / 1215P	"
225	8-3	"	7.0	2.07	.41	1.65	.85		.6	4	0	1144A / 1150A	"
226	8-10	"	8.0	1.68	.49	1.67	.80		.6	4	0	1225P / 1232P	"
227	8-17	"	7.0	1.40	.91	1.68	1.3		.6	4	0	1210P / 1215P	"
228	8-24	"	8.0	1.80	.63	1.69	1.1		.6	4	0	1225P / 1231P	"
229	8-31	"	8.0	1.64	.46	1.66	.75		.6	4	0	1205P / 1210P	"
230	9-7	"	8.0	1.52	.62	1.65	.95		.6	4	0	1152A / 1158A	"
231	9-14	"	8.0	1.76	.65	1.70	1.1		.6	4	0	1202P / 1207P	"
232	9-21	"	7.0	1.41	.67	1.70	.95		.6	4	0	1115A / 1120A	"
233	9-25	Brewster-Pettis	105.	322.9	5.61	5.22	1810.		.6	11	-.01	1150A / 1205P	"
234	9-25	" "	85.	100.5	2.73	3.21	274.		.6	9	-.06	611P / 625P	"
235	9-26	Brewster	20.0	7.28	1.14	1.68	8.3		.6	6	0	1202P / 1210P	"
236	9-28	"	8.0	2.52	.64	1.49	1.6		.6	4	0	100P / 105P	"

F. C. Dist. Form 58

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

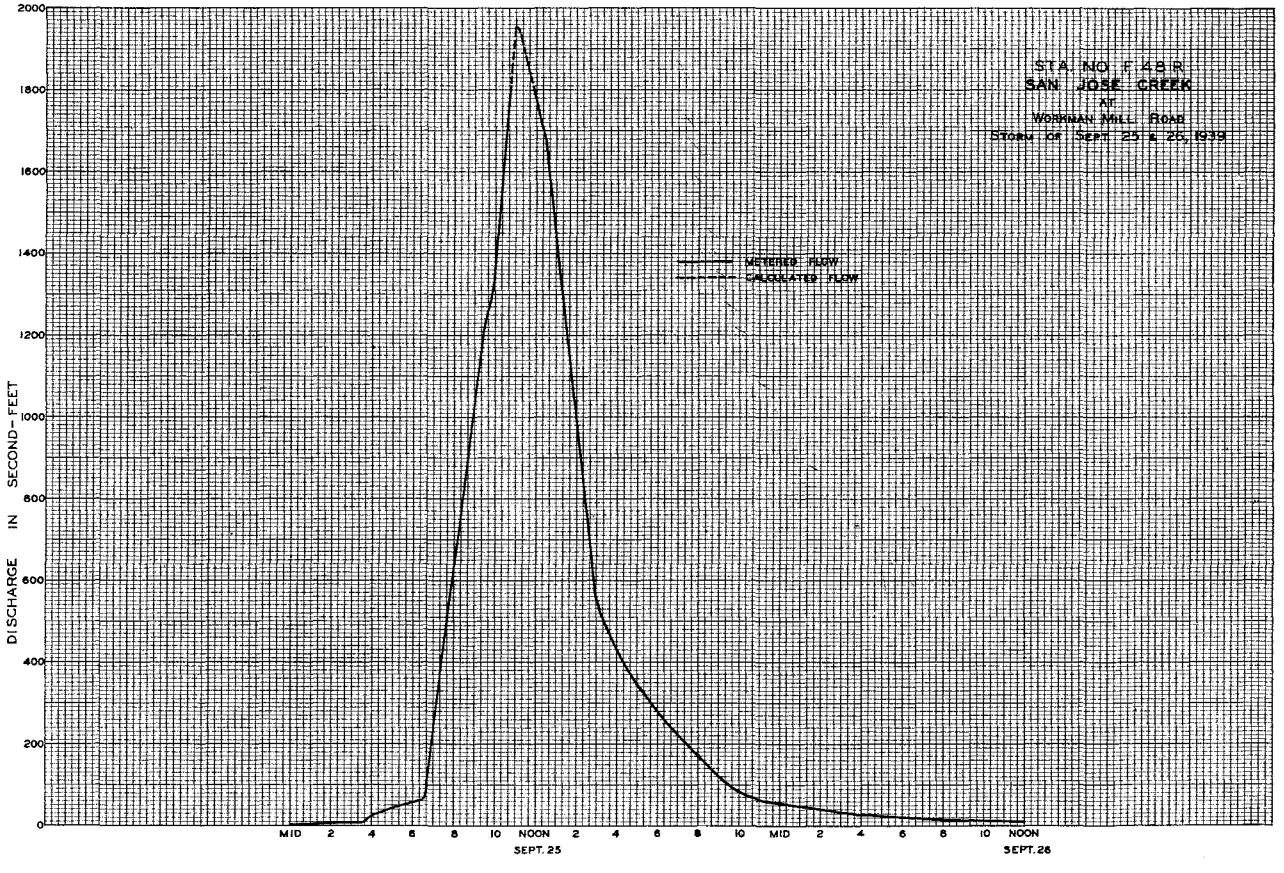
Sta. No. F48R

Daily discharge, in second-feet of SAN JOSE CREEK at Workman Mill Road, for the year ending September 30, 19 39

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.2	1.0	0.9	1.8	2.0	1.8	1.8	1.4	2.0	1.4	0.9	0.4
2	1.6	1.4	0.9	1.8	1.6	1.8	2.6	1.4	1.6	1.4	0.9	0.3
3	1.6	0.9	0.9	2.0	95	1.8	2.2	1.8	1.6	1.4	0.9	0.7
4	1.6	0.7	0.7	2.0	43	1.8	2.0	1.6	1.0	1.6	0.6	0.7
5	1.6	0.9	0.7	40	9	1.8	2.2	1.4	1.0	1.6	0.6	0.7
6	1.2	0.7	0.9	8	5	1.8	1.6	1.8	1.2	1.6	0.9	0.9
7	1.4	0.7	0.9	1.4	5	1.8	1.2	2.0	1.6	1.4	1.0	0.9
8	1.4	0.7	0.7	1.0	7	2.4	1.2	1.8	1.8	1.2	1.2	0.9
9	1.0	0.7	0.9	1.4	2.9	2.9	1.4	2.2	1.0	1.2	1.2	0.6
10	0.9	0.9	1.2	1.2	1.2	8	1.6	2.4	1.2	1.4	1.0	0.6
11	0.9	0.9	1.2	1.2	1.2	1.6	1.8	3.1	1.2	1.6	0.7	0.3
12	0.9	0.7	0.9	1.4	1.4	1.4	1.8	2.9	0.9	1.6	0.7	0.6
13	0.7	0.7	0.6	1.6	1.6	1.4	1.6	3.1	1.2	1.4	E 0.9	1.0
14	0.9	0.7	0.6	2.2	1.4	1.4	1.6	3.4	1.6	1.4	E 0.9	1.0
15	0.9	0.7	1.6	2.9	1.4	1.4	1.6	2.6	1.8	1.0	E 1.0	0.9
16	0.9	0.9	1.8	2.6	1.4	1.4	1.2	2.4	1.8	1.4	E 1.2	0.7
17	0.9	0.7	1.2	2.6	1.4	1.4	1.4	1.8	1.6	1.4	1.2	0.9
18	0.7	0.7	104	2.9	1.8	1.4	1.0	1.8	2.0	1.6	0.9	0.9
19	0.7	0.6	263	2.0	1.8	1.4	1.2	1.4	1.8	1.4	1.2	0.9
20	0.7	0.6	75	1.6	1.6	1.8	1.4	1.2	1.8	1.4	1.2	0.9
21	0.7	0.7	23	23	1.8	2.0	1.4	1.6	1.2	1.4	1.2	0.9
22	0.9	0.9	2.4	14	1.4	2.2	1.4	1.6	1.0	1.4	0.9	0.9
23	1.0	0.9	2.0	1.6	1.6	2.0	1.4	2.0	1.4	1.2	1.2	0.9
24	1.6	0.7	1.6	1.6	1.4	2.4	1.4	2.2	1.8	1.4	0.9	1.4
25	1.2	0.7	1.6	1.2	1.6	2.9	1.8	2.0	1.8	1.2	0.4	4.9.9
26	1.0	0.7	2.0	1.6	1.6	4.3	2.0	2.2	1.8	1.0	0.4	15
27	1.0	0.6	2.2	1.6	1.6	7.5	2.0	1.6	1.8	1.0	0.4	4.0
28	1.6	0.6	2.0	1.6	1.8	3.5	1.8	1.8	1.4	0.6	0.4	2.0
29	1.6	0.7	1.4	1.6		2.6	1.4	1.6	1.2	0.4	0.6	1.4
30	1.8	0.9	0.9	5		2.0	1.4	1.6	1.6	0.4	0.6	1.2
31	1.2		1.2	9.5		2.0		1.8		0.6	0.6	
	353	232	498.9	1439	1995	739	484	615	447	390	267	541.5
Mean	1.14	.77	16.1	4.64	7.12	2.38	1.61	1.98	1.49	1.26	.86	18.0
Acre-Feet	70	46	990	285	396	147	96	122	89	77	53	1070

Remarks: E indicates discharge estimated - see station description.

Year or Period: Mean 4.76; Acre-Feet 3440



STATION F260B-R

SANTA ANITA CREEK at Foothill Boulevard

LOCATION:

On the dowstream side on left (east) end of Foothill Bouleverd bridge, about one mile north of Arcadia, and approximately 1/4 mile below the confluence of Santa Anita Creek and Little Santa Anita Creek.
The former Station F260R was about 3/5 mile upstream.

DRAINAGE AREA:

19.2 square miles.

CHANNEL AND CONTROL:

Channel-sand, gravel, and boulders; banks protected with wire and rock.
No artificial control.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows measured from upstream side of highway bridge.

RECORDER:

Installed April 22, 1938 in a box type house over an 18 inch diameter corrugated iron pipe stilling well.
H.C.F. continuous recorder was in service from October 1, 1938 to September 30, 1939.

REGULATION:

Flow partially regulated by Big Santa Anita and Sierra Madre Dams.

DIVERSIONS:

Some water diverted for irrigation at mouth of Big Santa Anita Canyon.
Flow occasionally diverted for spreading from Little Santa Anita Creek at Sierra Madre Spreading Grounds.

RECORDS AVAILABLE:

April 22, 1938 to September 30, 1939.

EXTREMES OF DISCHARGE:

1938-1939
Maximum 128 second-feet, January 5.
Minimum no flow at various times.
1936-1939 (Stations F260R and F260B-R)
Maximum not determined March 2, 1938.
Minimum no flow at various times.

ACCURACY:

Fair.
Estimated by comparison: October 1 to December 16, 25 and 26.
Monthly totals only, shown for October and November.

OPERATION:

Located, constructed and operated by the Los Angeles County Flood Control District.

F. C. D. FORM 104 500 8-38

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F260B-R

DISCHARGE MEASUREMENTS OF SANTA ANITA CREEK

AT OR NEAR Foothill Blvd. DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
29	10-6	Lindsay	11.0	2.50	2.65	5.10	6.6		.6	6	0	945A / 954A	FC 28
30	10-13	"	4.5	.52	1.26	5.48	.65		.6	4	+.01	947A / 952A	"
31	10-20	"	8.0	.72	1.43	5.97	1.0		.6	4	+.02	1008A / 1015A	FC 13
32	10-27	"	5.0	.65	2.11	6.66	1.4		.6	4	-	1122A / 1127A	"
33	11-3	"	3.5	.36	1.41	7.03	.50		.6	3	-.02	112P / 115P	"
34	11-10	"	3.0	.28	1.39	-	.39		.6	3		125P / 130P	"
35	11-17	Lindsay	3.0	.32	1.28	-	.41		.6	3		1000A / 1005A	FC 13
36	11-23	"	1.2	.18	.39	7.56	.07		.6	2	0	331P / 333P	"
37	12-1	"	4.0	.65	1.82	7.78	1.2		.6	4	0	936A / 940A	"
38	12-8	Lindsay-Lindstrom	4.0	.33	1.70	7.38	.55		.6	4	0	1013A / 1017A	FC 28
39	12-14	Lindsay	4.5	.84	2.56	6.80	2.2		.6	4	0	1031A / 1035A	FC 13
40	12-15	Lindsay-Ingram	18.0	4.81	3.30	6.40	16.		.6	6	0	950A / 958A	"
41	12-16	Lindsay	13.5	3.46	2.41	4.94	8.3		.6	7	0	940A / 950A	"
42	12-18	Haig-Tscharner	10.7	8.62	3.76	5.38	32.		.6	8	0	727A / 735A	FC 38
43	12-18	Lindsay-Ingram	15.0	9.51	3.61	5.46	34.		.6	8	0	311P / 320P	FC 28
44	12-18	" "	19.0	18.04	5.00	5.75	90.		.6	6	+.03	847P / 853P	"
45	12-18	" "	17.0	13.08	3.43	5.52	45.		.6	6	-.13	1035P / 1042P	"
46	12-19	" "	15.0	13.85	3.49	5.49	48.		.6	6	-.06	815A / 823A	"
47	12-19	" "	15.0	9.87	4.21	5.40	42.		.6	7	0	210P / 221P	"
48	12-20	" "	15.0	12.02	3.56	5.44	43.		.6	7	+.05	934A / 943A	"
49	12-21	Lindsay	5.5	.86	.80	4.64	.70		.6	5	0	927A / 935A	"
50	12-22	"	15.0	12.36	3.32	5.52	41.		.6	9	0	316P / 326P	"
51	12-23	"	14.5	9.69	2.56	5.33	25.		.6	8	0	830A / 843A	"
52	12-27	"	2.2	.36	.25	4.40	.09		.6	4	0	1212P / 1218P	FC 13
53	12-28	Lindsay	13.6	7.57	2.17	5.21	16.		.6	8	-.10	951A / 957A	FC 28
54	12-29	"	13.5	4.22	1.05	4.90	4.4		.6	7	0	258P / 309P	"
55	1-1	"	13.7	7.22	1.70	5.10	13.		.6	7	0	1153A / 1203P	FC 13
56	1-6	Ingram	3.5	.50	.68	4.53	.34		.6	5	0	940A / 950A	FC 28
57	1-7	Haig	3.2	.55	.49	4.48	.27		.6	6	0	227P / 234P	FC 38
58	1-7	Lindsay	15.5	8.81	2.84	5.29	25.		.6	7	-.01	1142A / 1150A	FC 28
59	1-8	"	16.5	12.45	2.97	5.47	37.		.6	6	0	700P / 710P	"
60	1-9	"	14.5	10.10	2.97	5.38	30.		.6	9	-.01	1017A / 1027A	"
61	1-10	van der Goot Lindsay-	15.0	7.80	2.49	5.21	19.		.6	8	+.01	528P / 540P	"
62	1-20	Lindsay	6.2	1.60	1.0	4.78	1.6		.6	6	-.03	945A / 951A	FC 13
63	2-2	"	13.7	3.04	1.42	4.94	4.3		.6	8	0	921A / 931A	FC 28
64	2-3	Lindsay-Ingram	12.0	2.68	1.32	4.90	3.6		.6	6	0	153P / 158P	"
65	2-8	Lindsay	14.0	4.91	1.58	4.98	7.8		.6	8	+.01	1146A / 1155A	"
66	2-9	"	14.5	4.63	1.27	4.93	5.9		.6	8	0	1003A / 1011A	"
67	2-16	"	11.5	2.60	1.23	4.89	3.2		.6	6	0	247P / 255P	"
68	2-23	"	11.3	1.73	.80	4.76	1.4		.6	7	0	942A / 951A	"
69	3-2	"	3.7	.57	.58	4.63	.33		.6	6	0	954A / 1000A	"
70	3-9	"	12.3	3.13	1.09	4.90	3.4		.6	6	0	850A / 857A	"
71	3-11	"	15.0	7.90	2.13	5.19	17.		.6	8	0	1100A / 1110A	"
72	3-16	"	9.0	1.27	.68	4.67	.85		.6	7	-.02	1010A / 1020A	FC 13
73	3-23	"	12.5	2.29	.85	4.77	2.0		.6	7	0	947A / 955A	"
74	3-27	"	13.0	3.37	.98	4.85	3.3		.6	7	-.01	1106A / 1116A	FC 28
75	3-30	"	14.0	4.36	1.30	4.93	5.7		.6	8	0	1040A / 1050A	FC 13
76	4-6	"	9.3	.88	.66	4.68	.60		.6	6	0	925A / 932A	FC 28
77	4-13	Ingram	9.5	.97	.67	4.68	.65		.6	4	0	950A / 1000A	FC 28
78	9-24	"	11.0	1.29	.61	4.68	.80		.6	5	0	755P / 804P	FC 2
79	9-25	Lindsay-Ingram	14.0	4.28	1.44	4.94	6.2		.6	7	0	106A / 113A	FC 28
80	9-25	Lindsay	14.0	6.21	1.87	5.10	12.		.6	7	0	311P / 321P	"
81	9-26	"	18.0	12.18	4.05	5.54	49.		.6	9	0	900A / 910A	"
82	9-28	"	15.0	10.5	2.37	5.31	25.		.6	8	0	942A / 952A	"
83	9-28	"	14.5	8.22	1.87	5.15	15.		.6	8	0	1250P / 100P	"

F. C. Dist. Form 52

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

Sta. No. F260B-R

Daily discharge, in second-feet of SANTA ANITA CREEK at Foothill Boulevard for the year ending September 30, 19 39

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			E 1.0	12	2.2	0.2	1.7	0.1	0	0	0	0
2			E 1.0	12	3.8	0.5	2.1	0.1	0	0	0	0
3			E 1.0	3.8	3.8	1.2	1.9	0	0	0	0	0
4			E 1.0	0	2.4	1.2	1.8	0	0	+	0	0
5			E 1.0	1.1	3.0	0.5	1.1	0	0	0	0	0
6			E 1.0	4.4	3.8	0.5	0.6	0	0	0	0	0
7			E 1.0	2.2	6.4	0.5	0.5	0	0	0	0	0
8			E 1.0	2.9	9	1.4	0.4	0	0	+	0	0
9			E 1.0	3.0	7.5	4.4	0	0	0	+	0	0
10			E 1.0	2.5	10	E	+	0	0	+	0	0
11			E 1.0	1.4	9.5	1.7	0.2	+	0	0	0	0
12			E 1.0	0.3	4.9	1.1	0.3	+	0	0	0	0
13			E 1.0	1.0	4.9	3.0	0.8	0.1	0	0	0	0
14			E 2.2	0.7	3.5	1.6	0.7	0.2	0	0	0	0
15			E 1.0	0.9	3.8	1.4	0.4	+	0	0	0	0
16			E 7	0.9	3.8	1.1	0	+	0	0	0	0
17			7.5	0.8	4.6	1.1	+	0.1	0	0	0	0
18			3.8	0.6	4.3	1.4	+	0.1	0	0	0	0
19			3.5	1.9	4.0	1.7	0.1	+	0	0	0	0
20			1.6	1.7	3.5	1.7	0.1	+	+	0	0	0
21			0.5	2.5	3.0	1.7	0.1	0	+	0	0	0
22			2.0	0.1	2.8	1.9	+	0	+	0	0	0
23			1.6	0	2.1	1.9	0.3	0	0	0	0	0
24			4.8	0	2.1	1.8	0.2	0	0	0	0	1.5
25			E 0.1	0	2.2	1.8	0.3	0	0	0	0	1.4
26			E 0.1	0	1.8	2.4	0.4	0	+	0	0	4.6
27			5.5	0	1.9	3.3	0.2	0	0	0	0	3.9
28			1.2	0.3	1.1	4.0	+	0	0	0	0	2.0
29			3.8	0.7		6	0.3	0	0	0	0	1.4
30			2.8	1.0		6	0.2	0	0	0	0	6.5
31			4.0	1.4		3.2		0			0	
	E 55		198.3		115.7		14.7		+		0	
		E 50		178.0		93.4		0.7		+		1410
MEAN	1.8	1.7	6.40	5.74	4.13	3.01	.49	.02	+	+	0	4.70
ACRE-FEET	109	99	393	353	229	185	29	1.4	+	+	0	280

Remarks: + indicates discharge 0.05 sec. ft. or less.
E-Discharge estimated.- see station description.

YEAR OR PERIOD — MEAN 2.32 — ACRE-FEET 1680

STATION F92B-R

SANTA CLARA RIVER at Highway 99

LOCATION:

On the downstream side of first pier north of the left (south) abutment of the highway bridge about 4 miles west of Saugus.
The former Station F92R was about 1000 feet downstream.

DRAINAGE AREA:

355 square miles.

CHANNEL AND CONTROL:

Channel-fine to coarse sand and gravel.
No artificial control.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows measured from upstream side of highway bridge.

RECORDER:

Installed January 15, 1930 at Station F92R.
Removed September 21, 1938.
Installed at Station F92B-R September 30, 1938 in a standard type house over a 24 inch corrugated iron pipe stilling well.
An Au continuous recorder was in service from October 1, 1938 to September 30, 1939.

REGULATION:

Partially regulated by Bouquet Canyon and Dry Canyon Reservoirs.

DIVERSIONS:

Some flow diverted for irrigation near Lang.

RECORDS AVAILABLE:

At Station F92R
Recorder records available from January 15, 1930 to March 28, 1938. Some weekly stream measurements were taken prior to January 15, 1930 and subsequent to March 28, 1938.
At Station F92B-R
Recorder records available from October 1, 1938 to September 30, 1939.

EXTREMES OF DISCHARGE:

1938-1939
Maximum 4620 second-feet, December 15.
Minimum flow negligible at various times.
1930-1939 (Stations F92R and F92B-R)
Maximum 24000 second-feet, estimated March 2, 1938.
Minimum no flow at various times.

ACCURACY:

Poor.
Interpolated between measurements January 11 to January 19.
Estimated by interpolation of partial days December 15, 16, 19, 20, and 21; January 5, February 3, 7 and 8; March 9 and 10 and September 26.

OPERATION:

Located, constructed and operated by the Los Angeles County Flood Control District, in co-operation with the U.S.G.S. Water Resources Branch.

F. C. D. FORM 104 500 8-38

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F92B-R

DISCHARGE MEASUREMENTS OF SANTA CLARA RIVER

AT Highway #99 DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
1	9-30	Luce	1.7	.13	.69	5.60	.09		.6	3	0	1100A / 1103A	FC 39
2	10-20	"	1.5	.12	.58	5.67	.07		.6	3	0	1010A / 1012A	"
3	12-7	"	1.7	.16	.62	5.66	.10		.6	3	0	920A / 923A	"
4	12-15	Miller	32.0	11.49	2.06	-	24.		.6	10	-	915A / 935A	FC 35
5	12-16	"	27.5	9.06	2.76	6.08	25.		.6	15	0	100P / 125P	"
6	12-17	"	53.2	16.77	2.40	6.04	40.		.6	19	0	1125A / 1155A	"
7	12-18	"	56.5	32.07	3.61	7.16	116.		.6	20	0	200P / 230P	"
8	12-19	Miller-Skelly	59.9	23.18	3.32	6.51	77.		.6	20	-.02	205P / 230P	"
9	12-20	Miller	91.0	45.48	4.04	6.77	184.		.6	17	-.02	1215P / 100P	"
10	12-21	Miller-M.Miller	18.0	6.53	2.56	6.36	17.		.6	11	0	340P / 355P	"
11	1-5	" "	59.3	23.89	2.68	6.39	64.		.6	13	-.02	445P / 515P	"
12	1-7	" "	21.5	6.30	2.38	6.22	15.		.6	11	0	1050A / 1100A	"
13	1-10	Luce	21.5	5.82	2.38	6.22	14.		.6	11	0	1250P / 100P	FC 39
14	1-21	Miller-Taylor	29.0	14.95	3.68	6.37	55.		.6	9	-.02	515P / 535P	FC 35
15	1-23	Miller	31.6	9.69	2.34	6.24	23.		.6	13	-.04	1145A / 1205P	"
16	2-3	"	29.2	6.12	1.20	6.07	7.3		.6	12	-.02	1115A / 1130A	"
17	2-8	"	33.9	13.22	2.81	6.09	37.		.6	10	-.01	1045A / 1100A	"
18	2-22	Luce	19.5	11.71	3.20	5.73	38.		.6	10	-.02	240P / 255P	FC 39
19	2-24	Jamison	19.8	11.77	3.69	5.68	43.		.6	13	0	1150A / 1210P	25143
20	3-10	Luce	30.3	15.29	3.63	5.29	55.		.6	10	0	155P / 210P	FC 39
21	3-24	"	28.5	13.28	2.82	5.11	38.		.6	11	-.02	1145A / 1200N	"
22	4-9	Luce-M.Luce	27.5	11.78	3.42	4.95	40.		.6	8	0	1120A / 1130A	"
23	4-20	Luce	9.5	2.62	1.22	4.58	3.2		.6	6	0	1056A / 1104A	"
24	6-8	"	6.5	1.64	1.18	4.48	1.9		.6	6	0	115P / 120P	"
25	6-27	Luce	3.2	.78	1.34	4.50	1.0		.6	6	0	410P / 415P	FC 39
26	7-20	"	3.6	.89	.99	4.48	.9		.6	6	0	320P / 325P	"
27	8-3	"	3.8	.80	.90	4.46	.7		.6	6	0	240P / 250P	"
28	9-25	Luce-Miller	34.0	20.9	3.47	5.20	73.		.6	10	+.05	1050A / 1058A	"
29	9-26	Luce	8.0	1.25	.86	4.56	1.1		.6	6	0	150P / 155P	"

F. C. Dist. Form 58

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

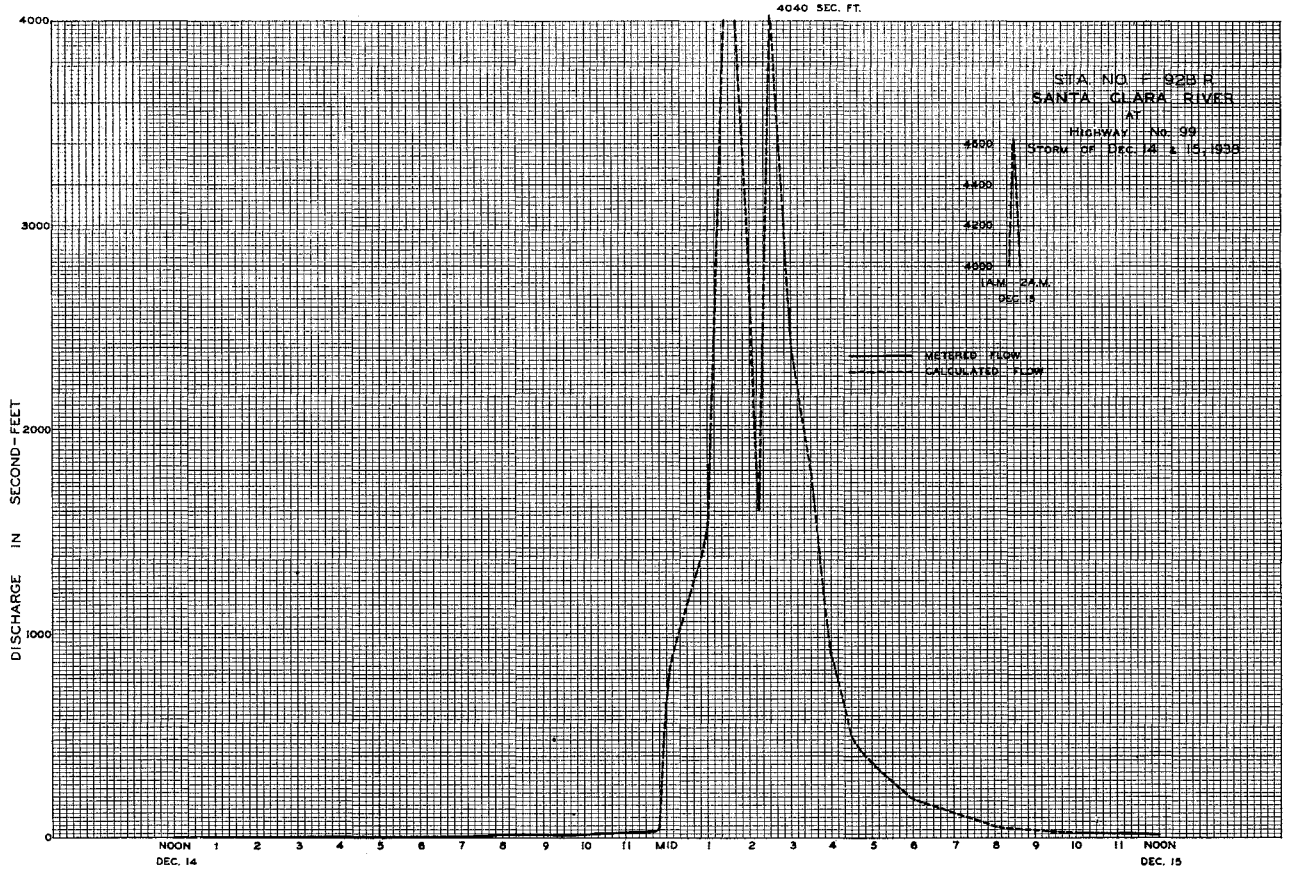
Sta. No. F92B-R

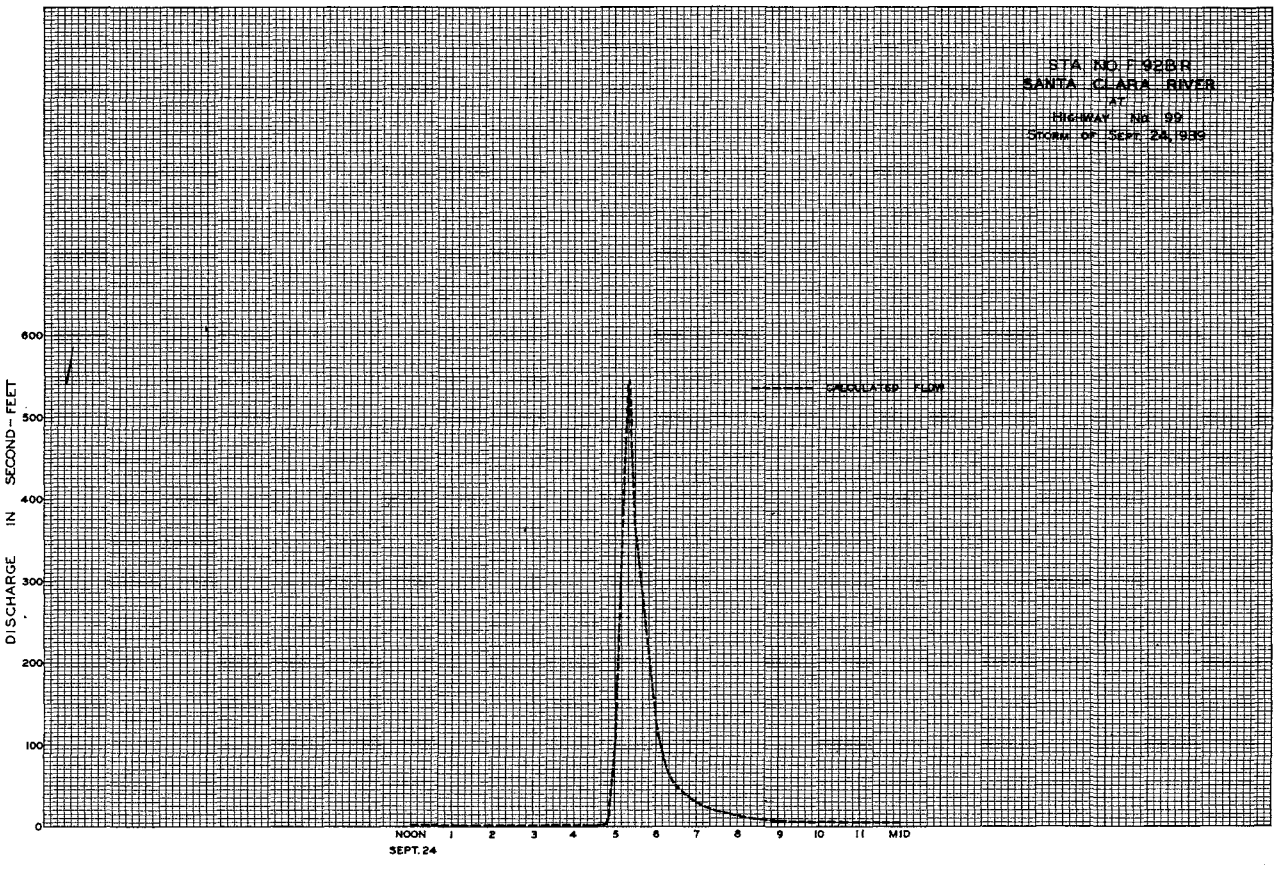
Daily discharge, in second-feet of SANTA CLARA RIVER at Highway #99, for the year ending September 30, 19 39

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.1	0.1	0.1	1.4	1.2	4.9	3.7	1.8	1.4	1.2	0.9	1.1
2	0.1	0.1	0.1	1.5	1.0	4.9	4.9	1.6	1.4	1.4	1.0	1.1
3	0.1	0.1	0.1	1.5	E 9.5	5.0	5.0	1.6	1.4	1.2	0.9	1.0
4	0.1	0.1	0.1	1.4	1.8	4.9	5.0	1.6	1.4	1.4	0.9	1.0
5	+	0.1	0.1	E 5.1	2.4	5.0	4.9	1.4	1.6	1.6	0.9	1.0
6	+	0.1	0.1	1.9	2.9	5.0	4.5	1.6	1.6	1.4	1.1	0.9
7	+	0.1	0.1	1.5	E 2.5	5.0	4.2	1.4	1.8	1.6	1.2	0.9
8	0.1	0.1	0.1	1.6	E 3.6	E 5.0	3.9	1.4	1.8	1.4	1.2	1.0
9	+	0.1	0.1	1.5	3.2	E 8.0	3.9	1.4	1.6	1.2	1.2	1.1
10	+	+	0.1	1.3	3.7	6.5	3.6	1.2	1.6	1.1	1.1	1.1
11	+	0.1	0.1	E 1.3	3.4	6.2	3.6	1.2	1.4	1.0	1.1	1.1
12	0.1	0.1	0.1	E 1.3	3.4	7.2	3.2	1.3	1.4	1.0	1.1	1.1
13	+	+	0.1	E 1.3	3.6	7.8	2.6	1.1	1.2	1.0	1.1	1.1
14	0.1	+	7	E 1.3	3.6	8.2	2.0	1.1	1.2	1.0	1.1	1.1
15	0.1	+	E 4.5	E 1.3	3.5	8.2	1.4	1.0	1.1	1.0	1.1	1.1
16	0.1	0.1	E 3.0	E 1.3	3.5	7.0	9.5	1.0	1.1	1.0	1.1	1.0
17	0.1	0.1	4.2	E 1.3	3.6	6.4	6.	1.0	0.9	1.0	1.1	1.6
18	0.1	0.1	2.9	E 1.2	3.7	6.2	4.7	0.9	1.1	1.2	1.1	1.1
19	0.1	+	E 1.0	E 1.2	3.5	6.1	4.0	0.9	1.0	1.2	1.1	1.3
20	0.1	0.1	E 1.4	1.3	3.4	5.4	3.3	0.8	1.0	1.0	1.1	1.8
21	0.1	0.1	E 3.3	4.0	3.6	4.9	3.1	0.9	0.9	1.0	1.1	1.8
22	0.1	0.1	7.5	2.5	3.7	4.2	2.9	0.9	0.8	1.0	1.1	1.6
23	0.1	0.1	1.0	2.2	4.2	4.1	2.9	0.8	1.0	1.0	1.1	1.8
24	0.1	0.1	1.1	2.2	4.6	3.8	2.7	0.8	1.0	1.0	1.1	1.9
25	0.1	0.1	1.0	1.9	4.6	4.6	2.2	0.8	1.0	0.9	1.1	3.3
26	0.1	0.1	1.0	2.2	4.8	4.6	2.7	0.8	1.1	0.9	1.1	E 3.1
27	0.1	0.1	9.5	2.0	4.8	4.6	2.0	1.0	1.1	1.0	1.1	1.8
28	0.1	0.1	1.9	1.7	4.8	4.4	2.0	1.6	1.2	0.9	1.1	2.0
29	0.1	0.1	1.9	1.6		4.2	2.0	1.4	1.2	0.9	1.1	1.8
30	0.1	0.1	1.4	1.3		4.0	1.8	1.2	1.2	0.9	1.1	1.2
31	0.1		1.4	1.2		3.8		1.2		0.9	1.1	
	2.4	2.5	121.53	54.3	93.55	170.1	61.58	36.6	37.5	34.3	33.5	89.6
MEAN	0.08	0.08	39.2	17.5	33.4	54.9	20.5	1.18	1.25	1.11	1.08	2.99
ACRE-FEET	4.8	5.0	2410	1080	1860	3370	1220	73	74	68	66	178

Remarks: E indicates discharge estimated - see station description.
+ indicates discharge 0.05 sec. ft. or less.

YEAR OR PERIOD — MEAN 14.4 — ACRE-FEET 10410





STATION F185R

SEPULVEDA CREEK at Charnock Road

LOCATION:

On the left (east) wing wall of the downstream side of the Charnock Road bridge, about 1200 feet west of Sawtelle Boulevard and approximately 2 miles northeast of Culver City.

DRAINAGE AREA:

25.7 square miles.

CHANNEL AND CONTROL:

Channel-adobe and some sand.
No artificial control.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows measured from footbridge 435 feet below the station.

RECORDER:

Installed September 15, 1932; removed March 3, 1937 on account of bridge construction; re-installed August 11,1937; removed March 3, 1938 due to the stilling well being washed out; re-installed July 7, 1938, in box type house over 20" corrugated iron pipe stilling well.
A Stevens type L recorder was in service from October 1, 1938 to February 1, 1939.
An H.C.F. recorder was in operation from February 1, 1939 to September 30, 1939.

REGULATION AND OR DIVERSIONS:

Stone Canyon Reservoir.

RECORDS AVAILABLE:

Discharge measurements only, January 1, 1932 to September 14, 1932.
Recorder records September 15, 1932 to March 3, 1937, August 11, 1937 to March 2, 1938, and July 7, 1938 to September 30, 1939.

EXTREMES OF DISCHARGE:

1938-1939
Maximum 1076. second-feet, September 25.
Minimum no flow at various times.
1932-1939
Maximum 3220. second-feet, February 28, 1936.
Minimum no flow at times each year.

ACCURACY:

Fair.
Interpolated between measurements or periods of records, November 19 to 22, January 25 and 26, September 28, 29, and 30.

OPERATION:

Located, constructed and operated by the Los Angeles County Flood Control District.

F. C. D. FORM 104 500 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO F185R

DISCHARGE MEASUREMENTS OF SEPULVEDA CREEK

AT OR NEAR Charnock Road DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
98	10-6	Moon	3.5	.36	.64	4.34	.23		.6	5	0	120P / 130P	FC 22
99	10-13	"	2.0	.22	.73	4.34	.16		.6	4	0	830A / 835A	"
100	10-20	"	2.0	.23	.52	4.38	.12		.6	4	0	845A / 850A	"
101	10-27	"	2.0	.22	.59	4.34	.13		.6	4	0	830A / 835A	"
102	11-3	"	2.8	.40	.68	4.37	.27		.6	5	-.04	835A / 840A	"
103	11-10	"	2.5	.26	.69	4.35	.18		.6	5	-.01	900A / 905A	"
104	11-17	"	2.4	.21	.57	4.34	.12		.6	4	0	810A / 815A	"
105	11-23	"	2.3	.18	.44	4.29	.08		.6	4	0	810A / 815A	"
106	12-1	"	2.3	.17	.47	4.29	.08		.6	3	0	815A / 820A	"
107	12-8	"	2.4	.20	.70	4.30	.14		.6	5	0	830A / 835A	"
108	12-14	"	33.0	37.2	3.49	6.68	130.		.6	4	-.65	848P / 907P	"
109	12-15	"	4.5	1.72	1.42	4.52	2.4		.6	4	-.02	120P / 215P	"
110	12-15	Moon-Mellen	27.5	31.5	2.28	5.26	72.		.6	7	-.20	905P / 914P	"
111	12-16	Moon	2.0	.29	.86	4.10	.25		.6	4	0	1248P / 1253P	"
112	12-17	Moon-Mellen	33.0	108.3	7.81	9.30	846.		.6	5	+.60	1100P / 1125P	"
113	12-17	" "	33.0	118.8	6.82	9.45	810.		.6	5	-.50	1128P / 1150P	"
114	12-18	" "	5.7	1.83	1.73	4.52	3.2		.6	4	-.04	826P / 832P	"
115	12-19	" "	16.0	8.89	2.15	4.94	19.		.6	5	0	941A / 946A	"
116	12-19	Moon-Middleton	30.5	48.7	3.67	6.48	179.		.6	5	-.35	432P / 442P	"
117	12-20	" "	5.5	1.66	1.42	4.50	2.4		.6	4	0	1045A / 1050A	"
118	12-21	" "	2.5	.37	.54	4.39	.20		.6	4	0	1033A / 1038A	"
119	12-22	Moon	2.5	.37	.49	4.38	.18		.6	4	0	835A / 839A	"
120	12-29	"	2.0	.15	.40	4.28	.10		.6	4	0	821A / 825A	"
121	1-5	Moon-Middleton	33.0	85.2	6.70	8.00	571.		.6	6	.90	1215P / 1232P	"
122	1-5	Moon-Middleton	33.0	83.4	6.42	8.15	535.		.6	5	-.50	1235P / 1247P	FC 22
123	1-6	" "	3.0	.75	1.12	4.48	.85		Surf	5	0	925A / 930A	"
124	1-12	Moon	3.0	.54	1.70	4.48	.90		.6	5	0	820A / 825A	"
125	1-19	"	2.0	.32	.94	4.38	.30		.6	4	0	819A / 824A	"
126	1-21	Moon-Middleton	32.0	71.4	4.84	7.48	346.		.6	5	-.25	756A / 809A	"
127	1-21	" "	26.0	61.2	6.10	7.30	373.		.6	5	-.10	1210P / 1221P	"
128	1-21	" "	24.0	19.4	2.72	5.28	53.		.6	7	-.08	513P / 523P	"
129	1-26	Moon	2.0	.35	.74	4.24	.26		.6	4	0	826A / 831A	"
130	1-30	Moon-Middleton	23.5	11.88	1.76	4.88	21.		.6	6	-.04	816P / 827P	"
131	2-2	Moon	2.0	.35	.77	4.22	.27		.6	4	0	815A / 820A	"
132	2-3	Moon-Middleton	33.0	64.6	5.88	7.52	379.		.6	5	-.25	717A / 721A	FC 22
133	2-3	" "	7.5	1.80	1.53	4.55	2.8		.6	5	-.02	416P / 423P	"
134	2-4	" "	12.4	3.24	.96	4.52	3.1		.6	5	+.04	916A / 923A	"
135	2-8	" "	13.0	6.25	1.60	4.67	10.		.6	7	-.02	653A / 700A	"
136	2-9	Moon	4.0	.75	1.05	4.42	.80		.6	4	0	841A / 846A	"
137	2-16	"	2.0	.30	.90	4.35	.27		.6	4	0	825A / 829A	"
138	2-23	"	2.5	.36	.69	4.36	.25		.6	3	0	830A / 834A	"
139	3-2	"	2.0	.20	.45	4.30	.09		.6	2	0	826A / 827A	"
140	3-9	"	2.0	.16	.41	4.25	.07		.6	2	0	906A / 907A	"
141	3-9	Moon-Middleton	31.0	49.8	4.34	6.45	216.		.6	5	-.20	919P / 927P	"
142	3-9	" "	30.0	35.5	2.92	5.70	103.		.6	6	-.20	1003P / 1011P	"
143	3-10	" "	2.0	.16	.50	4.34	.07		Surf	2	0	1053A / 1055A	"
144	3-16	Moon	2.0	.32	.50	4.22	.16		.6	2	0	856A / 858A	"
145	3-23	"	1.6	.19	.47	4.20	.09		Float	4	0	902A / 907A	
146	3-26	Moon	16.8	15.49	3.01	5.15	47.		.6	6	-.10	101P / 106P	FC 22
147	3-27	Moon-Middleton	3.5	.62	.79	4.40	.49		Surf	3	0	1040A / 1046A	"
148	3-30	Moon	1.5	.08	.50	4.28	.04		Surf	2	0	943A / 944A	"
149	4-2	"	1.8	.24	.25	4.26	.06		.6	2	0	344P / 350P	"
150	4-6	"	2.0	.20	.30	4.24	.06		.6	2	0	824A / 825A	"
151	4-13	"	1.8	.22	.27	4.22	.06		.6	2	0	903A / 904A	"
152	4-20	"	3.0	.66	1.06	4.34	.70		.6	4	-.03	840A / 845A	"
153	4-27	"	3.0	.52	.65	4.28	.34		.6	4	-.01	905A / 908A	"
154	5-4	"	2.0	.20	.35	4.23	.07		.6	2	0	851A / 853A	"
155	5-11	"	2.0	.20	.40	4.27	.08		.6	2	0	841A / 843A	"
156	5-18	"	2.8	.46	.65	4.30	.30		.6	4	-.01	902A / 905A	"
157	5-25	"	2.5	.35	.48	4.25	.17		Float	5	0	915A / 920A	
158	5-31	"	12.0	2.95	.97	4.53	2.8		.6	6	-.04	850A / 900A	FC 22
159	6-8	"	8.5	1.96	.83	4.47	1.6		.6	4	0	958A / 1004A	"
160	6-15	"	10.0	1.88	.76	4.45	1.4		.6	5	-.02	920A / 926A	"
161	7-6	Bonadiman	7.5	.83	.53	4.36	.44		.6	2	0	1037A / 1040A	FC 40
162	7-13	"	5.0	.50	.26	4.24	.13		.6	2	0	1130A /	"
163	7-27	Moon	2.8	.43	.49	4.26	.21		Float	5	0	901A / 904A	
164	8-10	"	9.0	1.50	.58	4.42	.85		.6	5	0	925A / 932A	FC 22
165	8-24	"	2.7	.56	.27	4.24	.15		Float	4	0	855A / 906A	
166	9-7	"	3.0	.54	.57	4.30	.31		Float	4	0	102P / 105P	
167	9-21	"	4.0	.93	.48	4.40	.45		.6	4	0	527P / 534P	FC 22
168	9-25	Moon-Andren	4.3	1.77	1.77	4.53	3.1		.6	5	-.02	300P / 309P	FC 36
169	9-28	Moon	2.6	.34	.32	4.18	.11		.6	4	0	842A / 848A	"

F. C. Dist. Form 52

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

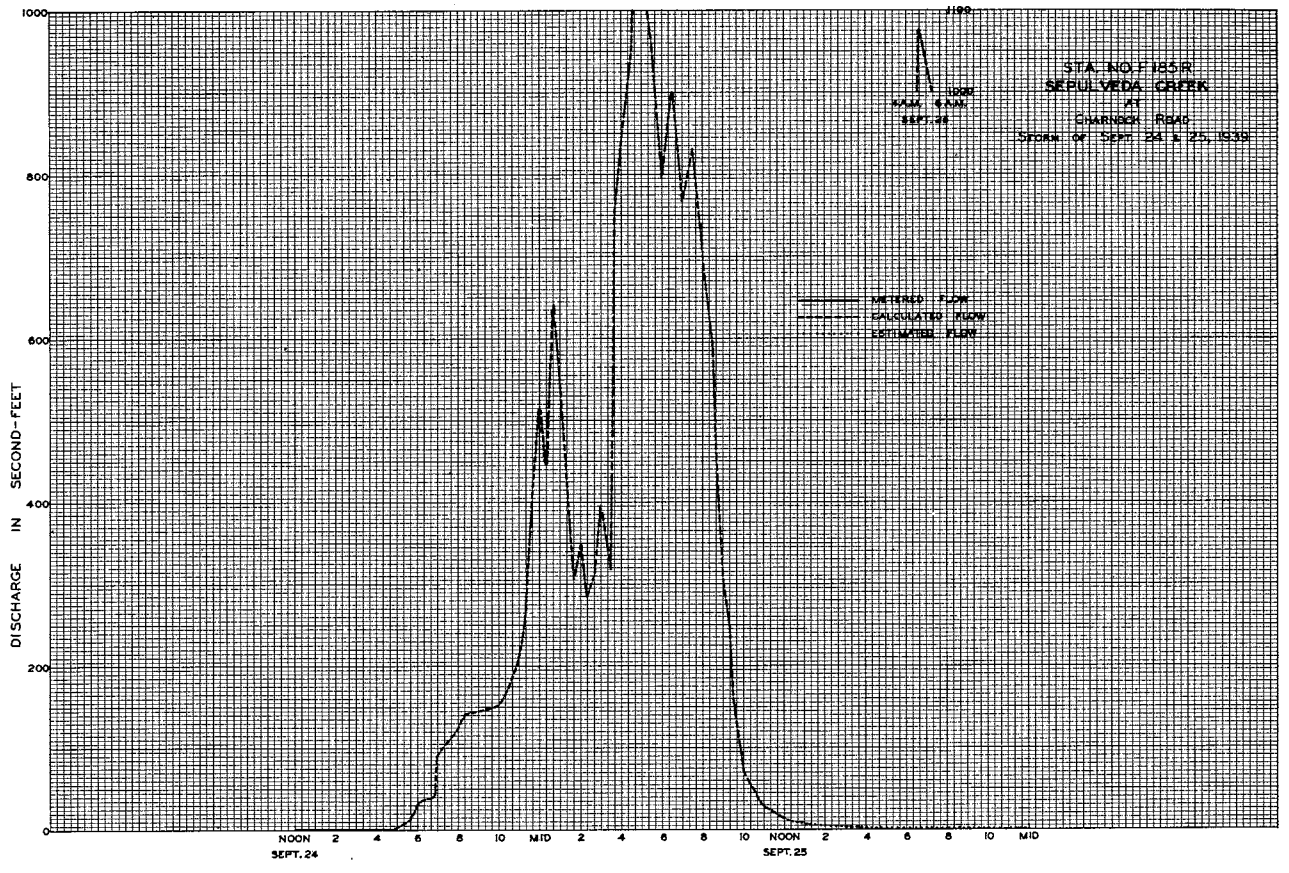
Sta. No. F185R

Daily discharge, in second-feet of SEPULVEDA CREEK at Charnock Road : for the year ending September 30, 1939

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.3	0.1	0.1	0.1	0.5	0.1	0.2	0.1	0.6	+	0.2	0.3
2	0.3	0.1	0.2	0.2	0.2	0.1	2.7	0.1	0.4	+	0.2	0.4
3	0.2	0.1	0.2	0.3	4.1	0.3	0.1	0.2	0.2	+	0.2	0.2
4	0.2	0.1	0.2	0.1	3.3	0.2	0.1	0.2	+	+	0.2	0.2
5	0.2	0.1	0.3	4.5	0.6	0.2	0.1	0.5	+	0.1	0.1	0.2
6	0.2	+	0.2	0.5	0.5	0.4	+	0.5	1.6	0.3	+	0.2
7	0.1	+	0.2	0.5	0.5	1.8	+	0.5	1.9	0.1	0.1	0.2
8	0.1	+	0.1	0.7	4.7	0.7	+	0.3	0.9	0.3	0.2	0.2
9	0.1	+	0.2	0.5	0.4	2.0	+	0.3	0.5	0.2	0.3	0.2
10	0.1	0.1	0.2	0.4	0.3	0.4	0.1	0.2	0.3	0.2	0.3	1.0
11	0.1	0.1	0.2	0.6	0.2	0.3	0.1	0.2	0.4	0.3	0.3	0.1
12	0.1	0.1	0.5	0.5	0.3	0.3	0.2	0.3	0.7	0.3	0.5	0.1
13	0.1	0.1	0.4	0.3	0.2	0.3	0.2	0.2	0.2	0.3	0.7	+
14	0.1	0.1	2.1	0.2	0.2	0.3	0.1	0.1	+	0.3	+	0.1
15	+	0.1	1.3.2	0.2	0.2	0.2	0.2	0.2	+	0.3	+	0.1
16	0.1	0.1	7.5	0.3	0.3	0.2	0.1	0.3	+	0.3	+	0.2
17	0.1	0.1	6.2	0.3	0.2	0.2	0.2	0.3	0	0.4	0.1	0.1
18	0.1	0.1	10.1	0.3	0.3	0.2	0.2	0.2	0	0.5	0.2	0.2
19	0.1	E 0.1	8.3	0.3	0.3	0.1	0.3	0.3	+	0.5	+	0.2
20	+	E 0.1	2.7	0.6	0.3	0.2	0.3	0.3	+	0.2	0.1	0.2
21	0.7	E 0.1	0.7	14.2	0.3	0.2	0.3	0.3	+	0.2	0.1	0.2
22	0.2	E 0.1	0.2	0.3	0.2	0.1	0.3	0.3	0	0.2	0.2	0.3
23	0.2	0.1	0.2	0.2	0.3	0.1	0.3	0.2	0	0.2	0.2	0.4
24	0.1	0.1	0.2	0.2	0.3	0.2	0.3	0.3	+	0.2	0.2	4.2
25	0.1	0.2	+	E 0.2	0.3	0.2	0.6	0.4	0	0.2	0.2	25.6
26	0.1	0.2	0.1	E 0.3	0.2	6.5	0.5	2.1	+	0.3	0.2	0.5
27	0.1	0.2	0.2	0.4	0.2	1.3	0.3	0.5	+	0.3	0.3	0.5
28	0.1	0.4	0.1	0.4	0.2	0.1	0.3	0.3	+	0.3	0.2	E 0.1
29	0.2	0.3	0.2	0.3		0.1	0.2	0.4	+	0.2	0.2	E 0.1
30	0.2	0.2	0.1	1.2		+	0.2	0.3	+	0.2	0.3	E 0.1
31	0.2		0.2	0.6		0.1		0.8		0.2	0.3	
	4.8	3.5	438.7	208.8	56.5	35.4	8.5	11.2	7.7	7.1	6.1	30.6
MEAN	0.15	0.12	14.2	6.74	2.02	1.14	0.28	0.36	0.26	0.23	0.20	10.2
ACRE-FEET	9.5	6.9	870	414	112	70	17	22	15	14	12	604

Remarks: + indicates discharge 0.05 sec. ft. or less.
E indicates discharge estimated - see station description.

YEAR OR PERIOD MEAN 2.99
ACRE FEET 2170



STATION F43R

SYCAMORE UPPER STORM DRAIN above Solway Street

LOCATION:

Right (north) side of concrete drain, approximately 50 feet above Solway Street and about 3 miles northeast of Glendale.

DRAINAGE AREA:

2.7 square miles.

CHANNEL AND CONTROL:

Channel-rectangular concrete, 5.0 feet wide and 5.0 feet deep. Invert 0.1 foot below bottom of vertical side walls.
Channel forms control.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows measured from footbridge about 50 feet below station.

RECORDER:

Installed January 30, 1928 in a 3 foot by 4.0 foot concrete house and stilling well combined. Recorder removed April 16, 1932. Recorder reinstalled October 1, 1935.
Rational Duplex recorder was in service from October 1, 1936 to February 21, 1939.
Stevens type L recorder was in service from February 21 to September 30, 1939.

REGULATIONS:

None.

DIVERSIONS:

None.

RECORDS AVAILABLE:

From January 30, 1928 to April 6, 1932 and from October 1, 1935 to September 30, 1939.
Not published from October 1, 1936 to September 30, 1938, but records are available at office of the Los Angeles County Flood Control District's Hydraulic Division.

EXTREMES OF DISCHARGE:

1938-1939
Maximum 74 second-feet January 5.
Minimum no flow at various times.
1928-1939
Maximum not determined.
Minimum no flow at various times.

ACCURACY:

Fair.

OPERATION:

Located, constructed and operated by the Los Angeles County Flood Control District.

F. C. Dist. Form 52

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

Sta. No. F43R

Daily discharge, in second-feet of SYCAMORE UPPER STORM DRAIN above Solway Street, for the year ending September 30, 19 39

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	+	0.1	0.1	0.2	0.2	0.2	0.3	0.2	0.1	0	0	0
2	+	0.1	0.2	0.2	0.2	0.2	0.3	0.1	0.1	0	0	0
3	+	0.1	0.2	0.2	0.5	0.4	0.3	0.1	0.2	0	0	0
4	+	0.1	0.2	0.2	0.4	0.3	0.3	0.1	0.1	0	0	0
5	+	0.1	0.2	4.8	0.4	0.5	0.3	0.2	0.2	0	0	0
6	+	0.1	0.2	0.2	0.4	0.3	0.3	0.2	0.1	0	0	0
7	+	+	0.1	0.2	0.3	0.2	0.2	0.2	0.2	0	0	0
8	+	+	0.1	0.2	0.3	0.2	0.3	0.2	0.1	0	0	0
9	+	+	0.2	0.2	0.2	0.4	0.4	0.2	0.2	0	0	0
10	+	+	0.1	0.2	0.1	0.4	0.4	0.1	0.2	0	0	0
11	+	+	0.1	0.2	0.2	0.2	0.3	0.1	0.2	0	0	0
12	+	0.1	0.2	0.2	0.2	0.2	0.3	0.1	0.2	0	0	0
13	+	0.1	0.2	0.2	0.3	0.3	0.3	0.1	0.2	0	0	0
14	+	0.1	1.5	0.2	0.4	0.2	0.4	0.1	0.2	0	0	0
15	+	0.1	1.8	0.2	0.4	0.2	0.3	0.2	0.2	0	0	0
16	+	0.1	0.3	0.2	0.3	0.1	0.3	0.2	0.2	0	0	0
17	+	0.1	0.7	0.2	0.4	0.2	0.4	0.1	0.2	0	0	0
18	0.1	0.1	5.5	0.2	0.5	0.2	0.2	0.1	0.2	0	0	0
19	0.1	0.1	1.4	0.2	1.0	0.2	0.2	0.2	0.1	0	0	0
20	0.1	0.1	1.3	0.2	0.4	0.2	0.2	0.2	0.1	0	0	0
21	0.2	0.1	0.4	1.1	0.2	0.2	0.2	0.2	0.1	0	0	0
22	0.2	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0	0	0
23	0.3	0.1	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0	0	0
24	0.4	0.1	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0	0	0
25	0.4	0.1	0.2	0.2	0.1	0.3	0.2	0.1	0.1	0	0	2.0
26	0.5	0.1	0.3	0.2	0.1	0.5	0.1	0.1	0.1	0	0	0.4
27	0.4	0.1	0.3	0.2	0.1	0.4	0.1	0.1	0.1	0	0	0.2
28	0.2	0.1	0.2	0.2	0.2	0.4	0.2	0.1	0.1	0	0	0.1
29	0.2	0.1	0.1	0.2		0.3	0.2	0.1	0	0	0	0.1
30	0.2	0.1	0.1	0.3		0.2	0.2	0.1	0	0	0	0.1
31	0.2		0.1	0.4		0.3		0.1		0	0	
	3.5		16.9		8.1		7.8		4.1			
		2.5		12.0		8.1		4.3		0	0	2.9
Mean	0.11	0.08	0.55	0.39	0.29	0.26	0.26	0.14	0.14	0	0	0.10
Acre-Feet	6.9	5.0	34	24	16	16	15	8.5	8.1	0	0	5.8

Remarks: + indicates discharge 0.05 sec. ft. or less.
E indicates discharge estimated - see station description.

Year or Period Mean 0.19 Acre-Feet 139

STATION F44R

SYCAMORE LOWER STORM DRAIN at Adams Square

LOCATION:

In man-hole in yard of Union Oil Company Service Station at southwest corner of Adams Square and Chase Drive, on the left (south) side of the drain, about 30 feet west of west curb of Adams Street about 1 mile southeast of Glendale.

DRAINAGE AREA:

6.2 square miles.

CHANNEL AND CONTROL:

Channel-closed rectangular concrete drain, 9.0 feet wide and 10.0 feet deep. Invert is 0.1 feet below bottom of vertical side walls. Channel forms control.

DISCHARGE MEASUREMENTS:

Low forms measured by wading.
High flows measured from footbridge below station.

RECORDER:

Installed December 15, 1927 underground in a 3.0 foot by 4. foot concrete house and stilling well combined.
An H.O.F. continuous recorder was in service from October 1, 1938 to September 30, 1939.

REGULATION:

None.

DIVERSIONS:

None.

RECORDS AVAILABLE:

December 15, 1927 to September 30, 1939.

EXTREMES OF DISCHARGE:

1938-1939
Maximum 314. second-feet January 5.
Minimum no flow at various times.
1927-1939
Maximum 2800 second-feet, estimated, March 2, 1938.
Minimum no flow at various times.

ACCURACY:

Fair.
Flow estimated by comparison December 14 to 19; January 7 and 8; March 25, 26, and 27.

OPERATION:

Located, constructed and operated by the Los Angeles County Flood Control District.

F. C. D. FORM 104 500 8-38

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F44R

DISCHARGE MEASUREMENTS OF SYCAMORE, LOWER STORM DRAIN

AT Adams Square DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Period Dur.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
28	12-14	Bollinger	9.0	1.50	1.94	4.88	3.0		.6	7	+.05	912A / 922A	FC 6
29	12-18	Koch-Lindstrom	9.0	4.95	3.37	-	17.		.6	7	-	426A / 440A	"

F. C. Dist. Form 5f

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

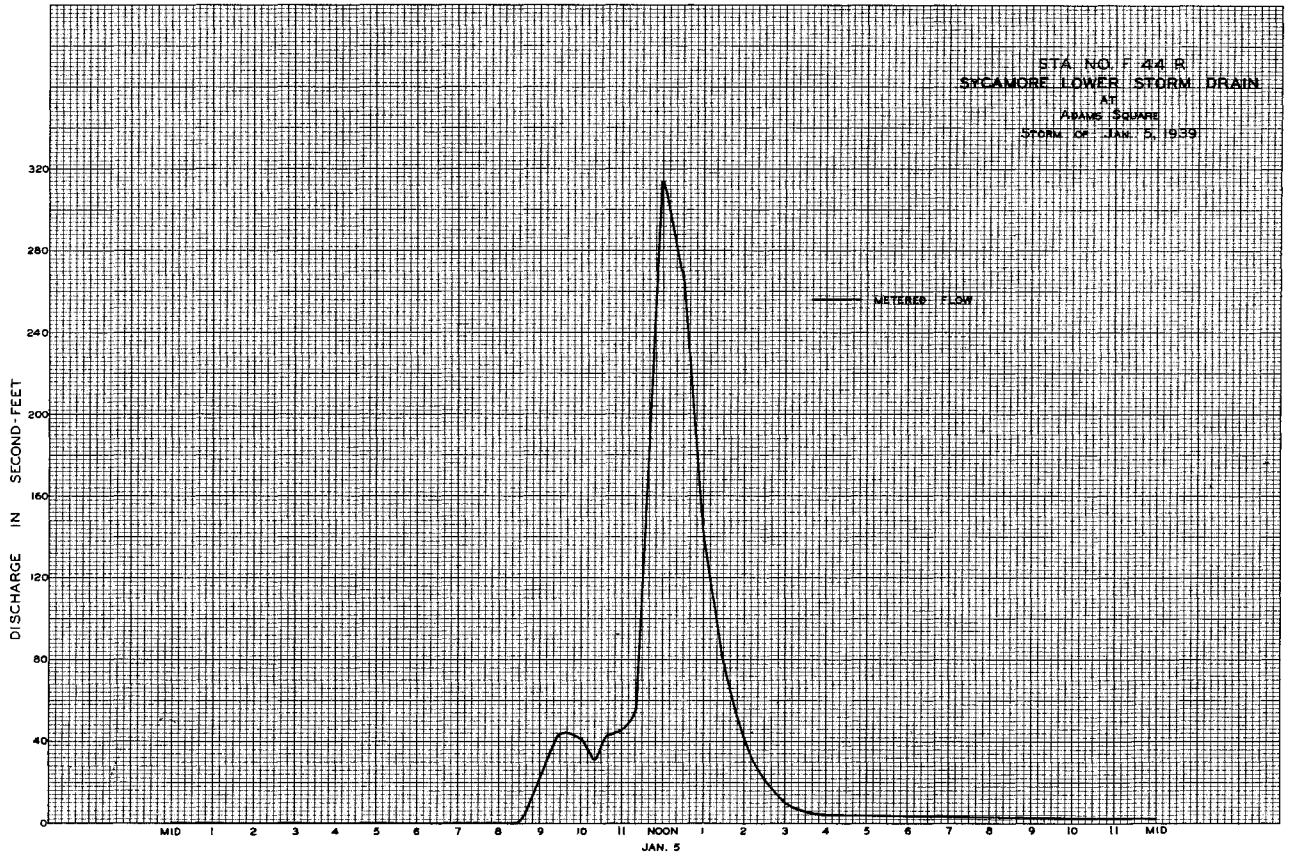
Sta. No F44R

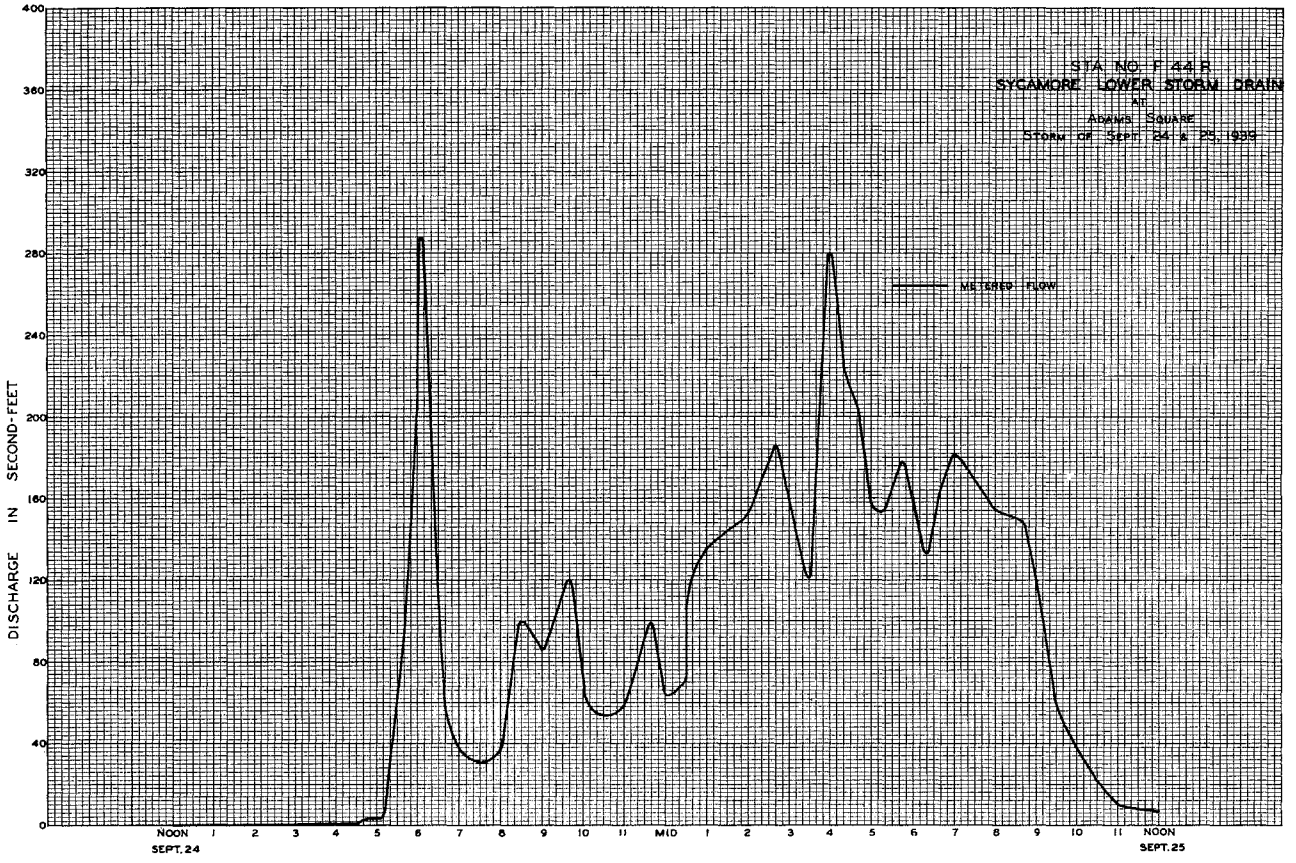
Daily discharge, in second-feet of SYCAMORE LOWER STORM DRAIN at Adams Square., for the year ending September 30, 1939

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	+	0.6	1.5	0.3	4.0	0.5	+	+	+	+
2	0	+	+	0.6	1.1	0.4	4.0	0.5	+	+	+	+
3	0	+	+	0.6	1.2	1.1	2.7	0.4	+	+	+	+
4	0	+	+	0.4	6	1.1	2.7	0.5	+	+	+	+
5	0	+	+	25	0.8	1.1	2.7	0.5	+	+	+	+
6	0	+	+	2.3	0.8	1.1	2.7	0.5	+	+	+	+
7	0	+	+	E 2.3	0.8	1.1	1.5	0.5	+	+	+	+
8	+	+	+	E 2.3	3.0	1.1	1.5	0.5	+	+	+	+
9	+	+	+	1.5	0.8	14	1.9	0.5	+	+	+	+
10	+	+	+	1.5	0.8	3.1	1.5	0.5	+	+	+	+
11	0	+	+	1.1	0.5	2.3	0.6	0.5	+	+	+	+
12	0	+	+	1.9	0.5	1.9	0.6	0.5	+	+	+	+
13	0	+	+	1.5	0.4	1.9	0.6	0.6	+	+	+	+
14	0	+	E 18	0.8	0.4	1.5	0.8	0.5	+	+	+	+
15	0	+	E 3.0	0.5	0.4	1.1	0.6	0.5	+	+	+	+
16	0	+	E 5	0.4	0.4	0.6	0.6	0.4	+	+	+	+
17	0	+	E 8	0.4	0.5	0.6	0.6	0.4	+	+	+	+
18	0	+	E 60	0.4	0.5	0.5	0.6	0.4	+	+	+	+
19	0	+	E 25	0.3	0.5	0.4	0.5	0.3	+	+	+	+
20	+	+	21	0.2	0.5	0.4	0.5	0.2	+	+	+	+
21	+	+	4.0	24	0.4	0.4	0.5	0.2	+	+	+	+
22	+	+	2.7	1.1	0.4	0.4	0.4	0.2	+	+	+	+
23	+	+	1.5	0.8	0.4	0.4	0.4	0.2	+	+	+	+
24	+	+	0.8	0.8	0.4	0.6	0.4	0.1	+	+	+	24
25	+	+	0.8	0.8	0.4	E 0.6	0.4	0.1	+	+	+	68
26	+	+	0.8	0.8	0.4	E 0.6	0.4	+	+	+	+	35
27	+	+	0.8	1.1	0.3	E 4.5	0.4	+	+	+	+	0.6
28	+	+	0.8	1.1	0.3	4.5	0.4	+	+	+	+	0.3
29	+	+	0.6	1.1		4.0	0.4	+	+	+	+	0.3
30	0	0	0.6	5.5		3.5	0.5	+	+	+	+	0.3
31	0		0.6	1.9		3.1		+			+	
	+	+	181.0	83.6	35.2	58.2	35.4	10.0	+	+	+	97.0
MEAN	+	+	5.84	2.70	1.26	1.88	1.18	0.32	+	+	+	3.23
ACRE-FEET	+	+	359	166	70	115	70	20	+	+	+	192

Remarks: E indicates discharge estimated - see station description.
+ indicates discharge 0.05 sec. ft. or less.

YEAR OR PERIOD — MEAN 1.37 — ACRE-FEET 992





STATION F54R

TOPANGA CREEK at highway bridge above mouth of canyon.

LOCATION:

On downstream end of right (west) wing wall of highway bridge 2 miles above mouth of canyon and about 6 miles northwest of Santa Monica.

DRAINAGE AREA:

18.0 square miles.

CHANNEL AND CONTROL:

Channel-rock and gravel.
No artificial control.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows measured from cable car above station.

RECORDER:

Installed January 1, 1930 in a box type house over a 21 inch diameter corrugated iron pipe stilling well.
An H.C.F. continuous recorder was in service from October 1, 1938 to September 30, 1939.

REGULATION:

None.

DIVERSIONS:

None.

RECORDS AVAILABLE:

January 1, 1930 to September 30, 1938.(See Remarks)

EXTREMES OF DISCHARGE:

1938-1939
Maximum not determined.
Minimum not determined.
1930-1939
Maximum 9300 second-feet, estimated, March 2, 1938
Minimum no flow at various times.

ACCURACY:

Poor. (See Remarks)

OPERATION:

Located, constructed and operated by the Los Angeles County Flood Control District in co-operation with the U.S.G.S. Water Resources Branch.

REMARKS:

Records for the 1938-1939 season were not computed. Field data were insufficient to determine a gage height-discharge relation as there was an extreme and continual change in control conditions during this period.
Periodic current meter measurements were made and are published herewith.

F. C. D. FORM 104 500 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F54R

DISCHARGE MEASUREMENTS OF TOPANGA CREEK

AT highway bridge above mouth of canyon. DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Permit Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
113	10-6	Moon	2.3	.33	0.27	1.44	0.09		.6	4	0	205P / 210P	FC 22
114	10-27	"	2.3	.31	.42	1.44	0.13		.6	4	0	420P / 425P	"
115	11-17	"	2.0	.30	.33	1.40	0.10		.6	4	0	235P / 240P	"
116	12-1	"	2.4	.38	.29	1.46	0.11		.6	3	0	135P / 140P	"
117	12-17	"	1.8	.15	1.07	6.57	0.16		.6	4	0	332P / 340P	"
118	12-18	Moon-Mellen	29.0	10.60	4.88	7.32	60.		.6	6	+.05	1105A / 1120A	"
119	12-19	Andren-Mellen	15.0	6.11	3.76	7.28	23.		.6	8	-.05	430P / 445P	FC 12
120	12-20	" "	30.0	13.91	7.10	7.78	99.		.6	8	+.05	400A / 412A	"
121	12-20	" "	32.0	22.80	9.35	7.71	213.		.6	8	+.02	520A / 532A	"
122	12-20	Moon-Middleton	26.0	9.87	5.60	7.72	55.		.6	7	+.04	300P / 309P	FC 22
123	12-21	" "	15.0	2.28	3.90	7.70	8.9		.6	5	0	405P / 410P	"
124	12-29	Moon	3.0	.39	.92	7.38	0.36		.6	5	0	126P / 130P	"
125	1-5	Moon-Middleton	Two Channels			8.59	53.		.6	10	-.02	540P / 555P	"
126	1-6	" "	8.0	1.66	4.88	8.66	8.1		.6	4	0	245P / 305P	"
127	1-12	Moon	4.0	.72	1.30	8.44	0.95		.6	4	0	325P / 330P	"
128	1-19	"	4.0	.68	1.15	8.38	0.80		.6	4	0	256P / 301P	"
129	1-21	Andren-Mellen	44.0	17.89	7.04	8.74	126.		.6	13	-.01	1100A / 1120A	FC 12
130	1-21	" "	44.0	19.18	7.53	8.74	144.		.6	14	-.01	1125A / 1140A	"
131	1-21	" "	44.0	21.81	8.67	8.74	145.		.6	11	0	405P / 420P	"
132	1-23	Moon	8.0	3.12	1.91		6.0		.6	6		323P / 333P	FC 22
133	1-26	"	5.0	1.63	1.60	8.51	2.6		.6	5	0	312P / 322P	"
134	1-30	Moon-Middleton	9.0	2.86	1.80	8.34	5.2		.6	5	0	938P / 945P	"
135	2-2	Moon	4.5	1.19	1.42	8.00	1.7		.6	4	0	400P / 406P	"
136	2-3	Moon-Middleton	14.0	6.40	2.56	8.42	16.		.6	7	0	1247P / 1255P	"
137	2-8	Moon-Middleton	10.0	2.40	1.43	7.43	3.4		.6	5	0	200P / 204P	FC 22
138	2-16	Moon	4.2	.95	1.00	7.27	0.95		.6	5	0	328P / 335P	"
139	2-23	"	4.5	1.03	.88	7.25	0.90		.6	4	0	323P / 328P	"
140	3-2	"	4.5	.87	.84	7.24	0.75		.6	4	0	151P / 156P	"
141	3-9	"	4.0	.80	.91	7.23	0.75		.6	4	0	120P / 125P	"
141A	3-9	Moon-Middleton	18.0	9.1	3.92	7.93	36.		.6	5	-.05	1121P / 1129P	"
142	3-10	" "	7.0	2.26	1.40	7.30	3.2		.6	6	0	129P / 135P	"
143	3-16	Moon	5.0	.79	.99	7.08	0.80		.6	4	0	321P / 325P	"
144	3-23	"	4.0	.74	1.00	7.07	0.75		.6	4	0	146P / 151P	"
145	3-26	"	6.5	2.10	1.33	7.27	2.8		.6	5	+.01	351P / 358P	"
146	3-27	Moon-Middleton	5.0	.90	.92	7.14	0.85		.6	5	0	1209P / 1213P	"
147	4-6	Moon	4.0	.54	.78	7.04	0.42		.6	4	0	1135A / 1139A	"
148	4-13	"	4.0	.58	.86	7.03	0.50		.6	4	0	116P / 120P	"
149	4-20	"	3.5	.47	.53	7.01	0.25		.6	5	0	321P / 329P	"
150	4-27	"	3.0	.39	.67	7.00	0.26		.6	3	0	202P / 205P	"
151	5-11	"	2.5	.30	.63	7.01	0.19		.6	4	0	127P / 131P	"
152	5-25	"	1.7	.14	.43	6.96	0.06		.6	2	0	340P / 342P	"
153	6-8	"	2.0	.25	.44	6.96	0.11	Float		4	0	410P / 414P	
154	6-22	"	2.0	.24	.50	6.98	0.12	"		4	0	920A / 923A	
155	6-29	"	2.0	.26	.58	6.98	0.15	"		4	0	1137A / 1140A	
156	7-13	Bonadiman	2.0	.24	.08	6.99	0.02		.6	2	0	240P /	FC40
157	7-20	Moon	1.9	.20	.20	6.99	0.04	Float		3	0	200P / 202P	
158	7-27	"	2.0	.20	.15	7.00	0.03	"		4	0	415P / 418P	
159	8-24	"	1.5	.08	.25	6.90	0.02	"		2	0	225P / 227P	
160	9-25	Moon-Andren	37.	18.2	3.80		69.		.6	11	0	1235P / 1250P	FC 36
161	9-28	Moon	2.4	.39	.56		.22		.6	4	0	112P / 115P	"

STATION F252R

VERDUGO CHANNEL at Estelle Avenue

LOCATION:

On the right (north) side of Verdugo Channel at Estelle Avenue, 800 feet east of San Fernando Road, and about 2 miles northwest of Glendale.

CHANNEL AND CONTROL:

Channel-rectangular concrete, 87 feet wide by 11 feet deep to bottom of invert. Invert is 1.0 foot below bottom of vertical side walls. Channel forms control.

DRAINAGE AREA:

22.4 square miles.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows measured from cable car above station.

RECORDER:

Installed December 2, 1935 in an F. C. standard type house over a 20 inch x 30 inch concrete well. An H. C. F. continuous recorder was in service from October 1, 1938 to September 30, 1939.

REGULATION:

Flow partially regulated by Verdugo and other Debris Basins.

DIVERSIONS:

Several diversions for domestic water supply and irrigation. From October 1 to November 11, flow was diverted by the U.S.E.D.

RECORDS AVAILABLE:

December 2, 1935 to September 30, 1939.

EXTREMES OF DISCHARGE:

1938-1939
Maximum 520 second-feet January 5.
Minimum no flow at various times.
1935-1939
Maximum 4400 second-feet, estimated, March 2, 1938.
Minimum no flow at times each year.

ACCURACY:

Fair.
Interpolated between known flows: July 18 and 19.

OPERATION:

Located, and constructed by United States Engineer Department and operated by Los Angeles County Flood Control District in co-operation with the U. S. Engineer Department.

F. C. D. FORM 104 500 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F252R

DISCHARGE MEASUREMENTS OF VERDUGO CHANNEL

AT Estelle Ave. DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Permit Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
15	11-10	Bollinger	5.0	.35	1.97	.14	.70		Float	2	-.01	911A / 914A	-
16	11-23	"	3.0	.12	2.25	.08	.27		"	2	0	914A / 918A	-
17	1-19	"	3.0	.14	2.07	.09	.29		"	2	0	840A / 845A	-
18	5-4	"	3.3	.16	1.19	.08	.19		"	2	0	923A / 927A	-
19	5-11	"	3.0	.15	1.87	.07	.28		"	2	0	1040A / 1042A	-

F. C. Dist. Form 59

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

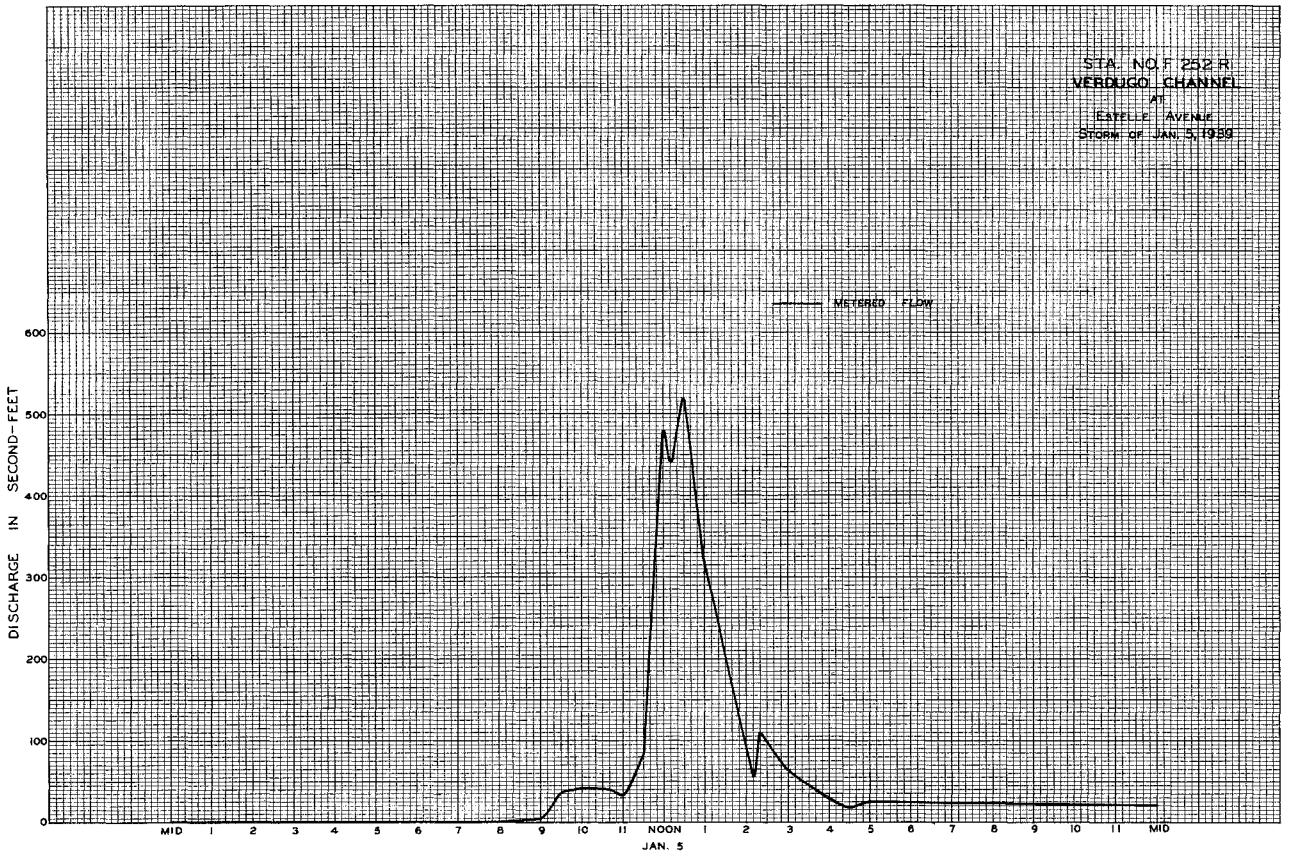
Sta. No. F252R

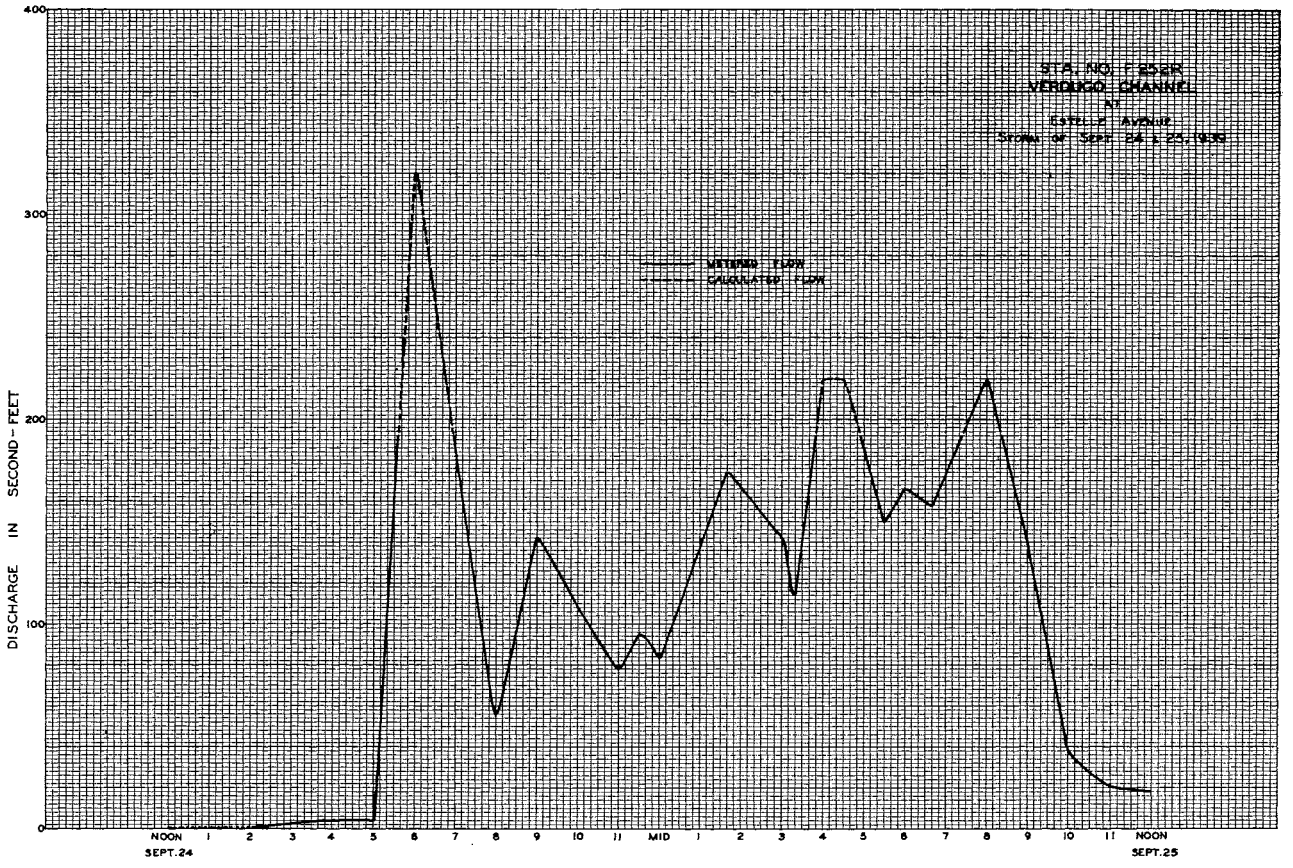
Daily discharge, in second-feet of VERDUGO CHANNEL at Estelle Avenue, for the year ending September 30, 19 39

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0.3	0.5	1.2	0.4	1.4	0.4	0.4	0.3	0.4	0.4
2	0	0	0.2	0.5	0.5	0.4	6.5	0.4	0.5	0.3	0.4	0.4
3	0	0	0.3	0.5	1.5	0.5	2.0	0.4	0.5	0.4	0.4	0.4
4	0	0	0.3	0.5	1.5	0.5	1.2	0.4	0.4	0.4	0.4	0.4
5	0	0	0.3	5.1	0.6	0.5	0.6	0.4	0.4	0.4	0.4	0.4
6	0	0	0.3	1.8	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
7	0	0	0.3	2.5	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4
8	0	0	0.4	2.0	2.9	0.4	0.4	0.4	0.4	0.4	0.4	0.4
9	0	0	0.4	1.5	1.2	2.1	0.4	0.4	0.4	0.4	0.4	0.4
10	0	0	0.4	1.5	1.5	1.2	0.4	0.4	0.4	0.4	0.4	0.4
11	0	0.6	0.4	0.6	1.5	0.8	0.5	0.4	0.4	0.4	0.4	0.4
12	0	0.2	0.4	0.8	1.2	0.4	0.4	0.4	0.4	0.4	0.4	0.4
13	0	0.2	0.4	0.8	0.6	0.4	0.4	0.5	0.4	0.4	0.4	0.4
14	0	0.2	2.4	0.5	0.5	0.4	0.8	0.5	0.4	0.4	0.4	0.4
15	0	0.1	4.4	0.5	0.4	5.5	1.2	0.5	0.4	0.4	0.4	0.4
16	0	0.2	7.5	0.5	0.4	1.2	1.2	0.5	0.4	0.4	0.4	0.4
17	0	0.1	9	0.4	0.4	0.5	1.2	0.5	0.4	0.4	0.4	0.4
18	0	0.2	6.6	0.5	0.8	0.4	0.6	0.4	0.4	E 0.4	0.4	0.4
19	0	0.2	3.4	0.4	0.8	0.4	0.8	0.4	0.4	E 0.4	0.4	0.4
20	0	0.2	2.8	0.4	0.5	0.4	0.8	0.4	0.4	0.4	0.4	0.4
21	0	0.2	8.5	3.3	0.4	0.4	0.8	0.4	0.4	0.4	0.4	0.4
22	0	0.4	2.5	3.8	0.4	0.5	0.8	0.4	0.4	0.4	0.4	0.4
23	0	0.4	1.2	2.5	0.4	2.5	0.8	0.4	0.4	0.4	0.4	0.4
24	0	0.4	0.5	1.5	0.4	1.2	0.6	0.4	0.4	0.4	0.4	4.0
25	0	0.4	0.5	1.5	0.4	0.8	0.6	0.4	0.4	0.4	0.4	7.8
26	0	0.4	0.5	3.0	0.4	1.0	0.6	0.4	0.6	0.4	0.4	1.3
27	0	0.4	0.5	1.2	0.4	.8	0.6	0.4	0.4	0.4	0.4	1.2
28	0	0.3	0.6	0.6	0.4	3.0	0.5	0.4	0.4	0.4	0.4	1.5
29	0	0.4	0.5	0.6		2.5	0.5	0.4	0.3	0.4	0.4	2.0
30	0	0.4	0.5	7		1.2	0.5	0.4	0.3	0.4	0.4	0.6
31	0		0.5	2.0		0.8		0.4		0.4	0.4	
	0	5.9	233.2	140.6	35.5	77.8	28.0	12.9	12.2	12.2	12.4	145.5
Mean	0	0.20	7.52	4.54	1.27	2.51	0.93	0.42	0.41	0.39	0.40	4.85
Acre-Feet	0	12	463	279	70	154	56	26	24	24	25	289

Remarks: E indicates discharge estimated - see station description.

Year or Period: Mean 1.96; Acre-Feet 1420





STATION F47R

WALNUT CREEK at Covina Boulevard

LOCATION:

On downstream end of first pier from left (south) end of highway bridge, about 2 miles southwest of Baldwin Park.
This station is at or near the location of the station operated from 1923 to 1928 by the State Division of Water Rights.

DRAINAGE AREA:

99.0 square miles.

CHANNEL AND CONTROL:

Channel-sand and gravel.
No artificial control.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows measured from downstream side of highway bridge at the station.

RECORDER:

Installed December 15, 1928 in a standard F. C. type house over an 18 inch diameter corrugated iron pipe stilling well.
An H.C.F. continuous recorder was in service from October 1, 1938 to September 30, 1939.

REGULATION:

Flow partially regulated by Big Dalton Dam, San Dimas Dam, Puddingstone Diversion Dam, Puddingstone Dam and Live Oak Dam. Irrigation companies at times spread San Gabriel River Water from the Covina Canal in Little and Big Dalton channels.

DIVERSIONS:

Some water diverted for irrigation.

RECORDS AVAILABLE:

December 15, 1928 to September 30, 1939.
(For records prior to December 15, 1928 see State Division of Water Rights Bulletins).

EXTREMES OF DISCHARGE:

1938-1939
Maximum 751 second-feet December 18.
Minimum no flow at various times.
1928-1939
Maximum 8060 second-feet January 1, 1934.
Minimum no flow at times each year.

ACCURACY:

Fair.

OPERATION:

Located, constructed and operated by the Los Angeles County Flood Control District.

F. C. D. FORM 104 500 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F47R

DISCHARGE MEASUREMENTS OF WALNUT CREEK

AT Covina Blvd. DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Factor Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
99	12-1	Brewster	1.0	.16	.25	1.56	.04		.6	1	0	812A / 815A	FC 8
100	12-15	"	4.0	.70	.84	1.68	.60		.6	4	0	850A / 856A	FC 8
101	12-18	Lindsay-Ingram	40.0	23.2	2.43	2.12	56.		.6	10	-.02	338A / 350A	FC 13
102	12-18	" "	77.0	77.95	4.34	2.70	347.		.6	9	+.01	938A / 950A	FC 28
103	12-18	Haig-Tscharner	35.8	18.52	1.59	2.00	29.		.6	10	0	500P / 518P	FC 38
104	1-5	Lindsay-Ingram	70.0	52.00	4.15	2.57	216.		.6	10	-.03	345P / 355P	FC 28
105	1-5	Haig-Tscharner	19.0	3.44	.78	1.73	2.7		.6	6	-.02	950P / 955P	FC 38
106	1-19	Brewster	4.0	.70	.43	1.50	.30		.6	4	0	145P / 151P	FC 8
107	1-21	"	4.0	.74	1.31	1.56	.95		.6	4	0	1024A / 1030A	"
108	1-21	Haig-Tscharner	7.3	2.47	1.35	1.75	3.3		.6	5	0	158P / 203P	FC 38
109	1-26	Brewster	4.0	.76	.75	1.51	.55		.6	4	0	210P / 217P	FC 8
110	2-2	"	8.0	1.36	.77	1.56	1.0		.6	4	-.01	250P / 255P	"
111	2-3	Haig-Tscharner	39.0	25.28	2.67	2.21	67.		.6	10	-.02	132P / 140P	FC 38
112	2-3	" "	16.5	4.59	1.55	1.55	7.1		.6	6		1118P / 1124P	FC 38
113	2-16	Brewster	4.0	.70	.94	1.44	.65		.6	4	0	110P / 115P	FC 8
114	2-23	Brewster	6.0	1.83	1.23	1.48	2.3		.6	4	0	220P / 228P	
115	3-2	"	5.0	1.26	1.28	1.44	1.6		.6	5	0	215P / 223P	"
116	3-9	"	5.0	.96	.94	1.46	.90		.6	5	0	225P / 231P	"
117	3-10	Lindsay-Ingram	22.0	10.25	2.76	1.91	28.		.6	7	-.02	123A / 128A	FC 28
118	3-16	Brewster	6.0	1.50	1.14	1.45	1.7		.6	4	0	135P / 142P	FC 8
119	3-23	"	6.0	1.33	.84	1.44	1.1		.6	4	0	250P / 258P	FC 8
120	3-26	Lindsay-Ingram	11.0	2.27	1.06	1.50	2.4		.6	6	0	626P / 632P	FC 28
121	3-27	Haig	25.0	11.94	2.88	1.92	34.		.6	10	-.04	1017A / 1027A	FC 38
122	3-30	Brewster	5.0	1.00	1.09	1.36	1.1		.6	5	0	220P / 228P	FC 8
123	4-6	Brewster	11.0	2.53	1.08	1.48	2.7		.6	6	0	100P / 110P	FC 8
124	4-13	"	5.0	1.00	.98	1.45	1.0		.6	3	0	200P / 205P	"
125	4-20	"	4.0	.72	.82	1.40	.60		.6	4	0	220P / 226P	"
126	4-27	"	4.0	.84	1.10	1.42	.90		.6	4	0	155P / 202P	"
127	5-11	"	5.0	1.24	1.05	1.48	1.3		.6	5	0	325P / 332P	"
128	5-18	"	4.0	.82	1.00	1.43	.80		.6	4	0	300P / 306P	"
129	9-24	"	20.0	9.18	2.29	1.98	21.		.6	6	-.01	1025P / 1035P	"
130	9-25	Brewster-Pettis	70.0	59.10	3.62	2.47	214.		.6	8	+.06	1055A / 1105A	"
131	9-25	" "	11.0	3.22	1.75	1.60	5.7		.6	4	-.04	530P / 535P	"

F. C. Dist. Form 52

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

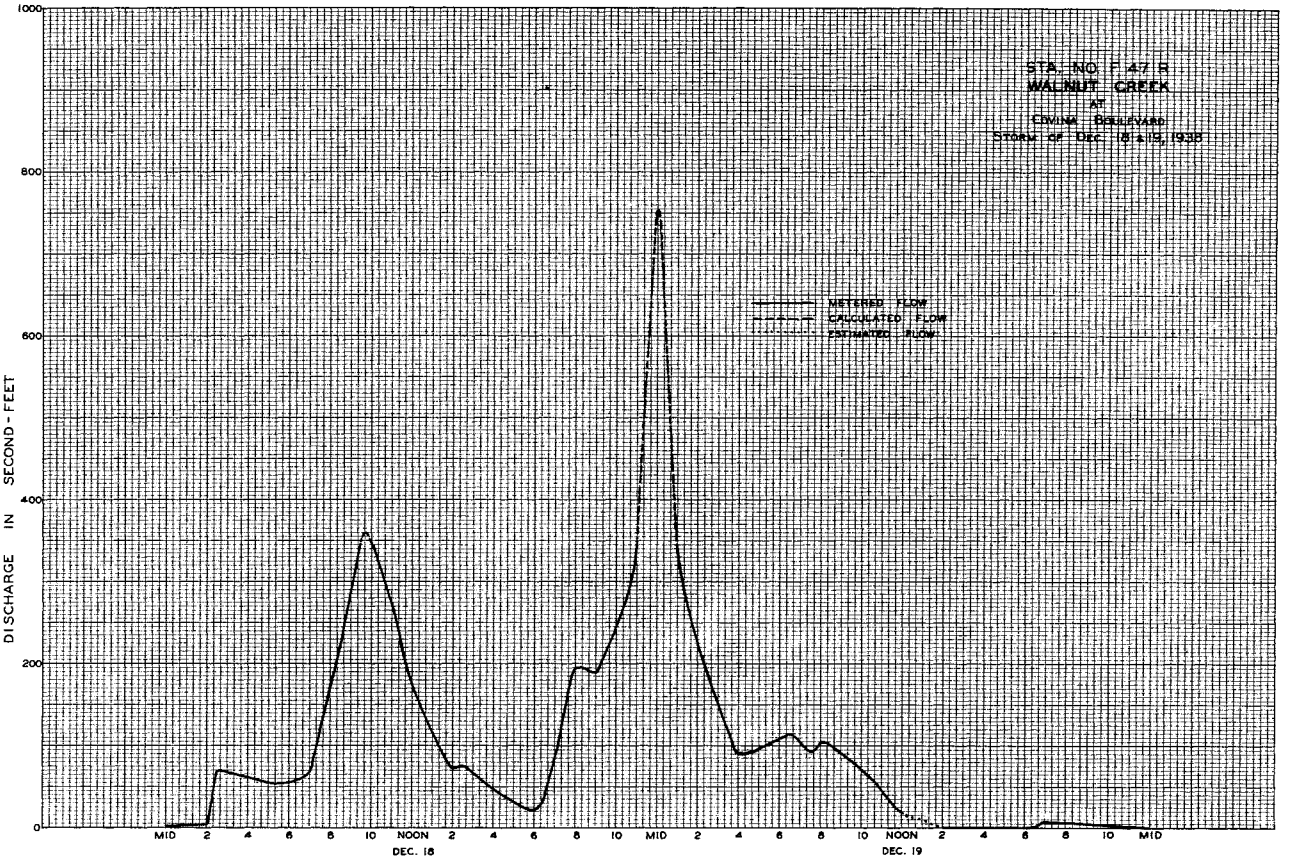
Sta. No F47R

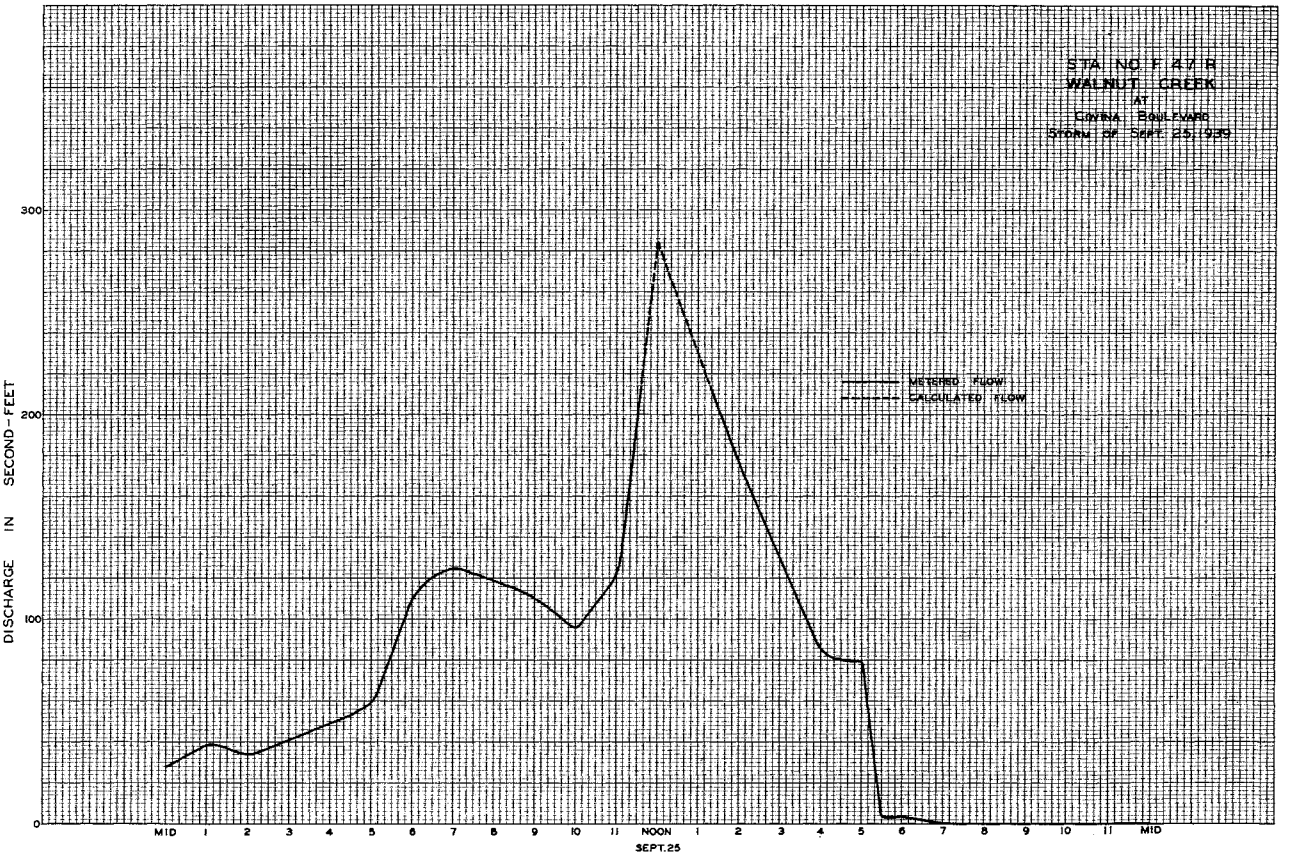
Daily discharge, in second-feet of WALNUT CREEK at Covina Boulevard for the year ending September 30, 19 39

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0	0	0	1.5	0	0.1	0	0	0	0
2	0	0	0	0	0.6	1.3	0.5	0.4	0	0	0	0
3	0	0	0	0	3.5	2.5	0	0.1	0	0	0	0
4	0	0	0	0	3.7	1.8	0.2	0.1	0	0	0	0
5	0	0	0	28	0	1.0	0.3	0.3	0	0	0	0
6	0	0	0	0	0	1.7	0.9	0	0	0	0	0
7	0.1	0	0	0	0	1.7	1.5	0.1	0	0	0	0
8	0.5	0	0	0	0	1.0	0.7	0.4	0	0	0	0
9	0.4	0	0	0.4	0	0.9	0	0.2	0	0	0	0
10	0.6	0	+	0	0	3.5	0.2	0.2	0	0	0	0
11	0.6	0	0	0	0.4	0	0.3	0.3	0	0	0	0
12	0.6	0	0	0	0.4	0	0.4	0.9	0	0	0	0
13	+	0	0	0.1	1.4	1.7	0.4	0.2	0	0	0	0
14	0.2	0	0.6	0	0.2	0.2	0.5	0.2	0	0	0	0
15	0.6	0	0.6	0	0.6	0.2	0.1	1.3	0	0	0	0
16	0.4	0	0.8	0	0.4	0.7	+	0.6	0	0	0	0
17	0.2	0	0.4	0	0.8	0.9	0.1	0.4	0	0	0	0
18	0.5	0	1.46	0	1.0	0.5	0.1	0.2	0	0	0	0
19	0.5	0	79	0.1	0.5	0.7	0.1	0.2	0	0	0	0
20	0.4	0	4.6	0.7	1.1	1.3	0.2	0.1	0	0	0	0
21	0.3	0	0.1	12	1.4	1.0	0.2	+	0	0	0	0
22	0.4	0	0	0.5	1.9	1.0	0.1	0	0	0	0	0
23	0	0	0	0	1.9	0.8	0	0	0	0	0	0
24	0.3	0	0	0	1.8	0.7	0.3	0	0	0	0	4.4
25	0.6	0	0	0	1.6	0.3	0.2	0	0	0	0	79
26	0	0	0	+	1.1	1.2	0	0	0	0	0	0.1
27	0	0	0	0.2	1.3	3.9	1.0	0	0	0	0	0
28	0	0	0	0.8	1.6	0	1.8	0	0	0	0	0
29	0	0	0	+		0.1	1.2	0	0	0	0	0
30	0	0	0	2.8		0.3	0	0	0	0	0	0
31	0		0	0.4		0.1		0		0	0	
	72	0	2321	460	920	325	113	63	0	0	0	835
MEAN	.23	0	7.49	1.48	3.29	1.05	.38	.20	0	0	0	2.78
ACRE-FEET	14	0	460	91	182	64	22	12	0	0	0	166

Remarks: + indicates discharge 0.05 sec. ft. or less.

YEAR OR PERIOD MEAN 1.40 ACRE-FEET 1010


STA. NO. F 47 R
WALNUT CREEK
AT
COVINA BOULEVARD
STORM OF DEC. 18 & 19, 1938
METERED FLOW
CALCULATED FLOW
ESTIMATED FLOW
DISCHARGE IN SECOND-FEET
1000
800
600
400
200
0
MID 2 4 6 8 10 NOON 2 4 6 8 10 MID 2 4 6 8 10 NOON 2 4 6 8 10 MID
DEC. 18
DEC. 19


STA. NO. F 47 R
WALNUT CREEK
AT
COVINA BOULEVARD
STORM OF SEPT. 25, 1939
METERED FLOW
CALCULATED FLOW
DISCHARGE IN SECOND-FEET
300
200
100
0
MID 1 2 3 4 5 6 7 8 9 10 11 NOON 1 2 3 4 5 6 7 8 9 10 11 MID
SEPT. 25

THE FOLLOWING RECORDS ARE PUBLISHED THRU THE COURTESY OF THE U.S.G.S. WATER RESOURCES BRANCH - LOS ANGELES OFFICE

STATION U1R

ARROYO SECO near Pasadena, California

LOCATION:

Water-stage recorder and control, lat. 34°13'20", long. 118°10'40", near north line of sec.31, T. 2 N., R. 12 W., 1½ miles upstream from Millard Canyon, and 5½ miles northwest of Pasadena, Altitude, about 1,400 feet.

DRAINAGE AREA:

16.4 square miles.

RECORDS AVAILABLE:

December 1910 to September 1939.

AVERAGE DISCHARGE:

25 years (1913-1915, 1916-1939); 9.52 second-feet.

EXTREMES:

Maximum discharge during year, 375 second-feet Dec. 18 (gage height, 7.70 feet); minimum daily discharge, 0.4 second-foot on several days during August and September.
1910-1939: Maximum discharge, 8,620 second-feet March 2, 1938, by slope-area method; practically dry for several months most years.

REMARKS:

Records poor. Discharge Oct. 17 to Nov. 17, Dec. 31 to Mar. 5, Mar. 12-26, Mar. 30 to July 7, July 18-19, and Sept. 28-30, determined by interpolating between discharge measurements. No diversion above station. Some measurements furnished by Los Angeles County Flood Control District.

F. C. O. FORM 104 500 8-38

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. U1R

DISCHARGE MEASUREMENTS OF ARROYO SECO

AT Pasadena, California DURING THE YEAR ENDING SEPTEMBER 30, 1939

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
1055	10-3	S.Tucker				4.25	2.4		.6	7	0		
1056	10-11	"				4.25	2.1		.6	7	0		
1057	10-13	R.Lindsay	5.0	1.66	1.24	4.25	2.1		.6	5	0	1120A / 1126A	FC13
1058	10-17	S.Tucker					2.6		.6	9	0		
1059	10-25	"					1.8		.6	10	0		
1060	10-27	R.Lindsay	6.2	2.06	0.98		2.0		.6	6		1208P / 1215P	FC13
1061	10-31	S.Tucker					2.6		.6	11	0		
1062	11-8	"					2.3		.6	11			
1063	11-10	R.Lindsay	5.2	2.05	1.05		2.2		.6	5		1157A / 1205P	FC13
1064	11-14	S.Tucker				4.83	2.1		.6	6	0		
1065	11-17	R.Lindsay	5.0	1.98	1.10		2.2		.6	5		1115A / 1125A	FC13
1066	11-22	S.Tucker				4.77	1.9		.6	6	0		
1067	11-28	"				4.77	1.4		.6	6	0		
1068	12-1	R.Lindsay	2.8	0.71	2.16	4.79	1.6		.6	5	0	1150A / 1156A	FC28
1069	12-6	S.Tucker				4.77	1.4		.6	6	0		
1070	12-12	"				4.79	1.9		.6	7	0		
1071	12-20	Lord-Wittman				7.10	98						
1072	12-30	O.J.Wittman				6.80	9.3		.6	20	0		
1073	1-6	"				6.99	16		.6	26	+.02		
1074	1-11	"				6.77	9.6		.6		-.01		
1075	1-20	"				6.80	7.0		.6	12	+.03		
1076	1-25	"				6.73	8.3		.6	21	-.05 +.05		
1077	1-30	O.J.Wittman				6.12	5.7		.6	10	+.01		
1078	2-4	"				6.36	10.2		.6	11	-.01		
1079	2-6	O.J.Wittman				6.34	8.1		.6	6	0		
1080	2-13	"				5.96	8.5		.6	8	0		
1081	2-21	"				5.97	5.3		.6	8	0		
1082	2-29	"					5.5		.6	7			
1083	3-6	"				5.76	5.3		.6	8	0		
1084	3-13	Wittman-Montgomery				6.26	9.0		.6	11	0		
1085	3-20	O.J.Wittman				5.86	6.4		.6	6	0		
1086	3-27	"				6.26	32		.6	15	-.07		
1087	4-5	S.Tucker				5.82	5.9		.6	15	.01		
1088	4-11	"				5.87	5.1		.6	15	0		
1089	4-19	"				5.86	3.9		.6	15	0		
1090	4-19	A.Ingram	8.5	2.53	1.22	5.87	3.1		.6	5		155P / 205P	FC28
1091	4-25	S.Tucker				5.86	4.2		.6	16	0		
1092	4-27	R.Lindsay	7.9	2.33	1.62	5.76	3.8		.6	8	0	1027A / 1038A	FC28
1093	5-3	S.Tucker				5.75	3.3		.6	15	0		
1094	5-4	R.Lindsay	8.0	2.39	1.38	5.72	3.3		.6	6	0	1203P / 1210P	FC28
1095	5-9	S.Tucker				5.72	3.5			12			
1096	5-11	R.Lindsay	6.3	1.85	1.55	5.76	2.9		.6	6	0	200P / 208P	FC28
1097	5-17	S.Tucker				5.79	3.8		.6	15	.02		
1098	5-18	R. Lindsay	6.1	1.82	1.45	5.50	2.6		.6	6	0	411P / 418P	FC28
1099	5-23	S.Tucker				5.47	3.1		.6	14	-.02		
1100	5-25	R.Lindsay	3.3	1.24	1.66	5.40	2.1		.6	6	0	332P / 339P	FC28
1101	5-29	S.Tucker				5.40	2.5		.6	14	-.01		
1102	6-1	R.Lindsay	3.6	1.33	1.77	5.41	2.4		.6	6	0	1042A / 1050A	FC28
1103	6-5	O.J.Wittman				5.40	2.4		.6	9	0		
1104	6-8	R.Lindsay	3.4	1.22	1.71	5.37	2.1		.6	5	0	1115A / 1122A	FC28
1105	6-12	O.J.Wittman				5.35	1.7		.6	11			
1106	6-15	R.Lindsay	3.5	1.14	1.45	5.36	1.6		.6	5	0	1140A / 1146A	FC28
1107	6-19	O.J.Wittman				5.35	1.5		.6	9			
1108	6-22	R.Lindsay	3.0	0.89	1.34	5.34	1.2		.6	5	0	1002A / 1010A	FC28
1109	6-29	A.Ingram	4.3	0.98	1.11	5.32	1.1		.6	4	0	1050A / 1058A	FC2
1110	7-1	R.Lindsay	2.8	0.53	0.91	5.23	0.50		.6	4	0	140P / 146P	FC28
1111	7-7	O.J.Wittman				5.34	1.3		.6	7	0		
1112	7-13	R.Lindsay	2.8	0.67	1.21	5.33	0.80		.6	5	0	930A / 935A	FC28
1113	7-14	O.J. Wittman				5.33	1.2		.6	7			
1114	7-20	"				5.30	0.80		.6	7	0		
1115	7-24	"				5.28	0.80		.6	9	0		
1116	8-9	"				5.23	0.55		.6	7	0		
1117	8-10	R.Lindsay	2.8	0.61	0.94	5.24	0.55		.6	4	0	1153A / 1158A	FC28
1118	8-14	O.J.Wittman				5.23	0.65		.6	6	0		
1119	8-21	"				5.22	0.60		.6	6	0		
1120	8-23	Brewster	2.5	0.71	0.69	5.22	0.49		.6	5	0	1108A / 1114A	FC8
1121	8-28	O.J.Wittman				5.23	0.60		.6	6	0		
1122	9-7	R.Lindsay	2.9	0.62	0.90	5.24	0.55		.6	5	0	853A / 859A	FC28
1123	9-12	O.J.Wittman				5.24	0.65		.6	6	0		
1124	9-18	"				5.21	0.50		.6	4	0		
1125	9-21	R.Lindsay	2.9	0.62	0.52	5.24	0.32		.6	6	0	815A / 820A	FC28
1126	9-22	O.J.Wittman				4.95	0.40		.6	6	0		
1127	9-26	"				6.54	52.		.6	13	.02		

F. C. Dist. Form 52

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

Sta. No. U1R

Daily discharge, in second-feet of ARROYO SECO near Pasadena, for the year ending September 30, 1939

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.8	2.5	1.5	E 9	7	5.5	E 8	3.4	2.4	1.0	0.7	0.4
2	2.1	2.4	1.4	9	8	5.5	7.5	3.4	2.4	1.0	0.7	0.4
3	2.1	2.4	1.4	8	9	5.5	7	3.3	2.4	1.0	0.7	0.5
4	2.1	2.3	1.4	8	10	5.5	6.5	3.3	2.4	1.1	0.6	0.4
5	2.3	2.3	1.4	24	9	E 5.5	6	3.3	2.4	1.2	0.5	0.4
6	2.3	2.3	1.4	16	8	5.5	6	3.3	2.2	1.2	0.6	0.4
7	2.3	2.3	1.5	14	8	5.5	6	3.2	2.2	E 1.3	0.7	0.5
8	2.3	2.3	1.5	12	10	5.5	5.5	3.2	2.1	1.3	0.7	0.5
9	2.3	2.2	1.6	11	9	8	5.5	3.2	2.0	1.3	0.6	0.4
10	2.3	2.2	1.7	10	9	26	5	3.2	1.9	1.2	0.6	0.4
11	2.1	2.2	1.8	9	8.5	12	5	3.2	1.8	1.2	0.5	0.4
12	2.1	2.1	1.9	9	8.5	E 10	5	3.2	1.7	1.1	0.6	0.6
13	2.1	2.1	1.8	8.5	8.5	E 9	5	3.2	1.6	1.0	0.6	0.7
14	2.1	2.1	1.7	8.5	8	8.5	4.8	3.2	1.5	1.0	0.6	0.6
15	3.1	2.1	8.2	8	7	E 8	4.6	3.2	1.4	1.0	0.6	0.5
16	2.9	2.2	7.7	8	6.5	7.5	4.2	3.2	1.4	1.0	0.6	0.5
17	E 2.6	E 2.2	7.6	7.5	6	7	4.0	3.2	1.4	1.0	0.6	0.4
18	2.6	2.2	13.0	7.5	5.5	7	3.8	3.2	1.5	E 0.9	0.6	0.5
19	2.5	2.2	11.3	7	5.5	6.5	3.6	3.0	1.5	E 0.8	0.5	0.5
20	2.4	2.0	11.0	7	5	6.5	3.6	3.0	1.4	0.7	0.5	0.5
21	2.3	1.9	5.2	7	5	6.5	3.8	2.8	1.3	0.7	0.5	0.6
22	2.2	1.9	3.5	7.5	5	6	3.8	2.8	1.2	0.7	0.5	E 0.5
23	2.1	1.6	3.7	7.5	5	6	4.0	2.6	1.2	0.7	0.4	0.4
24	2.0	1.6	4.6	7.5	5	6	4.0	2.6	1.2	0.7	0.4	28
25	1.9	1.5	3.0	8	5	6	4.2	2.6	1.2	0.7	0.4	85
26	1.9	1.4	2.7	7.5	5.5	E 10	4.0	2.6	1.1	0.6	0.4	48
27	1.9	1.4	2.2	7	5.5	22	3.8	2.6	1.1	0.6	0.4	E 15
28	2.1	1.4	2.1	6.5	5.5	17	3.8	2.5	1.1	0.6	0.4	E 12
29	2.2	1.4	1.7	6.5		14	3.6	2.5	1.1	0.7	0.4	E 11
30	2.4	1.4	1.0	6		E 10	3.6	2.5	1.0	0.7	0.4	E 10
31	2.6		1.0	6.5		E 9		2.4		0.7	0.4	
	70.0	60.1	93.23	278.5	197.5	272.5	145.2	92.9	49.1	28.7	16.7	220.0
MEAN	2.26	2.00	3.01	8.98	7.05	8.79	4.84	3.00	1.64	0.93	0.54	7.33
ACRE-FEET	139	119	1850	552	392	540	288	184	97	57	33	436

Remarks: E indicates discharge estimated - see station description.

YEAR OR PERIOD — MEAN 6.45 — ACRE-FEET 4690

STATION U9R

DALTON CREEK near Glendora, Calif.

LOCATION:

Water-stage recorder and broad-crested weir control, lat. 34°09'20", long. 117°49'50", in center of sec. 21, T. 1 N., R. 9 W., at Glendora Irrigation Company's dam, a quarter of a mile upstream from mouth and 2½ miles northeast of Glendora. Altitude, about 1,150 feet.

DRAINAGE AREA:

7.5 square miles.

RECORDS AVAILABLE:

December 1919 to September 1939.

AVERAGE DISCHARGE:

19 years (1920-1939), 1.22 second-feet.

EXTREMES:

Maximum discharge during year, 7.3 second-feet Jan. 5 (gage height, 0.83 foot); no flow for parts of several months.
1919-1939: Maximum discharge, about 850 second-feet March 2, 1938, from record of release from reservoir upstream; no flow for several months of each year.

REMARKS:

Records good except those for period of no gage-height record, Nov. 25-Dec.31, which were determined by interpolation between 9 discharge measurements and are fair. Glendora Irrigation Company diverts water above gage through 10-inch pipe line. Storage at flood control dam about 1 mile upstream. Results of several discharge measurements furnished by Los Angeles County Flood Control District.

F. C. D. FORM 184 300 8-38

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. U9R

DISCHARGE MEASUREMENTS OF DALTON CREEK

AT NEAR Glendora, California DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Present Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
498	10-12	Samuel Tucker				1.31	0.10		Vol.				
499	10-13	Brewster				1.33	0.15		Est.			250P	
												240P	
500	10-27	"	1.0	.14	.29	1.29	0.04		.6	2	0	243P	FC8
												301P	
501	11-10	"	1.0	.17	.47	1.30	0.08		.6	2	0	304P	"
												300P	
502	11-23	"	0.5	.11	.27	1.29	0.03		.6	1	0	302P	"
												250P	
503	12-8	"	0.5	.12	.33	-	0.04		.6	1	-	253P	"
												345P	
504	12-15	"	1.5	.23	.48	-	0.11		.6	3	-	348P	"
505	12-18	R.S.Lord				-	0.85		.6	4			
506	12-19	"				-	2.4		.6	7			
												1130A	
507	12-19	Brewster-Pettis	5.0	1.98	1.19	-	2.4		.6	5		1138A	FC8
												300P	
508	12-20	" "	7.0	3.58	.86	-	3.1		.6	7	-	310P	"
												345P	
509	12-22	" "	4.0	.88	.78		0.70		.6	4		357P	"
510	12-29	O.J.Wittman				0.20	0.33		.6	6			
												245P	
511	12-29	Brewster	1.5	.40	.80	0.20	0.32			3		250P	FC8
												320P	
512	1-5	Brewster-Pettis	7.0	3.41	2.01	0.80	6.9		.6	7	-.01	330P	"
513	1-5	O.J. Wittman				0.75	5.3		.6	6	.02		

F. C. D. FORM 104 (R 8-38)

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. U9R

DISCHARGE MEASUREMENTS OF DALTON CREEK

AT NEAR Glendora, California DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Permit Bit.	METH OD	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
514	1-9	O.J.Wittman				0.25	0.38		.6	5	-.02		
515	1-12	Brewster	2.5	.86	.29	0.22	0.25		.6	5	0	150P 158P	FC8
516	1-16	O.J. Wittman				0.22	0.22		.6	3	0		
517	1-19	Brewster	1.5	.35	.83	0.19	0.29		.6	3	0	255P 300P	FC8
518	1-21	O.J.Wittman				0.30	0.40		.6	4	+.01		
519	1-24	"				0.28	0.30		.6	5			
520	1-26	Brewster	1.5	.45	.78	0.22	0.35		.6	3	0	400P 405P	FC8
521	1-31	O.J.Wittman				0.27	0.36		.6	5			
522	2-2	Brewster	1.5	.44	.91	0.25	0.40		.6	3	0	335P? 340P	FC8
523	2-3	Brewster-Pettie	3.5	1.28	.93	0.50	1.2		.6	4	0	1050A 1057A	"
524	2-3	O.J.Wittman				0.48	1.0		.6	9	-.02		
525	2-7	"				0.33	0.60		.6	6	0		
526	2-9	Brewster	1.5	0.50	1.16	0.35	0.60		.6	3	0	250P 255P	FC8
527	2-14	O.J.Wittman				0.35	0.47		.6	7	0		
528	2-16	Brewster	1.5	0.45	0.87	0.27	0.39		.6	3	0	230P 235P	FC8
529	2-21	O.J.Wittman				0.28	0.36		.6	5	+.01		
530	2-23	Brewster	1.5	0.43	0.86	0.26	0.37		.6	3	0	318P 323P	FC8
531	3-1	O.J.Wittman				0.26	0.31		.6	4	0		
532	3-2	Brewster	1.5	0.35	0.86	0.24	0.30		.6	3	0	325P 330P	FC8
533	3-7	O.J.Wittman				0.21	0.19		.6	5	0		
534	3-9	Brewster	1.5	0.36	0.89	0.23	0.32		.6	3	0	325P 330P	FC8
535	3-14	O.J. Wittman				0.24	0.19		.6		0		
536	3-16	Brewster	1.5	0.35	0.89	0.23	0.31		.6	3	0	245P 250P	FC8
537	3-21	O.J.Wittman				0.24	0.20		.6	4	0		
538	3-23	Brewster	1.5	0.38	0.79	0.24	0.30		.6	3	0	350P 355P	FC8
539	3-28	Samuel Tucker				0.33	0.39		.6	7	0		
540	3-30	Brewster	1.5	0.41	0.95	0.29	0.39		.6	3	0	315P 320P	FC8
541	4-6	"	1.5	0.39	0.69	0.25	0.27		.6	3	0	225P 230P	"
542	4-7	Samuel Tucker				0.20	0.19		.6	5	0		
543	4-13	"				0.24	0.24		.6	5	0		
544	4-13	Brewster	1.5	.37	.76	0.23	0.28		.6	3	0	308P 312P	FC8
545	4-19	Samuel Tucker				0.15	0.12		.6	5	0		
546	4-20	Brewster	1.5	.34	.68	0.15	0.23		.6	3	0	325P 330P	FC8
547	4-27	Samuel Tucker				0.18	0.19		.6	5	0		
548	4-27	Brewster	1.0	.24	.67	0.13	0.16		.6	2	0	250P 254P	FC8
549	5-3	Samuel Tucker				.12	.11		.6	4	0		
550	5-11	"				0.14	0.14		.6	5			
551	5-11	Brewster	1.0	.24	.62	0.11	0.15		.6	2	0	430P 434P	FC8
552	5-17	Samuel Tucker				0.12	0.11		.6	4	0		
553	5-23	"				0.08	0.07		.6	4	0		
554	5-25	Brewster	0.5	.11	.45	0.06	0.05		.6	1	0	300P 302P	FC8
555	5-29	Samuel Tucker				0.08	0.06		.6	4	0		
556	6-6	O.J.Wittman				0.17	0.13	4"Flume					
557	6-8	Brewster	0.5	.12	.92	0.11	0.11		.6	1	0	328P 330P	FC8
558	6-14	O.J.Wittman				0.10	0.08		.6	3			
559	6-14	Brewster	0.4	.09	.67	0.06	0.06		.6	1	0	245P 247P	FC8
560	9-25	O.J.Wittman				0.15	0.10		.6	3	.02		
561	9-28	Brewster	0.5	.11	.73	0.04	0.08		.6	1	0	415P 417P	FC8

F. C. Dist. Form 52

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

Sta. No. U9R

Daily discharge, in second-feet of DALTON CREEK near Glendora, for the year ending September 30, 19 39

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0.1	E 0.1	0.2	0.3	0.3	0.3	0.1	0.4			0
2	3.0	0.2	E 0.1	0.2	0.3	0.3	0.5	0.1	0.3			0
3	1.9	0.2	E 0.1	0.2	0.9	0.3	0.4	0.1	0.2			0
4	0.4	0.1	E 0.1	0.2	0.7	0.3	0.4	0.1	0.3			0
5	0.3	0.1	E 0.1	1.8	0.5	0.3	0.4	0.1	0.2			0
6	0.3	0.1	E 0.1	0.6	0.5	0.3	0.3	0.1	0.2			0
7	0.2	0.1	E 0.1	0.4	0.4	0.3	0.3	0.1	0.2			0
8	0.2	0.1	E 0.1	0.4	1.0	0.3	0.2	0.1	0.1			0
9	0.2	0.1	E 0.1	0.3	0.6	0.3	0.2	0.1	0.1			0
10	0.2	0.1	E 0.1	0.3	0.6	0.6	0.2	0.1	0.1			0
11	0.2	0.1	E 0.1	0.3	0.5	0.4	0.2	0.1	0.1			0
12	0.1	0.1	E 0.1	0.3	0.5	0.3	0.2	0.1	0.1			0
13	0.1	0.1	E 0.1	0.3	0.5	0.3	0.2	0.1	0.1			0
14	0.1	0.1	E 0.1	0.2	0.5	0.3	0.3	0.1	0.1			0
15	0.3	0.1	E 0.1	0.2	0.5	0.3	0.2	0.1	0.1			0
16	0.3	0.1	E 0.2	0.2	0.4	0.2	0.2	0.1	0.1			0
17	0.2	0.1	E 0.4	0.2	0.4	0.3	0.2	0.1	0.1			0
18	0.2	0.1	E 0.8	0.2	0.3	0.3	0.2	0.1	0.1	No flow	No flow	0
19	0.2	0.1	E 2.4	0.2	0.4	0.3	0.2	0.1	0			0
20	0.2	0.1	E 3.1	0.2	0.4	0.3	0.2	0.1	0			0
21	0.2	0.1	E 1.5	0.8	0.4	0.3	0.2	0.1	0			0
22	0.2	0.1	E 0.7	0.5	0.3	0.3	0.2	0.1	0			0
23	0.2	0.1	E 0.7	0.4	0.3	0.2	0.2	0.1	0			0
24	0.2	0.1	E 0.6	0.3	0.3	0.2	0.2	0.1	0			0
25	0.1	E 0.1	E 0.6	0.3	0.3	0.3	0.2	0.1	0			0.1
26	0.1	E 0.1	E 0.5	0.2	0.3	0.4	0.2	0.1	0			0.1
27	0.1	E 0.1	E 0.4	0.3	0.3	0.7	0.2	0.1	0			0
28	0.1	E 0.1	E 0.4	0.3	0.3	0.5	0.1	0.1	0			0
29	0.1	E 0.1	E 0.3	0.3		0.4	0.1	0.1	0			0
30	0.1	E 0.1	E 0.3	0.3		0.4	0.1	0.1	0			0
31	0.1		E 0.3	0.4		0.4		0.2				
	101	3.2	14.7	11.0	12.7	10.3	7.0	3.2	2.9			0.2
MEAN	0.33	0.11	0.47	0.35	0.45	0.33	0.23	0.10	0.10	0	0	0.01
ACRE-FEET	20	6.3	29	22	25	20	14	6.3	5.8	0	0	0.4

Remarks: E indicates discharge estimated - see station description.

YEAR OR PERIOD MEAN 0.21 ACRE-FEET 149

STATION U2R

EATON CREEK near Pasadena, Calif.

LOCATION:

Water-stage recorder, lat. 34°11'40", long. 118°06'15", in SE¼ sec.2, T.1 N., R.12W., at mouth of canyon just upstream from site of former Mount Wilson toll bridge and 4 miles northeast of Pasadena. Altitude, 1,230 feet.

DRAINAGE AREA:

6.5 square miles.

RECORDS AVAILABLE:

March 1918 to September 1939.

AVERAGE DISCHARGE:

21 years, 2.38 second-feet. Average combined discharge of creek and diversion, 21 years, 3.37 second-feet.

EXTREMES:

Maximum discharge during year, 201 second-feet, Dec. 18, 930 P.M. (gage height, 2.32 feet); no flow for several months.
1918-1939: Maximum, 2,400 second-feet March 2, 1938, from record of inflow to Eaton flood-control reservoir; no flow for periods each year.

REMARKS:

Records good. Records do not include water diverted above station by City of Pasadena; record of this diversion furnished by city. Results of 5 discharge measurements furnished by Los Angeles County Flood Control District.

F. C. D. FORM 104 800 8-38

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. U2R

DISCHARGE MEASUREMENTS OF EATON CREEK

MADE BY Pasadena, California DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Present Diff.	Shifted	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
297	12-15	Lindsay-Ingram	10.5	8.33	1.99	9.80	17		.6	6	-.01	1053A / 1103A	FC13
298	12-18	R. S.Lord				1.23	40		.6	13	+.08		
299	12-18	Lindsay-Ingram	12.5	8.66	3.93	1.17	34		.6	7	-.01	213P / 220P	FC28
300	12-19	" "	16.0	7.54	2.65	1.05	20		.6	9	0	1235P / 1245P	"
301	12-20	" "	16.5	10.31	3.06	1.17	32		.6	9	-.02	1133A / 1145A	FC13
302	1-6	Haig	3.0	0.44	0.52	0.09	0.23		Sur.	6	-.01	1234P / 1238P	FC28
303	1-6	O.J.Wittman				0.08	0.28		.6	4			
304	1-23	"				0.42	4.9		.6	9			
305	3-27	"				0.58	8.7		.6	10	0		
306	9-25	"				1.28	42		.6	15	.05		
307	9-26	Lord-Ebert				1.01	26		.6				
308	9-28	R.Lindsay	3.2	0.67	0.55	0.12	0.37		.6	4	0	1113A / 1118A	FC28

F. C. Dist. Form 52

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

Sta. No U2R

Daily discharge, in second feet of EATON CREEK near Pasadena for the year ending September 30, 19 39

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			0	0	0	0						0
2			0	0	0	0						0
3			0	0	0	0						0
4			0	0	0	0						0
5			0	9.5	0	0						0
6			0	1.9	0	0						0
7			0	0.1	0	0						0
8			0	0	0.7	0						0
9			0	0	0	1.8						0
10			0	0	0.3	3.9						0
11			0	0	0.5	0						0
12			0	0	0	0						0
13			0	0	0	0						0
14			0.2	0	0	0						0
15			1.6	0	0	0						0
16			4.9	0	0	0						0
17	No flow	No flow	1.7	0	0	0	No flow	No flow	No flow	No flow	No flow	0
18			4.0	0	0	0						0
19			3.7	0	0	0						0
20			3.3	0	0	0						0
21			1.7	6	0	0						0
22			5	5.5	0	0						0
23			0.8	4.3	0	0						0
24			0.6	3.6	0	0						9.5
25			0.2	2.2	0	0						6.4
26			0	0	0	1.3						28
27			0	0	0	6						9.5
28			0	0	0	1.2						2.7
29			0	0		0						0.1
30			0	1.1		0						0
31			0	1.3		0						
			156.4	35.5	1.5	14.2						113.8
MEAN	0	0	5.05	1.15	0.05	0.46	0	0	0	0	0	3.79
ACRE-FEET	0	0	310	70	3.0	28	0	0	0	0	0	226

Remarks:

YEAR OR PERIOD MEAN 0.88 ACRE-FEET 637

STATION U7R

FISH CREEK near Duarte, Calif.

LOCATION:

Water-stage recorder and concrete control, lat. 34°10'00", long. 117°55'25", in SW¼SW¼ sec. 15, T. 1 N., R. 10 W., three-quarters of a mile upstream from mouth of canyon, and 3 miles northeast of Duarte, Altitude, about 1,000 feet.

DRAINAGE AREA:

6.5 square miles.

RECORDS AVAILABLE:

July to September 1916, July 1917 to September 1939.

AVERAGE DISCHARGE:

22 years (1917-1939), 4.06 second-feet.

EXTREMES:

Maximum discharge during year, 172 second-feet 12:30 A.M. December 19; minimum discharge, 0.2 second-foot August 26 - Sept. 5 and September 17-23.
1916-1939: Maximum discharge, about 2,180 second-feet April 4, 1925; no flow during periods in 1919-1921, 1924, 1929-1930.

REMARKS:

Records good except those for period Oct. 1 to Dec. 6, which are based on once daily staff gage readings, and are fair. Discharge interpolated for Feb.9-10. No diversions or regulation above station. Los Angeles County Flood Control District furnished some measurements.

F. C. D. FORM 104 800 5-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. U7R

DISCHARGE MEASUREMENTS OF FISH CREEK

AT OR NEAR Duarte, California DURING THE YEAR ENDING SEPTEMBER 30, 1939

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	RATING PERMIT DIFF.	METHOD	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
1223	10-3	SamuelTucker				11.18	1.2		.6	9	0		
1224	10-10	"				11.20	1.4		.6	10	0		
1225	10-17	"				11.20	1.5		.6	9	0		
1226	10-24	"				11.12	1.2		.6	9	0		
1227	10-27	Lindsay	4.4	1.14	1.00	11.14	1.2		.6	5		1010A / 1016A	FC13
1228	10-31	Samuel Tucker				11.60	1.2		.6	8	0		
1229	11-7	"				11.54	1.2		.6	9	0		
1230	11-10	Lindsay	4.5	1.11	1.05	11.56	1.2		.6	4		235P / 241P	FC13
1231	11-14	Samuel Tucker				11.58	1.0		.6	8	0		
1232	11-22	"				11.15	1.0		.6	9	0		
1233	11-23	Lindsay	4.2	1.00	.94	11.16	0.95		.6	5		142P / 150P	FC13
1234	11-28	Samuel Tucker				10.93	0.90		.6	8	0		
1235	12-5	"					0.95		.6	9			
1236	12-12	"				0.19	0.55		.6	5	0		
1237	12-19	R.S.Lord				1.13	20.		.6				
1238	12-29	Lindsay	Two channels			0.32	2.2		.6	8		1045A / 1057A	FC28
1239	12-29	O.J.Wittman				0.34	2.6		.6	11	0		
1240	1-6	"				0.71	8.9		.6	11	0		
1241	1-10	"				0.44	3.5		.6	9	.05		
1242	1-17	"				0.33	2.5		.6	8			
1243	1-21	"				0.58	6.6		.6	10			
1244	1-24	O.J.Wittman				0.32	3.0		.6	8			
1245	1-31	"				0.34	3.4		.6	8			
1246	2-3	"				0.56	6.8		.6	11			
1247	2-7	O.J.Wittman				0.47	4.7		.6	11			
1248	2-14	"				0.39	4.1		.6	11			
1249	2-21	"				0.27	3.2		.6	10			
1250	3-2	"				0.26	2.3		.6	9			
1251	3-7	"				0.25	2.3		.6	9			
1252	3-13	Wittman-Montgomery				0.19	2.8		.6	10	0		
1253	3-16	Ingram	8.5	2.99	.70	0.18	2.1		.6	6		1010A / 1025A	FC28
1254	3-21	O.J.Wittman				0.21	2.4		.6	9			
1255	3-23	Ingram	9.0	3.42	.61	0.20	2.1		.6	5		943A / 954A	FC28
1256	3-27	O.J.Wittman				0.78	12.		.6	13			
1257	3-28	Samuel Tucker				0.54	6.8		.6	13	.01		
1258	3-30	Ingram	10.5	4.29	1.07	0.34	4.6		.6	6		946A / 1000A	FC28
1259	4-7	Samuel Tucker				0.24	2.8		.6	16	0		
1260	4-11	"				0.22	2.2		.6	16	0		
1261	4-13	Ingram	9.5	3.78	.74	0.25	2.8		.6	5		1230P / 1240P	FC28
1262	4-18	Samuel Tucker				0.25	1.7		.6	13	0		
1263	4-20	Ingram	9.0	2.85	.55	0.25	1.6		.6	4		1248P / 103P	FC28
1264	4-25	Samuel Tucker				0.24	1.9		.6	15			
1265	5-3	"				0.23	1.5						
1266	5-9	"				0.22	1.3						
1267	5-16	"				0.24	1.6		.6	15	0		
1268	5-23	"				0.18	1.2		.6	16	0		
1269	5-29	"				0.17	1.0		.6	15	0		
1270	6-5	O.J.Wittman				0.17	1.2		.6	10			
1271	6-12	"				0.14	0.80		.6	10			
1272	6-15	Lindsay	7.0	1.60	.48	0.14	0.80		.6	7	0	159P / 205P	FC28
1273	6-19	O.J.Wittman				0.12	0.70		.6	8			
1274	7-5	"				0.14	0.70		.6	7			
1275	7-14	"				0.34	0.34				0		
1276	7-18	"				0.09	0.45		.6	4	0		
1277	7-20	Lindsay	4.0	.78	.44	0.08	0.34		.6	5		118P / 123P	FC28
1278	7-24	O.J.Wittman				0.07	0.26		.6	5	0		
1279	8-1	"				0.08	0.32		.6	5	0		
1280	8-3	Lindsay	3.8	.67	.42	0.09	0.28		.6	5	0	1205P / 1212P	FC28
1281	8-8	O.J.Wittman				0.08	0.41		.6	5	0		
1282	8-15	"				0.08	0.24		.6	4	0		
1283	8-17	Lindsay - Van der Goot	3.8	.66	.34	0.08	0.22		.6	5	0	1123A / 1132A	FC28
1284	8-21	O.J.Wittman				0.08	0.21		.6	6	0		
1285	8-28	"				0.07	0.17		.6	5	0		
1286	8-31	Lindsay	0.90	.18	1.11	0.06	0.20		.6	2	0	1038A / 1041A	FC28
1287	9-12	O.J.Wittman				0.09	0.37		.6	8	0		
1288	9-14	Lindsay	3.9	.71	.42	0.09	0.30		.6	4	0	224P / 227P	FC28
1289	9-19	O.J.Wittman				0.06	0.14		.6	7			
1290	9-25	"				1.46	43.		.6	16			

F. C. Dist. Form 52

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

Sta. No. U7R

Daily discharge, in second-feet of FISH CREEK near Duarte, for the year ending September 30, 1939

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.1	1.2	0.9	1.8	3.0	2.2	3.5	1.6	1.2	0.6	0.3	0.2
2	1.1	1.2	0.9	1.8	2.6	2.3	5	1.6	1.1	0.6	0.3	0.2
3	1.2	1.2	0.9	1.8	6.5	2.4	3.6	1.6	1.1	0.6	0.3	0.2
4	1.2	1.2	0.9	1.8	6	2.4	3.3	1.5	1.1	0.6	0.3	0.2
5	1.4	1.2	1.0	22	5.5	2.3	3.1	1.6	1.1	0.7	0.3	0.2
6	2.0	1.2	1.0	10	5	2.3	3.0	1.6	1.0	0.7	0.4	0.3
7	1.6	1.1	0.9	6	4.7	2.3	2.8	1.5	1.0	0.6	0.4	0.3
8	1.6	1.1	0.8	4.4	18	2.3	2.7	1.3	0.9	0.6	0.4	0.3
9	1.4	1.1	0.7	3.6	E 9	4.0	2.6	1.3	0.8	0.6	0.4	0.3
10	1.4	1.2	0.6	3.3	E 5.5	6.5	2.3	1.3	0.7	0.5	0.4	0.3
11	1.2	1.2	0.6	3.2	4.9	3.1	2.2	1.5	0.7	0.4	0.4	0.4
12	1.2	0.9	0.6	3.1	4.7	2.8	2.3	1.4	0.7	0.4	0.3	0.4
13	1.2	0.9	0.5	2.8	4.3	2.7	2.8	1.8	0.7	0.4	0.2	0.4
14	1.2	0.8	0.7	2.6	4.1	2.6	2.6	1.7	0.7	0.4	0.2	0.4
15	5.5	0.8	9	2.6	3.9	2.3	2.2	1.6	0.7	0.4	0.2	0.4
16	1.5	0.8	4.0	2.7	3.6	2.1	2.0	1.6	0.8	0.4	0.2	0.3
17	1.5	0.8	1.8	2.7	3.3	2.2	1.8	1.6	0.8	0.4	0.2	0.2
18	1.5	0.8	33	2.7	3.3	2.2	1.6	1.6	0.7	0.4	0.2	0.2
19	1.5	0.9	40	2.7	3.3	2.2	1.5	1.5	0.7	0.4	0.2	0.2
20	1.5	1.1	43	2.7	3.2	2.3	1.5	1.3	0.7	0.4	0.2	0.2
21	1.5	1.1	21	6.5	3.1	2.3	1.5	1.2	0.7	0.4	0.3	0.2
22	1.5	1.1	9	4.7	2.6	2.2	1.6	1.2	0.7	0.4	0.3	0.2
23	1.2	0.9	5.5	3.6	2.3	2.1	1.7	1.2	0.7	0.4	0.3	0.2
24	1.2	0.9	4.6	3.0	2.2	2.0	1.8	1.1	0.8	0.3	0.3	15
25	1.2	0.9	3.7	2.6	2.1	2.0	1.9	1.0	0.8	0.3	0.3	50
26	1.2	0.8	3.3	2.4	2.2	5.5	1.9	0.9	0.7	0.3	0.2	25
27	1.2	0.8	2.8	2.4	2.3	10	1.8	0.9	0.7	0.3	0.2	4.0
28	1.2	0.8	2.3	2.4	2.3	6.5	1.7	1.0	0.6	0.3	0.2	2.0
29	1.1	0.8	2.3	2.3		5	1.7	1.0	0.6	0.3	0.2	1.4
30	1.1	0.8	2.2	3.7		4.6	1.7	1.0	0.6	0.3	0.2	1.1
31	1.2		2.0	3.7		3.7		1.1		0.3	0.2	
	45.4	29.6	2005	121.6	123.5	99.4	69.7	42.1	24.1	13.7	8.5	104.7
MEAN	1.46	0.99	6.47	3.92	4.41	3.21	2.32	1.36	0.80	0.44	0.27	3.49
ACRE-FEET	90	59	398	241	245	197	138	84	48	27	17	208

Remarks: E indicates discharge estimated - see station description.

YEAR OR PERIOD — MEAN 2.42 — ACRE-FEET 1750

STATION U12R

HAINES CREEK near Tujunga, Calif.

LOCATION:

Water-stage recorder and broad-crested weir control, lat. 34°15'50", long.118°16'15", in SW¼NE¼ sec. 17, T. 2 N., R. 13 W., 800 feet upstream from mouth of canyon and 1½ miles northeast of Tujunga. Altitude, about 2,200 feet.

DRAINAGE AREA:

1.2 square miles.

RECORDS AVAILABLE:

February 1917 to September 1934 and October 1935 to September 1939.

AVERAGE DISCHARGE:

21 years, .14 second-foot.

EXTREMES:

Maximum discharge during year, 11.5 second-feet, March 9.
Minimum, less than 0.005 second-foot at times.

1917-1934, 1935-1939: Maximum stage, 11.0 feet Jan. 1, 1934 (discharge not determined); no flow for periods nearly every year.

REMARKS:

Records good.

F. C. D. FORM 104 500 8-38

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. U12R

DISCHARGE MEASUREMENTS OF HAINES CREEK

AT NEAR Tujunga, California DURING THE YEAR ENDING SEPTEMBER 30, 1939

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
223	12-20	Lord-Wittman				1.43	0.62		.6	5	0		
224	12-30	O.J.Wittman				1.18	0.18		.6	3	0		
225	1-6	"				1.42	0.48		.6	4	.02		
226	1-11	"					0.04		.6	2			
227	1-20	"				1.14	0.05		.6	3	0		
228	1-25	"				1.20	0.25		.6	4			
229	1-30	"				1.16	0.13		.6	4			
230	2-4	"				1.16	0.14		.6	3	0		
231	2-13	"				1.16	0.13		.6	4	0		
232	2-28	"				1.13	0.12		.6	3			
233	3-6	"				1.15	0.17		.6	3			
234	3-13	Wittman-Montgomery				1.18	0.19		.6	4			
235	3-20	O.J.Wittman				1.17	0.20		.6	4	0		
236	4-5	S.Tucker				1.14	0.12		.6	5	0		
237	4-11	"				1.15	0.10		.6	5	0		
238	4-19	"				1.12	0.06		.6	4	0		
239	4-25	"				1.11	0.04		.6	4	0		
240	5-3	"				1.10	0.03		.6	4	0		
241	5-17	"				1.08	0.004		.6	2	0		
242	5-23	"				1.08	0.007		.6	2	0		
243	5-29	"				1.09	0.004		.6	2	0		
244	6-5	O.J.Wittman				1.11	0.003		4"flume				
245	6-12	"				1.12	0.008		4"flume				
246	7-7	O.J.Wittman				1.04	0.009		4"flume				
247	7-24	"				1.04	0.005		Float				

F. C. Dist. Form 52

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

Sta. No. U12B

Daily discharge, in second-feet of HAINES CREEK near Tujunga, for the year ending September 30, 1939

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.05		E 0.05	0.17	0.17	0.13	0.15	0.04				
2	0.05		E 0.05	0.15	0.15	0.13	0.15	0.04				
3	0.05		E 0.05	0.19	0.17	0.15	0.15	0.04				
4	0.05		E 0.05	0.17	0.15	0.17	0.15	0.04				
5	0.06		E 0.05	1.2	0.13	0.15	0.15	0.05				
6	0.06		E 0.05	0.35	0.13	0.17	0.13	0.05				
7	0.06		E 0.05	0.19	0.13	0.17	0.13	0.05				
8	0.06		E 0.05	0.13	0.13	0.17	0.13	0.04				
9	0.06		E 0.05	0.08	0.13	0.8	0.11	0.05				
10	0.06		E 0.05	0.05	0.13	0.6	0.11	0.06				
11	E 0.05		E 0.05	0.04	0.13	0.21	0.11	0.06				
12	E 0.05		E 0.05	0.04	0.13	0.19	0.11	0.04				E 0.005
13	E 0.05		E 0.05	0.04	0.13	0.19	0.11	0.02				
14	E 0.05		0.09	0.04	E 0.13	0.19	0.11	0.01				
15	E 0.05		1.4	0.04	E 0.13	0.19	0.09	0.01				
16	E 0.05		0.7	0.04	E 0.12	0.19	0.08	0.01				
17	E 0.05		0.8	0.04	E 0.12	0.19	0.05	0.01				
18	E 0.05		1.7	0.04	E 0.12	0.19	0.05	0.01				
19	E 0.05		1.4	0.05	E 0.12	0.19	0.06	0.01				
20	E 0.05		0.9	0.05	E 0.12	0.19	0.06	0.01				
21	E 0.05		0.35	1.4	E 0.12	0.19	0.06	0.01				
22	E 0.05		0.19	0.32	E 0.12	0.19	0.06	0.01				
23	E 0.05		0.17	0.26	E 0.11	0.19	0.06	0.01				
24	E 0.05		0.15	0.24	E 0.11	0.17	0.06	E 0.01				0.26
25	E 0.05		0.17	0.24	E 0.11	0.17	0.05	E 0.01				0.34
26	E 0.05		0.19	0.21	E 0.11	0.19	0.05	E 0.01				0.37
27	E 0.05		0.15	0.19	E 0.11	0.21	0.05	E 0.01				0.08
28	E 0.05		0.15	E 0.20	0.11	0.17	0.05	E 0.01				0.03
29	E 0.05		0.15	E 0.20		0.17	0.05	E 0.01				0.01
30	E 0.05		0.19	0.19		0.15	0.04	E 0.01				0.04
31	E 0.05		0.17	0.17		0.15		E 0.01				
	1.61		9.67	6.72	3.57	6.51	2.72	0.76	0.150		0.124	
		1.50								0.155		1.245
Mean	0.052	Est. .05	0.312	0.217	0.128	0.210	0.091	0.025	Est. .005	Est. .005	Est. .004	0.042
Acre-Feet	3.2	3.0	19	13	7.1	13	5.4	1.5	0.30	0.31	0.25	2.5

Remarks: E indicates discharge estimated - see station description.

Year or Period: Mean 0.095; Acre-Feet 69

STATION U3R

LITTLE SANTA ANITA CREEK near Sierra Madre, Calif.

LOCATION:

Water-stage recorder and control, lat. 34°11'15", long. 118°02'35", near center of NW¼ sec. 9, T. 1 N., R.11 W., 2 miles northeast of Sierra Madre. Altitude, about 2,200 feet.

DRAINAGE AREA:

1.9 square miles.

RECORDS AVAILABLE:

April 1916 to September 1939.

AVERAGE DISCHARGE:

22 years (1916-1925, 1926-1939), 0.958 second-foot.

EXTREMES:

Maximum discharge during year, 9 second-feet Sept. 25; minimum daily discharge, 0.1 second-foot July 17 - Sept. 23.
1916-1939: Maximum discharge, 536 second-feet March 2, 1938, computed on basis of inflow to Sierra Madre flood-control reservoir; dry during periods in 1919, 1924 and 1925.

REMARKS:

Records good. Discharge for periods of missing gage heights, October 5 to November 1, and March 15-24, determined by interpolating between measurements. No diversions above station.

F.C.D. FORM 104 1M 8-37

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. U3R

DISCHARGE MEASUREMENTS OF LITTLE SANTA ANITA CREEK

AT OR NEAR Sierra Madre, California DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	RATING PERCENT DIFF.	METH. OD	MEAS. REC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
603	10-4	Samuel Tucker	2.5	0.5	0.6	0.68	0.29	.6	5				29567
604	10-18	" "	2.5	.5	.82	.68	.42	.6	5				"
605	11-1	" "	2.3	.35	.89	.68	.31	.6	4				"
606	11-15	" "	2.6	.47	.55	.64	.26	.6	5				"
607	11-29	" "	2.8	.45	.49	.64	.22	.6	5				"
608	12-13	" "	2.2	.3	.75	.63	.24	.6	5				"
609	1-4	O.J.Wittman	2.4	.41	.83	.81	.34	.6	4				1277
610	1-23	"	2.4	.58	1.68	.78	.63	.6	5				"
611	2-6	"	2.3	.50	1.52	.78	.76	.6	5				"
612	2-13	"	2.3	.49	1.60	.81	.78	.6	5				"
613	3-3	"	2.0	.36	1.25	*.81 .76	.45	.6	4				"
614	3-15	"	2.1	..35	1.03	.75	.36	.6	4				"
615	3-24	Samuel Tucker	2.4	.49	.84	.73	.41	.6	7				"
616	4-4	" "	2.2	.5	1.06	.76	.53	.6	7				1698
617	4-18	" "	2.2	.36	.92	.72	.33	.6	7				29529
618	5-2	" "	2.3	.37	1.00	.69	.37	.6	7				1698
619	5-16	" "	2.2	.38	.89	..69	.34	.6	7				"
620	6-13	O.J. Wittman	2.0	.23	.65	.64	.15	.6	5				1277
621	7-6	"	2.0	.23	.83	.64	.19	.6	7				"
622	7-20	"	1.9	.14	.50	.89	.07	.6	4				"
623	8-8	"	1.9	.18		.93	.09	Float					
624	9-12	"	2.0	.15	.33	.92	.05	.6	3				

* Leaves removed from control : 0.05' drop in stage.

F. C. Dist. Form 52

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

Sta. No. U3R

Daily discharge, in second-feet of LITTLE SANTA ANITA CREEK near Sierra Madre, for the year ending September 30, 19 39

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.3	E 0.3	0.2	0.4	0.7	0.5	0.5	0.4	0.2	0.2	0.1	0.1
2	0.3	0.3	0.2	0.4	0.6	0.5	0.6	0.4	0.2	0.2	0.1	0.1
3	0.3	0.2	0.2	0.4	0.8	0.4	0.5	0.4	0.2	0.2	0.1	0.1
4	0.3	0.2	0.2	0.4	0.8	0.4	0.5	0.4	0.2	0.2	0.1	0.1
5	E 0.3	0.2	0.2	1.3	0.8	0.4	0.5	0.3	0.2	0.2	0.1	0.1
6	E 0.3	0.2	0.2	1.0	0.8	0.4	0.5	0.3	0.2	0.2	0.1	0.1
7	E 0.3	0.2	0.2	0.8	0.7	0.4	0.4	0.3	0.2	0.2	0.1	0.1
8	E 0.3	0.2	0.2	0.7	1.0	0.4	0.4	0.3	0.2	0.2	0.1	0.1
9	E 0.3	0.2	0.2	0.7	0.9	0.6	0.4	0.3	0.2	0.2	0.1	0.1
10	E 0.3	0.2	0.2	0.7	0.8	0.5	0.4	0.3	0.2	0.2	0.1	0.1
11	E 0.4	0.2	0.2	0.6	0.8	0.4	0.4	0.3	0.2	0.2	0.1	0.1
12	E 0.4	0.2	0.2	0.6	0.8	0.4	0.4	0.3	0.2	0.2	0.1	0.1
13	E 0.4	0.2	0.2	0.6	0.8	0.4	0.4	0.3	0.2	0.2	0.1	0.1
14	E 0.4	0.2	0.3	0.6	0.7	0.3	0.4	0.3	0.2	0.2	0.1	0.1
15	E 0.4	0.2	0.8	0.6	0.7	E 0.4	0.4	0.3	0.2	0.2	0.1	0.1
16	E 0.4	0.2	0.4	0.6	0.8	E 0.4	0.4	0.3	0.2	0.2	0.1	0.1
17	E 0.4	0.2	0.3	0.6	0.8	E 0.4	0.3	0.3	0.2	0.1	0.1	0.1
18	E 0.4	0.2	1.5	0.5	0.8	E 0.4	0.3	0.3	0.2	0.1	0.1	0.1
19	E 0.4	0.2	2.6	0.5	0.8	E 0.4	0.3	0.3	0.2	0.1	0.1	0.1
20	E 0.4	0.2	2.4	0.5	0.8	E 0.4	0.3	0.3	0.2	0.1	0.1	0.1
21	E 0.4	0.2	2.0	1.0	0.7	E 0.4	0.3	0.3	0.2	0.1	0.1	0.1
22	E 0.4	0.2	1.1	0.7	0.7	E 0.4	0.3	0.3	0.2	0.1	0.1	0.1
23	E 0.4	0.2	0.8	0.6	0.6	E 0.4	0.4	0.3	0.2	0.1	0.1	0.1
24	E 0.4	0.2	0.7	0.6	0.6	E 0.4	0.4	0.3	0.2	0.1	0.1	0.7
25	E 0.4	0.2	0.6	0.6	0.6	0.4	0.4	0.3	0.2	0.1	0.1	1.5
26	E 0.3	0.2	0.5	0.6	0.6	0.6	0.4	0.3	0.2	0.1	0.1	1.3
27	E 0.3	0.2	0.4	0.6	0.6	0.7	0.4	0.2	0.2	0.1	0.1	0.7
28	E 0.3	0.2	0.4	0.6	0.6	0.6	0.4	0.2	0.2	0.1	0.1	0.6
29	E 0.3	0.2	0.4	0.6		0.6	0.4	0.2	0.2	0.1	0.1	0.5
30	E 0.3	0.2	0.4	0.7		0.6	0.4	0.2	0.2	0.1	0.1	0.4
31	E 0.3		0.4	0.7		0.5		0.2		0.1	0.1	
	10.8	6.2	18.6	19.8	20.7	14.0	12.1	9.2	6.0	4.7	3.1	8.0
MEAN	0.35	0.21	0.60	0.64	0.74	0.45	0.40	0.30	0.20	0.15	0.10	0.27
ACRE-FEET	21	12	37	39	41	28	24	18	12	9.3	6.1	16

Remarks: E indicates discharge estimated - see station description.

YEAR OR PERIOD — MEAN 0.36 — ACRE-FEET 263

STATION U14R

ROCK CREEK near Valyermo, Calif.

LOCATION:

Water-stage recorder, lat. 34°25'10", long. 117°50'25", in NE¼ sec. 20, T. 4 N., R. 9 W., 1 3/4 miles southeast of Valyermo. Altitude, about 4,050 feet.

DRAINAGE AREA:

23.0 square miles.

RECORDS AVAILABLE:

January 1923 to September 1937; May 1938 to September 1939.

AVERAGE DISCHARGE:

15 years (1923-1937; 1938-1939) 12.6 second-feet.

EXTREMES:

Maximum discharge during year, 552 second-feet Dec. 18, (gage height, 9.70 feet); minimum, 5.5 second-feet Sept. 16, (gage height, 2.14 feet), 9 second-feet Sept. 28.
1923-1939: Maximum discharge, 8,300 second-feet March 2, 1938, by slope area method; minimum, 1.2 second-feet August 22, 1925.

REMARKS:

Records good except for period Dec. 14 to Jan. 27, which are fair. Records for period Oct. 1 to Jan. 27 obtained from a temporary station 600 feet downstream which includes flow of Punchbowl Creek. Discharge for Dec. 20-21, 24-29, and Jan. 7, computed on basis of records for nearby streams. No diversions upstream from station. Results of 8 discharge measurements furnished by Los Angeles County Flood Control District.

F. C. D. FORM 104 500 8-38

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. U14R

DISCHARGE MEASUREMENTS OF ROCK CREEK

AT NEAR Valyermo, California DURING THE YEAR ENDING SEPTEMBER 30, 1939

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN	END	METER NO.
439	10-13	G.I.Lang				7.96	9.2		.6	9	0			
440	10-27	"				7.96	8.3		.6	8	0			
441	10-29	Luce	9.5	5.81	1.53	7.96	8.9		.6	9	0	710P	725P	FC39
442	11-10	G.I.Lang				7.95	7.0		.6	9	0			
443	11-18	Luce	9.5	4.86	1.49	7.94	7.3		.6	8	0	330P	340P	FC39
443	12-1	G.I.Lang				7.94	7.2		.6	9	0			
445	12-7	Luce	9.4	4.98	1.30	7.93	6.4		.6	9	0	110P	120P	FC39
446	12-15	G.I.Lang				8.10	12.		.6	11	0			
447	12-19	K.R.Melin				8.58	79.		.6	10				
448	12-22	Ebert-Melin				8.32	27.				0			
449	12-23	G.I.Lang				8.35	24.		.6	11	0			
450	12-30	"				8.68	15.		.6	10	0			
451	1-8	K.R.Melin				8.72	14.		.6	10				
452	1-19	"				8.71	14.		.6	12	0			
453	1-27	"				8.62	13.		.6	14	0			
454	2-9	G.I.Lang				2.19	13.		.6	8	0			
455	2-11	Luce-B.Luce	10.3	4.88	2.56	2.18	12.		.6	7	0	1105A	1115A	FC39
456	2-23	G.I.Lang				2.19	13.		.6	9	0			
457	2-26	K.R.Melin				2.17	12.		.6	8	0			
458	3-11	Luce - M.Luce	13.2	8.66	1.29	2.19	11.		.6	8	0	955A	1010A	FC39
459	3-18	Lang-Melin				2.22	18.		.6	8	0			
460	3-30	G.I.Lang				2.39	23.		.6	10	0			
461	4-13	"				2.41	27.		.6		0			
462	4-27	"				2.35	25.		.6	10	0			

F. C. D. FORM 104 500 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. U14R

DISCHARGE MEASUREMENTS OF ROCK CREEK

AT OR NEAR Valyermo, California DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Diff.	Noted	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
463	5-4	G.I.Lang				2.32	20.		.6	10	0		
464	5-19	Luce-B.Luce	11.5	7.85	2.01	2.27	16.		.6	8	0	430P / 440P	FC39
465	6-2	K.R.Melin				2.24	13.		.6	15	0		
466	6-17	Melin-Oliver				2.26	15.		.6	11	0		
466A	6-28	Luce	16.5	7.84	1.60		13.		.6	9		200P / 210P	FC39
467	6-29	K.R.Melin				2.22	13.		.6	17	0		
468	7-19	"				2.18	8.9		.6	15	0		
469	7-26	Luce	16.5	7.12	1.35	2.19	9.6		.6	8	0	630P / 640P	FC39
470	8-1	G.I.Lang				2.18	8.7		.6	11	0		
471	8-12	"				2.17	8.3		.6	12	0		
471A	8-15	Luce	9.0	5.16	1.37	2.15	7.1		.6	9		105P / 115P	FC39
472	8-22	G.I.Lang				2.16	8.3		.6	10			
473	8-30	"				2.15	7.2		.6	10			
474	9-9	"				2.16	6.6		.6	11			
475	9-20	"				2.16	7.0		.6	12			
475A	9-22	Luce	10.5	5.43	1.64	2.19	8.9		.6	8	0	230P / 240P	FC39
476	9-27	K.R. Melin				2.85	15.		.6	10			

Sta. No. U14R

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

for the year ending September 30, 1939

Daily discharge, in second-feet of ROCK CREEK near Valyermo

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9	8.5	7	14	13	11	23	20	15	12	8.5	7.5
2	9.5	8	7	14	12	11	49	20	14	12	8.5	7
3	9.5	8	7	14	13	11	41	20	14	12	8.5	7
4	9	7.5	7	14	12	11	38	19	15	12	8.5	7
5	9	8	7	13	12	11	36	19	15	12	9	7.5
6	9	8	7	15	12	11	34	18	15	12	9	7.5
7	9	8	7	15	13	11	32	18	15	11	9	7
8	9	7.5	7	14	12	10	30	17	15	11	9	6
9	9.5	7.5	7	14	12	11	30	16	15	11	9	6
10	9.5	7	7	14	12	12	28	16	15	11	9	6
11	9.5	7	7	14	12	12	28	17	15	11	9	6
12	9.5	7	7	14	12	12	28	17	15	10	9	6
13	9.5	7	7	14	12	13	26	20	15	10	9	6
14	10	7	11	14	12	13	26	20	15	10	9	6
15	9.5	7	28	14	12	14	25	20	15	10	9	6
16	9.5	7	44	14	12	15	25	19	15	10	8.5	6
17	9.5	7	120	13	12	16	25	19	15	10	8.5	6
18	9.5	7	98	14	12	18	25	18	15	10	8.5	6
19	9.5	7	145	14	12	19	24	17	15	10	8.5	6
20	9	7	132	14	12	26	25	16	14	10	8.5	6
21	9	7	127	15	12	30	25	16	14	10	8	6
22	8.5	6.5	124	13	12	32	25	16	13	10	8	6
23	8.5	6.5	121	14	12	30	25	16	13	10	8	6
24	8.5	6.5	119	13	12	28	24	15	14	10	7.5	6
25	8.5	6.5	118	13	12	28	24	15	13	10	7	11
26	9	7	117	14	12	26	24	15	13	10	7	12
27	9	7	116	13	12	24	23	15	13	10	7	11
28	9	7	115	13	12	23	24	15	13	10	7	11
29	9	7	114	13		22	22	15	13	10	7	11
30	9	7	113	13		22	22	15	13	9	7	11
31	9		114	13		22		15		9	7	13
	283.5	216.0	716	435	339	566	839	536	431	325	257.0	435.0
MEAN	9.15	7.20	23.1	14.0	12.1	18.3	28.0	17.3	14.4	10.5	8.29	14.5
Acre-Feet	562	428	1420	863	672	1120	1660	1060	855	645	510	863

YEAR TO DATE MEAN 14.7
PERIOD ACRE-FEET 10660

Remarks: M indicates discharge estimated - see station description.

F. C. Dis. Form 18

STATION U6R

ROGERS CREEK near Azusa, California

LOCATION:

Water-stage recorder, lat. 34°09'55", long. 117°54'20", in NW¼NW¼ sec. 23, T. 1 N., R.10 W., half a mile upstream from mouth and 2½ miles north of Azusa. Altitude, about 800 feet.

DRAINAGE AREA:

6.4 square miles.

RECORDS AVAILABLE:

October 1917 to September 1939. May 1916, to June 1917, discharge measurements only.

AVERAGE DISCHARGE:

22 years, 2.96 second-feet.

EXTREMES:

Maximum discharge during year, 153 second-feet Dec. 19; no flow for part of year.
1917-1939: Maximum discharge, about 2,600 second-feet April 7, 1926; no flow for several months of each year.

REMARKS:

Records good except those for periods of faulty gage heights, Oct.1 to Dec. 12, May 21 to June 12 (computed on basis of several measurements and field estimates), Dec. 23 to Jan. 4, Jan. 6-9, Mar. 11-12, and Sept. 24 (computed on basis of discharge measurements and comparison with record for Fish Creek), all of which are fair. Entire flow diverted above station at times. Results of several discharge measurements furnished by Los Angeles County Flood Control District.

F.C.D. FORM 104 IN 8-37

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. U6R

DISCHARGE MEASUREMENTS OF ROGERS CREEK

AT OR NEAR Azusa, California DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	RATING PERCENT DIFF.	NOTES	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
846	10-10	Samuel Tucker				4.97	0.20		4'	Venturi		Flume	
847	12-16	Lindsay, Ingram	7.0	2.34	1.06	5.11	2.5		.6	6	0	840A / 848A	FC13
848	12-19	R.S. Lord				5.08	21		.6	11	0		
849	12-22	Lindsay	7.5	4.7	1.32	4.85	6.2		.6	6	0	1005A / 1013A	FC13
850	12-29	"	6.0	2.14	.55		1.2		.6	5	0	913A / 920A	FC28
851	12-29	O.J.Wittman					1.9		.6	8			
852	1-3	Lindsay	7.0	2.84	.51		1.4		.6	6		822A / 832A	FC13
853	1-5	O.J.Wittman				5.12	18		.6	9	+.04		
854	1-10	"				4.78	3.1		.6	9	0		
855	1-12	Lindsay	7.5	2.48	.92	4.76	2.3		.6	7	0	1025A / 1032A	FC28
856	1-16	O.J. Wittman				4.75	2.0		.6	7	0		
857	1-19	Lindsay	7.5	2.35	..72	4.74	1.7		.6	6	0	1053A / 1057A	FC13
858	1-24	O.J.Wittman				4.85	2.4		.6	7	0		
859	1-26	Lindsay	8.0	2.71	.70	4.84	1.9		.6	7	0	913A / 921A	FC28

F.C.D. FORM 104 1M 9-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. U6R

DISCHARGE MEASUREMENTS OF ROGERS CREEK

NEAR Azusa, California DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	RATING PERCENT DIFF.	METHOD	MEAS SECS NO	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
860	1-30	O.J. Wittman				4.89	2.1	.6		8	0		
861	2-2	Lindsay	7.0	2.19	.60	4.82	1.3	.6		5	0	255P 302P	FC28
862	2-7	O.J.Wittman				4.95	3.6	.6		9	0		
863	2-14	"				4.87	3.2	.6		10	-.02		
864	2-16	Lindsay	7.0	2.72	.60	4.82	1.6	.6		5	0	405P 412P	FC28
865	2-21	O.J.Wittman				4.80	1.8	.6		8			
866	3-1	"				4.72	1.4	.6		8	0		
867	3-6	"				4.72	1.4	.6		8	0		
868	3-14	"				4.78	1.2	.6		6	0		
869	3-16	Ingram	6.5	2.01	.50	4.77	1.0	.6		4	0	205P 220P	FC28
870	3-21	O.J. Wittman				4.79	1.1	.6		6	0		
871	3-23	Ingram	7.0	2.07	.55	4.77	1.1	.6		4		218P 233P	FC28
872	3-28	Samuel Tucker				4.99	4.4	.6		15	0		
873	3-30	Ingram	7.0	2.54	.86	4.88	2.2	.6		5	0	206P 214P	FC28
874	4-7	Samuel Tucker				4.84	1.8	.6		12	0		
875	4-13	"				4.82	1.4	.6		13	0		
876	4-13	Ingram	9.0	3.57	.62	4.82	2.2	.6		5	0	328P 335P	FC28
877	4-19	Samuel Tucker				4.74	.60	.6		10	0		
878	4-20	Ingram	6.0	1.71	.33	4.75	.70	.6		4	0	255P 302P	FC28
879	4-25	Samuel Tucker				4.75	.70	.6		10	0		
880	4-26	Lindsay	6.5	2.05	.49	4.74	1.0	.6		5	0	1115A 1122A	FC28
881	5-3	Samuel Tucker				4.69	.31	.6		8	0		
882	5-4	Lindsay	5.0	.77	.45	4.70	.35	.6		5	0	445F 452F	FC28
883	5-9	Samuel Tucker				4.67	.20						
884	5-11	Lindsay	5.0	.80	.45	4.68	.36	.6		5	0	925A 930A	FC28
885	5-17	Samuel Tucker				4.70	.42	.6		10	0		
886	5-18	Lindsay	5.0	.86	.52	4.70	.45	.6		5	0	1113A 1120A	FC28
887	5-23	Samuel Tucker				4.65	.13	.6		8	0		
888	5-25	Lindsay	4.3	.53	.28	4.66	.15	.6		5	0	918A 923A	FC28
889	5-29	Samuel Tucker					.06	.6		5	0		
890	6-5	O.J.Wittman				4.73	.16	.6		3	0		
891	6-14	"				4.57	.03		Float				
892	6-20	"				4.61	.01		Est.				
893	9-25	Ebert-Dalton				5.52	50.			14	0		
894		O.J.Wittman				5.39	35	.6		13	.02		
895	9-26	Lord-Ebert				5.08	7.0	.6					
896	9-28	Lindsay	7.5	2.31	.57	4.90	1.3	.6		7	0	252P 300P	FC28
897	9-29	O.J.Wittman				4.86	1.3	.6		7	0		

F. C. Dist. Form 12

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

Sta. No U6R

Daily discharge, in second-feet of ROGERS CREEK near Azusa for the year ending September 30, 19 39

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar	Apr.	May	June	July	Aug.	Sept
1	E 0.1	E 0.2	E 0.2	E 1.6	1.3	1.5	2.4	0.6	E 0.2	0		0
2	E 0.1	E 0.2	E 0.2	E 1.6	1.3	1.5	4.0	0.7	E 0.2	0		0
3	E 0.1	E 0.2	E 0.2	E 1.6	5.5	1.7	2.9	0.4	E 0.2	0		0
4	E 0.1	E 0.2	E 0.2	E 1.8	6	1.7	2.6	0.4	E 0.2	0		0
5	E 0.1	E 0.2	E 0.2	1.3	5	1.5	2.6	0.4	E 0.2	E 0.2		0
6	E 0.1	E 0.2	E 0.2	E 6	4.4	1.4	2.4	0.4	E 0.2	E 0.1		0
7	E 0.1	E 0.2	E 0.2	E 5	3.7	1.4	2.1	0.6	E 0.1	E 0.1		0
8	E 0.2	E 0.2	E 0.2	E 4.0	3	1.4	1.7	1.0	E 0.1	0		0
9	E 0.2	E 0.2	E 0.2	E 3.5	4.4	1.6	1.7	0.8	E 0.1	0		0
10	E 0.2	E 0.2	E 0.2	3.1	4.4	2.4	1.7	0.4	E 0.1	0		0
11	E 0.2	E 0.2	E 0.2	2.8	4.0	E 1.6	1.5	0.4	E 0.1	0		0
12	E 0.2	E 0.2	E 0.2	2.3	3.7	E 1.5	1.5	0.4	E 0.1	0		0
13	E 0.2	E 0.2	0.2	2.3	3.4	1.3	1.8	1.6	0	0		0
14	E 0.2	E 0.2	0.7	1.9	3.1	1.2	2.1	1.7	0	0		0
15	E 0.7	E 0.2	6.5	1.9	2.5	1.1	1.8	0.9	0	0		0
16	E 0.2	E 0.2	5	1.9	2.2	1.0	1.8	0.6	0	0		0
17	E 0.2	E 0.2	2.7	1.6	2.8	1.0	1.7	0.5	0	0		0
18	E 0.2	E 0.2	2.6	1.6	2.5	1.0	1.2	0.4	0	0		0
19	E 0.2	E 0.2	3.1	1.6	2.2	1.0	0.8	0.3	0	0		0
20	E 0.2	E 0.2	3.0	1.6	2.2	1.0	0.7	0.2	0	0		0
21	E 0.2	E 0.2	1.5	6.5	1.8	1.1	0.7	E 0.2	0	0		0
22	E 0.2	E 0.2	6	5.5	1.7	1.1	0.7	E 0.1	0	0		0
23	E 0.2	E 0.2	E 4.0	2.8	1.7	1.1	0.8	E 0.1	0	0		0
24	E 0.2	E 0.2	E 3.5	2.2	1.7	1.1	0.8	E 0.2	0	0		E 8
25	E 0.2	E 0.2	E 3.0	2.2	1.5	1.1	0.9	E 0.2	0	0		27
26	E 0.2	E 0.2	E 2.5	1.9	1.5	3.0	0.8	E 0.2	0	0		14
27	E 0.2	E 0.2	E 2.0	1.9	1.5	6	0.7	E 0.2	0	0		29
28	E 0.2	E 0.2	E 1.7	2.6	1.5	4.9	0.6	E 0.1	0	0		15
29	E 0.2	E 0.2	E 1.6	2.5		2.9	0.6	E 0.1	0	0		12
30	E 0.2	E 0.2	E 1.6	3.5		2.4	0.4	E 0.1	0	0		0.8
31	E 0.2		E 1.6	2.2		2.1		E 0.2		0		
	6.0	6.0	147.0	94.5	85.5	55.0	46.0	14.4	1.8	0.4		554
MEAN	0.19	0.20	4.74	3.05	3.05	1.77	1.53	0.46	0.06	0.01	0	1.85
ACRE-FEET	12	12	292	187	170	109	91	29	3.6	0.8	0	110

Remarks: E indicates discharge estimated - see station description.

YEAR OR PERIOD MEAN 1.40
ACRE FEET 1020

STATION U15R

SAN ANTONIO CREEK near Claremont, Calif.

LOCATION:

Water-stage recorder and concrete control, lat. 34°12'50", long. 117°40'00", in NW¼SE¼ sec. 36, T. 2 N., R. 8 W., at highway bridge, half a mile upstream from Southern California Edison Company's Sierra power plant, and 8 miles northeast of Claremont. New concrete recorder house and control placed in operation Jan. 11. Altitude, about 3,400 feet.

DRAINAGE AREA:

16.9 square miles.

RECORDS AVAILABLE:

March 1901 to September 1939.

AVERAGE DISCHARGE:

22 years (1917-1939), 10.3 second-feet. Average combined discharge of creek and canal, 22 years (1917-1939), 22.6 second-feet.

EXTREMES:

Maximum discharge during year, 380 second-feet, September 25; minimum, 0.7 second foot at various times.
1917-1939: Maximum discharge, 17,800 second-feet, March 2, 1938, by rainfall-runoff studies; minimum, less than 0.1 second-foot for several days during October 1934.

REMARKS:

Records good, except those for periods Nov. 19-29, December 1-13, and January 8-10, which were interpolated and the results compared with discharge on nearby stations, and are fair. Southern California Edison Co.'s canal diverts water above station.

F. C. D. FORM 104 500 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. U15R

DISCHARGE MEASUREMENTS OF SAN ANTONIO CREEK

NEAR Claremont, California DURING THE YEAR ENDING SEPTEMBER 30, 1939

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Permit Dist.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
743	10-5	S.Tucker				7.95	17		.6	11	0		
744	10-19	"				7.94	14		.6	11	0		
745	11-2	"				7.95	13		.6	12	0		
746	11-16	"				7.95	13		.6	11	0		
747	11-30	"				7.93	11		.6	10	0		
748	12-14	S. Tucker				7.95	13		.6	12	0		
749	1-11	K.R.Melin				1.72	13		.6	9			
750	1-24	G.I.Lang				1.68	14		.6	10	0		
751	2-3	"				1.71	16		.6	11	0		
752	2-10	"				1.69	15		.6	11	0		
753	2-17	"				1.63	16		.6	9	0		
754	2-24	"				1.65	14		.6	11	0		
755	3-3	"				1.65	16		.6	11	0		
756	3-10	"				1.71	16		.6	12	0		
757	3-15	"				1.72	15		.6	11	0		
758	3-21	Lang-Melin				1.74	16		.6	12	0		
759	3-31	G.I.Lang				1.83	20		.6	11	0		
760	4-7	"				1.89	24.		.6	12	0		
761	4-14	"				2.00	30.		.6	12	0		
762	4-21	"				1.95	29		.6	12	0		
763	4-29	"				1.94	24		.6	12			
764	5-5	"				1.93	26		.6	12	0		
765	5-12	"				1.90	23		.6	12	0		
766	5-19	"				1.86	22		.6	12	0		
767	5-31	K.R. Melin				1.79	17		.6	15	0		
768	6-10	"				1.77	15		.6	11	0		
769	6-16	"				1.72	14		.6	12	0		
770	6-23	Oliver-Melin				1.44	7.0		.6				
771	6-26	K.R.Melin				1.67	10		.6	29			
772	6-26	"				1.71	12		.6	11			
773	6-26	"				1.72	13		.6	11			
774	7-6	"				1.71	12		.6	10			
775	7-17	"				1.67	11		.6	17	0		
776	7-27	"				1.66	10		.6	19			
777	8-7	"				1.60	10		.6	20			
778	8-15	"				1.02	1.3						
779	8-25	"				1.00	1.2		.6				
780	9-8	G.I.Lang				1.02	1.2		.6	6			
781	9-15	"				1.01	1.1		.6	5	0		
782	9-22	"				0.98	1.0		.6	6	0		
783	9-24	K.R.Melin				1.05	1.5		.6	4	0		
784	9-27	"				1.85	21.						

F. C. Dist. Form 58

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

Sta. No. U15R

Daily discharge, in second-feet of SAN ANTONIO CREEK near Claremont, for the year ending September 30, 1939

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17	13	E 12	18	14	15	21	24	17	6	10	12
2	17	13	E 12	17	14	15	23	25	17	5.5	11	12
3	17	13	E 13	17	15	16	23	25	17	5.5	11	12
4	17	13	E 13	17	16	16	23	25	17	6	11	12
5	17	13	E 13	24	15	15	24	26	17	8.5	11	12
6	17	16	E 13	20	15	15	24	26	16	12	11	12
7	17	15	E 13	17	15	15	24	24	16	13	11	12
8	17	15	E 14	E 15	16	14	26	24	16	13	10	12
9	16	15	E 14	E 15	16	15	26	23	15	11	10	11
10	16	14	E 14	E 14	15	16	26	23	15	11	6	12
11	16	14	E 14	E 14	16	15	28	23	15	11	1.8	13
12	16	13	E 14	14	15	15	29	23	15	11	1.8	12
13	16	13	E 14	14	15	15	30	23	12	11	1.7	13
14	15	13	E 14	14	15	15	30	22	11	11	1.8	12
15	15	13	18	14	16	15	30	22	12	11	1.5	12
16	15	13	17	14	16	15	30	22	10	11	1.5	11
17	14	13	16	14	16	15	30	22	14	11	1.5	11
18	14	14	27	14	16	15	30	22	14	11	1.3	10
19	14	E 14	37	14	15	15	30	21	14	11	1.4	10
20	14	E 14	29	14	15	16	30	20	12	11	1.3	11
21	14	E 13	24	15	15	16	30	20	9.5	11	1.3	10
22	14	E 13	22	14	14	16	29	20	7	10	1.2	10
23	14	E 13	21	14	14	16	28	19	7	10	1.3	0.9
24	14	E 13	20	14	14	16	28	19	7	10	1.3	2.6
25	14	E 12	19	13	14	16	27	18	7	10	1.3	122
26	14	E 12	19	13	14	18	26	18	11	10	1.2	46
27	13	E 12	18	13	15	18	25	18	9.5	10	1.2	20
28	13	E 12	18	13	15	18	25	18	6	10	1.2	13
29	13	E 12	18	14		18	24	17	10	10	1.2	11
30	13	12	18	14		19	24	17	9.5	10	1.2	12
31	13		18	15		19		17		10	1.2	
	466	398	546	466	421	493	803	666	375.5	310.5	131.2	252.9
MEAN	15.0	13.3	17.6	15.0	15.0	15.9	26.8	21.5	12.5	10.0	4.23	8.43
ACRE-FEET	924	789	1080	924	835	978	1590	1320	745	616	260	502

Remarks: E indicates discharge estimated - see station description.

YEAR OR PERIOD MEAN 14.6 ACRE-FEET 10560

STATION U10R

SAN DIMAS CREEK near San Dimas, Calif.

LOCATION:

Water-stage recorder, lat. 34°08'45", long.117°46'35", in SW¼NE¼ sec. 25, T. 1 N., R. 9 W., at mouth of San Dimas Canyon, 3 miles northeast of San Dimas. Altitude, about 1,245 feet.

DRAINAGE AREA:

18.3 square miles.

RECORDS AVAILABLE:

December 1916 to September 1939. April to September 1916, discharge measurements only.

AVERAGE DISCHARGE:

22 years (1917-1939), 4.37 second-feet.

EXTREMES:

Maximum discharge during year, 23 second-feet Jan. 10; minimum discharge 0.1 second-foot Sept. 19.
1916-1939: Maximum discharge, about 4,250 second-feet March 2, 1938; no flow for several months during most years.

REMARKS:

Records good. Discharge Nov. 22 to Dec. 31 computed on basis of 18 discharge measurements and record of release from flood-control reservoir. Flood-control dam above gage regulates flow. San Dimas Water Co. diverts just below gage for irrigation. Some measurements furnished by Los Angeles County Flood Control District.

F.C.D. FORM 104 IN 8-37

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. U10R

DISCHARGE MEASUREMENTS OF SAN DIMAS CREEK

AT OR NEAR San Dimas, California DURING THE YEAR ENDING SEPTEMBER 30, 1939

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	RATING PERCENT DIFF.	METHOD	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
1021	10-6	Brewster	6.0	1.24	1.25	0.37	1.6		.6	5	0	435P / 442P	FC8
1022	10-12	Samuel Tucker				0.46	2.0		.6	8	0		
1023	10-13	Brewster	8.0	1.48	1.20	0.48	1.8		.6	4	0	322P / 330P	FC8
1024	10-20	"	6.0	1.12	1.66	0.48	1.9		.6	6	0	410P / 420P	"
1025	10-26	Samuel Tucker				0.46	2.0		.6	9	0		
1026	10-27	Brewster	4.0	.89	1.37	0.47	1.2		.6	4	0	315P / 322P	FC8
1027	11-2	Samuel Tucker				0.54	3.3		.6	8	0		
1028	11-3	Brewster	5.0	1.02	1.31	0.55	1.3		.6	5	0	340P / 347P	FC8
1029	11-9	Samuel Tucker				0.52	3.3		.6	12	0		
1030	11-10	Brewster	5.0	1.04	1.75	0.55	1.8		.6	5	0	337P / 345P	FC8
1031	11-17	"	5.0	.98	1.09	0.51	1.1		.6	5	0	345P / 352P	"
1032	11-21	Samuel Tucker				0.51	2.8		.6	8	0		
1033	11-23	Brewster	4.0	1.18	1.19	-	1.4		.6	4		330P / 337P	FC8
1034	11-30	Samuel Tucker					1.9		.6	12			
1035	12-1	Brewster	6.5	1.53	1.64		2.5		.6	7		320P / 332P	FC8
1036	12-7	Samuel Tucker					2.0		.6	10			
1037	12-8	Brewster	5.0	1.12	1.20		1.3		.6	5		320P / 330P	FC8
1038	12-14	Samuel Tucker					2.3		.6	9			
1039	12-15	Brewster	4.0	.70	.40		0.28		.6	4		420P / 426P	FC8
1040	12-18	R.S. Lord					0.50		.6				
1041	12-18	Brewster-Pettis	50	1.10	1.05		1.2		.6	5		945P / 955P	FC8
1042	12-19	R.S. Lord					24.						
1043	12-19	Brewster-Pettis	14.0	9.83	2.96		29.		.6	9		130P / 145P	FC8
1044	12-20	" "	12.0	10.13	2.61		26.		.6	8		1005A / 1020A	"
1045	12-22	Brewster-Pettis	10.0	5.92	2.16		13		.6	6		415P / 425P	FC8
1046	12-29	O.J.Wittman					4.2		.6				
1047	12-29	Brewster	5.0	2.68	1.35		3.6			5		335P / 345P	FC8
1048	1-5	O.J.Wittman				1.00	15.		.6	15	-.14		
1049	1-5	Brewster-Pettis	5.0	2.60	1.47	0.57	3.8		.6	5	-.05	410P / 420P	FC8
1050	1-9	O.J.Wittman				0.08	0.44		.6	4	0		
1051	1-12	Brewster	15.0	10.52	1.70	1.06	18.		.6	8	0	335P / 350P	FC8
1052	1-16	O.J.Wittman				0.48	4.3		.6	8			
1053	1-19	Brewster	9.0	4.03	1.27	0.57	5.1		.6	9	0	325P / 340P	FC8
1054	1-21	O.J. Wittman				0.11	0.65		.6	5			
1055	1-24	"				0.07	0.36		.6	5			
1056	1-26	Brewster	1.2	.45	.91	0.05	0.41		.6	3	0	430P / 435P	FC8
1057	2-2	O.J.Wittman				0.07	0.35		.6	5			
1058	2-2	Brewster	1.3	.50	.86	0.07	0.43		.6	3	0	406P / 410P	FC8
1059	2-3	O.J.Wittman				0.24	1.7		.6	8	0		
1060	2-7	"				0.12	0.75		.6	6	0		
1061	2-9	Brewster	5.0	1.08	.71	0.13	0.75		.6	5	0	323P / 330P	FC8
1062	2-14	O.J.Wittman				0.11	0.27		.6	5	0		
1063	2-16	Brewster	1.5	.47	.81	0.08	0.38		.6	3	0	300P / 305P	FC8
1064	2-21	O.J.Wittman				0.44	4.1		.6	11	0		
1065	2-23	Brewster	6.0	2.67	1.27	0.43	3.4		.6	6	0	352P / 401P	FC8
1066	3-1	O.J.Wittman				0.46	3.9		.6	8	0		
1067	3-2	Brewster	6.0	2.86	1.20	0.44	3.4		.6	6	0	405P / 414P	FC8
1068	3-7	O.J.Wittman				0.40	3.8		.6	8	0		
1069	3-9	Brewster	6.0	2.70	1.27	0.39	3.4		.6	6		405P / 415P	FC8
1070	3-14	O.J.Wittman				0.47	4.3		.6	8	0		
1071	3-16	Brewster	6.0	3.23	1.36	0.49	4.4		.6	6	0	320P / 330P	FC8
1072	3-21	O.J.Wittman				0.35	3.0		.6	8	0		
1073	3-23	Brewster	7.0	2.63	0.74	0.34	2.0		.6	7	0	420P / 432P	FC8
1074	3-24	Lind	2.2	0.77	2.71	0.33	2.1		.6	5		115P / 120P	FC19
1075	3-28	Samuel Tucker				0.35	2.5		.6	13			
1076	3-30	Brewster	6.0	2.26	1.14	0.34	2.6		.6	6	0	415P / 425P	FC8
1077	3-31	Lind	2.25	0.71	2.68	0.34	1.9		.6	5	0	135P / 141P	FC19
1078	4-6	Brewster	2.0	0.67	0.81	0.13	0.55		.6	4	0	432P / 438P	FC8
1079	4-7	Samuel Tucker				0.13	0.49		.6	7	0		
1080	4-13	"				0.13	0.55		.6	8	0		
1081	4-13	Brewster	2.0	0.75	0.68	0.12	0.50		.6	4	0	335P / 340P	FC8
1082	4-19	Samuel Tucker				0.13	0.37		.6	7	0		
1083	4-20	Brewster	2.0	0.72	0.74	0.13	0.55		.6	4	0	350P / 355P	FC8
1084	4-27	Samuel Tucker				0.42	2.3		.6	10	0		
1085	4-27	Brewster	4.0	1.87	1.33	0.42	2.5		.6	4	0	540P / 546P	FC8
1086	5-3	Samuel Tucker				0.40	3.2		.6	11	0		
1087	5-4	Brewster	4.0	2.87	1.16	0.40	3.3		.6	4	0	400P / 408P	FC8
1088	5-5	Lind	2.3	0.86	2.74	0.40	2.4		.6	5	0	1245P / 1253P	FC19
1089	5-11	S. Tucker				0.52	4.6		.6	13	0		
1090	5-11	Brewster	4.0	3.38	1.40	0.53	4.7		.6	4		505P / 515P	FC8
1091	5-17	S.Tucker				0.50	4.3		.6	13			
1092	5-18	Brewster	4.0	3.26	1.30	0.50	4.2		.6	4	0	420P / 426P	FC8

F. C. D. FORM 104 500 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. U10R

DISCHARGE MEASUREMENTS OF SAN DIMAS CREEK

AT OR NEAR San Dimas, California DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
1093	5-20	S.Tucker				0.61	6.2		.6	9			
1094	5-25	Brewster	4.0	3.89	1.34	0.60	5.2		.6	4	0	325P / 333P	FC8
1095	5-26	Lind	2.5	1.20	4.17	0.59	5.0		.6	5		130P	FC19
1096	5-29	S. Tucker				0.59	6.1		.6	10			
1097	6-1	Brewster	4.0	3.81	1.34	0.59	5.1		.6	4	0	435P / 442P	FC8
1098	6-2	Lind	2.5	1.25	4.25	0.58	5.3		.6	5		110P / 118P	FC19
1099	6-6	O.J.Wittman				0.59	6.1		.6	9			
1100	6-8	Brewster	5.0	4.30	1.25	0.59	5.4		.6	5	0	355P / 403P	FC8
1101	6-9	Lind	2.5	1.26	3.78	0.59	4.8		.6	5	0	1215P / 1223P	FC19
1102	6-14	O.J.Wittman				0.60	5.8		.6	9			
1103	6-14	Brewster	6.0	4.71	1.21	0.60	5.7		.6	6	0	320P / 330P	FC8
1104	6-20	O.J.Wittman				0.58	5.6		.6	9			
1105	6-21	Lindsay	6.0	4.32	1.12	0.58	4.8		.6	7	0	440P / 448P	FC28
1106	6-23	Lind	6.0	3.00	1.11	0.44	3.3		.6	11		100P	FC19
1107	6-27	O.J.Wittman				0.44	3.6		.6	10			
1108	6-29	Brewster	7.0	3.78	0.94	0.43	3.5		.6	7		410P / 420P	FC8
1109	7-5	O.J.Wittman				0.40	3.4		.6	9			
1110	7-6	Brewster	6.0	3.19	0.85	0.39	2.7		.6	6	0	320P / 330P	FC8
1111	7-13	"	6.0	3.22	0.89	0.39	2.8		.6	6	0	545P / 555P	"
1112	7-14	O.J.Wittman				0.39	2.8		.6				
1113	7-18	"				0.40	2.6		.6	10			
1114	7-20	Brewster	6.0	3.23	0.86	0.39	2.8		.6	6	0	610P / 620P	FC8
1115	7-25	Wittman - McClelland				0.37	2.2		.6	10			
1116	7-27	Brewster	6.0	3.05	0.81	0.36	2.5		.6	6	0	320P / 329P	FC8
1117	8-1	O.J.Wittman				0.33	2.3		.6	8			
1118	8-3	Brewster	6.5	2.89	0.71	0.31	2.1		.6	7	0	245P / 255P	FC8
1119	8-8	O.J.Wittman				0.30	1.6		.6	7			
1120	8-10	Brewster	6.0	2.63	0.71	0.30	1.9		.6	6	0	302P / 311P	FC8
1121	8-15	O.J.Wittman				0.22	1.1		.6	6			
1122	8-17	Brewster	5.5	1.63	0.62	0.20	1.0		.6	6	0	335P / 345P	FC8
1123	8-23	O.J.Wittman				0.19	0.95		.6	8			
1124	8-24	Brewster	5.5	1.66	0.60	0.20	1.0		.6	6	0	300P / 310P	FC8
1125	8-28	O.J.Wittman				0.20	0.89		.6	8			
1126	8-31	Brewster	5.5	1.58	0.60	0.19	0.95		.6	7	0	237P / 250P	FC8
1127	9-7	"	5.5	1.49	0.58	0.19	0.85		.6	6	0	250P / 300P	"
1128	9-12	O.J.Wittman				0.04	0.23		.6	5			
1129	9-14	Brewster	1.5	0.24	0.58	0.00	0.14		.6	3		302P / 307P	FC8
1130	9-19	O.J.Wittman				0.05	0.08		.6	4			
1131	9-21	Brewster	1.0	0.24	0.38	0.01	0.09		.6	2		230P / 233P	FC8
1132	9-24	K.R.Melin				0.20	0.47		.6	4			
1133	9-25	O.J.Wittman				0.29	1.4		.6	5			
1134	9-28	Brewster	1.5	0.36	0.67	0.09	0.24		.6	3		330P / 335P	FC8

F. C. Dist. Form 52

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

Sta. No. U10R

Daily discharge, in second-feet of SAN DIMAS CREEK near San Dimas, for the year ending September 30, 19 39

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.5	2.4	E 2.5	9.5	0.4	4.0	2.5	3.5	5.5	4.0	2.2	0.9
2	1.4	2.2	E 2.6	16	0.4	3.9	2.6	3.5	5.5	3.2	2.2	0.9
3	1.4	2.3	E 2.4	20	1.2	3.8	2.5	3.4	6	3.2	2.2	0.9
4	1.4	2.3	E 2.2	7	1.4	3.7	2.5	3.3	6	3.2	2.1	0.9
5	1.5	2.4	E 2.2	2.5	0.9	3.5	1.7	3.3	6	3.1	2.0	0.9
6	1.6	2.3	E 2.1	6	0.8	3.5	0.6	3.2	6	3.0	1.9	0.9
7	1.7	2.3	E 2.0	4.7	0.7	3.3	0.6	3.1	6	3.0	1.9	0.9
8	1.7	2.3	E 1.5	0.7	1.4	3.2	0.6	3.1	6	2.9	1.8	0.9
9	1.9	2.3	E 1.4	12	0.8	3.1	0.6	3.1	6	2.9	1.8	0.9
10	2.0	2.5	E 1.4	22	0.8	2.4	0.6	3.2	6	2.9	1.8	0.9
11	1.9	2.6	E 1.4	20	0.7	4.1	0.6	3.9	6	2.8	1.6	0.9
12	1.8	2.4	E 1.5	18	0.7	4.0	0.6	4.5	6	2.7	1.2	0.4
13	2.0	2.4	E 2.0	12	0.6	4.1	0.6	4.5	6	2.7	1.1	0.2
14	2.2	2.6	E 2.5	4.9	0.6	4.1	0.6	4.3	6	2.7	1.1	0.4
15	2.9	2.4	E 0.3	2.2	0.6	5	0.5	4.3	6	2.7	1.1	0.4
16	2.5	2.3	E 0.4	4.5	0.5	4.4	0.5	4.3	6	2.7	1.1	0.4
17	2.6	2.0	E 0.4	4.1	0.5	4.4	0.5	4.3	6	2.7	1.0	0.2
18	2.4	1.8	E 0.5	4.5	0.6	4.4	0.5	4.3	6	2.8	0.9	0.2
19	2.2	1.7	E 2.8	4.1	0.6	4.4	0.5	4.3	6	2.8	0.9	0.1
20	2.0	1.5	E 2.6	2.7	4.0	3.5	0.6	5.5	5.5	2.6	0.9	0.2
21	2.0	1.7	E 2.0	0.9	5	2.5	0.6	6	5.5	2.7	0.9	0.2
22	2.0	E 1.5	E 1.3	0.6	3.8	2.4	0.6	5.5	4.5	2.7	0.9	0.2
23	2.0	E 1.5	E 8	0.4	3.8	2.4	1.3	5.5	3.8	2.5	1.1	0.2
24	2.0	E 1.6	E 6	0.4	3.7	2.4	2.3	5.5	3.8	2.4	1.1	0.3
25	1.9	E 1.6	E 5	0.3	4.7	2.4	2.4	5.5	3.8	2.4	1.0	1.2
26	1.7	E 1.7	E 7	0.3	4.9	2.6	2.4	5.5	3.8	2.3	0.9	0.5
27	1.7	E 1.7	E 6	0.3	4.5	2.9	2.4	5.5	3.8	2.3	0.9	0.3
28	1.8	E 1.8	E 5	0.4	4.4	2.6	2.8	5.5	3.8	2.4	0.9	0.2
29	2.0	E 1.8	E 4.2	0.4		2.5	3.7	6	3.8	2.3	0.9	0.2
30	2.2	E 1.9	E 4.3	0.5		2.5	3.5	6	4.1	2.2	0.9	0.2
31	2.1		E 4.4	0.6		2.5		6		2.2	0.9	
	60.0	61.8	166.2	182.5	53.0	104.5	42.3	139.4	159.2	85.2	41.2	15.9
MEAN	1.94	2.06	5.36	5.89	1.89	3.37	1.41	4.50	5.31	2.75	1.33	0.53
ACRE-FEET	119	123	330	362	105	207	84	276	316	169	82	32

Remarks: E indicates discharge estimated - see station description.

YEAR OR PERIOD — MEAN 3.04 — ACRE-FEET 2200

STATION U8R

SAN GABRIEL RIVER near Azusa, Calif.

LOCATION:

Water-stage recorder, lat.34°10'10", long.117°53'16", in SW¼ sec. 13, T. 1 N., R. 10W., 1 mile below Morris dam and 3 miles northeast of Azusa. Prior to Feb. 8, station was located about ¼ mile upstream.

DRAINAGE AREA:

211 square miles.

RECORDS AVAILABLE:

1894 to September 1939.

AVERAGE DISCHARGE:

43 years (1896-1939), 113 second-feet. Average combined discharge of river and diversions, adjusted for storage and evaporation in Morris Reservoir and San Gabriel River flood-control reservoirs 1 and 2, 44 years (1895-1939), 160 second-feet.

EXTREMES:

Maximum daily discharge during year, 316 second-feet July 16; minimum daily, 6.5 second-feet Feb. 15. 1894-1939: Maximum discharge, 65,700 second-feet Mar. 2, 1938, computation of flow over spillway at Morris Dam; no flow for several months each year during period 1894-1936.

REMARKS:

Records good. Discharge figures for period Oct. 1 to Feb. 7 furnished by City of Pasadena. Results of some discharge measurements furnished by Los Angeles County Flood Control District. During the year, flow at the station was completely regulated by releases from Morris Reservoir of Pasadena Water Department. Azusa canal (formerly power canal of Southern California Edison Company) diverts above high-water line of Morris Reservoir at point about 3 miles above station.

The following table of combined monthly discharge (converted to acre-feet) of river and diversions, corrected for storage and evaporation in Morris Reservoir and San Gabriel River Flood Control Reservoirs Nos. 1 and 2, furnished by City of Pasadena, is comparable to combined discharge of San Gabriel River and Southern California Edison Company's canal as published for 1894-1933 in the Water Supply Papers of the U. S. Geological Survey, Water Resources Branch:

Month	Acre-feet
October	3406
November	3060
December	12405
January	7879
February	6425
March	7432
April	7907
May	4541
June	3429
July	2417
August	1862
September	6439
Water year 1938-39	67202

Station owned and operated by the U. S. G. S. Water Resources Branch. The Los Angeles County Flood Control District cooperates with the U. S. G. S. to the extent of making meter measurements at various times.

F. C. D. FORM 104 500 8-38

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. U8R

DISCHARGE MEASUREMENTS OF SAN GABRIEL RIVER

AT NEAR Azusa, California DURING THE YEAR ENDING SEPTEMBER 30, 1939

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Permit Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
1247	10-3	Samuel Tucker				8.99	75		.6	15			
1247A	10-5	DeVore-Middleton	31.5	39.90	1.79	8.66	71		.6	11	0	150P / 213P	FC29
1248	10-10	Samuel Tucker				8.59	71		.6	15			
1248A	10-12	DeVore	30.5	38.79	1.73	8.60	67		.6	11	+.03	132P / 150P	FC29
1249	10-17	Samuel Tucker				8.23	73		.6	16			
1249A	10-19	Middleton	30.7	38.44	1.62	6.22	62		.6	13	0	1002A / 1027A	FC29
1250	10-24	Samuel Tucker					70		.6	16			
1250A	10-26	Middleton-DeVore	29.8	36.64	1.60		59		.6	11	0	316P / 330P	FC29
1251	10-31	Samuel Tucker					60		.6	16			
1251A	11-2	Middleton-DeVore	30.6	36.15	1.53		55		.6	12	0	245P / 257P	FC29
1252	11-7	Samuel Tucker					63		.6	16			
1252A	11-9	Middleton-DeVore	29.9	35.92	1.71		61		.6	11	0	146P / 200P	FC29
1253	11-14	Samuel Tucker					60		.6	16			
1253A	11-16	Middleton-Brown	30.7	37.52	1.56		58		.6	11	0	138P / 152P	FC29
1254	11-21	Samuel Tucker					59		.6	16			
1254A	11-23	Middleton	31.0	37.85	1.65		62		.6	12	0	1003A / 1027A	FC29
1255	11-28	Samuel Tucker					59		.6	16			
1255A	11-30	Middleton	30.0	36.74	1.54		56		.6	12	0	215P / 236P	FC29
1256	12-5	Samuel Tucker					63		.6	14			
1256A	12-7	Middleton	41.8	63.24	.91		58		.6	13	0	336P / 404P	FC11
1257	12-12	Samuel Tucker					60		.6	14			
1257A	12-16	Middleton	42.4	37.64	1.70		64		.6	14	0	1030A / 1050A	FC29
1257B	12-22	Middleton-M.Middleton	44.0	45.33	1.80		82		.6	14		325P / 345P	"
1257C	12-29	Brown-Middleton	49.0	48.88	2.13		104		.6	14		148P / 206P	FC29
1257D	1-6	Middleton	60.0	79.23	2.75		218		.6	15		1120A / 1146A	"
1258	1-9	O.J.Wittman					9.9		.6	21			
1258A	1-12	Middleton	10.3	5.03	1.40		7.0		.6	11		750A / 810A	FC29
1259	1-16	O.J.Wittman					9.1		.6	21			
1259A	1-19	Middleton	9.8	4.65	1.16		5.4		.6	10		756A / 814A	FC29
1259B	1-19	Lindsay	29.0	15.90	0.47		7.5		.6	10		1000A / 1015A	FC13
1260	1-24	O.J.Wittman					8.7		.6	19			
1260A	1-26	Lindsay	29.0	15.58	0.52		8.0		.6	9		840A / 850A	FC28
1261	1-31	O.J.Wittman					7.7		.6	22			
1261A	2-2	Lindsay	27.0	14.63	0.38		5.6		.6	9		320P / 330P	FC28
1262	2-7	O.J.Wittman				3.37	6.1		.6	16	0		
1263	2-9	Lindsay	28.0	15.93	0.38	3.40	6.1		.6	9	0	500P / 510P	FC28
1264	2-14	O.J.Wittman				4.09	76		.6 .2-8	19	0		
1265	2-21	"				3.39	6.9		.6	18	0		
1266	2-23	Lindsay-Ingram	27.0	14.69	0.31	3.39	4.5		.6	9		408P / 420P	FC28
1267	3-1	O.J.Wittman				3.41	5.8		.6	18	0		
1268	3-2	Lindsay	25.0	14.37	0.29	3.42	4.2		.6	8	0	327P / 335P	FC28
1269	3-7	O.J.Wittman				3.41	7.5		.6	20			
1270	3-9	Lindsay	26.0	14.22	0.23	3.42	3.3		.6	7	0	347P / 355P	FC28
1271	3-14	O.J.Wittman				3.45	8.5		.6	19	0		
1272	3-16	Ingram	31.0	15.82	0.45	3.46	7.2		.6	7	0	300P / 315P	FC28
1273	3-21	O.J.Wittman				3.44	9.2		.6	18	0		
1274	3-23	Ingram	11.5	5.07	1.56	3.44	7.9		.6	6	0	325P / 336P	FC28
1275	3-28	Samuel Tucker				3.44	8.5		.6	15	0		
1276	3-30	Ingram	11.0	6.0	1.28	3.44	7.7		.6	6	0	315P / 324P	FC28
1277	4-6	Lindsay	15.8	7.46	1.49	3.50	11.		.6	8	0	355P / 405P	"
1278	4-7	Samuel Tucker				3.41	6.8		.6	11	0		
1279	4-13	"				3.40	6.5		.6	11	0		
1280	4-13	Ingram	21.	14.16	.66	3.40	9.3		.6	6	0	407P / 418P	FC28
1280A	4-19	Pasadena Water Dept.					9.9						
1281	4-19	Samuel Tucker				3.40	6.5		.6	11	0		
1282	4-20	Ingram	13.5	5.69	1.34	3.41	7.6		.6	7	0	350P / 400P	FC28
1283	4-25	Samuel Tucker				3.40	8.3		.6	14	0		
1284	4-26	Lindsay	14.5	6.39	1.04	3.40	6.6		.6	9		1025A / 1035A	FC28
1285	5-3	Samuel Tucker				3.42	7.3		.6	15	0		
1286	5-4	Lindsay	15	5.79	1.26	3.42	7.3		.6	9	0	400P / 410P	FC28
1287	5-9	Ingram	18.0	9.26	.98	3.39	9.0		.6	5	0	1150A / 1158A	FC2
1288	5-9	Samuel Tucker				4.28	100.		.6	12	0		

F. C. D. FORM 104 200 8-38

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. U8R

DISCHARGE MEASUREMENTS OF SAN GABRIEL RIVER

AT NEAR Azusa, California DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
1289	5-9	Ingram-Keim	23	26.42	3.96	4.29	105		.6	8	0	555P / 605P	FC2
1290	5-10	Brewster-Ingram	77.0	77.55	3.23	4.67	250		.6	13	0	1057A / 1114A	FC8
1291	5-11	Lindsay	Two channels			4.67	241		.6	11	0	840A / 903A	FC28
1292	5-11	Samuel Tucker				4.67	245		.6	16	0		
1293	5-13	Ingram-Lindsay				4.63	233		.6	8	0	835A / 900A	FC2
1294	5-14	Ingram	31.5	30.94	3.81	4.56	194		.6	12	0	840A / 920A	"
1295	5-15	"	32	30.76	3.27	4.51	166		.6	10	0	840A / 906A	" "
1296	5-16	Ingram	31.0	34.51	2.72	4.22	94		.6	8	0	940A / 1000A	FC2
1297	5-17	Samuel Tucker				3.34	10		.6	12	0		
1298	5-18	Lindsay	23	14.89	0.48	3.32	7.1		.6	9	0	1030A / 1040A	FC28
1299	5-22	Ingram	28.5	44.55	3.66	4.48	163		.6	15	0	835A / 910A	FC2
1300	5-25	Lindsay	28.5	43.60	3.81	4.48	166		.6	11	0	835A / 906A	FC28
1301	5-25	Samuel Tucker				4.48	170.		.6	14	0		
1302	5-29	"				3.28	7.2		.6	16	0		
1303	6-1	Lindsay	13.5	6.90	1.16	3.30	8.0		.6	7	0	440P / 450P	FC28
1304	6-5	O.J.Wittman				3.29	6.0		.6	15	0		
1305	6-8	Lindsay	14	6.94	.87	3.29	6.0		.6	7	0	210P / 220P	FC28
1306	6-14	O.J.Wittman				3.97	66.		.6	26			
1307	6-15	Lindsay	27.5	33.40	2.24	4.13	75.		.6	10	0	330P / 345P	FC28
1308	6-20	O.J.Wittman				4.12	87.		.6	26	0		
1309	6-22	Lindsay	27.5	33.41	2.25	4.13	75.		.6	12	0	145P / 205P	FC28
1310	6-27	O.J.Wittman				4.08	84.		.6	28	0		
1311	6-29	Ingram	28	27.88	2.42	4.07	67.		.6	9		415P / 430P	FC2
1312	7-5	O.J.Wittman				4.07	79		.6	26	0		
1313	7-6	Lindsay	27.0	31.57	2.13	4.05	67		.6	9	0	345P / 400P	FC28
1314	7-13	Lindsay-J.Lindsay	Two channels			4.74	300		.6	10	0	415P / 430P	FC28
1315	7-14	O.J.Wittman				4.74	345.	.2-.8	.6	24	0		
1316	7-18	"				4.68	295.	.2-.8	.6	27	0		
1317	7-20	Lindsay	Two channels			4.68	275.		.6	11	0	405P	FC28
1318	7-25	Wittman-McClelland				4.07	82.		.6	30	0		
1319	7-25	Wittman-McClelland				4.07	88.		.6	29	0		
1320	7-28	Lindsay	27	33.30	2.21	4.07	73.		.6	11	0	842A / 900A	FC28
1321	8-1	O.J.Wittman				3.90	58.		.6	28	-.09		
1322	8-3	Lindsay	26	25.84	1.24	3.76	32		.6	10	0	145P / 155P	FC28
1323	8-9	O.J.Wittman				3.77	40		.6	28	.01		
1324	8-10	Lindsay	27.0	26.70	1.20	3.77	32		.6	10	0	247P / 300P	FC28
1325	8-15	O.J.Wittman				3.77	39.		.6	28	0		
1326	8-17	Lindsay-Van der Goot	27.5	24.84	1.02	3.70	25.		.6	10		103P / 117P	FC28
1327	8-22	O.J.Wittman				3.70	35.		.6	20	0		
1328	8-23	Brewster	27.0	19.27	1.47	3.70	28.		.6	14	0	200P / 220P	FC8
1329	8-28	O.J.Wittman				3.69	31.		.6	20	0		
1330	8-31	Lindsay	26.0	23.37	1.15	3.69	27.		.6	11	0	145P / 155P	FC28
1331	9-7	"	25.0	23.53	1.21	3.70	28.		.6	10	0	135P / 150P	"
1332	9-12	O.J.Wittman				3.63	24.		.6	20	0		
1333	9-14	Lindsay	26.0	21.77	.91	3.63	20.		.6	10	0	355P / 410P	FC28
1334	9-19	O.J.Wittman				3.70	30.		.6	20	0		
1335	9-21	Lindsay	17.0	18.01	1.42	3.70	26.		.6	9	0	1040A / 1100A	FC28
1336	9-28	"	16.	17.89	1.50	3.72	27.		.6	8	0	225P / 235P	"

F. C. Dist. Form 52

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

Sta. No. U8R

Daily discharge, in second-feet of SAN GABRIEL RIVER near Azusa, for the year ending September 30, 19 39

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	72	60	60	96	8	7.5	8.5	7.5	7.5	83	58	30
2	72	60	60	96	8	7.5	9	7.5	7.5	83	37	30
3	71	60	60	96	8	7.5	8.5	7.5	7.5	83	37	30
4	71	60	60	113	7.5	7.5	8.5	7.5	7	83	38	30
5	71	60	60	162	7.5	8	8	7.5	7	83	38	30
6	71	60	60	203	7.5	8	8	7	7	79	38	31
7	71	60	60	106	7.5	7.5	7	7	7	121	38	31
8	71	60	60	8.5	7.5	7.5	7	7	7	261	38	31
9	71	60	60	8.5	7	8	7	82	8.5	256	38	29
10	71	60	60	8.5	39	8	7	247	20	261	38	25
11	71	60	60	8	83	7	7	247	32	275	38	26
12	71	60	60	8	77	7.5	7	238	42	289	38	26
13	70	60	60	8	75	8	7	214	57	310	38	26
14	70	60	60	8	53	8.5	7	188	72	305	38	28
15	70	60	60	8	6.5	9	7	142	95	310	38	31
16	70	60	60	8	7	9	7	93	95	316	36	31
17	70	60	59	8	7	9	7	10	95	300	31	31
18	69	60	60	8	7	9	7	8	99	280	31	31
19	69	60	60	8	7	8.5	7	8	103	280	31	31
20	69	60	65	8	7	8.5	7	8	92	280	31	31
21	68	60	67	8	7	8.5	7	19	95	214	31	31
22	68	60	68	8	7	8.5	7	170	90	84	31	32
23	68	60	68	8	7	8.5	7	155	86	86	31	34
24	67	60	68	8	7	8.5	7	148	86	83	31	38
25	63	60	69	8	7	8.5	7	170	84	83	31	39
26	61	60	69	8	7	10	7	124	84	83	31	35
27	61	60	80	8	7.5	9.5	7	8.5	84	83	30	33
28	61	60	96	8	7.5	8.5	7	7	83	83	30	33
29	60	60	96	8		8	7	7	83	83	30	33
30	60	60	96	8		8	7	7	83	83	30	33
31	60		96	8		8		7		83	30	
	2108	1800	2077	1065.5	494.0	255.5	218.5	2366.0	1726.0	5386	1084	930
MEAN	68	60	67	34.4	17.6	8.24	7.28	76.3	57.5	174	35.0	31.0
ACRE-FEET	4180	3570	4120	2110	980	507	433	4690	3420	10680	2150	1840

Remarks:

YEAR OR PERIOD MEAN 53.5
ACRE-FEET 38880

STATION U4R

SANTA ANITA CREEK near Sierra Madre, Calif.

LOCATION:

Water-stage recorder, lat. 34°11'30", long. 118°01'00", in SW¼NE¼ sec. 10, T. 1 N., R. 11 W., at head of Hermits Falls, 4 miles northeast of Sierra Madre. Altitude, about 1,400 feet.

DRAINAGE AREA:

10.5 square miles.

RECORDS AVAILABLE:

July 1916 to September 1939.

AVERAGE DISCHARGE:

23 years 5.51 second-feet.

EXTREMES:

Maximum discharge during year, 252 second-feet, Sept.25; minimum, 0.4 second-foot August 30, to September 1.
1916-1939: Maximum discharge, about 5,200 second-feet March 2, 1938; minimum, practically dry August 18 to September 14, 1929.

REMARKS:

Records good. Discharge for period of no gage-height record, Oct. 1-25, based on interpolation between measurements. No diversions above station.

F.C.D. FORM 104 (M) 9-37

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. U4R

DISCHARGE MEASUREMENTS OF SANTA ANITA CREEK

AT OR NEAR Sierra Madre, California DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	RATING PERCENT DIFF.	GEN.	MEAS. ENGR. IND.	G. HT. CHANGE TOTAL	REMARKS	METER NO.
739	10-4	Samuel Tucker	5.6	1.6	1.19		1.9		.6	10			29567
740	10-12	"	4.8	1.3	1.46		1.9		.6	9			"
741	10-16	"	5.4	1.5	1.32		2.0		.6	10			"
742	10-25	"	8	2.9	.63	0.52	1.8		.6	8			"
743	11-1	"	7.5	3.3	.79	.56	2.6		.6	8			"
744	11-15	"	7.5	3.0	.70	.52	2.1		.6	13			"
745	11-29	"	7.8	3.0	.43	.51	1.3		.6	7			"
746	12-13	"	7.3	3.0	.73	.52	2.2		.6	10			"
747	1-4	O.J. Wittman	9	4.1	.99	.66	4.1		.6	9			1277
748	1-20	"	8.4	3.4	1.18	.69	4.0		.6	9			"
749	2-6	"	8.8	3.9	1.57	.77	6.1		.6	11			"
750	2-13	"	8.6	4.4	1.70	.80	7.5		.6	9			"
751	3-3	"	7.5	3.4	1.38	.68	4.7		.6	8			"
752	3-20	"	8.5	7.8	1.39	.69	4.0		.6	8			"
753	3-24	Samuel Tucker	8.3	2.5	1.33	.70	3.3		.6	16			1698
754	4-4	"	7.3	3.2	1.50	.74	4.8		.6	15			"
755	4-18	"	7.2	2.9	1.10	.66	3.2		.6	13			"
756	5-2	"	6.8	2.6	1.12	.64	2.9		.6	13			"
757	5-16	"	6.5	2.5	1.16	.65	2.9		.6	13			"
758	6-6	O.J.Wittman	7.2	2.35	1.11	.57	2.6		.6	9			1277
759	6-19	"	6.3	2.1	.71	.54	1.5		.6	7			"
760	7-6	"	6.8	2.0	.80	.51	1.6		.6	7			"
761	7-20	"	6.2	1.5	.63	.48	.95		.6	8			"
762	8-9	"	6.1	1.5	.57	.43	.85		.6	10			
763	8-21	O.J.Wittman	6.7	1.3	.68	.42	.75		.6	7			
764	8-26	"	6.0	1.22	.51	.38	.60		.6	6			

F. C. Dist. Form 52

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

Sta. No. U4R

Daily discharge, in second-feet of SANTA ANITA CREEK near Sierra Madre, for the year ending September 30, 19 39

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	E 1.8	2.6	2.2	4.2	4.9	4.8	4.8	2.9	2.6	1.3	0.9	0.4
2	E 1.8	2.4	2.1	4.2	4.8	4.6	5.5	2.9	2.5	1.3	0.9	0.5
3	E 1.9	2.2	2.1	4.1	7.5	4.6	4.8	2.7	2.4	1.4	0.9	0.5
4	E 1.9	2.1	2.1	4.1	7.5	4.6	4.8	2.6	2.5	1.6	0.8	0.5
5	E 1.9	2.1	2.1	20	6.5	4.6	4.6	2.7	2.6	1.6	0.8	0.5
6	E 1.9	2.0	2.1	8	6.5	4.4	4.4	2.9	2.6	1.6	0.8	0.5
7	E 1.9	2.0	2.0	6.5	6.5	4.4	4.1	2.9	2.5	1.6	0.9	0.6
8	E 1.9	2.0	2.0	5.5	11	4.4	3.9	2.7	2.2	1.4	0.9	0.6
9	E 1.9	2.0	2.0	5.5	8.5	9.5	3.8	2.6	2.0	1.4	0.8	0.5
10	E 1.9	2.2	2.1	4.9	8	7.5	3.8	2.6	1.9	1.2	0.8	0.5
11	E 1.9	2.2	2.2	4.8	8	5.5	3.8	2.7	1.7	1.1	0.8	0.5
12	E 1.9	2.1	2.2	4.6	7.5	5.5	3.8	2.7	1.7	1.0	0.7	0.7
13	E 1.9	2.1	2.1	4.4	7.5	4.9	4.4	2.9	1.6	0.9	0.7	0.8
14	E 1.9	2.1	2.7	4.2	7	4.6	4.1	2.9	1.7	0.9	0.7	0.7
15	E 1.9	2.1	14	4.2	7	4.4	3.8	2.9	1.7	0.8	0.8	0.6
16	E 2.0	2.1	6.5	4.2	6.5	4.2	3.6	2.9	1.6	0.9	0.7	0.5
17	E 2.0	2.1	3.9	4.1	6.5	4.1	3.4	2.7	1.6	0.9	0.7	0.5
18	E 2.0	2.0	42	4.1	6.5	4.1	3.4	2.7	1.5	0.9	0.7	0.5
19	E 2.0	2.0	46	4.1	6.5	4.1	3.2	2.7	1.4	0.9	0.7	0.5
20	E 1.9	2.0	36	4.1	6	4.1	3.1	2.6	1.4	0.8	0.7	0.5
21	E 1.9	2.0	22	10	6	3.9	3.1	2.4	1.3	0.8	0.7	0.5
22	E 1.9	2.0	12	7.5	5.5	3.8	3.2	2.5	1.4	0.8	0.7	0.5
23	E 1.8	2.0	9	6.5	5.5	3.5	3.4	2.5	1.4	0.8	0.6	0.5
24	E 1.8	2.0	7.5	5.5	5.5	3.4	3.4	2.4	1.5	0.8	0.6	1.4
25	E 1.8	2.0	6.5	5.5	5.5	3.4	3.2	2.4	1.5	0.8	0.6	7.4
26	1.8	2.0	6	5.5	5	6.5	3.1	2.4	1.4	0.8	0.6	27
27	1.9	2.0	5.5	5.5	4.9	8.5	3.0	2.4	1.3	0.8	0.5	7.5
28	2.0	2.0	4.9	5.5	4.9	6	2.9	2.4	1.3	0.8	0.5	4.9
29	2.0	2.0	4.6	5		5.5	2.9	2.4	1.3	0.8	0.5	3.9
30	2.2	2.1	4.4	6		4.9	2.9	2.5	1.2	0.9	0.4	3.5
31	2.5		4.2	5.5		4.8		2.9		0.9	0.4	
	59.8	62.5	265.0	177.8	183.5	153.1	112.2	82.4	53.3	32.5	21.8	147.2
MEAN	1.93	2.08	8.55	5.74	6.55	4.94	3.74	2.66	1.78	1.05	0.70	4.91
ACRE-FEET	119	124	526	353	364	304	223	163	106	64	43	292

Remarks: E indicates discharge estimated - see station description.

YEAR OR PERIOD MEAN 3.70
ACRE-FEET 2680

STATION U5R

SAWPIT CREEK near Monrovia, Calif.

LOCATION:

Water-stage recorder and broad-crested weir control, lat. 34°10'25", long.117°59'20" in NE¼SW¼ sec. 13, T.1 N., R. 11 W., 0.1 mile downstream from confluence of two main branches and 2 miles north of Monrovia. Prior to Oct. 22, water-stage recorder in old station 200 feet upstream.

DRAINAGE AREA:

5.3 square miles (present site).

RECORDS AVAILABLE:

November 1916 to September 1939.

AVERAGE DISCHARGE:

22 years (1917-1939), 1.23 second-feet. Average combined discharge of creek and diversion, 22 years, 2.54 second-feet.

EXTREMES:

Maximum discharge during year not determined; no flow for several months.
1916-1939
Maximum discharge, about 2,000 second-feet, April 7, 1926, estimated from flow of Rogers Creek; no flow for several months each year.

REMARKS:

Records fair. Discharge is sum of flow over control plus estimated flow in second channel. Regulation at flood-control dam above gage and diversions by city of Monrovia. Results of several discharge measurements furnished by Los Angeles County Flood Control District.

F. C. D. FORM 104 300 6-38

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. U5R

DISCHARGE MEASUREMENTS OF SAWPIT CREEK

AT OR NEAR Monrovia, California DURING THE YEAR ENDING SEPTEMBER 30, 1939

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Eddies Toward Bank	Strikes	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
435	10-11	Samuel Tucker				1.81	0.12		4"	Venturi flume			
436	10-25	"					0.10*		.6	4	0		
437	11-3	Lindsay	1.4	.22	.64	0.96	0.14*		.6	4	0	151P / 156P	FC13
438	11-8	Samuel Tucker				0.06	0.13*		.6	4	0		
439	11-17	Lindsay	1.5	.26	.65	0.08	0.17*		.6	3	0	941A / 945A	FC13
440	11-22	Samuel Tucker				0.05	0.07*		.6	4	0		
441	12-1	Lindsay	1.3	.16	.50	0.06	0.08*		.6	2	0	920A / 922A	FC13
442	12-15	Lindsay-Ingram	3.1	1.00	1.16	0.30	1.2		.6	3	0	920A / 925A	"
443	12-20	Samuel Tucker				0.06	0.1		Est.				
444	12-30	O.J.Wittman				0.06	0.13		.6	2	0		
445	1-6	Ingram	5.2	.92	2.09	0.40	2.1		.6	5	0	850A / 855A	FC28
446	1-6	O.J.Wittman				0.34	2.0		.6	5	-.01		
447	1-9	Lindsay	4.3	.72	0.97	0.27	0.70		.6	5	0	127P / 135P	FC28
448	1-10	O.J.Wittman				0.25	1.7		.6	5	0		
449	1-17	"				0.10	0.26*		.6	4	0		
450	1-20	Lindsay	1.9	.29	.62	0.10	0.18		.6	4		905A / 910A	FC13
451	1-21	O.J.Wittman				0.26	1.4		.6	5	+.02		
452	1-23	Lindsay	4.0	.76	.84	0.26	0.65		.6	5	0	940A / 945A	FC13
453	1-25	O.J.Wittman				0.11	0.37*		.6	4	0		
454	1-26	Lindsay	2.5	.35	.77	0.10	0.27*		.6	5	0	1150A / 1155A	FC28
455	1-30	O.J.Wittman				0.09	0.37*		.6	5	0		
456	1-31	Lindsay	4.0	.78	.91	0.20	0.70		.6	5	0	925A / 930A	FC13
457	2-3	O.J.Wittman				0.27	1.0		.6	7	-.02		
458	2-7	"				0.12	0.45*		.6	6	0		
459	2-9	Lindsay	4.1	.74	1.18	0.30	0.85*		.6	5	0	930A / 935A	FC28
460	2-14	O.J.Wittman				0.08	0.25*		.6	5	0		
461	2-17	Lindsay	3.8	.49	.55	0.11	0.27*		.6	5	0	900A / 905A	FC28
462	2-21	O.J.Wittman				0.10	0.29*		.6	5	0		
463	2-23	Lindsay	2.3	.29	.76	0.10	0.22*		.6	4	0	917A / 923A	FC28
464	3-2	Lindsay	2.7	.26	.54	0.08	0.14*		.6	4	0	927A / 931A	"
465	3-3	O.J.Wittman				0.08	0.19*		.6	4	0		
466	3-6	"				0.06	0.14*		.6	5	0		
467	3-9	Lindsay	10.0	2.5	1.63	0.64	4.1		.6	7	0	227P / 235P	FC28
468	3-10	Lindsay-Ingram	13.0	2.52	1.40	0.59	3.5		.6	9	0	1132A / 1140A	"
469	3-13	Wittman-Montgomery				0.04	0.07*		.6	5	0		
470	3-21	O.J.Wittman				0.02	0.03*		.6	2			
471	3-27	"				0.19	0.65		.6	5	0		
472	3-30	Lindsay	3.0	.58	.74	0.14	0.43		.6	6	0	1011A / 1019A	FC13
473	4-4	Samuel Tucker				0.10	0.29		.6	6	0		
474	4-6	Lindsay	3.0	.50	.74	0.11	0.37*		.6	6	0	856A / 903A	FC28
475	4-11	Samuel Tucker				0.07	0.29*		.6	5	0		
476	4-13	Ingram	4.0	.41	.60	0.07	0.25*		.6	4	0	915A / 921A	FC28
477	4-19	Samuel Tucker				0.04	0.08*		.6	4	0		
478	4-20	Ingram	4.0	.42	.48	0.05	0.20*		.6	3	0	1115A / 1120A	FC28
479	4-25	Samuel Tucker				0.06	0.11*		.6	5	0		
480	4-27	Lindsay	2.8	.34	.29	0.05	0.10*		.6	4	0	1227P / 1231P	FC28
481	5-2	Samuel Tucker				0.04	0.09*		.6	5	0		
482	5-4	Lindsay	1.8	.18	.39	0.04	0.07*		.6	3	0	131P / 135P	FC28
483	5-9	Samuel Tucker				0.03	0.04*		.6	5	0		
484	9-25	O.J.Wittman				1.38	44		.6	14		1045A / 1053A	FC28
485	9-25	Lindsay	Two channels			1.14	33		.6	12		256A / 304A	"
486	9-25	Lindsay-Ingram	Three channels			0.85	12		.6	11			
487	9-25	F.C. Ebert				0.82	11		.6				
488	9-26	Lindsay	Three channels			0.80	7.9		.6	12		800A / 818A	FC28
489	9-26	Lord-Ebert				0.63	6.1						
490	9-28	Lindsay	4.5	1.30	0.42	0.17	0.55		.6	5	0	912A / 917A	FC28

* Indicates discharge given is total flow.
Other measurements may be taken when some discharge by-passes station.

F. C. Dist. Form 52

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

Sta. No. U58

Daily discharge, in second-feet of SAWPIT CREEK near Monrovia, for the year ending September 30, 1939

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.1	0.2	0.1	0.2	0.3	0.2	0.6	0.1				0
2	0.1	0.2	0.2	0.2	0.2	0.2	1.3	0.1				0
3	0.1	0.1	0.1	0.2	1.6	0.2	0.6	0.1				0
4	0.1	0.2	0.1	0.2	2.4	0.2	0.4	0.1				0
5	0.1	0.2	0.1	5.5	1.3	0.2	0.4	0.1				0
6	0.2	0.2	0.1	3.1	1.0	0.2	0.4	0.1				0
7	0.1	0.1	0.1	2.0	0.6	0.2	0.3	0.1				0
8	0.1	0.1	0.1	1.4	2.7	0.3	0.3	0.1				0
9	0.1	0.1	0.1	1.3	1.5	2.5	0.2	0.1				0
10	0.1	0.1	0.1	1.0	0.5	2.9	0.2	0				0
11	0.1	0.1	0.1	0.8	0.6	0.2	0.2	0				0
12	0.1	0.1	0.1	0.6	0.4	0.2	0.2	0				0
13	0.1	0.2	0.1	0.5	0.3	0.1	0.3	0				0
14	0.1	0.1	0.2	0.3	0.2	0.1	0.1	0				0
15	0.3	0.2	2.5	0.3	0.3	0.1	0.1	0				0
16	0.1	0.4	0.8	0.3	0.4	0.1	0	0				0
17	0.1	0.2	0.2	0.3	0.3	0.1	0.1	0				0
18	0.1	0.1	4.7	0.4	0.2	0.1	0.1	0				0
19	0.1	0.1	3.9	0.4	0.2	0.1	0.1	0				0
20	0.1	0.1	4.6	0.4	0.2	0	0.1	0				0
21	0.1	0.1	1.9	2.3	0.3	0	0.1	0				0
22	0.1	0.1	1.1	2.7	0.3	0	0.2	0				0
23	0.1	0.1	0.7	1.2	0.3	0	0.2	0				0
24	0.1	0.1	0.8	0.7	0.3	0	0.1	0				5.5
25	0.1	0.1	0.8	0.3	0.2	0.1	0.1	0				2.4
26	0.1	0.1	0.7	0.3	0.3	2.9	0.1	0				8.5
27	0.1	0.1	0.4	0.3	0.2	1.5	0.1	0				1.8
28	0.1	0.1	0.2	0.6	0.2	0.9	0.1	0				0.6
29	0.1	0.1	0.2	0.2		0.6	0.1	0				0.3
30	0.1	0.1	0.2	0.8		0.6	0.1	0				0.3
31	0.1		0.2	0.8		0.5		0				
	3.4	4.1	25.5	29.6	17.3	15.4	7.2	0.9				41.0
MEAN	0.11	0.14	0.82	0.95	0.62	0.50	0.24	0.03	0	0	0	1.37
ACRE-FEET	6.7	8.1	51	59	34	31	14	1.8	0	0	0	81

Remarks:

YEAR OR PERIOD — MEAN 0.40 — ACRE-FEET 287

F. C. D. FORM 104 500 8-58

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F116S

DISCHARGE MEASUREMENTS OF ARROYO DITCH

AT below headgate DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Forward Diff.	Method	MEAS SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
111	10-6	Brewster	7.5	9.63	1.44	1.34	14.		.6	4	0	1255P / 105P	FC8
112	10-13	"	7.5	11.53	1.72	1.49	20.		.6	4	0	1115A / 1125A	"
113	10-20	"	7.5	9.65	2.08	1.28	20.		.6	4	0	1140A / 1150A	"
114	10-27	"	7.5	9.79	1.98	1.56	19.		.6	4	0	1115A / 1125A	"
115	11-3	"	7.5	6.62	1.97	0.98	13.		.6	4	0	1145A / 1152A	"
116	11-10	"	7.5	9.82	1.80	1.36	18.		.6	4	0	1204P / 1212P	"
117	11-17	"	7.5	9.77	1.53	1.51	15.		.6	4	0	1145A / 1155A	"
118	11-23	"	7.5	11.42	1.57	1.64	18.		.6	4	0	1152A / 1201P	"
119	12-1	"	7.5	5.97	1.85	1.02	11.		.6	4	0	1145A / 1155A	"
120	12-8	"	7.5	5.93	2.21	1.30	13.		.6	4	0	1130A / 1138A	"
121	12-15	"					0					120P	
122	12-22	"					0					1240P	
123	12-29	"					0					1155A	
124	1-5	"					0					1045A	
125	1-12	"					0					1110A	
126	1-19	"					0					1205P	
127	1-26	"					0					1135A	
128	2-2	"					0					1250P	
129	2-9	"					0					1125A	
130	2-16	"					0					1105A	
131	2-23	"					0					1140A	
132	3-2	"					0					1220P	
133	3-9	"					0					1140A	
134	3-16	"					0					1135A	
135	3-23	Brewster					0					1140A	
136	3-30	"					0					1100A	
137	4-6	"					0					1050A	
138	4-13	"	7.5	3.93	1.52	0.51	6.0		.6	4	0	1120A / 1128A	FC8
139	4-20	"	7.5	4.76	1.97	0.66	9.4		.6	4	0	1112A / 1120A	"
140	4-27	"	7.5	5.51	2.28	0.77	13.		.6	4	0	1045A / 1055A	"
141	5-4	"	7.5	7.38	2.67	0.98	20.		.6	4	0	1225P / 1235P	"
142	5-11	"	7.5	7.01	2.71	1.02	19.		.6	4	0	1255P / 102P	"
143	5-18	"	7.5	7.52	2.74	0.98	21.		.6	4	0	1145A / 1152A	"
144	5-25	"	7.5	9.85	2.44	1.31	24.		.6	4	0	1150A / 1158A	"
145	6-1	"	7.5	8.87	2.66	1.18	24.		.6	4	0	1140A / 1150A	"
146	6-8	"	7.5	8.38	2.48	1.08	21.		.6	4	0	1140A / 1147A	"
147	6-14	"	7.5	11.97	1.96	1.46	23.		.6	4	0	1130A / 1136A	"
148	6-21	Lindsay	7.0	11.49	1.68	-	19.		.6	5	0	100P / 110P	FC28
149	6-29	Brewster	7.5	8.57	2.46	1.20	21.		.6	4	0	1140A / 1148A	FC8
150	7-6	"	7.5	10.91	1.75	1.44	19.		.6	4	0	1100A / 1110A	"
151	7-13	"	7.5	11.84	1.70	1.61	20.		.6	4	0	230P / 240P	"
152	7-20	"	7.5	12.77	1.55	1.82	20.		.6	4	0	300P / 310P	"
153	7-27	"	7.5	11.87	1.47	1.59	17.		.6	4	0	1125A / 1132A	"
154	8-3	"	7.5	7.14	2.37	0.98	17.		.6	4	0	1050A / 1057A	"
155	8-10	"	7.5	7.43	2.15	1.02	16.		.6	4	0	1125A / 1132A	"
156	8-17	"	7.5	6.97	2.35	0.94	16.		.6	4	0	1105A / 1113A	"
157	8-24	"	7.5	6.45	2.24	0.90	14.		.6	4	0	1140A / 1148A	"
158	8-31	"	7.5	6.93	2.37	0.92	16.		.6	4	0	1110A / 1118A	"
159	9-7	Brewster	7.5	8.14	2.11	1.05	17.		.6	4	0	1100A / 1110A	FC8
160	9-14	"	7.5	7.16	2.35	0.98	17.		.6	4	0	1110A / 1117A	"
161	9-21	"	7.5	6.22	2.32	0.91	14.		.6	4	0	1030A / 1040A	"
162	9-28	"					0					1105A	

F. C. D. FORM 104 500 8-58

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F87S

DISCHARGE MEASUREMENTS OF BANTA DITCH

AT head of pipeline DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Forward Diff.	Method	MEAS SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
96	10-6	Brewster	13.0	15.02	1.25	1.18	19.		.6	7	0	120P / 145P	FC8
97	10-13	"	13.0	14.53	1.25	1.28	18.		.6	6	0	1230P / 1242P	"
98	10-20	"	12.0	14.32	1.42	1.23	20.		.6	6	0	1230P / 1242P	"
99	10-27	"	15.0	18.64	1.25	1.46	23.		.6	7	0	1215P / 1230P	"
100	11-3	"	14.0	15.30	1.20	1.26	18.		.6	6	0	1242P / 1253P	"
101	11-10	"	13.0	15.88	1.27	1.14	20.		.6	6	0	120P / 130P	"
102	11-17	"	15.0	16.02	1.29	1.22	21.		.6	7	0	1230P / 1245P	"
103	11-23	"	12.0	13.84	1.36	1.24	19.		.6	6	0	1230P / 1240P	"
104	12-1	"	14.0	15.32	1.27	1.08	20.		.6	7	0	1240P / 1255P	"
105	12-8	"	10.0	12.0	1.23	1.16	15.		.6	5	0	1150A / 1202P	"
106	12-15	"	14.0	26.84	0.96	2.04	26.		.6	6	0	130P / 140P	"
107	12-22	"					0					1250P	
108	12-29	"					0					1215P	
109	1-5	"					0					1055A	
110	1-12	"					0					1125A	
111	1-19	"					0					1215P	
112	1-26	"					0					1145A	
113	2-2	"					0					100P	
114	2-9	"					0					1135A	
115	2-16	"					0					1120A	
116	2-23	"					0					1220P	
117	3-2	"	7.0	6.08	0.99	0.67	6.0		.6	4	0	1225P / 1232P	FC8
118	3-9	"	8.0	7.62	1.34	0.83	10.		.6	5	0	1220P / 1228P	"
119	3-16	Brewster	9.0	7.45	1.04	0.74	7.8		.6	5	0	1153A / 1202P	FC8
120	3-23	"	8.0	7.08	1.01	0.81	7.2		.6	4	0	1205P / 1212P	"
121	3-30	"	7.0	5.91	0.84	0.61	5.0		.6	4	0	1230P / 1238P	"
122	4-6	"	7.0	5.01	0.66	0.48	3.3		.6	4	0	1105A / 1112A	"
123	4-13	"	4.5	4.93	1.95	1.12	9.6		.6	4	0	1140A / 1146A	"
124	4-20	"	8.0	8.80	1.31	1.04	12.		.6	4	0	1130A / 1140A	"
125	4-27	"	8.0	8.84	1.47	1.04	13.		.6	4	0	1110A / 1118A	"
126	5-4	"	4.5	4.31	2.82	1.02	12.		.6	4	0	1205P / 1215P	"
127	5-11	"	4.5	4.92	2.89	1.10	14.		.6	4	0	140P / 146P	"
128	5-18	"	4.5	3.73	2.25	0.84	8.4		.6	4	0	110P / 116P	"
129	5-25	"	4.5	6.80	3.32	1.52	23.		.6	4	0	1205P / 1212P	"
130	6-1	"	4.5	10.01	1.84	1.96	18.		.6	4	0	1230P / 1240P	"
131	6-8	"	12.0	19.60	1.06	1.22	21.		.6	6	0	1158A / 1210P	"
132	6-14	"	10.0	14.25	1.10	1.15	16.		.6	5	0	1150A / 1158A	"
133	6-21	Lindsay-Wright	9.5	13.40	1.08	-	14.		.6	6	0	140P / 146P	FC28
134	6-29	Brewster	12.0	16.95	0.92	1.08	16.		.6	6	0	1202P / 1214P	FC8
135	7-6	"	9.0	16.07	1.05	1.11	17.		.6	5	0	1130A / 1140A	"
136	7-13	"	4.5	9.05	2.45	2.01	22.		.6	4	0	1255P / 101P	"

F. C. D. FORM 104 500 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F87S

DISCHARGE MEASUREMENTS OF SANTA DITCH

AT NEAR head of pipeline DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
137	7-20	"	4.5	9.14	2.38	2.03	22.		.6	4	0	100P / 106P	"
138	7-27	"	11.0	17.49	0.88	1.28	15.		.6	6	0	1145A / 1155A	"
139	8-3	"	10.0	18.00	0.71	1.29	13.		.6	5	0	1110A / 1120A	"
140	8-10	"	10.0	14.08	1.06	1.13	15.		.6	5	0	1145A / 1155A	"
141	8-17	"	10.0	13.92	1.07	1.04	15.		.6	5	0	1125A / 1134A	"
142	8-24	"	10.0	13.20	1.09	1.01	14.		.6	5	0	1158A / 1206P	"
143	8-31	Brewster	10.0	13.08	1.10	1.02	14.		.6	5	0	1126A / 1135A	FC8
144	9-7	"	10.0	13.00	1.03	1.06	13.		.6	5	0	1120A / 1130A	"
145	9-14	"	10.0	14.60	1.15	1.08	17.		.6	5	0	1127A / 1135A	"
146	9-21	"	9.0	10.67	0.87	0.86	9.2		.6	4	0	1050A / 1058A	"
147	9-28	"					0					1115A	

F. C. D. FORM 104 500 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F183S

DISCHARGE MEASUREMENTS OF BIG ROCK CREEK

AT NEAR Palmdale-Victorville Road DURING THE YEAR ENDING SEPTEMBER 30, 1939

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
10	2-12	Luce -Luce	14.0	5.66	1.53	-	8.6		.6	13	-	1240P / 1250P	FC39
11	5-19	" "	5.0	1.67	0.90	-	1.5		.6	5	-	130P / 135P	"

F. C. D. FORM 104 500 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F143S

DISCHARGE MEASUREMENTS OF BIG ROCK CREEK

AT NEAR 300 ft. above Pallette Creek DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
22A	10-29	Luce	15.5	7.23	1.35	-	9.8		.6	10	-	545P / 555P	FC39
23	11-18	Luce	15.5	7.55	1.54	-	12.		.6	8	-	410P / 420P	FC39
24	12-7	"	15.0	7.59	1.55	-	12.		.6	9	-	155P / 205P	"
25	2-12	Luce - Luce	14.5	9.42	2.01	-	19.		.6	9	-	1155A / 1205P	"
26	3-11	" "	15.0	10.23	1.87	-	19.		.6	8	-	1100A / 1112A	"
27	5-19	" "	4.7	6.23	1.49	-	9.2		.6	5	-	545P / 555P	"
28	6-28	Luce	15.0	13.01	0.45	-	5.9		.6	8	-	235P / 245P	"
29	7-26	"	9.5	10.97	0.67	-	7.3		.6	6	-	545P / 555P	"
30	8-15	"	11.5	5.45	0.90	-	4.9		.6	6	-	145P / 150P	"
31	9-22	Luce-Luce	20.5	8.63	1.34	-	12.		.6	14	-	340P / 400P	"

F. C. D. FORM 104 500 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F84S

DISCHARGE MEASUREMENTS OF CATE DITCH

AT NEAR below sluicegate DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
97	10-6	Brewster	9.0	5.64	1.16	2.28	6.6		.6	5	0	1130A / 1136A	FC8
98	10-13	"	10.0	5.48	1.39	2.30	7.6		.6	6	0	1005A / 1015A	"
99	10-20	"	10.0	8.73	1.27	2.58	11.		.6	6	0	1000A / 1012A	"
100	10-27	"	10.0	8.27	1.29	2.65	11.		.6	6	0	1015A / 1025A	"
101	11-3	"	10.0	7.98	1.37	2.52	11.		.6	6	0	1040A / 1048A	"
102	11-10	Brewster	10.0	6.06	1.16	2.38	7.0		.6	6	0	1025A / 1035A	FC 8
103	11-17	"	10.0	8.23	1.24	2.58	10.		.6	6	0	1040A / 1050A	"
104	11-23	"	10.0	9.62	1.01	2.74	9.7		.6	6	0	1050A / 1100A	"
105	12-1	"	10.0	8.96	1.16	2.68	10.		.6	6	0	1030A / 1042A	"
106	12-8	"	10.0	9.63	1.16	2.78	11.		.6	6	0	1020A / 1030A	"
107	12-15	"	3.0	0.46	0.41	1.90	0.19		.6	3	0	1205P / 1210P	"
108	12-22	"					0					1150A	
109	12-29	"					0					1115A	
110	1-5	"					0					955A	
111	1-12	"					0					1020A	
112	1-19	"					0					1115A	
113	2-2	"					0					1150A	
114	2-9	"					0					1025A	
115	2-16	"					0					1010A	
116	2-23	"					0					1040A	
117	3-2	"					0					1140A	
118	3-9	"					0					1030A	
119	3-16	"	8.0	3.46	0.79	1.38	2.7		.6	4	0	1030A / 1040A	FC8
120	3-23	Brewster	8.0	3.26	0.72	1.36	2.4		.6	4	0	1035A / 1042A	FC8
121	3-30	"	1.5	0.28	0.64	1.01	0.18		.6	3	0	1000A / 1005A	"
122	4-6	"	8.0	3.46	0.81	1.38	2.8		.6	4	0	952A / 959A	"
123	4-13	"	8.0	2.66	0.72	1.36	1.9		.6	4	0	1000A / 1007A	"
124	4-20	"	1.0	0.14	0.57	1.02	0.08		.6	2	0	1010A / 1014A	"
125	4-27	"	8.0	6.98	1.54	2.18	11.		.6	5	0	930A / 937A	"
126	5-4	"	9.0	8.59	1.29	2.17	11.		.6	6	0	950A / 1000A	"
127	5-11	"	10.0	10.05	1.29	2.22	13.		.6	6	0	1105A / 1115A	"
128	5-18	"	10.0	8.23	1.06	1.98	8.8		.6	6	0	1012A / 1021A	"
129	5-25	"	10.0	11.90	1.21	2.52	14.		.6	6	0	1017A / 1026A	"
130	6-1	"	12.0	11.64	1.11	2.35	13.		.6	7	0	1010A / 1017A	"
131	6-8	"	9.0	8.72	1.31	2.18	11.		.6	5	0	1025A / 1032A	"
132	6-14	"	9.0	7.45	1.41	2.14	11.		.6	6	0	1020A / 1028A	"
133	6-21	Lindsay-Wright	9.5	8.22	1.48	2.18	12.		.6	7	0	1117A / 1125A	FC28
134	6-29	Brewster	9.0	7.94	1.20	2.01	9.5		.6	5	0	1020A / 1029A	FC8
135	7-6	"	9.0	6.68	1.32	2.11	8.8		.6	5	0	940A / 950A	"
136	7-13	"	10.5	16.41	1.05	3.04	17.		.6	6	0	955A / 1005A	"
137	7-20	"	9.5	8.85	1.28	2.27	11.		.6	6	0	930A / 940A	"
138	7-27	"	9.0	7.71	1.03	2.11	8.0		.6	5	0	1015A / 1022A	"
139	8-3	"	9.0	7.31	1.10	2.08	8.0		.6	5	0	940A / 950A	"
140	8-10	"	9.0	7.04	1.13	2.02	8.0		.6	5	0	1020A / 1028A	"
141	8-17	"	9.0	8.17	1.03	2.28	8.4		.6	5	0	950A / 1000A	"
142	8-24	"	10.0	9.84	1.08	2.48	11.		.6	5	0	1030A / 1040A	"
143	8-31	"	8.0	3.09	0.95	1.80	2.9		.6	5	0	1010A / 1018A	"
144	9-7	Brewster	9.0	7.53	0.95	2.28	7.2		.6	5	0	955A / 1002A	FC8
145	9-14	"	9.5	10.64	1.07	2.67	11.		.6	6	0	1005A / 1015A	"
146	9-21	"	9.0	6.99	1.01	-	7.0		.6	5	-	930A / 938A	"
147	9-28	"	8.0	3.32	0.49	1.88	1.6		.6	4	0	1010A / 1016A	"

F. C. D. FORM 104 500 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F141S

DISCHARGE MEASUREMENTS OF ELIZABETH LAKE CREEK

AT NEAR bridge at Center Cabin Site DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
13	2-22	Luce	9.5	2.77	2.55	-	7.0		.6	5	-	345P / 350P	FC39
14	6-8	"	2.5	0.35	0.97	-	0.34		.6	4	-	1040A / 1045A	"
15	9-28	"				-	Est. 0.10				-	1220P	

F. C. D. FORM 104 500 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F196S

DISCHARGE MEASUREMENTS OF PACOIMA CREEK

AT Maclay Avenue DURING THE YEAR ENDING SEPTEMBER 30, 1939

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
17	3-16	Luce	13.5	5.91	1.68	-	9.9		.6	7	-	1045A / 1100A	FC39
18	3-23	"	2.7	1.51	1.28	-	1.9		.6	5	-	150P / 200P	"
19	3-30	Luce-Luce	3.0	1.81	1.26	-	2.3		.6	4	-	1110A / 1115A	"
20	4-6	Luce	2.7	0.97	0.82	-	0.80		.6	5	-	325P / 330P	"
21	9-28	"	1.5	0.16	0.38	-	0.06		.6	3	-	1120A / 1125A	"

F. C. D. FORM 104 500 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F121S

DISCHARGE MEASUREMENTS OF PALLETTE CREEK

AT 1 mile above Big Rock Creek DURING THE YEAR ENDING SEPTEMBER 30, 1939

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
18	11-18	Luce-Luce	4.5	1.17	1.38	-	1.7		.6	6	-	210P / 215P	FC39
19	12-7	" "	4.0	1.14	1.19	-	1.4		.6	4	-	215P / 220P	"
20	2-12	" "	5.0	0.86	1.14	-	0.95		.6	7	-	1215P / 1225P	"
21	5-19	" "	4.7	1.23	1.33	-	1.6		.6	5	-	530P / 535P	"
22	7-26	" "	5.0	1.29	1.47	-	1.9		.6	6	-	455P / 500P	"
23	8-15	Luce	5.0	1.35	1.18	-	1.6		.6	6	-	200P / 204P	"
24	9-22	Luce-Luce	7.5	0.84	2.57	-	2.2		.6	7	-	430P / 440P	"

F. C. D. FORM 104 500 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F122S

DISCHARGE MEASUREMENTS OF PALLETTE CREEK

AT Big Rock Creek DURING THE YEAR ENDING SEPTEMBER 30, 1939

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
17	10-29	Luce-Luce	5.5	1.21	0.82	-	1.0		.6	6	-	610P / 615P	FC39
18	11-18	" "	4.9	1.18	1.15	-	1.4		.6	5	-	245P / 255P	"
19	12-7	" "	4.8	1.23	0.84	-	1.0		.6	5	-	140P / 145P	"
20	2-12	" "	4.5	0.88	1.12	-	1.0		.6	5	-	1145A / 1150A	"
21	3-11	" "	2.8	0.55	0.91	-	0.50		.6	4	-	1115A / 1120A	"
22	5-19	" "	3.0	0.80	1.22	-	1.0		.6	5	-	535P / 538P	"
23	6-28	" "	4.0	0.82	0.89	-	0.75		.6	5	-	225P / 230P	"
24	7-26	" "	3.5	0.86	0.94	-	0.80		.6	4	-	530P / 535P	"
25	8-15	Luce	3.9	0.73	0.97	-	0.70		.6	5	-	135P / 140P	"
26	9-22	Luce-Luce	2.9	0.61	0.95	-	0.60		.6	4	-	315P / 320P	"

F. C. D. FORM 104 500 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F238S

DISCHARGE MEASUREMENTS OF RUSTIC CANYON STORM DRAIN

AT 100 feet above Channel Road DURING THE YEAR ENDING SEPTEMBER 30, 1939

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
31	10-6	Moon				-	Est. 0.20					332P	
32	11-17	"	2.0	0.14	1.29	-	0.18		.6	4	-	355P / 400P	FC22
33	12-15	Moon-Andren	26.4	11.39	4.23	3.69	48.		.6	4	-0.02	230A / 240A	"
34	1-6	Moon-B.Middleton				-	Est. 1.5					345P	
35	1-19	Moon				-	Est. 0.70					450P	
36	1-21	Moon-B.Middleton	24.0	6.35	4.01	2.88	25.		.6	5	0	935A / 945A	FC22
37	2-3	" "	4.5	0.87	2.91	-	2.5		.6	4	-	140P / 145P	"
38	2-9	Moon	4.3	0.67	1.21	-	0.80		.6	4	-	310P / 315P	"
39	2-23	Moon	3.0	0.64	1.33	-	0.85		.6	3	-	423P / 428P	FC 22
40	3-16	"	3.0	0.46	1.22	-	0.55		.6	4	-	420P / 423P	"
41	3-23	"	2.5	0.52	1.54	-	0.80		.6	3	-	425P / 429P	"
42	4-6	"	4.0	0.52	1.15	-	0.60		.6	4	-	1150A / 1155A	"
43	4-13	"	4.0	0.55	1.64	-	0.90		.6	4	-	225P / 230P	"
44	4-20	"	2.5	0.41	1.29	-	0.55		.6	3	-	410P / 412P	"
45	4-27	"	4.0	0.62	1.53	-	0.95		.6	4	-	319P / 324P	"
46	5-4	"	4.0	0.55	1.09	-	0.60		.6	4	-	1204P / 1208P	"
47	5-11	"	4.0	0.56	1.23	-	0.70		.6	4	-	238P / 243P	"
48	5-18	"	3.5	0.42	1.12	-	0.47		.6	5	-	155P / 200P	"
49	5-25	"	3.0	0.28	1.07	-	0.30	Float		3	-	440P / 442P	
50	6-8	"	3.0	0.36	1.14	-	0.41	Float		3	-	440P / 442P	
51	6-15	"	2.0	0.20	1.10	-	0.22		.6	2	-	128P / 130P	"
52	6-22	"	2.0	0.25	1.32	-	0.33	Float		4	-	155P / 158P	
53	6-29	"	2.0	0.28	1.25	-	0.35	"		4	-	445P / 447P	
54	7-6	Bonadiman	2.5	0.32	1.56	-	0.50		.6	2	-	200P / 205P	FC40
55	7-13	Bonadiman					Est. 0.50					200P	

F. C. D. FORM 104 500 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F86S

DISCHARGE MEASUREMENTS OF SAN GABRIEL RIVER

AT below Standifer Ditch DURING THE YEAR ENDING SEPTEMBER 30, 1939

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
95	10-6	Brewster	Two	channels			22.		.6	11		1230P / 1250P	FC 8
96	10-13	"	24.0	16.06	1.57		25.		.6	7		1045A / 1100A	"
97	10-20	"	25.0	16.62	1.47		24.		.6	7		1040A / 1055A	"
98	10-27	"	24.0	17.52	1.63		29.		.6	7		1050A / 1105A	"
99	11-3	"	25.0	18.64	1.64		31.		.6	7		1110A / 1122A	"
100	11-10	"	26.0	20.61	1.79		37.		.6	8		1104A / 1116A	"
101	11-17	"	28.0	20.54	1.45		30.		.6	8		1120A / 1132A	"
102	11-23	"	26.0	20.25	1.58		32.		.6	8		1120A / 1132A	"
103	12-1	"	35.0	21.33	1.46		31.		.6	10		1110A / 1128A	"
104	12-8	"	34.0	20.00	1.42		28.		.6	10		1100A / 1120A	"
105	12-15	"	32.0	29.54	1.67		49.		.6	6		1250P / 102P	"
106	12-22	"	48.0	37.56	2.15		81.		.6	7		1215P / 1227P	"
107	12-29	"	64.0	36.02	1.87		68.		.6	8		1130A / 1145A	"
108	1-5	"	72.0	36.36	1.78		65.		.6	9		1015A / 1030A	"
109	1-12	"	89.0	41.84	1.36		57.		.6	11		1040A / 1100A	"
110	1-19	"	96.0	42.43	1.63		69.		.6	11		1135A / 1155A	"
111	1-26	"	96.0	37.00	1.66		62.		.6	11		1100A / 1120A	"
112	2-2	"	94.0	43.04	1.61		69.		.6	10		1215P / 1235P	"
113	2-9	"	82.0	38.02	1.80		68.		.6	9		1050A / 1105A	"
114	2-16	"	94.0	40.10	1.66		67.		.6	10		1030A / 1045A	"
115	2-23	"	106.0	44.41	1.36		60.		.6	12		1100A / 1120A	"
116	3-2	"	91.0	40.14	1.51		61.		.6	10		1155A / 1210P	"
117	3-9	"	81.0	39.40	1.57		62.		.6	10		1055A / 1115A	"
118	3-16	Brewster	108.0	40.95	1.40		57.		.6	12		1055A / 1115A	FC 8
119	3-23	"	98.0	39.12	1.42		56.		.6	13		1105A / 1125A	"
120	3-30	"	96.0	43.98	1.45		64.		.6	11		1025A / 1045A	"
121	4-6	"	113.0	42.34	1.35		57.		.6	13		1020A / 1040A	"
122	4-13	"	82.0	31.36	1.67		52.		.6	10		1050A / 1105A	"
123	4-20	"	82.0	33.28	1.37		45.		.6	10		1040A / 1100A	"
124	4-27	"	36.0	22.52	1.39		31.		.6	5		1020A / 1030A	"
125	5-4	"	55.0	24.63	1.38		34.		.6	9		1040A / 1055A	"
126	5-11	"	58.0	68.14	2.16		147.		.6	6		1140A / 1155A	"
127	5-18	"	40.0	23.24	1.53		36.		.6	11		1050A / 1105A	"

F. C. D. FORM 104 500 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F86S

DISCHARGE MEASUREMENTS OF SAN GABRIEL RIVER

AT below Standifer Ditch DURING THE YEAR ENDING SEPTEMBER 30, 1939

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Permit Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
128	5-25	Brewster	122.0	67.88	1.63		111.		.6	14		1050A / 1110A	FC 8
129	6-1	"	37.0	15.45	1.57		24.		.6	10		1040A / 1055A	"
130	6-8	"	27.0	15.76	1.49		23.		.6	7		1105A / 1120A	"
131	6-14	"	26.0	14.10	1.34		19.		.6	7		1102A / 1114A	"
132	6-21	Lindsay	33.0	12.52	1.20		15.		.6	11		1200P / 1210P	FC 28
133	6-29	Brewster	38.0	15.12	1.15		17.		.6	7		1055A / 1110A	FC 8
134	7-6	"	37.0	15.91	1.17		19.		.6	6		1015A / 1027A	"
135	7-13	"	57.0	58.83	1.79		105.		.6	8		1220P / 1240P	"
136	7-20	"	67.0	71.04	1.58		112.		.6	8		1158A / 1210P	"
137	7-27	"	24.0	18.02	1.11		20.		.6	7		1055A / 1107A	"
138	8-3	"	23.0	13.04	1.19		16.		.6	6		1015A / 1030A	"
139	8-10	"	22.0	15.84	1.18		19.		.6	6		1100A / 1114A	"
140	8-17	"	24.0	14.18	1.27		18.		.6	7		1030A / 1042A	"
141	8-24	"	24.0	13.16	1.30		17.		.6	7		1110A / 1125A	"
142	8-31	Brewster	21.0	11.41	1.42		16.		.6	7		1050A / 1102A	FC 8
143	9-7	"	25.0	11.84	1.26		15.		.6	8		1035A / 1050A	"
144	9-14	"	26.0	13.00	1.45		19.		.6	7		1040A / 1055A	"
145	9-21	"	28.0	11.08	1.24		14.		.6	7		1005A / 1020A	"
146	9-28	"	65.0	31.01	1.61		50.		.6	8		1035A / 1047A	"

F. C. D. FORM 104 500 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F55S

DISCHARGE MEASUREMENTS OF SANTA MONICA CANYON CREEK

AT 150 feet below East Rustic Road DURING THE YEAR ENDING SEPTEMBER 30, 1939

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Permit Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
48	10-6	Moon					Est. 0.5					330P / 345P	
49	11-17	"	2.0	0.35	1.86	1.85	0.65		.6	4	0	350P / 250A	FC22
50	12-15	Moon-Andren	20.0	4.1	10.50	-	43.		.6	4	-	300A / 347P	"
51	1-6	Moon-Middleton					Est. 0.5					450P / 323P	
52	1-19	Moon					Est. 0.3					328P / 430P	
53	2-9	"	2.8	0.19	1.00	-	0.19		.6	4	-		FC22
54	2-23	"					Est. 0.2					428P / 1200N	
55	3-16	"					Est. 0.2					210P / 216P	
56	4-6	"					Est. 0.2					400P / 406P	
57	4-13	"	4.5	0.83	1.17	-	0.97		.6	5		306P / 314P	FC22
58	4-20	"	4.2	0.63	0.95	-	0.60		.6	4		1150A / 1155A	"
59	4-27	"	4.0	0.85	1.18	-	1.0		.6	5		227P / 234P	"
60	5-4	"	5.0	1.04	1.15	-	1.2		.6	5		240P / 249P	"
61	5-11	"	5.0	1.10	1.06	-	1.2		.6	6			"
62	5-31	"	3.2	0.46	0.89	-	0.4		.6	4			"

F. C. D. FORM 104 500 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. F85S

DISCHARGE MEASUREMENTS OF STANDIFER DITCH

AT near below headgate DURING THE YEAR ENDING SEPTEMBER 30, 1939

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Permit Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
96	10-6	Brewster	8.0	10.48	1.63	3.89	17.		.6	4	0	1210P / 1220P	FC8
97	10-13	"	8.0	10.68	1.46	3.91	16.		.6	4	0	1025A / 1035A	"
98	10-20	"	8.0	11.00	1.53	3.86	17.		.6	4	0	1025A / 1035A	"
99	10-27	"	8.0	9.24	1.45	3.72	13.		.6	4	0	1035A / 1043A	"
100	11-3	"	8.0	10.32	1.49	3.91	15.		.6	4	0	1100A / 1106A	"
101	11-10	"	8.0	10.56	1.48	3.92	16.		.6	4	0	1050A / 1057A	"
102	11-17	"	8.0	10.92	1.68	3.93	18.		.6	4	0	1105A / 1112A	"
103	11-23	"	8.0	9.32	1.65	3.81	15.		.6	4	0	1108A / 1115A	"
104	12-1	"	8.0	9.12	1.65	3.79	15.		.6	4	0	1050A / 1058A	"
105	12-8	"	8.0	9.12	1.53	3.74	14.		.6	4	0	1045A / 1055A	"
106	12-15	"	6.0	5.23	1.28	3.30	6.7		.6	4	0	1235P / 1245P	"
107	12-22	"					0					1205P	
108	12-29	"					0					1125A	
109	1-5	"					0					1005A	
110	1-12	"					0					1035A	
111	1-19	"					0					1125A	
112	1-26	"					0					1050A	
113	2-2	"					0					1205P	
114	2-9	"					0					1040A	
115	2-16	"					0					1020A	
116	2-23	"					0					1050A	
117	3-2	"					0					1150A	
118	3-9	"					0					1045A	
119	3-16	Brewster					0					1125A	
120	3-23	"					0					1054A	
121	3-30	"					0					1015A / 1016A	
122	4-6	"	4.0	0.78	0.70	2.58	0.55		.6	4	0	1010A / 1030A	FC8
123	4-13	"	4.0	1.60	0.71	2.64	1.1		.6	4	0	1036A / 1025A	"
124	4-20	"	8.0	6.30	1.08	3.10	6.8		.6	4	0	1032A / 1000A	"
125	4-27	"	7.0	6.53	1.64	3.33	11.		.6	4	0	1010A / 1015A	"
126	5-4	"	8.0	7.57	1.29	3.40	9.7		.6	5	0	1023A / 1125A	"
127	5-11	"	9.0	11.32	1.82	3.92	21.		.6	5	0	1135A / 1030A	"
128	5-18	"	8.0	7.89	1.78	3.62	14.		.6	5	0	1040A / 1035A	"
129	5-25	"	9.0	10.49	2.08	3.86	22.		.6	5	0	1045A / 1025A	"
130	6-1	"	8.0	9.23	1.58	3.42	15.		.6	5	0	1035A / 1050A	"
131	6-8	"	7.0	7.71	1.60	3.69	12.		.6	5	0	1100A / 1045A	"
132	6-14	"	9.0	11.99	1.49	3.86	18.		.6	5	0	1055A / 1140A	"
133	6-21	Lindsay-Wright	8.7	10.01	1.70	-	17.		.6	7	0	1150A / 1043A	FC28
134	6-29	Brewster	8.0	9.16	1.77	3.72	16.		.6	5	0	1050A / 1002A	FC8
135	7-6	"	8.0	9.13	1.64	3.88	15.		.6	5	0	1010A / 1130A	"
136	7-13	"	9.0	12.71	1.72	3.92	22.		.6	5	0	1145A / 1140A	"
137	7-20	"	9.0	11.29	1.65	3.82	19.		.6	5	0	1150A / 1040A	"
138	7-27	"	7.0	8.39	1.71	3.62	14.		.6	5	0	1050A / 1000A	"
139	8-3	"	8.5	8.34	1.85	3.71	15.		.6	4	0	1006A / 1045A	"
140	8-10	"	7.0	7.04	1.88	3.70	13.		.6	5	0	1055A / 1015A	"
141	8-17	"	7.0	7.07	1.89	3.62	13.		.6	5	0	1025A / 1055A	"
142	8-24	"	8.0	8.00	1.87	3.63	15.		.6	5	0	1105A / 1035A	"
143	8-31	Brewster	8.0	8.98	1.86	3.68	17.		.6	5	0	1045A / 1020A	FC8
144	9-7	"	8.0	8.09	1.81	3.66	15.		.6	5	0	1028A / 1025A	"
145	9-14	"	7.0	7.08	1.77	3.64	13.		.6	5	0	1030A / 952A	"
146	9-21	"	7.0	6.22	1.93	3.61	12.		.6	5	0	1000A / 1025A	"
147	9-28	"					0						

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LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO F66B-S

DISCHARGE MEASUREMENTS OF TRI-CITY OUTFALL SEWER

AT outlet of pipe line DURING THE YEAR ENDING SEPTEMBER 30, 1939

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Format Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
1	10-6	Brewster	12.0	7.04	0.91	-	6.4		.6	6	-	815A / 825A	FC8
2	10-13	"	11.0	5.26	0.95	-	5.0		.6	5	-	805A / 815A	"
3	10-20	"	12.0	6.72	0.86	-	5.8		.6	6	-	805A / 815A	"
4	10-27	"	11.0	6.02	1.06	-	6.4		.6	6	-	820A / 830A	"
5	11-3	"	11.0	7.03	1.09	-	7.7		.6	6	-	810A / 822A	"
6	11-10	"	11.0	7.23	0.99	-	7.2		.6	6	-	816A / 824A	"
7	11-17	"	10.0	6.97	1.11	-	7.8		.6	6	-	830A / 840A	"
8	11-23	"	11.0	6.57	1.10	-	7.2		.6	5	-	858A / 907A	"
9	12-1	"	10.0	4.72	9.97	-	4.6		.6	5	-	835A / 845A	"
10	12-8	"	9.0	5.75	0.92	-	5.3		.6	5	-	830A / 838A	"
11	12-15	"	12.0	10.92	1.41	-	15.		.6	6	-	915A / 925A	"
12	12-22	Brewster-Pettis	10.0	12.32	1.58	-	20.		.6	5	-	1020A / 1030A	"
13	12-29	Brewster	9.0	7.60	1.10	-	8.3		.6	4	-	810A / 820A	"
14	1-5	Brewster-Brougher	9.0	8.96	0.88	-	7.9		.6	5	-	830A / 840A	"
15	1-12	Brewster	9.0	10.04	0.88	-	8.8		.6	5	-	835A / 842A	"
16	1-19	"	13.0	9.75	0.92	-	8.9		.6	7	-	844A / 855A	"
17	1-26	"	11.0	9.51	1.26	-	12.		.6	6	-	900A / 912A	"
18	2-2	"	13.0	10.47	1.07	-	11.		.6	7	-	846A / 857A	"
19	2-9	"	9.0	6.54	1.77	-	12.		.6	5	-	848A / 900A	"
20	2-16	"	9.0	8.37	1.14	-	9.6		.6	5	-	820A / 830A	"
21	2-23	"	8.0	9.28	0.84	-	7.8		.6	5	-	827A / 836A	"
22	3-2	"	9.0	7.44	1.47	-	11.		.6	5	-	905A / 915A	"
23	3-9	"	8.0	10.44	0.96	-	10.		.6	5	-	830A / 840A	"
24	3-16	"	9.0	6.01	1.75	-	11.		.6	5	-	842A / 853A	"
25	3-23	Brewster	9.0	5.85	1.37		8.0		.6	5		836A / 843A	FC 8
26	3-30	"	7.0	5.81	1.21		7.0		.6	4		830A / 840A	"
27	4-6	"	6.0	6.02	1.00		6.0		.6	4		832A / 840A	"
28	4-13	"	5.0	5.50	1.38		7.6		.6	3		838A / 845A	"
29	4-20	"	6.0	6.25	1.22		7.6		.6	4		825A / 832A	"
30	4-27	"	7.0	6.63	1.41		9.4		.6	4		800A / 810A	"
31	5-4	"	4.0	4.71	1.39		6.5		.6	3		820A / 824A	"
32	5-11	"	4.0	3.09	0.98		3.0		.6	4		820A / 826A	"
33	5-18	"	4.0	4.30	1.15		4.9		.6	4		825A / 832A	"
34	5-25	"	4.0	3.75	1.02		3.8		.6	4		820A / 827A	"
35	6-1	"	6.0	4.18	0.91		3.8		.6	6		830A / 840A	"
36	6-8	"	4.0	3.74	1.85		3.9		.6	4		832A / 839A	"
37	6-14	"	4.0	3.76	1.03		3.9		.6	4		840A / 846A	"
38	6-21	Lindsey-Wright	9.2	9.46	1.27		12.		.6	7		935A / 945A	FC 28
39	6-29	Brewster	7.0	7.13	0.69		4.9		.6	4		803A / 809A	FC 8
40	7-6	"	6.0	4.37	1.08		4.7		.6	4		751A / 758A	"
41	7-13	"	6.0	4.81	1.02		4.9		.6	4		751A / 758A	"
42	7-20	"	6.0	3.89	1.16		4.5		.6	4		756A / 802A	"
43	7-27	"	5.0	3.96	1.21		4.8		.6	5		802A / 810A	"
44	8-3	"	7.0	4.63	1.09		5.0		.6	4		805A / 812A	"
45	8-10	"	7.0	4.96	1.06		5.3		.6	4		807A / 814A	"
46	8-17	"	7.0	5.29	0.87		4.6		.6	4		756A / 804A	"
47	8-24	"	8.0	6.14	0.76		4.6		.6	4		802A / 810A	"
48	8-31	"	7.0	5.86	0.90		5.3		.6	4		804A / 811A	"
49	9-7	Brewster	8.0	5.72	0.99		5.6		.6	4		803A / 811A	FC 8
50	9-14	"	8.0	6.00	0.77		4.6		.6	4		810A / 817A	"
51	9-21	"	8.0	4.84	1.05		5.1		.6	4		755A / 802A	"
52	9-28	"	10.0	8.24	1.12		9.2		.6	5		803A / 810A	"

RISING WATER AT WHITTIER NARROWS

This is a computed discharge determined weekly, except when there is bank runoff during storms, from discharge measurements by the formula:

$$X = A + B - (D + E + F) + I + J + K + (L - M) + O + P - R$$

in which, in general,

- X = the rising water at Whittier Narrows, in second-feet.
- A = the measured discharge at Station F64R, Rio Hondo 1000 ft. above Mission Bridge.
- B = the measured discharge at Station F83R, Rio Hondo Slough at San Gabriel Blvd.
- D = the measured discharge of the Rio Hondo above Rising Water.
- E = the measured discharge at Station F66S, Tri-City Outfall Sewer above junction with Rio Hondo.
- F = the measured discharge of the El Monte Sewer.
- I = the measured discharge of Temple Ditch.
- J = the measured discharge of Rincon Ditch.
- K = the measured discharge of Durfee Ditch.
- L = the measured discharge at Station F84S, Cate Ditch below sluice gate.
- M = the measured, or estimated, discharge from the Cate Ditch Well.
- O = the measured discharge at Station F85S, Standifer Ditch below headgate.
- P = the measured discharge at Station F86S, San Gabriel River below Standifer Ditch.
- R = the measured discharge of San Gabriel River above Rising Water.

For the purpose of determining the monthly and yearly runoff, straight line variation in flow between measurements has been assumed. Included herewith is the graph showing the mean monthly rising water since January 1929.

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

Sta. No. _____

RISING WATER AT WHITTIER NARROWS

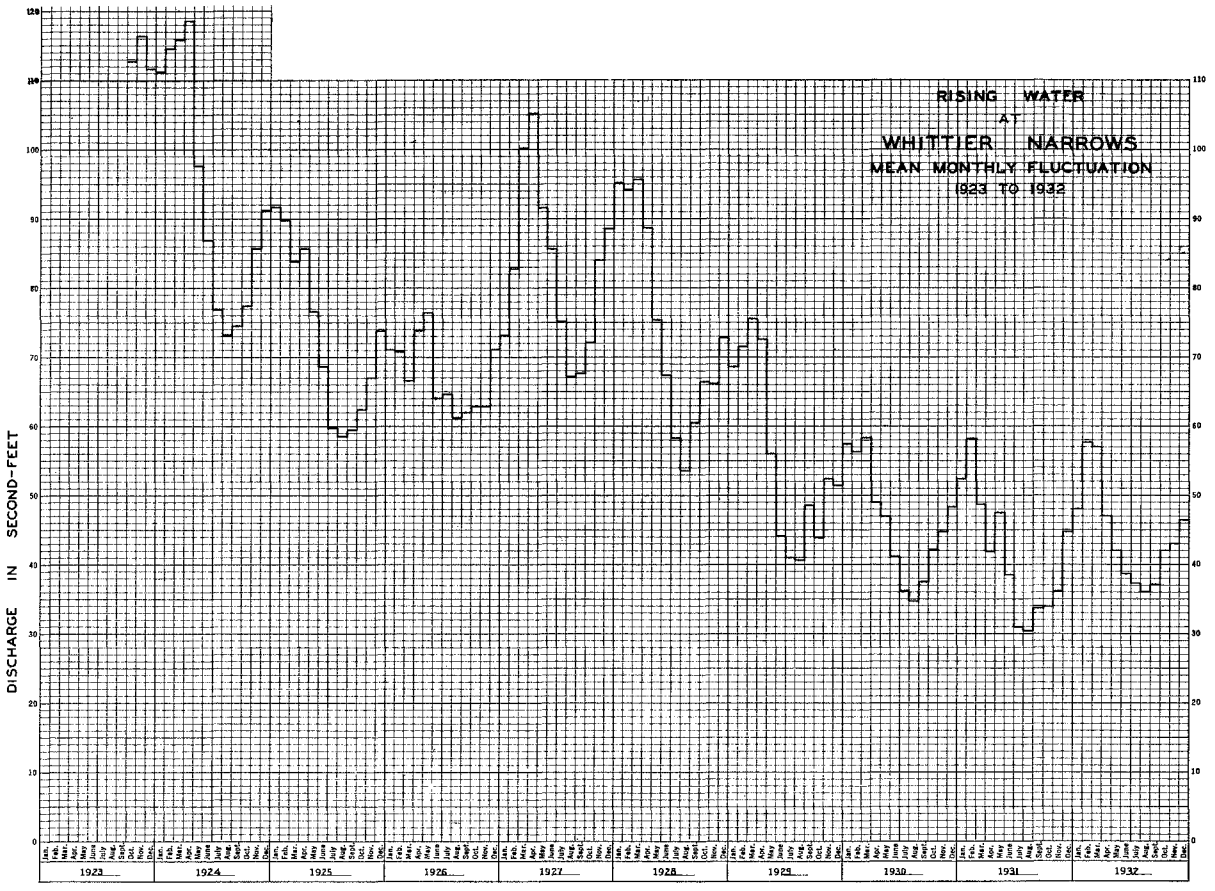
Daily discharge, in second-feet of _____ for the year ending September 30, 1939

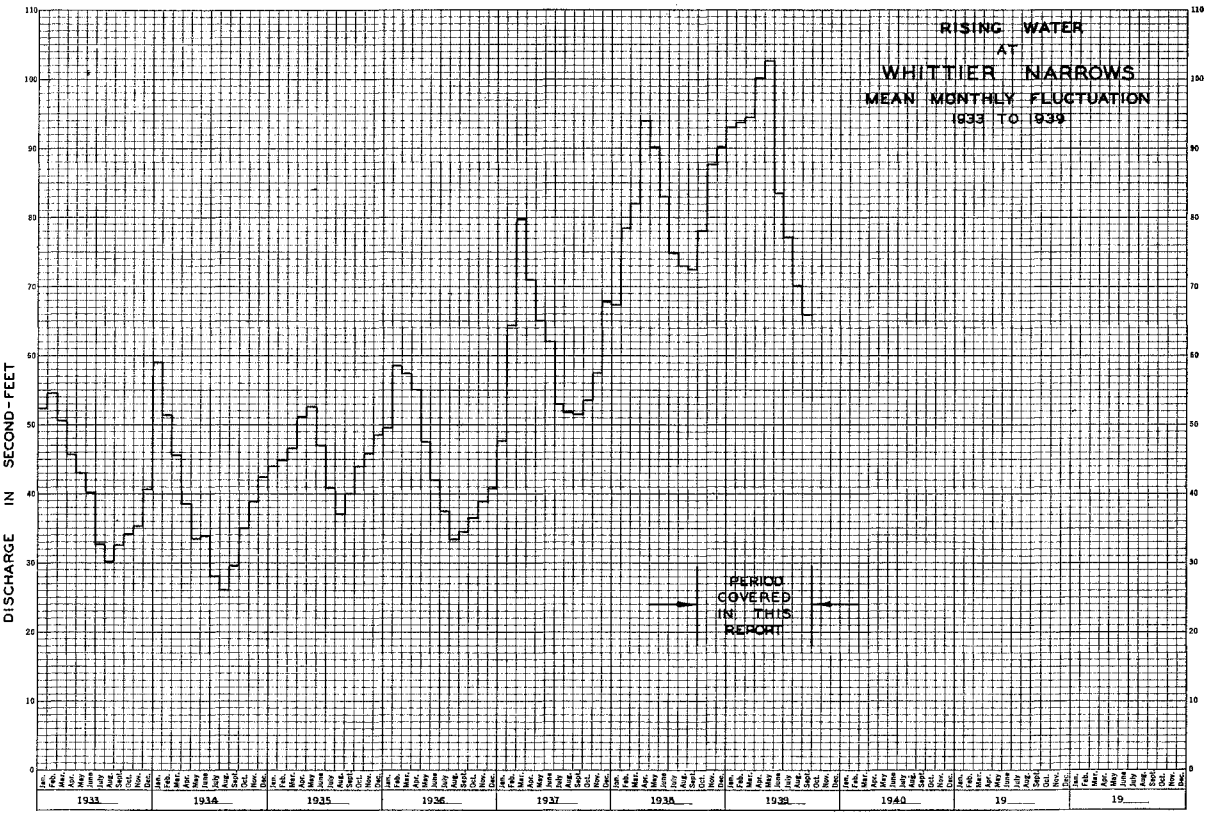
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			85									
2												
3		87				92					75	
4												
5								103				
6	72						101		94	76		65
7			84									
8												
9		91				91			90		72	
10												
11				90			95	107		79		68
12	79								88			
13												
14			89									
15							100	104		76	70	
16				92		91						
17		87										
18												
19	79											
20					94	99			73			61
21												
22		87						101			67	
23												
24												
25				94			104			78		
26									76			
27												
28	82											
29			99								64	
30												
31												
	2420	2631	2796	2884	2628	2926	3003	3184	2501	2389	2173	1976

	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Year or Period
Mean	78.1	87.7	90.2	93.0	93.8	94.4	100.1	102.7	83.4	77.1	70.1	65.9	85.3
Acre-feet	4800	5220	5550	5720	5210	5800	5960	6320	4960	4740	4310	3920	62500

Remarks: Weekly determinations omitted during storm period.

F. C. Dist. Form 19


RISING WATER
AT
WHITTIER NARROWS
MEAN MONTHLY FLUCTUATION
1923 TO 1932
DISCHARGE IN SECOND-FEET
1923
1924
1925
1926
1927
1928
1929
1930
1931
1932


RISING WATER
AT
WHITTIER NARROWS
MEAN MONTHLY FLUCTUATION
1933 TO 1939
DISCHARGE IN SECOND-FEET
PERIOD COVERED IN THIS REPORT
1933
1934
1935
1936
1937
1938
1939
1940

F. C. D. FORM 104 500 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. Misc.

DISCHARGE MEASUREMENTS OF in BIG ROCK CREEK DRAINAGE AREA

AT miscellaneous points DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Current Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
	DRAIMAN CREEK at submerged dam												
1	5-19	Luce-Luce	2.0	0.29	0.86		0.25		.6	4		250P / 253P	FC 39
	PALLETTE CREEK below Weimer's Diversion												
1	5-19	Luce-Luce	4.0	0.87	1.59		1.4		.6	5		540P / 545P	FC 39
2	7-26	" "	4.0	0.89	1.40		1.2		.6	5		430P / 435P	"

F. C. D. FORM 104 500 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. Misc.

DISCHARGE MEASUREMENTS OF in SANTA CLARA RIVER DRAINAGE AREA

AT miscellaneous points DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Current Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
	SANTA CLARA RIVER below Ravenna												
4	5-19	Luce-Luce	5.1	1.42	1.83		2.6		.6	6		1040P / 1050P	FC 39
	SANTA CLARA RIVER at Lang												
1	10-20	Luce	7.2	2.53	1.42		3.6		.6	8		915A / 930A	FC 39
	SANTA CLARA RIVER DIVERSION DITCH at Lang												
1	10-20	Luce	2.4	0.32	1.28		0.41			4		920A / 923A	FC 39

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LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. Misc.

DISCHARGE MEASUREMENTS OF in TOPANGA CANYON DRAINAGE AREA

AT miscellaneous points DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Current Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
	TOPANGA CREEK above Cable Section												
1	5-25	Moon	2.3	0.30	0.43		0.13		.6	4		320P / 325P	FC 22

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LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. Misc.

DISCHARGE MEASUREMENTS OF in SANTA MONICA CANYON DRAINAGE AREA

AT miscellaneous points DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Current Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
	SANTA MONICA CANYON CREEK above Rustic Canyon Storm drain.												
1	5-18	Moon	2.0	0.33	1.00		0.33		.6	4		205P / 210P	FC 22
2	5-25	"	1.5	0.18	0.83		0.15	Float		2		445P / 446P	
3	5-31	"	1.5	0.18	0.89		0.16		.6	2		252P / 254P	FC 22
4	6-8	"	1.5	0.16	1.25		0.20	Float		2		445P / 446P	
5	6-15	"	1.5	0.12	1.33		0.16		.6	2		137P / 138P	FC 22
6	6-22	"	2.0	0.20	0.85		0.17	Float		2		203P / 204P	
7	6-29	"	2.0	0.14	2.28		0.27	"		4		455P / 500P	
8	7-6	Bonadiman	2.5	0.37	1.05		0.39			2		220P	FC 40
9	7-13	"					Est. 0.40					210P	

F. C. D. FORM 104 500 8-39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. Misc.

DISCHARGE MEASUREMENTS OF in LOS ANGELES RIVER DRAINAGE AREA

AT miscellaneous points DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Current Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
	BIG TUJUNGA CREEK above Fox Creek												
20	10-6	Lind	6.2	2.37	2.10		5.0		.6	7		1050A / 1102A	FC 19
21	2-1	Turner	Two channels				19.			8		1155A / 1205P	FC 5
22	2-7	"	"	"			20		.6	8		1220P / 1230P	"
23	5-19	"	"	"			8.4		.6	10		1145A / 1155A	"
24	6-8	"	"	"			4.2		.6	9		1110A / 1120A	"
	FOX CREEK near mouth of canyon												
36	10-6	Lind	3.5	0.87	0.61		0.55		.6	7		1030A / 1036A	FC 19
	BIG TUJUNGA CREEK inflow into Big Tujunga reservoir												
44	2-9	Turner	13.0	6.58	3.62		24		.6	7		940A / 950A	FC 5
45	2-15	"	13.5	6.88	3.32		23		.6	7		1145A / 1155A	"
46	2-23	"	16.0	7.40	2.56		19		.6	9		1145A / 1155A	"
47	3-1	Turner-Gorsline	14.5	6.29	2.41		15		.6	9		150P / 200P	"
48	3-9	Turner	Two channels				14		.6	10		1155A / 1210P	"
49	3-16	"	16.0	7.72	2.52		20		.6	8		1135A / 1145A	"
50	3-23	"	12.0	5.68	2.64		15		.6	6		1000A / 1010A	"
51	3-30	"	12.0	6.72	2.36		16		.6	6		1120A / 1130A	"
52	4-6	"	12.0	6.48	2.04		13		.6	7		1100A / 1110A	"
53	4-13	"	11.0	5.42	2.03		11		.6	6		1100A / 1110A	"
54	4-20	Turner	11.0	5.42	1.82		9.9		.6	6		1255P / 100P	FC 5
55	4-28	"	10.0	4.27	2.15		9.2		.6	6		1250P / 100P	"
56	5-5	"	10.0	4.36	2.14		9.4		.6	6		1110A / 1120A	"
57	5-12	"	12.0	4.96	2.14		11.		.6	6		1040A / 1050A	"
58	6-1	Moon	8.7	3.78	1.21		4.6		.6	9		248P / 300P	FC 22
59	6-21	Turner	10.0	3.93	1.11		4.4		.6	7		1125A / 1135A	FC 5
60	6-29	"	10.0	4.20	0.73		3.1		.6	10		1100A / 1110A	"
61	7-5	Bollinger	7.3	2.54	1.14		2.9		.6	6		115P / 122P	FC 6
62	7-13	"	5.8	1.93	1.03		2.0		.6	9		1053A / 1102A	"
63	7-19	"	5.6	1.56	1.17		1.8		.6	7		135P / 143P	"
64	7-27	Turner-Miller	6.0	1.58	0.80		1.3		.6	6		950A / 955A	FC 5
65	8-3	Turner	5.5	1.97	0.72		1.4		.6	6		1000A / 1005A	"
66	8-15	Green	3.0	0.96	1.15		1.1		.6	6		250P / 300P	FC 31
67	8-15	"	3.0	0.95	1.16		1.1		.6	6		320P / 335P	"
68	8-22	"	3.0	0.82	1.27		1.0		.6	6		245P / 257P	"
69	8-22	"	3.0	0.81	1.22		1.0		.6	6		300P / 305P	"
70	8-24	Turner	6.0	3.12	0.33		1.0	Float		6		200P / 210P	
	BIG TUJUNGA CREEK below Osborn's fence												
1	9-28	Turner	24.5	13.67	0.88		12		.6	10		740A / 750A	FC 5
	BIG TUJUNGA CREEK above Hansen Dam												
1	8-17	Turner	Two Channels				14		.6	9		855A / 910A	FC 5
2	8-21	"	16.0	7.51	1.88		14		.6	9		800A / 815A	"
3	8-24	"	15.5	6.91	2.03		14		.6	9		815A / 825A	"
4	8-28	"	14.5	5.21	1.63		8.5		.6	8		735A / 745A	"
5	8-31	"	14.5	5.36	1.58		8.4		.6	8		825A / 840A	"
6	9-5	Bollinger	15.5	8.61	2.03		18		.6	10		843A / 853A	FC 6
7	9-8	"					0					815A	
8	9-19	Turner	8.2	2.00	1.00		2.0		.6	9		1120A / 1130A	FC 5
9	9-19	"	Two Channels				11		.6	12		1205P / 1220P	"

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LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. Misc.

DISCHARGE MEASUREMENTS OF in LOS ANGELES RIVER DRAINAGE AREA

at miscellaneous points DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Figure Ext.	Ext.	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
		BIG TUJUNGA CREEK below Foothill Blvd.											
1	9-11	Bollinger	23.5	13.53	1.28		17		.6	12		930A / 941A	FC 6
2	9-13	"	24.5	13.20	1.32		18		.6	13		103P / 115P	"
3	9-19	Turner	13.0	7.93	1.87		15		.6	7		1030A / 1040A	FC 5
		BIG TUJUNGA CREEK below Christy Ave.											
1	9-11	Bollinger	17.0	11.54	1.08		13		.6	9		840A / 849A	FC 6
2	9-13	Bollinger-Jordan	20.0	12.76	1.06		13		.6	11		255P / 303P	"
		BIG TUJUNGA WASH below Hansen Dam											
1	9-13	Bollinger-Jordan	18.1	13.12	0.91		12		.6	10		355P / 405P	
		BIG TUJUNGA WASH at Laurel Canyon											
2	9-13	Bollinger-Jordan	10.0	3.51	1.99		7.0		.6	6		435P / 442P	
3	9-19	Turner	6.5	1.79	0.79		1.4		.6	7		130P / 140P	FC 5
4	9-28	Luce	10.5	1.17	1.13		1.3		.6	10		200P / 210P	FC 39
		BIG TUJUNGA -E. CHANNEL above Chandler Blvd.											
1	12-16	Kooh-Lindstrom	16.0	3.02	1.83		5.5		.6	7		925A / 932A	FC 6
		LOS ANGELES RIVER at Louise Street											
1	10-20	Bollinger	4.3	6.23	0.64		4.0		.6	6		158P / 205P	FC 6
		LOS ANGELES RIVER below Buena Vista Street											
21	4-13	Bollinger	32.5	23.72	1.20		28		.6	10		430P / 441P	FC 6
22	4-20	"	33.7	32.09	0.93		30		.6	14		924A / 940A	"
23	4-27	"	33.9	32.65	0.90		29		.6	14		220P / 234P	"
24	5-11	"	32.0	21.70	0.42		9.1		.6	8		333P / 341P	"
25	5-18	"	34.0	36.20	0.74		27		.6	11		240P / 253P	"
26	5-25	"	34.7	38.92	0.67		26		.6	11		344P / 357P	"
27	6-1	"	33.8	39.94	0.72		29		.6	10		253P / 304P	"
28	6-8	"	35.5	38.78	0.73		28		.6	12		120P / 135P	"
29	6-15	"	34.6	37.02	0.87		32		.6	14		155P / 210P	"
30	6-22	"	35.0	37.57	0.82		31		.6	11		1102A / 1115A	"
31	6-29	"	35.2	37.4	0.79		29		.6	11		1053A / 1103A	"
32	7-6	"	36.0	39.88	0.71		28		.6	13		1147A / 1200N	"
33	7-14	"	35.2	37.85	0.74		28		.6	14		320P / 335P	"
34	7-20	"	34.7	35.74	0.80		28		.6	14		1038A / 1052A	"
35	7-27	"	33.7	32.59	0.92		30		.6	16		957A / 1012A	"
36	8-3	Bollinger-Odekirk	34.0	33.08	0.83		27		.6	17		210P / 225P	"
37	8-10	Bollinger	31.5	33.3	0.78		26		.6	16		100P / 116P	"
38	8-16	Luce	31.4	31.41	0.92		29		.6	14		1250P / 100P	FC39
39	8-23	Luce	33.5	37.13	0.76		28		.6	12		1010A / 1020A	FC 39
40	8-31	Bollinger	Three Channels				28		.6	18		1048A / 1134A	FC 6
41	9-7	Bollinger-Witt	33.7	34.77	0.82		29		.6	19		237P / 251P	"
42	9-14	Bollinger	34.0	34.72	0.74		26		.6	17		145P / 200P	"
43	9-21	"	34.8	36.41	0.77		28		.6	17		1157A / 1216P	"
44	9-28	"	32.1	25.90	0.64		17		.6	12		300P / 315P	"
		ARROYO SECO above Millard Creek											
28	12-15	Lindsey-Ingram	30.0	11.59	5.83		68		.6	10		1128A / 1143A	FC 13
29	12-18	" "	37.0	16.65	6.52		109		.6	8		130P / 140P	FC 28
		ARROYO SECO above Millard Creek											
30	12-22	Lindsey	27.5	6.55	4.44		29		.6	8		110P / 123P	FC 28
31	12-30	"	14.0	2.17	3.08		6.7		.6	6		857A / 903A	"
32	1-6	Haig	17.0	4.46	3.89		17		.6	9		1125A / 1135A	FC 38
33	1-13	Lindsay	10.0	2.45	3.66		9.0		.6	7		917A / 925A	FC13
34	1-20	"	10.5	2.12	3.76		8.0		.6	5		1100A / 1110A	"
35	1-26	"	15.0	2.22	2.49		5.5		.6	7		100P / 110P	FC 28
36	2-2	"	9.0	2.26	3.04		6.9		.6	6		1032A / 1040A	"
37	2-9	"	11.0	2.00	3.00		6.0		.6	5		1218P / 1224P	"
38	2-16	Lind	6.5	2.31	2.43		5.6		.6	7		1005A / 1017A	FC 19
39	2-17	Lindsay	8.0	2.31	2.46		5.7		.6	6		952A / 1000A	FC 28
40	2-23	"	7.2	2.34	2.31		5.4		.6	6		1145A / 1153A	"
41	3-2	"					0					1130A /	
42	3-16	"	13.3	2.88	2.90		8.4		.6	8		110P / 117P	FC 13
43	3-23	"	Two channels				5.6		.6	9		1145A / 1155A	"
44	3-30	"	10.5	3.04	3.17		9.6		.6	6		1250P / 100P	"
45	4-6	"	7.7	2.08	2.74		5.7		.6	5		1100A / 1105A	FC 28
		MILLARD CREEK above junction with Arroyo Seco											
12	12-22	Lindsay	6.5	1.65	1.85		3.1		.6	5		130P / 136P	FC 28
13	1-6	Haig	4.0	1.09	1.07		1.2		.6	5		1120A / 1122A	FC 38
		ARROYO SECO below Millard Creek											
5	9-28	Lindsay	18.0	3.25	3.35		11		.6	8		1150A / 1200N	FC 28
		ARROYO SECO below Devil's Gate Dam											
31	10-1	Van der Goot	18.0	20.94	0.94		20		.6	9		215P / 230P	
32	10-7	Lindsay	18.0	19.75	0.98		19		.6	10		410P / 420P	FC 28
33	10-7	Lindsay-VanderGoot	17.7	22.36	1.24		28		.6	10		500P / 510P	"
34	12-19	Lindsay-Ingram	19.0	26.63	1.64		44		.6	10		1120A / 1130A	"
35	12-19	" "	26.0	32.80	1.77		58		.6	12		500P / 515P	"
36	12-22	Lindsay	18.0	15.57	0.61		9.6		.6	10		145P / 155P	"
37	12-30	"					Est. 0.05					920A /	

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at miscellaneous points DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Figure Ext.	Ext.	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
		SANTA ANITA CREEK above Santa Anita Dam											
1	4-19	Lind	4.0	1.70	1.28		2.2		.6	8		1230P / 1236P	FC 19
		SANTA ANITA CREEK below Santa Anita Dam											
6	3-2	Lindsay					1.0					1030A /	
7	4-5	Lind	5.5	2.71	1.32		3.6		.6	8		1045A / 1050A	FC 19
8	4-13	Ingram	4.0	0.86	1.40		1.2		.6	4		1125A / 1135A	FC 28
9	4-19	Lind	5.4	2.29	0.60		1.3		.6	10		215P / 225P	FC 19
10	5-3	"	3.9	1.05	1.33		1.4		.6	8		1020A / 1030A	"
11	5-17	"	4.0	1.34	1.54		2.1		.6	8		1225P / 1240P	"
12	5-31	"	3.7	1.01	1.45		1.5		.6	7		1045A / 1052A	"
13	6-14	"	4.0	1.10	1.08		1.2		.6	8		945A / 953A	"
14	6-28	"	4.0	0.99	1.07		1.1		.6	8		1115A / 1121A	"
15	7-20	Lindsay	6.0	1.23	1.23		1.5		.6	9		905A / 915A	FC 28
16	8-3	"	3.3	0.92	1.12		1.0		.6	7		1035A / 1045A	"
17	8-9	Lind	3.3	0.98	1.28		1.3		.6	6		930A / 940A	FC 19
18	8-17	Lindsay	3.3	0.98	1.23		1.2		.6	7		910A / 918A	FC 28
19	8-23	Lind	3.5	0.89	0.98		0.85		.6	5		1015A / 1025A	FC 19
20	8-31	Lindsay	3.3	1.19	1.33		1.6		.6	7		850A / 859A	FC 28
21	9-6	Lind	3.5	1.16	1.52		1.8		.6	7		915A / 920A	FC 19

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AT miscellaneous points DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Safety Factor Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
	SANTA ANITA CREEK below Santa Anita Dam												
22	9-14	Lindsay	3.4	1.11	1.65		1.8		.6	7		905A / 914A	FC 28
23	9-20	Lind	3.7	1.21	1.18		1.4		.6	7		1015A / 1022A	FC 19
24	9-25	Haig-Koch	15.0	6.45	2.83		18.		.6	7		410P / 417P	FC 33
	OAKWOOD SYNDICATE DIVERSION at weir box below Santa Anita Dam												
5	12-1	Lindsay	Two channels				1.0		.6	4		1030A / 1037A	FC 13
6	1-20	"	"	"			0.95		.6	4		253P / 300P	"
7	2-16	"	"	"			1.2		.6	4		205P / 215P	FC 28
8	2-23	"	"	"			1.2		.6	4		1030A / 1035A	"
9	3-2	"	"	"			0.95		.6	5		1028A / 1035A	"
10	3-16	"	"	"			1.8		.6	5		1120A / 1130A	FC 13
11	3-23	"	2.5	1.04	1.92		2.0		.6	5		1042A / 1050A	"
12	4-6	"	Two channels				1.6		.6	4		1004A / 1010A	FC 28
13	4-13	Ingram	"	"			1.3		.6	4		1028A / 1035A	"
14	4-19	"	"	"			1.2		.6	4		310P / 315P	"
15	4-27	Lindsay	"	"			1.1		.6	4		1135A / 1143A	"
16	5-11	"	"	"			1.4		.6	4		228P / 235P	"
17	6-1	"	"	"			1.2		.6	4		940A / 945A	"
18	6-15	"	"	"			1.1		.6	4		1148A / 1155A	"
19	6-29	Ingram	"	"			0.85		.6	4		930A / 938A	FC 2
	SANTA ANITA CREEK at mouth of canyon												
14	12-1	Lindsay	4.0	0.93	0.86		0.80		.6	4		1010A / 1017A	FC 13
15	12-29	"	Two channels				3.9		.6	10		345P / 400P	FC 28
16	1-9	"	19.0	10.56	2.87		30		.6	9		1210P / 1220P	"
17	1-20	"	6.0	1.13	0.92		1.0		.6	5		240P / 246P	FC 13
18	1-31	"	9.3	3.82	1.50		5.7		.6	7		1115A / 1125A	"
19	2-9	"	9.5	3.82	1.76		6.7		.6	7		1047A / 1055A	FC 28
20	2-16	"	Two channels				6.6		.6	11		140P / 155P	"
21	2-23	"	7.7	1.75	1.02		1.8		.6	6		1012A / 1020A	"
22	3-11	"	15.0	7.80	2.26		18		.6	8		1040A / 1050A	"
23	3-16	"	6.0	1.50	0.79		1.2		.6	6		1050A / 1058A	FC 13
24	3-23	"	6.2	1.44	0.84		1.2		.6	6		1024A / 1030A	"
25	3-30	"	9.5	4.11	1.80		7.4		.6	8		1130A / 1140A	"
26	4-6	"	6.1	1.68	0.61		1.0		.6	6		953A / 1000A	FC 28
27	9-25	Haig-Koch	2.4	3.86	3.98		15.		.6	5		400P / 405P	FC 33
28	9-27	Lindsay	Two channels				29.		.6	14		335P / 350P	FC 28
	SAWPIT CREEK above junction with Monrovia Creek												
23	10-20	Lindsay					Est. 0.01					945A	
24	1-5	Lindsay-Ingram	9.0	0.96	4.26		4.1		.6	4		538P / 543P	FC 28
25	1-12	Lindsay	2.1	0.29	0.83		0.24		.6	4		120P / 124P	"
26	1-21	Lind	3.4	0.76	0.88		0.65		.6	4		155P / 200P	FC 19
27	1-21	Lindsay-Ingram	4.5	0.87	1.07		0.95		.6	5		236P / 241P	FC 13
28	2-3	" "	4.0	0.70	0.99		0.70		.6	5		242P / 247P	FC 28
29	3-30	Lindsay	2.4	0.34	0.76		0.26		.6	5		1000A / 1005A	FC 13
	EATON WASH below Eaton Wash Dam												
29	12-20	Lindsay-Ingram	21.5	14.22	2.03		29		.6	9		1055A / 1105A	FC 28
30	12-21	" "	14.0	3.64	1.32		4.8		.6	7		1020A / 1030A	"

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Safety Factor Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
	RUBIO WASH at Rose Road												
1	9-25	Baustian-Fricke	26.10	25.46	15.09		384			14		728A / 748A	Pitot
	RIO HONDO near Garvey Ave.												
94	10-6	Brewster	4.0	1.72	1.33		2.3		.6	4		835A / 841A	FC 8
95	10-13	"	Two channels				1.8		.6	8		828A / 840A	"
96	10-20	"	9.0	1.69	1.09		1.8		.6	5		825A / 835A	"
97	10-27	"	4.0	1.48	0.99		1.5		.6	4		840A / 846A	"
98	11-3	"	7.0	1.63	1.02		1.7		.6	5		836A / 843A	"
99	11-10	"	7.0	1.58	0.92		1.5		.6	4		840A / 847A	"
100	11-17	"	10.0	1.93	1.12		2.2		.6	6		848A / 857A	"
101	11-23	"	7.0	1.87	1.17		2.2		.6	4		918A / 926A	"
102	12-1	"	8.5	1.88	0.91		1.7		.6	5		852A / 900A	"
103	12-8	"	10.0	2.32	1.00		2.3		.6	5		850A / 900A	"
104	12-15	"	51.0	23.22	2.18		51.		.6	11		930A / 945A	"
105	12-22	"	Two channels				26.		.6			1035A / 1051A	"
106	12-29	"	15.0	5.26	1.41		7.4		.6	4		830A / 838A	"
107	1-5	"	59.0	36.53	2.11		77.		.6	8		800A / 820A	"
108	1-12	"	19.0	4.73	1.13		5.4		.6	6		804A / 815A	"
109	1-19	"	12.0	3.02	1.50		4.5		.6	4		824A / 836A	"
110	1-26	"	16.0	3.68	1.08		4.0		.6	5		840A / 850A	"
111	2-2	"	9.0	2.37	1.30		3.1		.6	5		822A / 830A	"
112	2-9	"	13.0	3.20	0.91		2.9		.6	7		824A / 837A	"
113	2-16	"	22.0	4.96	0.91		4.5		.6	6		840A / 850A	"
114	2-23	"	8.0	2.40	1.31		3.1		.6	4		906A / 912A	"
115	3-2	"	17.0	3.73	1.00		3.7		.6	5		840A / 850A	"
116	3-9	Brewster	9.0	2.87	1.29		3.7		.6	5		855A / 905A	FC 8
117	3-16	"	11.0	2.37	1.23		2.9		.6	5		905A / 915A	"
	EL MONTE SEWER near junction with Rio Hondo												
2	3-15	Brewster	2.5	0.65	1.05		0.70		.6	5		1230P / 1235P	FC 8
3	3-23	"	2.4	0.56	0.89		0.50		.6	3		820A / 825A	"
4	3-30	"	2.0	0.53	1.06		0.55		.6	4		818A / 823A	"
5	4-6	"	2.0	0.49	1.04		0.50		.6	4		820A / 825A	"
6	4-13	"	1.5	0.50	0.96		0.48		.6	3		825A / 830A	"
7	4-20	"	1.5	0.49	1.02		0.50		.6	3		810A / 815A	"
8	4-27	"	1.5	0.54	0.96		0.50		.6	3		820A / 825A	"
9	5-4	"	1.5	0.45	1.04		0.47		.6	3		804A / 808A	"
10	5-11	"	1.5	0.52	1.02		0.55		.6	3		805A / 810A	"
11	5-18	"	1.5	0.42	1.10		0.46		.6	3		807A / 812A	"
12	5-25	"	1.5	0.47	1.04		0.49		.6	3		808A / 814A	"
13	6-1	"	2.0	0.45	0.91		0.41		.6	4		815A / 820A	"
14	6-8	"	2.0	0.40	0.90		0.36		.6	4		813A / 819A	"
15	6-14	"	1.5	0.52	1.02		0.55		.6	3		900A / 905A	"
16	6-21	Lindsay					Est. 0.50					930A	
17	6-29	Brewster	2.0	0.43	0.81		0.35		.6	4		820A / 824A	"
18	7-6	Brewster	1.5	0.36	1.14		0.41		.6	3		810A / 815A	FC 8
19	7-13	"	1.5	0.44	1.05		0.46		.6	3		805A / 810A	"
20	7-20	"	2.0	0.43	1.05		0.45		.6	4		810A / 815A	"
21	7-27	"	1.5	0.46	1.15		0.55		.6	3		815A / 820A	"
22	8-3	"	2.0	0.47	0.91		0.43		.6	4		820A / 825A	"
23	8-10	"	1.5	0.43	1.12		0.48		.6	3		820A / 825A	"
24	8-17	"	1.5	0.46	1.09		0.50		.6	3		824A / 816A	"
25	8-24	"	1.5	0.45	1.04		0.47		.6	3		815A / 820A	"
26	8-31	"	2.0	0.43	0.95		0.41		.6	4		819A / 824A	"
27	9-7	"	3.0	0.54	0.94		0.50		.6	3		816A / 820A	"
28	9-14	"	2.0	0.52	0.83		0.43		.6	4		835A / 840A	"
29	9-21	"	1.0	0.33	1.48		0.49		.6	2		815A / 820A	"
30	9-29	"	2.0	0.37	1.16		0.43		.6	4		830A / 834A	"

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LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO Misc.

DISCHARGE MEASUREMENTS OF in SAN GABRIEL RIVER DRAINAGE AREA

AT miscellaneous points DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
		SAN GABRIEL RIVER - W. FORK above S.G. Dam No. 2											
1	5-15	Godfrey	5.0	1.76	4.14		7.3		.6	5		915A / 941A	FC 20
2	5-18	"	6.5	2.44	3.67		9.0		Float	6		952A / 1000A	
3	5-26	"	5.0	1.93	2.77		5.3		.6	6		1043A / 1050A	FC 20
		SAN GABRIEL RIVER - W. FORK side canyons below S.G. Dam No. 2											
27	12-19	De Vore-Godfrey	3.0	0.81	0.85		0.70		.6	5		1155A / 1203P	FC 20
28	1-5	" "	3.4	0.88	0.80		0.70		.6	5		215P / 220P	FC 32
		SAN GABRIEL RIVER - W. FORK below S. G. Dam No. 2											
9	10-7	Godfrey	1.2	0.06	0.84		0.05		Float	2		1040A / 1045A	
10	10-11	"	1.8	0.10	1.30		0.13		Float	4		1040A / 1043A	
11	10-14	"	1.6	0.09	1.33		0.12		Float	4		1150A / 1155A	
12	10-18	"	1.8	0.13	1.23		0.16		Float	4		325P / 330P	
13	10-21	"	1.8	0.13	1.23		0.16		Float	4		1040A / 1045A	
14	1-14	De Vore	1.8	0.12	0.60		0.07		Float	7		948A / 958A	
15	1-20	"	1.85	0.13	0.62		0.08		Float	8		1001A / 1008A	
16	1-23	Godfrey	1.5	0.09	1.11		0.10		Float	3		925A / 930A	
17	1-30	"	1.5	0.09	1.34		0.12		Float	3		920A / 925A	
18	2-6	"	1.5	0.08	1.50		0.12		Float	3		1030A / 1035A	
19	2-17	De Vore	2.2	0.17	0.76		0.13		Float	9		127P / 135P	
20	2-20	Godfrey	1.5	0.11	1.36		0.15		Float	3		920A / 925A	
21	2-24	De Vore	2.25	0.18	0.82		0.15		Float	9		1034A / 1042A	
22	2-27	Godfrey	1.5	0.09	1.56		0.14		Float	3		940A / 945A	
23	3-3	De Vore	2.25	0.19	0.79		0.15		Float	9		1026A / 1034A	
24	3-6	Godfrey	2.1	0.16	0.75		0.12		Float	4		940A / 945A	
25	3-10	De Vore	2.25	0.19	0.82		0.15		Float	9		1017A / 1025A	
26	3-13	Godfrey	2.2	0.16	0.75		0.12		Float	4		929A / 934A	
27	3-17	De Vore	2.75	0.30	1.18		0.36		Float	10		949A / 959A	
28	3-20	Godfrey	2.6	0.26	1.31		0.34		Float	5		935A / 945A	
29	3-24	De Vore	2.5	0.27	1.11		0.30		Float	6		920A / 926A	
30	3-27	Godfrey-De Vore	2.5	0.22	0.96		0.21		Float	5		1044A / 1052A	
31	3-30	De Vore	2.75	0.29	1.07		0.31		Float	8		911A / 918A	
32	4-3	Godfrey	2.6	0.25	0.88		0.22		Float	5		208P / 219P	
33	4-7	De Vore-De Vore	2.3	0.21	0.72		0.15		Float	7		1014A / 1020A	
34	4-10	Godfrey	2.2	0.13	0.61		0.08		Float	4		1127A / 1133A	
35	4-14	De Vore	2.25	0.19	0.95		0.18		Float	9		1013A / 1019A	
36	4-17	Godfrey	2.2	0.19	0.63		0.12		Float	4		930A / 935A	
		SAN GABRIEL RIVER above S. G. Dam No. 1											
46	11-18	Brown-Middleton	14.0	14.99	3.33		50		.6	10		156P / 214P	FC 29
47	5-9	Cooper	37.8	34.55	2.77		96		.6	13		250P / 312P	"
48	5-11	Middleton	33.5	28.54	3.18		91		.6	14		1220P / 1240P	"
49	5-11	"	33.5	28.33	3.22		91		.6	13		245P / 305P	"
50	5-11	"	33.3	28.66	3.20		92		.6	14		440P / 500P	"
51	5-12	Cooper	34.0	30.58	2.95		90		.6	12		922A / 940A	"
52	5-14	Middleton	34.1	32.12	2.98		96		.6	15		1255P / 120P	"
53	5-17	"	33.5	29.65	2.92		86		.6	13		220P / 240P	"
54	5-22	Cooper	33.0	27.97	2.71		76		.6	12		1020A / 1036A	"
55	5-24	Middleton	32.8	26.59	2.66		71		.6	13		215P / 235P	"
56	6-2	Cooper	32.0	23.62	2.42		57		.6	11		350P / 408P	"
57	6-8	Middleton	32.1	22.69	2.41		55		.6	13		206P / 226P	"
		SAN GABRIEL RIVER above S. G. Dam No. 1											
58	6-15	Middleton	32.0	21.74	2.37		52		.6	16		230P / 252P	FC 29
59	6-20	De Vore	31.0	20.80	2.36		49		.6	11		132P / 148P	"
60	6-28	"	30.4	20.12	2.12		43		.6	15		105P / 131P	"
61	7-6	Middleton	31.0	19.66	2.19		43		.6	16		100P / 122P	"
62	7-10	"	30.0	18.77	2.06		39		.6	16		1236P / 100P	FC 11
63	7-11	"	30.0	18.77	2.04		38		.6	15		1112A / 1135A	"
64	7-12	"	30.0	18.78	2.05		38		.6	16		1106A / 1129A	"
65	7-13	"	29.8	18.38	2.02		37		.6	16		1110A / 1133A	"
66	7-14	"	30.1	18.19	1.99		36		.6	17		926A / 950A	"
67	7-15	"	30.3	18.63	1.96		37		.6	17		857A / 920A	"
68	7-17	Middleton	30.0	18.44	2.01		37		.6	17		1051A / 1115A	FC 11
69	7-18	"	30.0	18.09	1.96		35		.6	17		1045A / 1108A	"
70	7-19	"	30.0	18.25	2.00		36		.6	16		1116A / 1139A	"
71	7-20	"	30.0	18.08	1.96		35		.6	17		1124A / 1147A	FC 29
72	7-21	"	30.0	17.63	1.95		34		.6	17		1120A / 1143A	"
73	7-22	"	30.0	17.75	1.91		34		.6	17		757A / 820A	"
74	7-24	"	30.0	17.56	1.89		33		.6	18		910A / 933A	"
75	7-25	"	29.8	17.25	1.88		33		.6	16		1056A / 1120A	"
76	7-25	De Vore	29.6	16.31	1.75		29		.6	15		257P / 318P	FC 32
77	7-26	Middleton	29.8	17.47	1.94		34		.6	17		1055A / 1118A	FC 34
78	7-26	De Vore	29.6	16.07	1.65		27		.6	15		246P / 307P	FC 32
79	7-27	Middleton	29.9	17.66	1.96		35		.6	16		650A / 712A	FC 29
80	7-27	"	29.9	17.21	1.87		32		.6	16		1127A / 1150A	FC 18
81	7-28	"	29.8	17.28	1.88		33		.6	15		758A / 820A	FC 29
82	7-29	"	29.9	17.31	1.90		33		.6	15		915A / 937A	FC 11
83	7-31	"	29.8	17.32	1.90		33		.6	15		805A / 828A	"
84	8-1	"	29.6	17.33	1.88		33		.6	15		913A / 936A	"
85	8-2	"	29.7	17.09	1.83		31		.6	15		1217P / 1238P	"
86	8-3	"	29.8	17.12	1.88		32		.6	15		915A / 935A	"
87	8-4	"	29.7	17.22	1.87		32		.6	15		1100A / 1121A	"
88	8-7	"	29.8	17.32	1.86		32		.6	15		1103A / 1125A	"
89	8-8	"	29.7	17.19	1.81		31		.6	15		800A / 822A	"
90	8-9	"	29.7	17.23	1.78		31		.6	15		816A / 838A	"
91	8-10	"	29.7	17.18	1.78		31		.6	15		820A / 842A	"
92	8-11	Middleton	29.7	17.13	1.78		30		.6	15		810A / 831A	FC 11
93	8-14	"	29.5	16.55	1.77		29		.6	15		1116A / 1138A	"
94	8-15	"	29.5	16.47	1.78		29		.6	15		1135A / 1157A	"
95	8-16	"	29.5	16.62	1.76		29		.6	15		928A / 950A	"
96	8-17	"	29.3	15.52	1.78		27		.6	15		155P / 217P	"
97	8-18	"	29.6	16.32	1.76		29		.6	15		800A / 822A	"
98	8-21	"	29.5	16.29	1.75		29		.6	15		756A / 818A	"
99	8-22	"	29.5	16.16	1.72		28		.6	15		822A / 844A	"
100	8-23	"	29.5	15.90	1.71		27		.6	15		940A / 1002A	"
101	8-24	"	29.5	16.09	1.71		27		.6	15		938A / 1000A	"
102	8-25	"	29.5	16.11	1.68		27		.6	15		1043A / 1105A	"
103	8-28	"	29.4	15.83	1.65		26		.6	15		800A / 821A	"
104	8-29	"	29.4	15.88	1.65		26		.6	15		915A / 936A	"
105	8-30	"	29.3	15.50	1.63		25		.6	15		1225P / 1245P	"
106	8-31	"	29.3	15.51	1.68		26		.6	15		1128A / 1150A	"
107	9-6	De Vore	29.4	15.10	1.59		24		.6	15		857A / 922A	FC 32
108	9-7	Cooper	29.1	14.68	1.65		24		.6	12		1220P / 1240P	FC 11
109	9-11	"	17.30	13.35	2.33		31		.6	9		1045A / 1100A	"
110	9-14	"	29.3	15.06	1.70		26		.6	14		130P / 150P	"
111	9-21	"	29.8	16.83	1.95		31		.6	15		1240P / 100P	"
112	9-28	"	46.0	28.49	5.33		157			12		832A / 852A	"

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LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. Misc.

DISCHARGE MEASUREMENTS OF in SAN GABRIEL RIVER DRAINAGE AREA

AT miscellaneous points DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Permit Dist.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
		SAN GABRIEL - BROWN'S GULCH near S. G. Dam No. 1											
30	9-18	Cooper					0.04	Volumetric				1100A	
31	9-18	"					0.03	"				1115A	
32	9-18	"					0.05	"				1128A	
33	9-18	"					0.04	"				1135A	
		SAN GABRIEL RIVER below S.G. Dam No.1. (Outflow)											
38	10-18	DeVore-Middleton	4.0	1.52	7.33		11		.6	6		205P 222P	FC29
39	10-19	" "	7.9	5.33	3.42		18		.6	7		300P 309P	"
40	10-20	Middleton	8.2	6.30	3.07		19		.6	8		1001A 1015A	"
41	10-24	DeVore-Middleton	20.0	13.79	3.37		46		.6	11		224P 242P	"
42	10-25	Middleton-Cooper	20.7	16.96	3.98		68		.6	11		220P 236P	"
43	10-26	Cooper	35.5	25.84	2.56		66		.6	12		415P 435P	FC11
44	10-28	"	Two channels				60		.6	12		1000A 1020A	"
45	10-29	Middleton	31.0	23.76	2.54		60		.6	16		220P 245P	FC29
46	10-30	DeVore	24.8	17.28	3.04		53		.6	12		328P 334P	"
47	10-31	Cooper	27.0	20.58	2.50		51		.6	9		300P 320P	FC11
48	11-1	"	25.5	18.66	2.75		51		.6	9		1040A 1058A	"
49	11-2	Middleton-Cooper	23.5	19.77	2.72		54		.6	12		1035A 1051A	"
50	11-3	" "	20.9	20.11	2.64		53		.6	11		1050A 1104A	FC29
51	11-4	Middleton-Cooper	21.3	21.29	2.32		50		.6	10		320P 334P	FC11
52	11-5	Middleton	21.3	20.67	2.42		50		.6	10		140P 200P	FC29
53	11-6	DeVore-DeVore	21.0	21.40	2.26		48		.6	11		312P 326P	"
54	11-7	DeVore	21.1	20.29	2.53		51		.6	11		324P 336P	"
55	11-8	Middleton	21.6	20.08	2.55		51		.6	12		1109A 1128A	"
56	11-9	"	21.9	20.48	2.53		52		.6	12		905A 924A	"
57	11-10	"	23.5	20.84	2.34		49		.6	13		1133A 1155A	"
58	11-11	DeVore	23.7	21.99	2.27		50		.6	12		246P 305P	"
59	11-12	Middleton	25.5	23.88	2.06		49		.6	13		220P 246P	"
60	11-13	DeVore	26.0	24.28	2.06		50		.6	13		246P 302P	FC29
61	11-14	"	27.3	24.34	1.95		47		.6	14		247P 308P	"
62	11-15	Middleton	22.1	22.52	2.30		52		.6	12		1029A 1049A	"
63	11-16	Middleton-Brown	26.0	21.81	2.45		53		.6	13		252P 305P	"
64	11-17	Middleton	26.0	21.28	2.49		53		.6	13		1041A 1100A	"
65	11-18	Middleton-Cooper	25.4	21.37	2.47		53		.6	13		1040A 1100A	"
66	11-19	Middleton	25.5	21.86	2.40		52		.6	13		115P 137P	"
67	11-20	Brown	25.8	21.84	2.53		55		.6	13		832A 851A	"
68	11-21	"	25.5	21.68	2.48		54		.6	14		954A 1018A	"
69	11-22	Middleton-Cooper	25.6	22.26	2.35		52		.6	13		1145A 1203P	FC11
70	11-23	" "	26.0	21.46	2.38		51		.6	13		155P 210P	FC29
71	11-24	Brown	25.7	22.35	2.42		54		.6	14		1022A 1041A	"
72	11-25	Middleton-Cooper	26.0	22.71	2.36		53		.6	14		200P 214P	"
73	11-26	Middleton	25.6	22.76	2.23		51		.6	13		247P 310P	"
74	11-27	Brown	25.6	22.41	2.28		51		.6	14		343P 403P	"
75	11-28	Cooper	25.5	22.73	2.30		52		.6	13		905A 925A	FC11
76	11-29	Middleton	25.5	22.46	2.32		52		.6	13		347P 407P	FC29
77	11-30	Middleton	25.6	21.28	2.38		51		.6	13		1025A 1046A	"
78	12-1	"	25.8	21.28	2.40		51		.6	13		955A 1016A	"
79	12-2	Middleton-Cooper	25.8	21.64	2.40		52		.6	13		1032A 1046A	"
80	12-3	Middleton	25.6	22.20	2.37		53		.6	13		1125A 1146A	"
81	12-4	Brown	25.5	22.19	2.25		50		.6	13		322P 340P	FC11
82	12-5	Cooper	24.3	19.33	2.52		49		.6	12		1120A 1140A	"
83	12-7	Middleton	24.0	20.08	2.49		50		.6	13		1108A 1126A	"
84	12-8	Middleton	24.0	22.58	2.06		47		.6	13		1046A 1107A	FC 29
85	12-9	"	24.4	25.59	1.86		48		.6	13		1015A 1040A	"
86	12-10	"	25.2	23.68	2.07		49		.6	14		1100A 1122A	"
87	12-11	Brown	25.7	24.90	2.00		50		.6	13		226P 243P	"
88	12-12	Cooper	25.5	24.06	1.91		46		.6	13		834A 852A	FC 11
89	12-13	Middleton-Cooper	25.4	25.21	1.85		47		.6	13		120P 140P	FC 29
90	12-14	Middleton	25.9	26.35	1.98		52		.6	13		1045A 1105A	"
91	7-27	Lindsay-DeVore	54.0	36.52	2.60		95		.6	14		308P 326P	FC 28
92	7-27	DeVore-Cooper	37.2	31.31	1.82		57		.6	13		500P 524P	FC 32
93	7-30	Cooper	36.6	21.46	1.43		31		.6	13		325P 346P	FC 34
94	8-1	Middleton	35.4	23.52	1.38		32		.6	18		245P 309P	FC 11
95	8-3	"	36.4	24.75	1.25		31		.6	17		1128A 1151A	"
96	8-8	"	35.3	25.36	1.08		27		.6	18		1235P 100P	"
97	8-10	"	35.3	25.64	1.11		28		.6	18		1127A 1151A	FC 29
98	8-15	"	35.2	25.									
		Note: The above measurements do not include conduit diversion.											
		FISH CREEK above Junction with San Gabriel River.											
12	1-12	Lindsay	13.0	2.76	0.58		1.6		.6	7		1210P 1220P	FC 28
13	1-26	Lindsay	10.5	2.59	0.31		0.80		.6	6		1056A 1105A	FC 28
14	2-16	"	11.5	3.08	0.42		1.3		.6	6		322P 330P	"
		Inflow to Puddingstone below channel outlet											
1	3-25	Lind	4.2	2.26	1.73		3.9		.6	8		1130A 1142A	FC 19
2	3-11	"	4.0	2.00	1.62		3.2		.6	8		1125A 1140A	"
3	3-25	"	4.0	1.83	0.94		0.94		.6	8		105P 113P	"
		SAN DIMAS CREEK above San Dimas Dam											
1	12-1	Haig	4.6	1.26	1.25		1.6		.6	6		1026A 1036A	FC 36
		SAN DIMAS CREEK below San Dimas Dam											
11	12-20	Brewster-Pettie	15.0	10.73	2.25		24		.6	8		1030A 1040A	FC 8
12	12-22	Brewster	14.0	9.28	1.39		13.		.6	7		830A 845A	"
13	12-23	"	14.0	6.67	0.92		6.1		.6	8		940A 952A	"
14	12-29	"	8.0	3.65	0.96		3.5		.6	5		315P 325P	"
15	1-3	"	17.0	10.26	1.67		17.		.6	9		504P 517P	"
16	1-5	"					Est. 0.20					350P	
17	1-6	"	16.0	10.84	1.24		13.		.6	9		215P 230P	"
18	1-10	"	18.0	13.38	1.70		23.		.6	6		830A 840A	"
19	1-13	"	15.0	11.30	0.82		9.2		.6	8		745A 757A	"
20	4-14	Lind	7.0	2.50	1.86		4.6		.6	6		230P	FC 19
		San Gabriel River near Elliot Ave. (Above rising water)											
28	5-11	Brewster	32.0	37.52	3.22		121		.6	8		1025A 1040A	FC 8
29	5-25	"	36.0	27.72	3.29		91		.6	10		938A 955A	"
30	7-13	"	32.0	28.10	3.66		103		.6	7		1040A 1055A	"
31	7-20	"	31.0	34.97	2.95		103		.6	9		1015A 1035A	"

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LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO. Misc.

DISCHARGE MEASUREMENTS OF in SAN GABRIEL RIVER DRAINAGE AREA

AT Miscellaneous points DURING THE YEAR ENDING SEPTEMBER 30, 1939

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Ratios Percent Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
		RANTA DITCH above Whittier Blvd.											
1	5-4	Brewster	5.0	3.28	1.91		6.3		.6	5		1149A / 1155A	FC 8
2	5-15	Ingram	15.0	11.10	0.77		8.6		.6	5		245P / 255P	FC 2
3	5-22	"	13.0	11.02	1.63		18.		.6	5		413P / 425P	"
		SAN GABRIEL RIVER above Whittier Blvd.											
1	5-4	Brewster	9.0	3.51	0.91		3.2		.6	5		1135A / 1145A	FC 8
2	5-24	"	Three Channels				40.		.6	17		230P / 250P	"
		SAN GABRIEL RIVER below Whittier Blvd.											
1	1-13	Bonadiman	74.0	43.68	1.60		70.		.6	14		913A / 938A	FC 40
2	1-13	"	Two Channels				40.		.6	21		1012A / 1050A	"
3	1-13	"	"	"			19.		.6	14		1125A / 1149A	"
4	1-13	"	74.0	40.93	1.48		61.		.6	14		139P / 205P	"
5	1-13	"	Two Channels				32.		.6	19		215P / 245P	"
6	1-13	"	"	"			18.		.6	15		307P / 333P	"
7	5-4	Brewster	14.0	4.24	0.94		4.0		.6	5		1250P / 1258P	FC 8
		CATE DITCH PUMP at Cate Ditch near Whittier Narrows											
5	8-24	Brewster	3.5	2.40	1.58		3.8		.6	4		1000A / 1008A	FC 8
6	9-14	"	4.0	3.21	1.19		3.8		.6	4		945A / 951A	"
		TEMPLE DITCH above head of pipeline near Whittier Narrows											
1	3-23	Brewster	5.0	3.74	1.10		4.1		.6	6		225P / 235P	FC 8
2	3-30	"	5.0	3.86	1.20		4.6		.6	4		200P / 206P	"
3	4-6	"	5.0	3.66	1.26		4.6		.6	5		1230P / 1240P	"
4	4-13	"	5.0	3.57	1.34		4.8		.6	4		120P / 127P	"
5	4-20	"	5.0	3.50	1.44		5.0		.6	4		145P / 152P	"
6	4-27	"	5.0	3.58	1.32		4.7		.6	4		130P / 136P	"
7	5-4	"	5.0	3.04	1.58		4.8		.6	4		220P / 228P	"
8	5-11	"	5.0	2.90	1.50		4.4		.6	4		305P / 313P	"
9	5-18	"	5.0	2.81	1.58		4.4		.6	4		220P / 226P	"
10	5-25	"	5.0	3.58	1.54		5.5		.6	4		150P / 200P	"
11	6-1	"	5.0	3.61	1.53		5.5		.6	4		225P / 233P	"
12	6-8	"	5.6	5.47	0.72		3.9		.6	4		125P / 132P	"
13	6-14	"	6.0	8.70	0.32		2.8		.6	4		120P / 140P	"
14	6-21	Lindsay					0					315P / 102P	
15	6-29	Brewster	4.8	2.46	1.13		2.8		.6	4		110P / 120P	"
16	7-6	"	1.0	0.24	0.83		0.20		.6	2		124P / 420P	"
17	7-13	"	4.8	2.29	1.10		2.5		.6	4		426P / 440P	"
18	7-20	"	4.8	2.72	1.61		4.4		.6	4		447P / 110P	"
19	7-27	"	4.0	1.93	0.92		1.8		.6	4		116P / 1240P	"
20	8-3	"	4.0	2.72	1.50		4.1		.6	4		1245P / 120P	"
21	8-10	"	5.6	7.09	0.68		4.8		.6	4		128P / 120P	"
22	8-17	"	5.2	4.39	0.46		2.0		.6	4		126P / 115P	"
		TEMPLE DITCH above head of pipeline near Whittier Narrows											
23	8-24	Brewster	5.0	2.52	1.01		2.5		.6	4		120P / 1250P	FC 8
24	8-31	"	4.0	2.30	1.07		2.4		.6	4		1256P / 1250P	"
25	9-7	"	4.0	4.00	0.55		2.2		.6	4		1256P / 1255P	"
26	9-14	"	4.0	2.42	1.11		2.7		.6	4		101P / 1225P	"
27	9-21	"	4.0	3.60	0.86		3.1		.6	4		1230P / 125P	"
28	9-28	"					0						
		RINCON DITCH above head of pipe line near Whittier Narrows											
1	3-15	Brewster					0					300P / 140P	
2	3-23	"	3.0	0.52	0.63		0.33		.6	3		145P / 145P	FC 8
3	3-30	"					0					1215P / 1220P	
4	4-6	"	3.0	0.50	0.60		0.30		.6	3		100P / 1255P	FC 8
5	4-13	"					0					105P / 1245P	
6	4-20	"	6.0	11.20	0.53		5.9		.6	4		1253P / 200P	FC 8
7	4-27	"	7.0	14.29	0.52		7.6		.6	4		210P / 240P	"
8	5-4	"	6.0	5.46	1.18		6.5		.6	4		246P / 200P	"
9	5-11	"	6.0	9.73	0.52		5.0		.6	4		206P / 130P	"
10	5-18	"	6.0	7.83	0.56		4.4		.6	4		140P / 150P	"
11	5-25	"	7.0	12.08	0.48		5.8		.6	4		200P / 105P	"
12	6-1	"	5.0	3.60	0.74		2.7		.6	5		111P / 1250P	"
13	6-8	"	6.0	9.39	0.45		4.2		.6	4		1256P / 245P	"
14	6-14	"	6.0	8.50	0.47		4.0		.6	3		225P / 1250P	"
15	6-21	Lindsay	6.7	11.18	0.21		2.4		.6	7		1256P / 100P	FC 28
16	6-29	Brewster	6.0	5.44	0.64		3.5		.6	3		106P / 400P	FC 8
17	7-6	"	6.0	7.98	0.51		4.1		.6	3		406P / 420P	"
18	7-13	"	6.0	8.30	0.59		4.9		.6	3		426P / 1230P	"
19	7-20	"	6.0	9.78	0.48		4.7		.6	3		1236P / 1205P	"
20	7-27	"	7.0	6.72	0.68		4.6		.6	4		1212P / 1240P	"
21	8-3	"	7.0	7.45	0.67		5.0		.6	4		1248P / 1240P	"
22	8-10	"	6.0	6.61	0.50		3.3		.6	4		1248P / 1245P	"
23	8-17	Brewster	7.0	3.89	1.05		4.1		.6	5		1252P / 1220P	FC 8
24	8-24	"	7.0	3.01	0.97		2.9		.6	4		1226P / 1210P	"
25	8-31	"	8.0	2.85	0.95		2.7		.6	5		1217P / 1215P	"
26	9-7	"	7.0	2.61	0.82		2.1		.6	4		1225P / 1130A	"
27	9-14	"	7.0	3.07	0.83		2.6		.6	5		1140A / 115P	"
28	9-21	"	7.0	2.52	0.72		1.8		.6	5			
29	9-28	"					0						
		LIVE OAK CREEK below Live Oak Dam											
24	9-15	Lind	4.0	0.91	1.43		1.3		.6	8		1100A / 1110A	FC19
		THOMPSON CREEK SPREADING AREA at outlet of flume											
1	12-19	Brewster	4.0	0.86	1.08		0.95		.6	4		400P / 406P	FC 8
2	12-20	"	4.0	0.76	1.04		0.80			4		330P / 336P	"
3	12-21	"	2.0	0.37	1.03		0.38		.6	3		400P / 405P	"
4	12-23	"					Est. 0.20					930A	
5	12-25	"					Est. 0.05					1130A	

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LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO._____

Percolation MEASUREMENTS OF LITTLE DALTON WASH

AT Miscellaneous points DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Current Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
		1300' East of Citrus Ave. 50' below Azusa Ditch inflow											
1	4-26	Lindsay	8.0	2.18	1.93		4.2		.6	8	-	325p / 335p	FC 28
		100' below Azusa Ave											
2	4-26	Lindsay	5.0	1.43	1.50		2.1		.6	6	-	355p / 405p	FC 28

PERCOLATION MEASUREMENTS

LITTLE DALTON WASH — April 26, 1939 — SET NO. 1

Time	Description	Point	Station	Meas. No.	Disch. in Sec. Ft.	Length of Reach in Ft.	Mean Width of Reach in Ft.	Area in Acres	Loss in Reach in Sec.Ft.	Loss in Sec.Ft. per Ac. Wetted Area	Remarks
3:30P	1300' East of Citrus Ave.		0 + 00		4.22	*5300	12.08	1.47	2.08	1.41	Follow flow through, no change during study.
4:00P	100' below Azusa Ave.		98 + 00		2.14						
					98+00	actual length of reach					
					45+00	concrete channel					
					*53+00	length of reach subject to percolation					

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LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

STATION NO._____

Percolation MEASUREMENTS OF LITTLE DALTON WASH

AT Miscellaneous points DURING THE YEAR ENDING SEPTEMBER 30, 19 39

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Current Diff.	Method	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
		At Azusa Ditch inflow 1300' East of Citrus Ave.											
1	4-27	Lindsay	9.0	2.55	1.96		5.0		.6	8	-	205p / 215p	FC 28
		Above Junction with Big Dalton Creek											
2	4-27	Lindsay	6.5	1.26	1.00		1.3		.6	6		447p / 455p	FC 28

PERCOLATION MEASUREMENTS

LITTLE DALTON WASH — April 27 1939 — SET NO. 2

Time	Description	Point	Station	Meas. No.	Disch. in Sec. Ft.	Length of Reach in Ft.	Mean Width of Reach in Ft.	Area in Acres	Loss in Reach in Sec.Ft.	Loss in Sec.Ft. per Ac. Wetted Area	Remarks
2:10P	1300' East of Citrus Ave.		0 + 00		5.00						Follow flow through so any change in Q would not effect study.
						*14500	12.8	4.26	3.74	0.88	
4:50P	Junction with Big Dalton 150' above Vincent Ave.		190+00		1.26						*4500' of concrete channel deducted from actual length of reach.

GROUND WATER

&

CONSERVATION

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

Hydraulic Division

CONSERVATION AND GROUND WATER

Season 1938-39

Foreword:

As specified in the act of the California Legislature which created the Los Angeles County Flood Control District, an important function of the District is to conserve flood and storm waters.

In order to ultimately attain the maximum degree of conservation consistent with adequate flood control, the Conservation and Ground Water Section is engaged in a study of the conservation requirements of the several ground water basins of the District, and of the methods by which those requirements can be met.

During the season of 1938-39, the Conservation and Ground Water Section was engaged primarily in (1) measuring water levels at several hundred wells; (2) tracing the sources of ground water pollution; (3) preparing semi-annual ground water contour maps and key well graphs; (4) operating permanently constructed spreading grounds and supervising the spreading operations of private agencies; (5) conducting spreading tests on temporary test spreading grounds; (6) scarifying channels; and (7) preparing reports on the above operations as required.

Well Measurements:

About 1200 wells were measured in April, 1938 and again in November, 1939; 75 (designated as key wells - see Map IV were measured monthly; a smaller number were measured at more frequent intervals; and a few were equipped with automatic recorders which provide a continuous record of water table fluctuations.

Tracing the sources of ground water pollution:

Samples were taken for analysis from streams, sewage disposal plant effluents, wells in the industrial districts and oil fields, and from wells along the coast. In general, only partial analyses of these samples were made, that is, only the carbonate, bicarbonate and chloride contents were determined. During the 1938-39 period, about 600 partial analyses were made in the District's laboratory.

The District is also cooperating with the U.S.G.S. and local agencies in a study of the Dominguez - Newport Barrier with respect to ground water movement and salt water intrusion from the ocean.

Preparing Semi-Annual Ground Water contour maps and key well graphs.

From the well measurements made in the spring and fall, ground water contour maps were prepared showing the seasonal high and low positions of the ground water table during the 1938-39 period. These maps are included herein as Maps V to X.

Hydrographs of the key well measurements were prepared, ten of which are included herein. (See key well graphs on Pages 204 to 209).

Summary of water table changes.

Following is a summary of water table changes in a number of the ground water basins from the Fall of 1937 to the Fall of 1938, and from the Fall of 1938 to the Spring of 1939:

	Fall of 1937 to Fall of 1938 (Feet)		Fall of 1938 to Spring of 1939 (Feet)	
San Fernando Valley				
1 - Main Part, Southerly from S. F. city	+ 5		+ 1.5	
2 - Sylmar	+ 11		+ 8	
3 - Pacoima	- 5		0	
4 - Tujunga	+ 2.5		+ 1.5	
5 - Verdugo	+ 9.5		+ 1	
San Gabriel Valley				
1 - Main Basin	+13.5		+ 1.5	
2 - Monk Hill	+21.5		+ 0.5	
3 - Pasadena	+ 2.5		+ 3.5	
4 - Santa Anita	+ 8		+ 3.5	
5 - Canyon Basins	(a)		(a)	
6 - Glendora	+14		+ 3.5	
7 - Way Hill	+20.5		+ 6.5	
8 - San Dimas	+ 0.5		+ 3	
9 - Foothill	- 6		+20	
10 - Puente	+10		+ 8.5	
11 - San Jose Creek	+ 8.5		+ 6	
Coastal Plain				
1 - Western Area				
(a) Northern Section	(b)		(b)	
(b) Southern Section	0		1	
2 - Hollywood	+ 2		+ 0.5	
3 - Central Area				
(a) Forebay	+13.5		+ 4.5	
(b) Pressure Area	+ 1 to +10	(c)	- 7 to +23	(c)

	Fall of 1937 to Fall of 1938 (Feet)	Fall of 1938 to Spring of 1939 (Feet)
Upper Santa Ana Valley (d)		
1 - Upper Claremont	+ 1.5	+12
2 - Lower Claremont	+11.5	-7
3 - Live Oak	+24	+65
4 - Pomona	0	+13
5 - Chino (Northwestern Part)	+39 (e)	-31

Notes:

(a) This basin is replenished in part each year by spreading.

(b) Seasonal changes are scarcely noticeable in this section. However, a local cone of depression resulting from continuous pumping was drawn down to an elevation of 93 feet below sea level in the Fall of 1938, which was 3 feet lower than it was in the Fall of 1937.

(c) These figures represent pressure changes as measured in feet.

(d) Water from San Antonio Creek is spread during the rainy season in the Upper Claremont Basin. Each lower basin is replenished in turn down stream by the underflow of the basin above it. Under these conditions the ground water levels do not change simultaneously in all the basins. Consequently, the figures given do not necessarily represent replenishment as generally indicated by the Fall water levels, and neither do they represent seasonal changes as generally represented by the Spring water levels.

(e) This change was local, and resulted from underflow from Upper Claremont heights basin across the San Jose fault barrier. The lack of a lasting effect, due to the wide diffusion of this underflow into the large Chino basin, is evidenced by the decrease from the Fall of 1938 to the Spring of 1939.

Operating permanently constructed spreading grounds and supervising the spreading operation of private agencies:

An important part of the Section's conservation activities consisted of spreading water on permanently constructed off-channel spreading grounds, scarification of channels to increase their percolating capacities, and supervision of the conservation work of other agencies.

The descriptions of the various spreading grounds and the amounts of water spread in them during previous years are given in the District's report on Hydrological Data for the seasons 1936-37 and 1937-38. The following tabulation gives the quantities spread in the 1938-39 season.

Spreading Grounds		Acre-feet Spread	
1.	Pacoima	380	
2.	San Antonio	1132 *	
3.	Big Dalton	49	
4.	Little Dalton	12	
5.	Thompson Creek	Not measured	
6.	San Gabriel River Water Committee		
	In canyon basin		
	(a) Duarte Canal to West Side	3052	
	(b) East Side	14763	
	Total		17,815 **
	In Main basin		
	(c) Brush land	582	
	(d) Covina Canal	2318	
	(e) Azusa Canal	3294	
	Total		6,194 **

* 418 of the 1132 acre-feet were spread in September, 1939 and are included in the P.V.P.A. records for the 1939-40 season. The District water year is from October 1 - September 30.

** The following quantities, included in the figures for the Canyon and Main Basins, were spread in September, 1939 and are given in the San Gabriel River Water Committee records for the 1939-40 season:

Total in Canyon Basin	221 acre-feet
Total in Main Basin	172 acre-feet

Operation of temporary off-channel test spreading grounds and channel percolating areas.

1. Santa Fe Diversion: Not used in 1938-39 because of high water table south of El Monte.

2. Rio Hondo Coastal Basin Spreading Grounds: Not used in 1938-39 because of insufficient stored water in the San Gabriel Reservoirs No. 1 and No. 2.

3. San Gabriel Coastal Basin Spreading Grounds.
   Location: Along west bank of San Gabriel River from Whittier Blvd. south to a line 1000 feet north of Center St.
   Area: 73.4 acres
   Date of Construction: Constructed by the District in April, 1939
   Capacity: 60 c.f.s.
   Amount Spread: 2622 acre feet

Data on percolation rates

During the past years, the District has kept accurate records of the percolation rates at various locations where spreading has been practiced. (See Map IV, for locations)

The following list gives the unit rates of percolation in c.f.s. per wetted acre as measured in the permanently constructed and the temporary test spreading grounds:

Permanently constructed spreading grounds

1. Pacoima
   - Maximum initial rate 3.0
   - Minimum rate after an extended run 1.0

2. San Antonio
   - Maximum rate 4.5
   - Minimum rate 1.3

3. Big Dalton
   - Maximum rate 6.0
   - Minimum rate Not measured

4. San Gabriel River Water Committee
   - Average rate on east side Canyon Basin 1.6

Temporary Test spreading grounds

1. Peck Road diversion
   - Maximum initial rate 7.5
   - Minimum rate after an extended run 2.7

2. Santa Fe Diversion
   - (a) Basins in old overflow channels:
     - Maximum 1.5
     - Minimum 0.9
   - (b) Basins in old channels after blasting with dynamite:
     - Average rate 4.0
   - (c) Shallow cover of brush land:
     - Average rate 2.4
   - (d) Contour basins above Arrow Highway:
     - Maximum 5.0
     - Minimum 3.8
     - Average for 70 day period 4.6

3. Los Angeles St. Diversion:
   - Average 2.5

4. Rio Hondo Coastal Basin
   - Maximum initial rate, 9.0 reducing to 2.0 with a high water table; final rate after 20 day run, 0.9

5. San Gabriel Coastal Basin
   (a) Basins 1 to 4: Initial rate 2.5, final 1.0, average for 13 day run, 1.05.
   *(b) Basins 5 and 6: Initial rate 3.4, final 0.15, average 0.3.
   *(c) Basin 7: Initial 2.0, final 0.4, average .55
   (d) Basin 8: Initial 4.0, final 1.8, average 2.0

* Basins 5, 6 and part of 7 underlain with a clay lens which caused perched water beneath them.

Note: Percolation rates in the Rio Hondo and San Gabriel Coastal Basin Spreading Grounds were controlled by the high water table resulting from preceding wet seasons.

Conservation accomplished in channels:

Releases from reservoirs regulated to percolating capacity of channels below except during large storms. Percolating capacity of channels maintained by scarifying.

1. Big Tujunga Dam.

Channel: Big Tujunga Wash from dam to Magnolia Blvd.
Percolating Capacity of Channel: 300 c.f.s.
Amount Conserved:

Year	Acre-feet Released	Acre-feet in Excess of Channel Capacity	Acre-feet Conserved
1931-32	13,168	6,397	6,771
1932-33	4,518	0	4,518
1933-34	4,234	0	4,234
1934-35	10,698	672	10,026
1935-36	5,508	0	5,508
1936-37	25,729	18,327	7,402
1937-38	65,022	43,724	21,298
1938-39	9,106	0	9,106

The amount of water conserved by percolation in the channel during the period shown was 50% of the runoff from the tributary drainage area. Excluding the year, 1937-38, when much water was wasted during a flood, the total amount of water conserved was 47,600 acre-feet, or 65% of the runoff.

2. Santa Anita Dam

Channel: Santa Anita Wash from dam to Arrow Highway.
Percolating Capacity: 30 c.f.s.
Amount Conserved:

Year	Acre-feet Released	Acre-feet in Excess of Channel Capacity	Acre-feet Conserved
1931-32	3,587	897	2,690
1932-33	2,022	81	1,941
1933-34	2,622	1,276	1,346
1934-35	3,585	234	3,351
1935-36	2,535	467	2,068
1936-37	8,616	4,171	4,445
1937-38	16,689	12,143	4,546
1938-39	2,461	60	2,401

The amount conserved during the period was 54% of the runoff. Excluding the year 1937-38, the total amount conserved was 18,200 acre-feet or 72% of the runoff.

3. Eaton Dam.

Channel: Eaton Dam to Rio Hondo
Percolating Capacity: 14. c.f.s.
Amount Conserved:

Year	Reservoir Percolation Acre-Feet	Channel Percolation Acre-Feet	Total Acre-Feet
1936-37	1,540	970	2,510
1937-38	1,550	870	2,420
1938-39	194	61	255

4. Sawpit Dam.

Channel: Sawpit Dam to Rio Hondo.
Percolating Capacity: 10 c.f.s.
Amount Conserved: 145 acre-feet.

5. Puddingstone Diversion.

Channel: San Dimas Wash from Puddingstone Diversion to Glendora Boulevard.
Percolating Capacity: 7 c.f.s.
Amount Conserved: 357 acre-feet.

6. San Gabriel Dams 1 and 2.

Channels: Canyon Basin, 1960 acre-feet
Main Basin 3847 acre-feet
Coastal Basin 1585 acre-feet

Total 7392 acre-feet

7. Pacoima Dam

Channel: Pacoima Wash from Pacoima Dam to Pacoima Spreading Grounds.
Percolating Capacity: 50 c.f.s. with 125 c.f.s. release.
Amount Conserved: 2700 acre-feet, some of which was diverted from the channel below the dam for irrigation.

8. Live Oak Dam

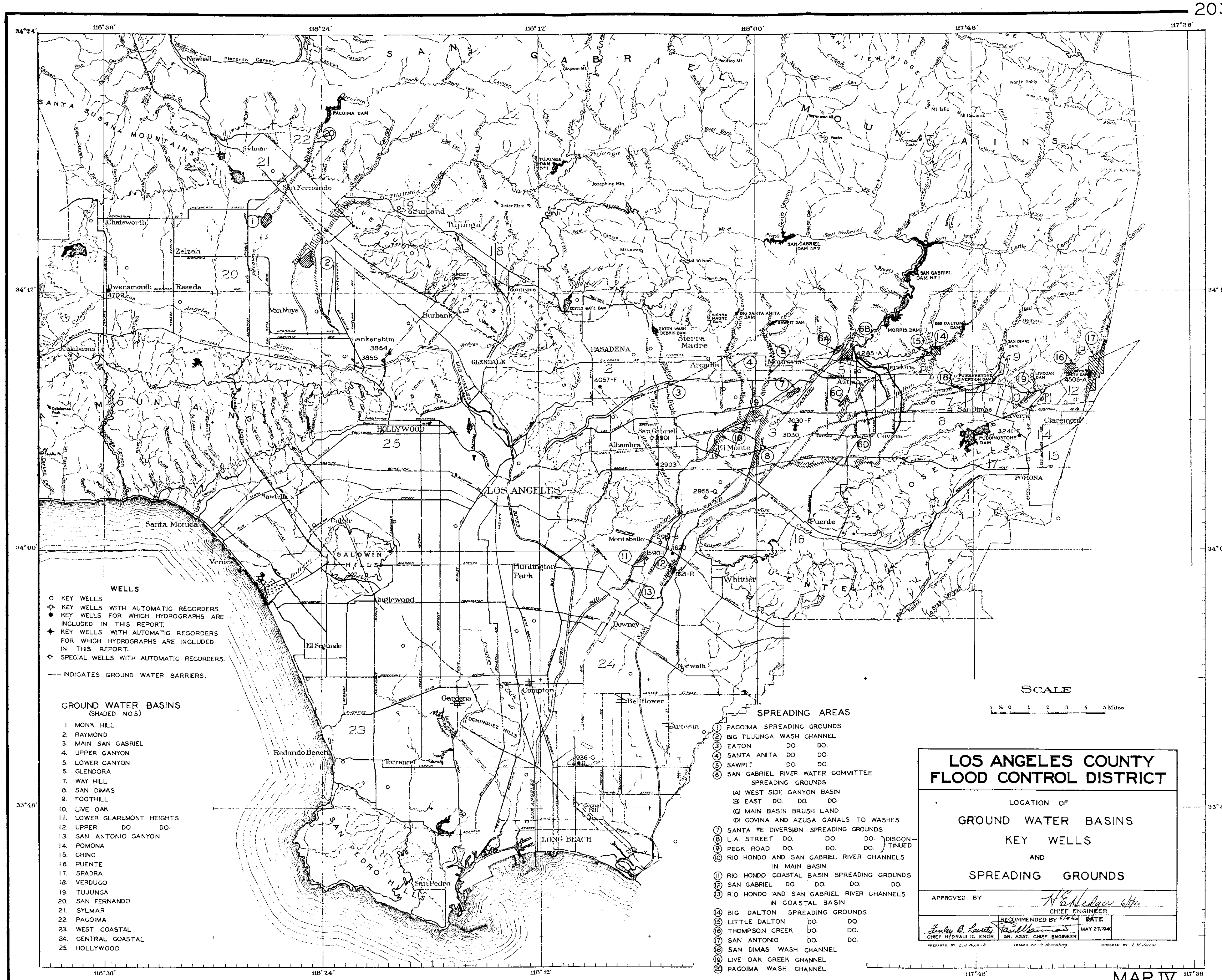
Channel: Live Oak Creek from Live Oak Dam to Foothill Boulevard.
Percolating Capacity: 4 c.f.s.
Amount Conserved: Percolation in reservoir 20.6 acre-feet, percolation in channel 3.2 acre-feet.

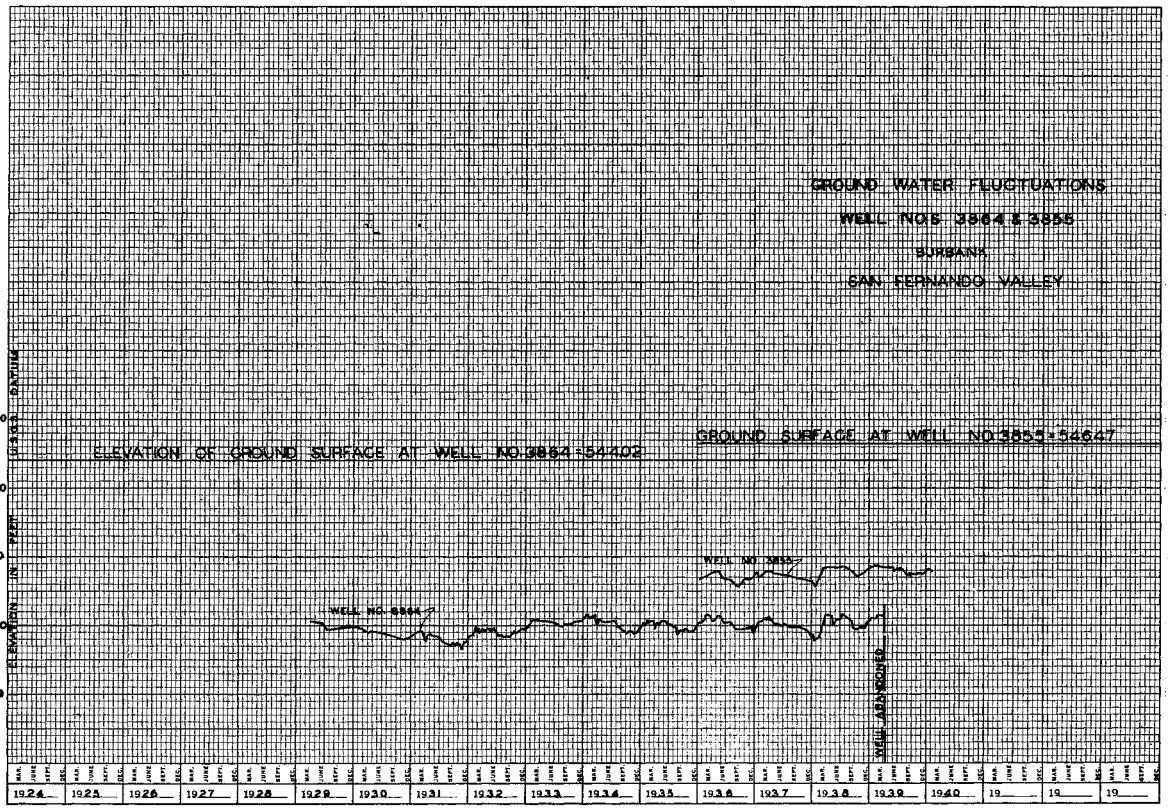
Reports:

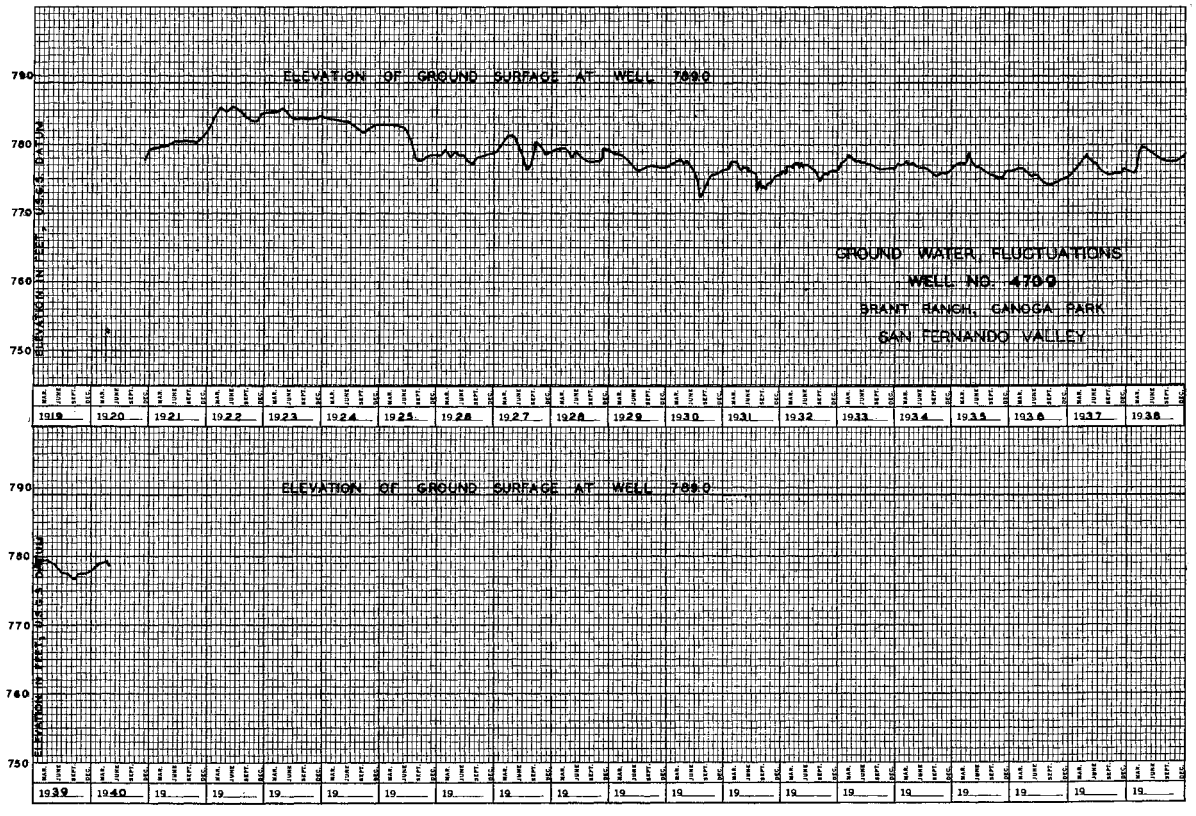
In order to summarize certain conservation studies on current projects the Section prepared occasional formal reports.

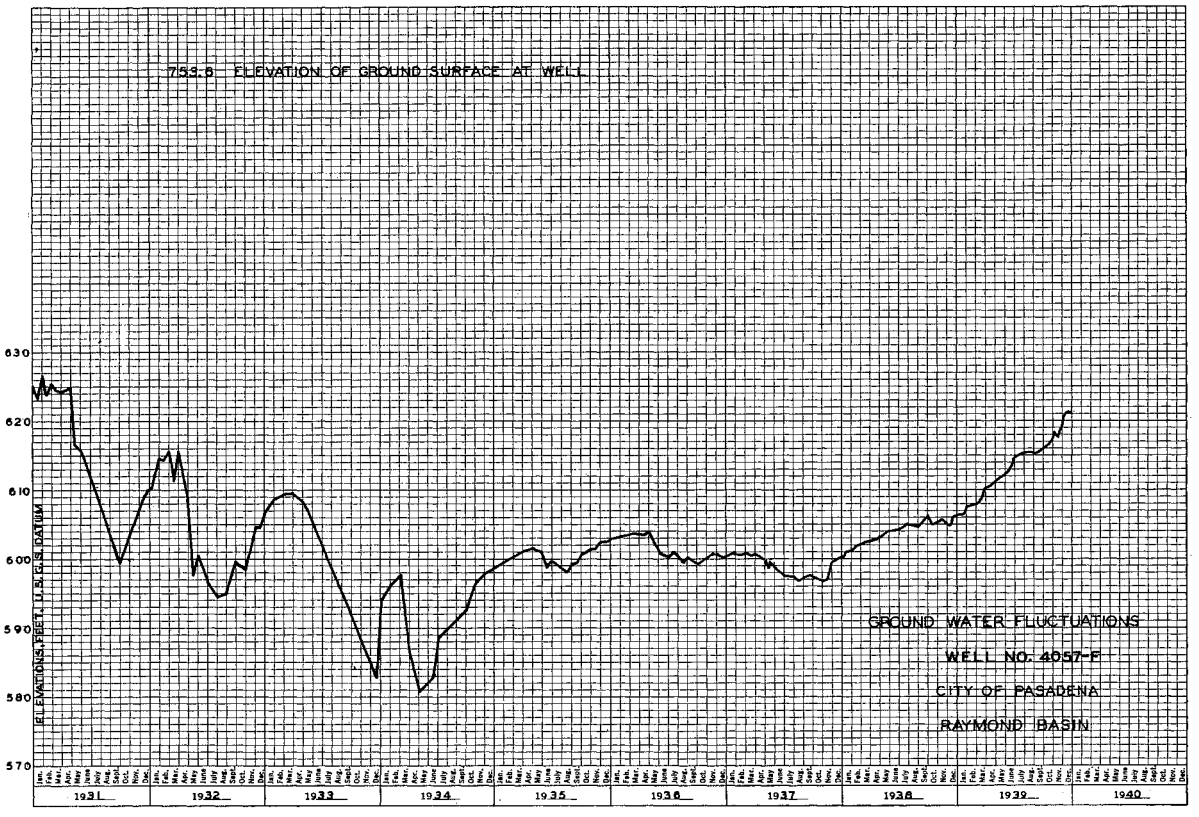
During the period under discussion formal reports were issued upon the 1937-38 investigation at San Antonio Spreading Grounds, upon the 1937-38 spreading test at Rio Hondo Spreading Grounds, near Montebello, and upon the progress of the Ballona Creek Salinity Investigation.

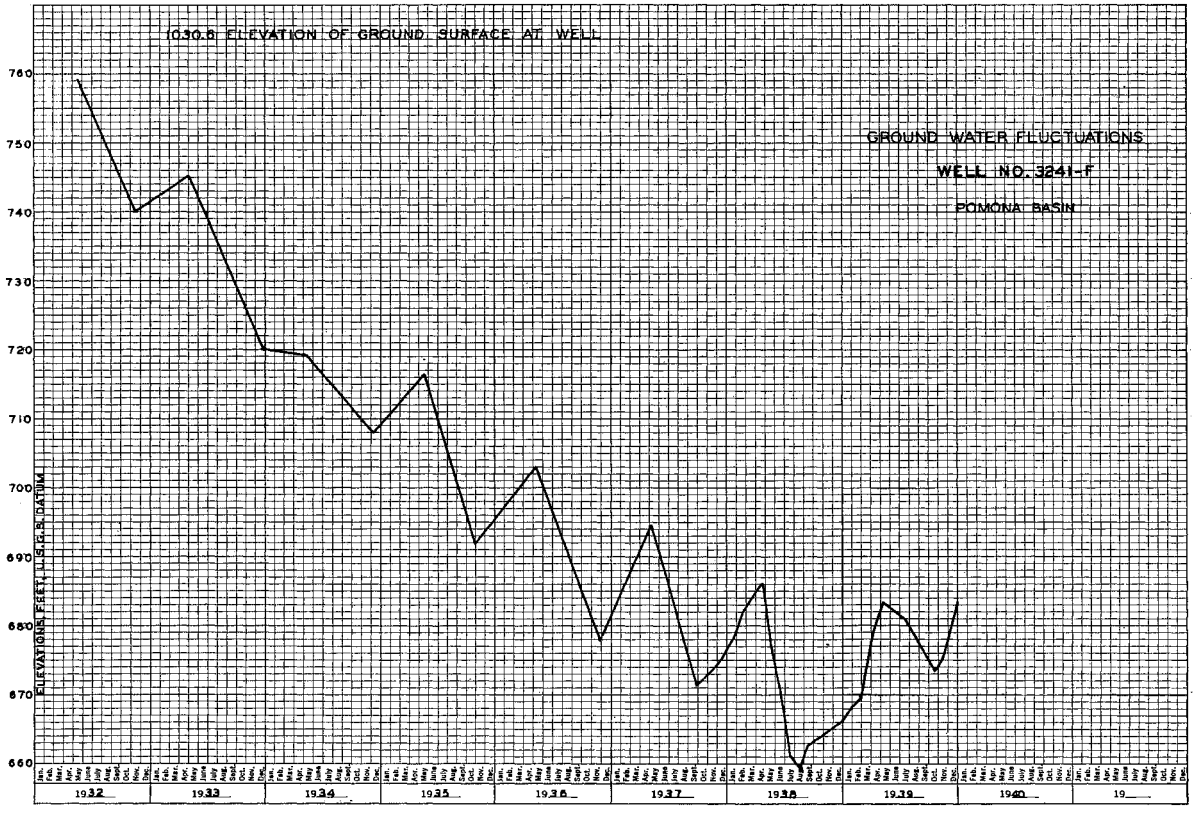
All field and office work was done under the direction of L. W. Jordan.

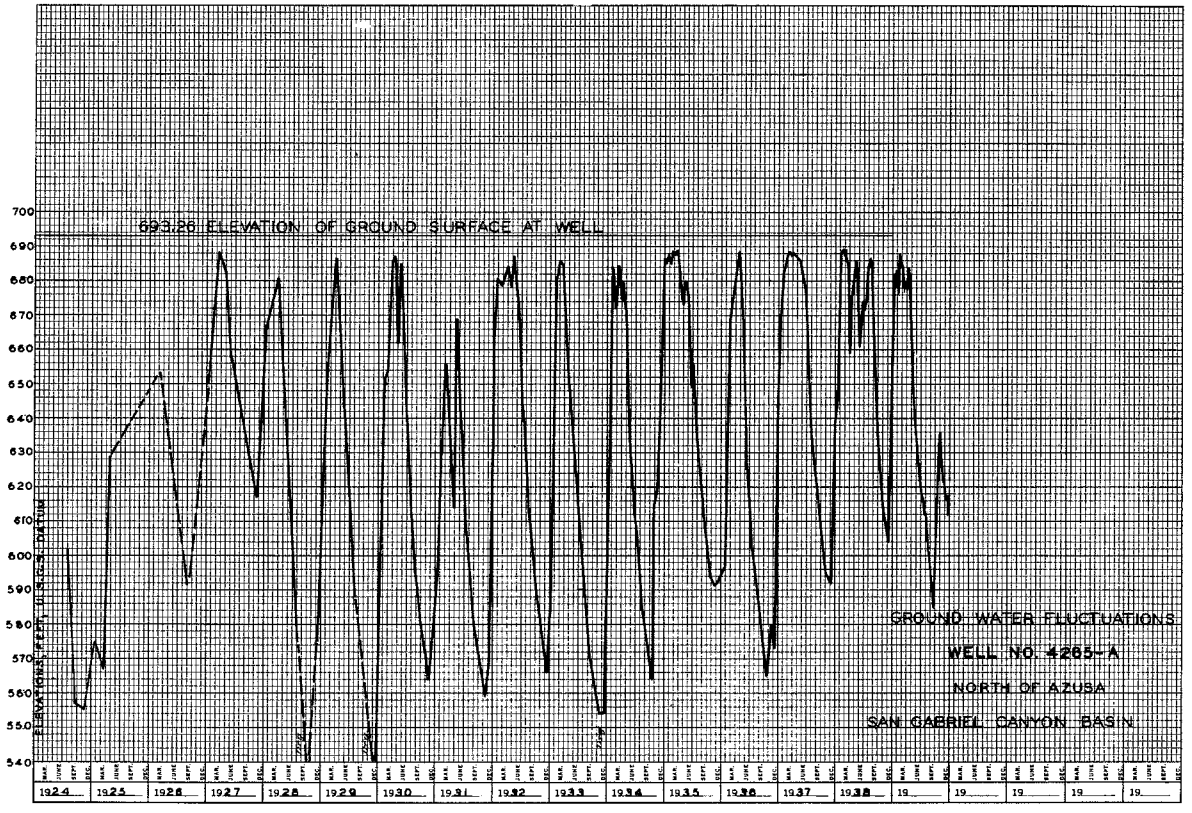

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
LOCATION OF
GROUND WATER BASINS
KEY WELLS
AND
SPREADING GROUNDS
APPROVED BY
CHIEF ENGINEER
RECOMMENDED BY
DATE
MAY 27, 1940
CHIEF HYDRAULIC ENGR.
SR. ASST. CHIEF ENGINEER
SCALE
5 Miles
MAP IV
WELLS
KEY WELLS
KEY WELLS WITH AUTOMATIC RECORDERS.
KEY WELLS FOR WHICH HYDROGRAPHS ARE INCLUDED IN THIS REPORT.
KEY WELLS WITH AUTOMATIC RECORDERS FOR WHICH HYDROGRAPHS ARE INCLUDED IN THIS REPORT.
SPECIAL WELLS WITH AUTOMATIC RECORDERS.
--- INDICATES GROUND WATER BARRIERS.
GROUND WATER BASINS
(SHADED NOS.)
1. MONK HILL
2. RAYMOND
3. MAIN SAN GABRIEL
4. UPPER CANYON
5. LOWER CANYON
6. GLENDORA
7. WAY HILL
8. SAN DIMAS
9. FOOTHILL
10. LIVE OAK
11. LOWER CLAREMONT HEIGHTS
12. UPPER DO. DO.
13. SAN ANTONIO CANYON
14. POMONA
15. CHINO
16. PUENTE
17. SPADRA
18. VERDUGO
19. TUJUNGA
20. SAN FERNANDO
21. SYLMAR
22. PACOIMA
23. WEST COASTAL
24. CENTRAL COASTAL
25. HOLLYWOOD
SPREADING AREAS
1 PACOIMA SPREADING GROUNDS
2 BIG TUJUNGA WASH CHANNEL
3 EATON DO. DO.
4 SANTA ANITA DO. DO.
5 SAWPIT DO. DO.
6 SAN GABRIEL RIVER WATER COMMITTEE SPREADING GROUNDS
(A) WEST SIDE CANYON BASIN
(B) EAST DO. DO. DO.
(C) MAIN BASIN BRUSH LAND
(D) COVINA AND AZUSA CANALS TO WASHES
7 SANTA FE DIVERSION SPREADING GROUNDS
8 L.A. STREET DO. DO. DO. } DISCONTINUED
9 PECK ROAD DO. DO. DO.
10 RIO HONDO AND SAN GABRIEL RIVER CHANNELS IN MAIN BASIN
11 RIO HONDO COASTAL BASIN SPREADING GROUNDS
12 SAN GABRIEL DO. DO. DO. DO.
13 RIO HONDO AND SAN GABRIEL RIVER CHANNELS IN COASTAL BASIN
14 BIG DALTON SPREADING GROUNDS
15 LITTLE DALTON DO. DO.
16 THOMPSON CREEK DO. DO.
17 SAN ANTONIO DO. DO.
18 SAN DIMAS WASH CHANNEL
19 LIVE OAK CREEK CHANNEL
20 PACOIMA WASH CHANNEL
SAN GABRIEL MOUNTAINS
SANTA SUSANA MOUNTAINS
SANTA MONICA MOUNTAINS
VERDUGO MOUNTAINS
SAN RAFAEL HILLS
SAN JOSE HILLS
PUENTE HILLS
SAN PEDRO HILLS
BALDWIN HILLS
DOMINGUEZ HILLS
LOS ANGELES
PASADENA
GLENDALE
HOLLYWOOD
LONG BEACH
POMONA
Newhall
Sylmar
San Fernando
Chatsworth
Zelzah
Owensmouth
Reseda
Van Nuys
Lankershim
Burbank
Sunland
Tujunga
Montrose
Calabasas
Sierra Madre
Arcadia
Monrovia
Azusa
Glendora
San Dimas
La Verne
Claremont
Covina
El Monte
San Gabriel
Alhambra
Puente
Whittier
Montebello
Huntington Park
Downey
Norwalk
Bellflower
Artesia
Compton
Gardena
Torrance
Inglewood
El Segundo
Redondo Beach
San Pedro
Sawtelle
Culver
Santa Monica
Venice
PACOIMA DAM
TUJUNGA DAM No 1
DEVILS GATE DAM
EATON WASH DEBRIS DAM
SAN GABRIEL DAM No 2
SAN GABRIEL DAM No 1
MORRIS DAM
BIG DALTON DAM
SAN DIMAS DAM
PUDDINGSTONE DAM
PUDDINGSTONE DIVERSION DAM
LIVE OAK DAM
BIG SANTA ANITA DAM
SAWPIT DAM
SIERRA MADRE DAM
SUNSET DAM
118°36′
118°24′
118°12′
118°00′
117°48′
117°36′
34°24′
34°12′
34°00′
33°48′

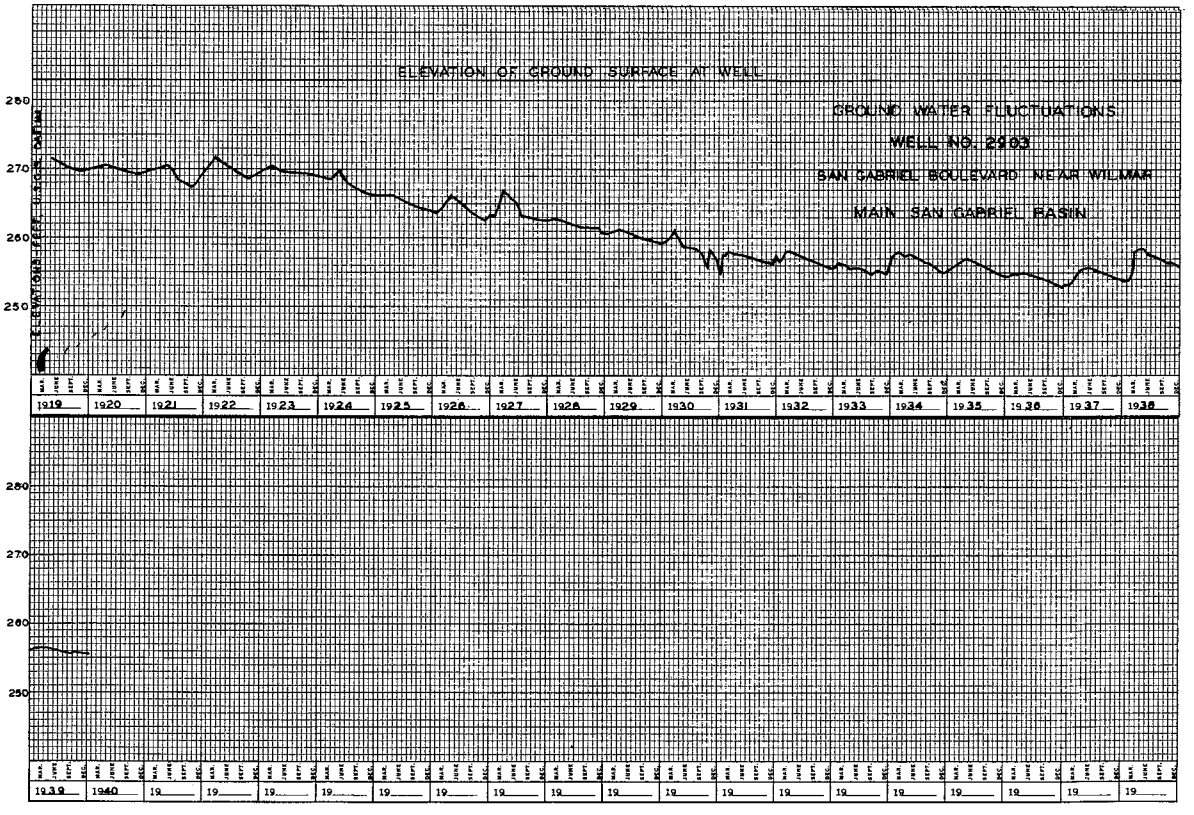

GROUND WATER FLUCTUATIONS
WELL NOS. 3864 & 3855
BURBANK
SAN FERNANDO VALLEY
ELEVATION IN FEET, U.S.C.G. DATUM
550
540
530
520
510
ELEVATION OF GROUND SURFACE AT WELL NO. 3864 = 544.02
GROUND SURFACE AT WELL NO. 3855 = 546.47
WELL NO. 3855
WELL NO. 3864
WELL ABANDONED
1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940

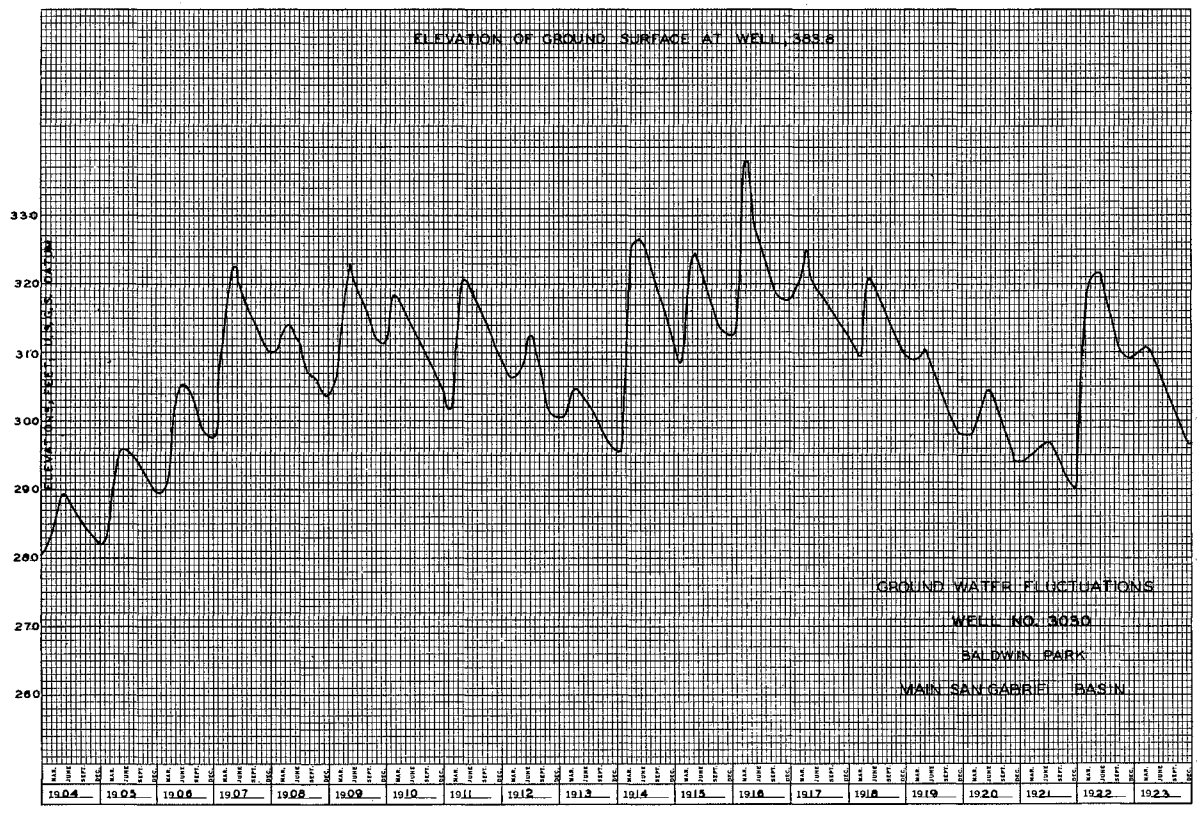

ELEVATION OF GROUND SURFACE AT WELL 7899
790
780
770
760
750
ELEVATION IN FEET, U.S.C.G. DATUM
GROUND WATER FLUCTUATIONS
WELL NO. 4799
BRANT RANCH, GANOGA PARK
SAN FERNANDO VALLEY
1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938
ELEVATION OF GROUND SURFACE AT WELL 7899
790
780
770
760
750
ELEVATION IN FEET, U.S.C.G. DATUM
1939 1940

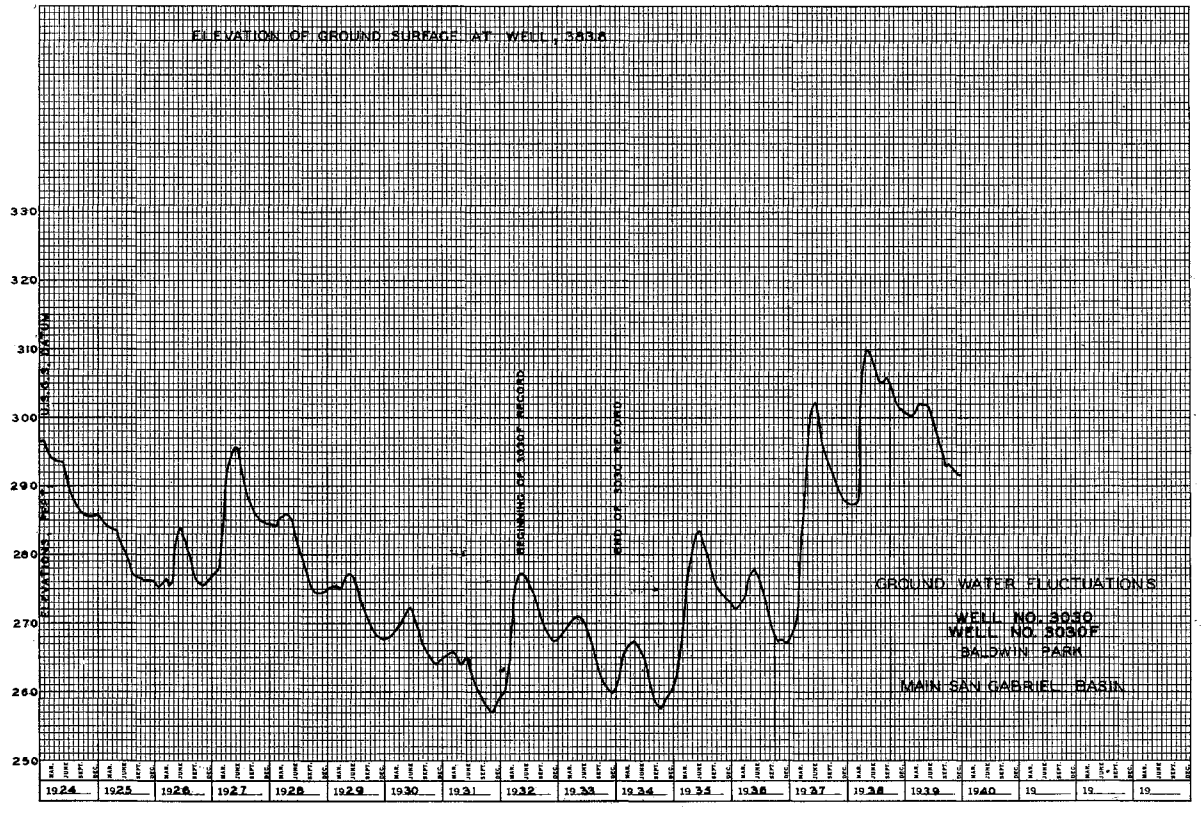

753.5 ELEVATION OF GROUND SURFACE AT WELL
ELEVATIONS, FEET, U.S.G.S. DATUM
630
620
610
600
590
580
570
GROUND WATER FLUCTUATIONS
WELL NO. 4057-F
CITY OF PASADENA
RAYMOND BASIN
1931
1932
1933
1934
1935
1936
1937
1938
1939
1940

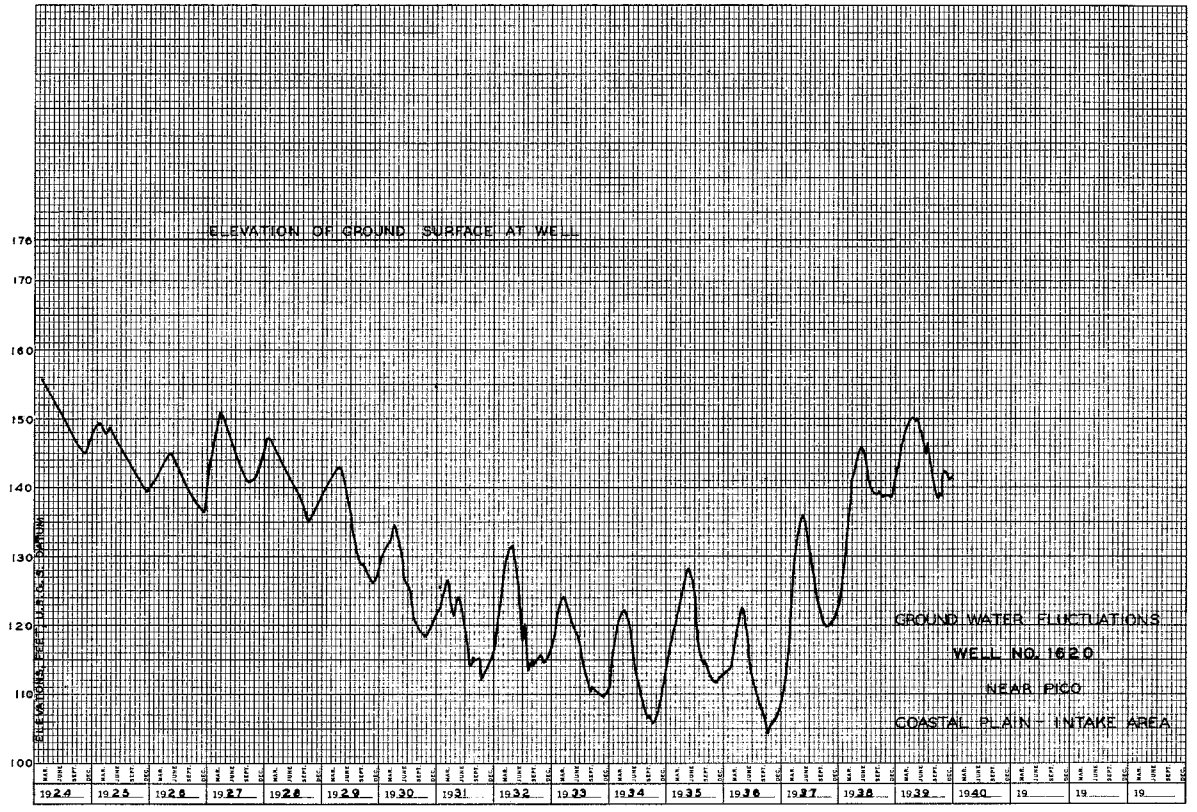

1030.5 ELEVATION OF GROUND SURFACE AT WELL
ELEVATIONS, FEET, U.S.G.S. DATUM
760
750
740
730
720
710
700
690
680
670
660
GROUND WATER FLUCTUATIONS
WELL NO. 3241-F
POMONA BASIN
1932
1933
1934
1935
1936
1937
1938
1939
1940
19

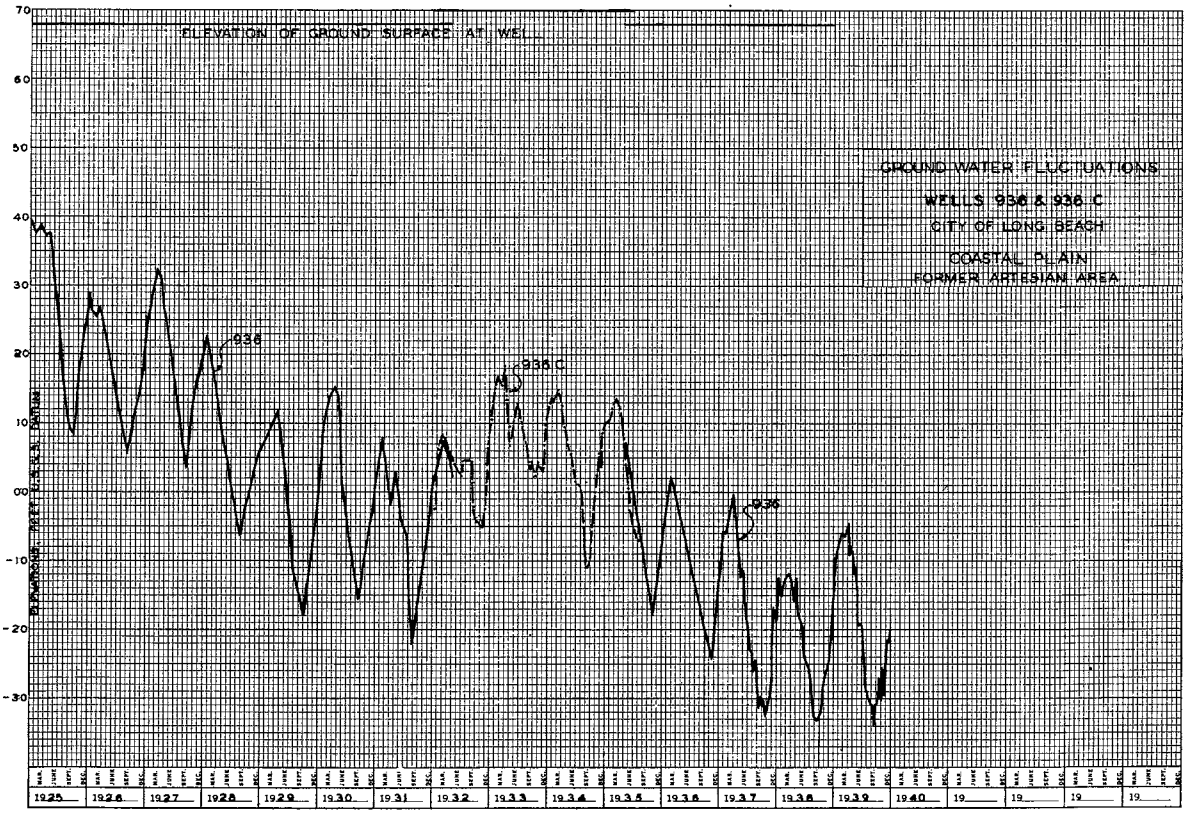

693.26 ELEVATION OF GROUND SURFACE AT WELL
ELEVATIONS IN FEET ABOVE U.S.C.G.S. DATUM
700
690
680
670
660
650
640
630
620
610
600
590
580
570
560
550
540
GROUND WATER FLUCTUATIONS
WELL NO. 4265-A
NORTH OF AZUSA
SAN GABRIEL CANYON BASIN
1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 19 19 19 19 19

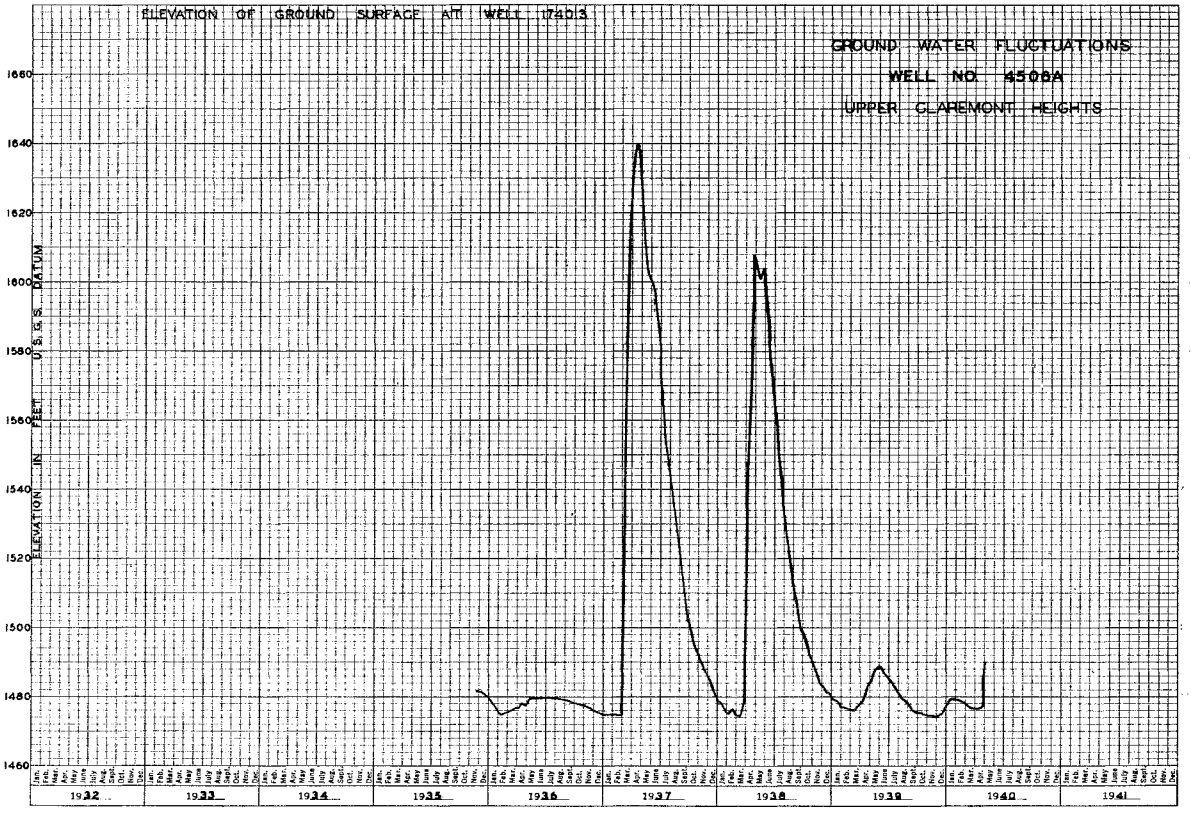

ELEVATION OF GROUND SURFACE AT WELL
ELEVATIONS IN FEET ABOVE U.S.C.G.S. DATUM
280
270
260
250
GROUND WATER FLUCTUATIONS
WELL NO. 2903
SAN GABRIEL BOULEVARD NEAR WILMAR
MAIN SAN GABRIEL BASIN
1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938
1939 1940 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19 19

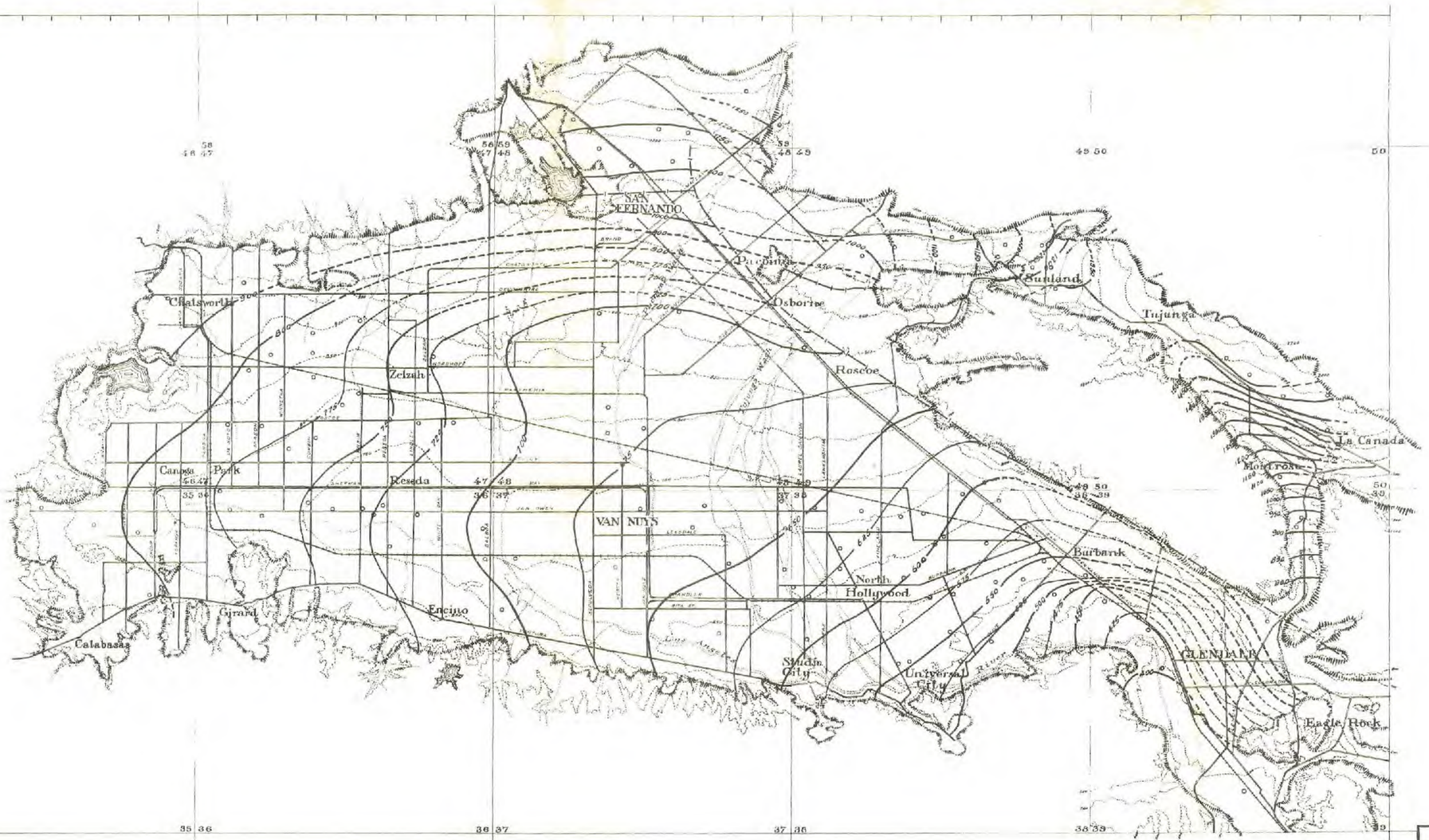

ELEVATION OF GROUND SURFACE AT WELL, 3858
ELEVATIONS, FEET, U.S.C.G.S. DATUM
330
320
310
300
290
280
270
260
GROUND WATER FLUCTUATIONS
WELL NO. 3050
BALDWIN PARK
MAIN SAN GABRIEL BASIN
1904 1905 1906 1907 1908 1909 1910 1911 1912 1913 1914 1915 1916 1917 1918 1919 1920 1921 1922 1923


ELEVATION OF GROUND SURFACE AT WELL, 3858
ELEVATIONS, FEET, U.S.C.G.S. DATUM
330
320
310
300
290
280
270
260
250
BEGINNING OF 3030F RECORD
END OF 3030 RECORD
GROUND WATER FLUCTUATIONS
WELL NO. 3030
WELL NO. 3030F
BALDWIN PARK
MAIN SAN GABRIEL BASIN
1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940 19 19 19


ELEVATION OF GROUND SURFACE AT WELL
ELEVATIONS, FEET U.S.C.G.S. DATUM
176
170
160
150
140
130
120
110
100
GROUND WATER FLUCTUATIONS
WELL NO. 1620
NEAR PICO
COASTAL PLAIN - INTAKE AREA
1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940 19 19 19


ELEVATION OF GROUND SURFACE AT WELL
ELEVATIONS, FEET U.S.C.G.S. DATUM
70
60
50
40
30
20
10
00
-10
-20
-30
936
936 C
936
GROUND WATER FLUCTUATIONS
WELLS 936 & 936 C
CITY OF LONG BEACH
COASTAL PLAIN
FORMER ARTESIAN AREA
1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940 19 19 19 19


ELEVATION OF GROUND SURFACE AT WELL 1740.3
GROUND WATER FLUCTUATIONS
WELL NO. 4508A
UPPER CLAREMONT HEIGHTS
ELEVATION IN FEET U.S.G.S. DATUM
1660
1640
1620
1600
1580
1560
1540
1520
1500
1480
1460
1932
1933
1934
1935
1936
1937
1938
1939
1940
1941



LEGEND

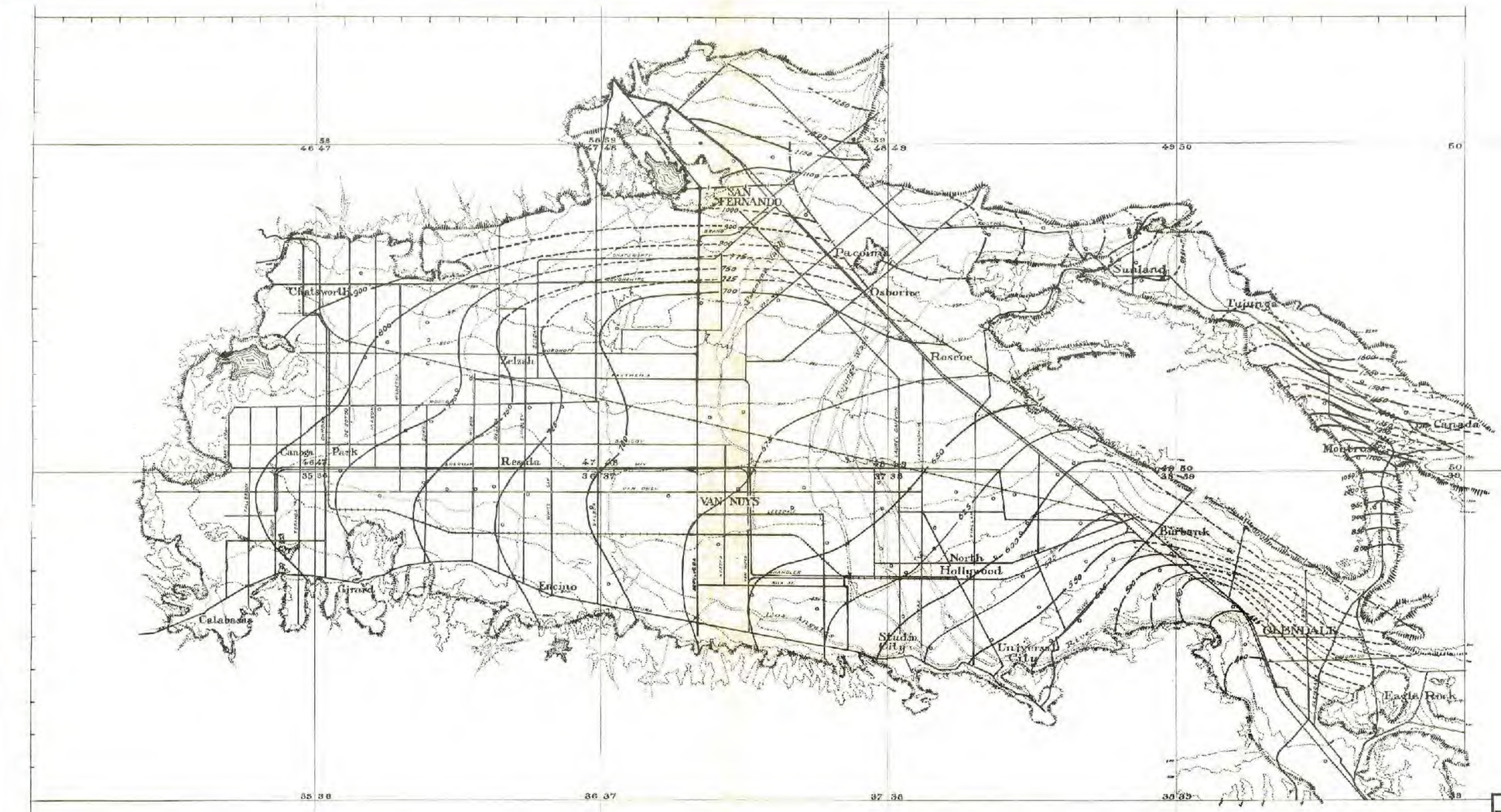
- ○ Wells representative of average ground water elevations, with comparable depth of hole, chemical analysis of water, and elevation of perforations.
- ® Wells as above, except under heavy draught, or affected by heavy draught on nearby wells.
- • Wells which differ from average wells for various reasons, such as artesian characteristics, damaged casing, surface inflow, insufficient data, and erratic fluctuations of water in well.
- ● Wells of shallow depth, with perched water indications.
- ◆ Wells of deep water strata, not related to those of average wells.
- ——— Lines of equal static ground water levels or of equal pressures
- - - - - Ditto,- location approximate
- —|—|— Faults and other barriers to free ground water movement.
- ~~~ Surface Contours

Scale in Miles

PREPARED BY ..... W. N. Thayer.....
TRACED BY ..... E. Heidelberg.....
CHECKED BY ..... L. W. Gordon.....

REVISIONS			LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
MARK	DATE	DESCRIPTION	SAN FERNANDO VALLEY GROUND WATER CONTOURS NOVEMBER 1938
			APPROVED BY ..... R. R. Nelson 6/13/40 CHIEF ENGINEER
RECOMMENDED BY: Fred C. Merrill, CHIEF HYDRAULIC ENGINEER; Paul Kamman, SR. ASST. CHIEF ENGINEER			SCALE — DATE MAY 1, 1940 — NO. SHEET 19-H20 OF

MAP V



LEGEND

- ○ Wells representative of average ground water elevations, with comparable depth of hole, chemical analysis of water, and elevation of perforations.
- ◎ Wells as above, except under heavy draught, or affected by heavy draught on nearby wells.
- • Wells which differ from average wells for various reasons, such as artesian characteristics, damaged casing, surface inflow, insufficient data, and erratic fluctuations of water in well.
- ● Wells of shallow depth, with perched water indications.
- ◆ Wells of deep water strata, not related to those of average wells.
- ——— Lines of equal static ground water levels or of equal pressures
- - - - - Ditto,— location approximate
- —|—|— Faults and other barriers to free ground water movement.
- ~~~~ Surface Contours

Scale in Miles

PREPARED BY ..... W.H. Hansen
TRACED BY ..... H. Hornsberg
CHECKED BY ..... C. Waterfall

REVISIONS		
MARK	DATE	DESCRIPTION

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

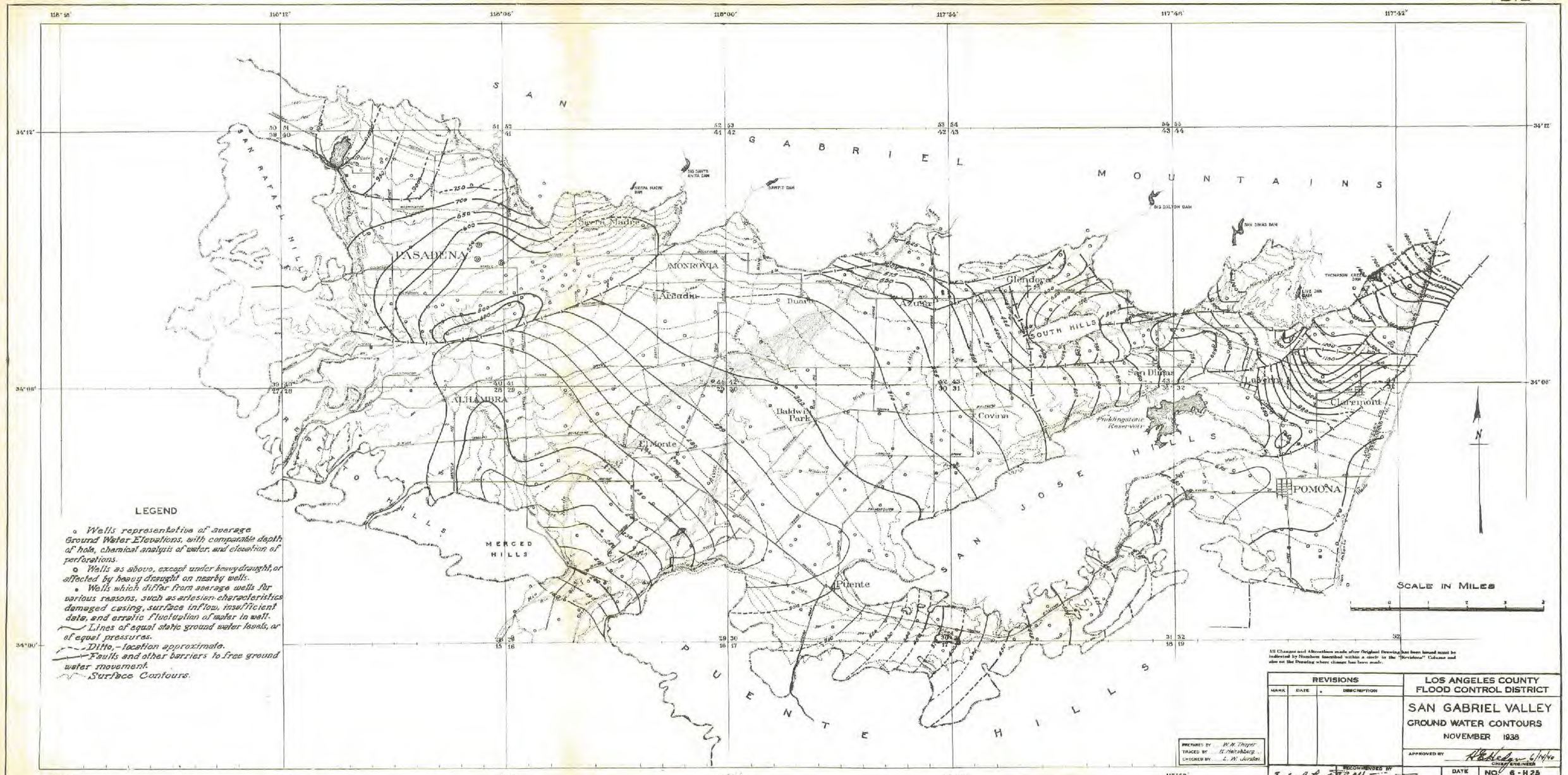
SAN FERNANDO VALLEY
GROUND WATER CONTOURS
APRIL 1939

APPROVED BY ..... CHIEF ENGINEER

RECOMMENDED BY
Finley B. Laverty, CHIEF HYDRAULIC ENGINEER — Paul Sumner, SR. ASST. CH. OF ENGINEER

SCALE | DATE MAY 1940 | NO. 19-H21 SHEET OF

MAP VI



LEGEND

- Wells representative of average Ground Water Elevations, with comparable depth of hole, chemical analysis of water, and elevation of perforations.
- Wells as above, except under heavy draught, or affected by heavy draught on nearby wells.
- Wells which differ from average wells for various reasons, such as artesian characteristics damaged casing, surface inflow, insufficient data, and erratic fluctuation of water in well.
- Lines of equal static ground water levels, or of equal pressures.
- Ditto, - location approximate.
- Faults and other barriers to free ground water movement.
- Surface Contours.

All Changes and Alterations made after Original Drawing has been issued must be indicated by Numbers inscribed within a circle in the "Revisions" Column and also on the Drawing where change has been made.

REVISIONS			
MARK	DATE	△	DESCRIPTION

PREPARED BY W. W. Troyer
TRACED BY H. Hershberg
CHECKED BY L. W. Worden

RECOMMENDED BY
CHIEF HYDRAULIC ENGINEER — ASSISTANT CHIEF ENGINEER

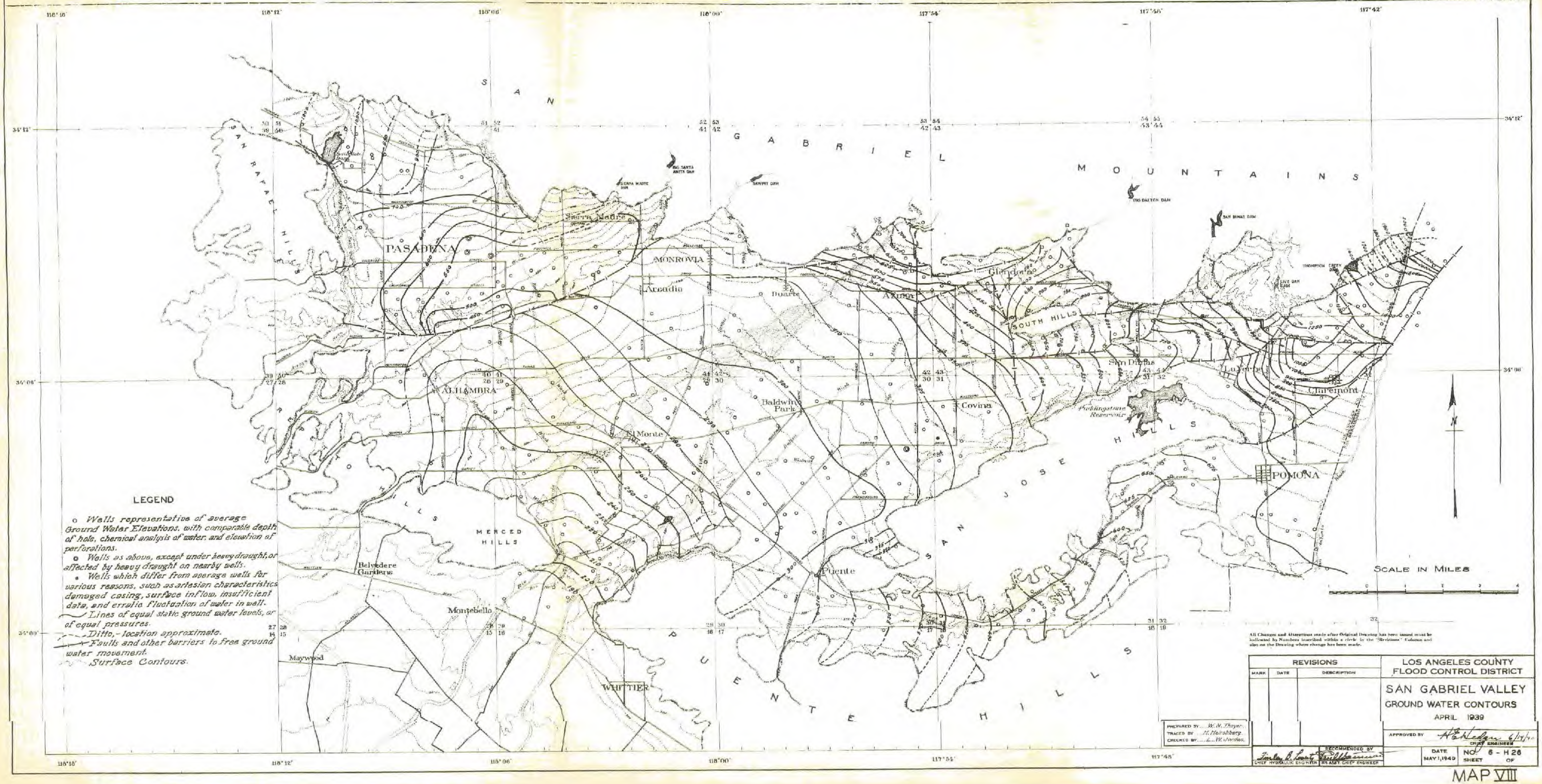
LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

SAN GABRIEL VALLEY
GROUND WATER CONTOURS
NOVEMBER 1938

APPROVED BY [signature] 6/14/40
CHIEF ENGINEER

DATE MAY 1940 NO. 6-H 25 SHEET OF

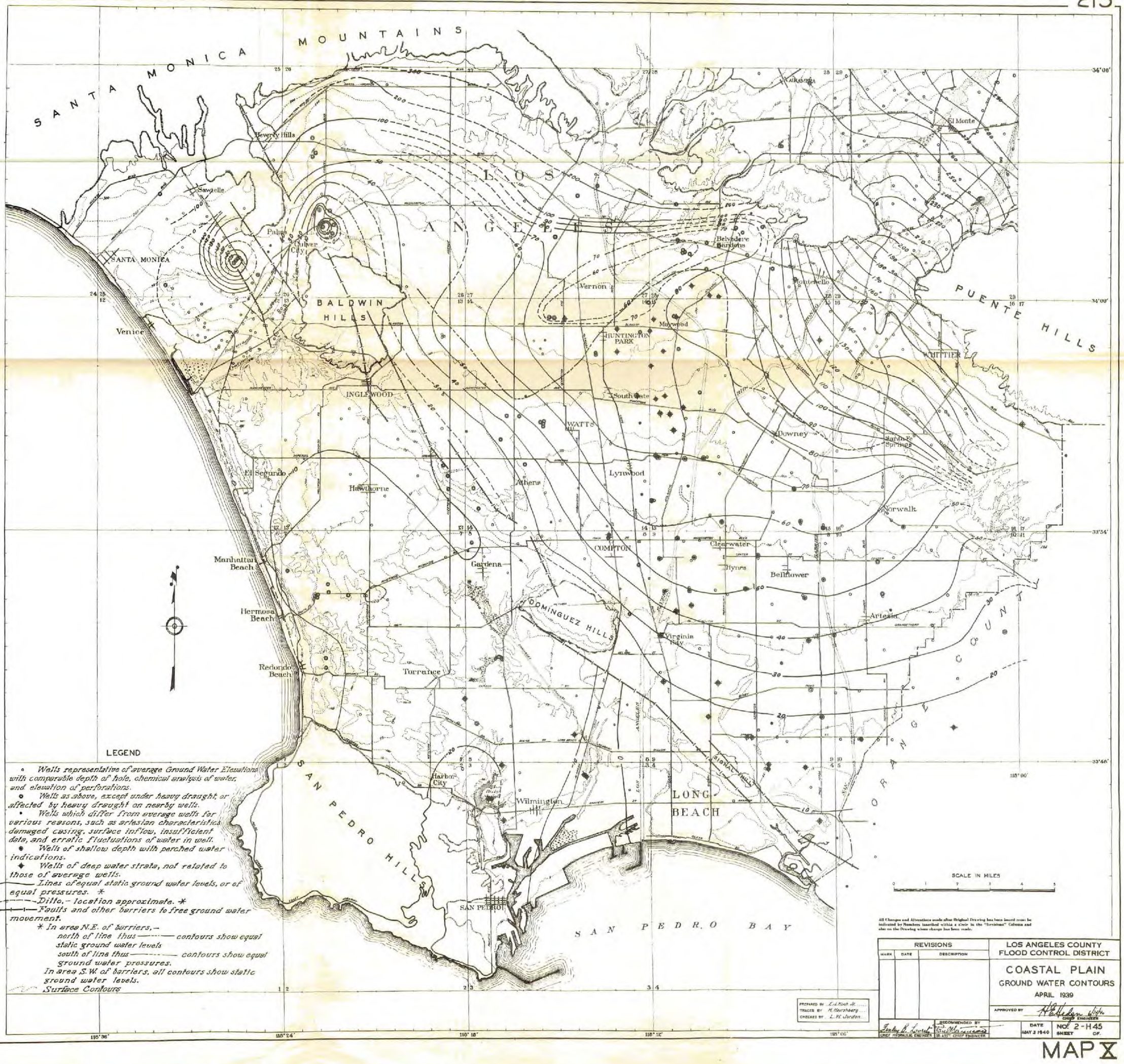
MAP VII


SAN GABRIEL MOUNTAINS
SAN RAFAEL HILLS
MERCED HILLS
PUENTE HILLS
SAN JOSE HILLS
SOUTH HILLS
PASADENA
Sierra Madre
MONROVIA
Arcadia
Duarte
Azusa
Glendora
San Dimas
La Verne
Claremont
POMONA
Covina
Baldwin Park
El Monte
ALHAMBRA
Puente
Belvedere Gardens
Montebello
Maywood
WHITTIER
Puddingstone Reservoir
BIG SANTA ANITA DAM
SIERRA MADRE DAM
SAWPIT DAM
BIG DALTON DAM
SAN DIMAS DAM
THOMPSON CREEK DAM
LIVE OAK DAM
LEGEND
Wells representative of average Ground Water Elevations, with comparable depth of hole, chemical analysis of water, and elevation of perforations.
Wells as above, except under heavy draught, or affected by heavy draught on nearby wells.
Wells which differ from average wells for various reasons, such as artesian characteristics, damaged casing, surface inflow, insufficient data, and erratic fluctuation of water in well.
Lines of equal static ground water levels, or of equal pressures.
Ditto, - location approximate.
Faults and other barriers to free ground water movement.
Surface Contours.
SCALE IN MILES
All Changes and Alterations made after Original Drawing has been issued must be indicated by Numbers inscribed within a circle in the "Revisions" Column and also on the Drawing where change has been made.
REVISIONS
MARK
DATE
DESCRIPTION
LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
SAN GABRIEL VALLEY
GROUND WATER CONTOURS
APRIL 1939
PREPARED BY W. N. Thayer
TRACED BY M. Hershberg
CHECKED BY L. W. Jordan
APPROVED BY
CHIEF ENGINEER
RECOMMENDED BY
CHIEF HYDRAULIC ENGINEER
DR. ASS'T. CHIEF ENGINEER
DATE MAY 1, 1940
NO. 6 - H 26
SHEET OF

MAP VIII


SANTA MONICA MOUNTAINS
LOS ANGELES
BALDWIN HILLS
PUENTE HILLS
DOMINGUEZ HILLS
SAN PEDRO HILLS
SIGNAL HILL
ORANGE COUNTY
SAN PEDRO BAY
Beverly Hills
Sawtelle
SANTA MONICA
Palms
Culver City
Venice
Alhambra
El Monte
Belvedere Gardens
Montebello
Vernon
Maywood
HUNTINGTON PARK
WHITTIER
INGLEWOOD
South Gate
WATTS
Downey
Santa Fe Springs
El Segundo
Hawthorne
Athens
Lynwood
Norwalk
COMPTON
Clearwater
Hynes
Bellflower
Manhattan Beach
Gardena
Hermosa Beach
Artesia
Virginia City
Redondo Beach
Torrance
Harbor City
Wilmington
LONG BEACH
SAN PEDRO
34°06'
34°00'
33°54'
33°48'
118°36'
118°24'
118°18'
118°12'
118°06'
118°00'
SCALE IN MILES
0 1 2 3 4 5
LEGEND
Wells representative of average Ground Water Elevations with comparable depth of hole, chemical analysis of water, and elevation of perforations.
Wells as above, except under heavy draught or affected by heavy draught on nearby wells.
Wells which differ from average wells for various reasons, such as artesian characteristics, damaged casing, surface inflow, insufficient data, and erratic fluctuations of water in well.
Wells of shallow depth with perched water indications.
Wells of deep water strata, not related to those of average wells.
Lines of equal static ground water levels, or of equal pressures. *
Ditto, - location approximate. *
Faults and other barriers to free ground water movement.
* In area N.E. of barriers, -
north of line thus contours show equal static ground water levels
south of line thus contours show equal ground water pressures.
In area S.W. of barriers, all contours show static ground water levels.
Surface Contours
All Changes and Alterations made after Original Drawing has been issued must be indicated by Numbers inscribed within a circle in the "Revisions" Column and also on the Drawing where change has been made.
REVISIONS
MARK DATE DESCRIPTION
LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
COASTAL PLAIN
GROUND WATER CONTOURS
NOVEMBER 1938
PREPARED BY J. J. Koch Jr.
TRACED BY H. Hirshberg
CHECKED BY L. W. Jordan
APPROVED BY
CHIEF ENGINEER
RECOMMENDED BY
CHIEF HYDRAULIC ENGINEER
SR. ASS'T. CHIEF ENGINEER
DATE MAY 3, 1940
NO. 2-H44
SHEET OF

MAP IX


SANTA MONICA MOUNTAINS
LOS ANGELES
BALDWIN HILLS
PUENTE HILLS
DOMINGUEZ HILLS
SAN PEDRO HILLS
SAN PEDRO BAY
ORANGE COUNTY
Beverly Hills
Sawtelle
Palms
Culver City
SANTA MONICA
Venice
Vernon
Belvedere Gardens
Montebello
El Monte
Maywood
HUNTINGTON PARK
WHITTIER
INGLEWOOD
South Gate
WATTS
Downey
Santa Fe Springs
El Segundo
Hawthorne
Athens
Lynwood
Norwalk
COMPTON
Clearwater
Hynes
Bellflower
Gardena
Manhattan Beach
Hermosa Beach
Redondo Beach
Torrance
Artesia
Virginia Park
Harbor City
Wilmington
LONG BEACH
SAN PEDRO
SIGNAL HILL
LEGEND
Wells representative of average Ground Water Elevations with comparable depth of hole, chemical analysis of water, and elevation of perforations.
Wells as above, except under heavy draught, or affected by heavy draught on nearby wells.
Wells which differ from average wells for various reasons, such as artesian characteristics damaged casing, surface inflow, insufficient data, and erratic fluctuations of water in well.
Wells of shallow depth with perched water indications.
Wells of deep water strata, not related to those of average wells.
Lines of equal static ground water levels, or of equal pressures. *
Ditto, - location approximate. *
Faults and other barriers to free ground water movement.
* In area N.E. of barriers, -
north of line thus ——— contours show equal static ground water levels
south of line thus ——— contours show equal ground water pressures.
In area S.W. of barriers, all contours show static ground water levels.
Surface Contours
SCALE IN MILES
0 1 2 3 4 5
All Changes and Alterations made after Original Drawing has been issued must be indicated by Numbers inscribed within a circle in the "Revisions" Column and also on the Drawing where change has been made.
REVISIONS
MARK DATE DESCRIPTION
LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
COASTAL PLAIN
GROUND WATER CONTOURS
APRIL 1939
APPROVED BY H. A. Hadley Jr. CHIEF ENGINEER
RECOMMENDED BY
DATE MAY 3 1940
NO. 2-H45
SHEET OF
PREPARED BY L. A. Koch Jr.
TRACED BY M. Hirschberg
CHECKED BY L. W. Jordan
118° 36' 118° 24' 118° 18' 118° 12' 118° 06'
34°06' 34°00' 33°54' 33°48'

MAP X