Los Angeles County Flood Control District

HYDRAULIC DIVISION

REPORT TO H. E. HEDGER, CHIEF ENGINEER

ANNUAL REPORT

ON

HYDROLOGIC DATA

SEASON 1939-40

Paul Baumann, Assistant Chief Engineer
Finley B. Laverty, Chief - Hydraulic Division

October 1, 1941

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
LOS ANGELES, CALIFORNIA

H. E. HEDGER
CHIEF ENGINEER

751 S. FIGUEROA ST.
ROOM 410

October 1, 1941

FILE NO. 2-20
SUBJECT Annual Report on Hydrologic Data Season of 1939-40.

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

All Districts.

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 1939-40. This report is the tenth of a series of annual or biennial reports covering the thirteen years of records.

This report includes data collected and compiled by the District's Hydraulic Division 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

October 1, 1941

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

Dear Sir:

Transmitted herewith is the "Annual Report on Hydrologic Data" for the season 1939-40. This report includes the data collected and compiled by the Hydraulic Division of the District and is presented as follows:

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

The precipitation records include the monthly records of 380 stations of which 370 furnished complete seasonal records. Of these stations, 85% have a continuous record for over ten years with 10 stations having a continuous record for over 50 years.

Intensity records are obtained from 59 automatic gages. Comparative intensities with maximum of record are included in this report for nine representative stations.

The rainfall for the season 1939-40 was 82% of normal for the entire County. No important storms were recorded with the exception of occasional high intensities of short duration occurring principally in the San Fernando Valley and Santa Monica Mountains. The following indices show the distribution of rainfall throughout the County:

	% Normal
1. San Gabriel Mt. Area	74
2. Valley and Coastal Plain	89
3. Santa Monica Mts.	95
4. Desert Area - North of San Gabriel Mts.	76

Snowfall for five mountain locations is also summarized herein.

Monthly evaporation records for 21 stations are included in the report and comparative monthly values for several years of record are shown for six representative locations. The total yearly evaporation recorded at the various locations varied from over 7.4 feet at Encino Reservoir to less than 3.4 feet at Opid's Camp.

Dam operation records included in this report show daily reservoir water surface, storage, inflow and outflow values for fourteen dams operated by the District. Maximum hourly inflow and outflow are also shown. These dams and two small debris dams control 411 square miles of mountain drainage with a total storage of over 93,000 acre feet.

The total combined inflow of 85,421 acre feet, was almost entirely conserved through storage or channel percolation.

Reference is also made to sluicing activities at various dams with results indicating the recovery of several hundred acre feet of storage.

Runoff records include the data pertinent to the District's recording streamflow records, which include stream flow measurements, mean daily runoff and storm hydrographs.

The District operated 59 stations located on the main streams and tributaries. These records are similar to and supplement the records of the thirteen stations operated by the U.S.G.S. Water Resources Branch which are also included in this publication. Cooperative assistance is given by the District in the operation of these stations while the District, in turn, received cooperation at seven stations from the local office of the U. S. Engineer Department.

Of increasing interest, during recent years, are the conservation activities and ground water studies being undertaken by the District with the cooperation of various interested individuals and agencies. Included in this report are ground water maps showing approximate high and low seasonal ground water conditions. These maps are compiled from measurements taken at approximately 1175 wells. The general trend indicates a depletion from the fall of 1938 to the fall of 1939. However, from the fall of 1939 to the spring of 1940 the recovery generally exceeded the depletion. Details of these changes are shown herein.

Total conservation effected during the season amounts to over 55,000 acre feet. Of this amount, about 33,000 acre feet was percolated in off channel spreading grounds while the remainder was percolated in natural and scarified channels. The most important spreading was as follows:

Spreading Grounds	Acre Feet
Pacoima	907
San Antonio	2715
Rio Hondo Coastal Basin	1702
San Gabriel River Water Committee	
Canyon Basin	19304
Main Basin	8544

Following is a yearly summary of water wasted to the ocean as indicated by the stations located near the outlets of the principal streams of the County. Water wasted from Coyote and Ballona Creeks originates almost entirely from valley and street runoff while the Los Angeles and San Gabriel River waters are combined valley, street and mountain tributary runoff.

Year	Coyote Creek near Del Amo St. *below P. E. Bridge, Artesia	San Gabriel River at Spring St.	L.A.River at State St. *L.A.River at Willow St.	Ballona Cr.at Sawtelle Blvd. *at Centinella Blvd.	Total Waste to Ocean	Rainfall Index-Mean for County
1927-28	-	No Flow	-	*3930 Inc.		70
1928-29	-	No Flow	*9340 Inc.	*14900	24240 Inc.	74
1929-30	*699	No Flow	*12300	*13500	26500	76
1930-31	*568	No Flow	*14400	*18500	33470	83
1931-32	*2690	6560	51000	*21800	82050	117
1932-33	*457	809	22900	*15800	39970	72
1933-34	*3890	12400	67900	*20600	104800	87
1934-35	*3850	2380	40500	*24900	71630	126
1935-36	*1150	1190	20500	*13300 186	36330	79
1936-37	13700	13500	91100	40680	159000	151
1937-38	15100	88020	408000	52500	599600	151
1938-39	4250	1083	82750	28490	116600	111
1939-40	3193	1462	65930	21110	91700	84

Development of additional off-stream spreading areas will reduce this waste.

We wish to thank the many individuals and agencies who have cooperated by furnishing an appreciable part of the precipitation data and other records included in this report. The expressions indicating the value of the data are also appreciated.

Respectfully submitted,

Finley B. Laverty

Finley B. Laverty, Chief
Hydraulic Division

Recommended

Paul Baumann

Paul Baumann
Assistant Chief Engineer

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

Hydraulic Division

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GAGING STATION RECORDS

Recorder Station Data (Arranged Alphabetically)

F.C. No.	Station	Location	
F81D-R	ALHAMBRA WASH	near Short Street	58
F152R	ALISO WASH	at Nordhoff Street	59
F38B-R	BALLONA CREEK	at Sawtelle Boulevard	61
F120R	BIG DALTON CREEK	below Big Dalton Dam	63
F111B-R	BIG TUJUNGA CREEK	above Edison Road	64
F168R	BIG TUJUNGA CREEK	below Big Tujunga Dam No. 1 . .	66

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GAGING STATION RECORDS (Continued)

Recorder Station Data (Arranged Alphabetically)

F.C. No.	Station	Location	Page
F213R	BIG TUJUNGA CREEK	above Gold Canyon	67
F20B-R	TUJUNGA WASH	at Remsen Avenue	69
F106B-R	TUJUNGA WASH CENTRAL BRANCH	at Chandler Boulevard	70
F105R	TUJUNGA WASH	at Magnolia Boulevard	71
F270R	CALABASAS CREEK	at Ventura Boulevard	72
F37B-R	COMPTON CREEK	near Greenleaf Street	73
F41C-R	COYOTE CREEK	at Del Amo Street	75
F53R	DUME CREEK	at Roosevelt Highway	77
F104R	EATON WASH	at Ellis Lane	78
F149R	LIMEKILN WASH	at Devonshire Avenue	80
F65B-R	LITTLE DALTON CREEK	above mouth of canyon	81
L1R	LITTLE ROCK CREEK	above Little Rock Dam	83
F67B-R	LITTLE SANTA ANITA CREEK	below Sierra Madre Dam	84
F267R	LITTLE SANTA ANITA CREEK	at Woodland Avenue	86
F19R	LITTLE TUJUNGA WASH	at Foothill Boulevard	86
F31R	LIVE OAK CREEK	near mouth of canyon	88
F5R	LOS ANGELES RIVER	at Van Nuys Boulevard	89
F266R	LOS ANGELES RIVER	at Mariposa Street	92
F57C-R	LOS ANGELES RIVER	above Arroyo Seco (near Dayton Avenue)	94
F34B-R	LOS ANGELES RIVER	at Firestone Boulevard	97
F180R	LOS ANGELES RIVER	at State Street, Long Beach	100
F130R	MALIBU CREEK	at Crater Camp	103
F22R	MONROVIA CREEK	above Sawpit Creek	105
F195R	MONROVIA STORM DRAIN	at Peck Road	107
F181R	MONTEBELLO STORM DRAIN	at Outlet into Rio Hondo	109
F118B-R	PACOIMA CREEK FLUME	below Pacoima Dam	110
F16R	PACOIMA WASH	at Parthenia Street	111
F40R	PUDDINGSTONE CREEK	below Puddingstone Dam	113
F192R	RIO HONDO	at Lower Azusa Road	114
F64R	RIO HONDO	above Mission Bridge	116
F45R	RIO HONDO	at Stewart and Gray Road	119
F83R	RIO HONDO SLOUGH	at San Gabriel Boulevard	121
F82C-R	RUBIO WASH	at Glendon Way	123
F151R	SAN ANTONIO CREEK	at mouth of canyon	124
F209R	SAN GABRIEL RIVER WEST FORK	below S.G. Dam No. 2	126
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F220R	SAN GABRIEL - AZUSA CONDUIT	at North Portal #4-B Tunnel	

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Recorder Station Data (Arranged Alphabetically)

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F261R	SAN GABRIEL RIVER	at Elliot Avenue	138
F263R	SAN GABRIEL RIVER	at Beverly Boulevard	139
F262R	SAN GABRIEL RIVER	at Florence Avenue	141
F42R	SAN GABRIEL RIVER	at Spring Street, Long Beach	143
F48R	SAN JOSE CREEK	at Workman Mill Road	145
F260B-R	SANTA ANITA WASH	at Foothill Boulevard	147
F92B-R	SANTA CLARA RIVER	at Highway 99	148
F185R	SEPULVEDA CREEK	at Charnock Road	150
F44R	SYCAMORE LOWER STORM DRAIN	at Adams Square	152
F43R	SYCAMORE UPPER STORM DRAIN	above Solway Street	154
F54R & F54B-R	TOPANGA CREEK	above mouth of canyon	155
F252R	VERDUGO CHANNEL	at Estelle Avenue	157
F47R	WALNUT CREEK	at Covina Boulevard	158

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F.C. No.	Station	Location	
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U9R	SAN GABRIEL RIVER BASIN	Dalton Creek near Glendora	161
U2R	LOS ANGELES RIVER BASIN	Eaton Creek near Pasadena	163
U7R	SAN GABRIEL RIVER BASIN	Fish Creek near Duarte	164
U12R	LOS ANGELES RIVER BASIN	Haines Creek near Tujunga	165
U3R	LOS ANGELES RIVER BASIN	Little Santa Anita Creek near Sierra Madre	166
U14R	ANTELOPE VALLEY BASIN	Rock Creek near Valyermo	167
U6R	SAN GABRIEL RIVER BASIN	Rogers Creek near Azusa	168
U15R	SANTA ANA RIVER BASIN	San Antonio Creek near Claremont	170
U10R	SAN GABRIEL RIVER BASIN	San Dimas Creek near San Dimas	171
U8R	SAN GABRIEL RIVER BASIN	San Gabriel River near Azusa	172
U4R	LOS ANGELES RIVER BASIN	Santa Anita Creek near Sierra Madre	174
U5R	SAN GABRIEL RIVER BASIN	Sawpit Creek near Monrovia	175

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CALABASAS CREEK	196
CENTINELA CREEK	196
COMPTON CREEK	196
COYOTE CREEK	196
DUME CREEK	197
EATON WASH	197
LIMEKILN WASH	197
LITTLE DALTON CREEK	197
LITTLE ROCK CREEK	197
LITTLE SANTA ANITA CREEK	197
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PRECIPITATION RECORDS

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
Hydraulic Division

REPORT ON PRECIPITATION

Season 1939-40

Foreword:

It is the policy of the District to obtain rainfall records which give a representative coverage of Los Angeles County.

This is being accomplished principally by a study of the areas where further data is required, and subsequently securing cooperative observers in these areas and equipping them.

The choice of location is generally made on the annual inspection of present stations and of proposed locations suggested by private individuals. Annual inspection trips are made in the fall of the year or at the end of the District's season in order that a check be made on the present gage location and condition; that helpful suggestions and instructions in obtaining accurate and complete records be given observers; and that supplies for the ensuing season may be delivered.

The District's rain season includes the period between October 1st and September 30th, and conforms with the water year as used by the United States Geological Survey.

Length of Records:

Of prime importance is the length of record at a single location, as well as the accuracy of the record. With this in mind, the District is continually striving to obtain long time records, and to maintain its present locations, with reliable observers.

The District has continuous records of 175 stations from 10 years to 14 years in length; of 93 stations from 15 years to 24 years; of 46 stations from 25 years to 49 years, and of 10 stations from 50 years and over; a total of 324 stations with over ten years records.

Distribution of Gages:

The proper operation of the District's dams and debris basins, as well as the coordination of rainfall and runoff for the various drainage areas, requires the proper distribution of stations in the mountain and valley areas.

For the operation of the District's dams, a number of automatic gages strategically located with reference to the various dams not only record the rainfall data, but the observers report

these data by telephone at frequent intervals as requested, to be used for estimates of runoff to be expected at the dams.

The distribution of rain gages in the valley area is fairly complete and satisfactory both as to the various drainage areas and stream gaging districts. The mountain areas are not as complete however, and additional locations are being added as observers are located and new gages (particularly automatic) become available.

The District maintained 48 automatic rain gages during the 1939-40 season; 26 of which were in the mountain area and the remaining 22 in the valley area. Three 12 inch capacity Stevens Q-12 weighing type automatic rain gages were purchased by the District during the season. These gages are less expensive than the Fergusson gages which the District has previously purchased. The Stevens gage, after some improvements have been added, may prove fairly satisfactory. In general, each automatic gage is placed close to a standard 8" United States Weather Bureau type gage as a check. 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 occurence.

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

Intensity data have been obtained from special gages utilizing glass graduates at certain of the District's dams, debris basins and most of the patrol stations. These gages are read at frequent intervals during storms, thereby furnishing additional valuable intensity data at small cost. Complete seasonal records are not kept for these gages.

Value of Precipitation Data:

Some of the more important uses are:

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

Many services have been 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.
   Photostatic copies of the monthly records and all automatic records of rain at Mt. Wilson were furnished to the United States Weather Bureau at San Francisco every month, for publication.
2. United States Engineer Department:
   Daily rainfall and intensity data made available to the United States Engineers, on all major storms. Complete daily rainfall data and statistics on same, for a considerable number of the Districts and cooperative stations since their beginning.
3. Division of Water Resources, State of California:
   Daily rainfall and snow records were 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 40 cooperative rainfall stations. Snow Surveys data taken by the District in the winter were also furnished. Considerable data are also made available to the Los Angeles Branch of the Division.
4. Pasadena Water Department:
   Daily rainfall data for practically all stations in the vicinity of Pasadena were made available to the Engineering Division.
5. United States Forest Service:
   Rainfall data were furnished to the Flood Control Surveys Division of the United States Forest Service at Glendora, Los Angeles, and San Francisco.
6. Various:
   Data requested by individuals and agencies.

Rainfall data are also furnished to the District by the above and other agencies, greatly augmenting the data received and compiled during the season.

Source and Number of Records:

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

TABLE I. Rain Gage Ownership and Type

				Number of Gages 1939-40	Total
(a)	Los Angeles County Flood Control District	Std.	8"	178	
		Std.	8" *	35	
		Automatic-Fergusson Type	9" Cap.	31	
		Automatic-Fergusson Type	12" Cap.	13	
		Automatic-Friez	30" Cap.	1	
		Automatic-Stevens-Type Q-12	12" Cap.	3	
		Can & Glass Graduates		11	
		Glass Graduate Special Henson Head		4	276
(b)	Los Angeles Water Department	Std.	8"	17	
		Std.	8" *	2	
		Automatic-Lietz Type	10" Cap.	1	20
(c)	United States Weather Bureau	Std.	8"	11	
		Std.	8" *	5	
		Automatic-Tipping Bucket		1	17
(d)	City of Long Beach	Std.	8"	5	
		Std.	8" *	1	
		Automatic-Tipping Bucket		1	7
(e)	City of Beverly Hills				
		Automatic-Fergusson Type	9" Cap.	1	1
(f)	So. Pacific Railroad	Std. Type	3"	2	2
(g)	So. Calif. Edison Co.	Std.	8"	5	5
(h)	U. S. Forest Service	Std.	8"	4	
		Std.	8" *	2	
		Automatic-Friez Tipping Bucket		2	8
(i)	L. A. City Storm Drain Division	Std.	8" *	3	
		Automatic-Rational		2	
		Automatic Green Tipping Bucket		1	6
(j)	L. A. County Survey Dept. Storm Drain Div.				
		Automatic-Fergusson-Type	12" Cap.	3	3
(k)	L. A. County Rec. Dept.	Std.	8"	4	
		Std.	8" *	1	5
(l)	Pomona Valley Protective Association	Std.	8"	4	4
(m)	Glendora Irrigation Co.	Std.	8"	3	3
(n)	Pasadena Water Dept.	Std.	8"	12	
		Std.	8" *	1	
		Automatic-Friez Tipping Bucket		1	14

TABLE I. Rain Gage Ownership and Type (Concluded)

			Number of Gages 1939-40	Total
(o)	State of Calif. DWR	Std. 8"	4	4
(p)	Miscellaneous - Individuals, Companies, Cities, Towns, etc.	Std. 8"	39	
		Std. 8" *	3	
		Std. Type 6"	1	
		Std. Type 5"	3	
		Std. Type 4½"	1	
		Std. Type 3"	15	
		Dial Type	2	64
			Total	439
			Std. 8"**	-53
			***	-6
				380

Total gages from which the District receives records regularly.

* Represents a standard gage accompanying the automatic 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 63% of all the gages from which daily records are received each month. The remainder are privately owned as shown on the preceding page, and are cooperative with the District. Each observer is supplied with all the necessary supplies such as forms, envelopes, etc., and records are sent in each month.

TABLE II. Complete Seasonal Reports.

Type	Season - 1939-40
F.C. Standard Gage with F.C. Auto. Gage	35
F.C. Standard Gage only	171
F.C. Automatic Gage only	1
F.C. Automatic with Private Standard Gage	12
F.C. Can and Glass Graduate	11
F.C. Glass Graduate and Special 8.81" Head.	4
Private Cooperative Standard Gage	122
Private Automatic Gage	6
Private Automatic and Private Standard Gage	6
Private Dial Gage	2
Total	370

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. Thus out of the 380 stations reporting during the season, 97 percent furnished complete records.

The following table presents a complete list of the automatic raingages which were active during the season 1939-40, with the length of active record included.

TABLE III

ACTIVE AUTOMATIC RAIN GAGES

SEASON 1939-40

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
11B	Upper Franklin Reservoir	870	" 9"	Franklin Canyon	9-29-37 to 9-20-40
11C	Upper Franklin Reservoir	867	" 9"	Franklin Canyon	9-20-40 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	1500	" 9"	Pacoima	9-22-30 to date
47A	Clear Creek	3100	" 12"	Big Tujunga	11-2-28 to date
49	Altadena - Chiesa	1345	Rational-Float 4" (Private)	Arroyo Seco	2-4-39 to date
52B	Switzer Camp	3000	Fergusson 12"	Arroyo Seco	10-6-38 to date
53A	Sleepy Hollow Rch.(Colbys)	3500	" 12"	Big Tujunga	4-19-26 to date
54	Loomis Ranch	4050	" 9"	Big Tujunga	11-24-31 to date
57B-E	Opid's Camp	4350	" 12"	San Gabriel W.Fork	12-14-25 to date
60A	Hoegee's Camp	2750	" 12"	Big Santa Anita	10-11-26 to 10-13-39
60C	Winter Creek	2400	" 12"	Big Santa Anita	10-13-39 to 9-27-40
60A	Hoegee's Camp	2750	" 12"	Big Santa Anita	9-27-40 to date
65	Sierra Madre	1160	" 9"	Rio Hondo	12-9-27 to date
70E	Dalton #1	800	" 9"	San Gabriel	12-4-26 to date
83E	Big Pines County Park	6860	" 9"	Desert	12-17-25 to date
85D	Camp Baldy Guard Station	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	1800	" 9"	Sawpit	2-4-28 to 10-5-38
150	Monrovia Falls	1800	" 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
213	Hancock Park	177	" 9"	Ballona	1-13-29 to date
228B	Beverly Hills	255	" 9" (Private)	Ballona	10-14-31 to date
235B	Henninger Flats	2550	" 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
261E	Acton	3075	" 9"	Santa Clara	11-27-30 to date
268E	Torrance	57	Stevens- Q-12,12"	Laguna-Dominguez	13-19-40 to date
280	Flintridge Fire Station	1325	Fergusson 9"	Arroyo Seco	7-26-30 to date
283a	Crystal Lake - E. Flats	5740	" 12"	San Gab. N.Fork	11-26-35 to date

TABLE III

ACTIVE AUTOMATIC RAIN GAGES

(Continued)

F.C. No.	Name of Station	Elev. USGS	Type and Capacity	Watershed	Period of Record
289	Laguna Bell	140	Fergusson 12"(Private)	Rio Hondo	10-6-30 to May '40
290	Newmark	375	" 12"(Private)	L. A. River	10-6-30 to May '40
291	96th & Central Sts. L.A.	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
334E	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	4-8-37 to date
352	Lechuza Patrol Station	1530	" 9"	Arroyo Sequis and Trancas Canyon	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 6-11-40
367	Upper Haines Canyon	3450	J.P.Friez-Cam 30"	Big Tujunga	6-11-40 to date
373	Briggs Terrace	2310	Fergusson 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"	Coastal	3-15-37 to date
418	Pickens Canyon	4075	" 9"	Verdugo	10-29-36 to 3-28-40
418	Pickens Canyon	4075	Stevens-Q-12, 12"	Verdugo	3-28-40 to date
419	Mt. Gleason	5450	J.P.Friez-Cam 30"	Pacoima-Santa Clara	9-21-37 to 6-4-40
419	Mt. Gleason	5450	Fergusson 12"	Pacoima-Santa Clara	6-4-40 to date
425	San Gabriel Dam #1	1470	" 12"	San Gabriel	10-12-37 to date
433	Altadena-Co.Forestry Pk.	1710	" 9"	Rubio Wash	9-14-38 to date
439B	Charlton Flats	5500	" 12"	Big Tujunga and San Gab.W.Fork	8-2-39 to date
445	Live Oak Canyon	1630	Stevens- Q-12,12"	Live Oak Wash	3-20-40 to date
446	Aliso Cn.Santa Susana Mts.	2367	Fergusson 9"	L. A. River	7-2-40 to date
577	Los Angeles-U.S.W.B.	330	Friez Tip Bucket (Private)	L. A. River	2-19-97 to 3-1-40
577	Los Angeles-U.S.W.B.	313	" " " "	L. A. River	3-1-40 to date
690	San Antonio-Guard Sta.	2380	Stevens Float (Private)	San Antonio	12-17-37 to date
X-3	Rustic Canyon-Fire Area	900	Fergusson 9"	Santa Monica Cn.	12-2-38 to 9-12-40

The District also has records of 35 automatic gages at stations which are now inactive. These records are available in our files.

Summary of Seasonal Precipitation:

I. Storms and run-off.

There were no exceptional or important storms during the season 1939-40. The two largest storms, those of January 4 - 12, 1940 and January 31 - February 3, 1940 did not produce excessive run-off except at isolated locations.

The maximum intensities recorded in the District during the season were generally only light to moderate. See Table IV for a complete list of maximum intensities at nine representative stations in the County.

II. Comparison of Mountain and Valley Rainfall:

Los Angeles County as a whole received less than normal rainfall, the 1939-40 seasonal index being 82, i.e., 82 percent of the County 68 year seasonal normal.

Rainfall varied from slightly above normal for an average along the Coast line from Seal Beach to the West end of the County along the Roosevelt Highway, to 74% of normal for the San Gabriel Mountain area. The Santa Monica Mountains and the San Fernando Valley received the next heaviest rainfall, and the Coastal Plain received slightly less. This comparative distribution of rainfall appears to be nearly the same as that of last season. The heaviest monthly rainfall occurred in the following order: February, January, April, March, December and November, with small amounts in October and May.

The same eight locations used in previous reports have again been compared and represent stations with long time records in the valley, mountain, foothill and the coastal areas:

Station	Elev.	Yrs.of Record	68 yr. Normal Inches	1939 1940 Inches	% of Normal
Long Beach	80	46	13.10	11.78	90%
Los Angeles (USWB)	417	68	15.47	13.54	88%
Pasadena	865	68	19.99	17.05	85%
Winter Creek	2400	15	43.71	29.65	68%
Mouth of San Antonio Cn.	2500	36	26.91	22.56	84%
Colby's Ranch	2950	43	30.66	18.86	62%
Opid's Camp	4350	23	41.86	27.59	66%
Mount Wilson	5650	36	36.22	27.84	77%

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, except that where those stations are now inactive, nearby stations have been substituted.

Area	No. of Sta.Used	Ave.68 yr. Normal Inches	Season - 1939-40 Ave.Amt. Inches	% 68 yr. Normal
San Gabriel Mts.	18	29.38	21.63	74%
Valley and Coastal Plain	24	17.35	15.36	89%
Santa Monica Mountains	14	19.34	18.36	95%
Desert Side - Area North of San Gabriel Mts.	10	12.68	9.61	76%

Number of Days Rainfall - .01 inch or more

Los Angeles (USWB)	(Valley)	37 days	5 p.m. to 5 p.m.
Opid's Camp	(Mountains)	42 days	5 p.m. to 5 p.m.

Average Rainfall Indices for Los Angeles County

The following table presents the 68 year seasonal indices for Los Angeles County. These indices show the comparison of rainfall each season in the form of percent of seasonal normal rainfall and have been obtained by averaging the indices of each of 58 representative long time stations in the County.

1872-1873	93	1906-1907	146
73	150	07	94
74	111	08	121
75	131	09	90
76	29	1910	127
77	112	11	77
78	57	12	77
79	105	13	163
1880	73	14	123
81	62	15	138
82	65	16	95
83	226	17	97
84	54	18	69
85	133	19	90
86	80	1920	102
87	109	21	153
88	126	22	81
89	191	23	54
1890	96	24	64
91	79	25	113
92	150	26	119
93	53	27	69
94	117	28	75
95	53	29	76
96	112	1930	82
97	49	31	116
98	38	32	71
99	60	33	89
1900	111	34	124
01	66	35	80
02	121	36	154
03	56	37	153
04	128	38	109
05	131	1939-1940	82

Maximum Rainfall - Seasonal and Daily

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

No.	Station	Maximum Seasonal	Maximum Day	Date
60C	Winter Creek	29.65		
56	Kamp Kole (formerly Valley Forge Lodge)		5.05	1-8-40
304	Deer Park		5.16*	1-8-40
308	Kelly's Kamp * * *	34.43	6.22**	1-8-40

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

Maximum Rainfall Intensities

Table IV, page 14 shows a comparison of maximum intensities for nine representative stations in the District during the season and the maximum intensities of record for the stations.

Table V. which follows, presents monthly and seasonal rainfall amounts for stations from which the District received records during the season 1939-40.

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

III Summary of Snowfall:

Snowfall at five high mountain points is shown as follows:

Sta.No.	Location	Elev.	Season-1939-40 Amt. in Inches
82	Table Mountain	7500 ft.	55½
83	Big Pines Rec. Camp	6860 ft.	60½
283a	Crystal Lake - E. Pine	5740 ft.	40
308	Kelly's Kamp	8300 ft.	112
419	Mt. Gleason (Santa Clara Ridge)	5450 ft.	10

The snow pack at Mount Baldy averaged 36% water content as against 40% water content in the upper Ice House Canyon, based on this season's measurements taken on March 7, 1940 and April 2, 3, 1940.

Cooperation of Rainfall Observers:

Observers have continued their valuable cooperation with the District in the collection of these data as indicated by the fact that 97% of all observers reporting each month to the District have sent in complete reports for the 12 months period. All but 1% are private individuals who receive no compensation for sending in these records. The private ownership of gages has increased 1% since last season and represents 37% of all stations reporting. This continued increase in privately owned gages has indicated the increasing interest manifested in rainfall. The excellent cooperation has been largely due to the personal contact made with the various observers on our annual inspection trips. On these trips, collaboration with the observer in setting up gage locations, furnishing the supplies, instructions in recording rainfall properly has resulted 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:

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 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	Amt.	.23	.32	.35	.36	.53	.77	1.39	1.93	3.34	3.34
(USWB)1939-40	Date	2-29-40		4-15-40		1- 7-40		1- 7-40		(1-31 - 2-1,2,3-40)	
			2-29-40		4-15-40		1- 7-40		2-1,2,-40		
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		3- 2-38	12-31-33	12-31-33	
			2-18-14		2-18-14		2-18-14		1- 1-34	1- 1-34	3-2,10 -84
Sta.No. 15											
Van Nuys Whse	Amt.	.30	.42	.50	.74	.88	1.12	2.29	3.45	4.46	4.67
1939-40	Date	1- 8-40		1- 8-40		1- 8-40		1-7,8-40		(1-31-2-1,2,3,4-40)	
			1- 8-40		1- 8-40		1- 7-40		2-1,2-40		
Max.of Record	Amt.	.33	.42		.74	.89	1.36		6.94	7.85	7.81
	Date	12-15-38			1- 8-40		12-14-38		12-31-33	(12-30-33	)
			1- 8-40			12-15-38			1- 1-34	(1- 1-34	)
Sta.No. 178											
Azusa-Griffith	Amt.	.18	.30	.32	.48	.61	.94	2.04	3.17	4.35	-
1939-40	Date	1- 8-40		2- 1-40		1- 7-40		1- 7-40		1-6,12,40	
			1- 8-40		1- 7-40		1-7-40		1-7,8-40		
Max.of Record	Amt.	.31	.44		.77	1.10	1.73		8.27	12.14	12.02
	Date	2-28-38				10-17-34	12-31-33		12-31-33	12-31-33	
			2-28-38		10-17-34		1- 1-34		1- 1-34	1- 1-34	1-14,19-16
Sta.No. 425	Amt.	(No automatic record received for)					.96(Int.gage)		3.97 (Std.)		5.74
San Gab.Dam #1	Date	(storm producing maximum intensi-					1-7-40		1-7,8-40		1-4,12,-40
1939-40		(ties at nearby stations.					)				

Intensity gage read 2.27 inches in 6 hrs. or 1.67 inches in 4 hours 1-7,8-40

1939-40 *	Amt.	.17	.33	.45	.57	.76	.92	1.64		3.65	3.95
	Date	2-1-40		2-1-40		2-1-40		2-25-40		(1-30,31,-2-1,4-40)	
			2-1-40		2-1-40		2-25-40				

* These intensities are probably the second largest at this station during the season.

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				4-4,8-26	
			4-5-26		4-5-26		3-2-38		3-1,2,-38		12-17,22-21
Sta.No. 261-E											
Acton-Mellen	Amt.	.07	.10	.14	.19	.36	.49	.80	1.47	2.16	2.26
1939-40	Date	2-29-40		2-29-40		1-23-40		2 -1-40		(1-31,-2-1,4-40)	
			2-29-40		1-23-40		1-23-40		2-1,2-40		
Max.of Record	Amt.	.29	.41		.66	.72*	.69		3.00	3.82	6.69
	Date	8-26-35				10-1-32				12-17,21-38	
			8-26-35		10-1-32		2-16-32		3-1,2-38		12-18,27-21

* Standard gage

Sta. No. 6											
Topanga Canyon	Amt.	.22	.36	.47	.65	1.08	1.34	1.95	3.86	6.60	6.77
1939-40	Date	1-23-40		1-23-40		1-23-40		1-7,8-40		(1-31,- 2-1-40)	
			1-23-40		1-23-40		1-23-40		1-31,-2-1-40		
Max.of Record	Amt.	.28	.50		1.12	1.52	2.72		13.44	15.88	16.03
	Date	1- 5-35				12-31-33				12-29-33	12-29-33
			12-14-38		2-22-36		12-31-33		12-31-33	1- 1-34	1- 1-34
Sta.No. 92											
Pomona College	Amt.	.22	.33	.36	.56	.78	1.11	1.99	2.90	4.22	4.19
1939-40	Date	1- 7-40		1- 7-40		1- 7-40		1- 7-40		(1-7,8-40)	
			1- 7-40		1- 7-40		1- 7-40		1-7,8-40		
Max.of Record	Amt.	.23	.33		.58	.92	1.47		7.86	8.87	11.03
	Date	10-17-34				1- 1-34			1- 1-34	12-31-33	
			1- 7-40		10-17-34		1- 1-34		12-31-33	1- 1-34	2-10,18-27
Sta. No.57B-E											
Opid's Camp	Amt.	.14	.20	.23	.41	.71	1.14	2.00	3.28	6.10	5.95
1939-40	Date	2- 1-40		2- 1-40		2- 1-40		2-25-40		(2-1,2,3-40)	
			2- 1-40		2- 1-40		2- 1-40		2-25,26-40		
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		3- 2-38		4-4,8-26	
			4- 5-26		4- 5-26		4- 5-26		3-1,2-38		12-18,23-21

1.03 inches in one minute 4:48 AM to 4:49 AM April 5, 1926

Sta. No.60C											
Winter Creek	Amt.	.30	.40	.42	.56	.76	1.37	2.65	4.72	6.77	7.20
1939-40	Date	1- 8-40		1- 8-40		1- 7-40		1-7,8-40		(1-6,12-40)	
			1- 8-40		1- 8-40		1-7,8-40		1-7,8-40		
Max.of Record	Amt.	.43	.57		.91	1.58	2.88		14.76	17.51	30.39
	Date	12-27-36				3- 2-38				12-30-33	
			12-27-36		10-18-36		3- 2-38		3-1,2-38	1-1-34	4-5,9-26

TABLE V

SEASON 1939-40 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 Sta.	.04	.27	1.07	7.47	8.22	1.10	1.12	T	0	0	0	0	19.29
3	Seminole Hot Springs	.08+	.40	1.17	6.25	6.54	1.04	1.73	T	0	0	0	0	17.21
4	Crags Country Club	.13	.38	1.13+	7.20	8.27	1.26	1.56	0	0	0	0	0	19.93
5B	Calabasas	.05	.30	.84	6.29	6.07	1.25	1.36	0	0	0	0	0	16.16
6	Topanga Patrol Sta.	.03+	.25	1.02	8.04	10.49	2.01	1.43	T	0	.01	0	0	23.28
7C	Bel Air Bay Club	.33	.17	.67	4.92	7.13	1.61	1.16	0	0	0	0	0	15.99
8	Mandeville Canyon	.35	.20	.80	6.76	7.84	1.25	1.80	0	0	T	0	0	19.00
9	Sepulveda-Chase	T	.20	.55	6.83	6.04	1.16	1.91	.06	0	0	0	0	16.75
10	Bel Air	.15	.23	.83	6.48	7.91	1.45	1.27	0	0	0	0	0	18.32
11B	Upper Franklin Reservoir	.10	.20	.66	4.51	7.60	1.55	1.62	0	0	0	0	0	16.24
11C	Upper Franklin Reservoir	Station 11B moved to "C" location 9-20-40												
12	Franklin-Mulholland Patrol #1	.10+	.10	.70	5.52	7.63	1.44	1.88	T	0	0	0	0	17.37
13	North Hollywood-Blix	.07	.17	.63	4.51	7.11	1.36	1.94	.10	0	0	0	0	15.89
14	Roscoe-Merrill	.18	.23	.58	6.05	5.53	2.05	1.31	.16	0	0	0	0	16.09
15	Van Nuys-City Warehouse	T	.22	.60	5.75	6.42	1.13	1.66	.05	0	0	0	0	15.83
16C	Sherman Oaks-Stone Canyon	.07	.20	.82	6.92	7.67	1.36	1.72+	T+	0	0	0	0+	18.76
17	Sepulveda-Mulholland Patrol #2	.02	.27	.79	6.34	8.32	1.37	1.59	T	0	0	0	0+	18.70
18	Adohr Dairy	.01	.22	.61	5.07	6.22	1.04	1.46	.05	0	0	0	0	14.68
19	Topanga-Summit	.04	.19	.74	5.75	7.64	1.56	1.59	.01	0	.03	0	0	17.46
20A	Girard	.05+	.30	N.R.	N.R.	N.R.	1.09	1.81	0	0	0	0	0	Ino.
20B	Girard Reservoir	Station 20A moved to "B" location 3-23-40												
21	Brant Ranch	.05	.27	.72	6.00	5.89	1.05	1.67	.10	0	0	0	0	15.75
22	Bell Canyon-Johnson	.05+	.28	.75	5.68	5.67	1.40	1.52	T	0	?	0	0	15.35
23E	Chatsworth Reservoir	.12	.26	.64	5.20	5.49	1.48	1.60	.09	0	0	0	0	14.88
24C	Chatsworth	.08	.34	.79	5.43	6.11	1.47	1.71	.11	0	0	0	0	16.04
25B	Northridge-Andrews	.04	.28	.70	6.45	5.76	1.33	1.66	T	0	T	0	T	16.22
27	W.D. Miller Ranch	.05	.21	.69	6.40	5.10	1.29	2.02	.05	0	0	0	0	15.81
28	San Fernando Lemon Assn.	.07	.23	.92	6.90	6.01	1.21	2.35	.04	0	T	0	.02	17.75
29B	Granada Pump Plant	.15	.24	.98	6.41	6.40	1.42	2.08	.08	0	0	0	0	17.76
30	Sylmar	.22	.15	1.04	6.31	5.93	1.47	2.13	.01	0	T	0	.03	17.29
32E	Newhall	.19	.29	.77	2.80	5.33	1.22	1.81	0	0	0	0	0	12.41
33A'-E	Pacoima Dam	.20	.23	.82	6.97	6.18	1.43	2.17	.04	0	.03	0	.06	18.13
38	Chappel Ranch	.20	.23+	.67	6.46	5.26	1.48	2.00	.28	0	0	0	0	16.58
39B	Sunset Dam-Burbank	.25+	.20	.70	5.20	5.59	1.52	2.08	.16	0	0	0	.01	15.71
42	Redondo-City Hall	.25	.15	.78	4.42	4.75	.69	1.53	0	0	0	0	0	12.57
43A	Palos Verdes-Admin. Bldg.	.31	.11	.50	4.13	3.99	.80	1.28	T	0	0	0	.03	11.15
43B	Palos Verdes (Golf Course)	.27	.14	.45	4.04	4.42	.79	1.33	0	0	0	0	0	11.44
44	Pt. Vicente Light House	.36	.06	.16	3.72	4.68	.63	1.01	0	0	0	0	0	10.62
46B-E	Big Tujunga-Caretakers House	.37	.45	1.06	6.67	8.29	1.78	2.38	.19	0	0	0	0	21.19
46C	Big Tujunga-New Caretakers House	.38+	.47	1.08	6.31	7.71	1.88	2.39	.32	0	0	0	0	20.54
		Station 46C established 10-31-39												
47A	Clear Creek	.60	.50	1.10	8.43	8.65	1.59	2.91	.03	0	0	0	0	23.81
48	Oak Wild	.50	.36	.89	7.63	8.31	1.66	2.87	0	0	0	0	0	22.22
49	Altadena-Chiesa	.31	.31	.80	5.28	7.01	1.41	2.01	.08	T	T	0	.07	17.28
50B	Arroyo Seco Patrol	.17	.22	.73	5.85	7.67	1.73	2.15	.01	T	T	0	.07	18.60
51	Little Cienega (Hill)	.45	.65	.96	9.00	8.99	1.49	3.30	0	0	0	0	0	24.84
52B	Switzers	.41	.39	.95	6.96	7.89	1.77	2.78	0	0	0	0	0	21.15
53A	Sleepy Hollow Ranch	.22	.40	1.23	6.06	6.87	1.83	2.17	.07+	0	0	0	0	18.85
53B	Colby's Ranch-Lower	.20	.41	1.17	6.44	6.55	1.67	2.35	.07	0+	0+	0	0	18.86
54	Loomis Ranch (Alder Creek)	.10	.77	.78	5.40	4.88	1.27	1.91	.17	0	0	0	0	15.28
56	Valley Forge Lodge	.36+	.45+	1.55	9.01	11.79	2.34	3.20	.14	0	0	0	0	28.84
57B-E	Opids Camp	.36	.45	1.46	7.73	11.68	2.44	3.32	.15	0	0	0	0	27.59
58	Sturtevant Camp	.92+	.45+	1.17	8.46*	8.94*	2.02	2.32*	.03	T	0	0	0	24.31
60A	Hoegee's Camp	1.09	Station "A" moved to "C" location 10-13-39; back to "A" 9-27-40											
60C	Winter Creek	1.09+	.53	1.21	9.47	12.03	2.06	3.20	.06	T	0	0	0	29.65
60A'	Hoegee's Camp (Near)	1.09+	.53	1.02	8.02	9.89	1.98+2.86		.06+	0	0	0	0	25.45
60A'	Hoegee's Camp (Near)	Station "A'" established 11-15-39, discontinued 9-5-40												
63B-E	Santa Anita Dam	.89	.36	.84	7.10	7.47	1.79	2.65	.09	T	T	0	.03	21.22
64	Clark's Half Way House	.73+	.27	.71	6.91	7.40	1.91	2.24	.06+	0	0	0	.01	20.24
65	Sierra Madre-Hersey	.65	.28	.74	6.07	7.69	1.45	2.34	.08	0	0	0	.04	19.34
66	Sierra Madre-Pegler Ranch	.53	.19	.70*	6.40	7.14	1.38	2.03	.0	0	0	0	T	18.37
67B	Monrovia-City Hall	.29	.19	.57	6.00	5.50	1.04	2.49	0	0	0	0	0	16.08
68B	Sawpit Dam	.73	.37	.74	6.87	7.25	1.53	2.76	.16	0	T	0	.05	20.46
69	Sawpit Canyon	1.21	.42	.80	7.81	8.97	1.92	3.16	.30	0	T	0	.05	24.64
70-E	Dalton #1	1.08	.23	.58	6.30	6.34	1.14	2.88	.03	0	0	0	.02	18.60
73	Glendora-Englewild	.52	.38	.72*	6.83	6.30	1.47	2.53	.08	0	0	0	.01	18.84
76B	San Gabriel Dam #1 Camp	.39	.36	.85	6.27	7.50	1.57	3.01	.02	0	0	0	.01	19.98
82	Table Mountain	.74	2.19	.27	3.13	2.40	.99	.50	.28	T	0	T	T	10.50
83-E	Big Pines Recreation Park	.80	2.29	.65	5.62	5.82	1.92	2.08	.21	T	0	T	.01	19.40
85-D	Camp Baldy-Ranger Station	.70	.67	.87	8.36	8.19	1.86	3.49	.06	0	0	0	T	24.20
87	San Dimas Guard Station	.59	.24	.84	7.84	6.20	1.47	3.69	T	0	T	0	T	20.87
89-E	San Dimas Dam	.53	.27	.78	6.91	5.37	1.60	3.19	0	0	0	0	0	18.65
90	Brydon Ranch	.56	.25	.80*	6.79	5.25	1.46	3.00	0	0	0	0	0	18.11
91	Claremont-Indian Hill	.56	.32	.77	6.61	4.32	1.22	2.19	0	0	0	0	T	15.99
92	Claremont-Pomona College	.45	.40	.84	6.19	4.62	1.04	1.96	0	0	0	0	T	15.50
93	Claremont-Fire Station	.47	.34	.88	5.29	4.16	.95	1.96	0	0	0	0	0	14.05
94	Charter Oak-Fields	.48	.20	.74	5.99	5.11	1.82	2.35	0	0	0	0	0	16.69
95	San Dimas-Fire Warden	.29	.18	.84	6.19	4.41	1.49	2.71	T	0	0	0	0	16.11
96-E	Puddingstone Dam	.38	.19	.70	5.18	4.30	1.21	2.62	0	0	0	0	0	14.58
97	San Dimas-Ferguson	.28	.24	.82	5.21	4.47	1.40	2.46	0	0	0	0	0	14.88
98	Azusa-Hibsch	.30	.25	.61	5.94	5.34	1.39	1.85	.03	0	0	0	0	15.71
99	Azusa-Foothill Ranch	.38	.25+	.73	5.71	5.51	1.30	2.77	0	0	0	0	0	16.65
100	Fish Canyon	1.74	.34	.70	7.18	7.92	1.46	3.39	.19	0	0	0	0	22.92
101	Hurst Ranch-Covina	.16	.18	.57	5.74	5.03	1.35	2.68	0	0	0	0	0	15.71
102	Walnut	.24	.15	.45	5.69	4.77	1.40	2.28*	0	0	0	0	.05+	15.03
104	North Whittier-Cole Ranch	.13+	.13+	.57*	5.36	4.78	1.16	3.13	.04	0	0	0	0	15.30
105	East Whittier-Sharpless	.15	.02	.56	4.54	4.73	.88	2.15	.09	0	0	0	0	13.12
106	Whittier-City Hall	.17	.05	.29	4.20	4.72	.80	2.52	.04	0	0	0	0	12.79
107B	Downey-Fire Station	.12	.09	.36	4.62	4.61	.93	2.06	.02	0	0	0	0	12.81
108B	El Monte-Fire Station	.10	.11	.82	5.18	4.22	.77	2.55	.03	0	0	0	0	13.78
109	West Arcadia	.21	.22	.53	5.27	6.86	1.06	2.43	.03	0	0	0	0	16.61
110	Alhambra	.34	.15	.64	5.86	5.95	1.14	1.79	0	0	0	0	T	15.87
111	South Pasadena	.26	.14	.48	5.42	6.58	1.45	1.78	.02	0	0	0	0	16.13
114	Gardena-Rosecrans	.10	.15+	.40	4.96	4.98	.85	1.25	0	0	0	0	.05	12.74
116B	Inglewood-Fire Station	.06	.20	.55	5.93	5.01	.92	1.70	.01	T	T	0	T	14.38
117B	Compton-Fire Station	.12	.09	.38	3.99	5.00	.64	1.45	.02	0	0	0	T	11.69
117D	Compton-Junior College	.12	.09	.61	4.02	3.93	.66	1.58	T	0	0	0	T	11.01
118B	Wilmington	.22	.15	.34	4.39	5.01	1.08	1.09	.02	0	0	0	0	12.30
119A	Soldiers Home-Sawtelle	.08	.23	.66	6.40	7.29	1.32	1.43	T	0	.01	0	0	17.42
119B	Soldiers Home-Sawtelle	Station "A" moved to "B" location 1-1-40												
120	Vincent Patrol Station	.03	.66	.36	1.95	2.39	.79	.97	.08	0	0	0	0	7.23
121	Lancaster	T	.23	.27	1.46	2.11	.60	.28	.12	0	0	0	0	5.07
122	Rouff Ranch	.09	.25	.52	3.03	3.58	1.25	1.46	0	0	0	0	0	10.18
123	Eli Munz Ranch	.48	.74	.63*	4.08	5.29	1.32	1.40+	.04+	0	0	0	0	13.98
124B	Bouquet Canyon	.37	.28	.62	3.93	4.27	1.55	1.35	.07	0	0	0	0	12.44
125	Power House #1	.51	.33	.80	5.19	4.68	1.25	1.82	.15	0	0	0	0	14.73
126	Venice City Hall	.05	.12	.55	5.18	6.41	.88	1.39	.02	0	0	0	0	14.60
127	Dry Canyon Reservoir	.27	.28	.49	3.24	3.70	.79	1.49	.05	0	0	0	0	10.31
128	Radium Hot Springs	.39	.41	1.88	5.11	6.22	1.83	2.11	.27	0	0	0	0	18.22
130B	Sandberg-Co. Guard Station	.04	.32	.82	2.36	5.79	1.10	1.21	.44	0	0	0	0	12.08
134	San Dimas-Stevens	.34	.23	1.11	6.37	4.61	1.53	2.63	0	0	0	0	0	16.82
135	Norwalk	.18	.05	.44	4.94	3.82	.67	1.75	0	0	0	0	0	11.85
136B	Hollywood	.10	.06	.28	4.50	5.04	1.28	1.49	.07+	0	0	0	0	13.42
137B	Curson Canyon	.08	.18	.66	5.97	6.70	1.54	1.75	.08	0	0	0	0	16.96
139	L.A.W.D. 2nd & Hill St.,L.A.	.07	.09	.37	4.33	5.19	1.81	1.37	.02	0	0	0	0	13.25
F.C.	Roof - 751 S. Figueroa, L.A.	.12	.08	.49	4.45	5.81	1.13	2.11	.02	0	0	0	0	14.21
140	Sawtelle-West Los Angeles	.07	.19	.43	5.91	6.88	1.26	1.64	T	0	0	0	0	16.38
143	Azusa-City Hall	.35	.30	.63	6.02	5.77	1.25	2.85	.05	T	0	0	T	17.22
144	Sierra Madre Dam	.88	.21	.72	6.35	7.49	1.49	2.33	.02	0	0	0	0	19.49
150	Monrovia Falls	1.19	.40	.87	7.95	8.30	1.92	3.16	.25	0	0	0	.06	24.10
155B	Little Rock Creek	.06	.49	.47	1.92	2.34	1.04	.78	.07	0	0	0	.42	7.59
156	La Mirada	.32	.03	.65	4.76	4.21	.82	1.79	0	0	0	0	0	12.58
157	El Segundo	.16	.08	.62	4.75	5.22	.63	1.53	0	T	T	0	.02	13.01
158	Tanbark Flats	.59	.32	1.05	7.44	7.55	1.39	3.54	.11	0	0	0	T	21.99
164	Monrovia-O'Connor	.50	.17	.62	6.06	6.01	1.24	2.87	.09	0	0	0	0	17.56
167	Arcadia Pump Plant	.51	.22	.67	5.95	6.45	1.14	2.27	.03	0	0	0	.01	17.25
168	San Gabriel-Watts	.30	.11	.39	5.12	5.60	1.14	1.99	T	0	0	0	T	14.65
169	Sierra Madre-Hogan	.48	.25	.63	5.58	6.79	1.26	2.21	.04	0	0	0	0	17.24
170	Potrero Heights	.16	.11	.44	5.84	5.15*	1.50	2.20	0	0	0	0	0	15.40
171	Chapman Wells	.30	.23	.60	5.43	6.87	1.23	1.90	.03	0	0	0	0	16.59
174	Glendora-Warren	.42	.24	.85	6.73	4.78	1.97	2.17	.05	.02	.03	0	.02	17.28
175B	Alta Canyada-Reservoir	.38	.27	.95	6.30	8.30	1.56	2.17	.15	0	0	0	0	20.08
176	Altadena-Rubio L. & W. Co.	.44	.25	.81	5.73	6.91	1.19	2.41	.01	0	0	0	0	17.75
177	La Canyada	.26	.22	.80	5.85*	7.47	2.14	2.64	.06+	0	0	0	.02+	19.46
178	Azusa-Griffith	.30	.24	.71	5.39	5.05	1.66	1.91	0	0	0	0	T	15.26
179	Sierra Madre-Carter	.63	.20	.73	6.31	7.33	1.54	2.16	.09	0	0	0	.04+	19.03
181B	Bassett	.13+	.17+	.52+	5.25	4.58	.97	2.36	0	0	0	0	0	13.98
182	Baldwin Park-Leach	Station "B" established 1-5-40												
35	Glendora-West	.09	.18	.68	5.17	4.89	1.04	2.55	.01	0	0	0	0	14.61
188	San Dimas-Howard	.54	.16	.68	6.11	5.81	1.19	2.50	.04	0	0	0	0	17.03
189	San Dimas-Harris	.28	.26	.86	5.36	3.96	1.41	2.18	0	0	0	0	0	14.31
192B	Bell-Fire Dept.	Records lost by observer											0	Inc.
193	Covina-Temple	.03	.10	.28	4.91	4.59	1.25	1.89	0	0	0	0	0	13.05
196	La Verne-Leader	.14	.19	.52	5.09	4.36	1.29	2.36	.02	0	0	0	0	13.97
198	Brand Estate	.44	.21	.79	5.89	4.36	1.05	2.32	0	0	0	0	0	15.06
199B	Huntington Park	.17	.15	.59	4.30	4.74	1.23	1.59	.10+	0	0	0	T+	12.87
200	Saugus-S.C.E.Co.	.06	.10	.28	4.85	4.64	1.32	1.84	0	0	0	0	0	13.09
201	Puente Hills	.19	.31	.45	2.87	4.23	.77	1.74	.03	0	0	0	0	10.59
205	Puente-S.C.E. Co.	.13	.04	.54	4.97	4.54	1.36	2.38	.05	0	0	0	0	14.01
206	Valencia Heights	.05	.16	.32	4.90	5.12	1.39	2.17	0	0	0	0	0	14.11
208	Artesia-Borr Lumber Co.	.15+	.20	.43*	4.94	5.05	1.09	2.49	0	0	0	0	0	14.35
209	Big Tujunga Edison Patrol Sta.	.21	T	.35*	4.94	3.64	.80	1.13	0	0	0	0	0	11.07
210B	Brand Park	.37+	.36	1.00	5.80	6.93	1.80	2.24	.21	0	0	0	0	18.71
		.25	.18	.62	5.10	5.70	1.68	1.91	.14	0	0	0	.01	15.59

TABLE V. 1939-40 (Continued)

Sta. No.	Station	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Season Total
213	Hancock Park	.04	.12	.58	4.41	5.66	1.30	1.44	.06	0	0	0	0	13.61
215B	Bellflower	M.I.	M.I.	M.I.	.33I	3.86	.91	1.30	.01	0	0	0	0	Inc.
216	Glendale-Jones	.12	.13	.74	5.29	5.82	1.50	1.75	.16	T	0	0	T	15.51
217	Watts	.04	.12	.41	4.50	5.30	.96	2.01	0	0	0	0	0	13.34
218	Torrance-Gen'l Patrol	.28	.08	.69	4.23	4.53	.74	1.27	0	0	0	0	0	11.82
219	Pacoima Warehouse Co. F.S.	.07	.24	.80	6.92	6.35	1.26	2.19	.08	0	0	0	0	17.91
220	Whittier Narrows	.06	.08	.30	5.18	4.18	.79	2.52	0	0	0	0	0	13.11
221B	Keiner Ranch	.11	.24	.86	6.75	5.74	1.56	2.02	.14	0	0	0	0	17.42
222	Lankershim Power Plant	.04	.16	.56	5.12	4.94	1.77	1.19	.07	0	0	0	0	13.85
223B-E	Big Dalton Dam	.87	.26	.74	7.33	7.08	1.38	3.53	.18	.02	.03	0	.03	21.45
224	Long Beach-Los Alamitos Ld.Co.	.19	.09	.42	4.68	4.47	.58	1.24	T	0	0	0	.11	11.78
225	Montana Ranch	.18	.13	.46	4.70	3.61	.77	1.27	T	0	0	0	0	11.12
226	Burbank	.11	.16	.51	4.57	4.73	1.32	1.79	.10	0	0	0	0	13.29
227B	San Gabriel-Gleason	.28	.16	.55	4.80	6.36	1.30	1.84	T	0	0	0	0	15.29
228B	Beverly Hills-City Hall	.04	.19	.55	5.98	7.52	1.46	1.60	0	0	0	0	0	17.34
230C	Live Oak Canyon-Elder	.50	.32	.81	6.19	4.37	1.22	2.21	0	0	0	0	0	15.62
233	Covina-Matthews	.30	.22	.57	5.05	4.92	1.04	2.43	T	T	0	0	0	14.53
234	Covina-Thorpe	.15	.20	.52*	.96 I	4.32	1.48	2.62	0	0	0	0	0	10.25I
235B	Henninger Flats	.53	.34	.85	7.04	8.07	1.86	3.19	.10	.01	T	0	.10	22.09
236	Ford-Craig Ranch	.15	.27	.93	6.94	5.95	1.59	2.00	.03	T	0	0	.03	17.89
237	Stone Canyon Dam	.42	.27	.80	6.21	7.83	2.17	.87	.02	0	0	0	0	18.59
238	Hollywood Dam	.20	.14	.48	5.69	5.43	2.16	1.17	.01	0	0	0	0	15.28
240	Little Tujunga	0	.32	1.10	9.21	5.61	2.01	2.47	.10	0	0	0	.04	20.86
241	Long Beach	.18	.09	.36	4.1#	4.09	.57	1.26	.01	0	0	T	0	10.73
242	La Verne-Hathaway	.65	.24	.78*	5.83	4.48*	1.14	2.06	.01	0	0	0	0	15.19
246B	Culver City	.05+	.14	.59	4.24	4.90	.94	1.41	.06	0	0	0	0	12.33
247	Rivera	.12	.09	.32	4.24	4.26	.81	2.26	.06	0	0	0	0	12.16
248E	West Saddle Peak	.07	.44	1.25	7.95	8.58	1.38	2.30	T	0	0	0	0	21.97
249	Mint Canyon-Oaks Garage	.28	.34	.43	3.90	3.77	1.17	1.27	.11	0	0	0	0	11.27
250B	Acton	.06	.57	.35	2.51	2.67	1.20	1.21	.23	0	0	0	0	8.78
251	La Crescenta	.33	.24	.97	6.74	7.96	1.80	2.48	.17	0	0	0	0	20.69
252B	Castaic	N.R.	N.R.	N.R.	Inc.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	Inc.
		Station discontinued - See Station #451 nearby station.												
253	Western Ave. Tank	.02	.16+	.33	4.82	5.23	.95	1.67	0	0	T	0	0	13.18
254	Rowlands Ranch	.05	.09	.40*	5.05	6.03	1.36	2.05	0	0	0	0	0	15.03
255	State Narcotic Hospital	.24	.20	.37	5.29	4.91	.82	2.99	0	0	0	0	0	14.82
256	Pomona-S.P.R.R.	.42	.38	.60	5.05	3.87	.36	2.53	0	0	0	0	0	13.21
257	Griffith Park-Nursery	.09	.09	.59	5.06	5.46	1.82	1.88	0	0	0	0	0	14.99
258 a	" " Near Tunnel	.19	.10	.60	5.05	5.88	1.61	1.60	0	0	0	0	0	15.03
258 b	" " South Slope	.22	.08	.61	5.04	5.87	1.65	1.65	0	0	0	0	0	15.12
258 c	" " North Slope	.28	.13	.74	5.42	5.82	1.76	1.75	0	0	0	0	0	15.90
259B	Chatsworth Patrol-Twin Lakes	.08	.26	1.01	6.14	6.46	1.57	2.08	0	0	0	0	0	17.60
261-E	Acton-Mellen	.12	.37	.36	3.08	3.23	.98	1.20	.16	0	0	0	0	9.50
263A	Pomona-Frater	.32	.20	.69*	5.71	3.42	1.33	1.97	0	T	0	0	T	15.64
		Station 263A re-established 10-1-39												
264	Sand Canyon-Riley	.26+	.20+	1.07	4.15	6.00	1.38	2.15	0	0	0	0	0	15.21
2650-E	Puente Hills(LaHabra Heights)	.13	.08	.42	5.63	4.75	1.34	2.61	0	0	0	0	0	14.96
266	East Whittier-Leffingwell Roh.	.35	.05	.44	5.59	3.87	.97	2.09	0	0	0	0	0	13.36
268-E	Torrance-S.C.E.Co.	.15	.06	.41	4.10	4.19	.81	1.11	0	0	T	0	.01	10.84
269A	Diamond Bar Ranch #1	.18	.13	.65	6.50	4.03	1.28	2.71	0	0	0	0	T	15.48
269B	Diamond Bar Ranch-Horse Camp	.21	.15	.64	6.38	3.74	1.22	2.67	0	0	0	0	0	15.01
270	County Farm	.12	.14	.40	3.92	4.46	.89	1.73	0	0	0	0	0	11.66
271	Dominguez Hills	.16	.12	.28	3.66	5.01	.71	1.27	0	0	0	0	0	11.21
272	Headworks Plant	.05	.14	.51	5.12	5.36	1.49	2.08	.07	0	0	0	0	14.82
273	San Pedro Hills	.32	.18	.65	4.66	5.47	1.06	1.46	0	0	0	0	0	13.80
274	Acton-Hubbard	.09	.40	.49	2.87	3.15	.93	1.43	.14	0	0	0	0	9.50
275	San Marino	.50	.15	.57	5.45	6.65	.28	3.46	0	0	0	0	0	17.06
277	Sawmill Mt. Ranch	.43	.34	.99	3.42	6.87	1.77	2.04	.18	0	0	0	0	16.06
278B	Clark Memorial Library	.06	.08	.46	4.45	5.60	1.33	1.22	0	0	0	0	0	13.20
279B	Kinneloa Ranch	.46	.26	.68	5.74	7.59	1.44	2.40	.11	0	0	0	.04+	18.72
280	Flintridge-Fire Station	.28	.19	.70	5.70	7.59	1.57	1.88	.03	T	0	0	.02	17.96
283 a	Crystal Lake-East	.41	1.07	1.22	7.95	10.90	2.27	3.40	.27	0	0	0	0	27.49
283 b	Crystal Lake-West	.42	.85	.83	7.75	9.77	2.15	2.82	.21	0	0	0	0	24.80
284	Placerita Canyon	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	0	Inc.
		Station re-established 9-18-40												
285C	Mt. St. Mary's College	.38	.31	.85	6.83	8.33	1.71	1.47	0	0	0	0	0	19.88
286B	Hermosa Reh. S.F. Valley	.07	.26	.79	7.47	5.19	1.31	2.05	.10+	0	0	0	0	17.24
		Station re-established 10-5-39												
287	Glendora-Irrig. Co.	.48	.18	.72	5.67	5.56	1.24	2.34	0	0	0	0	0	16.19
289	Laguna Bell	.06	.06	.30	4.03	4.92	.91	1.80	0	0	0	0	0	12.08
		Station discontinued by County Storm Drain Div. in the summer												
290	Newmark	.03	.10	.35	4.74	4.97	1.27	2.09	0	0	0	0	0	13.55
		Station discontinued by County Storm Drain Div. in the summer												
291	96th & Central Avenue	T	.08	.26	4.55	4.79	.79	1.83	0	0	0	0	0	12.30
292-E	Encino Reservoir	.02	.21	.63	5.55	5.99	.96	1.38	.05	0	T	0	0	14.79
293	Lower San Fernando Res.	.10	.19	.94	6.31	5.68	1.92	1.49	.06	0	0	0	.01	16.70
294	Mira Monte Reservoir	.58	.20	.66	6.10	7.50	1.42	2.13	.02	0	0	0	0	18.61
295F	Glendale-Kennedy	.08	.13	.61	4.96	5.83	1.52	1.69	.10	T	0	0	0	14.92

Sta. No.	Station	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Season Total
298	Gorman	T	.15	.20	3.21	5.72	2.09	.98	0	0	0	0	0	12.35
299C	Calivalli Farms	.13	.51	.61	1.53	1.90	.86	.46	.08	0	0	0	.25	6.33
300B	Garrapata Canyon	.03	.22	.84	6.25	8.11	1.51	1.50	0	0	0	0	0	18.46
303B	Cal-Teeh	.66	.20	.60	5.39	6.64	1.43	1.93	0	0	0	0	0	16.85
304	Deer Park	1.09	.44	.91	9.44	9.50	2.04	3.41	.44	0	T	0	.07	27.34
305	Mason Estate-Arroyo Sequis	.19	.44	1.02	8.53	8.00	1.45	2.10	T	0	0	0	T	21.73
306A	Trancas Canyon at Highway	0	0	1.12*	6.69	6.15	1.41	2.55	T	0	0	0	0	17.92
307	Snow Crest Camp	.98	1.05	.74	8.97	7.99*	N R	N R	0+	0	0	0	T	19.73I
308	Kelly's Kamp	1.37	.94	1.66	11.42	10.42	3.30	5.32	0+	0	0	0	T	34.43
309	Padua Hills	.78	.38	.83	7.86	5.49	1.42	2.71	0	0	0	0	0	19.47
311B	Pasadena-Meteorological Sta.	.38	.22	.68	5.97	6.81	1.23	2.23	.01	T	0	0	.01	17.54
312	Azusa Plt.-Glendora Irrig. Co.	.41	.30	.57	5.89	5.98	1.70	2.06	.03	0	0	0	T	16.94
314	San Dimas-Water Co. Plant	.27	.23	.82	5.90	4.38	1.37	2.34	0	0	0	0	0	15.31
315	Glendora-H.C. Warren	.54	.25	.65	6.02	5.54	1.20	2.68	.03	0	0	0	0	16.91
317	Big Pines-Sawmill Flats #2	.76	2.11	.63	5.85	5.66	1.85	2.00	.21	T	0	T	T	19.07
318	Big Pines-Jackson Lake	.12	1.93	.73	3.96	4.45	1.31	1.19	.28	0	0	0	T+	13.97
		Station discontinued by L. A. County Rec. Dept. in the summer.												
319	Big Pines-Apple Tree Flat	.25	1.86	.81	4.95	6.40	2.06	1.91	.13	0	0	0	T+	18.37
		Station discontinued by L. A. County Rec. Dept. in the summer.												
302A	Sycamore Canyon-Chevy Chase	.15	.15	.68	6.37	7.20	1.35	2.21	T	0	0	0	0	18.11
321-E	Pine Canyon Patrol	.42	.28	.69	3.11	5.01	1.37	1.46	.04	0	0	0	0	12.38
322	E.S. Munn-Ranch	0	.15	.27	1.90	2.71	.83	.20	0	0	0	0	0	6.06
326B	Santa Ynez Canyon	.45	.09	.96	8.19	9.08	1.73	1.10	0	0	0	0	0	21.60
334-E	San Gabriel Dam #2	.62	.59	1.15	6.98	9.29	1.76	2.50	.13	0	T	0	T	23.02
336	Silver Lake Reservoir	.13	T	.34	4.31	4.92	1.86	1.19	T	0	0	0	0	12.75
338A	Mt. Wilson	.71	.57	1.00	8.69	11.46	1.95	3.40	.06	T	0	0	T	27.84
338B	Mt. Wilson-Air Ways Sta.	.61	.02	.82	8.13	10.24	1.18	3.30	.06	0	0	0	T	24.36
339	Walnut-Fruit Growers Assn.	.24	.17	.22	5.55	5.01	1.31	2.44	0	0	0	0	.05	14.99
341	Blum Ranch	.03	1.01	.44	2.31	2.82	.93	.93	.11	0	0	0	0	8.58
342	Upland	.56	.40	.79	5.95	4.84	1.14	2.20	0	0	0	0	0	15.88
343	Telegraph Road	.13	.11	.39	4.61	4.58	.80	2.40	.09	0	0	0	0	13.11
346	Downey #2 "Live Wire"	Station discontinued on 8-26-40												
347-E	Baldwin Park Exp. Sta.	.10	.18	.67	4.99	5.07	.95	2.52	.01	0	0	0	0	14.49
348C	Honor Camp #4	.52	.28	.86	7.00	6.10	1.64	2.80	.12	0	0	0	T+	19.32
349B	Camp Rincon	.37	.39	.95	6.62	7.82	1.36	3.11	.02	0	0	0	0	20.64
351D	Palmdale	.03	.27	.32	1.42	2.37	.74	.60	T	0	0	0	0	5.75
352	Leghuza Patrol Station	.12	.37	1.09	9.09	9.01	1.58	1.63	T	0	0	0	0	22.89
353	Duarte-Monrovia Citrus Assn.	.28	.21	.55	5.43	4.90	.19	3.52	0	0	0	0	0	15.08
354B	Honor Camp #6	.65	.59	1.10	8.35	8.51	2.20	3.70	.08	0	0	0	T	25.18
355	L. A. City College	.14	.07	.67	4.24	4.89	1.35	1.89	T	0	0	0	T	13.25
356	Diamond Bar Ranch #2, Spadra	.19	.22	.57	5.21	3.40	1.11	2.28	0	0	0	0	0	12.98
357	Power House #3	.06	.15	1.25	6.31	6.32	1.49	2.08	.02	0	0	0	.03	17.71
358B	Aldrich Ranch	0	.93	.53	2.58	3.37	1.27	.65	.50	0	0	0	0	9.83
360B	Haines Debris Basin	.28	.26	.67	5.70	5.81	1.43	2.30	.30	0	0	0	.01+	16.76
362	El Mirador Ranch	.30	.18	.79	5.67	7.27	1.68	2.10	.01	0	.01	0	0	18.01
364	Lower Haines Canyon (U.S.G.S.)	.43	.29	.93	7.34	7.18	1.67	2.39	.27	0	0	0	.01+	20.51
366	Valyermo	0	.84	.40	1.91	2.83	.91	.46	.66	0	0	0	0	8.01
367	Upper Haines Canyon	.54	.32	.99	8.64	8.48	1.82	2.85	.36	0	0	0	.04+	24.04
372	San Francisquito Power Hse. #2	.56	.36	.91	4.10	4.67	.94	2.08	.10	0	0	0	0	13.72
373	Briggs Terrace-Pickens Canyon	.48	.29	.94	7.22	8.57	1.84	2.49	.18	0	.05	0	.03	22.09
375A	Griffith Park Zoo	.27	.10	.61	6.75	4.93	2.70	1.65	.05	0	0	0	0	17.06
375B	Griffith Park Zoo	Station "A" moved to "B" location 10-24-39												
377C	Sherwood Lake	T	.50	1.30	5.50	5.02	.78	1.38	.10	0	0	0	0	14.58
378	La Canyada-Hall	.31	.25	.84	6.60	7.75	1.48	2.94	.08	0	0	0	.03+	20.28
379B	San Gabriel-East Fork	.40	.38	1.00	5.98	6.66	1.26	2.91	.02	0	0	0	.01	18.62
380	El Sereno	.14	.11	.34	4.66	5.93	1.50	1.87	0	0	0	0	0	14.55
381B	Santa Monica-"Outlook"	.05	.19	.39	5.97	7.04	1.65	1.29	.02	T	.01	0	T	16.61
384B	San Rafael Hills-Laverty	.12	.15	.63	5.26	6.98	1.40	2.14	.03	0	0	0	0	16.71
385	North Whittier Heights-Smith	.13	.13	.50	5.50	5.17	1.15	3.24	.06	0	0	0	0	15.88
386B	Dume Canyon-Oakley	.15	.40	.63	8.53	8.92	1.35	1.78	.02	0	0	0	0	21.78
387B	Sewer and Disposal Plant	.17	.21	.54	5.20	4.83	1.16	2.31	.01	0	0	0	0	14.43
388A	Hynes	.21	.08	.38	4.53	3.77	.86	1.12	.02	T+	0+	0+	T+	10.97
388B	Clearwater Fire Station	Station "A" moved to "B" location 5-24-40												
389	Glendora-Brown	.38	.27	.70	6.45	5.64	1.42	2.58	.09	.01	.01	0	T	17.55
390B	Morris Dam	1.20	.34	.72	6.79	7.75	1.32	3.03	.02	T	0	0	.02	21.19
391	Montebello-Cotton	.12	.12	.31	5.11	4.94	1.22	1.73	0	0	0	0	0	13.55
392B	Altadena-Barton	.42	.28	.73	5.82	7.25	1.23	2.29	.04	0	0	0	.06	18.12
394	Highland Park-Lindsay	.16	.18	.49	4.44	8.03	1.20	1.85	T	0	0	0	0	16.35
395	Olive View-Sanatorium	.27	.22	1.16	6.75	6.42	1.68	2.00	.04	0	.02	0	0	18.56
396	Oneota Ranch-San Fernando	.07+	.21+	.70	6.56	5.49*	N.R.	N.R.	.05+	0	0	0	.02+	13.10 I
397	Begue Ranch-Tujunga	.50	.16	.67	6.25	7.64	1.45	2.47	.32	0	0	0	T+	19.46
398B	Trails Inn	.67	.91	.84	7.51	7.49	2.04	3.59	0	0	0	0	0	23.05
400	Pasadena-Washington and Palm Terr.	.87	.26	.73	5.91	6.68	1.42	2.29	.06	T	0	0	.02	18.24

TABLE V. 1939-40 (Continued)

Sta. No.	Station	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Season Total
402B	State Prison Camp #35-Chilao	.26	.97	.50	5.49	7.37	2.25	1.91	.59	0	0	0	0	19.34
402C	State Prison Camp #37-Cedar Springs	Station "B" moved to "C" location 9-27-40												
403	Altadena-Lindvall	.37	.30	.71	6.24	7.60	1.32	2.46	.02	0	0	0	.05	19.07
404	Glendale-Opid	.12+	.11	.52	4.60	5.97	1.52	1.42	0	0	0	0	0	14.26
405	Soledad Canyon-Nelson	.01	.35	.81	2.83	3.43	1.15	1.34	.04	0	0	0	0	9.96
406	West Azusa	.22	.30	.63	5.24	5.61	1.11	2.80	0	0	0	0	0	15.91
407	Newhall-U.S.F.S.	.30	.18	.66	3.43	6.24	1.25	1.75*	0	0	.02	0	T	13.83
408	Soledad Canyon-Mitchell	.14	.27	.70	2.44	4.01	1.05	2.17	.02+	0	0	0	0	10.80
409	New Ridge Route-State Road Maintenance	.06	.29	.16	2.11	5.04	1.03	1.16	.20	0	0	0	0	10.05
410C	New Ridge Route-Old S.C.E.Co. Hse.	.23	.34	1.17	3.95	7.18	1.77	1.62	.09	0	0	0	0	16.35
411	Rivera-Pico-Robinson	.10	.12	.33	4.49	4.05	.89	2.35	0	0	0	0	0	12.33
412A	Pasadena-Ohio & Euclid	.39	.23	.54	5.26	6.17	1.20	2.23	.02	T	0	0	T	16.04
412B	Pasadena-Ohio & Euclid	Station "A" moved to "B" location 5-2-40												
415	Signal Hill-City Hall-Long Beh.	.17	.08	.42	4.57	4.38	.97	1.27	0	0	0	0	0	11.86
416	Altadena-Ventura Street	.27	.13	.72	5.24	6.92	1.31	1.91	.04	0	0	0	.06	16.60
417	Lamanda Park-Webber	.39	.25	.71	5.84	7.37	1.24	2.47	0	0	0	0	0	18.27
418	Pickens Canyon-U.S.F.S. Plots	.60	.35	.92	7.82	9.29	1.71	2.37	.16	0	0	0	.03+	23.25
419	Santa Clara Ridge-Mt. Gleason	.26	.82	1.00	8.79	8.14	1.34	2.53	.14	0	0	0	0	23.02
420	Acton-Madie Ranch	.12+	.62	.60	2.88	3.00	.84	1.58	.06	0	0	0	0	9.70
421	Mouth of Lopez Canyon	.07+	.25	.45	6.54	5.58	1.26	1.92	.06	0	T	0	0	16.13
422	Pacoima Canyon	.35	.25	1.05	7.08	10.35	1.70	1.50	0	0	0	0	T	22.68
423	Wagon Wheel Ranch-Aliso Canyon	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	0
		Station re-established 9-19-40												Inc.
425	San Gabriel Dam #1	.65	.37	.83	6.45	7.59	1.31	2.86	.03	T	0	0	.02	20.11
427	Downey-Jordan	.18	.08	.30	4.17	4.63	.96	2.26	.01	0	0	0	T	12.59
428	Mouth of Eaton Canyon	.36	.33	.68	6.21	7.24	1.69	2.17	.09	0	.01	0	.08	18.86
429	Red Box-Angeles Crest Highway	.69	.50	1.16	7.56	8.66	2.10	2.43	.10	0	0	0	0	23.20
430	Saugus-State Road Maintenance	.59	.33	.39	2.58	4.00	1.39	2.13	T	0	0	0	0	11.41
431	Baldwin Hills	.05	.15	.64	5.17	6.05	1.24	1.50	.10	0	0	0	0	14.90
432	Santa Anita-Fern Lodge	.95	.54	1.11	7.95	10.08	1.52	2.77	.08	T	0	0	T	25.00
433	Altadena-Co. Forestry Res. Pk.	.35	.34	.82	5.49	7.65	1.22	2.11	.04	0	.02	0	.05	18.09
434	Malibu Hdqts. Co. Forest Serv.	.08	.41	.81	4.75	7.68	.84	1.10	0	0	0	0	0	15.67
435	Monte Nido Canyon-Co. " "	.05	.40	1.07	7.18	7.78	1.26	1.78	T	0	0	0	0	19.52
436A	Hansen Dam	.11	.11	.93	6.99	4.87	1.08	1.99	.10	0	0	0	0	16.18
436B	Hansen Dam U.S.E.D. Office	Station "A" moved to "B" location 5-1-40												
437	Hamilton Bowl-Long Beach	.18	.09	.51	4.74	3.68	1.26	.92	0	0	0	0	T	11.38
438	Encino-Quirello	T	.30	.75	6.74	6.44	1.11	1.35	.05	0	0	0	0	16.74
439A	Charlton Flats	.38	.66	1.02	5.32	8.37	2.08	2.06	.32	0	0	0	0	20.21
439B	Charlton Flats	Station "A" moved to "B" location 12-22-39												
440	Chilao-U.S.F.S. Guard Sta.	.24	.97	1.09	5.14	5.75	1.49	1.75	.28	0	0	0	0	16.71
441-E	Palmdale-County Road Maintenance	T	.30	.35	1.44	2.29	.96	.42	T	0	0	0	0	5.76
442	Mescal Creek	.46	.73	.42	1.75	1.76	.70	.33	.39	0	0	0	.37	6.91
443	Junction Mulholland & Latigo Canyon Road	.15	.42	.93	5.78	8.30	1.22	1.96	.02	0	0	0	0	18.78
444	Rolling Hills-Palos Verdes	.33	.12	.49	4.41	6.08	.57	1.52	0	0	0	0	0	13.52
445	Live Oak Dam-Larry	.35	.30	.79	6.92	4.75	1.32	2.51	0	0	0	0	0	16.94
446	Santa Susana Mts.-Aliso Canyon	.50	.28	1.17	7.23	7.39	2.10	2.61	.09+	0	0	0	0	21.17
447	Las Flores Can. Near Roosevelt Highway	.03	.19	1.00	6.16	8.97	1.69	1.35	0	0	0	0	0	19.39
448	Mint Canyon-Witt	.31	.30	.36	3.28	2.99	.88	.95	0	0	0	0	0	9.07
449	Eaton Dam	.32	.25	.57	5.17	6.62	1.50	1.83	.05	0	.01+	0	.02	16.34
450	Eagle Rock	.16+	.12	.61	4.91	6.34	1.48	1.98	0	0	0	0	0	15.60
451	Castaic-Co. F.S. Guard Sta.	N.I.	N.I.	N.I.	1.28I	4.64	.74	1.57	.05	0	0	0	0	8.28 I
		Station established 1-16-40												
452	Studio City-Thayer	.09+	.14+	.64	4.79	6.68	1.35	1.35	.38	0	T	0	T	15.42
453	Devils Gate Dam	.26	.18	.64	5.17	7.07	1.54	1.90	.03	0	0	0	.03	16.82
454	L. A. Wood	.05	.07	.56	4.40	5.30	1.56	.97	.04	0	0	0	0	12.95
455	Lancaster-State Highway Main.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	N.I.	●	
		Station established 9-18-40												
X-3	Rustic Canyon Fire Area	.30	.20	1.12	7.25	8.78	1.59	1.75	T+	0	0	0	0+	20.99
X-3A	Rustic Canyon Josepha Res.	Station moved to "A" location 9-12-40												
X-3B	Rustic Canyon near Mulholland	.02	.26	.72	6.33	7.97	1.27	1.51	T	0	0	0	0	18.08
X-3C	Pacific Palisades-Fire Area	.74	.18	.86	5.92	7.38	1.70	1.83	0	0	0	0	0	18.61
508B	Arroyo Seco Ranger Station	.29	.28	.81	5.99	7.33	1.26	2.58	.02	.08	.01	0	.07	18.72
516	Buena Park	.39	.06	.58	5.69	5.24	.12	2.86	0	0	0	0	0	14.94
530	Conejo Ranch	.15	.27	.75	4.35	4.28	.89	1.41	0	0	0	0	0	12.10
557	La Habra Citrus Assn.	.15	0	.55	5.36	4.56	1.03	2.54	T	0	C	0	0	14.19
577	Los Angeles (U.S.W.B.)	.13	.08	.38	4.33	5.43	1.55	1.61	.02	T	T	0	.01	13.54

Sta. No.	Station	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Season Total
588B	Mt. Lowe-Wormser Cabin	.61+	.49+	.86+	8.34	8.37	1.54	3.35	.09	0	0	0	.01	23.66
589	Mountain Springs	Station established 12-23-39												
593B	Newhall Ranch-Piru	.48*	.24	.77	7.00	4.27	1.53	2.90	0	0	0	0	0	17.19
594	Newhall-S.P.R.R.	.39	.37	.71	4.35	5.56	1.02	2.28	.05	0	0	0	0	14.73
597	Newberry Park	.15	.15	.69	2.92	5.29	1.13	1.82	0	0	0	0	0	12.15
610A	Pasadena-Jones	.21	.25	.78	4.52	4.40	.84	1.52	0	0	0	0	0	12.52
610B	Pasadena-City Hall	.37	.21	.67	5.85	6.97	1.63	2.11	.02	0	0	0	0	17.83
611	Pasadena-Allen	.45	.15	.69	5.76	6.37	1.50	2.12	.01	0	0	0	T	17.05
612	Arroyo Seco-Chlorine Plant	.26	.20	.68	5.79	7.15	1.35	2.52	.02	T	0	0	0	17.97
613B	Pasadena-Hurlbut Fire Station	.30	.28	.83	5.98	7.23	1.23	2.32	.06	.02	0	0	.06	18.31
618	Santa Susana	.22	.08	.56	5.12	6.64	1.29	2.16	.01	0	0	0	0	16.08
656B	Sunland-Keim	.17	.41	.55	4.55	4.25	.89	1.51	0	0	0	0	0	12.33
671B	Wabash Branch, S.C.E.Co. Sub.	.08	.16	.63	5.30	4.73	1.19	1.92	.13	0	0	0	T	14.14
672	Eagle Rock-S.C.E.Co. Sub Sta.	.26	.08	.35	4.34	6.09	1.32	1.77	.02	0	0	0	0	14.23
673	Seal Beach	.17	.18	.74	5.26	6.93	1.59	2.52	.04	0	0	0	0	17.43
676	L. A.-West 50th Street	.28	0	.55	3.78	3.70	.90	.56	0	0	0	0	0	9.77
677	Pasadena-Hayes	.15	.10	.53	5.03	5.55	1.02	1.66	T	T	T	T	T	14.04
678	Pasadena-Sheldon Reservoir	.42	.21	.80	5.85	7.52	1.66	2.10	.04	0	T	0	.03	18.63
679	No. Whittier Heights-Citrus Association	.33	.22	.76	5.57	7.23	1.38	2.14	.01	T	0	0	.02	17.66
680	U.C.L.A.	.01	.13	.49	5.08	5.02	1.00	3.15	.03	0	0	0	0	14.91
681	Santa Anita Ranger Station	.17	.27	.70	6.77	6.83	1.46	1.32	.02	0	T	0	0	17.44
682	Gould-S.C.E.Co. Sub Station	.59	.23	.69	6.26	7.11	1.70	2.38	.05	0	0	0	.02	19.03
683	Sunset-Guard Sta. Altadena	.34	.25	.88	6.62	7.99	1.84	2.68	.14	0	.05	0	.04	20.83
684	Arcadia Warehouse (U.S.F.S.)	.38*	.38	.91*	6.36	7.90	1.43	2.19	.06	T	.04	0	.09	19.74
686	Big Dalton Spreading Grounds	.31	.18	.62	5.73	5.05	1.19	2.21	.10	0	0	0	0	15.39
689B	San Marino-Cooper	.73	.21	.66	6.61	6.88	1.37	3.52	.17	04	T	0	.06	20.25
690	San Antonio Guard Station	.08	.32	.56	5.52	5.14	1.02	2.36	T	0	0	0	0	15.00
691	San Antonio Spreading Grounds	1.10	.29	.93	7.67	7.41	1.86	3.53	0	0	0	0	0	22.69
692	Pasadena-Snitzer	.76	.40	.69	6.83	5.43	1.49	2.80	0	0	0	0	T	18.40
693	Bellflower-Anthony	.47	.20	.71	5.56	6.30	1.22	2.14	.02	0	T	0	T	16.62
694	Tujunga-U.S.F.S. Guard Sta.	.14	.07	.43	4.79	4.28	.73	1.39	.08	0	0	0	0	11.91
695	Valhalla Ranch-Tujunga Canyon	.34	.27	1.07	7.49	5.91	.99	2.51	.20	0	0	0	.01	18.79
696	Pasadena Glen	.04	.24	1.01	7.70	7.69	1.60	1.68	.25+	0	0	0	0	20.21
697	Venice-Sunset Pier	.51	.27	.72	5.93	7.65	1.35	2.55	.11	0	0	0	.05	19.14
		.05	.13	.54	5.15	6.35	1.40	.77	.01	0	0	0	0	14.40

LEGEND

\+ - - - - - - - - - Estimate from nearby station

* - - - - - - - - - Partly Estimated

I - - - - - - - - - Incomplete Record

N.I. - - - - - - - Not Installed

N.R. - - - - - - - No Record

TABLE VI

RAIN GAGE STATION LOCATION

SEASON 1939-40

Sta. No.	Type Gage	Quad. Index	Elev. U.S.G.S.	Observer	Location
2	S	22-25	1025	H. A. Gibson	Upper Escondido Canyon
3	S	34-09	875	V. A. Ward & Son	La Sierra Canyon at Cornell
4	Sp	22-70	600	J. Roldan	Malibu Creek, S. W. of Calabasas
5B	Sp	35-64	924	Tom Farmer	4801 El Canon Ave., Calabasas
6	SA	24-01	747	E. C. Roth	.4 mi. S. of Topanga Canyon Bridge
7C	S	24-55	90*	Henry Jenks	Bel Air Bay Club, Roosevelt Highway
8	Sp	25-03	470	M. D. Gardner	Rear of Admin. Bldg., Mandeville Canyon
9	Scw	48-37	815	Robert Larson	8535 Sepulveda Boulevard
10	SA	25-51	540*	O. F. Bell	10601 Chalon Road, West Los Angeles
11B	ScwA	37-97	870	Pump Plant Employees	Upper Franklin Reservoir
11C	ScwA	37-87	867	Fred Gertsch	Upper Franklin Reservoir
12	S	37-86	1175	City Firemen	Mulholland Highway at Franklin Canyon
13	S	38-34	593	Katie Blix	10834 E. Blix, North Hollywood
14	Scw	49-46	1000	E. S. Merrill	Near mouth of La Tuna Canyon
15	ScwA	37-41	695	Frank Carr	Aetna and Vesper Streets, Van Nuys
16C	S	37-35	900	Del Francis	15023 Encanto Drive, Cahuenga Park
17	S	37-07	1400	City Fireman	Sepulveda Canyon at Mulholland Highway
18	S	36-73	815*	M. M. Sherman	Adohr Dairy, Ventura Blvd.
19	S	35-96	1520	R. L. Scott	Summit-Topanga Canyon Road
20A	S	35-93	892*	Allen Shaw	S. E. cor. Ventura Blvd. & Topanga Can. Rd.
20B	S	35-84	986	L. A. W. D.	Girard Reservoir
21	S	36-02	876*	Carl Wyninger	Canoga Road, N. of Ventura Blvd.
22	SA	46-58	930	Paul Johnson	23800 Cohassett St., Bell Cn., San Fernando Valley
23-E	Scw	46-87	865	R. R. Melrose	East end Chatsworth Reservoir
24C	S	46-94	965	E. L. Johnson	10239 Jordan Ave., Chatsworth
25B	Sp	47-57	795	Jack Andrews	19055 W. Parthenia Sts., Northridge
27	S	48-64	944	W. D. Miller	14163 Van Nuys Blvd., Pacoima
28	S	48-32	950*	B. Hanneman	11030 Sepulveda Blvd., San Fernando
29B	S	47-81	1130	L.A.W.D. Operator	Mayerling St., at L.A.W.D. Pump Plant, Granada
30	Scw	59-28	1250*	W. C. Simonds	Sylmar Olive Packing Plant
32-E	S	58-61	1243	Milan A. Priest	Inland Highway, ½ mi. N. of Newhall
33A'-E	SA	60-07	1500	R. E. Waddicor	Caretaker's House, below Pacoima Dam
38	S	49-34	1060	Sam Chappel	10100 Helen St., Roscoe
39B	8-81"GG	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 Malago Cove Plaza, Palos Verdes Estates
43B	Sp	2-20	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
46C	S	51-10	2290	D. J. Robertson	West of Spillway, Big Tujunga 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	SpAp	40-50	1345	Geo. S. Chiesa	165 E. Foothill, Altadena
50B	S	40-10	1155	H. J. Durand	352 Foothill, Flintridge
51	S	65-69	4650	Mrs. R. F. Hill	1 mile N. of Coldbrook Camp (Little Cienega)
52B	SA	51-44	3000	J. A. Percell	Switzers Camp
53A	SA	62-89	3500	Edward Emerick	Sleepy Hollow Rch, Coldwater Canyon 1 mile S. of Big Tujunga Creek
53B	Swb	62-89	2950	Joe Arkay	½ mi. 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	3450	Geo. Comstock	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	3225	Tex Strange	Upper Big Santa Anita Can.(Sturtevant Camp)
60A	SA	52-69	2750	Le Roy Haynes	W. Fork Santa Anita Cn.-(Hoegee's Camp)
60A'	S	52-69	2750	J. H. Knauss	W. Fork Santa Anita Can.opposite Hoegee's Camp
60C	SA	52-79	2400	L. W. Herman	W. Fk. Santa Anita Cn.-Winter Creek
63B-E	S	41-81	1400	Joseph Propst	Caretaker's house-Santa Anita Dam
64	S	41-71	1600	J. E. Clark	Clark's Half Way House on old Sturtevant Trail
65	SwbA	41-42	1160	Laura A. 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
76B	S	54-57	1500	Ted Cooper	San Gabriel Dam #1 Camp
82	S	67-11	7500	Greeley & Warner	Top of Table Mountain
83-E	SA	67-02	6860	Leslie E. Mac Donald	Big Pines County Park
85D	SwbA	56-46	4300	Tunstall & Huse	U. S. Guard Station, Camp Baldy
87	S	44-33	1500	L. L. Winters	San Dimas Canyon, at West 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. Brydon	North end of Brydon Road
91	S	44-87	1405	W. White	2945 Indian Hill Road
92	SA	32-90	1190	Dr. W. T. Whitney	Pomona College Observatory
93	S	32-80	1165	Harvey Case	221 W. 2nd St., Claremont
94	S	31-60	805	Will G. Fields	1331 Covina Blvd., San Dimas
95	S	43-99	960	S. L. Trout	114 E. 1st 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	Juanita, near Walnut, San Dimas
98	Swb	42-96	602	John Hibsch	325 Foothill, Azusa
99	S	43-06	615	Charles Stewart	962 Foothill, Azusa
100	Swb	42-73	1050	August Bohm	Above U.S.G.S. Gaging Station, Fish Canyon
101	S	30-53	358	Hurst Bros.	S. E. cor. Merced and Orange St.,W. 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 7th Ave., North Whittier Heights
105	S	16-64	215	Peter E. Sharpless	1226 Laurel Ave., Whittier
106	S	16-61	365*	E. W. Honeyman	City Hall Roof, Whittier
107B	S	15-65	118	T. C. Loggins	224 W. 2nd 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 2nd & Main Sts, Rear of City Hall, Alhambra
111	Sp	40-48	660*	Norval B. Krug	N.W. cor Mound & Mission Sts-City Hall, South Pasadena
114	S	14-09	64	C. E. Rosecrans	S. E. cor Vermont & Rosecrans, Gardena
116B	Sp	13-43	125*	Eugene D. Wells	111 E. Queen St., Inglewood Fire Station
117B'	S	8-70	68	Cap't. Edward Dowd	Fire Station-Compton
117D	C.G.G.	8-70	68	G. D. Aumack	Compton Junior College
118B	S	3-41	40*	E. A. Bishop	1251 Banning Blvd., Wilmington
119A	S	25-44	335*	L. P. Emerick	National Military Home, Sawtelle
119B	S	25-44	325*	L. P. Emerick	National Military Home, Sawtelle near Wilshire Boulevard
120	S	74-70	3250	John B. Sigrist	1533 Sierra Highway, Vincent
121	S	112-79	2350	R. E. Lofinck	Union High School, Lancaster
122	Sp	98-29	3200	Mrs. Cy Cooke	Bouquet Cn. Rd., ½ mi. S. of Elizabeth Canyon Road
123	Sp	96-73	3250	Eli Munz	Between Elizabeth and Hughes Lakes
124B	Acw	82-31	3000	R. W. Mathews	Bouquet Cn. W. of orchard & Reservoir yard
125	Scw	83-40	2100	Station Operator	Power Plt. #1, Upper San Francisquito Cn.
126	S	12-41	7*	A. S. Ede & A.J. Bernal	Venice City Yards
127	Scw	70-71	1507	Jim Ray	Dry Canyon Reservoir
128	S	95-49	2041	Louis G. Klein	Elizabeth Lake Canyon at Radium Hot Springs
130B	S	106-85	4025	J. L. Ozanne	Quail Lake County Patrol Station
134	S	44-07	1110	A. L. Stevens	½ mi. N. of Foothill, West of Artesia Ave., San Dimas
135	S	10-30	83	C. S. Hargitt	¼ mi. N. of Center St., 1/5 mi. W. of Bloomfield-Norwalk
136B	S	26-70	305*	H. P. Larson	6225 Santa Monica Boulevard
137B	S	38-48	1125	F. C. Employees	East side Curson Cn. near Mulholland Hwy.
139	Scw	27-54	300*	D. A. Lane & McIntyre	S. E. cor 2nd & Hill Sts., L. A. W. D. Roof
F.C. Roof	S	27-33	262*	F. C. Employees	751 S. Figueroa St., F. C. Office Roof
140	S	25-55	232*	W. B. Scott	Rear- 1620 S. Purdue St., West Los Angeles
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	1800	F. C. Employees	Monrovia Canyon Falls
155B	S	87-79	2900	Gene Brealin	Little Rock Creek, 1.5 miles below Dam
156	Sp 3'	10-81	86	Standard Oil Employees	Center St. & Lemont Ave., La Mirada
157	Sp	12-88	135	Lab Employees	Standard Oil Refinery, El Segundo
158	SpAp	55-49	2700	U.S.F.S. Employees	W. Fork San Dimas Canyon, Tanbark Flats
164	Sp 3'	41-93	.690	Charles J. O'Connor	432 N. Primrose, Monrovia
167	Sp	41-64	611	Scott M. Lee	89 Orange Grove Ave., Arcadia Pump Plant
168	S	41-09	433*	Richard Watts	309 E. Live Oak Ave., San Gabriel

* #7C is 10 ft. above ground. #10 is 12 ft. above. #18 is 12 ft. above. #20A is 10 ft. above. #21 is 15 ft. above. #28 is 10 ft. above. #30 is 20 ft. above. #39B is 8 ft. above. #42 is 30 ft. above. #43A is 20 ft. above. #67 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. #116B is 12 ft. above. #118B is 10 ft. above. #119A is 12 ft. above. #119B is 11 ft. above. #126 is 10 ft. above. #136B is 20 ft. above. #139 is 85 ft. above. F. C. Roof is 75 ft. above. #140 is 20 ft. above. #168 is 6 ft. above ground.

TABLE VI (Continued)

Sta. No.	Type Gage	Quad. Index	Elev. U.S.G.S.	Observer	Location
169	Sp	41-63	700	Hogan & Al Freeland	621 Sierra Madre Ave. S. M. Pump Plant
170	S	29-15	320	J. A. Reifer, Jr.	3623 Delta St., San Gabriel
171	S	41-35	635	W. E. Comerford	South Michillinda near E. Colorado, Chapman Wells
174	Sp	43-86	965	C. C. Warren	Old Foothill - 2.75 mi. E. of Glendora
175B	S	50-87	2020	W. N. Carpenter	N. W. cor Alta Canyada & Del Oro Drive
176	Ap	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., near Citrus Ave., Azusa
179	Swb	41-42	1110	Arthur N. Carter	N. of upper end Baldwin Ave., Sierra Madre
181B	S	29-94	295	R. S. Clifford	S. side Valley Blvd. at Covina Blvd. intersection
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
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. 6th 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*	"Leader" Employees	2152 Third St., La Verne
198	Sp Dial	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	S	70-27	1093	W. H. Roberts	2.5 miles W. of Saugus Ridge Route
200	Sp 3"	70-27	1093	W. H. Roberts	50 ft. E. of 8" gage, rear of S.C.E. Co. Sub Station
201	S	17-00	860	Mrs. Blanche Lowry	Alta Mira Orchard, 1 mi. N. E. of Summit Turnbull Canyon Road
205	Sp	30-79	374	G. C. Hoisington	S.C.E. Co. Sub Sta. Valley Blvd. 1.5 mile East of Puente
206	S	30-94	467	P. R. Jackson	2024 Azusa Ave., Valenoia 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 Station
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.
215B	S	9-71	73	Cap't. K.E. Grogan	917 E. Flower st. Bellflower Fire Station
216	Swb	39-43	620	J. E. Jones	318 E. Randolph St., Glendale
217	Sp 3"	14-75	110	J. S. Carver	2265 E. 103 St., Watts
218	S	7-54	75	Marion E. Dice	2 mi. N. W. of Torrance, Gen'l. Pat. Corp.
219	S	48-94	955	Warehouse Foreman	12605 Osborne Ave., Pacoima
220	S	29-28	195	D. M. Cate	547 Friendship Ave., Near Montebello
221B	S	59-99	1375	Louis Coronada	Keiner Ranch, Pacoima Wash
222	Scw	38-10	732	Station Operator	11845 Vose St., No. Hollywood Generating Plant
223B-E	S	43-83	1575	Paul Keiser	Caretaker's house below Big Dalton Dam
224	S	4-03	30*	W. N. Beach	Bldg. W. of 22 Pacific Ave., Long Beach
225	S	9-85	47	J. F. Anthony	Montana Ranch, 3 mi. S. W. of Artesia
226	S	38-91	650*	F. Olchvary	125 E. 3rd 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. 0.6 mi. N. of 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 Street
235B	SpA	41-10	2550	Co. F. S. Employees	Henninger Flats, Forestry Nursery, Mt. Wilson
236	S	59-88	1455	V. H. Craig	Craig Ranch, San Fernando
237	Scw	37-49	725	L.A.W.D. Employees	Stone Canyon Dam
238	Scw	38-68	750	L.A.W.D. Employees	Hollywood Dam
240	S	60-67	1700	F. J. Wright	4.3 mi. up Little Tujunga Canyon, from old Foothill Boulevard
241	Sp	4-03	30*	C. Bower	Utilities Bldg., Long Beach
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. Dodrill	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
252B	S	69-80	1156	Ernest J. Clark	Castaic - 100 ft. North of "A", off Old Ridge Route
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. Grazido Rd & S. edge of Rowland Ranch
255	S	31-55	770	L. P. Groff	State Narcotic Hospital, near Spadra
256	S	32-44	862*	Station Operator	S. P. R.R. Depot, Pomona
257	SA	39-17	750	J. Kladler	2650 N. Commonwealth Ave., Griffith Park Nursery
258a	C.G.G.	38-97	1100	Louis Strauss	W. of Tunnel, Pt. of Ridge, Griffith Park
258b	C.G.G.	39-07	1400	Louis Strauss	South Slope of Mt. Hollywood "
258c	C.G.G.	39-06	1600	Louis Strauss	North Slope of Mt. Hollywood "

* #224 is 50 ft. above ground. #226 is 15 ft. above. #228B is 30 ft. above.
#241 is 38 ft. above ground. #246B is 10 ft. above. #256 is 12 ft. above.

Sta. No.	Type Gage	Quad. Index	Elev. U.S.G.S.	Observer	Location
259B	SA	46-92	1249	Geo. M. Cuthbert	21880 Mayon Dr., Co. F. S. Twin Lakes Park
261-E	SA	73-30	3075	H. F. Mellen	Escondido Canyon, N. Branch, near Aoton
263A	S	32-56	778	Milton Frater	2211 S. Towne St., Pomona
264	S	59-92	1900	J. C. Brooks	Sand Canyon-Coyote Canyon Branch, formerly Riley Ranch
265C-E	S	17-74	675	P. J. Weisel, Jr.	Anaheim Rd., 1 mi. N. of Whittier Blvd., Puente Hills
266	Sp	17-06	253	C. A. Hewitt	1234 Santa Gertrudes Ave., Whittier
268-E	SpA	7-94	57	Station Operator	190th & Western Ave., S.C.E. Co. Sub Sta.
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 #1, 741 Old River School Road
271	S	8-63	195	James L. Nash	Dominguez Hills, S. side of Reservoir-Summit
272	S	38-94	473	C. J. Smith	W. of N. Entrance, Griffith Park, near L. A. River
273	S	2-12	1235	W. W. McCarrell	Top of San Pedro Hills, West end.
274	Sp	85-68	3250	Mrs. A. S. Hubbard	Mint Canyon Rd. just E. of Summit
275	Sp 3"	40-87	670	G. L. Brown	Huntington Estates, San Marino
277	S	108-17	3700	Clarence Soates	Sawmill Mt. Rch., 8.9 mi. N. W. of Lake Hughes
278B	S	26-86	203*	H. M. Hughs	2205 W. Adams, Los Angeles
279B	Sp	41-21	1500	Ross M. Lockhart	Kinneloa Rch., E. Side Eaton Wash
280	SA	40-01	1325	Station Employees	1028 Inverness Dr., Flintridge Fire Station
283a	ScoA	65-57	5740	F. Richards	Crystal Lake Co. Park,-East Pine Flat
283b	Sco	65-58	5370	F. Richards	Crystal Lake Co. Park,-West Pine Flat
284	S	59-22	1480	John Wood & D.F.Pollock	Placerita Canyon-formerly Dulin Ranch
285C	S	25-11	1025	Martin Bullinger	Mt. St. Mary's College-Santa Monica Mts.
286B	C.G.G.	49-22	1120	John Hermann	11332 Osborne Ave., San Fernando
287	Sp	43-36	782*	H. C. Warren	234 N. Michigan Ave., Glendora
289	Aco	15-52	140	L. A. Co. Surveyors	Compton & Aboneria Rd. just N. of Baker Ave.
290	Aco	28-75	375	L. A. Co. Surveyors	La Merced Hills-Garfield Ave., at S.C.E. Co. Sub Station
291	Aco	14-45	121	L. A. Co. Surveyors	96th & Central Sts., Los Angeles
292-E	Scw	36-85	1000	John H. Cowen	Crest of Encino Dam - 1 mi. S. W. of Encino
293	Scw	48-11	1150	Dam Tender-L.A.W.D.	800 ft. N. & W. end Lower San Fernando Dam
294	Sp	41-53	985	Al Freeland	Mira Monte Ave., Pump Plt. near Mt. Wilson Trail
295F	S	39-34	530	Maurice E. Kennedy	415 W. Lexington Ave., Glendale
298	S	105-40	3830	J. L. Ralphs & Hamilton	Gorman, Ridge Route N.W. cor. L. A. County
299C	S	88-26	2835	Mrs. Lena Schwab	1 mi. W. of Pear Blossom, 1 mi. N. of Victorville Highway
300B	Sp 3"	36-18	990*	R. L. Peeler	Garrapata Cn.-½ mi. N.E. of Topanga Cn. Rd.
303B	SA	40-76	763	Prof. Michael & Students	Cal Tech. Campus E. of Admin. Bldg.
304	S	42-30	2700	F. C. Employee	Deer Park 1½ mi. up from Sawpit Dam
305	S	21-01	1155	R. L. Mason	E. Fk. Arroyo Seguis. S. of Road
306A	S	21-56	10	Mrs. May Bozeman	Roosevelt Hwy., 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. 1½ mi. N.E. of Ontario Peak
309	Sp	45-05	1768	Kenneth B. Forbes	4064 Monte Vista Ave., Padua Hills
311b	SpAp	40-43	918	Pasadena Water Dept.	1083 Mentone St., Pasadena
312	Sp	42-85	675	Fred F. Kammerdiener	1-mi. N.W. Azusa, 0.4 mi.W. of West end Sierra Madre Ave.
314	Sp	44-07	1064	F. L. Brockham	N.E.Cor. Foothill & Artesia Ave.
315	Sp	43-15	865	J. M. Boggman	300 ft.W.of Ben Lomand Av.on Sierra Madre Av
317	Sco	67-12	6750	L. MacDonald	.6 mi. SE of Main Rd. near Swartout - Valley Park Entrance
318	Sco	66-70	6075	Leonard M. Luglan	So. edge Jackson Lake
319	Sco	66-81	5900	" "	Big Pines Pk., Apple Tree Flat
320A	S	39-93	900	G. W. Burroughs	2816 E. Chevy Chase Blvd.
321E	S	96-72	3400	Co. Forestry Employees	Guard Sta.bet. Elizabeth & Hughes 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.
334E	SA	53-35	2335	F. C. Employee	San Gabriel Dam #2-W.Fk.San Gabriel River
336	Scw	39-39	455	Res. Caretaker	Silver Lake Reservoir, Los Angeles
338	Swb	52-47	5650*	J. O. Hickox	50 ft.S.of 60 in. Telescope, Mt. Wilson
338	A	52-47	5650*	" "	50 ft.S.of 60 in. Telescope, Mt. Wilson
338B	Swb	52-37	5709	V. W. Kellogg	1/2 mi.W.of 60 in.Telescope, Mt. Wilson
339	Sp	31-49	533	Packing House Employee	1/2 mi.SE of Walnut,S.side UPRR tracks
341	S	74-43	2900	Geo. J. Blum	Aliso Canyon - E. of Acton
342	S	45-17	1550	L. Wood	1544 N. Benson St., Upland
343	Sp	16-04	141	F. C. Collins	439 E. Telegraph Rd., Rivera
347E	S	30-30	387	Various	Scott Pl.1 blk.W.of Maine St.Baldwin Park
348C	SA	55-36	2000	G. H. McKelvey	.6 mi.NNE of Camp Bonita,E.FK.SanGabriel Riv.
349B	S	54-46	1530	Mrs.C. M. Schmidt	Camp Rincon 1.3 mi.W.of Forks,SanGabriel Riv.
351D	Swb	86-82	2648	H. P. Schoeller	Ave.Q 7 St.bet.E.8 & E.9 Sts.S.Side-Palmdale
352	SA	21-21	1530	L. Cesena	4 mi.from Coast 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 bet.Cow & San Antonio Canyons 1-1/4 mi. S.W. of Camp Baldy
355	S	27-01	315*	Frank S. Trueblood	855 N. Vermont Ave., Los Angeles
356	SpA	31-86	675*	W.P. Collins	Spadra Ofc.Diamond Bar Ranch, 0.5 mi. S.E. Pomona Blvd.

* #269A is 10 ft. above ground. #278B is 8 ft. above. #287 is 15 ft. above.
#300B is 5 ft. above. #338 Standard and automatic are 6 ft. above ground.
#355 is 20 ft. above. #356 is 10 ft. above ground.

TABLE VI. 1939-40 (Continued)

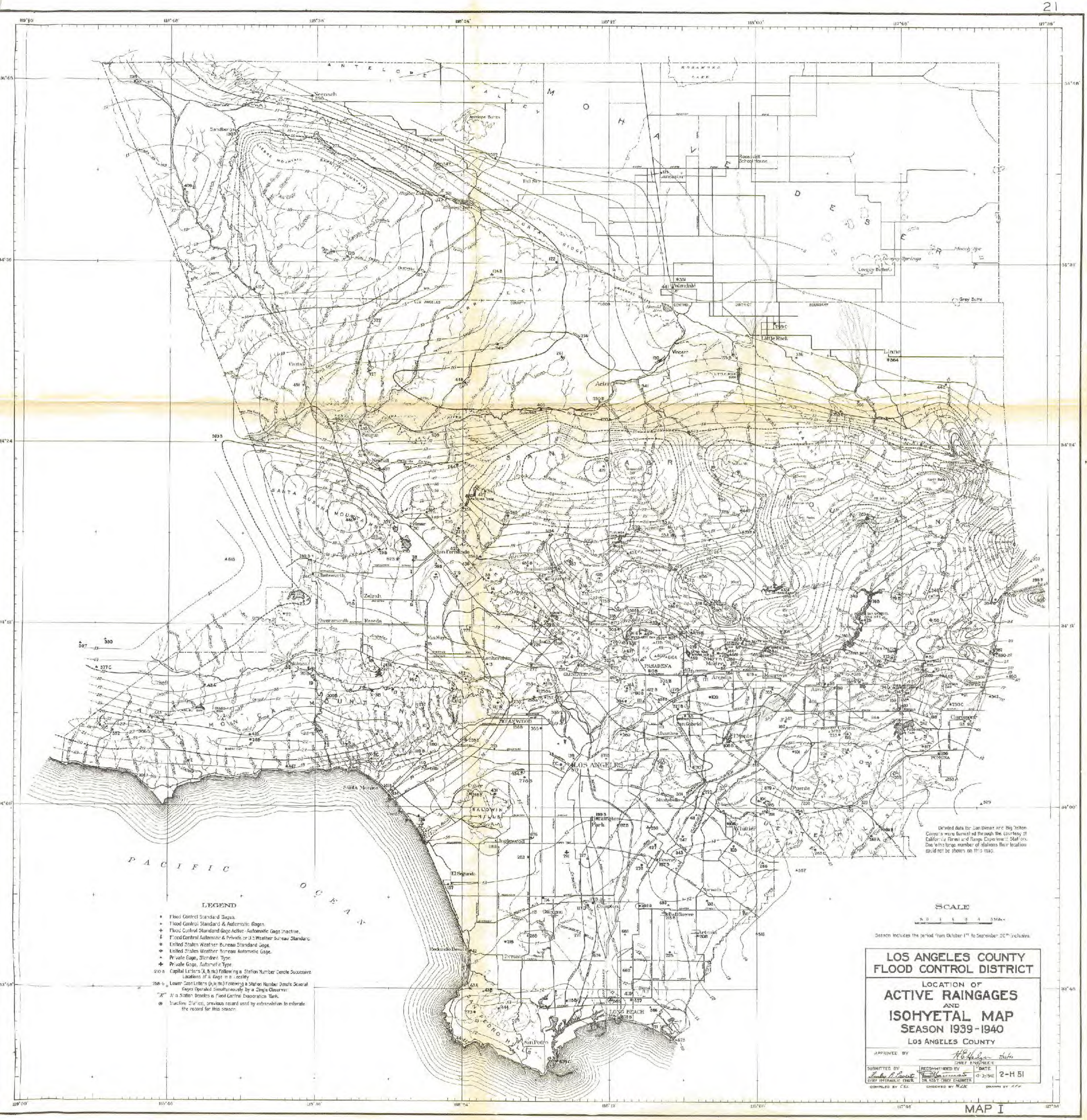
Sta. No.	Type Gage	Quad. Index	Elev. U.S.G.S.	Observer	Location
357	Scw	59-08	1248	Sta. Operator	Power Hse.#3 N.of Upper San Fernando Res.
358B	S	77-16	4050	A. P. Aldrich	Pallett Cr.2½ mi.N.W. Devil's Punch Bowl.
360B	GG Spl H	50-23	2196	F. C. Employee	Haines Canyon Debris Basin
362	Sp	40-23	1025	J. D. Hoffman	W.end of Mirador Drive, Pasadena
364	Swb	50-23	2450	F. C. Employee	50 ft.E.of USGS Gaging Sta.Haines Creek
366	S	77-45	3740	L. F. Noble	¼ mi.NW Valyermo,¼ mi.S.of Big Rock Cr.Rd.
367	SwbA	50-42	3450	F. C. Employee	At upper Fk.nr.Head of Haines Canyon
372	Scw	82-76	1580	Sta. Operator	San Francisquito Cn.11 mi.NE of Saugus
373	SA	50-76	2310	L. R. Bleitz	5613 Canyon Side Dr., Briggs Terrace
375A	S	39-16	575	Charles Allen	Griffith Park Zoo, Los Angeles
375B	S	39-16	650		Griffith Park Zoo, Los Angeles at new house
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
379B	S	54-96	1600	F. C. Employee	2.7 mi.above confluence E & W Fks.S.Gab.Riv.
380	SA	28-11	553	Geo. P. Morgan	4566 Bedillion St., El Sereno
381B	S	25-08	100*	Paul F. Knief	1245 - 4th St., Santa Monica
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 NW of Vera Canyon
387B	Sp	31-01	508	V. C. Johnson	227 S. Hollenbeck Ave. Covina
388	S	9-41	72	Bob Kamp	347 So. Paramount Blvd., Hynes
388B	S	9-40	71	Fire Station employee	210 No. Paramount Blvd., Clearwater
389	Sp	43-35	825	Frank H. Brown	Rear of Ranch, cor.Penn and Sierra Madre Ave., Glendora
390B	Sp	43-21	1210	Pasadena Water Dept.	Morris Dam, San Gabriel Canyon
391	Sp	29-06	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	620	Robert H. Lindsay	6425 Elgin St., Highland Park
395	S	59-57	1425	R. N. Loomis	Olive View Sanitarium,San Fernando
396	Sp	48-63	1005	W. H. Bowlus, Jr.	13781 Payton Avenue, San Fernando
397	Sp	50-25	1835	Philip Begue	9743 Tujunga Canyon Rd. at Summit
398B	Sp	56-85	6250	C. H. Plank	300 ft. E.of "A" location Trails Inn, Ice House Canyon
400	Sp	40-63	1000	H. J. Sievert	Washington & Palm Terrace, Pasadena
402B	SA	64-05	5585	H. J. Childers	State Prison Camp #35,1½ mi.NE of Chilao
403	Sp	40-90	1360	F. C. Lindvall	1860 Allen Drive, Altadena
404	S	39-54	653	John Opid	811 N. Glendale Ave., Glendale
405	S	73-06	2250	James E. Nelson	11.7 mi.E of Solemint on Soledad Cn. Rd.
406	S	42-88	505	Geo. E. Love	624 W. Broadway, W. Azusa
407	S	58-82	1325	Ray McCormick	17700 San Fernando Road, 1 mi. SE of Newhall - U.S.F.S.
408	S	71-58	1472	J. Mitchell	0.4 mi. S.of Soledad Cn.Rd. 1.2 mi. W.of Jct. Sand and Soledad Canyons
409	S	93-12	2425	Rex C. Farmer	18 mi. N.of Castaic Jct.New Ridge Route
410C	S	81-13	2360	E. E. Blohm	7 mi. N of Castaic Jct.at Old Edison House New Ridge Route
411	Sp	16-10	173	V. M. Robinson	345 S. Passons Blvd.½ mi.S.of Whittier Blvd
412A	Sp	40-57	755	H. J. Sievert	W.of Euclid Ave.200 ft.N.of Glenarm,Pasadena
412B	Sp	40-57	755		E.of Euclid Ave.100 ft.S.of Ohio, Pasadena
415	SA	4-30	115 *	Geo. I. Osborne	Signal Hill City Hall, Long Beach
416	Sp	40-40	1170	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	4075	F. C. Employee	Upper end Pickens Cn.,USFS Exp. Plots
419	SA	61-92	5450	D. W. Boore	Hd.of Pacoima Cn.on Santa Clara Ridge, Mt. Gleason
420	S	74-07	3100	" "	3.3 mi.S.of Acton on Mt.Gleason Truck Trail
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 Dillon's Ranch
423	S	75-08	3920	Earl W. Scribner	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. 12th St., Downey
428	Sp	40-90	1340	H. J. Laity	2059 Rubio Drive, Altadena
429	S	51-83	4460	I. Bird	Angeles Crest Hwy.,0.9 mi.S.of Red Box
430	S	70-57	1176	C. T. Warren	Saugus, at State Hwy. 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	Farnsworth Park, Altadena
434	S	34-46	800	B. O. Butler	Malibu Hdqts., Co. F.S. 1 mi. S. of Ventura Blvd. on Cornell Rd.
435	S	23-12	600	C. A. Bollman	Monte Nido Co. F.S.Brents Mt.Crags Road
436A	S	49-13	1087 *	E. B. Davey	Hansen Dam, Osborne Ave.,Tujunga Wash
436B	S	49-13	1005 *	U S E D Employees	Hansen Dam, U S E D Office
437	S	4-30	23 *	J. C. Vidmar	Hamilton Bowl, Long Beach
438	S	36-94	950	C. E. Quirello	17151 Oak View Drive, Encino
439A	SA	63-89	5650	K. M. Kaylor	Charlton Flats, U S F S Reservoir
439B	SA	63-99	5500	" "	Charlton Flats, U S F S Checking Station
440	S	63-87	5150	" "	Chilao, U S F S Guard Station
441E	S	86-82	2662	James R. Nelan	Palmdale, County Road, Maint. Yard
442	S	78-53	3810	E. A. Eberle	Near Mescal Creek on Fort Tejon Rd.Desert
443	S	21-80	1725	W. A. Brandenberger	Jct.Latigo Cn.Rd. and Mulholland Hwy.
444	S	2-52	475	C. C. Miller	"Rolling Hills", Palos Verdes Hills
445	SA	44-56	1630	Al. A. Quiroz	Live Oak Canyon Rim, 1/3 mi.above Live Oak Dam
446	SA	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.from Coast in Las Flores Cn.at Co. F.S. Guard Station
448	CGG	72-03	1875	J. V. Witt	Mint Canyon, 5 mi. N.of Solemint
449	GG Spl H	41-03	902 *	F. C. Employee	Eaton Dam, Altadena
450	S	40-16	770	Carl A. Wohl	5052 Monte Bonita St., Eagle Rock
451	S	69-83	1066	W. M. Kleinsmith	24819 Route #99, Castaic
452	CGG	38-05	637	W. N. Thayer	3817 Mound View Ave., Studio City
453	GG Spl H	40-21	1070 *	F. C. Employee	Devils Gate Dam, Pasadena
454-	S	26-86	200	W. J. Wood	2210 - 3rd Ave., Los Angeles
455	S	99-61	2395	J. Folsetter	Lancaster, State Hwy. Maint. Dept.
X-3	SA	24-82	900	W. Miller	Rustic Canyon Fire Area, 3.5 mi. from Sunset Blvd.
X3A	S	24-82	580	" "	Rustic Canyon Fire Area,2100 Rustic Cn.Road
X3B	S	36-77	1900	L.A.City Fire Sta.Empl.	Rustic Canyon Fire Area,nr.Mulholland Hwy.
X3C	S	24-74	420 *	W. G. Robertson	15015 McKendree Ave. Pacific Palisades
508B	S	51-39	1220	U.S. Forest Ranger	Arroyo Seco Cn.at El Prieto Cn. U S F S
516	Sp 5"	0- Co	75	Nelson Hardware Employee	932 Grand Ave., Buena Park
530	Sp	V- Co	650	Guy M. Turner	Conejo Ranch, Ventura County
557	Sp 3"	0- Co	300	A. Chewning	La Habra, Citrus Assn.
577	AP	27-55	330 *	U. S. W. B.	SW Cor. 6th & Main Sts., Los Angeles
577	AP	27-54	313 *	U S W B	New Federal Blvd. N.Spring St.Los Angeles
588B	S	51-87	4450	J. W. Wurmser	Mt. Lowe in Grand Canyon
589	Sp	44-25	1400	Mrs. E. P. White	Mouth of San Dimas Cn.Top of hill, E. edge of Canyon
593B	Sp	68-69	675	E. J. Higgins	Newhall Rch.3.1 mi.W.of LA Ventura Co.Line
594	Sp 3"	58-72	1270	A. B. Thatcher	Southern Pacific R.R. Depot, Newhall
597	Sp 3"	V-Co	710	R. Heckman	Newbury Park, Ventura County
610A	Sp	40-73	980	Morris Jones	1250 N. Holliston St., Pasadena
610B	Sp	40-55	864	H. J. Sievert	City Hall, Pasadena
611	S	40-32	1052	W. Allen	2057 Pepper Drive, Altadena
612	Sp	51-39	1181 *	H. J. Sievert	Chlorine Plant, nr.Mouth Arroyo Seco Canyon
613B	Sp	40-46	780	H. J. Sievert	900 S. Pasadena Ave., Pasadena
618	Sp	V-Co	980	J. M. Fuller	1 mi.W. of Santa Susana,Wolff Rch.Ventura Co
656B	CGG	49-83	1265	John Bonner	10921 O'Dell Ave., Sunland
671B	Sp	27-94	325	Station Operator	1006 N. Breed St.,Los Angeles,SCE Co.Sub Sta.
672	Sp	40-14	1000 *	" "	N. Figueroa St.,N.of Colorado Blvd. " "
673	Scw	4-85	15	" "	Seal Beach,LA Power Plt.San Gab.Riv.at Ocean
676	Sp 4½"	13-93	173	H. F. Parkinson	1727 W. 80th 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
679	Spl Dial	30-27	310	H. I. Morris	533 9th Ave.No.Whittier Hgts.Citrus Assn.
680	Sp	25-52	425	U C L A Students	U C L A Campus
681	Sp	41-63	890	U S Forest Ranger	N.end Double Drive Santa Anita Av.Arcadia
682	Sp	51-17	1900	Station Operator	Gould Sub Sta. Angeles Crest Hwy.
683	Sp	51-58	2110	U S F S Employees	Sunset Guard Sta.bet.Millard & West Ravine Canyon
684	Sp	41-65	518	" "	Arcadia Warehouse, U S F S
686	Sp	43-64	1175	N. D. Meacham	Big Dalton Spreading Grounds
689B	Sp 6"	40-68	603	Carl V. Cooper	2814 Carlaris Rd., San Marino
690	Ap	45-22	2380	U S F S Employee	San Antonio Cn.-U S F S Guard Station
691	GG	45-14	2075 *	J. T. Corrington	San Antonio Spreading Grounds
692	Sp	40-84	820	W. C. Snitzer	1735 Maple St., Pasadena
693	Sp 3"	9-70	77	J. R. Anthony	237 N. Cornuta Ave., Bellflower
694	Sp	50-10	1500	O. W. Rutherford	Tujunga Canyon, U S F S Guard Station
695	Sp	50-60	1850	E. G. Ulrich	Tujunga Canyon, Valhalla Rch.2.8 mi. above F.C. Gaging Sta. #213
696	Sp	41-21	1400	Robert Casamajor	Pasadena Glenn - L. A. County
697	Ap Sp	12-21	0 *	A. J. Bernal	Sunset Pier, Venice

* #381B is 15 ft. above ground. #415 is 10 ft. above ground. #417 is 10 ft. above. #436A is 23 ft. above. #436B is 15 ft. above. #437 is 17 ft. above.

* #449 is 13 ft. above ground. #453 is 24 ft. above. #X-3C is 14 ft. above. #577, 6th & Main Sts. is 87 ft. above. #577 New Federal Bldg. is 235 ft. above. #612 is 10 ft. above. #672 is 120 ft. above. #691 is 15 ft. above. #697 is 35 ft. above sea level.

LEGEND REGARDING GAGE TYPE AND OWNERSHIP

S - - - - Standard 8" gage unless followed by number showing diameter. Owned by Flood Control District.
A - - - - Flood Control District automatic gage.
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 4½" diameter.
Sp 3" - - Private gage of standard type 3" diameter.
CGG - - - Special "can" (8.81" diameter) gage 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 the L.A. City Water Department.
co - - - Gage owned by L.A. County but not Flood Control.
Spl - - - Special type gage.
wb - - - Gage owned by U.S. Weather Bureau.
AP - - - Automatic tipping bucket at USWB--L.A.
Ap - - - Private automatic gage.
Dial - - Gage registers cumulative rainfall only.


ANTELOPE VALLEY
MOHAVE DESERT
SANTA SUSANA MOUNTAINS
SIERRA PELONA
SAN GABRIEL MOUNTAINS
SANTA MONICA MOUNTAINS
PACIFIC OCEAN
LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
Lancaster
Palmdale
Little Rock
Llano
Acton
Agua Dulce
Saugus
Newhall
Sandberg
Antelope Buttes
Fairmont
Del Sur
Roosevelt School House
Lovejoy Springs
Lovejoy Buttes
Grey Butte
Vincent
Soledad Canyon
San Fernando
Sunland
Tujunga
Chatsworth
Zelzah
Owensmouth
Reseda
Van Nuys
Burbank
Lankershim
Glendale
Pasadena
Monrovia
Arcadia
Azusa
Glendora
Claremont
San Gabriel
Alhambra
El Monte
Covina
Pomona
Puente
Hollywood
Los Angeles
Santa Monica
Venice
Culver
Baldwin Hills
Inglewood
Hermosa Beach
Redondo Beach
Torrance
El Segundo
Hawthorne
Lennox
Compton
Gardena
Lynwood
Dominguez Hills
Artesia
Norwalk
Downey
Whittier
La Habra Heights
Long Beach
San Pedro
Palos Verdes Hills
Detailed data for San Dimas and Big Tujunga Canyons were furnished through the courtesy of California Forest and Range Experiment Station. Due to the large number of stations their location could not be shown on this map.
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
258-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.
Inactive Station, previous record used by extrapolation to estimate the record for this season.
SCALE
Season includes the period from October 1st to September 30th inclusive.
LOCATION OF
ACTIVE RAINGAGES
AND
ISOHYETAL MAP
SEASON 1939-1940
LOS ANGELES COUNTY
APPROVED BY
CHIEF ENGINEER
SUBMITTED BY
CHIEF HYDRAULIC ENGR.
RECOMMENDED BY
SR. ASST. CHIEF ENGINEER
DATE
2-H 51
COMPILED BY C.S.C.
CHECKED BY W.L.K.
DRAWN BY A.F.G.
MAP I

EVAPORATION RECORDS

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
Hydraulic Division

REPORT ON EVAPORATION

Season 1939-40

Foreword:

Evaporation records have been continued at various representative locations where the District has maintained raingages, particularly at or near reservoirs and spreading grounds. These tanks are read at 5 p.m. at all District stations to be consistant with the rainfall reading. Most stations include maximum and minimum thermometers, as standard equipment and some stations are further equipped with anemometers and psychrometers, to make a more nearly complete weather station.

Evaporation data obtained from tanks placed at reservoirs and spreading grounds, are used in computations of water losses.

These data are also used in the District's hydrologic investigations and by other agencies and individuals.

Number of Stations:

The District maintained 21 land evaporation stations and 2 lake pans during the season. The Los Angeles Water Department reservoir at Encino maintained a United States Weather Bureau type pan and a lake pan from which the District received additional data. The Baldwin Park Experimental station, which is cooperatively maintained by several agencies and the District 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 evaporation 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 normally 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 No. 1 and No. 2 are 30 inches square and 18 inches deep with a 6 inch wave baffle to prevent water splashing in. The pan is floated on suitable rigging and 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.

Maximum Seasonal Amt. Inches	- Encino Reservoir	89.625	
Maximum Monthly Amt. Inches	- Acton	13.940	in July
Maximum Daily Amt. Inches	- Encino Reservoir	0.685	July 10
Minimum Seasonal Amt. Inches	- Opid's Camp	41.453	
Minimum Monthly Amt. Inches	- Opid's Camp	0.150	in January

The next largest seasonal evaporation measured in the District's pans was at Acton and amounted to 87.628 inches.

The largest average monthly evaporation for a 3 months and 6 months period occurred at Acton and amounted to 12.78 inches and 10.574 inches per month respectively.

The next lowest seasonal evaporation measured in the District's pans was at Puente Hills and amounted to 42.736 inches.

The minimum evaporation at any location in the District is largely influenced by the rainfall and sometimes by freezing weather.

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 1939-40

Sta. No.	Station	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Total
23	Chatsworth	7.470	3.635	3.415	1.960	2.670	3.705	4.635	7.590	8.200	11.350	10.125	7.675	72.430
32	Newhall	6.500	4.670	3.580	2.585	2.450	4.095	4.480	6.740	8.225	9.798	8.675	8.350	70.148
33	Pacoima Dam	8.750	6.845	6.175	2.965	3.410	4.870	4.685	6.375	6.690	10.160	7.400	6.930	75.255
46	Big Tujunga	4.875	3.875	2.585	1.695	1.920	3.330	4.010	6.115	8.825	10.775	10.150	7.575	65.730
57	Opid's	2.290	1.128	0.595'	0.150'	0.225'	1.615'	2.545	5.130	6.825	8.400	8.090	4.430	41.453'
63	Santa Anita	5.870	4.740	4.035	2.065	2.485	3.720	3.310	5.000	5.060	7.680	6.340	6.060	56.365
70	Dalton	7.460	5.679	5.150	2.565	2.858	4.450	4.099	6.580	7.060	9.830	8.770	7.810	72.311
83	Big Pines Park	4.510*	2.680	N. R.	N. R.	N. R.	N. R.	N. R.	N. R.	6.655	9.795	10.900	9.930	7.880	Inc.
89	San Dimas Dam	4.645	4.265	2.635	1.345*	0.900*	1.700*	1.400*	2.575	4.475	7.000	7.750	7.800	46.490*
96	Puddingstone	6.330	4.415	3.855	2.026	2.605	3.690	3.795	4.450	4.790	7.300	8.300	6.940	58.496
223	Big Dalton	4.850	3.750	2.825	1.550	2.250	3.225	2.650	5.575	6.405	9.848	8.425	6.775	58.128
248	W. Saddle Pk.	4.485	2.480	1.760	1.495	1.915	2.865	3.590	4.710	5.650	6.590	5.910	5.330	46.780
261	Acton (near)	7.085	4.625	4.220	2.380	2.618	4.525	5.815	9.205	11.150	13.940	13.250	8.815	87.628
265	Puente Hills	3.905	2.457	1.637	0.777*	1.430*	2.875*	3.210*	4.580	4.417	6.553	5.962	4.933	42.736*
268	Torrance	5.020	1.525	1.015	0.910	1.340	3.684	5.340	6.875	6.545	8.625	7.945	6.605	55.429
292	Encino-F.C.	8.930	5.580*	4.280	2.080	3.155*	5.285	7.065	9.460	9.280	13.700	10.910	9.900	89.625
	" U.S.W.B.	6.456	3.948	3.264	1.836	2.808	4.500	7.140	7.542	8.110	10.830	9.230	8.080	73.744
	" Lake	6.384	3.912	3.120	1.848	2.304	3.948	6.504	6.962	7.190	9.810	8.470	7.630	68.082
334	San Gabriel #2													
	Land Pan	7.070	4.879	3.050	1.915	2.475	4.575	4.915	7.985	10.275	12.070	12.050	9.355	80.614
	Lake Pan	N. R.	N. R.	N. R.	0.620"	1.970	3.895	4.235	7.360	8.505	10.355	Inc.	N. R.	Inc.
321	Pine Canyon Pat.	5.005	2.675	1.615	1.345	2.045	4.050	5.235	8.330	9.415	10.140	10.220	7.700	67.775
347	Bald. Pk.-F. C.	4.665	2.925	2.300	1.120*	2.265*	3.455	4.525	6.586	7.039	9.210	8.368	7.007	59.465*
	" " USWB	4.88	2.90	2.39	1.50*	2.82	3.93	4.89	6.69	6.66	8.35	7.83	6.66	60.00 *
	" " 6 ft.	4.11	2.37	1.94	1.09*	2.16	3.06	3.90	5.68	5.96	7.76	6.88	5.80	50.71 *
	" " 2 ft.	4.65	2.97	2.37	1.23*	2.34	3.43	4.54*	6.54	6.99	9.13	8.21	6.96	59.36 *
425	S. G. Dam #1													
	Land Pan #1	6.705	5.210	4.085	1.965	2.335	3.745	3.635	6.090	6.190	9.875	8.910	7.340	66.085
	Land Pan #2	N. I.	N. I.	N. I.	N. I.	N. I.	N. I.	N. I.	N. I.	N. I.	4.515"	10.303	8.885	Inc.
	Lake Pan	N. R.	3.715	2.720	1.577	1.995	3.425	4.170	6.930	7.575	9.655	8.450	6.060	56.272"
441	Palmdale	5.260	2.365	2.035	1.800	2.915	4.450	5.455	7.530	8.875	9.250	8.320	6.470	64.725

NOTE: Big Pines Park Gage Emptied for Winter Period

LEGEND

" - Incomplete
* - Partly Estimated
' - Partly Frozen
N.R-No Record
N.I.No Information

TABLE II

MONTHLY EVAPORATION AT NEWHALL

STATION #32

	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Total	Mean
1931-32	6.300	4.145	2.825	3.515	2.490	5.287	7.110	6.295	9.010	11.425	10.305	8.280	76.987	6.415
1932-33	7.165	6.315	3.835	1.970*	3.485	4.120	5.400	7.455	8.145	10.385	10.320	7.270	75.865*	6.322
1933-34	6.365	5.745	2.305	3.600	2.440	5.345	6.630	8.355	5.905	9.840	9.600	8.375	74.505	6.209
1934-35	6.235	3.930	3.155	2.585	3.985	3.750	4.695	6.830	8.900	9.705	9.485	8.085	71.340	5.945
1935-36	7.005	4.030	3.765	3.705	2.630	4.900	4.950	8.555	9.370	10.135	10.265	8.455	77.765	6.480
1936-37	6.105	5.710	3.230	1.995	2.145	3.365	6.325	5.835	7.515	8.545	9.595	8.380	68.745	5.729
1937-38	6.795	3.885	3.520	3.545	1.750	3.580	5.160	6.990	6.565	9.325	9.185	8.180	68.480	5.707
1938-39	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	6.434
1939-40	6.500	4.670	3.580	2.585	2.450	4.095	4.480	6.740	8.225	9.798	8.675	8.350	70.148	5.846
Total	59.010	44.735	30.400	26.770	24.995	38.722	51.020	64.540	71.590	88.483	87.000	73.775	661.040	55.087
Mean	6.557	4.971	3.378	2.974	2.777	4.302	5.669	7.171	7.955	9.831	9.667	8.197	73.449	

MONTHLY EVAPORATION AT TORRANCE

STATION #268

	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Total	Mean
1931-32	5.170	2.320	1.220	1.160	1.470	4.240	6.160	6.660	6.965	7.645	7.600	5.580	56.190	4.683
1932-33	4.315	2.525	1.608	1.180	2.085	4.125	4.940	7.105	6.095	7.030	7.325	5.430	53.763	4.480
1933-34	4.335	2.715	.985	1.105	1.161	3.775	5.580	8.010	5.930	7.890	7.810	6.635	55.931	4.661
1934-35	4.575	1.715	1.125	.400	1.840	2.805	3.955	6.055	6.055	8.150	7.610	5.875	50.160	4.180
1935-36	4.895	2.145	1.320	1.720	1.765	3.910	4.485	7.170	7.640	8.375	8.000	6.860	58.285	4.857
1936-37	4.705	2.310	1.155	1.005	1.410	3.960	5.515	6.035	7.325	8.490	7.695	7.110	56.715	4.726
1937-38	5.150	2.075	1.801	1.650	1.416	4.497	5.375	6.835	7.020	8.545	8.240	7.410	60.013	5.001
1938-39	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	4.844
1939-40	5.020	1.525	1.015	.910	1.340	3.684	5.340	6.875	6.545	8.625	7.945	6.605	55.429	4.619
Total	43.045	20.360	11.474	10.190	14.877	34.156	46.565	61.150	60.920	73.000	69.830	59.045	504.612	42.051
Mean	4.783	2.262	1.275	1.132	1.653	3.795	5.174	6.794	6.769	8.111	7.759	6.561	56.068	

MONTHLY EVAPORATION AT WEST SADDLE PEAK

STATION #248

	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Total	Mean
1931-32	5.150	3.360	1.545	1.635	3.950	4.235	5.695	5.915	7.150	7.875	8.020	5.625	60.155	5.013
1932-33	5.050	4.535	2.576	6.165	3.285	4.130	4.505	5.950	6.300	7.905	7.560	5.320	63.281	5.273
1933-34	4.665	3.960	1.415	2.305	1.620	3.785	5.135	6.625	5.445	7.865	7.525	6.240	56.585	4.715
1934-35	4.410	2.485	1.510	.960	2.350	2.140	2.990	4.595	6.270	8.150	7.445	6.200	49.505	4.126
1935-36	4.635	2.725	2.180	2.090	1.125	3.345	3.560	5.950	7.090	7.810	7.575	6.190	54.275	4.523
1936-37	3.960	3.285	1.490	1.185	1.445	2.875	4.425	4.455	6.505	7.960	7.250	6.415	51.250	4.271
1937-38	4.855	2.680	2.665	2.720	1.585	2.690	3.595	5.175	4.980	6.940	7.200	5.950	51.035	4.253
1938-39	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	4.455
1939-40	4.485	2.480	1.760	1.495	1.915	2.865	3.590	4.710	5.650	6.590	5.910	5.330	46.780	3.898
Total	41.555	29.295	17.711	20.560	20.230	29.570	37.335	48.200	55.565	67.842	65.230	53.235	486.328	40.527
Mean	4.617	3.255	1.968	2.284	2.248	3.286	4.148	5.356	6.174	7.538	7.248	5.915	54.037	

MONTHLY EVAPORATION AT PINE CANYON

STATION #321

	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Total	Mean
1931-32	6.395	3.840	1.425	1.775	1.000*	6.700	8.700	9.350	11.515	16.300	15.527	12.425	94.952*	7.913
1932-33	8.670	6.510	2.960	1.725	3.475	5.670	6.346	7.760	9.825	12.790	12.250	10.325	88.306	7.359
1933-34	8.325	6.200	3.100	3.965	3.130	6.430	8.455	10.610	8.700	13.075	12.175	10.060	94.225	7.852
1934-35	6.513	3.627	3.187	2.804	3.375	3.713	4.854	7.195	14.075	12.450	10.515	9.845	82.153	6.846
1935-36	7.500	3.938	2.615	2.635	2.215	5.145	6.275	8.885	10.485	11.550	11.660	9.400	82.303	6.859
1936-37	6.440	4.725	2.545	1.360#	1.680	3.095	5.595	6.715	8.485	12.050	10.775	8.075	71.540#	5.962
1937-38	5.660	2.925	3.110	2.475	1.620	2.625	4.920	6.000	8.120	9.715	9.055	7.225	63.450	5.287
1938-39	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	5.519
1939-40	5.005	2.675	1.615	1.345	2.045	4.050	5.235	8.330	9.415	10.140	10.220	7.700	67.775	5.648
Total	59.038	38.225	23.117	19.794	21.060	40.983	55.425	71.555	89.980	108.355	101.902	81.505	710.939	59.245
Mean	6.560	4.247	2.569	2.199	2.340	4.554	6.158	7.951	9.998	12.039	11.322	9.056	78.993	

MONTHLY EVAPORATION AT PUENTE HILLS

STATION #265

	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Total	Mean
1931-32	4.720	3.220	1.845	1.155	.805	2.530	5.580	4.875	5.785	6.765	6.900	5.340	49.520	4.127
1932-33	4.505	4.900	2.315	2.255	3.055	3.200	3.730	4.950	5.530	6.500	6.295	5.210	52.445	4.370
1933-34	4.500	4.550	2.380	2.590	1.605	2.695	4.670	6.365	4.455	6.745	6.595	6.460	53.610	4.468
1934-35	3.870	2.110	1.525	1.465	1.835	1.600	2.595	4.085	5.190	6.855	6.925	5.255	43.310	3.609
1935-36	4.700	3.080	2.800	2.505	1.460	2.700	3.420	5.640	5.940	6.880	7.035	5.740	51.900	4.325
1936-37	4.155	4.285	2.245	1.615	1.260	2.300	3.410	4.100	5.530	6.420	6.755	6.125	48.200	4.017
1937-38	4.300	2.560	2.970	2.850	1.600	2.440	3.470	4.240	5.035	6.445	6.805	6.365	49.080	4.090
1938-39	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*	4.199
1939-40	3.905	2.457	1.637	.777	1.430	2.875	3.210	4.580	4.417	6.553	5.962	4.933	42.736	3.561
Total	39.230	31.642	20.347	16.957	15.572	23.093	30.085	38.835	47.719	59.408	59.125	50.775	432.788	36.766
Mean	4.359	3.516	2.261	1.884	1.730	2.566	3.343	4.315	5.302	6.601	6.569+	5.642	48.088	

MONTHLY EVAPORATION AT BALDWIN PARK

STATION #347

	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Total	Mean
1932-33	5.630	4.805	2.442	2.213	3.145	4.880	5.825	7.750	9.085	10.100	9.410	6.593	71.878	5.990
1933-34	4.987	4.050	1.735	1.715	1.625	4.330	6.355	9.060	6.805	9.785	8.925	7.975	67.347	5.612
1934-35	4.250	2.650	2.190	1.770	2.710	3.090	4.390	6.375	8.520	10.190	9.635	7.345	63.115	5.260
1935-36	6.125	3.425	2.450	2.325	2.075	3.675	4.705	8.490	9.760	10.290	9.565	7.560	70.445	5.871
1936-37	5.110	4.045	1.957	1.410	2.060	3.845	5.820	6.035	8.320	10.170	10.210	8.210	67.192	5.599
1937-38	5.093	2.975	2.330	2.495	1.950	3.385	4.705	6.740	7.320	8.985	8.865	7.425	62.268	5.189
1938-39	5.200	4.065	2.425	1.875	3.125	2.940	4.610	6.495	8.570	9.065	8.455	7.135	63.960	5.330
1939-40	4.665	2.925	2.300	1.120	2.265	3.455	4.525	6.586	7.039	9.210	8.368	7.007	59.465	4.955
Total	41.060	28.940	17.829	14.923	18.955	29.600	40.935	57.531	65.419	77.795	73.433	59.250	525.670	43.806
Mean	5.133	3.618	2.229	1.865	2.369	3.700	5.117	7.191	8.177	9.725	9.179	7.406	65.709	

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	#
No record	N.R.

Station numbers are identical with numbers of rainfall stations at which evaporation data are taken.

DAM OPERATION RECORDS

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
Hydraulic Division

DAM OPERATION

Season 1939-40

Foreword:

Sixteen dams and sixteen debris basins were operated and maintained by the Flood Control District during the 1939-40 season. These structures have been built over a period of 23 years. 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-A.F. at Spillway	Latest Storage-A.F. at Spillway
1	Pacoima	Feb. 1929	27.8	6060.	5004.3
**2	Sunset Canyon	Nov. 1929	0.44	9.	5.±
3	Big Tujunga #1	July 1931	81.4	6240.	4568.0
4	Devil's Gate	June 1920	30.6	4554.	2966.8
5	Eaton Wash	Feb. 1937	9.48	956.3	699.2
**6	Sierra Madre	Feb. 1928	2.39	55.	34.4
7	Big Santa Anita	Mar. 1927	10.8	1376.	710.4
8	Sawpit	June 1927	3.27	476.	319.7
9	San Gabriel No.1	July 1939	°161.7	53334.	47191.0
10	San Gabriel No.2	Apr. 1934	40.4	12298.	11028.7
11	Big Dalton	Aug. 1929	4.49	1290.	968.7
12	San Dimas	Sept.1922	16.2	1496.	1189.3
***13	Puddingstone Div.	July 1928	2.64	147.5	76.0
14	Puddingstone	Jan. 1928	°° 13.7	17398.	17398.0
15	Live Oak	Nov. 1922	2.30	250.	227.5
16	Thompson Creek	Mar. 1928	3.70	812.	812.0

Total drainage area 411.3 square miles controlled by 93199 acre feet of storage capacity.

* Hansen Dam on Tujunga Wash was completed by the U.S.E.D. near the end of this season but had no material regulating effect on flows during the winter storm period.

** Debris Dams.

*** For diversion of flow only.

° Exclusive of San Gabriel Dam No. 2.

°° Exclusive of Live Oak and San Dimas Dams.

NOTE: Storage capacities are corrected for debris encroachment or sluicing whenever surveys or other information is made available. Drainage areas are corrected whenever the United States Geological Survey makes new topography available.

Debris Basins Owned and Operated

by

Los Angeles County Flood Control District

Debris Basin	Date of Completion	Drainage Area Sq.Mi.	Basic Capacity Cubic Yards
1 Dunsmuir	10-20-36	0.84	122,000
2 Shields	1-26-37	0.27	42,000
3 Eagle-Goss	10-20-36	0.61	64,000
4 Hall-Beckley	2-21-35	0.84	74,000
5 Pickens	2-19-35	1.84	116,000
6 Snover	3- 9-37	0.23	32,000
7 Hay	10-20-36	0.20	35,000
8 Verdugo	3-9-35	15.24	152,000
9 Brand	11-12-35	1.03	72,500
10 Nichols	11-23-37	0.94	32,000
11 Lincoln	1-17-36	0.50	35,000
12 Fern	12- 5-35	0.50	32,000
13 West Ravine	12-10-35	0.25	47,000
14 Fair Oaks	12-29-35	0.21	28,000
15 Los Flores	4-15-36	0.42	48,000
16 Stough	Under Construction	1.65	109,000

Purpose and Operation:

The operation of Flood Control dams in Los Angeles County is an exceptionally difficult task in that they serve two opposed purposes; the primary purpose being flood control and the secondary purpose being conservation. Obviously, flood control demands that a maximum amount of storage capacity be held in reserve thereby precluding any appreciable conservation storage during the storm season.

The District has been able to improve it's facilities to regulate flood flows by gradually establishing a comprehensive system of telephone and radio communication between the dams, rainfall stations and the office. This, together with more reliable weather forecasts has made possible better correlation of reservoir operation with existing meteorological conditions.

Due to inadequate and unimproved channels in the valley reaches below the dams, proper flood regulation for moderate as well as important storms is necessary in order to avoid damage below the mountain drainage areas. Sufficient storage is kept in reserve during the winter season to enable the District to store or detain peak flood flows until valley runoff has receded sufficiently to allow the discharging of the storm waters from the dams. If meteorological conditions permit, it is sometimes possible to temporarily store such storm water as can be released immediately after cessation of a storm in such quantities as will percolate in the existing channels and spreading grounds downstream. The storage of all excessive runoff

is usually commenced when the threat of the winter flood season is passed. Water stored in this manner is conserved for summer use or allowed to percolate in the natural stream channels and spreading grounds.

During and following the March 2, 1938 flood, large quantities of debris were deposited in the District's reservoirs. Some storage lost in this manner was reclaimed by cluicing through lower outlets at the dams. Several reservoirs were sluiced during the current season with material success. In some cases, actual storage was reclaimed while in others, debris deposited in the canyon reaches just above the reservoir high water line was moved through the reservoir without decreasing the storage. Quantities of material sluiced from the reservoirs are summarized in the following table.

Sluicing at Los Angeles County

Flood Control District's Dams During Season

of 1939-40

Dam	Yardage Removed	Estimated Cost per Cu. Yd.
Devil's Gate	7,663	$ 0.220 *
San Gabriel No. 2	67,921	0.026
Santa Anita	235,385	0.008
Tujunga Dam	104,705	0.010

* Nozzle sluicing with outside water supply.

NOTE: Values shown include only those instances where actual funds were set up for sluicing. Other sluicing was accomplished with routine releases.

Records:

The daily storage and flow records at each dam are summarized on the Dam Operation Record sheets. These sheets show the following:

1. Reservoir water surface elevations - show the water surface elevation above sea level at midnight of each day. These were determined from recorder graphs or interpolated from actual readings.

2. Storages in acre feet - based on actual topographic surveys. Topography is redetermined and the storages are corrected as frequently as is practical.

3. Inflows in cubic feet per second - show the average daily flow into the reservoir. These are usually determined from storage change and known outflow. When outflow records are unreliable, the inflows may be determined from gaging station records or interpolated between measurements.

4. Outflows in cubic feet per second - show the mean daily valve discharge from the reservoirs. These are determined from gaging station records, known valve openings or from storage change and known inflow.

5. In some instances, total monthly and yearly evaporation and percolation losses have been computed as indicated on the Operation Records. Discrepancies between outflow and storage losses at Devil's Gate, Eaton, Puddingstone, Puddingstone Diversion, Thompson Creek and Live Oak Dams were attributed to percolation and for evaporation losses and shown as total monthly and yearly losses. Total month-evaporation losses are shown for San Gabriel Dam No. 1 and were determined from readings taken on a floating evaporation pan. In those cases where no allowances were made for evaporation, the amounts are necessarily included in the flow values.

Accuracy of the flow records computed from storage records is obviously dependent on the accuracy of the storage tables. Percentage of error is in direct proportion to the error in water surface areas through the range at which the flows were computed.

Summary:

With the seasons rainfall 82% of normal, the yearly runoff into the dams for the period was comparatively moderate. Few rainfall intensities of sufficient magnitude and duration to tax reservoir capacities occurred. Practically the entire 85,420 Ac. Ft. of inflow was conserved through storage or channel percolation.

Debris encroachment during the season was apparently negligible as would be expected with moderate runoff. Available survey data indicates that several hundred acre feet of storage was reclaimed. Debris depositions in the Debris Basins was correspondingly negligible.

A summary of yearly storage and flow records at each dam follows:

Runoff Summary for the District's Dams

Dam	Inflow Ac.Ft.	Outflow Ac. Ft.	Storage in Ac.Ft. Maximum For Year	At Mdt. 9-30-39	At Mdt. 9-30-40
1. Pacoima	3209.3	3133.4	1697.8	445.2	521.0
2. Big Tujunga	7057.6	7196.9	2276.5	799.6	716.8
3. Devil's Gate	744.6	141.9	959.3	488.2	0
4. Eaton Wash	390.1	95.8	148.6	62.0	0
5. Big Santa Anita	2743.2	2664.0	573.2	265.3	312.4
6. Sawpit	264.2	307.6	62.5	58.1	14.6
7. San Gabriel No. 2	9633.6	9568.7	1541.3	20.0	2.7
8. San Gabriel No. 1	58553.5	63385.7	12146.	5793.	373.
9. Big Dalton	232.3	236.5	230.3	8.8	4.5

Runoff Summary for the District's Dams (Contd.)

Dam	Inflow Ac.Ft.	Outflow Ac. Ft.	Storage in Ac.Ft. Maximum For Year	At. Mdt. 9-30-39	At Mdt. 9-30-40
10. San Dimas	1532.0	1599.5	777.8	141.0	68.2
11. Puddingstone Div.	349.7	155.3	27.2	0	0
12. Puddingstone	645.8	2523.9	4756.2	4756.2	2108.7
13. Live Oak	16.1	1.4	16.0	0	0
14. Thompson Creek	49.2	0	19.8	0	0
Total	85421.2	91010.6	25232.5	12837.4	4121.9

NOTE: Outflow includes valve release only. All flows based on storage changes are subject to error due to some undetermined evaporation or percolation losses.

Responsibility:

Preparation of the operation records was under the direction of H. A. vander Goot and the supervision of W. J. Wood.

Reservoir operation was under the direct supervision of Finley B. Laverty, Chief Hydraulic Engineer. Dam maintenance was under the supervision of R. D. Reeve, Engineer of Maintenance and Operation.

DAM OPERATION RECORDS

PACOIMA

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

Storages Based on Composite Map 64T11 and Debris Determinations Following March 2, 1938.

Daily Gage Height in feet and Operation Record of PACOIMA Dam

In Pacoima Canyon for the Year Ending September 30, 19 40

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	1813.4	4410	0.2	2.2	1802.7	2996	0	2.6	1792.5	1847	0.1	1.2	1789.9	1585	0.5	0.6	1
2	1813.1	4367	0.2	2.6	1802.3	2948	0	2.6	1792.3	1826	0.1	1.3	1789.9	1585	0.4	0.6	2
3	1812.9	4339	0.2	1.4	1801.9	2899	0	2.6	1792.2	1816	0.1	0.6	1789.9	1585	0.4	0.6	3
4	1812.8	4325	0.2	1.3	1801.5	2852	0	2.5	1792.1	1805	0.1	0.6	1790.1	1605	1.6	0.6	4
5	1812.6	4296	0.1	1.3	1801.1	2804	0	2.5	1792.0	1795	0.2	0.7	1790.2	1615	1.1	0.6	5
6	1812.4	4268	0.7	2.1	1800.7	2757	0	2.5	1791.9	1785	0.2	0.7	1790.2	1615	0.6	0.6	6
7	1812.1	4225	0.4	2.5	1800.3	2710	0	2.5	1791.8	1775	0.2	0.7	1790.8	1675	3.6	0.6	7
8	1811.7	4170	0	2.5	1799.9	2662	0	2.5	1791.7	1765	0.2	0.7	1815.8	4758	156.2	0.7	8
9	1811.3	4114	0	2.5	1799.5	2616	0	2.5	1791.6	1755	0.2	0.7	1821.2	5585	42.4	0.7	9
10	1811.0	4073	0	2.4	1799.0	2559	0	2.5	1791.5	1745	0.2	0.7	1824.5	6118	27.5	0.7	10
11	1810.6	4018	0	2.4	1798.5	2501	0	2.5	1791.4	1735	0.2	0.7	1827.3	6586	24.4	0.7	11
12	1810.3	3976	0	2.5	1798.1	2455	0	2.5	1791.3	1725	0.2	0.6	1830.1	7073	25.2	0.7	12
13	1809.9	3922	0	2.5	1797.6	2398	0	2.5	1791.2	1715	0.2	0.6	1831.9	7393	16.8	0.7	13
14	1809.6	3881	0	2.5	1797.1	2342	0	2.5	1791.1	1705	0.2	0.6	1833.2	7629	12.6	0.7	14
15	1809.2	3828	0	2.5	1796.7	2297	0	2.5	1791.0	1695	0.2	0.6	1834.2	7812	9.9	0.7	15
16	1808.9	3788	0	2.4	1796.2	2241	0	2.5	1791.0	1695	0.2	0.6	1835.0	7961	8.3	0.7	16
17	1808.5	3734	0	2.4	1795.8	2197	0	2.5	1790.9	1685	0.2	0.6	1835.7	8091	7.2	0.7	17
18	1808.1	3680	0	2.4	1795.6	2176	0.1	1.0	1790.8	1675	0.2	0.6	1836.3	8204	6.5	0.8	18
19	1807.8	3641	0	2.5	1795.2	2133	0.1	2.2	1790.8	1675	0.2	0.6	1836.9	8318	6.1	0.8	19
20	1807.4	3589	0	2.5	1794.8	2089	0.1	2.4	1790.7	1665	0.2	0.6	1837.4	8413	6.0	0.8	20
21	1807.0	3537	0	2.5	1794.5	2057	0.1	1.3	1790.6	1655	0.2	0.6	1837.8	8489	4.7	0.8	21
22	1806.6	3485	0	2.5	1794.3	2035	0.1	1.3	1790.5	1645	0.2	0.6	1838.2	8566	4.7	0.8	22
23	1806.2	3433	0	2.5	1794.1	2014	0.1	1.2	1790.6	1655	1.1	0.6	1839.0	8722	8.6	0.8	23
24	1805.9	3394	0	2.5	1793.9	1993	0.1	1.2	1790.5	1645	0.3	0.6	1839.7	8858	7.7	0.8	24
25	1805.5	3344	0	2.5	1793.7	1972	0.1	1.2	1790.4	1635	0.2	0.6	1840.2	8956	5.7	0.8	25
26	1805.1	3294	0	2.5	1793.5	1951	0.1	1.2	1790.3	1625	0.2	0.6	1840.6	9035	4.8	0.8	26
27	1804.7	3243	0	2.5	1793.3	1930	0.1	1.2	1790.2	1615	0.2	0.6	1841.0	9115	4.4	0.8	27
28	1804.3	3193	0	2.5	1793.1	1909	0.1	1.2	1790.2	1615	0.2	0.6	1841.3	9175	4.3	0.8	28
29	1803.9	3143	0	2.5	1792.9	1889	0.1	1.2	1790.1	1605	0.2	0.6	1841.4	9195	4.1	3.0	29
30	1803.5	3094	0	2.5	1792.7	1868	0.1	1.2	1790.0	1595	0.2	0.6	1841.4	9195	4.1	4.2	30
31	1803.1	3045	0	2.5					1790.0	1595	0.2	0.6	1841.4	9195	3.9	3.9	31
TOTAL			2.0	72.9			1.3	60.6			6.8	20.6			414.3	311.1	
Inf. Ac. Ft.			4.0				2.6				13.5				821.8	841.9	
Outf. Ac. Ft.				144.6				120.2				40.9			61.7	367.4	
Maximum Mean Daily Inflow			0.7				0.1				1.1				156.2	156.2	
Minimum Mean Daily Inflow			0				0				0.1				0.4	0	
Storage Change			-140.7				-117.7				-27.3				+760.0	+474.3	

REMARKS: Outflows as indicated by valve changes and Sta. F118-R. Mean for period. ½ Year

Max. W. S. Elev.	1873.9	feet on 5-6 & 7-40	Storage 1697.8	Acre Feet	RECORDS COLLECTED BY		COMPUTATIONS	Date
Min. W. S. Elev.	1789.85	feet on 1-3 & 4-40	Storage 158.0	Acre Feet	R.E.Waddicor & E.K.De Vore	Dam Tender	Gage Hts. copied	HAV
Max. Peak Inf.	927.5	C.F.S. from 2:30 a.m. on 1-8-40	to 3:00 a.m. on 1-8-40		Willis T. Lind	Hydrographer	Storage applied	HAV
Max. Peak Outf. ***	169.	C.F.S. from at 7:40a.m. on 2-4-40	to	on	John W. Luce	Hydrographer	Inf. & Outf. computed	HAV
							Checked CCG	8-7-40

Gage Height and Storage as of Midnight on day shown.

*** Instantaneous Peak at Sta. F118-BR.

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

Daily Gage Height in feet and Operation Record of PACOIMA Dam

In Pacoima Canyon for the Year Ending September 30, 19 40

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	1844.6	9846	36.3	3.5	1856.3	12433	18.6	4.5	1858.7	13007	17.5	0.6	1872.7	16642	4.3	* 0.1	1
2	1849.3	10845	53.2	2.8	1849.9	10977.5	1 17.9	9.4	1859.6	13225	12.2	1.2	1873.0	16726	4.4	* 0.1	2
3	1853.5	11783	49.8	2.5	1840.7	9055	1 17.2	114.0	1860.3	13396	9.8	1.1	1873.3	16810	4.3	* 0.1	3
4	1846.5	10243	41.3	119.0	1838.4	8605	1 16.5	39.2	1860.9	13545	8.6	1.1	1873.5	16866	3.7	* 0.1	4
5	1836.0	8147	30.4	136.0	1839.3	8780	15.9	7.1	1861.5	13693	8.5	1.1	1873.8	16950	3.6	* 0.1	5
6	1835.9	8128	30.0	31.0	1840.0	8916	13.5	6.6	1862.1	13842	7.8 *	0.1	1873.9	16978	3.1	1.7	6
7	1837.7	8470	23.3	6.1	1840.7	9055	13.1	6.1	1862.7	13994	7.6	0.3	1873.8	16950	3.1	5.3	7
8	1839.2	8760	20.0	5.3	1841.4	9195	13.1	6.0	1863.1	14095	7.0	1.4	1873.7	16922	3.0	3.8	8
9	1840.3	8976	16.0	5.1	1842.0	9314	12.0	6.0	1863.6	14221	6.9	1.1	1873.7	16922	3.0	2.9	9
10	1841.3	9175	15.0	5.0	1842.6	9436	11.9	5.8	1864.0	14322	5.2 *	0.1	1873.7	16922	3.0	2.9	10
11	1842.2	9355	14.1	5.0	1843.2	9558	1 10.9	5.8	1864.4	14425	4.7 *	0.1	1873.6	16894	2.0	2.9	11
12	1842.8	9477	11.5	5.4	1843.9	9701	1 10.8	2.5	1864.8	14528	4.7 *	0.1	1873.6	16894	2.0	2.9	12
13	1843.3	9579	11.1	5.9	1844.8	9887	9.9	0.5	1865.1	14605	4.6 *	0.1	1873.5	16866	2.0	3.0	13
14	1844.1	9742	13.9	5.7	1845.6	10054	8.9	0.5	1865.4	14683	4.6 *	0.1	1873.5	16866	2.0	3.0	14
15	1844.5	9825	9.8	5.6	1846.4	10222	8.9	0.5	1865.8	14786	5.3 *	0.1	1873.4	16838	1.9	3.0	15
16	1844.9	9908	9.6	5.5	1847.1	10371	8.1	0.5	1866.1	14863	4.0 *	0.1	1873.3	16810	1.9	3.0	16
17	1845.2	9971	8.7	5.5	1847.8	10520	8.0	0.5	1866.4	14942	4.1 *	0.1	1873.2	16782	1.9	3.0	17
18	1845.5	10033	8.4	5.3	1848.4	10649	7.6	0.5	1866.7	15021	4.1 *	0.1	1866.4	14942	1 1.9	94.7	18
19	1845.7	10075	7.1	4.9	1849.1	10801	7.5	0.5	1867.0	15100	4.1 *	0.1	1857.6	12742	1 1.9	112.8	19
20	1845.9	10116	6.8	4.8	1849.7	10932	7.1	0.5	1867.3	15176	4.0 *	0.1	1856.3	12433	1 1.9	17.5	20
21	1846.1	10158	7.0	4.8	1850.3	11064	7.1	0.4	1867.5	15231	3.9 *	0.1	1856.3	12433	1 1.9	1.9	21
22	1846.4	10222	8.0	4.8	1850.8	11175	6.6	0.4	1867.8	15310	3.9 *	0.1	1856.5	12481	1.9	0.1	22
23	1846.6	10265	6.9	4.8	1851.4	11309	6.5	0.4	1868.1	15389	3.9 *	0.1	1856.6	12505	1.9	0.1	23
24	1846.8	10307	7.0	4.8	1851.9	11420	6.0	0.4	1868.4	15469	3.8 *	0.1	1856.8	12552	1.9	0.1	24
25	1846.5	10671	23.1	4.8	1852.3	11510	5.0	0.4	1868.7	15550	3.8 *	0.1	1856.9	12576	1.9	0.1	25
26	1851.0	11220	32.4	4.7	1852.9	11647	7.2	0.3	1870.3	15980	21.7 *	0.1	1857.0	12600	1.8	1.0	26
27	1852.2	11488	18.2	4.7	1853.5	11783	6.9 *	0.1	1871.1	16199	11.2 *	0.1	1856.9	12576	1.8	2.9	27
28	1853.4	11761	18.4	4.6	1854.0	11897	5.9 *	0.1	1871.6	16336	7.0 *	0.1	1856.8	12552	1.8	2.9	28
29	1855.1	12153	24.3	4.6	1854.5	12013	5.9 *	0.1	1872.0	16446	5.7 *	0.1	1856.7	12528	1.8	2.9	29
30					1855.0	12130	6.0 *	0.1	1872.4	16558	5.7 *	0.1	1856.6	12505	1.8	2.9	30
31					1857.3	12671	27.4 *	0.1					1856.5	12481	1.8	2.9	31
TOTAL			561.6	412.5			327.9	301.8			206.1	10.1			75.2	280.7	
Inf. Ac. Ft.			1113.9				650.4				408.7				149.2	3164.1	
Outf. Ac. Ft.				818.2				598.6				20.0			556.8	2361.0	
Maximum Mean Daily Inflow			53.2				27.4				21.7				4.4	156.2	
Minimum Mean Daily Inflow			6.8				5.0				3.8				1.8	0	
Storage Change			+295.8				+51.8				+388.7				-407.7	+802.9	

REMARKS: Mean for period. Outflows as indicated by valve changes and Sta. F118-R. ** Computed from storage change. ½ Year

Max. W. S. Elev.	1873.9	feet on 5-6 & 7-40	Storage 1697.8	Acre Feet	RECORDS COLLECTED BY		COMPUTATIONS	Date
Min. W. S. Elev.	1789.85	feet on 1-3 & 4-40	Storage 158.0	Acre Feet	R.E.Waddicor & E.K.De Vore	Dam Tender	Gage Hts. copied	HAV
Max. Peak Inf.	927.5	C.F.S. from 2:30 a.m. on 1-8-40	to 3:00 a.m. on	1-8-40	W. T. Lind	Hydrographer	Storage applied	HAV
Max. Peak Outf. ***	169.	C.F.S. from 7:40 a.m. on 2-4-40	to	on	John W. Luce	Hydrographer	Inf. & Outf. computed	HAV
							Checked CCG	10-14-40

Gage Height and Storage as of Midnight on day shown.

* Indicates gate leakage. *** Instantaneous Peak at Sta. F118-BR.

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 PACOIMA Dam

In / On Pacoima Canyon for the Year Ending September 30, 1940

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	1856.4	1245.7	1.6	2.8	1851.3	1128.6	0.1	2.1	1844.6	984.6	0.05	3.3	1834.9	794.2	0	3.1	1
2	1856.3	1243.3	1.4	2.9	1851.3	1128.6	0.1	* 0.1	1844.3	978.3	0.05	3.3	1834.5	786.8	0	3.1	2
3	1856.1	1238.6	1.3	2.9	1851.3	1128.6	0.1	* 0.1	1843.9	970.1	0.05	3.3	1834.2	781.2	0	3.1	3
4	1856.0	1236.2	1.3	2.9	1851.3	1128.6	0.1	* 0.1	1843.6	964.0	0.05	3.3	1833.9	775.7	0	2.8	4
5	1855.9	1233.9	1.3	2.9	1851.3	1128.6	0.1	* 0.1	1843.3	957.9	0.05	3.3	1833.6	770.2	0	3.0	5
6	1855.7	1229.2	1.3	2.9	1851.3	1128.6	0.1	* 0.1	1843.0	951.8	0.05	3.3	1833.3	764.8	0	2.9	6
7	1855.6	1226.9	1.3	2.9	1851.3	1128.6	0.1	* 0.1	1842.7	945.6	0.05	3.3	1833.0	759.3	0	2.8	7
8	1855.5	1224.6	1.0	2.9	1851.2	1126.4	0.1	0.6	1842.4	939.5	0.05	3.3	1832.7	753.8	0	2.8	8
9	1855.3	1219.9	0.9	2.9	1851.0	1122.0	0.1	2.7	1842.0	931.4	0.05	3.3	1832.4	748.4	0	2.6	9
10	1855.1	1215.3	0.9	2.8	1850.7	1115.3	0.1	2.8	1841.7	925.4	0.05	3.3	1832.1	742.9	0	2.5	10
11	1855.0	1213.0	0.8	2.8	1850.5	1110.8	0.1	2.8	1841.4	919.5	0	3.3	1831.8	737.5	0	2.5	11
12	1854.8	1208.3	0.7	2.8	1850.2	1104.2	0.1	2.8	1841.1	913.5	0	3.3	1831.6	734.0	0	2.5	12
13	1854.6	1203.7	0.7	2.8	1850.0	1099.7	0.1	2.7	1840.8	907.5	0	3.3	1831.3	728.6	0	2.5	13
14	1854.4	1199.0	0.7	2.8	1849.8	1095.4	0.1	2.8	1840.4	899.6	0	3.3	1831.0	723.3	0	2.6	14
15	1854.2	1194.4	0.5	2.8	1849.6	1091.0	0.1	2.8	1840.1	893.6	0	3.3	1830.7	718.0	0	2.7	15
16	1854.0	1189.7	0.4	2.8	1849.3	1084.5	0.1	2.7	1839.7	885.8	0	3.5	1830.4	712.6	0	2.5	16
17	1853.8	1185.2	0.4	2.8	1849.1	1080.1	0.1	2.7	1839.4	879.9	0	3.9	1830.1	707.3	0	2.5	17
18	1853.5	1178.3	0.3	2.8	1848.8	1073.6	0.1	2.7	1839.1	874.1	0	3.0	1829.9	703.8	0	2.4	18
19	1853.3	1173.8	0.3	2.6	1848.5	1067.1	0.1	3.1	1838.9	870.2	0	1.9	1829.6	698.5	0	2.5	19
20	1853.1	1169.2	0.3	2.8	1848.2	1060.6	0.1	3.5	1838.6	864.4	0	2.3	1829.0	688.1	0	4.9	20
21	1852.9	1164.7	0.2	2.8	1847.9	1054.1	0.1 **	3.4	1838.3	858.5	0	2.9	1827.3	658.8	0	** 14.8	21
22	1852.8	1162.4	0.2	1.4	1847.6	1047.7	0.1	3.4	1838.0	852.7	0	2.8	1825.6	630.1	0	** 14.5	22
23	1852.8	1162.4	0.2	* 0.1	1847.3	1041.3	0.1	3.3	1837.7	847.0	0	3.1	1824.9	618.4	0	** 5.9	23
24	1852.8	1162.4	0.2	0.4	1847.0	1035.0	0.1	3.3	1837.4	841.3	0	3.1	1824.6	613.5	0	** 2.4	24
25	1852.6	1157.9	0.2	2.8	1846.7	1028.6	0.1	3.3	1837.0	833.7	0	3.0	1824.3	608.5	0	** 2.5	25
26	1852.4	1153.3	0.2	2.8	1846.4	1022.2	0.1 **	3.3	1836.7	828.0	0	3.0	1824.0	603.5	0	** 2.6	26
27	1852.1	1146.5	0.2	2.8	1846.1	1015.8	0.1	3.3	1836.4	822.3	0	3.0	1823.3	592.2	0	** 5.7	27
28	1851.9	1142.0	0.2	2.6	1845.8	1009.5	0.1	3.3	1836.1	816.6	0	2.8	1821.6	564.8	0	** 13.8	28
29	1851.7	1137.5	0.1	2.8	1845.5	1003.3	0.1	3.3	1835.8	811.0	0	2.9	1819.6	533.3	0	** 15.9	29
30	1851.4	1130.9	0.1	2.8	1845.2	997.1	0.1	3.2	1835.5	805.4	0	3.0	1818.6	521.0	0	** 6.2	30
31					1844.9	990.8	0.1	3.2	1835.2	799.8	0	3.1					31
TOTAL			19.2	78.3			3.1	73.7			0.5	96.8			0	140.6	
Inf. Ac. Ft.			381				61				10				0	32093	
Outf. Ac. Ft.				1553				1462				1920			2789	31334	
Maximum Mean Daily Inflow			1.6				0.1				0.05				0	156.2	
Minimum Mean Daily Inflow			0.1				0.1				0				0	0	
Storage Change			-1172				-1401				-1910				-278.8	+75.8	

REMARKS: Outflows as indicated by valve changes and Sta. 118B. * Indicates gate leakage, etc. 1 - Interpolated. ½ Year

Max. W. S. Elev.	1873.9	feet on 5-6 & 7-40	Storage 1697.8	Acre Feet		
Min. W. S. Elev.	1789.85	feet on 1-3 & 4-40	Storage 158.0	Acre Feet		
Max. Peak Inf.	927.5	C.F.S. from 2:30 a.m. on 1-8-40	to 3:00 a.m. on 1-8-40			
Max. Peak Outf.***	169.	C.F.S. from at 7:40a.m. on 2-4-40	to	on		

RECORDS COLLECTED BY

R.E.Waddicor & E.K.De Vore	Dam Tender	
Willis T. Lind	Hydrographer	
John W. Luce	Hydrographer	

COMPUTATIONS — Date

Gage Hts. copied	REL & HAV
Storage applied	REL & HAV
Inf. & Outf. computed	HAV
Checked CCG	8-7-40

Gage Heights and Storage as of Midnight on date shown.

{ Mean for period. *** Instantaneous Peak at Sta. F118-B.

BIG TUJUNGA

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

Storages based on L.A.C.F.C.D. Survey of February, 1940. (Table No. IV)

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Daily Gage Height in feet and Operation Record of BIG TUJUNGA Dam No. 1

In / On Big Tujunga Canyon for the Year Ending September 30, 1940

Continuous Water Stage Recorder Au

Drainage Area 81.4 Square Miles. Capacity of Reservoir 4568.0 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	2203.2	*7595	1 7.4	5.6	2163.3	483	2.8	0.4	2131.6	247.1	4.2	0.4	2196.3	508.4	5.3	0.5	1
2	2199.5	*6666	1 7.2	5.4	2163.8	514	2.8	0.4	2132.1	254.8	4.3	0.4	2196.8	518.5	5.3	0.5	2
3	2195.4	*5774	1 7.0	5.2	2164.5	560	2.7	0.5	2132.6	262.6	4.4	0.5	2197.3	528.8	5.3	0.5	3
4	2191.4	*4917	1 6.8	5.0	2165.3	614	2.7	0.5	2133.1	270.4	4.4	0.5	2198.0	543.2	7.8	0.6	4
5	2187.0	*4096	1 6.6	4.8	2165.9	657	2.7	0.6	2133.5	276.8	4.4	0.5	2198.5	553.7	5.6	0.5	5
6	2184.9	*3648	1 6.4	2.9	2166.6	710	2.7	0.8	2134.0	284.6	4.4	0.5	2199.1	566.3	6.9	0.5	6
7	2181.2	*3017	1 6.2	3.8	2167.2	757	2.7	0.6	2134.5	293.0	4.3	0.6	2200.7	600.8	17.9	** 0.5	7
8	2178.2	*1946	1 6.0	6.0	2168.1	832	4.4	0.6	2134.9	299.6	4.3	0.6	2213.6	914.2	337.0	17.9	8
9	2170.2	*1267	1 5.8	4.0	2169.0	911	4.6	0.6	2135.4	307.8	4.3	0.6	2213.7	916.9	39.3	3.8	9
10	2166.8	*962	1 5.6	2.1	2169.8	985	4.3	0.6	2135.9	316.1	4.6	0.6	2214.4	936.0	26.5	16.8	10
11	2162.0	* 395	1 5.4	3.4	2170.6	1063	4.3	0.6	2136.4	324.6	4.6	0.6	2215.1	955.2	26.4	16.8	11
12		* 0.2	1 5.2	2.5	2171.3	1135	4.3	0.6	2136.8	331.4	4.6	0.6	2215.7	971.9	26.6	18.1	12
13		0	1 5.0	5.1	2171.9	1198	4.2	0.6	2137.3	340.0	4.6	0.5	2215.8	974.7	20.6	19.2	13
14	DRY	0	4.8	4.6	2172.6	1275	4.2	0.6	2137.7	347.0	4.6	0.5	2215.5	966.4	15.0	19.2	14
15		0	4.5	4.5	2173.2	1342	4.2	0.6	2138.2	355.7	4.5	0.5	2215.3	960.8	14.0	16.8	15
16		0	4.5	4.5	2173.8	1411	3.9	0.6	2138.6	362.8	4.2	0.5	2215.1	955.2	13.3	16.2	16
17		0	4.5	4.5	2174.4	1482	3.9	0.5	2139.1	371.6	4.2	0.5	2214.9	949.7	12.9	15.6	17
18		0	4.3	4.3	2174.9	1543	3.9	0.5	2139.5	378.8	4.2	0.5	2214.6	941.4	10.8	15.0	18
19		0	4.3	4.3	2175.4	1606	3.8	0.6	2139.9	386.0	4.0	0.4	2214.5	938.7	11.0	12.4	19
20		0	4.3	4.3	2175.9	1669	3.8	0.6	2140.2	391.4	4.0	0.5	2214.5	938.7	10.2	10.2	20
21		0	4.3	4.3	2176.5	1747	4.1	0.6	2140.6	398.7	4.0	0.5	2214.5	938.7	11.6	11.6	21
22		0	4.5	4.5	2177.0	1812	4.1	0.6	2141.0	406.0	4.0	0.4	2214.8	946.9	10.7	6.5	22
23		0	4.5	4.5	2177.5	1880	4.0	0.5	2142.0	424.6	10.1	0.7	2215.8	974.7	14.5	0.5	23
24	2145.3	0.2	3.7	3.1	2178.0	1947	4.0	0.5	2142.6	435.9	6.2	0.5	2216.1	983.1	11.7	7.5	24
25	2145.5	0.2	3.7	1.3	2178.5	2017	4.0	0.5	2143.1	445.4	5.3	0.5	2215.9	977.5	10.3	13.1	25
26	2131.6	5.1	3.7	0.3	2179.0	2087	4.2	0.5	2143.6	455.0	5.2	0.5	2215.5	966.4	9.2	13.6	26
27	2136.3	16.4	3.7	0.3	2179.6	2174	4.2	0.5	2144.0	462.7	5.1	0.5	2215.1	955.2	9.2	13.6	27
28	2139.2	27.5	3.6	0.3	2180.0	2233	4.3	0.4	2144.5	472.5	5.1	0.5	2214.8	946.9	9.2	15.6	28
29	2161.6	38.7	3.6	0.3	2180.6	2321	4.3	0.4	2145.0	482.3	5.0	0.5	2214.7	944.2	9.1	9.8	29
30	2162.4	43.1	3.6	0.5	2181.1	2395	4.3	0.4	2145.4	490.3	5.0	0.4	2215.1	955.2	9.1	5.1	30
31	2162.6	45.4	3.6	0.3					2145.9	500.3	5.0	0.4	2215.5	966.4	9.1	4.8	31
TOTAL			134.3	563.0			114.4	16.5			147.1	15.7			731.6	496.6	
Inf. Ac. Ft.			306.0				226.9				291.8				1451.1	2275.8	
Outf. Ac. Ft.				1116.7				32.7				31.1			985.0	2165.5	
Maximum Mean Daily Inflow			7.4				4.3				10.1				337	337.0	
Minimum Mean Daily Inflow			3.6				2.7				4.0				5.3	2.7	
Storage Change			-810.5				+194.1				+260.8				+466.1	+110.5	

REMARKS: 1 - Interpolated. { Mean for period. ½ Year

Max. W. S. Elev.	2250.9	feet on Various Times	Storage 2276.5	Acre Feet		
Min. W. S. Elev.	2143.0	feet on Various Times	Storage 0	Acre Feet		
Max. Peak Inf.	2301.9	C.F.S. from 2:00 a.m. on 1-8-40	to 2:30 a.m. on 1-8-40			
Max. Peak Outf.	747.	C.F.S. from 4:45 a.m. on 1-8-40	to 8:00 a.m. on 1-8-40			

RECORDS COLLECTED BY

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

COMPUTATIONS — Date

Gage Hts. copied	REL
Storage applied	LT
Inf. & Outf. computed	LT
Checked CCG	5-29-40

Gage Heights and Storage as of Midnight on day shown.

* Storages computed from flow records Oct. 1 to 12 (incl.) Storage at 2206.9 on 9-30-39 = 855.9 a.f. by present flow records
= 799.6 a.f. computed from last year's flow records.

** Q at Sta. 168 not used on account of runoff below dam..

BIG TUJUNGA (CONT.)

F. C. Dist. Form 58 Revised 800 6/59

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Daily Gage Height in feet and Operation Record of BIG TUJUNGA Dam No. 1

In Big Tujunga Canyon for the Year Ending September 30, 1940

On

Drainage Area 81.4 Square Miles. Capacity of Reservoir 4568.0 Ac. Ft. at Spillway Elev. 2290.0 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	2220.4	1108.0	75.0	3.6	2206.2	726.3	29.8	0.4	2219.7	1087.1	36.4	1.2	2241.3	1852.7	8.8	0.3	1
2	2223.7	1209.9	88.4	3.7.0	2208.4	779.8	27.4	0.4	2221.4	1138.3	26.9	1.0	2241.7	1869.3	8.7	0.3	2
3	2225.0	1251.5	151.9	131.0	2210.3	827.6	24.5	0.4	2222.7	1178.4	21.2	1.0	2242.1	1885.9	8.7	0.3	3
4	2220.1	1099.0	106.2	183.0	2211.9	869.0	21.6	0.4	2223.8	1213.1	18.3	0.8	2242.5	1902.7	8.7	0.3	4
5	2212.4	882.2	53.6	163.0	2213.5	911.6	21.6	0.4	2224.8	1245.1	17.0	0.7	2242.9	1919.6	8.7	0.3	5
6	2191.5	415.3	48.0	285.0	2214.8	946.9	19.7	0.4	2225.8	1277.7	16.9	0.7	2243.3	1936.6	7.7	0.3	6
7	2165.0±	59.3	40.0	235.0	2215.7	971.9	19.7	6.7	2226.6	1304.2	14.1	0.7	2243.7	1953.7	7.7	0.3	7
8	2159.0±	26.2 E	34.0	48.0	2215.4	963.6	19.7	23.0	2227.4	1331.0	14.1	0.6	2244.0	1966.5	7.6	0.3	8
9	2160.0±	30.6	28.0	25.0	2214.7	944.2	19.7	29.0	2228.2	1358.2	12.5	0.6	2244.3	1979.5	7.6	0.3	9
10	2152.0±	5.7	24.0	28.0	2214.3	933.2	19.7	27.0	2228.8	1378.7	12.5	0.4	2244.6	1992.4	7.6	0.3	10
11		0	21.3	19.0	2213.8	919.6	19.6	28.0	2229.4	1399.6	10.9	0.4	2244.9	2005.4	6.1	0.3	11
12		0	19.0	19.0	2213.2	903.5	17.4	29.0	2230.0	1420.5	10.9	0.3	2245.1	2014.1	6.0	0.3	12
13		0	18.6	18.6	2212.6	887.5	17.3	28.0	2230.6	1441.7	10.9	0.3	2245.4	2027.2	6.0	0.3	13
14		0	22.0	22.0	2212.0	871.6	17.3	24.0	2231.2	1463.1	9.9	0.3	2245.6	2036.0	6.0	0.3	14
15		0	19.2	19.2	2211.2	850.7	17.3	23.0	2231.8	1484.6	9.9	0.3	2245.9	2049.1	6.0	0.3	15
16	2152.0	5.7	18.0	9.2	2210.6	835.3	15.2	23.0	2232.4	1506.4	9.8	0.3	2246.1	2057.9	5.8	0.3	16
17	2163.4	48.9	16.0	1.3	2209.9	817.4	14.0	23.0	2232.9	1524.7	9.8	0.3	2246.4	2071.3	5.7	0.4	17
18	2166.4	69.5 E	15.0	2.8	2209.2	799.7	13.6	22.0	2233.4	1543.1	9.8	0.3	2246.7	2084.6	5.7	0.4	18
19	2169.0	91.1	14.0	1.3	2208.6	784.8	13.6	22.0	2233.9	1561.7	9.8	0.3	2246.9	2093.5	5.7	0.3	19
20	2171.6	116.6	13.0	0.5	2207.9	767.5	13.6	22.0	2234.3	1576.7	9.8	0.3	2247.1	2102.4	5.7	0.3	20
21	2173.9	142.3	11.3	0.5	2207.2	750.4	12.7	22.0	2234.8	1595.4	9.8	0.3	2247.3	2111.4	4.9	0.3	21
22	2176.3	172.1	15.6	0.5	2207.4	755.3	12.6	9.8	2235.3	1614.3	9.8	0.4	2247.5	2120.4	4.9	0.3	22
23	2178.4	200.3	14.7	0.5	2208.3	777.3	12.6	11.1	2235.7	1629.6	9.8	0.4	2247.7	2129.4	4.8	0.3	23
24	2180.3	227.6	14.2	0.5	2209.2	799.7	12.1	11.0	2236.2	1648.7	9.8	0.4	2247.9	2138.4	4.8	0.3	24
25	2186.6	328.0	51.2 *	0.5	2210.0	819.9	12.1	11.1	2236.7	1668.1	10.2	0.4	2248.1	2147.5	4.8	0.3	25
26	2193.9	460.8	67.3	0.4	2210.9	842.9	12.0	11.1	2238.2	1727.0	30.1	0.4	2248.3	2156.6	4.5	0.3	26
27	2197.1	524.7	32.6	0.4	2211.8	866.4	11.9	11.2	2239.1	1762.9	18.5	0.4	2248.5	2165.7	4.5	0.3	27
28	2199.7	579.2	27.9	0.4	2212.6	887.5	11.8	11.1	2239.8	1791.2	14.6	0.4	2248.7	2174.8	4.5	0.3	28
29	2203.7	667.9	45.3	0.6	2213.3	906.2	11.8	11.1	2240.4	1815.7	12.7	0.3	2248.9	2183.9	4.5	0.2	29
30					2214.1	927.7	11.8	11.1	2240.9	1836.1	10.6	0.3	2249.1	2193.0	4.4	0.2	30
31					2217.3	1017.2	46.2 *	11.1					2249.2	2197.6	4.4	0.2	31
TOTAL			1105.3	1255.8			549.9	373.8			427.4	14.5			191.5	9.2	
Inf. Ac. Ft.			2192.3				1090.7				847.7				379.8	5786.3	
Outf. Ac. Ft.				2490.8				741.4				28.8			18.2	3444.7	
Maximum Mean Daily Inflow			151.9				29.8				36.4				8.8	337.0	
Minimum Mean Daily Inflow			11.3				11.8				9.8				4.4	2.7	
Storage Change			- 298.5				+ 349.3				+818.9				+361.5	+1341.7	

REMARKS { Mean for period. E - Estimate. % Year

Max. W. S. Elev.	2250.9	feet on	Various Times	Storage 2276.5	Acre Feet		
Min. W. S. Elev.	2143.0	feet on	Various Times	Storage 0	Acre Feet		
Max. Peak Inf.	2301.9	C.F.S. from	2:00 a.m. on	1-8-40 to 2:30 a.m. on	1-8-40		
Max. Peak Outf.	747.	C.F.S. from	4:45 a.m. on	1-8-40 to 8:00 a.m. on	1-8-40		

Gage Heights and Storage as of Midnight on day shown.

RECORDS COLLECTED BY

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

COMPUTATIONS — Date

Gage Hts. copied LT
Storage applied LT
Inf. & Outf. computed LT
Checked CCG 8-16-40

* Q at Sta. 168 not used on account of runoff below dam.

F. C. Dist. Form 58 Revised 800 6/59

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Daily Gage Height in feet and Operation Record of BIG TUJUNGA Dam No. 1

In Big Tujunga Canyon for the Year Ending September 30, 1940

On

Drainage Area 81.4 Square Miles. Capacity of Reservoir 4568.0 Ac. Ft. at Spillway Elev. 2290.0 Ft.

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	2249.4	2206.8	4.0	0.2	2249.9	2229.9	1.1	3.5	2240.5	1819.8	0.6	5.1	2233.4	1543.1	0.7	4.8	1
2	2249.6	2216.1	3.9	0.2	2249.6	2216.1	1.1	7.5	2240.2	1807.5	0.6	5.1	2233.2	1535.7	0.7	4.8	2
3	2249.7	2220.7	3.9	0.2	2249.2	2197.6	1.0	10.2	2240.0	1799.3	0.6	5.1	2232.9	1524.7	0.7	4.8	3
4	2249.9	2229.9	3.9	0.2	2248.9	2183.9	1.0	8.4	2239.8	1791.2	0.6	5.1	2232.7	1517.4	0.7	4.8	4
5	2250.0	2234.5	3.9	0.2	2248.6	2170.2	1.0	8.0	2239.6	1783.1	0.5	5.1	2232.5	1510.1	0.7	4.8	5
6	2250.2	2243.8	3.8	0.2	2248.3	2156.6	1.0	7.6	2239.4	1775.1	0.5	5.1	2232.1	1495.5	0.7	7.0	6
7	2250.3	2248.5	3.7	0.2	2248.0	2142.9	1.0	7.6	2239.1	1762.9	0.5	5.1	2231.5	1473.9	0.7	12.6	7
8	2250.5	2257.9	3.5	0.3	2247.7	2129.4	1.0	7.6	2238.9	1754.9	0.5	5.1	2230.9	1452.4	0.7	12.1	8
9	2250.6	2262.5	3.4	0.3	2247.5	2120.4	1.0	7.2	2238.7	1746.9	0.5	5.1	2230.3	1431.1	0.7	11.6	9
10	2250.7	2267.2	3.4	0.3	2247.1	2102.4	1.0	9.2	2238.4	1735.0	0.5	5.1	2229.6	1406.5	0.7	11.6	10
11	2250.8	2271.9	2.7	0.3	2246.7	2084.6	0.9	8.7	2238.2	1727.0	0.5	5.4	2228.7	1375.3	0.7	16.4	11
12	2250.9	2276.5	2.3	0.3	2246.4	2071.3	0.9	9.1	2238.0	1719.0	0.5	5.4	2227.6	1337.8	0.7	19.8	12
13	2250.9	2276.5	2.3	1.4	2246.0	2053.5	0.8	8.7	2237.7	1707.2	0.5	5.4	2226.5	1300.9	0.7	19.2	13
14	2250.9	2276.5	2.3	2.9	2245.6	2036.0	0.8	8.7	2237.5	1699.4	0.5	5.4	2225.4	1264.6	0.8	19.2	14
15	2250.9	2276.5	2.1	3.1	2245.3	2022.8	0.7	8.4	2237.3	1691.5	0.5	5.1	2224.3	1229.0	0.8	19.2	15
16	2250.8	2271.9	2.0	3.1	2244.9	2005.4	0.7	8.4	2237.0	1679.7	0.4	5.1	2223.1	1190.9	0.8	19.2	16
17	2250.8	2271.9	2.0	2.9	2244.6	1992.4	0.7	8.4	2236.8	1672.0	0.4	5.1	2222.0	1156.6	0.8	19.2	17
18	2250.7	2267.2	2.0	2.9	2244.2	1975.1	0.7	8.4	2236.6	1664.2	0.4	4.8	2220.9	1123.1	0.8	19.2	18
19	2250.7	2267.2	2.0	2.8	2243.9	1962.2	0.7	8.0	2236.4	1656.5	0.4	4.8	2219.7	1087.1	0.8	19.2	19
20	2250.6	2262.5	1.7	2.8	2243.5	1945.2	0.7	8.0	2236.1	1644.9	0.4	4.8	2218.5	1051.9	0.8	18.6	20
21	2250.6	2262.5	1.7	2.8	2243.2	1932.3	0.7	8.0	2235.9	1637.2	0.4	4.8	2217.3	1017.2	0.7	18.6	21
22	2250.5	2257.9	1.7	2.9	2242.8	1915.4	0.7	8.0	2235.6	1625.8	0.5	4.8	2216.0	980.3	0.7	18.6	22
23	2250.5	2257.9	1.6	2.9	2242.5	1902.7	0.7	8.0	2235.4	1618.1	0.5	4.8	2214.8	946.9	0.7	18.0	23
24	2250.4	2253.2	1.6	3.1	2242.1	1885.9	0.7	8.0	2235.2	1610.5	0.5	4.8	2213.5	911.6	0.7	18.0	24
25	2250.4	2253.2	1.6	3.1	2241.8	1873.4	0.7	8.0	2235.0	1602.9	0.5	4.8	2212.3	879.6	0.7	16.8	25
26	2250.3	2248.5	1.6	3.3	2241.5	1861.0	0.7	7.0	2234.7	1591.7	0.5	4.8	2211.0	845.5	0.7	16.8	26
27	2250.2	2243.8	1.6	3.3	2241.3	1852.7	0.7	4.3	2234.5	1584.2	0.5	4.8	2209.8	814.9	0.7	16.8	27
28	2250.2	2243.8	1.5	3.3	2241.2	1848.5	0.6	4.3	2234.3	1576.7	0.5	4.8	2208.5	782.3	0.7	16.8	28
29	2250.1	2239.2	1.5	3.3	2241.0	1840.2	0.6	4.3	2234.1	1569.2	0.5	4.8	2207.1	747.9	0.7	16.8	29
30	2250.0	2234.5	1.5	3.3	2240.8	1833.0	0.6	4.3	2233.8	1558.0	0.5	4.8	2205.8	716.8	0.7	16.8	30
31					2240.7	1827.9	0.6	4.3	2233.6	1550.6	0.5	4.8					31
TOTAL			74.7	56.1			35.1	230.1			15.3	155.1			21.7	442.1	
Inf. Ac. Ft.			148.2				49.8				30.3				430.7	7057.6	
Outf. Ac. Ft.				111.3				456.4				307.6			876.9	7196.9	
Maximum Mean Daily Inflow			4.0				1.1				0.6				0.8	337.0	
Minimum Mean Daily Inflow			1.5				0.7				0.4				0.7	0.4	
Storage Change			+36.9				- 406.6				- 277.3				- 833.8	+139.1	

REMARKS { Mean for period. Yearly Totals

Max. W. S. Elev.	2250.9	feet on	Various Times	Storage 2276.5	Acre Feet		
Min. W. S. Elev.	2143.0	feet on	Various Times	Storage 0	Acre Feet		
Max. Peak Inf.	2301.9	C.F.S. from	2:00 a.m. on	1-8-40 to 2:30 a.m. on	1-8-40		
Max. Peak Outf.	747.	C.F.S. from	4:45 a.m. on	1-8-40 to 8:00 a.m. on	1-8-40		

Gage Heights and Storage as of Midnight on day shown.

RECORDS COLLECTED BY

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

COMPUTATIONS — Date

Gage Hts. copied HAV
Storage applied HAV
Inf. & Outf. computed HAV
Checked CCG 8-16-40

DEVIL'S GATE

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

On Arroyo Seco for the Year Ending September 30, 1940

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 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	1024.3	482.9	0	0	1021.9	363.6	0	0	1020.1	282.6	0	0	1018.9	232.4	0	0	1
2	1024.2	477.7	0	0	1021.8	359.0	0	0	1020.1	282.6	0	0	1018.9	232.4	0	0	2
3	1024.1	472.4	0	0	1021.8	359.0	0	0	1020.0	278.2	0	0	1018.8	228.5	0	0	3
4	1024.0	467.1	0	0	1021.7	354.4	0	0	1020.0	278.2	0	0	1019.0	236.4	4.8	0	4
5	1023.9	462.0	0	0	1021.6	349.8	0	0	1019.9	274.0	0	0	1019.0	236.4	0.8	0	5
6	1023.9	462.0	0	0	1021.6	349.8	0	0	1019.9	274.0	0	0	1018.9	232.4	0	0	6
7	1023.8	457.0	0	0	1021.5	345.2	0	0	1019.8	269.8	0	0	1020.6	304.5	36.1	0	7
8	1023.7	451.9	0	0	1021.5	345.2	0	0	1019.8	269.8	0	0	1026.1	580.8	141.9	0	8
9	1023.6	446.9	0	0	1021.4	340.5	0	0	1019.7	265.7	0	0	1026.3	592.3	8.6	0	9
10	1023.6	446.9	0	0	1021.4	340.5	0	0	1019.7	265.7	0	0	1026.5	603.8	8.6	0	10
11	1023.5	441.8	0	0	1021.3	335.9	0	0	1019.7	265.7	0	0	1026.7	615.3	8.8	0	11
12	1023.4	436.7	0	0	1021.2	331.3	0	0	1019.6	261.5	0	0	1026.9	626.8	8.8	0	12
13	1023.3	431.7	0	0	1021.2	331.3	0	0	1019.6	261.5	0	0	1026.9	626.8	3.0	0	13
14	1023.2	426.6	0	0	1021.1	326.7	0	0	1019.5	257.3	0	0	1026.9	626.8	3.0	0	14
15	1023.1	421.6	0	0	1021.1	326.7	0	0	1019.5	257.3	0	0	1026.8	621.0	0.1	0	15
16	1023.1	421.6	0	0	1021.0	322.1	0	0	1019.5	257.3	0	0	1026.7	615.3	0	0	16
17	1023.0	416.5	0	0	1020.9	317.7	0	0	1019.4	253.1	0	0	1026.6	609.5	0	0	17
18	1022.9	411.7	0	0	1020.9	317.7	0	0	1019.4	253.1	0	0	1026.5	603.8	0	0	18
19	1022.8	406.8	0	0	1020.8	313.3	0	0	1019.3	248.9	0	0	1026.4	598.1	0	0	19
20	1022.7	402.0	0	0	1020.7	308.9	0	0	1019.3	248.9	0	0	1026.3	592.3	0	0	20
21	1022.7	402.0	0	0	1020.7	308.9	0	0	1019.2	244.8	0	0	1026.2	586.6	0	0	21
22	1022.6	397.2	0	0	1020.6	304.5	0	0	1019.2	244.8	0	0	1026.1	580.8	0	0	22
23	1022.6	397.2	0	0	1020.6	304.5	0	0	1019.3	248.9	3.0	0	1626.2	586.6	5.7	0	23
24	1022.5	392.4	0	0	1020.5	300.2	0	0	1019.3	248.9	0.9	0	1626.1	580.8	0	0	24
25	1022.4	387.5	0	0	1020.5	300.2	0	0	1019.2	244.8	0	0	1026.0	575.1	0	0	25
26	1022.3	382.7	0	0	1020.4	295.8	0	0	1019.2	244.8	0	0	1026.0	575.1	0	0	26
27	1022.2	377.9	0	0	1020.3	291.4	0	0	1019.1	240.6	0	0	1025.9	569.6	0	0	27
28	1022.1	373.0	0	0	1020.3	291.4	0	0	1019.1	240.6	0	0	1025.8	564.1	0	0	28
29	1022.1	373.0	0	0	1020.2	287.0	0	0	1019.0	236.4	0	0	1025.7	558.5	0	0	29
30	1022.0	368.2	0	0	1020.2	287.0	0	0	1019.0	236.4	0	0	1025.7	558.5	0	0	30
31	1021.9	363.6	0	0					1018.9	232.4	0	0	1025.6	553.0	0	0	31
TOTAL			0	0			0	0			3.9	0			230.2	0	
Inf. Ac. Ft.			0				0				7.7				456.6	464.3	
Outf. Ac. Ft.			0 + *(124.6)				0 + *(76.6)				0 + *(62.3)			0 + *(136.1)		0+*(399.6)	
Maximum Mean Daily Inflow			0				0				30				141.9	141.9	
Minimum Mean Daily Inflow			0				0				0				0	0	
Storage Change			- 124.6				- 76.6				- 54.6				+ 320.6	+64.8	

REMARKS *( ) - Total percolation loss [Mean for period ½ Year

Max. W. S. Elev. 1032.2 feet on 2-3-40 Storage 959.3 Acre Feet
Min. W. S. Elev. 1010 + feet on Various Times Storage 0 Acre Feet
Max. Peak Inf. 859.0 C.F.S. from 3:00 a.m. on 1-8-40 to 3:30 a.m. on 1-8-40
Max. Peak Outf. 73.8 C.F.S. from 12:00 Noon on 2-21-40 to 10:00 p.m. on 2-22-40

Gage Heights and Storage as of Midnight on day shown.

Daily Outflows show Valve Release only.

RECORDS COLLECTED BY
C. C. Green and C. R. Schmittal — Dam Tender
W. T. Lind — Hydrographer
R. E. Lindsay — Hydrographer

COMPUTATIONS — Date
Gage Hts. copied R.E.L.
Storage applied H.A.V.
Inf. & Outf. computed HAV 7-29-40
Checked C.G.C. 8-4-40

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 DEVIL'S GATE Dam

On Arroyo Seco for the Year Ending September 30, 1940

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 at Various Times

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	1028.5	722.7	88.6	0	1027.8	680.1	2.7	0	1026.6	609.5	5.2	0	1025.4	542.0	0	0	1
2	1031.0	880.6	83.6	0	1027.8	680.1	0.7	0	1026.5	603.8	0	0	1025.3	536.5	0	0	2
3	1032.2	959.3	74.4	30.4	1027.7	674.2	0.7	0	1026.4	598.1	0	0	1025.2	530.9	0	0	3
4	1031.1	887.5	35.2	67.0	1027.6	668.2	0.7	0	1026.4	598.1	0	0	1025.2	530.9	0	0	4
5	1029.7	797.4	14.6	55.6	1027.6	668.2	0.6	0	1026.3	592.3	0	0	1025.1	525.4	0	0	5
6	1029.7	797.4	5.3	0	1027.5	662.3	0.6	0	1026.2	586.6	0	0	1025.0	519.9	0	0	6
7	1029.8	803.7	5.2	0	1027.4	656.3	0.6	0	1026.2	586.6	0	0	1025.0	519.9	0	0	7
8	1029.7	797.4	0	0	1027.4	656.3	0.5	0	1026.1	580.8	0	0	1024.9	514.6	0	0	8
9	1029.6	791.1	0	0	1027.3	650.4	0.4	0	1026.1	580.8	0	0	1024.9	514.6	0	0	9
10	1029.5	784.8	0	0	1027.2	644.4	0.2	0	1026.0	575.1	0	0	1024.8	509.3	0	0	10
11	1029.4	778.5	0	0	1027.1	638.5	0.1	0	1025.9	569.6	0	0	1024.7	504.1	0	0	11
12	1029.3	772.2	0	0	1027.0	632.5	0	0	1025.9	569.6	0	0	1024.7	504.1	0	0	12
13	1029.2	765.9	0	0	1026.9	626.8	0	0	1025.8	564.1	0	0	1024.6	498.8	0	0	13
14	1029.2	765.9	3.2	0	1026.9	626.8	0	0	1025.7	558.5	0	0	1024.6	498.8	0	0	14
15	1029.1	759.6	0	0	1026.8	621.0	0	0	1025.7	558.5	0	0	1024.5	493.5	0	0	15
16	1029.0	753.3	0	0	1026.7	615.3	0	0	1025.6	553.0	0	0	1024.4	488.2	0	0	16
17	1028.9	747.2	0	0	1026.6	609.5	0	0	1025.5	547.5	0	0	1024.4	488.2	0	0	17
18	1028.8	741.0	0	0	1026.6	609.5	0	0	1025.5	547.5	0	0	1024.3	482.9	0	0	18
19	1028.7	734.4	0	0	1026.6	609.5	0	0	1025.4	542.0	0	0	1024.2	477.7	0	0	19
20	1028.6	728.8	0	0	1026.5	603.8	0	0	1025.3	536.5	0	0	1024.2	477.7	0	0	20
21	1027.5	662.3	0	30.7	1026.5	603.8	0	0	1025.3	536.5	0	0	1024.1	472.4	0	0	21
22	1025.4	542.0	0	38.4	1026.4	598.1	0	0	1025.2	530.9	0	0	1024.1	472.4	0	0	22
23	1025.3	536.5	0	0	1026.3	592.3	0	0	1025.2	530.9	0	0	1024.0	467.1	0	0	23
24	1025.2	530.9	0	0	1026.3	592.3	0	0	1025.1	525.4	0	0	1023.9	462.0	0	0	24
25	1027.0	632.5	53.2	0	1026.2	586.6	0	0	1025.1	525.4	0	0	1023.9	462.0	0	0	25
26	1027.5	662.3	17.5	0	1026.1	580.8	0	0	1025.6	553.0	15.3	0	1023.8	457.0	0	0	26
27	1027.4	656.3	2.2	0	1026.1	580.8	0	0	1025.6	553.0	1.4	0	1023.7	451.9	0	0	27
28	1027.4	656.3	0	0	1026.0	575.1	0	0	1025.5	547.5	0	0	1023.7	451.9	0	0	28
29	1027.8	680.1	14.6	0	1026.0	575.1	0	0	1025.5	547.5	0	0	1023.6	446.9	0	0	29
30					1025.9	569.6	0	0	1025.4	542.0	0	0	1023.6	446.9	0	0	30
31					1026.5	603.8	19.4	0					1023.5	441.8	0	0	31
TOTAL			397.6	242.3			27.2	0			21.9	0			0	0	
Inf. Ac. Ft.			788.6				54.0				43.4				0	1350.3	
Outf. Ac. Ft.			480.6 + *(180.9)				0 + *(130.3)				0 + *(105.1)			0 + *(100.2)		480.6+*(916.1)	
Maximum Mean Daily Inflow			88.6				19.4				15.3				0	141.9	
Minimum Mean Daily Inflow			0				0				0				0	0	
Storage Change			+127.1				-76.3				-61.8				-100.2	-46.4	

REMARKS *( ) - Total percolation loss [Mean for period ⅔ Year

Max. W. S. Elev. 1032.2 feet on 2-3-40 Storage 959.3 Acre Feet
Min. W. S. Elev. 1010. + feet on Various Times Storage 0 Acre Feet
Max. Peak Inf. 859. C.F.S. from 3:00 a.m. on 1-8-40 to 3:30 a.m. on 1-8-40
Max. Peak Outf. 73.8 C.F.S. from 12:00 Noon on 2-21-40 to 10:00 p.m. on 2-22-40

Gage Heights and Storage as of Midnight on Day Shown.

Daily Outflows show Valve Release only.

RECORDS COLLECTED BY
A. E. Marshall — Dam Tender
W. T. Lind — Hydrographer
R. E. Lindsay — Hydrographer

COMPUTATIONS — Date
Gage Hts. copied R.E.L.
Storage applied H.A.V.
Inf. & Outf. computed HAV 7-30-40
Checked C.C.G. 8-5-40

DEVIL'S GATE (CONT.)

F. C. Dist. Form 66 Revised 600 5/39

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, 19 40
On

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 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	1023.4	436.7	0	0	1021.8	359.0	0	0	1019.9	274.0	0	0					1
2	1023.4	436.7	0	0	1021.7	354.4	0	0	1019.9	274.0	0	0					2
3	1023.3	431.7	0	0	1021.6	349.8	0	0	1019.8	269.8	0	0					3
4	1023.3	431.7	0	0	1021.6	349.8	0	0	1019.8	269.6	0	0					4
5	1023.2	426.6	0	0	1021.5	345.2	0	0	1019.4	253.1	0	7.5					5
6	1023.2	426.6	0	0	1021.5	345.2	0	0	1018.8	228.5	0	11.5					6
7	1023.1	421.6	0	0	1021.4	340.5	0	0	1017.9	193.0	0	17.2					7
8	1023.1	421.6	0	0	1021.4	340.5	0	0	1016.6	145.1	0	23.7					8
9	1023.0	416.5	0	0	1021.3	335.9	0	0	1015.3	100.8	0	22.3					9
10	1023.0	416.5	0	0	1021.2	331.3	0	0	1013.8	55.3	0	23.0					10
11	1022.9	411.7	0	0	1021.2	331.3	0	0	1013.1	36.7	0	9.4					11
12	1022.8	406.8	0	0	1021.1	326.7	0	0	1013.0	34.0	0	1.3					12
13	1022.8	406.8	0	0	1021.1	326.7	0	0	1012.5	23.6	0	5.3					13
14	1022.7	402.0	0	0	1021.0	322.1	0	0	1010	0	0	11.9	DRY				14
15	1022.7	402.0	0	0	1020.9	317.7	0	0			0	0					15
16	1022.6	397.2	0	0	1020.9	317.7	0	0			0	0					16
17	1022.6	397.2	0	0	1020.8	313.3	0	0			0	0					17
18	1022.5	392.4	0	0	1020.7	308.9	0	0			0	0					18
19	1022.4	387.5	0	0	1020.7	308.9	0	0			0	0					19
20	1022.4	387.5	0	0	1020.6	304.5	0	0			0	0					20
21	1022.3	382.7	0	0	1020.6	304.5	0	0			0	0					21
22	1022.3	382.7	0	0	1020.5	300.2	0	0			0	0					22
23	1022.2	377.9	0	0	1020.4	295.6	0	0			0	0					23
24	1022.2	377.9	0	0	1020.4	295.6	0	0			0	0					24
25	1022.1	373.0	0	0	1020.3	291.4	0	0			0	0					25
26	1022.0	368.2	0	0	1020.3	291.4	0	0			0	0					26
27	1022.0	368.2	0	0	1020.2	287.0	0	0			0	0					27
28	1021.9	363.6	0	0	1020.1	282.6	0	0			0	0					28
29	1021.9	363.6	0	0	1020.1	282.6	0	0			0	0					29
30	1021.8	359.0	0	0	1020.0	278.2	0	0			0	0					30
31					1020.0	278.2	0	0			0	0					31
TOTAL			0	0			0	0			0	1331					
Inf. Ac. Ft.			0				0				0				0	1350.3	
Outf. Ac. Ft.			0 + *(82.7)				0 + *(80.7)				264.0 + *(14.3)				0	744.6+*(1093.8)	
Maximum Mean Daily Inflow			0				0				0				0	141.9	
Minimum Mean Daily Inflow			0				0				0				0	0	
Storage Change			-82.6				-80.6				-278.2				0	- 488.2	
REMARKS	*( ) Total percolation loss															Yearly Totals	

RESERVOIR DRY — NO STORAGE — RESERVOIR SLUICED

RESERVOIR DRY — NO STORAGE — NO FLOW

Max. W. S. Elev.	1032.2	feet on 2-3-40	Storage 959.3	Acre Feet		
Min. W. S. Elev.	1010 +	feet on Various Times	Storage 0	Acre Feet		
Max. Peak Inf.	869.	C.F.S. from 3:00 a.m. on 1-8-40	to 3:30 a.m. on 1-8-40		RECORDS COLLECTED BY	
Max. Peak Outf.	73.8	C.F.S. from 12:00 Noon on 2-21-40	to 10:00 p.m. on 2-22-40		A. E. Marshall	Dam Tender
Gage Heights and Storage as of Midnight on Day Shown.					W. T. Lind	Hydrographer
					R. E. Lindsay	Hydrographer

COMPUTATIONS	Date
Gage Hts. copied	H.A.V.
Storage applied	H.A.V.
Inf. & Outf. computed	H.A.V. 10-11-40
Checked	C.C.G. 10-11-40

Daily Outflows Show Valve Release Only.

EATON WASH DEBRIS

F. C. Dist. Form 66 Revised 600 5/39

Storages based on C.I.T. Survey of Dec. 1938. (Table No. IV)

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

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

In Eaton Wash for the Year Ending September 30, 19 40
On

Continuous Water Stage Recorder Au

Drainage Area 9.48 Square Miles. Capacity of Reservoir 699.2 Ac. Ft. at Spillway Elev. 887.5 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	8593	*742	0	0			0	0			0	0	8429	0	0	0	1
2	8589	699	0	0			0	0			0	0	8429	0	0	0	2
3	8586	667	0	0			0	0			0	0	8429	0	0	0	3
4	8583	636	0	0			0	0			0	0	8429	0	0	0	4
5	8580	605	0	0			0	0			0	0	8429	0	0	0	5
6	8575	555	0	1.3			0	0			0	0	8429	0	0	0	6
7	8546	298	0	12.3			0	0			0	0	8538	242	122	0	7
8	8490	41	0	12.8			0	0			0	0	8596	775	312	0	8
9	8430	0	0	2.1			0	0			0	0	8589	699	11	0	9
10			0	0			0	0			0	0	8584	647	0	0	10
11			0	0			0	0			0	0	8580	605	0	0	11
12			0	0			0	0			0	0	8577	575	0	0	12
13			0	0			0	0			0	0	8573	535	0	0	13
14			0	0			0	0			0	0	8570	505	0	0	14
15			0	0			0	0			0	0	8567	477	0	0	15
16			0	0			0	0			0	0	8564	449	0	0	16
17			0	0			0	0			0	0	8562	431	0	0	17
18			0	0			0	0			0	0	8559	404	0	0	18
19			0	0			0	0			0	0	8557	387	0	0	19
20			0	0			0	0			0	0	8555	370	0	0	20
21			0	0			0	0			0	0	8553	352	0	0	21
22			0	0			0	0			0	0	8551	336	0	0	22
23			0	0			0	0			0	0	8551	336	0 8	0	23
24			0	0			0	0			0	0	8549	320	0	0	24
25			0	0			0	0			0	0	8547	305	0	0	25
26			0	0			0	0			0	0	8545	290	0	0	26
27			0	0			0	0			0	0	8544	283	0	0	27
28			0	0			0	0			0	0	8542	269	0	0	28
29			0	0			0	0			0	0	8540	254	0	0	29
30			0	0			0	0			0	0	8539	248	0	0	30
31			0	0							0	0	8538	242	0	0	31
TOTAL			0	285			0	0			0	0			453	0	
Inf. Ac. Ft.			0				0				0				899	899	
Outf. Ac. Ft.			56.5 +(23.2)					0				0			0 + (65.7)	56.5+(86.9)	
Maximum Mean Daily Inflow			0				0				0				312	312	
Minimum Mean Daily Inflow			0				0				0				0	0	
Storage Change			-79.7				0				0				+24.2	-55.5	
REMARKS	( ) - Total monthly percolation loss. Outflows show Valve release only.															½ Year	

RESERVOIR DRY — NO STORAGE — RESERVOIR DRY — NO STORAGE

Max. W. S. Elev.	865.4	feet on 2-5-40	Storage 148.6	Acre Feet		
Min. W. S. Elev.	843 +	feet on Various Times	Storage 0	Acre Feet		
Max. Peak Inf.	219.5	C.F.S. from 3:00 a.m. on 1-8-40	to 3:30 a.m. on 1-8-40		RECORDS COLLECTED BY	
Max. Peak Outf.	12.8	C.F.S. from Mean Daily on 10-8-39	to		C. C. Green	Dam Tender
Gage Heights and Storage as of Midnight on Day Shown.					W. T. Lind	Hydrographer
					R. E. Lindsay	Hydrographer

COMPUTATIONS	Date
Gage Hts. copied	R.E.L.
Storage applied	H.A.V.
Inf. & Outf. computed	H.A.V.
Checked	C.C.G. 8-7-40

* Storage corrected for 17.7 acre feet increase on 9-30-39

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

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

In / On Eaton Wash for the Year Ending September 30, 19 40

Drainage Area 9.48 Square Miles. Capacity of Reservoir 699.2 Ac. Ft. at Spillway Elev. 887.5 Ft.

DAM OPERATION RECORD
LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Continuous Water Stage Recorder Au

Gage Height: 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	8580	605	19.2	0	8642	1326	3.4	0	8589	699	3.7	0	8474	15	0	0.2	1
2	8615	991	20.8	0	8636	1275	0.4	0	8586	667	0	0		C	0	0.7	2
3	8642	1326	19.0	0	8635	1236	0.7	0	8584	647	0	0			0	0	3
4	8651	1445	10.0	0	8632	1198	0.3	0	8581	615	0	0			0	0	4
5	8652	1458	5.2	0	8628	1148	0	0	8579	595	0	0			0	0	5
6	8648	1405	1.6	0	8625	1112	0	0	8576	565	0	0			0	0	6
7	8646	1379	2.6	0	8622	1075	0	0	8574	545	0	0			0	0	7
8	8647	1392	4.4	0	8620	1050	0	0	8572	525	0	0			0	0	8
9	8644	1352	1.7	0	8617	1015	0	0	8570	505	0	0			0	0	9
10	8639	1287	0.4	0	8614	979	0	0	8568	486	0	0			0	0	10
11	8636	1249	0.4	0	8611	944	0	0	8566	468	0	0			0	0	11
12	8632	1198	0.2	0	8609	921	0	0	8563	440	0	0			0	0	12
13	8629	1161	0.1	0	8606	887	0	0	8561	421	0	0	DRY		0	0	13
14	8626	1124	0.1	0	8604	864	0	0	8558	395	0	0		STORAGE	0	0	14
15	8623	1087	0	0	8601	830	0	0	8556	378	0	0			0	0	15
16	8620	1050	0	0	8598	797	0	0	8554	361	0	0			0	0	16
17	8617	1015	0	0	8596	775	0	0	8552	344	0	0			0	0	17
18	8615	991	0	0	8594	753	0	0	8550	327	0	0			0	0	18
19	8612	956	0	0	8591	720	0	0	8548	312	0	0	RESERVOIR		0	0	19
20	8609	921	0	0	8589	699	0	0	8545	290	0	0		NO	0	0	20
21	8607	898	0	0	8587	676	0	0	8543	276	0	0			0	0	21
22	8604	864	0	0	8585	657	0	0	8536	229	0	1.7			0	0	22
23	8601	830	0	0	8583	636	0	0	8522	150	0	3.4			0	0	23
24	8599	808	0	0	8580	605	0	0	8495	53	0	4.3			0	0	24
25	8628	1148	18.6	0	8578	585	0	0	8486	34	0	0.7			0	0	25
26	8636	1249	7.5	0	8576	565	0	0	8533	211	9.4	0			0	0	26
27	8633	1211	0.6	0	8574	545	0	0	8528	182	1.3	2.0			0	0	27
28	8630	1173	0	0	8572	525	0	0	8514	115	0	2.8			0	0	28
29	8642	1326	10.5	0	8570	505	0	0	8487	35	0	3.7			0	0	29
30					8566	486	0	0	8480	23	0	0.3			0	0	30
31					8584	647	9.2	0							0	0	31
TOTAL			122.9	0			14.0	0			14.4	18.9			0	0.9	
Inf. Ac. Ft.			243.8				27.8				28.6				0	390.1	
Outf. Ac. Ft.			0 + (135.3)				0 + (95.6)				37.5 + (53.6)				1.8 + (0.6)	95.8+(374.0)	
Maximum Mean Daily Inflow			20.8				9.2				9.4				0	31.2	
Minimum Mean Daily Inflow			0				0				0				0	0	
Storage Change			+108.4				-67.9				-62.4				-2.3	-79.7	

REMARKS ( ) - Total monthly percolation loss. Outflows show Valve release only. [Mean for Period.

Max. W. S. Elev.	865.4	feet	on 2-5-40	Storage	148.6	Acre Feet			% Year
Min. W. S. Elev.	843 +	feet	on Various Times	Storage	0	Acre Feet			
Max. Peak Inf.	219.5	C.F.S. from 3:00 a.m.	on 1-8-40	to 3:30 a.m.	on 1-8-40				
Max. Peak Outf.	12.8	C.F.S. from Mean Daily	on 10-8-39	to	on				

Gage Height and Storage as of Midnight on Day Shown.

RECORDS COLLECTED BY

C. C. Green	Dam Tender
W. T. Lind	Hydrographer
R. E. Lindsay	Hydrographer

COMPUTATIONS	Date
Gage Hts. copied	REL & HAV
Storage applied	REL & HAV
Inf. & Outf. computed	H.A.V.
Checked C.C.G.	8-7-40

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

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

In / On Eaton Wash for the Year Ending September 30, 19 40

Drainage Area 9.48 Square Miles. Capacity of Reservoir 699.2 Ac. Ft. at Spillway Elev. 887.5 Ft.

DAM OPERATION RECORD
LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Continuous Water Stage Recorder Au

Gage Height: 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																	1
2																	2
3																	3
4																	4
5																	5
6																	6
7																	7
8																	8
9																	9
10																	10
11	DRY				DRY				DRY				DRY				11
12																	12
13		STORAGE	FLOW	FLOW		STORAGE	FLOW	FLOW		STORAGE	FLOW	FLOW		STORAGE	FLOW	FLOW	13
14																	14
15	RESERVOIR				RESERVOIR				RESERVOIR				RESERVOIR				15
16																	16
17			NO	NO			NO	NO			NO	NO			NO	NO	17
18		NO				NO				NO				NO			18
19																	19
20																	20
21																	21
22																	22
23																	23
24																	24
25																	25
26																	26
27																	27
28																	28
29																	29
30																	30
31																	31
TOTAL			0	0			0	0			0	0			0	0	
Inf. Ac. Ft.			0				0				0				0	390.1	
Outf. Ac. Ft.				0				0				0			0	95.8+(374.0	
Maximum Mean Daily Inflow			0				0				0				0	31.2	
Minimum Mean Daily Inflow			0				0				0				0	0	
Storage Change			0				0				0				0	-79.7	

REMARKS ( ) Total percolation loss.

									Yearly Totals
Max. W. S. Elev.	865.4	feet	on 2-5-40	Storage	148.6	Acre Feet			
Min. W. S. Elev.	843 +	feet	on Various Times	Storage	0	Acre Feet			
Max. Peak Inf.	219.5	C.F.S. from 3:00 a.m.	on 1-8-40	to 3:30 a.m.	on 1-8-40				
Max. Peak Outf.	12.8	C.F.S. from Mean daily	on 10-8-39	to	on				

Gage Heights and Storages as of Midnight on Day Shown.

RECORDS COLLECTED BY

C. C. Green	Dam Tender
W. T. Lind	Hydrographer
R. E. Lindsay	Hydrographer

COMPUTATIONS	Date
Gage Hts. copied	H.A.V.
Storage applied	H.A.V.
Inf. & Outf. computed	H.A.V.
Checked C.C.G.	8-7-40

BIG SANTA ANITA

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

Storages based on U.S.S.C.S. Survey of July 1938 with debris correction Feb. 1940. (Table V)

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

In Big Santa Anita Canyon

On for the Year Ending September 30, 1940

Drainage Area 10.8 Square Miles. Capacity of Reservoir 710.4 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	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	1267.3	*231.2	3.6	4.7	1250.0	132.0	2.2	3.4	1231.4	55.1	2.4	3.0	1233.1	61.3	2.3	E 2.1	1
2	1266.9	228.4	3.5	4.9	1249.3	128.7	2.2	3.9	1231.1	54.1	2.2	2.7	1233.6	63.1	2.2	E 1.6	2
3	1266.3	224.3	3.4	5.4	1248.6	125.4	2.2	3.8	1230.9	53.4	2.2	2.5	1234.5	66.5	2.2	0	3
4	1265.7	220.3	3.0	5.1	1247.9	122.1	2.4	4.1	1230.6	52.3	2.2	2.8	1236.2	72.9	3.3	0	4
5	1265.1	216.4	2.9	4.6	1247.3	119.4	2.5	3.9	1230.3	51.3	2.2	2.7	1237.6	78.3	2.7	0	5
6	1265.0	215.7	3.8	4.2	1246.8	117.1	2.5	3.5	1230.2	50.9	2.2	2.4	1238.8	83.1	2.4	0	6
7	1265.0	215.7	4.1	4.1	1246.2	114.4	2.4	3.8	1230.2	50.9	2.4	2.4	1244.6	108.2	12.6	0	7
8	1264.7	213.6	3.1	4.0	1245.8	112.6	2.9	3.5	1230.2	50.9	2.4	2.4	1254.2	152.6	61.5	39.0	8
9	1264.4	211.8	2.9	3.9	1245.3	110.4	3.0	4.1	1230.2	50.9	2.4	2.4	1258.5	176.1	15.1	3.3	9
10	1263.9	208.6	2.6	4.3	1244.7	107.6	2.6	3.9	1230.2	50.9	2.4	2.4	1258.3	175.0	9.3	9.9	10
11	1263.3	204.7	2.5	4.4	1244.0	104.7	2.5	4.1	1230.2	50.9	2.7	2.7	1255.3	158.6	9.1	17.3	11
12	1262.8	201.6	2.2	3.8	1243.3	101.7	2.5	4.0	1230.3	51.3	2.5	2.3	1252.4	143.7	9.7	17.3	12
13	1262.2	197.9	2.1	3.9	1242.5	98.3	2.5	4.2	1230.4	51.6	2.5	2.3	1251.7	140.2	8.4	10.1	13
14	1261.6	194.3	2.0	3.9	1241.7	94.9	2.5	4.2	1230.5	52.0	2.4	2.2	1252.9	146.2	6.3	3.3	14
15	1261.0	190.6	1.9	3.7	1241.0	92.0	2.5	4.0	1230.6	52.3	2.4	2.3	1253.7	150.3	5.4	3.5	15
16	1260.4	187.1	1.9	3.7	1240.4	89.5	2.4	3.6	1230.7	52.7	2.4	2.2	1254.3	153.4	4.8	3.3	16
17	1259.8	183.5	1.9	3.7	1239.8	87.1	2.4	3.6	1230.7	52.7	2.4	2.4	1254.9	156.5	4.9 M	3.5	17
18	1259.3	180.6	1.9	3.4	1239.1	84.3	2.2	3.7	1230.7	52.7	2.2	2.2	1255.3	158.6	4.4 I	3.5	18
19	1258.5	176.1	1.9	4.1	1238.4	81.6	2.2	3.6	1230.8	53.0	2.2	2.0	1255.5	159.7	3.7 I	3.2	19
20	1257.4	169.9	1.9	5.1	1237.7	78.7	2.2	3.6	1230.8	53.0	2.2	2.2	1255.5	159.7	3.2 I	3.2	20
21	1256.3	163.9	1.9	4.9	1237.0	76.0	2.2	3.5	1230.8	53.0	2.2	2.2	1255.5	159.7	3.1 I	3.1	21
22	1255.5	158.6	1.9	4.6	1236.4	73.7	2.2	3.4	1230.8	53.0	2.2	2.2	1255.5	159.7	3.1 I	3.1	22
23	1254.9	153.4	1.9	4.5	1235.8	71.3	2.2	3.4	1231.1	54.1	3.3	2.4	1255.9	161.8	4.1 I	3.0	23
24	1253.6	150.8	2.0	3.3	1235.1	68.7	2.4	3.7	1231.5	55.5	3.2	2.4	1256.5	165.0	4.5 M	2.9	24
25	1253.6	150.8	2.1	2.1	1234.3	65.7	2.4	3.5	1232.0	57.2	2.7	2.3	1256.8	166.6	3.7	2.9	25
26	1253.5	149.3	2.1	2.8	1233.6	63.1	2.4	3.7	1232.2	57.9	2.6	2.2	1256.6	165.5	3.6	4.2	26
27	1252.9	146.2	2.1	3.7	1232.9	60.5	2.4	3.6	1232.4	58.7	2.6	2.2	1256.2	163.4	3.6	4.6	27
28	1252.3	143.2	2.1	3.6	1232.3	58.3	2.4	3.5	1232.6	59.4	2.6	2.3	1255.8	161.2	3.5	4.6	28
29	1251.7	140.2	2.0	3.5	1232.0	57.2	2.4	2.9	1232.7	59.6	2.5	2.3	1255.3	158.6	3.4	4.7	29
30	1251.1	137.3	2.0	3.5	1231.7	56.2	2.4	2.9	1232.8	60.2	2.5	2.3	1254.9	156.5	3.4	4.5	30
31	1250.5	134.4	2.1	3.6					1232.9	60.5	2.5	2.3	1254.7	155.4	3.5	4.1	31
TOTAL			75.3	125.2			72.2	111.6			75.8	73.6			213.0	165.2	
Inf. Ac. Ft.			149.4				143.2				150.3				422.5	865.4	
Outf. Ac. Ft.				248.3				221.4				146.0			327.7	943.4	
Maximum Mean Daily Inflow			4.1				3.0				3.3				6.1.5	6.1.5	
Minimum Mean Daily Inflow			1.9				2.2				2.2				2.2	1.9	
Storage Change			-98.9				-78.2				+4.3				+94.9	-109.9+*(32.0)	

REMARKS { Mean for period. E - Estimated. * Storage corrected to new data beginning Oct. 1, 1939. ½ Year

Max. W. S. Elev.	1304.7	feet on 6-5 to 11-40 Storage	573.2	Acre Feet	RECORDS COLLECTED BY		COMPUTATIONS Date
Min. W. S. Elev.	1200. +	feet on Various Times Storage	0	Acre Feet	J. R. Propst	Dam Tender	Gage Hts. copied RH.
Max. Peak Inf.	377.7	C.F.S. from 2:00 a.m. on 1-8-40	to 2:30 a.m. on	1-8-40	W. T. Lind	Hydrographer	Storage applied REL
Max. Peak Outf.	73	C.F.S. from 11:00 p.m. on 2-4-40	to 2:00 p.m. on	2-5-40		Hydrographer	Inf. & Outf. computed HAV
Gage Height and storages as of Midnight on day shown.							Checked CCG & WEC 7-19-40

Oct. 1, to Dec. 31 and Jan. 26 to 31 - Inflows as per U.S.G.S. Station-outflows computed.
Jan. 1 to 25 - Outflows as per operation records-inflows computed.
M - measured. I - Interpolated.
NOTE: Outflow includes loss due to percolation in channel at base of dam.

* See Storage Rating Table No. V.
Debris loss at 1267.6 = 32.0 A.F.

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

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

In Big Santa Anita Canyon

On for the Year Ending September 30, 1940

Drainage Area 10.8 Square Miles. Capacity of Reservoir 710.4 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	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	1260.1	185.3	19.9	4.8	1262.4	199.1	12.0	11.4	1278.8	319.0	10.4	E 3.3	1299.2	512.1	3.9	2.2	1
2	1260.0	215.7	36.9	21.6	1262.4	199.1	10.0	10.0	1279.8	327.3	7.4	E 3.3	1299.5	515.3	3.6	2.2	2
3	1266.8	227.7	46.3	40.2	1262.3	198.5	10.0	10.3	1280.6	335.6	7.0	2.7	1299.8	518.5	3.6	2.2	3
4	1257.9	172.7	28.9	36.7	1262.4	199.1	9.0	8.7	1281.8	344.4	6.0	1.7	1300.1	521.8	3.9	2.2	4
5	1239.1	84.3	23.1	67.6	1261.8	195.5	8.5	10.3	1282.7	352.2	5.5	1.6	1300.4	525.1	3.8	2.2	5
6	1222.5	27.0	12.0	40.9	1260.6	188.2	8.0	11.7	1283.6	360.1	5.6	1.6	1300.7	528.3	3.6	2.2	6
7		* 0	10.0	23.6	1260.3	186.5	7.5	8.3	1284.4	367.2	5.2	1.6	1301.0	531.6	3.9	2.2	7
8		0	8.5	8.5	1261.1	191.2	7.0	4.7	1285.2	374.3	5.2	1.6	1301.3	534.9	3.6	2.1	8
9		0	7.5	7.5	1261.9	196.1	7.0	4.5	1286.0	381.6	5.3	1.6	1301.5	537.2	3.3	2.2	9
10	SUDDING RESERVOIR EMPTY	0	6.5	6.5	1262.5	199.6	6.5	4.6	1286.7	388.0	4.8	1.6	1301.7	539.4	3.3	2.2	10
11		0	6.5	6.5	1263.1	203.4	6.0	4.2	1287.3	393.5	4.4	1.6	1301.9	541.6	3.3	2.2	11
12		0	6.0	6.0	1263.7	207.3	6.0	4.1	1287.9	399.0	4.4	1.7	1302.1	543.8	3.3	2.2	12
13		0	6.0	6.0	1264.2	210.5	6.0	4.3	1288.4	403.7	4.2	1.6	1302.3	546.1	3.4	2.2	13
14		-	7.0	2.5	1264.6	213.1	5.5	4.2	1288.8	407.4	4.1	1.8	1302.5	548.3	3.3	2.2	14
15		-	6.0	2.5	1264.9	215.1	5.5	4.5	1289.3	412.1	4.1	1.8	1302.6	549.4	3.2	2.1	15
16		-	6.0	2.5	1265.4	218.3	5.5	3.9	1289.8	416.8	4.1	1.8	1302.7	550.5	3.1	2.3	16
17		-	5.5	2.5	1266.2	223.7	5.5	2.5	1290.3	421.6	4.0	1.9	1302.8	551.7	3.1	2.3	17
18	1225.3	34.9	5.5	2.5	1266.9	228.4	5.5	3.1	1290.7	425.4	4.1	2.1	1303.0	553.9	3.1	2.3	18
19	1227.4	41.5	5.0	1.6	1267.6	233.3	5.5	3.1	1291.1	429.3	4.0	2.1	1303.2	556.2	3.1	2.3	19
20	1228.9	46.5	4.8	2.3	1268.3	238.2	5.5	3.0	1291.5	433.2	4.0	2.1	1303.4	558.4	3.1	2.3	20
21	1230.2	50.9	4.6	2.4	1269.2	244.6	5.5	2.3	1291.8	436.1	4.0	2.1	1303.6	560.7	3.1	2.3	21
22	1232.5	59.1	4.8	0.7	1270.0	250.4	5.0	2.0	1292.2	440.0	4.0	2.1	1303.7	561.8	3.1	2.2	22
23	1234.7	67.2	4.6	0.5	1270.7	255.5	5.0	2.5	1292.6	443.9	4.0	2.1	1303.8	562.9	3.0	2.5	23
24	1236.4	73.7	4.4	1.1	1271.4	260.7	4.9	2.2	1293.0	447.9	3.9	2.1	1303.9	564.1	3.0	2.4	24
25	1251.5	139.3	33.6	E 0.5	1272.1	266.0	4.9	2.3	1293.4	451.9	4.3	2.3	1304.0	565.2	3.0	2.4	25
26	1255.7	160.7	27.5	16.7	1272.7	270.5	5.0	2.7	1293.5	473.1	10.8	0.1	1304.1	566.3	3.0	2.4	26
27	1257.4	169.9	14.6	10.0	1273.3	275.1	4.9	2.6	1296.6	484.4	5.7	0	1304.2	567.5	3.0	2.4	27
28	1259.0	178.9	12.4	7.9	1273.8	279.0	4.9	2.9	1297.5	493.9	4.8	0	1304.3	568.6	3.0	2.4	28
29	1262.2	197.9	19.4	9.8	1274.2	282.1	4.8	3.2	1298.3	502.4	4.3	0	1304.4	569.8	3.0	2.4	29
30					1274.6	285.2	4.8	3.3	1298.9	508.8	4.3	1.1	1304.5	570.9	3.0	2.4	30
31					1277.1	305.1	13.3	E 3.3					1304.6	572.0	2.9	2.4	31
TOTAL			383.8	362.4			205.0	151.0			123.9	51.2			102.4	70.5	
Inf. Ac. Ft.			761.3				406.6				305.3				2031	2541.7	
Outf. Ac. Ft.				718.8				299.5				101.6			139.8	2203.1	
Maximum Mean Daily Inflow			46.3				13.3				10.8				3.9	6.1.5	
Minimum Mean Daily Inflow			4.4				4.8				3.9				2.9	1.9	
Storage Change			+425				+107.2				+203.7				+63.2	+306.7 +*(32.0)	

REMARKS E - Estimated. { Mean for period. I - Interpolated ½ Year

Max. W. S. Elev.	1304.7	feet on 6-5 to 11-40 Storage	573.2	Acre Feet	RECORDS COLLECTED BY		COMPUTATIONS Date
Min. W. S. Elev.	1200. +	feet on Various Times Storage	0	Acre Feet	J. R. Propst	Dam Tender	Gage Hts. copied RL & HAV
Max. Peak Inf.	377.7	C.F.S. from 2:00 a.m. on 1-8-40	to 2:30 a.m. on	1-8-40	W. T. Lind	Hydrographer	Storage applied HAV
Max. Peak Outf.	73.	C.F.S. from 11:00 p.m. on 2-4-40	to 2:00 p.m. on	2-5-40		Hydrographer	Inf. & Outf. computed HAV
Gage Heights and Storage as of Midnight on day shown.							Checked CCG 11-20-40

Feb. 1 to 4 and 25 to 29 Outflows as per operation records, inflows computed.
Feb. 6 to 24 and Mar. 1 to 30 Inflows as per U.S.G.S. records, outflows computed.
April 1 to May 31, Outflows based on measurements and valve operation records, inflows computed.
* Storage debris loss correction - 32.0 A.F.

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 BIG SANTA ANITA Dam

In Big Santa Anita Canyon for the Year Ending September 30, 1940

Drainage Area 10.8 Square Miles. Capacity of Reservoir 710.4 Ac. Ft. at Spillway Elev. 1316.0 Ft.

Continuous Water Stage Recorder An

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	1304.6	5720	2.6	2.5	1302.3	5451	1.3	2.2	1294.7	4649	0.4	1.4	1287.1	3916	0.4	1.8	1
2	1304.6	5720	2.6	2.4	1302.2	5449	1.3	2.2	1294.5	4629	0.4	1.1	1286.8	3888	0.4	1.8	2
3	1304.6	5720	2.5	2.4	1302.0	5427	1.3	2.2	1294.4	4619	0.4	1.1	1286.5	3862	0.4	1.8	3
4	1304.6	5720	2.5	2.4	1301.9	5405	1.1	2.2	1294.3	4609	0.4	1.0	1286.2	3834	0.5	1.8	4
5	1304.7	5732	2.5	2.4	1301.6	5383	1.1	2.2	1294.1	4589	0.4	1.4	1285.9	3807	0.5	1.8	5
6	1304.7	5732	2.4	2.2	1301.4	5360	1.0	2.2	1293.9	4569	0.4	1.6	1285.6	3780	0.4	1.8	6
7	1304.7	5732	2.4	2.2	1301.2	5338	1.0	2.2	1293.6	4539	0.4	1.6	1285.3	3752	0.4	1.8	7
8	1304.7	5732	2.2	2.2	1300.9	5305	0.9	2.2	1293.4	4519	0.4	1.6	1285.0	3725	0.4	1.8	8
9	1304.7	5732	2.1	2.2	1300.7	5283	0.9	2.1	1293.1	4489	0.4	1.6	1284.7	3698	0.4	1.8	9
10	1304.7	5732	1.9	2.2	1300.5	5262	0.8	2.1	1292.9	4469	0.4	1.7	1284.4	3672	0.4	1.8	10
11	1304.7	5732	1.9	2.2	1300.3	5240	0.8	2.1	1292.6	4439	0.4	1.7	1284.1	3645	0.4	1.8	11
12	1304.6	5720	1.8	2.1	1300.1	5218	0.7	2.1	1292.4	4420	0.4	1.7	1283.8	3618	0.4	1.8	12
13	1304.6	5720	1.7	2.1	1299.8	5185	0.6	2.1	1292.1	4390	0.4	1.7	1283.5	3592	0.4	1.6	13
14	1304.5	5709	1.7	2.1	1299.5	5153	0.6	2.1	1291.9	4370	0.4	1.7	1283.2	3566	0.5	1.8	14
15	1304.4	5698	1.7	2.1	1299.2	5121	0.7	2.1	1291.6	4341	0.4	1.6	1282.9	3539	0.5	1.8	15
16	1304.3	5688	1.7	2.1	1299.0	5099	0.6	2.1	1291.4	4322	0.4	1.6	1282.6	3513	0.5	1.8	16
17	1304.2	5675	1.6	2.1	1298.7	5067	0.7	2.1	1291.1	4293	0.4	1.6	1282.2	3478	0.4	1.8	17
18	1304.1	5663	1.6	2.1	1298.4	5035	0.8	2.1	1290.9	4273	0.4	1.6	1281.9	3452	0.4	1.6	18
19	1304.0	5652	1.4	2.1	1298.2	5013	0.7	2.1	1290.6	4245	0.4	1.6	1281.6	3427	0.5	1.8	19
20	1303.9	5641	1.4	2.1	1297.9	4981	0.6	2.1	1290.4	4225	0.4	1.7	1281.3	3401	0.4	1.8	20
21	1303.8	5629	1.3	2.1	1297.7	4960	0.6	2.0	1290.1	4197	0.4	1.7	1281.0	3375	0.4	1.8	21
22	1303.6	5607	1.3	2.0	1297.4	4928	0.5	2.0	1289.8	4168	0.4	1.7	1280.6	3341	0.4	1.8	22
23	1303.5	5596	1.2	2.0	1297.1	4897	0.5	2.0	1289.6	4149	0.4	1.7	1280.3	3316	0.4	1.8	23
24	1303.4	5584	1.2	1.8	1296.8	4865	0.5	2.0	1289.3	4121	0.4	1.7	1280.0	3290	0.4	1.8	24
25	1303.3	5573	1.3	2.1	1296.6	4844	0.5	2.0	1289.0	4093	0.5	1.7	1279.7	3265	0.4	1.8	25
26	1303.2	5562	1.3	2.1	1296.3	4813	0.5	2.0	1288.8	4074	0.5	1.7	1279.4	3240	0.4	1.8	26
27	1303.0	5539	1.3	2.1	1296.0	4782	0.6	1.9	1288.5	4046	0.5	1.7	1279.1	3215	0.4	1.8	27
28	1302.9	5528	1.3	2.1	1295.7	4751	0.8	1.9	1288.2	4018	0.4	1.7	1278.7	3182	0.4	1.8	28
29	1302.7	5505	1.3	2.2	1295.5	4731	0.6	1.9	1287.9	3990	0.4	1.7	1278.4	3157	0.4	1.8	29
30	1302.5	5483	1.3	2.2	1295.2	4700	0.5	1.9	1287.6	3962	0.4	1.7	1278.0	3124	0.4	1.7	30
31					1294.9	4669	0.4	1.9	1287.4	3944	0.4	1.7					31
TOTAL			53.0	64.9			23.3	64.3			12.7	49.3			12.6	53.9	
Inf. Ac. Ft.			1051				462				252				250	2743.2	
Outf. Ac. Ft.				1287				1275				978			1069	2664.0	
Maximum Mean Daily Inflow			2.6				1.3				0.5				0.5	6.15	
Minimum Mean Daily Inflow			1.2				0.4				0.4				0.4	0.4	
Storage Change			-23.7				-8.1.4				-7.25				-8.2.0	+47.1 +*(32.0	
REMARKS	Inflows as per U.S.G.S. Station.				Mean for period.											Yearly Totals	

Max. W. S. Elev.	1304.7	feet on 6-5 to 11-40 Storage 573.2 Acre Feet	RECORDS COLLECTED BY		COMPUTATIONS	Date
Min. W. S. Elev.	1290. +	feet on Various Times Storage 0 Acre Feet	J. R. Propst	Dam Tender	Gage Hts. copied	HAV
Max. Peak Inf.	377.7	C.F.S. from 2:00 a.m. on 1-8-40 to 2:30 a.m. on 1-8-40	W. T. Lind	Hydrographer	Storage applied	HAV
Max. Peak Outf.	73.	C.F.S. from 11:00 p.m. on 2-4-40 to 2:00 p.m. on 2-5-40		Hydrographer	Inf. & Outf. computed	HAV
					Checked	CCG 11-20-40

Gage Heights and storage as of Midnight on day shown.

* Storage debris loss correction - 32.0 A.F.

SAWPIT

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

Storages based on L.A.C.F.C.D. Survey following March 2, 1938. (Table No. IV)

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Daily Gage Height in feet and Operation Record of SAWPIT Dam

In Sawpit Canyon for the Year Ending September 30, 1940

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

Continuous Water Stage Recorder An

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	1310.1	581	0.4	0.4	1310.2	583	0.1	0.1	1310.0	578	0.05	0.05	1310.0	578	+	+	1
2	1310.1	581	0.4	0.4	1310.2	583	0.1	0.1	1310.0	578	0.05	0.05	1310.0	578	+	+	2
3	1310.1	581	0.4	0.4	1310.2	583	0.1	0.1	1310.0	578	0.05	0.05	1310.0	578	+	+	3
4	1310.1	581	0.4	0.4	1310.2	583	0.1	0.1	1310.0	578	0.05	0.05	1310.0	578	+	+	4
5	1310.2	583	0.4	0.4	1310.2	583	0.1	0.1	1309.8	573	0.05	0.5	1310.0	578	+	+	5
6	1310.2	583	0.4	0.4	1310.2	583	0.1	0.1	1309.8	573	0.05	0.05	1310.0	578	+	+	6
7	1310.2	583	0.4	0.4	1310.2	583	0.1	0.1	1309.8	573	0.05	0.05	1310.6	594	2.6	1.8	7
8	1310.2	583	0.4	0.4	1310.2	583	0.1	0.1	1309.8	573	0.05	0.05	1310.3	586	1.06	1.10	8
9	1310.2	583	0.4	0.4	1310.2	583	0.05	0.1	1309.8	573	0.05	0.05	1310.4	588	2.4	2.3	9
10	1310.2	583	0.4	0.3	1310.2	583	0.05	0.1	1309.9	576	0.05	0.05	1310.4	588	1.8	1.8	10
11	1310.3	586	0.4	0.3	1310.2	583	0.05	0.1	1309.9	576	0.05	0.05	1310.6	594	2.1	1.8	11
12	1310.3	586	0.4	0.3	1310.2	583	0.05	0.1	1309.9	576	0.05	+	1310.6	594	2.3	2.6	12
13	1310.3	586	0.3	0.3	1310.2	583	0.05	0.1	1310.0	578	0.05	+	1310.5	591	2.2	2.0	13
14	1310.3	586	0.3	0.3	1310.1	581	0.05	0.1	1310.0	578	0.05	+	1310.3	586	1.5	1.8	14
15	1310.3	586	0.3	0.3	1310.1	581	0.05	0.05	1310.0	578	0.05	+	1310.3	586	1.0	1.0	15
16	1310.3	586	0.3	0.3	1310.1	581	0.05	0.05	1310.0	578	0.05	+	1310.1	581	0.5	0.7	16
17	1310.3	586	0.3	0.3	1310.1	581	0.05	0.05	1310.0	578	0.05	+	1310.1	581	0.5	0.5	17
18	1310.3	586	0.3	0.3	1310.1	581	0.05	0.05	1310.0	578	0.05	+	1310.1	581	0.3	0.4	18
19	1310.3	586	0.3	0.3	1310.1	581	0.05	0.05	1310.0	578	0.05	+	1310.0	578	0.3	0.3	19
20	1310.3	586	0.3	0.3	1310.1	581	0.05	0.05	1310.0	578	0.05	+	1310.0	578	0.3	0.3	20
21	1310.3	586	0.2	0.2	1310.1	581	0.05	0.05	1310.0	578	+	+	1310.0	578	0.3	0.3	21
22	1310.3	586	0.2	0.2	1310.0	578	0.05	0.05	1310.0	578	+	+	1310.0	578	0.2	0.3	22
23	1310.3	586	0.2	0.2	1310.0	578	0.05	0.05	1310.0	578	+	+	1310.1	581	0.6	0.4	23
24	1310.3	586	0.2	0.2	1310.0	578	0.05	0.05	1310.0	578	+	+	1310.1	581	0.6	0.6	24
25	1310.3	586	0.2	0.2	1310.0	578	0.05	0.05	1310.0	578	+	+	1310.1	581	0.6	0.6	25
26	1310.2	583	0.2	0.2	1310.0	578	0.05	0.05	1310.0	578	+	+	1310.1	581	0.5	0.5	26
27	1310.2	583	0.2	0.2	1310.0	578	0.05	0.05	1310.0	578	+	+	1310.1	581	0.3	0.3	27
28	1310.2	583	0.2	0.2	1310.0	578	0.05	0.05	1310.0	578	+	+	1310.1	581	0.3	0.3	28
29	1310.2	583	0.1	0.2	1310.0	578	0.05	0.05	1310.0	578	+	+	1310.1	581	0.3	0.3	29
30	1310.2	583	0.1	0.2	1310.0	578	0.05	0.05	1310.0	578	+	+	1310.2	583	0.3	0.3	30
31	1310.2	583	0.1	0.1					1310.0	578	+	+	1310.2	583	0.6	0.5	31
TOTAL			9.1	9.0			1.90	2.20			1.00	1.00			33.0	32.7	
Inf. Ac. Ft.			180				38				20				655	893	
Outf. Ac. Ft.				179				44				20			649	892	
Maximum Mean Daily Inflow			0.4				0.1				0.05				1.06	1.06	
Minimum Mean Daily Inflow			0.1				0.05				+				+	+	
Storage Change			+0.2				-0.5				0				+0.5	+0.2	
REMARKS	Mean for period.				+ less than 0.05 c.f.s.											½ Year	

Max. W. S. Elev.	1311.8	feet on 1-8-40 Storage 62.5 Acre Feet	RECORDS COLLECTED BY		COMPUTATIONS	Date
Min. W. S. Elev.	1289.2	feet on Various Times Storage 14.6 Acre Feet	A. E. Marshall & R. E. Waddicor	Dam Tender	Gage Hts. copied	REL
Max. Peak Inf.	38.4	C.F.S. from 1:00 a.m. on 1-8-40 to 1:30 a.m. on 1-8-40	W. T. Lind	Hydrographer	Storage applied	REL
Max. Peak Outf.	Est. 20	C.F.S. from 12:00 p.m. on 1-7-40 to 4:00 a.m. on 1-8-40		Hydrographer	Inf. & Outf. computed	HAV
					Checked	CCG 5-29-40

Gage Heights and Storage as of Midnight on day shown.

Outflows as indicated from operation records and U.S.G.S. Station less Monrovia Creek.

SAWPIT (CONT.)

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 SAWPIT Dam

In Sawpit Canyon for the Year Ending September 30, 1940

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	1310.6	594	4.2	3.6	1311.0	604	1.8	1.8	1311.0	604	1.1	1.1	1310.5	591	0.2	0.3	1
2	1310.9	601	6.3	6.0	1311.0	604	1.8	1.8	1310.9	601	0.5	0.7	1310.5	591	0.2	0.2	2
3	1310.9	601	6.0	6.0	1310.9	601	1.5	1.7	1310.9	601	0.5	0.5	1310.5	591	0.2	0.2	3
4	1310.8	599	4.7	4.8	1310.9	601	1.4	1.4	1310.9	601	0.3	0.3	1310.5	591	0.2	0.2	4
5	1310.6	594	3.3	3.5	1310.8	599	1.1	1.2	1310.8	599	0.3	0.3	1310.5	591	0.2	0.2	5
6	1310.5	591	2.1	2.3	1310.7	596	1.0	1.1	1310.8	599	0.3	0.3	1310.5	591	0.2	0.2	6
7	1310.6	594	2.1	1.9	1310.7	596	0.9	0.9	1310.8	599	0.3	0.3	1310.5	591	0.2	0.2	7
8	1310.7	596	1.5	1.4	1310.6	594	0.6	0.7	1310.8	599	0.3	0.3	1310.5	591	0.2	0.2	8
9	1310.5	591	0.8	1.1	1310.6	594	0.6	0.6	1310.7	596	0.3	0.3	1310.5	591	0.2	0.2	9
10	1310.3	586	0.4	0.6	1310.8	599	0.8	0.6	1310.7	596	0.3	0.3	1310.5	591	0.2	0.2	10
11	1310.3	586	0.4	0.4	1310.8	599	0.6	0.6	1310.6	594	0.2	0.3	1310.5	591	0.2	0.2	11
12	1310.4	588	0.4	0.4	1310.8	599	0.3	0.3	1310.6	594	0.2	0.3	1310.5	591	0.2	0.2	12
13	1310.3	586	0.4	0.4	1310.8	599	0.3	0.3	1310.6	594	0.2	0.3	1310.5	591	0.2	0.2	13
14	1310.5	591	0.6	0.4	1310.8	599	0.3	0.3	1310.6	594	0.2	0.2	1310.5	591	0.1	0.2	14
15	1310.7	596	1.0	0.7	1310.7	596	0.3	0.3	1310.6	594	0.2	0.2	1310.4	588	0.1	0.2	15
16	1310.6	594	0.6	0.7	1310.7	596	0.3	0.3	1310.6	594	0.2	0.2	1310.4	588	0.1	0.2	16
17	1310.5	591	0.3	0.5	1310.7	596	0.3	0.3	1310.6	594	0.2	0.2	1310.4	588	0.1	0.2	17
18	1310.4	588	0.3	0.4	1310.7	596	0.2	0.3	1310.6	594	0.2	0.2	1310.4	588	0.1	0.2	18
19	1310.4	588	0.3	0.3	1310.7	596	0.3	0.3	1310.6	594	0.2	0.2	1310.4	588	0.1	0.2	19
20	1310.4	588	0.3	0.3	1310.6	594	0.3	0.3	1310.6	594	0.2	0.2	1310.4	588	0.1	0.2	20
21	1310.4	588	0.3	0.3	1310.6	594	0.2	0.3	1310.6	594	0.2	0.2	1310.4	588	0.1	0.2	21
22	1310.5	591	0.4	0.3	1310.6	594	0.2	0.3	1310.6	594	0.1	0.2	1310.3	586	0.1	0.2	22
23	1310.7	596	0.6	0.3	1310.6	594	0.2	0.3	1310.5	591	0.1	0.2	1310.3	586	0.1	0.2	23
24	1310.7	596	0.4	0.4	1310.5	591	0.2	0.2	1310.5	591	0.3	0.3	1310.3	586	0.1	0.1	24
25	1311.3	612	5.6	4.6	1310.5	591	0.2	0.2	1310.4	588	0.2	0.3	1310.3	586	0.1	0.1	25
26	1311.0	604	4.6	5.0	1310.5	591	0.2	0.2	1310.9	601	1.6	1.0	1310.2	583	0.1	0.1	26
27	1310.9	601	2.5	2.7	1310.5	591	0.2	0.2	1310.9	601	0.8	0.8	1310.1	581	0.1	0.1	27
28	1310.9	601	2.0	2.0	1310.4	588	0.2	0.2	1310.8	599	0.4	0.5	1310.0	578	0.1	0.1	28
29	1311.0	604	3.1	2.9	1310.4	588	0.2	0.2	1310.7	596	0.2	0.3	1309.9	576	0.1	0.1	29
30					1310.4	588	0.1	0.2	1310.6	594	0.2	0.3	1309.9	576	0.1	+	30
31					1311.0	604	1.4	0.6					1309.9	576	0.1	+	31
TOTAL			55.5	54.4			18.0	18.0			10.3	10.8			4.4	5.3	
Inf. Ac. Ft.			110.1				35.7				20.4				8.7	26.42	
Outf. Ac. Ft.				107.9				35.7				21.4			10.5	26.47	
Maximum Mean Daily Inflow			6.3				1.8				1.6				0.2	10.6	
Minimum Mean Daily Inflow			0.3				0.1				0.1				0.1	+	
Storage Change			+ 2.1				0				-1.0				-1.8	-0.5	

REMARKS { Mean for period. + Less than 0.05 c.f.s. ¾ Year

Max. W. S. Elev.	1311.8	feet on	1-8-40	Storage	62.5	Acre Feet	RECORDS COLLECTED BY		COMPUTATIONS Date
Min. W. S. Elev.	1289.2	feet on	Various Times	Storage	14.6	Acre Feet	A.E.Marshall & R.E.Waddicor	Dam Tender	Gage Hts. copied REL & HAV
Max. Peak Inf.	39.4	C.F.S. from	1:00 a.m. on 1-8-40	to	1:30 a.m. on	1-8-40	W. T. Lind	Hydrographer	Storage applied REL & HAV
Max. Peak Outf. Est.	20.	C.F.S. from	12:00 p.m. on 1-7-40	to	4:00 a.m. on	1-8-40		Hydrographer	Inf. & Outf. computed HAV
									Checked CCG 5-20-40

Gage Heights and Storage as of Midnight on day shown.

Outflows as indicated from dam operation records and U.S.G.S. station less Monrovia Creek.

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 SAWPIT Dam

In Sawpit Canyon for the Year Ending September 30, 1940

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	1309.9	576	+	+	1309.9	576	+	+	1309.6	568	0	0	1289.2	146	0	0	1
2	1309.9	576	+	+	1309.9	576	+	+	1309.6	568	0	0	1289.2	146	0	0	2
3	1309.9	576	+	+	1309.9	576	+	+	1309.6	568	0	0	1289.2	146	0	0	3
4	1309.9	576	+	+	1309.9	576	+	+	1309.6	568	0	0	1289.2	146	0	0	4
5	1309.9	576	+	+	1309.9	576	+	+	1309.6	568	0	0	1289.2	146	0	0	5
6	1309.9	576	+	+	1309.9	576	+	+	1309.6	568	0	0	1289.2	146	0	0	6
7	1309.9	576	+	+	1309.9	576	+	+	1309.6	568	0	0	1289.2	146	0	0	7
8	1309.9	576	+	+	1309.9	576	+	+	1308.3	536	0	1.8	1289.2	146	0	0	8
9	1309.9	576	+	+	1309.9	576	+	+	1306.2	485	0	2.5	1289.2	146	0	0	9
10	1309.9	576	+	+	1309.9	576	+	+	1305.0	457	0	1.4	1289.2	146	0	0	10
11	1309.9	576	+	+	1309.9	576	+	+	1303.7	427	0	1.6	1289.2	146	0	0	11
12	1309.9	576	+	+	1309.9	576	+	+	1302.3	396	0	1.5	1289.2	146	0	0	12
13	1309.9	576	+	+	1309.8	573	0	+	1301.0	368	0	1.4	1289.2	146	0	0	13
14	1309.9	576	+	+	1309.8	573	0	0	1299.7	341	0	1.4	1289.2	146	0	0	14
15	1309.9	576	+	+	1309.8	573	0	0	1298.3	312	0	1.5	1289.2	146	0	0	15
16	1309.9	576	+	+	1309.8	573	0	0	1296.8	282	0	1.5	1289.2	146	0	0	16
17	1310.0	578	+	+	1309.8	573	0	0	1295.3	254	0	1.4	1289.2	146	0	0	17
18	1310.0	578	+	+	1309.8	573	0	0	1293.7	224	0	1.5	1289.2	146	0	0	18
19	1310.0	578	+	+	1309.8	573	0	0	1292.0	193	0	1.6	1289.2	146	0	0	19
20	1310.0	578	+	+	1309.7	571	0	0	1290.5	168	0	1.2	1289.2	146	0	0	20
21	1310.0	578	+	+	1309.7	571	0	0	1290.4	166	0	0.2	1289.2	146	0	0	21
22	1310.0	578	+	+	1309.7	571	0	0	1290.1	161	0	0.2	1289.2	146	0	0	22
23	1310.0	578	+	+	1309.7	571	0	0	1289.8	156	0	0.2	1289.2	146	0	0	23
24	1310.0	578	+	+	1309.7	571	0	0	1289.5	151	0	0.3	1289.2	146	0	0	24
25	1310.0	578	+	+	1309.7	571	0	0	1289.2	146	0	0.2	1289.2	146	0	0	25
26	1310.0	578	+	+	1309.7	571	0	0	1289.1	145	0	+	1289.2	146	0	0	26
27	1310.0	578	+	+	1309.7	571	0	0	1289.1	145	0	0	1289.2	146	0	0	27
28	1310.0	578	+	+	1309.7	571	0	0	1289.1	145	0	0	1289.2	146	0	0	28
29	1309.9	576	+	+	1309.7	571	0	0	1289.1	145	0	0	1289.2	146	0	0	29
30	1309.9	576	+	+	1309.7	571	0	0	1289.1	145	0	0	1289.2	146	0	0	30
31			+	+	1309.7	571	0	0	1289.2	146	0	0					31
TOTAL			+	+			+	+			0	21.4			0	0	
Inf. Ac. Ft.			+				0				0				0	26.42	
Outf. Ac. Ft.			+					*0.5				42.4			0	30.76	
Maximum Mean Daily Inflow			+				0				0				0	10.6	
Minimum Mean Daily Inflow			+				-0.5				0				0	0	
Storage Change			0								-42.5				0	-4.35	

REMARKS * Leakage and Evaporation loss. + Less than 0.05 c.f.s. { Mean for period. Yearly Totals

Max. W. S. Elev.	1311.8	feet on	1-8-40	Storage	62.5	Acre Feet	RECORDS COLLECTED BY		COMPUTATIONS Date
Min. W. S. Elev.	1289.2	feet on	Various Times	Storage	14.6	Acre Feet	A.E.Marshall & R.E.Waddicor	Dam Tender	Gage Hts. copied HAV
Max. Peak Inf.	39.4	C.F.S. from	1:00 a.m. on 1-8-40	to	1:30 a.m. on	1-8-40	W. T. Lind	Hydrographer	Storage applied HAV
Max. Peak Outf. Est.	20.	C.F.S. from	12:00 p.m. on 1-7-40	to	4:00 a.m. on	1-8-40		Hydrographer	Inf. & Outf. computed HAV
									Checked P.H. 12-10-40

Gage Heights and Storage as of Midnight on Day Shown.

Outflows as indicated from dam operation records and U.S.G.S. Station less Monrovia Creek.

SAN GABRIEL NO. 2

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

Storages based on L.A.F.C.D. survey of Dec. 1935 and silt survey of Nov. 1939 (Table No. III)

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Daily Gage Height in feet and Operation Record of SAN GABRIEL Dam No. 2

In / On San Gabriel - West Fork for the Year Ending September 30, 1940

Continuous Water Stage Recorder Pressure

Drainage Area 40.4 Square Miles. Capacity of Reservoir 11029 Ac. Ft. at Spillway Elev. 2385.0 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		c235.6	115.6	14.0			6.0	6.0			4.9	4.9		0	5.5	5.5	1
2		c235.5	11.5.2	14.0			5.5	5.5			4.9	4.9		0	5.0	5.0	2
3		c238.2	114.5	13.0			5.0	5.0			4.9	4.9	21324	1.9	6.5	5.5	3
4		c244.5	113.9	16.0			4.9	4.9			4.9	4.9	21916	8.7	7.7	4.3	4
5		c247.3	113.2	19.0			4.8	4.8			4.8	4.8	21940	11.3	1 7.0	c 5.7	5
6		c 253	112.5	16.0			4.8	4.8			4.6	4.6	21962	14.1	6.2	4.6	6
7		c 220	111.8	14.0			4.7	4.7			4.5	4.5	22179	7.1.2	35.3	6.5	7
8		0	c110.0	12.0			5.5	5.5			4.4	4.4	22494	651.6	308.6	16.0	8
9		0	10.0	10.0			6.0	6.0			4.5	4.5	22433	408.0	58.5	14.1.0	9
10		0	8.5	8.5			6.0	6.0			4.6	4.6	22557	269.6	40.0	14.0.0	10
11	DRY	0	8.5	8.5	DRY		6.0	6.0	DRY		5.5	5.5	22575	364.6	39.6	1.7	11
12		0	8.5	8.5			5.5	5.5			4.2	4.6	22403	425.4	53.0	2.4	12
13		0	8.0	8.0	STORAGE		5.5	5.5	STORAGE		4.6	4.6	22328	273.2	129.5	c106.6	13
14		0	7.5	7.5			5.5	5.5			4.6	4.6	22257	157.3	126.6	c 85.0	14
15		0	7.0	7.0			5.5	5.5			4.5	4.5	22145	53.6	123.5	c 75.8	15
16	RESERVOIR	0	6.5	6.5	RESERVOIR		5.5	5.5	RESERVOIR		4.5	4.5	22139	51.0	120.4	c 21.7	16
17		0	6.0	6.0		NO	5.5	5.5		NO	4.5	4.5	22173	87.8	117.3	c 8.8	17
18		0	6.0	6.0			5.5	5.5			4.8	4.8	22160	50.3	14.2	18.0	18
19		0	6.5	6.5			5.0	5.0			4.8	4.8	22145	53.6	14.6	18.0	19
20		0	6.5	6.5			5.0	5.0			5.0	5.0	22138	50.7	12.6	14.0	20
21		0	6.5	6.5			5.0	5.0			5.0	5.0	22140	51.4	14.3	14.0	21
22		0	6.0	6.0			5.0	5.0			4.8	4.8	22139	51.0	12.8	13.0	22
23		0	6.0	6.0			5.0	5.0			6.0	6.0	22177	70.1	22.6	13.0	23
24		0	6.0	6.0			5.0	5.0			6.0	6.0	22220	107.5	19.8	0.9	24
25		0	6.0	6.0			5.0	5.0			4.8	4.8	22243	137.3	15.9	0.9	25
26		0	6.0	6.0			4.9	4.9			5.0	5.0	22261	163.1	14.0	1.0	26
27		0	6.0	6.0			4.8	4.8			4.8	4.8	22277	137.6	13.4	1.0	27
28		0	6.0	6.0			4.8	4.8			4.8	4.8	22291	209.9	12.3	1.1	28
29		0	6.0	6.0			4.8	4.8			4.8	4.8	22303	229.5	11.0	1.1	29
30		0	6.0	6.0			4.9	4.9			5.0	5.0	22314	248.3	10.7	1.2	30
31		0	6.0	6.0							5.5	5.5	22329	275.0	15.1	1.7	31
TOTAL		0	263.9	274.0			156.9	156.9			151.1	151.1			873.8	735.2	
Inf. Ac. Ft.			523.4				311.2				299.7				1733.2	2667.5	
Outf. Ac. Ft.				5435				311.2				299.7			1458.2	2612.6	
Maximum			15.8				6.0				6.0				308.6	308.6	
Mean Daily Inflow			6.0				4.7				4.2				5.0	4.2	
Minimum Mean Daily Inflow																	
Storage Change			-20				0				0				+275.0	+255.0	

REMARKS: Outflows as per Station P209R. c - Computed. 1 - Interpolated. ½ Year

Max. W. S. Elev. 2274.9 feet on 6/8-12/40 Storage 1541.3 Acre Feet

Min. W. S. Elev. Dry at various feet on times Storage Acre Feet

Max. Peak Inf. 2023. C. F. S. from 2:30 a.m. on 1/8/40 to 3:00 a.m. on 1/8/40

Max. Peak Outf. *1240. C. F. S. from at 12:50 p.m. on 1/15/40 to on

RECORDS COLLECTED BY
Ben Harrison — Dam Tender
G. Brown — Hydrographer
E. Godfrey — Hydrographer

COMPUTATIONS — Date
Gage Hts. copied HAV
Storage applied HAV
Inf. & Outf. computed HAV
Checked CCG 8/12/40

Gage Heights and Storage as of Midnight on day shown.

* - Instantaneous record at Station P209R.

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 No. 2

In / On San Gabriel - West Fork for the Year Ending September 30, 1940

Continuous Water Stage Recorder Pressure

Drainage Area 40.4 Square Miles. Capacity of Reservoir 11029. 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	22425	476.1	103.6	2.2	22673	12385	50.6	7.5	22455	5491	49.0	1.6	22675	12460	12.8	3.2	1
2	22480	613.5	130.3	61.0	22674	12422	39.9	38.0	22479	6109	32.8	1.7	22680	12646	12.8	3.4	2
3	22530	754.5	190.0	119.0	22630	10810	38.7	120.0	22496	6625	28.0	1.9	22685	12841	12.2	3.4	3
4	22533	766.4	129.0	123.0	22604	9906	37.4	83.0	22514	7077	24.9	2.1	22689	12995	12.1	3.4	4
5	22506	685.0	79.0	120.0	22623	10562	37.7	4.6	22520	7248	20.6	1.2.0	22695	13150	11.0	3.2	5
6	22467	579.7	63.9	117.0	22639	11130	33.2	4.6	22520	7248	19.0	19.0	22697	13304	10.9	5.2	6
7	22418	459.6	44.5	105.0	22655	11640	30.2	4.5	22520	7248	19.0	19.0	22700	13420	9.3	3.2	7
8	22399	416.4	40.2	62.0	22666	12122	29.0	4.7	22519	7220	17.6	19.0	22703	13539	9.3	3.4	8
9	22398	414.2	35.9	37.0	22678	12573	27.5	4.7	22516	7191	16.5	18.0	22706	13658	9.3	3.4	9
10	22391	399.0	33.3	41.0	22661	11934	23.8	56.0	22520	7248	15.9	13.0	22709	13777	8.2	3.4	10
11	22381	377.3	30.1	41.0	22630	10810	21.3	78.0	22520	7515	15.5	2.1	22711	13856	8.2	3.4	11
12	22369	352.4	27.4	40.0	22620	10456	24.2	42.0	22537	7753	14.1	2.1	22713	13936	9.1	3.7	12
13	22355	324.2	26.8	41.0	22631	10846	23.6	4.0	22544	7997	14.5	2.2	22715	14016	7.7	3.4	13
14	22347	308.7	27.2	35.0	22641	11202	21.7	3.7	22555	8213	13.1	2.2	22717	14095	7.7	3.4	14
15	22332	280.5	20.8	35.0	22650	11530	20.4	3.9	22559	8430	13.4	2.4	22719	14174	7.7	3.4	15
16	22334	302.9	20.6	13.0	22659	11859	20.7	4.1	22566	8686	15.3	2.4	22721	14255	7.7	3.7	16
17	22336	346.3	20.6	1.4	22666	12122	1 20.3	c 7.1	22574	8911	13.7	2.4	22723	14337	7.7	3.7	17
18	22338	386.0	20.6	1.6	22643	11275	1 19.9	c 62.6	22580	9104	12.1	2.4	22725	14419	7.7	3.7	18
19	22342	299.0	20.5	57.0	22603	9872	1 19.5	c 90.2	22586	9304	12.5	2.4	22727	14501	7.7	3.7	19
20	22285	200.2	18.2	68.0	22559	8430	1 19.1	c 91.8	22592	9503	12.5	2.4	22729	14583	7.7	4.0	20
21	22304	231.2	18.6	3.0	22515	7106	1 18.7	c 85.4	22598	9702	12.7	2.7	22731	14664	6.7	4.0	21
22	22329	275.0	23.4	1.3	22467	5797	1 18.4	c 84.4	22603	9872	11.5	2.9	22733	14746	6.7	4.0	22
23	22350	314.5	21.2	1.3	22448	5317	1 18.1	c 42.3	22608	10044	11.3	2.7	22735	14828	6.7	3.7	23
24	22369	352.4	20.4	1.3	22460	5615	1 17.8	c 2.8	22613	10216	11.1	2.4	22736	14869	6.7	3.4	24
25	22470	587.5	120.6	2.0	22433	4951	1 17.5	c 5.1.0	22619	10422	12.6	2.2	22737	14911	6.7	3.4	25
26	22550	815.2	118.9	4.1	22333	2823	1 17.2	c1245	22639	11130	38.9	3.2	22738	14951	6.7	3.7	26
27	22585	927.0	61.8	5.5	22314	2483	16.9	34.0	22650	11530	23.4	3.2	22739	14992	6.6	4.0	27
28	22612	1018.1	52.4	6.5	22324	2659	15.9	7.0	22658	11823	18.1	3.4	22740	15033	6.0	4.0	28
29	22650	11530	76.1	8.0	22341	2970	16.4	0.8	22664	12046	14.7	3.4	22741	15075	6.0	4.0	29
30					22357	3281	16.3	0.6	22670	12272	14.8	3.4	22742	15118	6.0	3.7	30
31					22416	4551	65.7	1.7					22743	15160	5.9	3.7	31
TOTAL			1595.9	1153.2			797.5	1149.5			549.1	159.6			256.5	110.9	
Inf. Ac. Ft.			3165.4				1582.0				1089.1				508.8	9212.8	
Outf. Ac. Ft.				2287.3				2280.0				317.0			2200	7716.9	
Maximum			190.0				65.7				49.0				12.8	308.6	
Mean Daily Inflow			18.2				15.9				11.1				5.9	4.2	
Minimum Mean Daily Inflow																	
Storage Change			+8780				-6979				+7721				+238.8	+1496.0	

REMARKS: Outflows as per station 209. [Mean for period. 1 - Interpolated. c - Computed ⅔ Year

Max. W. S. Elev. 2274.9 feet on 6-8 to 12-40 Storage 1541.3 Acre Feet

Min. W. S. Elev. Dry at Various feet on Times Storage Acre Feet

Max. Peak Inf. 2023. C. F. S. from 2:30 a.m. on 1-8-40 to 3:00 a.m. on 1-8-40

Max. Peak Outf. *1240. C. F. S. from at 12:50p.m. on 1-15-40 to on

RECORDS COLLECTED BY
Ben Harrison — Dam Tender
G. Brown — Hydrographer
E. Godfrey — Hydrographer

COMPUTATIONS — Date
Gage Hts. copied HAV
Storage applied HAV
Inf. & Outf. computed HAV
Checked CCG 8-13-40

Gage Heights and storage as of Midnight on day shown.

* - Instantaneous record at Station P209R.

SAN GABRIEL NO. 2 (CONT.)

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

Daily Gage Height in feet and Operation Record of SAN GABRIEL Dam No. 2

In San Gabriel - West Fork for the Year Ending September 30, 19 40

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Continuous Water Stage Recorder Au

Drainage Area 40.4 Square Miles. Capacity of Reservoir 11029 Ac. Ft. at Spillway Elev. 2385.0 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	2274.4	1520.2	5.9	3.7	2273.3	1474.6	1.8	4.7	2255.0	*734.3	1.0	18.0	2194.5	2.7	0.9	0.9	1
2	2274.5	1524.4	5.8	4.0	2273.2	1470.5	1.8	4.7	2253.9	702.3	1.0	18.0	2194.5	2.7	0.9	0.9	2
3	2274.6	1528.6	5.8	4.2	2273.1	1466.4	1.7	4.7	2252.8	671.0	1.0	18.0	2194.5	2.7	0.9	0.9	3
4	2274.6	1528.6	5.8	4.2	2272.9	1458.3	1.6	4.7	2251.6	637.7	1.0	18.0	2194.5	2.7	1.1	1.1	4
5	2274.7	1532.9	5.8	4.5	2272.8	1454.2	1.5	4.7	2250.5	608.0	1.0	16.0	2194.5	2.7	0.9	0.9	5
6	2274.8	1537.1	5.6	4.2	2272.6	1446.0	1.4	4.7	2249.4	579.1	1.0	16.0	2194.5	2.7	0.9	0.9	6
7	2274.8	1537.1	5.3	4.2	2272.5	1441.9	1.4	4.7	2248.2	548.6	0.9	16.0	2194.5	2.7	0.9	0.9	7
8	2274.9	1541.3	5.0	4.2	2272.3	1433.7	1.3	4.7	2247.0	519.1	0.9	16.0	2194.5	2.7	0.9	0.9	8
9	2274.9	1541.3	4.8	4.2	2271.9	1417.4	1.3	9.5	2245.8	490.7	0.8	15.0	2194.5	2.7	0.9	0.9	9
10	2274.9	1541.3	4.6	4.2	2271.3	1393.6	1.3	13.0	2242.7	420.7	0.8	33.0	2194.5	2.7	0.9	0.9	10
11	2274.9	1541.3	4.3	4.2	2270.7	1369.8	1.3	13.0	2237.1	307.6	0.8	54.0	2194.5	2.7	0.9	0.9	11
12	2274.9	1541.3	4.0	4.2	2270.1	1346.0	1.3	13.0	2225.3	127.0	0.8	87.0	2194.5	2.7	1.1	1.1	12
13	2274.8	1537.1	3.8	4.0	2269.6	1326.6	1.3	13.0	2220.6	9.3	0.8	57.0	2194.5	2.7	1.1	1.1	13
14	2274.8	1537.1	3.7	4.5	2269.0	1303.4	1.3	13.0	2194.8	3.0	0.9	9.0	2194.5	2.7	1.1	1.1	14
15	2274.6	1537.1	3.6	4.7	2268.5	1284.1	1.2	12.0	2194.5	2.7	0.9	1.9	2194.5	2.7	1.1	1.1	15
16	2274.7	1532.9	3.5	5.0	2267.9	1261.0	1.2	13.0	2194.5	2.7	0.9	1.5	2194.5	2.7	1.1	1.1	16
17	2274.7	1532.9	3.4	4.7	2267.4	1242.2	1.2	12.0	2194.5	2.7	0.9	1.5	2194.5	2.7	0.9	0.9	17
18	2274.6	1528.6	3.3	4.5	2266.8	1219.7	1.2	13.0	2194.5	2.7	0.9	1.5	2194.5	2.7	0.9	0.9	18
19	2274.6	1528.6	3.3	4.5	2266.1	1193.4	1.2	14.0	2194.5	2.7	0.8	1.3	2194.5	2.7	1.1	1.1	19
20	2274.5	1524.4	3.3	4.5	2265.4	1167.7	1.2	14.0	2194.5	2.7	0.8	1.3	2194.5	2.7	1.1	1.1	20
21	2274.4	1520.2	3.1	4.5	2264.8	1145.7	1.2	14.0	2194.5	2.7	0.8	1.3	2194.5	2.7	1.1	1.1	21
22	2274.3	1516.0	3.0	4.5	2264.1	1120.2	1.1	13.0	2194.5	2.7	0.8	1.3	2194.5	2.7	1.1	1.1	22
23	2274.2	1511.8	2.8	4.5	2263.4	1095.2	1.1	13.0	2194.5	2.7	0.9	1.3	2194.5	2.7	1.1	1.1	23
24	2274.1	1507.5	2.6	4.3	2262.6	1066.9	1.1	15.0	2194.5	2.7	0.9	1.3	2194.5	2.7	1.1	1.1	24
25	2274.0	1503.3	2.5	4.1	2261.7	1035.3	1.1	16.0	2194.5	2.7	0.9	1.1	2194.5	2.7	0.9	0.9	25
26	2273.9	1499.2	2.4	4.4	2260.9	1007.8	1.1	16.0	2194.5	2.7	0.9	1.1	2194.5	2.7	0.9	0.9	26
27	2273.8	1495.1	2.3	4.6	2260.0	976.9	1.1	16.0	2194.5	2.7	0.9	1.1	2194.5	2.7	0.9	0.9	27
28	2273.7	1491.0	2.2	4.9	2259.2	950.3	1.1	15.0	2194.5	2.7	0.9	1.1	2194.5	2.7	0.9	0.9	28
29	2273.6	1486.9	2.0	5.0	2258.3	920.4	1.1	16.0	2194.5	2.7	0.9	1.1	2194.5	2.7	0.9	0.9	29
30	2273.5	1482.8	2.0	5.0	2257.2	884.7	1.1	17.0	2194.5	2.7	0.9	1.1	2194.5	2.7	0.9	0.9	30
31					2256.1	849.3	1.1	18.0	2194.5	2.7	0.9	1.1					31
TOTAL			115.5	132.2			39.7	359.1			27.6	412.9			29.4	29.4	
Inf. Ac. Ft.			2291	•			787				54.7				583	9633.6	
Outf. Ac. Ft.				262.2				712.3				819.0			583	9568.7	
Maximum Mean Daily Inflow			5.9				1.8				1.0				1.1	308.6	
Minimum Mean Daily Inflow			2.0				1.1				0.8				0.9	0.8	
Storage Change			-332				-633.5				-(846.6 - *82.3)				0	-17.3**(82.3)	

REMARKS Outflows as per station F209R. ** Outflows computed from storage change. ( ) Mean for period. Yearly Totals

Max. W. S. Elev.	2274.9 feet on 6-8 to 12-40 Storage 1541.3 Acre Feet	RECORDS COLLECTED BY		COMPUTATIONS	Date
Min. W. S. Elev.	Dry at ~~feet~~ on various times ~~Storage~~ ~~Acre Feet~~	Ben Harrison	Dam Tender	Gage Hts. copied	HAV
Max. Peak Inf.	2023. C.F.S. from 2:30 a.m. on 1-8-40 to 3:00 a.m. on 1-8-40	G. Brown	Hydrographer	Storage applied	HAV
Max. Peak Outf. ** 1240.	C.F.S. from 12:50 p.m. on 1-15-40 to	E. Godfrey	Hydrographer	Inf. & Outf. computed	HAV
Gage Heights and Storage as of Midnight on day shown.				Checked CCG	10-10-40

* Storage corrected Aug. 1, 1940 for debris encroachment (Survey Oct. 1940) See storage table No. IV.
** - Instantaneous record at Station F209R.

SAN GABRIEL NO. 1

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

Storages based on L.A.C.F.C.D. Survey of Oct. 1938 corrected for debris Sept. 1939 (Table No. IV)

Daily Gage Height in feet and Operation Record of SAN GABRIEL Dam No. 1

In San Gabriel Canyon for the Year Ending September 30, 19 40

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Continuous Water Stage Recorder Au

Drainage Area 202. Square Miles. Capacity of Reservoir 47,191 Ac. Ft. at Spillway Elev. 1453.0 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	1331.15	5883	64.4	38.7	1311.15	5153	45.5	41.9	1311.97	5245	40.5	41.0	1312.91	5352	40.2	38.1	1
2	1330.80	5826	81.1	109.4	1311.21	5160	44.5	40.5	1311.93	5240	38.9	41.0	1312.95	5356	40.1	38.1	2
3	1329.40	5600	66.5	180.0	1311.26	5165	43.6	40.5	1311.89	5236	39.6	41.0	1312.94	5355	41.6	42.3	3
4	1328.35	5433	61.7	145.0	1311.31	5171	43.9	40.5	1311.85	5231	38.9	41.0	1313.01	5363	47.2	43.1	4
5	1327.83	5351	69.2	110.0	1311.36	5176	43.5	40.5	1311.84	5230	39.1	39.3	1313.02	5364	43.7	43.1	5
6	1327.40	5284	76.9	110.0	1311.40	5181	43.4	40.5	1311.87	5233	39.8	38.1	1313.06	5369	45.7	43.1	6
7	1327.02	5225	80.3	110.0	1311.44	5185	42.9	40.5	1311.90	5237	40.4	38.1	1314.40	5525	121.7	43.1	7
8	1326.47	5140	67.6	110.0	1311.60	5203	49.5	40.5	1311.93	5240	39.7	38.1	1325.15	4939	757.2	44.3	8
9	1325.85	5045	62.6	110.0	1311.78	5223	51.0	40.5	1311.97	5245	40.8	38.1	1327.52	5303	319.0	135.5	9
10	1325.22	4949	62.2	110.0	1311.87	5233	46.1	40.5	1312.01	5249	40.2	38.1	1329.56	5594	330.6	184.0	10
11	1324.60	4842	56.8	110.0	1311.94	5241	45.1	40.5	1312.05	5254	40.8	38.1	1328.56	5466	120.5	185.0	11
12	1323.72	4728	53.7	110.0	1312.00	5248	44.6	40.5	1312.09	5258	40.6	38.1	1327.60	5316	109.6	185.0	12
13	1322.90	4610	52.1	110.0	1312.03	5251	42.6	40.5	1312.11	5261	40.2	38.1	1327.86	5339	172.5	150.3	13
14	1322.10	4498	54.7	110.0	1312.07	5256	44.0	40.7	1312.12	5262	39.1	38.1	1328.66	5462	188.8	126.0	14
15	1321.29	4387	53.2	108.0	1312.09	5258	42.0	40.5	1312.13	5263	39.1	38.1	1329.36	5554	131.4	74.1	15
16	1320.46	4279	54.6	108.0	1312.11	5260	42.2	40.5	1312.13	5263	38.6	38.1	1329.00	5536	104.0	132.5	16
17	1319.60	4165	51.5	108.0	1312.15	5265	43.6	40.5	1312.13	5263	38.5	38.1	1326.52	5148	70.2	265.0	17
18	1319.70	4050	51.1	108.0	1312.18	5268	43.1	41.0	1312.10	5259	36.6	38.1	1325.00	4916	82.6	199.3	18
19	1317.87	3946	55.4	107.0	1312.18	5268	41.7	41.0	1312.08	5257	37.5	38.1	1325.04	4922	85.7	82.0	19
20	1316.97	3834	51.4	107.0	1312.17	5267	41.1	41.0	1312.06	5255	37.6	38.1	1325.00	4916	82.6	85.1	20
21	1316.05	3722	50.6	106.0	1312.13	5263	39.6	41.0	1312.03	5251	36.6	38.1	1324.68	4898	76.6	85.1	21
22	1315.14	3613	50.9	105.0	1312.10	5259	39.6	41.0	1312.01	5249	37.5	38.1	1324.77	4882	73.3	81.0	22
23	1314.22	3504	51.1	105.0	1312.08	5257	40.5	41.0	1312.33	5286	56.8	38.1	1324.65	4894	96.1	89.9	23
24	1313.30	3397	51.5	105.0	1312.05	5254	39.6	41.0	1312.55	5311	50.8	38.1	1324.04	4774	76.5	137.0	24
25	1312.41	3295	53.6	105.0	1312.03	5251	39.8	41.0	1312.63	5320	42.9	38.1	1323.02	4627	63.1	137.0	25
26	1311.50	3192	54.6	105.8	1312.01	5249	40.3	41.0	1312.68	5326	41.5	38.1	1322.35	4533	63.1	110.2	26
27	1311.10	3147	47.7	69.9	1312.02	5250	41.7	41.0	1312.75	5334	42.4	38.1	1322.10	4498	61.3	78.6	27
28	1311.10	3147	47.1	46.4	1312.01	5249	41.0	41.0	1312.79	5338	40.3	38.1	1321.80	4457	58.4	78.6	28
29	1311.13	3151	47.4	44.6	1312.00	5248	40.8	41.0	1312.82	5341	39.8	38.1	1321.49	4415	57.6	78.6	29
30	1311.12	3149	44.4	44.6	1311.99	5247	40.9	41.0	1312.85	5345	40.2	38.1	1321.17	4371	56.6	78.6	30
31	1311.10	3147	44.4	44.6					1312.88	5348	39.8	38.1	1320.91	4336	60.9	78.6	31
TOTAL			1790.5	3101.0			1287.7	1223.1			1255.1	1193.9			3679.0	3172.2	
Inf. Ac. Ft.			3551.4				2554.1				2489.5				7297.2	15892.2	
Outf. Ac. Ft.			6150.7 (+46.6 Evap.)				2426.0 (+28.1 Evap.)				2369.1 (+20.4 Evap.)				6292.0 (+17.3 Evap.)	17236.8+(112.4)	
Maximum Mean Daily Inflow			64.4				51.0				56.8				757.2	757.2	
Minimum Mean Daily Inflow			44.4				39.6				36.6				40.1	36.6	
Storage Change			- 2646				+ 100				+ 101				+ 988	+1457.	

REMARKS Outflows as indicated by valve operation records. Inflows computed from storage change corrected for evaporation. ½ Year

Max. W. S. Elev.	1359.35 feet on 4-15-40 Storage 12,146. Acre Feet	RECORDS COLLECTED BY		COMPUTATIONS	Date
Min. W. S. Elev.	1273.05 feet on 9-26-40 Storage 349. Acre Feet	Ralph Harrison	Dam Tender	Gage Hts. copied	HAV & WEC
Max. Peak Inf.	2270. C.F.S. from 3:00 a.m. on 1-8-40 to 3:30 a.m. on 1-8-40	T. A. Cooper	Hydrographer	Storage applied	HAV & WEC
Max. Peak Outf.	4200. (Test) C.F.S. from 12:00 Noon on 4-16-40 to 12:20 p.m. on 4-16-40		Hydrographer	Inf. & Outf. computed	HAV & WEC
Gage Heights and Storage as of Midnight on day shown.				Checked	HAV & WEC

( ) - Indicates total monthly evaporation losses.

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 No. 1

In San Gabriel Canyon for the Year Ending September 30, 19 40

Drainage Area 202. Square Miles. Capacity of Reservoir 47,191. Ac. Ft. at Spillway Elev. 1453.0 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	1322.90	4610	190.6	52.5	1348.88	9479	249.3	250.0	1356.75	11455	189.6	86.1	1335.28	*5608	85.5	257.0	1
2	1327.37	5280	338.1	0.3	1349.88	9721	253.8	130.7	1357.11	11549	137.8	89.1	1333.47	6278	86.0	251.0	2
3	1333.70	6319	524.2	0.3	1352.43	10352	319.4	0.2	1357.38	11620	127.1	90.7	1333.45	6275	89.7	89.9	3
4	1338.41	7211	450.3	0.3	1354.69	10922	288.6	0.2	1357.60	11678	120.8	90.7	1333.42	6269	88.3	89.9	4
5	1341.75	7892	344.2	0.3	1354.33	10830	181.3	226.6	1357.85	11744	125.5	90.7	1333.36	6259	85.9	89.9	5
6	1344.39	8455	284.6	0.3	1351.98	10239	159.6	456.0	1358.16	11827	134.0	90.7	1333.30	6248	84.9	89.2	6
7	1346.85	9004	278.5	1.0	1349.79	9699	149.2	420.3	1358.45	11904	130.4	90.7	1333.22	6234	83.3	89.2	7
8	1348.18	9313	212.1	55.1	1349.12	9536	149.6	230.7	1358.72	11976	127.9	90.7	1333.11	6214	80.8	89.2	8
9	1348.98	9502	178.1	81.8	1349.34	9590	149.6	122.0	1358.98	12046	127.2	90.7	1332.94	6185	76.5	89.2	9
10	1349.63	9660	163.1	82.5	1350.86	9962	188.3	0.2	1359.19	12102	120.7	90.7	1332.77	6156	76.4	89.2	10
11	1350.25	9812	159.6	82.5	1352.61	10397	220.6	0.2	1359.27	12124	104.2	90.7	1332.58	6123	73.9	89.2	11
12	1350.81	9949	152.5	82.5	1352.83	10452	180.7	151.3	1359.29	12129	96.1	90.7	1332.38	6089	72.6	83.5	12
13	1351.32	10075	146.8	82.5	1350.16	9789	121.6	454.0	1359.31	12135	95.8	90.7	1332.26	6068	71.5	80.6	13
14	1351.90	10219	155.5	82.5	1349.13	9539	112.2	236.7	1359.33	12140	94.4	90.7	1332.32	6079	72.6	65.5	14
15	1352.36	10334	141.2	82.5	1349.01	9509	114.5	128.0	1356.18	11306	86.7	498.9	1332.36	6086	70.3	65.5	15
16	1352.66	10409	121.0	82.5	1348.87	9476	112.9	128.0	1353.93	10728	86.7	376.4	1332.59	6091	69.3	65.5	16
17	1352.74	10429	93.3	82.5	1348.82	9464	105.9	111.3	1353.92	10726	86.7	93.3	1332.45	6101	72.0	65.5	17
18	1352.79	10442	89.6	82.5	1349.39	9602	148.1	78.0	1353.69	10668	88.7	116.4	1332.52	6113	72.5	65.5	18
19	1353.10	10519	122.2	82.5	1350.33	9831	194.0	78.0	1352.73	10427	87.2	207.0	1332.58	6123	71.8	65.5	19
20	1353.74	10680	164.8	82.5	1351.20	10046	191.1	82.0	1351.39	10065	83.8	265.0	1332.60	6127	68.7	65.5	20
21	1353.73	10678	82.4	83.1	1352.02	10249	186.9	84.0	1349.79	9699	81.3	265.0	1332.60	6127	66.5	65.5	21
22	1353.77	10688	90.3	85.0	1352.76	10434	180.1	86.0	1348.29	9339	83.5	264.0	1332.54	6116	63.9	68.2	22
23	1351.70	10170	79.5	340.5	1353.26	10560	150.4	86.1	1346.77	8986	86.1	263.0	1332.47	6104	64.7	69.6	23
24	1349.52	9633	74.1	344.0	1353.32	10575	94.2	86.1	1345.25	8644	90.7	262.0	1332.37	6087	62.5	69.6	24
25	1349.12	9536	295.1	344.0	1353.50	10620	109.2	86.1	1343.75	8317	97.6	262.0	1332.26	6068	61.3	69.6	25
26	1350.44	9858	506.4	344.0	1354.47	10866	210.3	86.1	1343.04	8165	187.9	264.0	1332.15	6050	61.5	69.6	26
27	1350.10	9775	271.2	312.2	1354.92	10981	144.6	86.1	1341.74	7890	124.1	262.0	1332.07	6036	63.9	69.6	27
28	1349.05	9519	212.9	341.0	1355.00	11001	96.8	86.1	1340.32	7596	114.9	262.0	1331.98	6021	63.1	69.6	28
29	1348.90	9483	323.2	340.0	1355.02	11006	89.4	86.1	1339.73	7475	98.9	260.0	1331.86	6001	61.0	69.6	29
30					1355.03	11009	88.3	86.1	1337.08	6951	96.1	258.0	1331.70	5974	57.8	69.6	30
31					1355.97	11251	208.6	86.1					1331.54	5948	57.9	69.6	31
TOTAL			6245.6	3633.2			5149.3	4229.3			3312.6	3442.6			2236.6	2700.8	
Inf. Ac. Ft.			123879				102134				65704				44362	49500.1	
Outf. Ac. Ft.			7206.3 (Evap.34.6)				8388.7 (Evap. 56.7)				10795.2 (Evap. 75.1)				5357.0 (Evap. 82.3)	48984.0+(361.1)	
Maximum			524.2				319.4				189.8				89.7	757.2	
Mean Daily Inflow																	
Minimum			74.1				88.3				81.3				57.8	36.6	
Mean Daily Inflow																	
Storage Change			+5147				+1768				-4300				-1003	+155	

REMARKS: Outflows as indicated by valve operation records. Inflows computed from storage change corrected for evaporation. % Year

Max. W. S. Elev.	1359.35	feet	on 5-15-40	Storage	12,146	Acre Feet	
Min. W. S. Elev.	1273.05	feet	on 9-26-40	Storage	349	Acre Feet	
Max. Peak Inf.	2270.	C.F.S. from 3:00 a.m.	on 1-8-40	to 3:30 a.m.	on	1-8-40	
Max. Peak Outf.	4200. (Test)	C.F.S. from 12:00 Noon	on 4-16-40	to 12:20 p.m.	on	4-16-40	

Gage Heights and Storage as of Midnight on day shown.

RECORDS COLLECTED BY

Ralph Harrison	Dam Tender
T. A. Cooper	Hydrographer
	Hydrographer

COMPUTATIONS	Date
Gage Hts. copied	HAV & WbC
Storage applied	HAV & WEC
Inf. & Outf. computed	HAV & WEC
Checked	

( ) - Indicates total monthly evaporation losses.

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 No. 1

In San Gabriel Canyon for the Year Ending September 30, 19 40

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

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	1331.38	5921	57.4	69.6	1315.17	3616	40.3	75.5	1307.98	2807	46.0	25.3	1293.32	1464	25.3	77.6	1
2	1331.20	5891	56.2	69.6	1314.47	3533	38.7	79.5	1308.32	2844	44.9	25.3	1291.94	1361	25.5	77.0	2
3	1330.95	5850	53.6	73.2	1313.76	3450	38.7	79.5	1308.65	2879	44.0	25.3	1290.53	1257	25.0	76.4	3
4	1330.70	5809	56.1	75.8	1313.05	3368	38.2	78.3	1308.98	2915	44.4	25.3	1289.16	1159	24.6	75.7	4
5	1330.46	5771	57.0	75.1	1312.32	3284	37.3	78.3	1309.30	2950	44.0	25.3	1287.74	1060	24.6	75.1	5
6	1330.20	5728	54.4	75.1	1311.57	3200	37.4	78.3	1309.60	2982	43.0	25.8	1286.26	959	24.6	73.6	6
7	1329.95	5688	55.4	74.5	1310.83	3117	36.9	77.6	1309.90	3015	43.4	25.8	1284.70	859	24.6	73.0	7
8	1329.66	5642	52.2	74.5	1310.03	3029	35.9	78.9	1310.18	3046	42.4	25.8	1283.80	762	23.7	72.1	8
9	1329.37	5595	51.6	74.5	1309.25	2944	36.9	78.3	1310.46	3077	42.5	25.8	1280.50	665	22.7	71.1	9
10	1329.05	5544	49.9	74.5	1309.01	2918	45.0	56.4	1310.69	3124	50.7	25.8	1277.75	574	23.4	70.2	10
11	1328.71	5490	48.9	74.5	1309.29	2949	47.3	29.9	1311.86	3232	31.3	25.8	1272.60	466	23.4	75.3	11
12	1327.44	5291	45.9	144.9	1309.56	2978	45.6	29.2	1313.21	3386	104.6	25.8	1272.86	440	23.4	37.1	12
13	1325.47	4987	42.9	195.1	1309.62	3006	44.7	29.2	1314.43	3529	99.0	25.8	1274.30	438	24.1	25.3	13
14	1323.42	4684	43.5	195.1	1310.06	3033	43.9	29.2	1314.71	3562	43.6	26.2	1275.00	433	24.1	25.7	14
15	1322.46	4548	46.5	113.9	1310.29	3058	45.0	31.3	1314.02	3480	27.6	68.0	1275.30	430	24.1	25.7	15
16	1322.07	4494	47.3	73.3	1310.48	3079	44.5	32.8	1313.00	3362	25.0	83.4	1275.40	425	22.8	26.0	16
17	1321.68	4440	46.3	72.2	1310.63	3095	41.9	32.8	1311.93	3240	23.0	83.4	1275.30	416	22.8	26.2	17
18	1321.30	4389	46.8	70.8	1310.73	3106	44.2	37.5	1310.86	3121	23.5	82.1	1275.15	410	23.3	26.2	18
19	1320.91	4336	45.2	70.2	1310.79	3113	44.5	39.9	1309.74	2998	20.0	80.8	1275.00	404	23.2	26.2	19
20	1320.51	4283	45.0	70.2	1310.82	3116	42.6	39.9	1308.62	2876	20.0	80.2	1274.90	398	23.3	26.2	20
21	1320.08	4227	43.3	70.6	1310.85	3120	44.3	40.9	1307.49	2755	18.2	78.3	1274.70	392	23.2	26.5	21
22	1319.63	4169	42.6	70.8	1310.34	3063	39.1	66.6	1306.30	2630	18.9	80.9	1274.40	384	23.2	26.5	22
23	1319.18	4111	42.7	70.8	1309.54	2976	36.4	79.2	1305.09	2506	20.5	82.1	1274.00	374	22.1	26.5	23
24	1318.71	4051	41.8	70.8	1308.75	2890	37.4	79.5	1303.90	2387	21.7	80.8	1273.60	362	22.1	26.9	24
25	1318.23	3991	41.8	70.8	1308.00	2809	39.7	79.5	1302.71	2271	22.0	79.5	1273.20	353	22.1	26.9	25
26	1317.76	3932	42.4	70.8	1307.28	2733	42.0	79.5	1301.48	2148	20.0	81.2	1273.65	354	22.1	22.3	26
27	1317.25	3869	40.4	70.8	1306.50	2651	41.7	82.2	1300.10	2026	21.4	82.1	1274.30	361	23.0	20.0	27
28	1316.75	3808	41.3	70.8	1306.49	2650	45.1	44.7	1298.76	1906	20.4	80.2	1274.60	365	23.0	20.0	28
29	1316.26	3748	41.4	70.8	1306.85	2687	44.8	25.3	1297.42	1791	22.3	79.5	1274.80	370	22.9	20.0	29
30	1315.77	3688	41.7	70.8	1307.22	2726	46.0	25.3	1296.06	1679	23.1	78.9	1274.90	373	21.8	20.0	30
31					1307.61	2768	47.6	25.3	1294.68	1569	23.3	78.3					31
TOTAL			1421.7	2524.4			1293.6	1720.3			1145.1	1718.8			704.0	1297.3	
Inf. Ac. Ft.			28199				25658				22713				13964	58555.5	
Outf. Ac. Ft.			5007.1 +(72.8 Evap)				3412.2 +(73.6 Evap)				3409.2 + (61.1)Evap.				2573.2 +17.4(Evap)	63585.7+(586.0)	
Maximum Mean Daily Inflow			57.4				47.6				104.6				25.5	757.2	
Minimum Mean Daily Inflow			40.4				35.9				18.2				21.8	18.2	
Storage Change			-2260				-920				-1199				-1196	-5420	

REMARKS: Outflows as indicated by valve operation records. Inflows computed from storage change corrected for evaporation. Yearly Totals

Max. W. S. Elev.	1359.35	feet	on 4-15-40	Storage	12146	Acre Feet	
Min. W. S. Elev.	1273.05	feet	on 9-26-40	Storage	349	Acre Feet	
Max. Peak Inf.	2270.	C.F.S. from 3:00 a.m.	on 1-8-40	to 3:30 a.m.	on	1-8-40	
Max. Peak Outf.	4201. (Test)	C.F.S. from 12:00 Noon	on 4-16-40	to 12:20 p.m.	on	4-16-40	

Gage Heights and Storage as of Midnight on day shown.

RECORDS COLLECTED BY

Ralph Harrison	Dam Tender
T. A. Cooper	Hydrographer
	Hydrographer

COMPUTATIONS	Date
Gage Hts. copied	HAV & WEC
Storage applied	HAV & WEC
Inf. & Outf. computed	HAV & WEC
Checked	HAV & WEC

( ) - Indicates total monthly evaporation losses. { Mean for period.

BIG DALTON

F. C. Dist. Form 68 Revised 600 8/39

Storages based on U.S.F.S. Survey of Sept. 1934, corrected for debris following Mar. 2, 1938.

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, 1940

On

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 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	1615.6	88	0.1	0.1	1613.4	5.7	0.1	0	1616.1	9.5	0.05	0	1618.0	12.6	0.05	0	1
2	1615.8	91	0.3	0.1	1613.5	5.9	0.1	0	1616.2	9.7	0.05	0	1618.1	12.8	0.05	0	2
3	1615.7	89	0.1	0.2	1613.6	6.0	0.1	0	1616.2	9.7	0.05	0	1618.2	13.0	0.05	0	3
4	1615.4	85	0.1	0.4	1613.8	6.3	0.1	0	1616.3	9.8	0.05	0	1618.3	13.1	0.05	0	4
5	1615.2	82	0.1	0.2	1613.9	6.4	0.1	0	1616.4	10.0	0.05	0	1618.3	13.1	0.1	0	5
6	1615.2	82	0.1	0.1	1614.0	6.5	0.1	0	1616.4	10.0	0.05	0	1618.4	13.3	0.2	0	6
7	1614.7	75	0.1	0.5	1614.1	6.7	0.1	0	1616.5	10.1	0.05	0	1620.7	17.8	2.2	0	7
8	1614.4	71	0.1	0.3	1614.2	6.8	0.1	0	1616.6	10.3	0.05	0	1624.3	26.0	4.0	0	8
9	1614.5	72	0.1	0	1614.3	6.9	0.05	0	1616.6	10.3	0.05	0	1624.5	26.5	0.4	0	9
10	1614.4	71	0.1	0.2	1614.4	7.1	0.05	0	1616.7	10.4	0.05	0	1624.8	27.3	0.4	0	10
11	1614.2	68	0.1	0.2	1614.5	7.2	0.05	0	1616.8	10.6	0.05	0	1625.4	28.9	0.6	0	11
12	1613.9	64	0.1	0.3	1614.6	7.4	0.05	0	1616.8	10.6	0.05	0	1625.9	30.2	0.7	0	12
13	1613.8	63	0.1	0.2	1614.7	7.5	0.05	0	1616.9	10.7	0.05	0	1626.3	31.3	0.5	0	13
14	1613.7	61	0.1	0.2	1614.8	7.6	0.05	0	1616.9	10.7	0.05	0	1626.7	32.5	0.5	0	14
15	1613.5	59	0.1	0.2	1614.9	7.8	0.05	0	1617.0	10.9	0.05	0	1627.0	33.3	0.5	0	15
16	1612.8	50	0.1	0.5	1615.0	7.9	0.05	0	1617.1	11.1	0.05	0	1627.3	34.2	0.5	0	16
17	1612.4	45	0.1	0.4	1615.0	7.9	0.05	0	1617.1	11.1	0.05	0	1627.6	35.1	0.4	0	17
18	1612.4	45	0.1	0.1	1615.1	8.1	0.05	0	1617.2	11.2	0.05	0	1627.9	36.0	0.4	0	18
19	1612.4	45	0.1	0.1	1615.2	8.2	0.05	0	1617.2	11.2	0.05	0	1628.1	36.6	0.4	0	19
20	1612.4	45	0.1	0.1	1615.3	8.4	0.05	0	1617.3	11.4	0.05	0	1628.3	37.2	0.4	0	20
21	1612.4	45	0.1	0.1	1615.4	8.5	0.05	0	1617.3	11.4	0.05	0	1628.5	37.9	0.3	0	21
22	1612.4	45	0.1	0.1	1615.4	8.5	0.05	0	1617.4	11.6	0.05	0	1628.7	38.5	0.3	0	22
23	1612.4	45	0.1	0.1	1615.5	8.6	0.05	0	1617.5	11.8	0.05	0	1629.2	40.1	0.8	0	23
24	1612.4	45	0.1	0.1	1615.6	8.8	0.05	0	1617.5	11.8	0.05	0	1629.4	40.7	0.3	0	24
25	1612.4	45	0.1	0.1	1615.7	8.9	0.05	0	1617.6	11.9	0.05	0	1629.6	41.4	0.3	0	25
26	1612.6	47	0.1	0	1615.8	9.1	0.05	0	1617.7	12.1	0.05	0	1629.8	42.0	0.3	0	26
27	1612.7	48	0.1	0	1615.8	9.1	0.05	0	1617.7	12.1	0.04	0	1630.0	42.7	0.3	0	27
28	1613.0	52	0.1	0	1615.9	9.2	0.05	0	1617.8	12.3	0.04	0	1630.1	43.0	0.3	0	28
29	1613.1	53	0.1	0	1616.0	9.4	0.05	0	1617.8	12.3	0.04	0	1630.3	43.7	0.3	0	29
30	1613.2	55	0.1	0	1616.0	9.4	0.05	0	1617.9	12.4	0.04	0	1630.5	44.4	0.3	0	30
31	1613.3	56	0.1	0					1617.9	12.4	0.04	0	1630.7	45.1	0.4	0	31
TOTAL			3.3	4.9			1.9	0			1.5	0			1.65	0	
Inf. Ac. Ft.			6.5				3.8				3.0				32.7	46.0	
Outf. Ac. Ft.				9.7				0				0			0	9.7	
Maximum Mean Daily Inflow			0.3				0.1				0.05				4.0	4.0	
Minimum Mean Daily Inflow			0.1				0.05				0.04				0.05	0.04	
Storage Change			-3.2				+3.8				+3.0				+32.7	+36.3	

REMARKS Outflows as Indicated by Dam Operation Records and Station F120R { Mean for Period. ½ Year

Max. W. S. Elev.	1659.2	feet on Various Times Storage	230.3	Acre Feet	RECORDS COLLECTED BY		COMPUTATIONS Date
Min. W. S. Elev.	1612.4	feet on Various Times Storage	4.5	Acre Feet	H. Paul Keiser	Dam Tender	Gage Hts. copied R.E.L.
Max. Peak Inf.	29.0	C.F.S. from 3:30 a.m. on 1-8-40	to 4:00 a.m. on	1-8-40	W. T. Lind	Hydrographer	Storage applied R.E.L.
Max. Peak Outf.	2.7	C.F.S. from at 2:45 p.m. on 9-11-40	to	on	C. L. Brewster	Hydrographer	Inf. & Outf. computed H.A.V.

Gage Heights and Storages as of Midnight on Day Shown. Checked C.C.G.-W.E.C. 7-16-40

F. C. Dist. Form 68 Revised 600 8/39

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, 1940

On

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 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	1631.8	490	2.0	0	1646.8	1246	2.1	0	1653.6	178.8	1.8	0	1657.9	217.8	0.4	0	1
2	1633.2	542	2.6	0	1647.3	1282	1.8	0	1653.8	180.5	0.9	0	1658.0	218.7	0.4	0	2
3	1634.7	601	3.0	0	1647.7	1311	1.5	0	1654.0	182.2	0.8	0	1658.0	218.7	0.4	0	3
4	1635.7	642	2.0	0	1648.0	1333	1.1	0	1654.2	184.0	0.7	0	1658.1	219.7	0.4	0	4
5	1636.4	673	1.6	0	1648.3	1356	1.2	0	1654.3	184.8	0.7	0	1658.2	220.6	0.3	0	5
6	1637.0	699	1.3	0	1648.6	1379	1.1	0	1654.5	186.6	0.7	0	1658.2	220.6	0.2	0	6
7	1637.5	722	1.2	0	1648.9	1401	1.1	0	1654.6	187.5	0.7	0	1658.3	221.6	0.2	0	7
8	1637.9	740	0.9	0	1649.1	1417	0.8	0	1654.8	189.2	0.7	0	1658.3	221.6	0.2	0	8
9	1638.3	756	0.9	0	1649.3	1433	0.8	0	1655.0	191.0	0.6	0	1658.4	222.5	0.2	0	9
10	1638.6	772	0.7	0	1649.5	1449	0.9	0	1655.1	191.9	0.6	0	1658.4	222.5	0.2	0	10
11	1638.9	786	0.7	0	1649.8	1472	0.8	0	1655.2	192.8	0.5	0	1658.5	223.5	0.2	0	11
12	1639.2	801	0.7	0	1650.0	1488	0.8	0	1655.3	193.7	0.5	0	1658.5	223.5	0.2	0	12
13	1639.4	811	0.6	0	1650.1	1496	0.8	0	1655.4	194.6	0.5	0	1658.6	224.5	0.2	0	13
14	1639.7	825	0.7	0	1650.3	1512	0.7	0	1655.5	195.5	0.5	0	1658.6	224.5	0.2	0	14
15	1640.0	840	0.7	0	1650.5	1529	0.7	0	1655.6	196.4	0.4	0	1658.7	225.4	0.2	0	15
16	1640.3	856	0.7	0	1650.6	1537	0.7	0	1655.7	197.3	0.5	0	1658.7	225.4	0.2	0	16
17	1640.5	866	0.6	0	1650.8	1553	0.7	0	1655.8	198.2	0.5	0	1658.7	225.4	0.2	0	17
18	1640.7	876	0.5	0	1650.9	1561	0.7	0	1655.9	199.1	0.5	0	1658.8	226.4	0.2	0	18
19	1640.9	887	0.6	0	1651.1	1577	0.7	0	1656.0	200.0	0.5	0	1658.8	226.4	0.2	0	19
20	1641.1	897	0.5	0	1651.3	1594	0.7	0	1656.1	200.9	0.5	0	1658.8	226.4	0.2	0	20
21	1641.3	908	0.5	0	1651.4	1602	0.5	0	1656.2	201.8	0.5	0	1658.9	227.3	0.2	0	21
22	1641.5	919	0.6	0	1651.5	1610	0.5	0	1656.3	202.8	0.4	0	1658.9	227.3	0.2	0	22
23	1641.7	929	0.5	0	1651.7	1626	0.5	0	1656.4	203.7	0.4	0	1658.9	227.3	0.2	0	23
24	1641.9	940	0.6	0	1651.8	1635	0.5	0	1656.5	204.6	0.4	0	1659.0	228.3	0.2	0	24
25	1643.2	1014	3.7	0	1651.9	1643	0.4	0	1656.6	205.5	0.4	0	1659.0	228.3	0.2	0	25
26	1644.2	1074	3.0	0	1652.1	1660	0.9	0	1657.2	211.1	2.8	0	1659.0	228.3	0.2	0	26
27	1644.7	1105	1.6	0	1652.2	1668	0.6	0	1657.4	213.0	1.0	0	1659.1	229.3	0.2	0	27
28	1645.2	1137	1.6	0	1652.3	1677	0.5	0	1657.6	214.9	0.8	0	1659.1	229.3	0.2	0	28
29	1646.2	1204	3.4	0	1652.5	1694	0.5	0	1657.7	215.9	0.7	0	1659.1	229.3	0.1	0	29
30					1652.6	1702	0.5	0	1657.8	216.8	0.4	0	1659.2	230.3	0.1	0	30
31					1653.2	1753	2.6	0					1659.2	230.3	0.1	0	31
TOTAL			38.0	0			27.7	0			20.9	0			6.8	0	
Inf. Ac. Ft.			75.4				54.9				41.5				135	231.3	
Outf. Ac. Ft.				0				0				0			0	9.7	
Maximum Mean Daily Inflow			3.7				2.6				2.8				0.4	4.0	
Minimum Mean Daily Inflow			0.5				0.4				0.4				0.1	0.05	
Storage Change			+75.3				+54.9				+41.5				+13.5	+221.5	

REMARKS Outflow as Indicated by Dam Operation Records and Station F120R { Mean for period ⅓ Year

Max. W. S. Elev.	1659.2	feet on Various Times Storage	230.3	Acre Feet	RECORDS COLLECTED BY		COMPUTATIONS Date
Min. W. S. Elev.	1612.4	feet on Various Times Storage	4.5	Acre Feet	H. Paul Keiser	Dam Tender	Gage Hts. copied R.E.L & H.A.V.
Max. Peak Inf.	29.0	C.F.S. from 3:30 a.m. on 1-8-40	to 4:00 a.m. on	1-8-40	W. T. Lind	Hydrographer	Storage applied R.E.L.
Max. Peak Outf.	2.7	C.F.S. from at 2:45 p.m. on 9-11-40	to	on	C. L. Brewster	Hydrographer	Inf. & Outf. computed H.A.V.

Gage Heights and Storages as of Midnight on Day Shown. Checked W.E.C. 7-16-40

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 BIG DALTON Dam

In Big Dalton Canyon for the Year Ending September 30, 19 40

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	1659.2	230.3	0.05	0	1652.0	165.1	0	1.1	1642.1	95.1	0	1.1	1626.1	30.8	0	1.0	1
2	1659.2	230.3	0.05	0	1651.8	163.5	0	1.2	1641.7	92.9	0	1.1	1625.3	28.6	0	1.1	2
3	1659.0	228.3	0.05	0.7	1651.5	161.0	0	1.1	1641.3	90.8	0	1.1	1624.5	26.5	0	1.0	3
4	1658.8	226.4	0.05	1.2	1651.3	159.4	0	1.2	1640.9	88.7	0	1.1	1623.6	24.2	0	1.2	4
5	1658.5	223.5	0.05	1.3	1651.0	156.9	0	1.1	1640.5	86.6	0	1.1	1622.7	22.1	0	1.0	5
6	1658.3	221.6	0.05	1.2	1650.7	154.5	0	1.2	1640.1	84.5	0	1.1	1621.9	20.3	0	1.0	6
7	1658.1	219.7	0.05	1.2	1650.4	152.0	0	1.1	1639.7	82.5	0	1.1	1621.1	18.6	0	0.8	7
8	1657.8	216.8	0.05	1.2	1650.1	149.6	0	1.2	1639.2	80.1	0	1.1	1620.0	16.3	0	1.2	8
9	1657.6	214.9	0.05	1.2	1649.8	147.2	0	1.1	1638.8	78.2	0	1.1	1619.0	14.4	0	0.9	9
10	1657.4	213.0	0.05	1.2	1649.5	144.9	0	1.2	1638.3	75.8	0	1.1	1617.7	12.1	0	1.2	10
11	1657.2	211.1	0	1.2	1649.2	142.5	0	1.1	1637.9	74.0	0	1.1	1615.9	9.2	0	1.4	11
12	1656.9	208.3	0	1.2	1648.9	140.1	0	1.2	1637.4	71.7	0	1.1	1614.6	7.4	0	1.0	12
13	1656.7	206.4	0	1.2	1648.5	137.1	0	1.1	1637.0	69.9	0	1.1	1613.2	5.5	0	0.9	13
14	1656.4	203.7	0	1.2	1648.3	135.6	0	1.2	1636.5	67.7	0	1.1	1612.4	4.5	0	0.5	14
15	1656.2	201.8	0	1.2	1648.0	133.3	0	1.1	1636.0	65.5	0	1.1	1612.4	4.5	0	0	15
16	1655.9	199.1	0	1.2	1647.7	131.1	0	1.2	1635.5	63.4	0	1.1	1612.4	4.5	0	0	16
17	1655.7	197.3	0	1.2	1647.4	128.9	0	1.1	1635.0	61.3	0	1.0	1612.4	4.5	0	0	17
18	1655.4	194.6	0	1.2	1647.1	126.7	0	1.2	1634.4	58.9	0	1.0	1612.4	4.5	0	0	18
19	1655.2	192.8	0	1.2	1646.8	124.6	0	1.1	1633.9	56.9	0	1.0	1612.4	4.5	0	0	19
20	1654.9	190.1	0	1.1	1646.4	121.8	0	1.2	1633.3	54.6	0	1.0	1612.4	4.5	0	0	20
21	1654.7	188.4	0	1.1	1646.1	119.7	0	1.1	1632.8	52.7	0	1.0	1612.4	4.5	0	0	21
22	1654.4	185.7	0	1.1	1645.8	117.7	0	1.1	1632.2	50.4	0	1.0	1612.4	4.5	0	0	22
23	1654.2	184.0	0	1.1	1645.5	115.7	0	1.1	1631.7	48.6	0	1.0	1612.4	4.5	0	0	23
24	1653.9	181.3	0	1.1	1645.2	113.7	0	1.1	1631.1	46.5	0	1.0	1612.4	4.5	0	0	24
25	1653.6	178.8	0	1.1	1644.8	111.1	0	1.1	1630.5	44.4	0	1.0	1612.4	4.5	0	0	25
26	1653.4	177.0	0	1.1	1644.4	108.6	0	1.1	1629.9	42.4	0	1.0	1612.4	4.5	0	0	26
27	1653.1	174.5	0	1.1	1644.0	106.1	0	1.1	1629.4	40.7	0	1.0	1612.4	4.5	0	0	27
28	1652.8	171.9	0	1.1	1643.7	104.3	0	1.1	1628.8	38.8	0	1.0	1612.4	4.5	0	0	28
29	1652.6	170.2	0	1.1	1643.3	102.0	0	1.2	1628.2	36.9	0	1.0	1612.4	4.5	0	0	29
30	1652.3	167.7	0	1.1	1642.9	99.6	0	1.2	1627.5	34.8	0	1.0	1612.4	4.5	0	0	30
31					1642.5	97.4	0	1.2	1626.8	32.7	0	1.0					31
TOTAL			0.5	32.1			0	35.4			0	32.6			0	14.2	
Inf. Ac. Ft.			1.0				0				0				0	232.3	
Outf. Ac. Ft.				63.7				70.2				64.7			28.2	236.5	
Maximum Mean Daily Inflow			0.05				0				0				0	4.0	
Minimum Mean Daily Inflow			0				0				0				0	0	
Storage Change			-62.6				-70.3				-64.7				-28.2	-43.3	

REMARKS: Outflows as Indicated by Dam Operation Records and Station F120R { = Mean for Period — Yearly Totals

Max. W. S. Elev.	1659.2 feet on Various Times	Storage 230.3 Acre Feet	RECORDS COLLECTED BY		COMPUTATIONS	Date
Min. W. S. Elev.	1612.4 feet on Various Times	Storage 4.5 Acre Feet	H. Paul Kaiser	Dam Tender	Gage Hts. copied	H.A.V.
Max. Peak Inf.	29.0 C.F.S. from 3:30 a.m. on 1-8-40	to 4:00 a.m. on 1-8-40	W. T. Lind	Hydrographer	Storage applied	H.A.V.
Max. Peak Outf.	2.7 C.F.S. from at 2:45 a.m. on 9-11-40	to on	C. L. Brewster	Hydrographer	Inf. & Outf. computed	H.A.V.
Gage Heights and Storages as of Midnight on Day Shown.					Checked	C.C.G. 11-12-40

SAN DIMAS

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

Storages based on U.S.F.S. Survey of November 1939. (Table No. IV)

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

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

In San Dimas Canyon for the Year Ending September 30, 1940

Continuous Water Stage Recorder Au

Drainage Area 16.2 Square Miles. Capacity of Reservoir 1129.3 Ac. Ft. at Spillway Elev. 1462.0 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	1413.9	*139.3	1.7	0	1416.9	170.0	0.9	2.4	1409.3	98.7	1.3	2.4	1398.8	35.0	1.5	0	1
2	1414.2	142.3	1.8	0	1416.7	167.9	0.9	2.2	1409.0	96.3	1.3	2.4	1399.4	37.8	1.5	0	2
3	1414.6	146.3	1.8	0	1416.4	164.7	0.9	2.2	1408.7	94.1	1.3	2.4	1400.1	41.3	1.5	0	3
4	1414.9	149.3	1.8	0	1416.2	162.6	0.8	2.3	1408.4	91.8	1.3	2.4	1401.3	47.5	3.2	0	4
5	1415.2	152.3	1.7	0	1415.9	159.5	0.8	2.2	1408.2	90.3	1.3	2.4	1402.1	51.9	2.2	0	5
6	1415.6	156.4	1.7	0	1415.7	157.4	0.8	2.1	1407.9	88.1	1.3	2.4	1402.9	56.4	2.3	0	6
7	1416.1	161.6	2.7	0	1415.4	154.4	0.8	2.0	1407.6	86.0	1.3	2.3	1406.8	81.1	12.4	0	7
8	1416.5	165.8	1.6	0	1415.3	153.3	1.3	2.2	1407.4	84.6	1.3	2.3	1419.2	195.3	57.6	0	8
9	1416.7	167.9	1.5	0	1415.1	151.3	1.3	2.1	1407.3	83.9	1.3	1.9	1421.1	217.4	11.1	0	9
10	1416.9	170.0	1.1	0.1	1414.9	149.3	1.3	2.1	1407.4	84.6	1.3	1.3	1422.2	230.8	6.6	0	10
11	1417.0	171.1	1.1	0.3	1414.7	147.3	1.2	2.2	1407.4	84.6	1.3	1.2	1423.1	242.1	5.7	0	11
12	1417.1	172.1	1.1	0.4	1414.4	144.3	1.2	2.3	1407.5	85.3	1.3	1.1	1423.9	252.6	5.3	0	12
13	1517.2	173.2	1.1	0.4	1414.2	142.3	1.2	2.2	1407.6	86.0	1.2	1.1	1424.6	262.0	4.7	0	13
14	1417.3	174.3	1.1	0.5	1413.9	139.3	1.2	2.3	1407.6	86.0	1.2	1.0	1425.1	268.8	3.4	0	14
15	1417.4	175.4	1.1	0.5	1413.7	137.4	1.2	2.3	1407.6	86.0	1.2	1.0	1425.6	275.7	3.5	0	15
16	1417.5	176.5	1.1	0.5	1413.4	134.5	1.1	2.3	1407.7	86.7	1.2	0.9	1425.8	278.5	2.4	1.0	16
17	1417.5	176.5	1.1	0.6	1413.1	131.7	1.1	2.3	1407.8	87.4	1.2	0.9	1425.8	278.5	2.5	2.5	17
18	1417.5	176.5	1.1	0.8	1412.8	128.9	1.1	2.3	1407.4	84.6	1.2	2.2	1425.8	278.5	2.4	2.4	18
19	1417.5	176.5	1.1	1.0	1412.5	126.1	1.1	2.3	1406.3	77.1	1.2	4.7	1425.8	278.5	2.4	2.4	19
20	1417.5	176.5	1.1	1.0	1412.2	123.3	1.1	2.3	1404.0	62.7	1.2	8.3	1425.8	278.5	2.4	2.4	20
21	1417.5	176.5	1.1	1.0	1412.0	121.5	1.1	2.3	1399.9	40.3	1.2	12.8	1425.8	278.5	2.4	2.4	21
22	1417.5	176.5	1.1	1.0	1411.7	118.8	1.1	2.3	1397.5	29.4	1.2	6.8	1425.8	278.5	2.4	2.4	22
23	1417.5	176.5	1.1	1.0	1411.5	117.1	1.1	2.3	1397.2	28.1	2.7	3.3	1426.2	284.1	5.2	2.4	23
24	1417.5	176.5	1.1	1.0	1411.2	114.4	1.1	2.3	1396.2	24.4	1.7	3.5	1426.6	289.8	4.9	2.0	24
25	1417.6	177.6	1.1	1.0	1411.0	112.7	1.1	2.4	1395.7	22.7	1.6	2.4	1426.7	291.3	2.8	2.0	25
26	1417.6	177.6	1.1	1.0	1410.7	110.1	1.1	2.4	1395.7	22.7	1.6	1.7	1426.7	291.3	2.5	2.1	26
27	1417.7	178.7	1.1	1.0	1410.5	108.5	1.1	2.4	1396.0	23.7	1.5	1.0	1426.8	292.7	2.5	2.1	27
28	1417.7	178.7	1.1	1.4	1410.2	105.9	1.1	2.4	1396.3	24.8	1.4	0.8	1426.8	292.7	2.4	2.2	28
29	1417.6	177.6	1.0	1.8	1409.9	103.5	1.1	2.4	1396.8	26.6	1.4	0.5	1426.9	294.1	2.4	2.2	29
30	1417.4	175.4	1.0	2.3	1409.6	101.9	1.1	2.4	1397.5	29.4	1.4	0	1426.9	294.1	2.4	2.2	30
31	1417.2	173.2	1.0	2.6					1398.2	32.3	1.4	0	1427.0	295.6	3.0	2.3	31
TOTAL			40.2	21.2			32.3	68.2			42.3	77.4			167.7	35.0	
Inf. Ac. Ft.			79.7				64.1				83.9				332.6	560.3	
Outf. Ac. Ft.				42.0				135.3				153.5			69.4	400.2	
Maximum Mean Daily Inflow			2.7				1.3				2.7				60.3	60.3	
Minimum Mean Daily Inflow			1.0				0.8				1.2				1.5	0.8	
Storage Change			+37.7				-71.3				-69.6				+263.3	+154.6+*(5.5)	

REMARKS: Outflows as per U.S.G.S. Station and operation records corrected for estimated accretion below dam. { Mean for period. — ½ Year

Max. W. S. Elev.	1449.5 feet on 5-13-40	Storage 777.8 Acre Feet	RECORDS COLLECTED BY		COMPUTATIONS	Date
Min. W. S. Elev.	1395.7 feet on 12-25&26-39	Storage 22.7 Acre Feet	G. W. Rodgers	Dam Tender	Gage Hts. copied	REL
Max. Peak Inf.	302.5 C.F.S. from 3:00 a.m. on 1-8-40	to 3:30 a.m. on 1-8-40	W. T. Lind	Hydrographer	Storage applied	HAV
Max. Peak Outf.	36.0 C.F.S. from 8:00 a.m. on 2-4-40	to 8:00 a.m. on 2-5-40	C. L. Brewster	Hydrographer	Inf. & Outf. computed	HAV
Gage Heights and Storage as of midnight on day shown.			H. A. van der Goot		Checked	WEC 7-18-40

* Storages corrected for *(5.5) A.F. Storage loss on 9-30-39.

SAN DIMAS (CONT.)

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 DIMAS Dam

In / On San Dimas Canyon for the Year Ending September 30, 19 40

Drainage Area 16.2 Square Miles. Capacity of Reservoir 1189.3 Ac. Ft. at Spillway Elev. 1462.0 Ft.

Continuous Water Stage Recorder Au

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	1428.5	314.7	12.1	2.5	1432.4	379.1	7.5	2.5	1441.7	568.1	8.5	0	1448.4	745.7	1.8	0	1
2	1429.1	326.7	13.8	7.7	1432.9	387.4	6.7	2.5	1442.0	575.4	3.7	0	1448.5	748.6	1.8	0	2
3	1429.8	337.4	16.4	11.0	1433.3	394.3	6.0	2.5	1442.3	582.6	3.7	0	1448.6	751.5	1.7	0	3
4	1427.6	307.3	10.6	26.0	1433.7	401.2	5.2	1.8	1442.6	590.3	3.2	0	1448.7	754.4	1.7	0	4
5	1426.2	284.1	10.3	22.0	1434.1	408.2	4.1	0.5	1442.8	595.2	3.1	0	1448.8	757.2	1.7	0	5
6	1425.4	272.9	7.4	13.0	1434.5	415.4	4.1	0.5	1443.0	600.2	2.3	0	1449.0	763.0	1.5	0	6
7	1424.6	262.0	6.5	12.0	1434.8	420.8	3.2	0.5	1443.2	605.3	2.3	0	1449.1	766.0	1.5	0	7
8	1423.7	249.9	4.9	11.0	1435.1	426.3	3.3	0.5	1443.4	610.4	2.3	0	1449.2	768.9	1.5	0	8
9	1423.5	247.3	4.8	6.2	1435.4	432.0	3.4	0.5	1443.6	615.5	2.3	0	1449.3	771.9	1.5	0	9
10	1423.5	247.3	3.7	3.6	1435.7	437.6	3.3	0.5	1443.7	618.1	2.3	0	1449.4	774.8	1.5	0	10
11	1423.6	248.6	3.7	3.4	1436.0	443.3	3.4	0.5	1443.9	623.2	2.0	0	1449.4	774.8	1.5	0	11
12	1423.6	248.6	3.7	3.3	1436.2	447.2	2.4	0.5	1444.0	625.7	2.0	0	1449.5	777.8	1.4	0	12
13	1423.7	249.9	3.6	3.0	1436.4	451.2	2.5	0.5	1444.2	630.9	1.9	0	1449.5	777.8	1.4	1.4	13
14	1423.8	251.2	3.6	3.0	1436.6	455.1	2.5	0.5	1444.3	633.5	1.9	0	1449.4	774.8	1.4	2.9	14
15	1424.1	255.2	4.8	2.8	1436.8	459.1	2.3	0	1444.6	641.4	4.0	0	1449.3	771.9	1.4	2.9	15
16	1424.2	256.6	3.4	2.7	1437.0	463.0	2.3	0	1444.8	646.6	2.6	0	1449.1	766.0	1.4	3.6	16
17	1424.3	257.9	3.0	2.5	1437.3	469.2	2.3	0	1444.9	649.2	1.6	0	1448.9	760.1	1.3	3.6	17
18	1424.4	259.3	3.0	2.5	1437.5	473.4	2.2	0	1445.0	651.8	1.6	0	1448.6	752.2	1.3	3.6	18
19	1424.4	259.3	3.0	2.5	1437.7	477.5	2.2	0	1445.1	654.5	1.5	0	1448.6	751.5	1.3	3.6	19
20	1424.5	260.6	3.0	2.5	1437.9	481.6	2.0	0	1445.2	657.2	1.5	0	1448.5	748.6	1.3	3.6	20
21	1424.5	260.6	2.9	2.5	1438.1	485.9	2.0	0	1445.3	659.8	1.5	0	1448.3	742.8	1.3	3.6	21
22	1424.6	262.0	2.9	2.5	1438.3	490.2	2.0	0	1445.5	665.2	1.5	0	1448.1	737.0	1.3	3.6	22
23	1424.7	263.3	3.1	2.5	1438.5	494.5	2.0	0	1445.6	667.9	1.5	0	1448.0	734.2	1.3	3.6	23
24	1424.8	264.7	3.2	2.6	1438.6	496.7	1.9	0	1445.8	673.2	2.7	0	1447.6	728.5	1.3	3.6	24
25	1427.1	297.0	18.6	2.5	1438.8	501.0	1.9	0	1445.9	675.9	1.4	0	1447.7	725.7	1.3	3.6	25
26	1429.2	328.2	18.2	2.5	1439.0	505.3	2.2	0	1447.1	708.8	16.6	0	1447.5	720.1	1.3	3.7	26
27	1430.1	342.0	9.5	2.5	1439.3	512.1	3.4	0	1447.6	722.9	7.1	0	1447.4	717.3	1.3	3.7	27
28	1430.6	349.9	6.5	2.5	1439.5	516.6	2.3	0	1447.8	728.5	2.8	0	1447.2	711.6	1.3	3.7	28
29	1431.6	369.2	12.2	2.5	1439.7	521.1	2.3	0	1448.0	734.2	2.9	0	1447.1	708.8	1.3	3.7	29
30					1439.9	525.6	2.3	0	1448.2	739.9	2.8	0	1446.9	703.3	1.3	3.7	30
31					1441.0	551.2	12.9	0					1446.7	697.8	1.3	3.7	31
TOTAL			202.6	165.7			106.1	14.3			95.1	0			44.2	65.4	
Inf. Ac. Ft.			402.2				210.4				188.6				87.7	1449.2	
Outf. Ac. Ft.				328.7				28.4				0			129.7	887.0	
Maximum Mean Daily Inflow			18.6				12.9				16.6				1.8	60.3	
Minimum Mean Daily Inflow			2.9				1.9				1.4				1.3	0.8	
Storage Change			+ 73.6				+182.0				+ 188.7				- 42.1	+ 556.8+*(5.5)	
REMARKS	Outflows as indicated by valve operation records and flow at U.S.G.S. Station. { Mean for period.															% Year	

Max. W. S. Elev.	1449.5	feet on 5-13-40	Storage 777.8	Acre Feet		
Min. W. S. Elev.	1395.7	feet on 12-25&26-39	Storage 22.7	Acre Feet		
Max. Peak Inf.	302.5	C.F.S. from 3:00 a.m. on 1-8-40	to 3:30 a.m. on	1-8-40		
Max. Peak Outf.	36.0	C.F.S. from 8:00 a.m. on 2-4-40	to 8:00 a.m. on	2-5-40		
Gage Heights and Storage as of Midnight on day shown.						

RECORDS COLLECTED BY		COMPUTATIONS	Date
G. W. Rodgers	Dam Tender	Gage Hts. copied	HAV
W. T. Lind	Hydrographer	Storage applied	HAV
C. L. Brewster	Hydrographer	Inf. & Outf. computed	HAV
H. A. van der Goot		Checked WEC	7-18-40

* See note on October. 1 - interpolated.

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 DIMAS Dam

In / On San Dimas Canyon for the Year Ending September 30, 19 40

Drainage Area 16.2 Square Miles. Capacity of Reservoir 1189.3 Ac. Ft. at Spillway Elev. 1462.0 Ft.

Continuous Water Stage Recorder Au

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	1446.5	692.3	1.3	3.6	1440.2	532.5	0.5	3.4	1430.8	353.1	0.2	3.0	1418.9	191.9	0	2.4	1
2	1446.4	689.5	1.3	3.8	1439.9	525.6	0.5	3.3	1430.4	346.8	0.2	3.0	1418.5	187.5	0	2.4	2
3	1446.2	684.0	1.3	3.6	1439.6	518.8	0.5	3.3	1430.1	342.0	0.2	3.0	1418.1	183.0	0	2.4	3
4	1446.0	678.6	1.3	3.8	1439.4	514.3	0.5	3.3	1429.7	335.9	0.2	3.0	1417.6	177.6	0	2.4	4
5	1445.8	673.2	1.3	3.8	1439.1	507.6	0.4	3.2	1429.4	331.3	0.1	2.9	1417.2	173.2	0	2.3	5
6	1445.7	670.5	1.3	3.8	1438.8	501.0	0.4	3.2	1429.0	325.2	0.1	2.9	1416.8	169.0	0	2.3	6
7	1445.5	665.2	1.3	3.8	1438.6	496.7	0.4	3.2	1428.7	320.7	0.1	2.9	1416.3	163.7	0	2.3	7
8	1445.3	659.8	1.2	3.8	1438.3	490.2	0.4	3.1	1428.3	314.7	0.1	2.8	1415.9	159.5	0	2.3	8
9	1445.2	657.2	1.2	3.8	1438.0	483.7	0.4	3.1	1428.0	310.2	0.1	2.8	1415.4	154.4	0	2.3	9
10	1445.0	651.8	1.2	3.6	1437.7	477.5	0.3	2.9	1427.6	304.4	0.1	2.6	1415.0	150.3	0	2.3	10
11	1444.8	646.6	1.1	3.6	1437.4	471.3	0.3	2.9	1427.3	300.0	0.1	2.9	1414.5	145.3	0	2.2	11
12	1444.6	641.4	1.1	3.7	1437.1	465.1	0.3	3.1	1426.9	294.1	0.1	2.8	1414.0	140.3	0	2.2	12
13	1444.3	633.5	1.0	3.7	1436.8	459.1	0.3	3.1	1426.5	288.4	0.1	2.7	1413.5	135.5	0	2.2	13
14	1444.1	628.3	1.0	3.7	1436.5	453.1	0.3	3.2	1426.1	282.7	0.1	2.7	1413.1	131.7	0	2.2	14
15	1443.9	623.2	1.0	3.7	1436.2	447.2	0.3	3.2	1425.7	277.1	0.1	2.7	1412.6	127.0	0	2.2	15
16	1443.7	618.1	0.9	3.7	1435.9	441.4	0.3	3.4	1425.3	271.5	0.1	2.7	1412.1	122.4	0	2.2	16
17	1443.5	613.0	0.9	3.7	1435.6	435.7	0.3	3.4	1424.9	266.0	0.1	2.7	1411.6	118.0	0	2.2	17
18	1443.2	605.3	0.8	3.7	1435.3	430.1	0.3	3.4	1424.5	260.6	0.1	2.7	1411.1	113.5	0	2.2	18
19	1443.0	600.2	0.8	3.5	1435.0	424.4	0.3	3.3	1424.1	255.2	0.1	2.7	1410.6	109.3	0	2.2	19
20	1442.8	595.2	0.7	3.5	1434.7	419.0	0.3	3.3	1423.7	249.9	0.1	2.6	1410.1	105.1	0	2.2	20
21	1442.5	587.8	0.7	3.5	1434.4	413.6	0.2	3.3	1423.3	244.7	0.1	2.6	1409.5	100.3	0	2.1	21
22	1442.3	582.8	0.7	3.5	1434.1	408.2	0.2	3.2	1422.9	239.6	0.1	2.8	1409.0	96.3	0	2.1	22
23	1442.1	577.6	0.7	3.5	1433.8	403.0	0.2	3.1	1422.5	234.5	0.1	2.8	1408.5	92.6	0	2.0	23
24	1441.9	572.9	0.6	3.5	1433.5	397.8	0.2	3.1	1422.1	229.5	0.1	2.8	1408.0	88.8	0	2.0	24
25	1441.6	565.7	0.6	3.5	1433.1	390.8	0.2	3.2	1421.6	225.8	0.1	2.8	1407.5	85.3	0	2.0	25
26	1441.4	560.9	0.6	3.5	1432.8	385.6	0.2	3.2	1421.4	221.0	0.1	2.7	1407.0	81.8	0.1	2.0	26
27	1441.1	553.6	0.6	3.4	1432.5	380.8	0.2	3.2	1421.0	216.2	0.1	2.5	1406.5	78.5	0.1	1.9	27
28	1440.9	548.9	0.6	3.4	1432.2	375.8	0.2	3.3	1420.6	211.5	0.1	2.5	1405.9	74.5	0.1	1.9	28
29	1440.7	544.2	0.6	3.4	1431.8	369.2	0.2	3.1	1420.2	206.8	0.1	2.5	1405.4	71.3	0.1	1.9	29
30	1440.4	537.2	0.6	3.4	1431.5	364.3	0.2	3.1	1419.7	201.0	0.1	2.5	1404.9	68.2	0.1	1.8	30
31					1431.2	359.4	0.2	3.0	1419.3	196.4	0.1	2.5					31
TOTAL			28.3	109.3			9.5	99.1			3.5	85.7			0.5	65.1	
Inf. Ac. Ft.			56.1				18.8				6.9				1.0	1532.0	
Outf. Ac. Ft.				216.8				196.6				170.0			129.1	1599.5	
Maximum Mean Daily Inflow			1.3				0.5				0.2				0.1	60.3	
Minimum Mean Daily Inflow			0.6				0.2				0.1				0	0	
Storage Change			- 160.6				- 177.8				- 163.0				- 128.2	- 72.8*(5.5	
REMARKS	{ Mean for period. Outflows as indicated by valve operation records and flow at U.S.G.S. Station.															Yearly Totals	

Max. W. S. Elev.	1449.5	feet on 5-13-40	Storage 777.8	Acre Feet		
Min. W. S. Elev.	1395.7	feet on 12-25&26-39	Storage 22.7	Acre Feet		
Max. Peak Inf.	302.5	C.F.S. from 3:00 a.m. on 1-8-40	to 3:30 a.m. on	1-8-40		
Max. Peak Outf.	36.0	C.F.S. from 8:00 a.m. on 2-4-40	to 8:00 a.m. on	2-5-40		
Gage Heights and Storage as of Midnight on day shown.						

RECORDS COLLECTED BY		COMPUTATIONS	Date
G. W. Rodgers	Dam Tender	Gage Hts. copied	HAV
W. T. Lind	Hydrographer	Storage applied	HAV
C. L. Brewster	Hydrographer	Inf. & Outf. computed	HAV
H. A. van der Goot		Checked CCG	11-12-40

* See note on October.

PUDDINGSTONE DIVERSION

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

Storages based on L.A.F.C.D. Survey of Nov. 1939. (Table No. IV)

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

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

In San Dimas Creek On for the Year Ending September 30, 19 40

Continuous Water Stage Recorder Au

Drainage Area 2.64 Square Miles. Capacity of Reservoir 76.0 Ac. Ft. at Spillway Elev. 1152.5 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	1130.2	0.1	0	0	1
2											0	0	1128.7	0	0	0	2
3											0	0	Dry	0	0	0	3
4											0	0	Dry	0	0	0	4
5											0	0	Dry	0	0	0	5
6											0	0	Dry	0	0	0	6
7											0	0	1136.1	2.5	1.6	0	7
8											0	0	1140.5	10.2	5.2	0	8
9											0	0	1139.2	8.7	0.4	0	9
10											0	0	1139.0	7.1	0.4	0	10
11											0	0	1138.4	5.5	0.3	0	11
12	DRY	STORAGE	FLOW	FLOW	DRY	STORAGE	FLOW	FLOW			0	0	1137.6	4.5	0.6	0	12
13											0	0	1137.0	3.4	0.5	0	13
14											0	0	1136.1	2.5	0.5	0	14
15											0	0	1135.3	1.6	0.4	0	15
16											0	0	1135.6	2.2	1.0	0	16
17											0	0	1138.0	4.6	2.3	0	17
18											0	0	1139.0	6.6	2.0	0	18
19	RESERVOIR	NO	NO	NO	RESERVOIR	NO	NO	NO			0	0	1139.5	7.7	1.7	0	19
20									1134.3	1.2	0.9	0	1139.7	8.2	1.5	0	20
21									1138.2	5.1	2.9	0	1139.9	8.7	1.4	0	21
22									1133.0	4.6	0.9	0	1140.0	8.9	1.3	0	22
23									1137.9	4.6	0.9	0	1140.3	9.7	1.6	0	23
24									1139.1	6.8	2.2	0	1140.2	9.4	1.1	0	24
25									1139.1	6.8	1.1	0	1140.1	9.2	1.1	0	25
26									1139.2	5.1	0.3	0	1140.0	8.9	1.0	0	26
27									1136.6	3.2	0.2	0	1140.1	9.2	1.4	0	27
28									1135.3	1.8	0.2	0	1140.2	9.4	1.3	0	28
29									1134.2	1.1	0.2	0	1140.3	9.7	1.3	0	29
30									1132.9	0.6	0.2	0	1140.4	10.0	1.4	0	30
31									1131.6	0.3	0.2	0	1140.4	10.0	1.2	0	31
TOTAL		0	0				0	0			10.2	0			32.5	0	
Inf. Ac. Ft.		0					0				20.2				64.5	64.7	
Outf. Ac. Ft.			0					0			0 + *(19.8)				0 + *(54.7)	0 + *(74.5)	
Maximum Mean Daily Inflow		0					0				2.9				5.2	5.2	
Minimum Mean Daily Inflow		0					0				0				0	0	
Storage Change		0					0				+ 0.3				9.7	+ 10.0	

REMARKS { Mean for period. *(Monthly percolation loss).

Max. W. S. Elev.	1145.7	feet	on 2-4&5-40	Storage 27.2	Acre Feet	RECORDS COLLECTED BY		COMPUTATIONS	Date
Min. W. S. Elev.	1128.0	feet	on Various Times	Storage Dry	Acre Feet	None	Dam Tender	Gage Hts. copied	REL
Max. Peak Inf.	32.6	C.F.S. from 12:30 a.m.	on 1-8-40	to 1:00 a.m.	on 1-8-40	W. T. Lind	Hydrographer	Storage applied	REL
Max. Peak Outf.	25.+ (Est.)	C.F.S. from 10:00 a.m.	on 2-4-40	to 9:00 a.m.	on 2-5-40	H. A. van der Goot	Hydrographer	Inf. & Outf. computed	HAV
Gage Heights and Storages as of Midnight on day shown.								Checked CCG	8-14-40

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 PUDDINGSTONE DIVERSION Dam

In San Dimas Creek On for the Year Ending September 30, 19 40

Continuous Water Stage Recorder Au

Drainage Area 2.64 Square Miles. Capacity of Reservoir 76.0 Ac. Ft. at Spillway Elev. 1152.5 Ft.

Gage Heights Read at Various Times.

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	1140.9	11.3	2.0	0	1143.2	16.2	{ 1.2	0	1133.9	0.9	0.7	0					1
2	1143.3	18.5	5.0	0	1143.0	17.5	{ 1.1	0	1133.5	0.6	0	0					2
3	1145.6	26.6 ° 11.0		5.8	1142.6	15.6	1.1	0	1133.5	0.7	0	0					3
4	1145.7	27.2 ° 25.0		24.2	1142.4	15.7	0.8	0	1133.1	0.6	0	0					4
5	1145.6	26.8 ° 22.0		20.6	1141.7	13.6	1.0	0	1132.6	0.5	0	0					5
6	1145.6	26.6 **11.0		9.4	1141.0	11.5	1.0	0	1132.4	0.4	0	0					6
7	1145.6	26.6 **10.0		8.4	1140.4	10.0	1.0	0	1132.0	0.3	0	0					7
8	1145.6	26.6 ** 9.0		7.4	1139.7	8.2	E 0.2	0	1131.5	0.2	0	0					8
9	1145.5	26.4 ** 4.5		3.1	1139.1	6.6	1.0	0	1131.0	0.2	0	0					9
10	1145.4	26.0	1.4	0	1138.5	5.7	1.0	0	1130.5	0.1	0	0					10
11	1145.2	25.2	1.2	0	1137.9	4.6	1.0	0	1129.9	0.1	0	0					11
12	1144.9	24.1	1.0	0	1137.2	3.7	1.0	0	1129.3	0	0	0					12
13	1144.2	21.6	{ 0.5	0	1136.5	2.9	1.0	0	1128.7	0	0	0					13
14	1143.7	19.9	{ 0.5	0	1135.7	2.1	1.0	0		0	0	0					14
15	1143.0	17.5	0.3	0	1135.0	1.6	E 0	0		0	0	0					15
16	1142.3	15.4	0.3	0	1134.5	1.3	0	0		0	0	0					16
17	1142.2	15.1	1.3	0	1134.1	1.0	0	0		0	0	0					17
18	1142.1	14.7	{ 1.3	0	1133.6	0.8	0	0		0	0	0					18
19	1142.0	14.4	{ 1.3	0	1133.1	0.6	0	0		0	0	0					19
20	1142.0	14.4	{ 1.3	0	1132.7	0.5	0	0		0	0	0					20
21	1141.9	14.1	{ 1.2	0	1132.2	0.4	0	0		0	0	0					21
22	1141.8	13.9	1.3	0	1131.8	0.3	0	0		0	0	0					22
23	1141.7	13.6	1.2	0	1131.5	0.2	0	0		0	0	0					23
24	1141.6	13.3	1.2	0	1131.2	0.2	0	0		0	0	0					24
25	1142.7	16.6	3.0	0	1131.0	0.2	0	0		0	0	0					25
26	1143.3	18.5	2.5	0	1130.7	0.1	0	0		0	0	0					26
27	1143.2	18.2	{ 1.4	0	1130.4	0.1	0	0		0	0	0					27
28	1143.1	17.9	{ 1.3	0	1130.1	0.1	0	0		0	0	0					28
29	1143.4	18.9	2.0	0	1128.5 ++	0	0	0		0	0	0					29
30					1128.5 ++	0	0	0		0	0	0					30
31					1132.9	0.6	0.5	0		0	0	0					31
TOTAL			126.0	78.3			69	0			0.7	0			0	0	
Inf. Ac. Ft.			249.9				137				1.4				0	349.7	
Outf. Ac. Ft.			155.3 + *(85.7)				0 + *(31.9)				0 + *(2.0)				0	155.3+*(194.1)	
Maximum Mean Daily Inflow			26.0				1.2				0.7				0	26.0	
Minimum Mean Daily Inflow			1.0				0				0				0	0	
Storage Change			+ 89				- 183				- 0.6				0	0	

REMARKS Outflow - flow down diversion channel. ° Inflows based on USGS Station. **Less 2.0 cfs assumed channel percolation loss.

Max. W. S. Elev.	1145.7	feet	on 2-4&5-40	Storage 27.2	Acre Feet	RECORDS COLLECTED BY		COMPUTATIONS	Date
Min. W. S. Elev.	1128.0	feet	on Various Times	Storage Dry	Acre Feet	None	Dam Tender	Gage Hts. copied	REL
Max. Peak Inf.	32.6	C.F.S. from 12:30 a.m.	on 1-8-40	to 1:00 a.m.	on 1-8-40	W. T. Lind	Hydrographer	Storage applied	REL
Max. Peak Outf.	25.+ (Est.)	C.F.S. from 10:00 a.m.	on 2-4-40	to 9:00 a.m.	on 2-5-40	H. A. van der Goot	Hydrographer	Inf. & Outf. computed	HAV
Gage Heights and Storages as of Midnight on day shown.								Checked CCG	8-14-40

E - Estimated. 1 - Interpolated. *(Monthly percolation loss.) { Mean for period.

PUDDINGSTONE DIVERSION (CONT.)

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 PUDDINGSTONE DIVERSION Dam

In/On San Dimas Creek for the Year Ending September 30, 19 40

Continuous Water Stage Recorder Au

Drainage Area 2.64 Square Miles. Capacity of Reservoir 76.0 Ac. Ft. at Spillway Elev. 1152.5 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																	1
2																	2
3																	3
4																	4
5																	5
6																	6
7																	7
8																	8
9																	9
10	DRY				DRY				DRY				DRY				10
11		STORAGE	FLOW	FLOW		STORAGE	FLOW	FLOW		STORAGE	FLOW	FLOW		STORAGE	FLOW	FLOW	11
12																	12
13																	13
14																	14
15	RESERVOIR				RESERVOIR				RESERVOIR				RESERVOIR				15
16		NO	NO	NO		NO	NO	NO		NO	NO	NO		NO	NO	NO	16
17																	17
18																	18
19																	19
20																	20
21																	21
22																	22
23																	23
24																	24
25																	25
26																	26
27																	27
28																	28
29																	29
30																	30
31																	31
TOTAL			0	0			0	0			0	0			0	0	
Inf. Ac. Ft.			0				0				0				0	349.7	
Outf. Ac. Ft.			0				0				0				0	155.3+*(194.1)	
Maximum Mean Daily Inflow			0				0				0				0	26.0	
Minimum Mean Daily Inflow			0				0				0				0	0	
Storage Change			0				0				0				0	0	

REMARKS * Total Percolation Loss. Yearly Totals

Max. W. S. Elev.	1145.7	feet on 2-4&5-40	Storage 27.2	Acre Feet	RECORDS COLLECTED BY	COMPUTATIONS Date
Min. W. S. Elev.	1128.0	feet on Various Times	Storage Dry	Acre Feet	None Dam Tender	Gage Hts. copied HAV
Max. Peak Inf.	32.6	C.F.S. from 12:30 a.m. on 1-8-40	to 1:00 a.m. on	1-8-40	W. T. Lind Hydrographer	Storage applied HAV
Max. Peak Outf.	25.+ (Est.)	C.F.S. from 10:00 a.m. on 2-4-40	to 9:00 a.m. on	2-5-40	H. A. van der Goot Hydrographer	Inf. & Outf. computed HAV
Gage Heights and Storages as of Midnight on day shown.						Checked CCG 11-12-40

PUDDINGSTONE

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

Storages Based on Original Reconnaissance Survey of 1915.

DAM OPERATION RECORD
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPARTMENT

Daily Gage Height In feet and Operation Record of PUDDINGSTONE Dam

In/On Puddingstone Creek for the Year Ending September 30, 19 40

Continuous Water Stage Recorder Au

Drainage Area 32.2 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	931.55	4745.4	0	0	930.90	4604.8	0	2.2	929.20	4286.6	0	2.2	928.25	4140.0	0	0	1
2	931.55	4745.4	0	0	930.85	4593.9	0	1.7	929.20	4286.6	0	1.0	928.25	4140.0	0	0	2
3	931.55	4745.4	0	0	930.85	4593.9	0	2.2	929.15	4278.6	0	0.9	928.25	4140.0	0	0	3
4	931.50	4734.6	0	.0	930.80	4583.1	0	3.6	929.10	4271.1	0	2.9	928.30	4147.7	3.9	0	4
5	931.50	4734.6	0	0	930.75	4572.3	0	2.6	929.05	4263.4	0	4.4	928.30	4147.7	0	0	5
6	931.50	4734.6	0	0	930.70	4561.5	0	2.5	929.00	4255.7	0	4.5	928.30	4147.7	0	0	6
7	931.50	4734.6	0	0	930.65	4550.6	0	4.1	928.95	4248.0	0	3.0	929.00	4235.7	5.5	0	7
8	931.50	4734.6	0	0	930.65	4550.6	0	2.4	928.95	4248.0	0	3.0	929.40	4317.4	31.1	0	8
9	931.45	4723.8	0	0	930.65	4550.6	0	0	928.95	4248.0	0	0.9	929.45	4325.1	3.8	0	9
10	931.45	4723.8	0	0	930.60	4539.8	0	0	928.90	4240.3	0	0	929.50	4332.9	4.0	0	10
11	931.45	4723.8	0	0	930.60	4539.8	0	0	928.90	4240.3	0	0	929.60	4348.3	7.7	0	11
12	931.40	4713.0	0	0	930.60	4539.8	0	0	928.90	4240.3	0	0	929.60	4348.3	0	0	12
13	931.40	4713.0	0	0	930.55	4529.0	0	3.4	928.65	4232.5	0	2.3	929.60	4348.3	0	0	13
14	931.40	4713.0	0	0	930.45	4507.4	0	6.5	928.60	4224.8	0	5.3	929.60	4348.3	0	0	14
15	931.35	4702.1	0	0	930.35	4485.7	0	7.0	928.75	4217.1	0	6.0	929.55	4340.6	0	0	15
16	931.35	4702.1	0	0	930.25	4454.1	0	9.2	928.65	4201.7	0	6.1	929.55	4340.6	0	0	16
17	931.30	4691.3	0	0	930.15	4442.4	0	8.6	928.60	4194.0	0	5.5	929.55	4340.6	0	0	17
18	931.30	4691.3	0	0	930.05	4420.8	0	8.1	928.50	4178.6	0	4.6	929.55	4340.6	0	0	18
19	931.30	4691.3	0	0	930.00	4410.0	0	5.5	928.45	4170.8	0	4.5	929.55	4340.6	0	0	19
20	931.25	4680.5	0	0	929.90	4394.6	0	6.3	928.40	4163.1	0	3.6	929.50	4332.9	0	0	20
21	931.25	4680.5	0	0	929.75	4371.4	0	10.2	928.40	4163.1	0	0	929.50	4332.9	0	0	21
22	931.25	4680.5	0	0	929.65	4356.0	0	10.4	928.30	4147.7	0	5.3	929.50	4332.9	0	0	22
23	931.20	4669.7	0	0	929.55	4340.6	0	7.0	928.35	4155.4	7.2	3.3	929.55	4340.6	3.9	0	23
24	931.20	4669.7	0	0	929.50	4332.9	0	5.4	928.35	4155.4	0	0	929.55	4340.6	0	0	24
25	931.15	4658.8	0	2.7	929.40	4317.4	0	5.3	928.35	4155.4	0	0	929.55	4340.6	0	0	25
26	931.10	4648.0	0	1.5	929.40	4317.4	0	2.0	928.30	4147.7	0	0	929.55	4340.6	0	0	26
27	931.05	4637.2	0	2.0	929.35	4309.7	0	1.3	928.30	4147.7	0	0	929.55	4340.6	0	0	27
28	931.00	4626.4	0	3.0	929.30	4302.0	0	2.7	928.30	4147.7	0	0	929.55	4340.6	0	0	28
29	931.00	4626.4	0	1.5	929.30	4302.0	0	1.5	928.30	4147.7	0	0	929.55	4340.6	0	0	29
30	930.95	4615.6	0	1.5	929.25	4294.3	0	3.0	928.30	4147.7	0	0	929.55	4340.6	0	0	30
31	930.95	4615.6	0	2.2					928.30	4147.7	0	0	929.55	4340.6	0	0	31
TOTAL			0	14.4			0	124.7			72	69.3			1089	0	
Inf. Ac. Ft.			0				0				143				2160	2303	
Outf. Ac. Ft.			28.6 + *(112.1)				247.3 + *(74.0)				137.5 + *(23.4)				0 + *(23.0)	409.5+*(236.5)	
Maximum Mean Daily Inflow			0				0				72				545	545	
Minimum Mean Daily Inflow			0				0				0				0	0	
Storage Change			-140.6				-321.3				-146.6				+1929	-415.6	

REMARKS *( ) - Total evaporation, percolation and leakage loss in excess of inflows. Inflows are net. ½ Year

Max. W. S. Elev.	931.6	feet on 10-1-39	Storage 4756.2	Acre Feet	RECORDS COLLECTED BY	COMPUTATIONS Date
Min. W. S. Elev.	912.9	feet on 9-30-40	Storage 2108.7	Acre Feet	F. A. Pollard Dam Tender	Gage Hts. copied REL
Max. Peak Inf.	447.7	C.F.S. from 10:30 p.m. on 1-7-40	to 11:00 p.m. on	1-7-40	W. T. Lind Hydrographer	Storage applied REL
Max. Peak Outf.	11.3	C.F.S. from 1:00 p.m. on 6-19-40	to 6:00 p.m. on	6-20-40	Hydrographer	Inf. & Outf. computed HAV
Gage Heights and Storage as of Midnight on day shown.						Checked CCG 8-12-40

Outflows as indicated by Valve Operation Records.

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

Daily Gage Height in feet and Operation Record of PUDDINGSTONE Dam

In Puddingstone Creek for the Year Ending September 30, 1940

Drainage Area 32.2 Square Miles. Capacity of Reservoir 17398. Ac. Ft. at Spillway Elev. 970.0 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	929.75	4371.4	15.5	0	931.05	4637.2	0	0	931.00	4626.4	10.9	0	930.85	4593.9	0	0	1
2	929.90	4394.6	11.7	0	931.00	4626.4	0	0	931.05	4637.2	5.4	0	930.80	4583.1	0	0	2
3	930.25	4464.1	35.1	0	931.00	4626.4	0	0	931.05	4637.2	0	0	930.80	4583.1	0	0	3
4	930.45	4507.4	21.8	0	931.00	4626.4	0	0	931.00	4626.4	0	0	930.80	4583.1	0	0	4
5	930.60	4539.6	16.3	0	930.95	4615.6	0	0	931.00	4626.4	0	0	930.75	4572.5	0	0	5
6	930.70	4561.5	11.0	0	930.95	4615.6	0	0	931.00	4626.4	0	0	930.75	4572.5	0	0	6
7	930.80	4583.1	10.9	0	930.95	4615.6	0	0	931.00	4626.4	0	0	930.75	4572.5	0	0	7
8	930.85	4593.9	5.4	0	930.95	4615.6	0	0	931.00	4626.4	0	0	930.70	4561.5	0	0	8
9	930.85	4593.9	0	0	930.90	4604.8	0	0	931.00	4626.4	0	0	930.70	4561.5	0	0	9
10	930.85	4593.9	0	0	930.90	4604.8	0	0	930.95	4615.6	0	0	930.70	4561.5	0	0	10
11	930.85	4593.9	0	0	930.90	4604.8	0	0	930.95	4615.6	0	0	930.65	4550.7	0	0	11
12	930.85	4593.9	0	0	930.85	4593.9	0	0	930.95	4615.6	0	0	930.65	4550.7	0	0	12
13	930.85	4593.9	0	0	930.85	4593.9	0	0	930.95	4615.6	0	0	930.65	4550.7	0	0	13
14	930.85	4593.9	0	0	930.85	4593.9	0	0	930.90	4604.8	0	0	930.60	4539.8	0	0	14
15	930.85	4593.9	0	0	930.80	4583.1	0	0	930.90	4604.8	0	0	930.60	4539.8	0	0	15
16	930.85	4593.9	0	0	930.80	4583.1	0	0	930.90	4604.8	0	0	930.60	4539.8	0	0	16
17	930.85	4593.9	0	0	930.80	4583.1	0	0	930.85	4593.9	0	0	930.55	4529.0	0	0	17
18	930.85	4593.9	0	0	930.80	4583.1	0	0	930.85	4593.9	0	0	930.55	4529.0	0	0	18
19	930.80	4583.1	0	0	930.80	4583.1	0	0	930.85	4593.9	0	0	930.50	4518.2	0	1.5	19
20	930.80	4583.1	0	0	930.80	4583.1	0	0	930.85	4593.9	0	0	930.45	4507.4	0	4.4	20
21	930.80	4583.1	0	0	930.80	4583.1	0	0	930.80	4583.1	0	0	930.40	4496.6	0	4.4	21
22	930.80	4583.1	0	0	930.75	4572.5	0	0	930.80	4583.1	0	0	930.35	4485.7	0	4.0	22
23	930.80	4583.1	0	0	930.75	4572.5	0	0	930.80	4583.1	0	0	930.30	4474.9	0	1.3	23
24	930.80	4583.1	0	0	930.75	4572.5	0	0	930.80	4583.1	0	0	930.20	4453.3	0	6.0	24
25	931.00	4626.4	21.8	0	930.75	4572.5	0	0	930.75	4572.5	0	1.0	930.10	4431.6	0	7.3	25
26	931.00	4626.4	0	0	930.75	4572.5	0	0	930.90	4604.8	16.4	0	930.05	4420.8	0	5.5	26
27	931.00	4626.4	0	0	930.75	4572.5	0	0	930.90	4604.8	0	0	930.00	4410.0	0	7.0	27
28	931.00	4626.4	0	0	930.75	4572.5	0	0	930.90	4604.8	0	0	929.90	4394.6	0	7.0	28
29	931.05	4637.2	5.4	0	930.75	4572.5	0	0	930.85	4593.9	0	0	929.85	4386.9	0	2.9	29
30					930.70	4561.5	0	0	930.85	4593.9	0	0	929.80	4379.1	0	4.4	30
31					930.90	4604.8	21.9	0					929.70	4363.7	0	2.9	31
TOTAL			134.9	0			21.9	0			32.7	1.0			0	58.6	
Inf. Ac. Ft.			3072				434				649				0	645.8	
Outf. Ac. Ft.			0 + *(10.7)				0 + *(75.8)				2.0 + *(73.8)			116.2 + *(114.0)		527.7+*(510.8)	
Maximum Mean Daily Inflow			35.1				0				164				0	54.5	
Minimum Mean Daily Inflow			0				0				0				0	0	
Storage Change			+296.6				-32.4				-109				-2302	-3925	

REMARKS *( ) - Total evaporation, percolation and leakage loss in excess of inflows. Inflows are net.

% Year

Max. W. S. Elev.	931.6	feet on 10-1-39	Storage 4756.2	Acre Feet	RECORDS COLLECTED BY		COMPUTATIONS	Date
Min. W. S. Elev.	912.9	feet on 9-30-40	Storage 2108.7	Acre Feet	F. A. Pollard	Dam Tender	Gage Hts. copied	REL & HAV
Max. Peak Inf.	447.7	C.F.S. from 10:30 a.m. on 1-7-40	to 11:00 p.m. on 1-7-40		W. T. Lind	Hydrographer	Storage applied	REL & HAV
Max. Peak Outf.	11.3	C.F.S. from 1:00 p.m. on 6-19-40	to 6:00 p.m. on 6-20-40			Hydrographer	Inf. & Outf. computed	HAV
Gage Heights and Storage as of Midnight on day shown.							Checked CCG	8-12-40

Outflows are as indicated by valve operation records.

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

Daily Gage Height in feet and Operation Record of PUDDINGSTONE Dam

In Puddingstone Creek for the Year Ending September 30, 1940

Drainage Area 32.2 Square Miles. Capacity of Reservoir 17398. Ac. Ft. at Spillway Elev. 970.0 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	929.60	4348.3	0	8.1	926.50	3870.0	0	6.2	922.80	3299.0	0	7.3	918.05	2658.7	0	8.2	1
2	929.50	4332.9	0	9.6	926.40	3854.5	0	8.6	922.65	3275.9	0	8.9	917.90	2642.7	0	8.4	2
3	929.40	4317.4	0	8.0	926.35	3846.8	0	8.3	922.50	3252.8	0	8.5	917.75	2626.7	0	7.5	3
4	929.30	4302.0	0	6.9	926.25	3831.4	0	7.3	922.35	3229.6	0	7.1	917.60	2610.7	0	7.2	4
5	929.20	4286.6	0	5.5	926.15	3815.9	0	5.6	922.20	3206.5	0	6.2	917.45	2594.7	0	7.0	5
6	929.15	4279.8	0	5.5	926.00	3792.8	0	7.3	922.05	3183.3	0	8.1	917.30	2578.6	0	7.6	6
7	929.05	4263.4	0	8.1	925.90	3777.4	0	7.8	921.90	3160.2	0	8.9	917.15	2562.6	0	7.9	7
8	928.90	4240.3	0	8.9	925.80	3761.9	0	7.9	921.75	3137.0	0	9.0	917.00	2546.6	0	9.3	8
9	928.80	4224.8	0	8.3	925.70	3746.5	0	8.3	921.55	3106.2	0	10.3	916.80	2525.2	0	9.6	9
10	928.70	4209.4	0	7.5	925.55	3723.4	0	8.1	921.40	3083.0	0	10.3	916.60	2503.9	0	9.1	10
11	928.60	4194.0	0	8.0	925.40	3700.2	0	8.2	921.25	3059.9	0	9.6	916.45	2487.9	0	8.4	11
12	928.50	4178.6	0	9.7	925.30	3684.8	0	10.1	921.10	3036.7	0	9.6	916.25	2466.5	0	9.8	12
13	928.35	4155.4	0	9.6	925.15	3661.6	0	9.7	920.95	3013.6	0	9.5	916.05	2445.1	0	10.3	13
14	928.25	4140.0	0	8.4	925.00	3638.5	0	9.6	920.80	2990.4	0	8.0	915.85	2423.8	0	9.9	14
15	928.15	4124.5	0	7.5	924.90	3623.1	0	9.6	920.60	2959.6	0	8.9	915.70	2407.8	0	9.0	15
16	928.05	4109.1	0	5.9	924.75	3599.9	0	8.3	920.40	2928.7	0	10.5	915.50	2386.4	0	8.2	16
17	927.95	4093.7	0	7.1	924.65	3584.5	0	8.3	920.25	2905.6	0	10.5	915.30	2365.0	0	8.4	17
18	927.85	4078.3	0	7.0	924.50	3561.4	0	9.1	920.10	2882.4	0	10.2	915.10	2343.7	0	9.6	18
19	927.70	4055.1	0	9.2	924.35	3538.2	0	10.7	919.95	2861.7	0	10.2	914.90	2322.3	0	10.7	19
20	927.55	4032.0	0	10.6	924.20	3515.1	0	10.3	919.80	2845.6	0	10.2	914.70	2301.0	0	11.1	20
21	927.45	4016.5	0	9.1	924.05	3491.9	0	8.5	919.60	2824.3	0	9.3	914.45	2274.3	0	11.1	21
22	927.35	4001.1	0	8.3	923.95	3476.5	0	7.3	919.45	2808.3	0	9.2	914.25	2252.9	0	9.4	22
23	927.25	3985.7	0	6.1	923.80	3453.3	0	8.1	919.30	2792.2	0	8.1	914.10	2236.9	0	7.4	23
24	927.15	3970.2	0	7.2	923.70	3437.9	0	8.0	919.20	2781.6	0	7.8	913.90	2215.5	0	10.0	24
25	927.05	3954.8	0	6.9	923.55	3414.6	0	8.2	919.05	2765.5	0	8.4	913.75	2199.5	0	8.2	25
26	926.95	3939.4	0	7.3	923.45	3399.3	0	7.8	918.85	2744.2	0	8.7	913.60	2183.5	0	6.5	26
27	926.85	3924.0	0	6.0	923.30	3376.2	0	7.5	918.70	2728.2	0	8.4	913.45	2167.5	0	6.2	27
28	926.75	3908.5	0	6.5	923.20	3360.8	0	6.8	918.55	2712.1	0	7.9	913.30	2151.4	0	8.0	28
29	926.65	3893.1	0	6.5	923.10	3345.3	0	5.9	918.45	2701.5	0	5.8	913.10	2130.1	0	8.0	29
30	926.55	3877.7	0	5.2	923.00	3329.9	0	7.4	918.30	2685.4	0	6.3	912.90	2108.7	0	8.4	30
31					922.90	3314.5	0	4.4	918.20	2674.8	0	6.4					31
TOTAL			0	228.7			0	249.2			0	268.1			0	260.4	
Inf. Ac. Ft.			0				0				0				0	645.8	
Outf. Ac. Ft.			453.6 + *(32.3)				494.3 + *(68.8)				531.8 + *(107.9)			516.5 + *(49.6)		2523.9+*(769.4)	
Maximum Mean Daily Inflow			0				0				0				0	54.5	
Minimum Mean Daily Inflow			0				0				0				0	0	
Storage Change			-486.0				-563.2				-639.7				-566.1	-2647.5	

REMARKS *( ) Evaporation, percolation and leakage loss and/or storage error.

Yearly Totals

Max. W. S. Elev.	931.6	feet on 10-1-39	Storage 4756.2	Acre Feet	RECORDS COLLECTED BY		COMPUTATIONS	Date
Min. W. S. Elev.	912.9	feet on 9-30-40	Storage 2108.7	Acre Feet	F. A. Pollard	Dam Tender	Gage Hts. copied	HAV
Max. Peak Inf.	447.7	C.F.S. from 10:30 p.m. on 1-7-40	to 11:00 p.m. on 1-7-40		W. T. Lind	Hydrographer	Storage applied	HAV
Max. Peak Outf.	11.3	C.F.S. from 1:00 p.m. on 6-19-40	to 6:00 p.m. on 6-20-40			Hydrographer	Inf. & Outf. computed	HAV
Gage Heights and Storage as of Midnight on day shown.							Checked CCG	11-14-40

Outflows as indicated by valve operation records.

LIVE OAK

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

Storages Based on U.S.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 Live Oak Canyon for the Year Ending September 30, 19.40.

Drainage Area 2.3 Square Miles. Capacity of Reservoir 227.5 Ac. Ft. at Spillway Elev. 1497.0 Ft.

Continuous Water Stage Recorder Au

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			0	0			0	0			0	0	Dry	0	0	0	1
2			0	0			0	0			0	0	"	0	0	0	2
3			0	0			0	0			0	0	"	0	0	0	3
4			0	0			0	0			0	0	"	0	0	0	4
5			0	0			0	0			0	0	"	0	0	0	5
6			0	0			0	0			0	0	"	0	0	0	6
7			0	0			0	0			0	0	1444.3	0	0	0	7
8			0	0			0	0			0	0	1454.1	2.4	1.2	0	8
9			0	0			0	0			0	0	1454.1	2.4	0	0	9
10	DRY		0	0	DRY		0	0	DRY		0	0	1454.1	2.4	0	0	10
11			0	0			0	0			0	0	1454.1	2.4	0	0	11
12	STORAGE		0	0	STORAGE		0	0	STORAGE		0	0	1454.1	2.4	0	0	12
13			0	0			0	0			0	0	1454.1	2.4	0	0	13
14			0	0			0	0			0	0	1454.1	2.4	0	0	14
15	RESERVOIR		0	0	RESERVOIR		0	0	RESERVOIR		0	0	1454.1	2.4	0	0	15
16			0	0			0	0			0	0	1454.1	2.4	0	0	16
17			0	0			0	0			0	0	1454.1	2.4	0	0	17
18	NO		0	0	NO		0	0	NO		0	0	1454.1	2.4	0	0	18
19			0	0			0	0			0	0	1454.1	2.4	0	0	19
20			0	0			0	0			0	0	1454.1	2.4	0	0	20
21			0	0			0	0			0	0	1454.0	2.3	0	0	21
22			0	0			0	0			0	0	1454.0	2.3	0	0	22
23			0	0			0	0			0	0	1454.1	2.4	0	0	23
24			0	0			0	0			0	0	1454.1	2.4	0	0	24
25			0	0			0	0			0	0	1454.1	2.4	0	0	25
26			0	0			0	0			0	0	1454.1	2.4	0	0	26
27			0	0			0	0			0	0	1454.1	2.4	0	0	27
28			0	0			0	0			0	0	1454.1	2.4	0	0	28
29			0	0			0	0			0	0	1454.1	2.4	0	0	29
30			0	0			0	0			0	0	1454.2	2.5	0.1	0	30
31			0	0							0	0	1454.2	2.5	0	0	31
TOTAL			0	0			0	0			0	0			1.3	0	
Inf. Ac. Ft.			0				0				0				2.6	2.6	
Outf. Ac. Ft.				0				0				0			0	0	
Maximum Mean Daily Inflow			0				0				0				1.2	1.2	
Minimum Mean Daily Inflow			0				0				0				0	0	
Storage Change			0				0				0				+2.5	+2.5	

REMARKS: Inflows computed from storage change.

½ Year

Max. W. S. Elev.	1463.6	feet	on Various Times	Storage	16.0	Acre Feet						
Min. W. S. Elev.	1443. +	feet	on Various Times	Storage	0	Acre Feet						
Max. Peak Inf.	10.6	C.F.S. from 2:30 a.m.	on 1-8-40	to 3:00 a.m.	on 1-8-40							
Max. Peak Outf.	10. (Est.)	C.F.S. from 2:15 p.m.	on 5-31-40	to 2:20 p.m.	on 5-31-40							

Gage Height and Storage 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	HAV & CCG
Storage applied	HAV & CCG
Inf. & Outf. computed	HAV
Checked CCG	5-28-40

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 LIVE OAK Dam

In Live Oak Canyon for the Year Ending September 30, 19.40

Drainage Area 2.3 Square Miles. Capacity of Reservoir 227.5 Ac. Ft. at Spillway Elev. 1497.0 Ft.

Continuous Water Stage Recorder Au

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	1454.4	2.6	0.1	0	1461.7	11.9	0.2	0	1463.2	15.1	0.3	0	1463.6	16.0	0	0	1
2	1454.8	2.9	0.1	0	1461.8	12.1	0.1	0	1463.2	15.1	0.05	0	1463.6	16.0	0	0	2
3	1456.0	3.9	0.5	0	1461.9	12.3	0.05	0	1463.2	15.1	0.05	0	1463.6	16.0	0	0	3
4	1457.0	4.9	0.5	0	1461.9	12.3	0.05	0	1463.3	15.3	0.05	0	1463.6	16.0	0	0	4
5	1457.3	5.3	0.05	0	1462.0	12.5	0.05	0	1463.3	15.3	0.05	0	1463.6	16.0	0	0	5
6	1457.4	5.4	0.05	0	1462.0	12.5	0.05	0	1463.3	15.3	0.05	0	1463.6	16.0	0	0	6
7	1457.5	5.5	0.05	0	1462.1	12.7	0.05	0	1463.3	15.3	0.05	0	1463.6	16.0	0	0	7
8	1457.6	5.6	0.05	0	1462.1	12.7	0.05	0	1463.3	15.3	0.05	0	1463.5	15.8	0	0	8
9	1457.7	5.7	0.05	0	1462.2	12.9	0.05	0	1463.4	15.5	0.05	0	1463.5	15.8	0	0	9
10	1457.7	5.7	0.05	0	1462.2	12.9	0.05	0	1463.4	15.5	0	0	1463.5	15.8	0	0	10
11	1457.8	5.9	0.05	0	1462.3	13.1	0.05	0	1463.4	15.5	0	0	1463.5	15.8	0	0	11
12	1457.9	6.0	0.05	0	1462.3	13.1	0.05	0	1463.4	15.5	0	0	1463.4	15.5	0	0	12
13	1457.9	6.0	0.05	0	1462.3	13.1	0.05	0	1463.4	15.5	0	0	1463.4	15.5	0	0	13
14	1458.0	6.1	0.05	0	1462.3	13.1	0.05	0	1463.4	15.5	0	0	1463.4	15.5	0	0	14
15	1458.1	6.2	0.05	0	1462.4	13.3	0.05	0	1463.5	15.8	0	0	1463.4	15.5	0	0	15
16	1458.1	6.2	0.05	0	1462.4	13.3	0.05	0	1463.5	15.8	0	0	1463.3	15.3	0	0	16
17	1458.2	6.4	0.05	0	1462.4	13.3	0.05	0	1463.5	15.8	0	0	1463.3	15.3	0	0	17
18	1458.2	6.4	0.05	0	1462.5	13.6	0.05	0	1463.5	15.8	0	0	1463.3	15.3	0	0	18
19	1458.3	6.5	0.05	0	1462.5	13.6	0.05	0	1463.5	15.8	0	0	1463.2	15.1	0	0	19
20	1458.3	6.5	0.05	0	1462.5	13.6	0.05	0	1463.5	15.8	0	0	1463.2	15.1	0	0	20
21	1458.4	6.6	0.05	0	1462.5	13.6	0	0	1463.5	15.8	0	0	1463.2	15.1	0	0	21
22	1458.4	6.6	0.05	0	1462.5	13.6	0	0	1463.5	15.8	0	0	1463.1	14.8	0	0	22
23	1458.5	6.8	0.05	0	1462.6	13.8	0	0	1463.5	15.8	0	0	1463.1	14.8	0	0	23
24	1458.5	6.8	0.05	0	1462.6	13.8	0	0	1463.5	15.8	0	0	1463.0	14.6	0	0	24
25	1459.5	8.2	0.7	0	1462.6	13.8	0	0	1463.5	15.8	0	0	1463.0	14.6	0	0	25
26	1460.6	9.9	0.8	0	1462.6	13.8	0	0	1463.6	16.0	0	0	1462.9	14.4	0	0	26
27	1460.9	10.4	0.3	0	1462.7	14.0	0	0	1463.6	16.0	0	0	1462.9	14.4	0	0	27
28	1461.1	10.8	0.2	0	1462.7	14.0	0	0	1463.6	16.0	0	0	1462.8	14.2	0	0	28
29	1461.5	11.6	0.4	0	1462.7	14.0	0	0	1463.6	16.0	0	0	1462.8	14.2	0	0	29
30					1462.7	14.0	0	0	1463.6	16.0	0	0	1462.7	14.0	0	0	30
31					1463.0	14.6	0.3	0					1462.1	12.7	0	0.7	31
TOTAL			4.6	0			1.5	0			0.7	0			0	0.7	
Inf. Ac. Ft.			9.1				3.0				1.4				0	16.1	
Outf. Ac. Ft.				0				0				0			1.4 + *(2.0)	1.4 + *(2.0)	
Maximum Mean Daily Inflow			0.8				0.2				0.3				0	1.2	
Minimum Mean Daily Inflow			0.05				0				0				0	0	
Storage Change			+9.1				+3.0				+1.4				- *(3.3)	+12.7	

REMARKS: Inflows computed from Storage change. * - Evaporation and Percolation loss. (Mean for Period.

½ Year

Max. W. S. Elev.	1463.6	feet	on Various Times	Storage	16.0	Acre Feet						
Min. W. S. Elev.	1443. +	feet	on Various Times	Storage	0	Acre Feet						
Max. Peak Inf.	10.6	C.F.S. from 2:30 a.m.	on 1-8-40	to 3:00 a.m.	on 1-8-40							
Max. Peak Outf.	10 (Est.)	C.F.S. from 2:15 p.m.	on 5-31-40	to 2:20 p.m.	on 5-31-40							

Gage Height and Storage 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	HAV & CCG
Storage applied	HAV & CCG
Inf. & Outf. computed	HAV
Checked CCG	5-28-40

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 LIVE OAK Dam

In / On Live Oak Canyon for the Year Ending September 30, 1940

Drainage Area 2.3 Square Miles. Capacity of Reservoir 227.5 Ac. Ft. at Spillway Elev. 1497.0 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	1460.6	10.3	0	1.2													1
2	1459.5	8.8	0	1.1													2
3	1458.3	6.5	0	0.8													3
4	1457.5	5.5	0	0.5													4
5	1456.9	4.8	0	0.4													5
6	1456.3	4.2	0	0.3													6
7	1455.2	3.2	0	0.5													7
8	1454.2	2.5	0	0.3													8
9	1452.9	1.7	0	0.4													9
10	1452.4	1.5	0	0.1													10
11	1452.1	1.3	0	0.1													11
12	1451.7	1.0	0	0.1													12
13	1445.8	0	0	0.6	DRY				DRY				DRY				13
14	1445.2	0	0	0		STORAGE				STORAGE				STORAGE			14
15	1445.0	0	0	0													15
16			0	0													16
17			0	0													17
18			0	0													18
19			0	0	RESERVOIR		NO FLOW	NO FLOW	RESERVOIR		NO FLOW	NO FLOW	RESERVOIR		NO FLOW	NO FLOW	19
20			0	0													20
21	DRY		0	0		NO				NO				NO			21
22		STORAGE	0	0													22
23			0	0													23
24			0	0													24
25			0	0													25
26	RESERVOIR	NO	0	0													26
27			0	0													27
28			0	0													28
29			0	0													29
30			0	0													30
31																	31
TOTAL			0	6.4			0	0			0	0			0	0	
Inf. Ac. Ft.			0				0				0				0	16.1	
Outf. Ac. Ft.				12.7				0				0			0	1.4 + *(2.0)	
Maximum			0				0				0				0	1.2	
Mean Daily Inflow																	
Minimum			0				0				0				0	0	
Mean Daily Inflow																	
Storage Change			-12.7				0				0				0	+12.7	

REMARKS Outflows computed from Storage Change. Yearly Totals

Max. W. S. Elev.	1463.6	feet	on Various Times	Storage	16.0	Acre Feet	RECORDS COLLECTED BY		COMPUTATIONS	Date
Min. W. S. Elev.	1443.0 ±	feet	on Various Times	Storage	0	Acre Feet		Dam Tender	Gage Hts. copied	HAV
Max. Peak Inf.	10.6	C.F.S. from	2:30 a.m. on 1-8-40	to	3:00 a.m. on	1-8-40	W. T. Lind	Hydrographer	Storage applied	HAV
Max. Peak Outf.	10. (Est.)	C.F.S. from	2:15 p.m. on 5-31-40	to	2:20 p.m. on	5-31-40	H. A. van der Goot	Hydrographer	Inf. & Outf. computed	HAV
Gage Height and Storage as of Midnight on Day Shown.									Checked CCG	10-11-40

THOMPSON CREEK

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

Storages based on L.A.C.F.C.D. Survey of Nov. 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, 1940

Drainage Area 3.70 Square Miles. Capacity of Reservoir 812.0 Ac. Ft. at Spillway Elev. 1640.0 Ft.

Continuous Water Stage Recorder None

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	0	1
2														0	0	0	2
3														0	0	0	3
4														0	0	0	4
5														0	0	0	5
6														0	0	0	6
7														0	0	0	7
8													1581.8	8.7	4.5	0	8
9													1581.7	8.5	0	0	9
10	DRY				DRY				DRY				1581.6	8.3	0	0	10
11													1581.7	8.5	0.2	0	11
12		STORAGE				STORAGE				STORAGE			1581.8	8.7	0.2	0	12
13			FLOW	FLOW			FLOW	FLOW			FLOW	FLOW	1581.8	8.7	0.2	0	13
14													1581.9	8.9	0.2	0	14
15													1582.0	9.1	0.2	0	15
16	RESERVOIR				RESERVOIR				RESERVOIR				1582.0	9.1	0.1	0	16
17		NO	NO	NO		NO	NO	NO		NO	NO	NO	1582.1	9.3	0.1	0	17
18													1582.1	9.3	0.1	0	18
19													1582.1	9.3	0.1	0	19
20													1582.1	9.3	0.1	0	20
21													1582.1	9.3	0.1	0	21
22													1582.0	9.1	0.1	0	22
23													1582.0	9.1	0.1	0	23
24													1582.0	9.1	0.1	0	24
25													1581.9	8.9	0.1	0	25
26													1581.9	8.9	0.1	0	26
27													1581.8	8.7	0	0	27
28													1581.8	8.7	0	0	28
29													1581.7	8.5	0	0	29
30													1581.7	8.5	0	0	30
31													1581.6	8.3	0	0	31
TOTAL			0	0			0	0			0	0			6.6	0	
Inf. Ac. Ft.			0				0				0				13.1	13.1	
Outf. Ac. Ft.				0				0				0			0 + (4.8)*	0 + (4.8)*	
Maximum Mean Daily Inflow			0				0				0				4.5	4.5	
Minimum Mean Daily Inflow			0				0				0				0	0	
Storage Change			0				0				0				+8.3	+8.3	

REMARKS ( )* During periods of inflow, the evaporation and percolation loss is estimated at 0.1 second foot. Outflow shows valve release only. ½ Year

Max. W. S. Elev.	1585.8	feet	on Various Times	Storage	19.8	Acre Feet	RECORDS COLLECTED BY		COMPUTATIONS	Date
Min. W. S. Elev.	1572.0	feet	on Various Times	Storage	None	Acre Feet		Dam Tender	Gage Hts. copied	REL
Max. Peak Inf.	26.0	C.F.S. from	Midnight on 1-7-40	to	2:45 a.m. on	1-8-40	H. A. van der Goot	Hydrographer	Storage applied	REL
Max. Peak Outf.	None	C.F.S. from	on	to	on		W. T. Lind	Hydrographer	Inf. & Outf. computed	HAV
Gage Heights and Storage as of Midnight on day shown. [Mean for Period.									Checked CCG	8-15-40.

THOMPSON CREEK (CONT.)

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 THOMPSON CREEK Dam

In / On Thompson Creek for the Year Ending September 30, 19 40

Continuous Water Stage Recorder None

Drainage Area 3.70 Square Miles. Capacity of Reservoir 812.0 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	1581.8	8.7	0.3	0	1585.8	19.8	0.2	0	1584.7	16.1	0.4	0	1582.2	9.6	0	0	1
2	1582.1	9.3	0.4	0	1585.8	19.8	0.2	0	1584.6	15.8	0.1	0	1582.1	9.3	0	0	2
3	1582.9	11.2	1.2	0	1585.8	19.8	0.2	0	1584.5	15.5	0.1	0	1582.0	9.1	0	0	3
4	1583.1	11.7	0.4	0	1585.8	19.8	0.2	0	1584.4	15.2	0.1	0	1581.9	8.9	0	0	4
5	1583.3	12.2	0.5	0	1585.8	19.8	0.2	0	1584.3	14.9	0.1	0	1581.8	8.7	0	0	5
6	1583.4	12.4	0.3	0	1585.8	19.8	0.2	0	1584.2	14.6	0.1	0	1581.7	8.5	0	0	6
7	1583.4	12.4	0.3	0	1585.8	19.8	0.2	0	1584.1	14.3	0.1	0	1581.6	8.3	0	0	7
8	1583.5	12.7	0.3	0	1585.8	19.8	0.2	0	1584.0	14.0	0.1	0	1581.4	7.8	0	0	8
9	1583.5	12.7	0.3	0	1585.8	19.8	0.2	0	1583.8	13.5	0.1	0	1581.3	7.6	0	0	9
10	1583.5	12.7	0.2	0	1585.8	19.8	0.2	0	1583.7	13.2	0.1	0	1581.2	7.4	0	0	10
11	1583.6	13.0	0.2	0	1585.8	19.8	0.1	0	1583.6	13.0	0.1	0	1581.1	7.2	0	0	11
12	1583.6	13.0	0.2	0	1585.7	19.5	0.1	0	1583.4	12.4	0.1	0	1581.0	7.0	0	0	12
13	1583.6	13.0	0.2	0	1585.7	19.5	0.1	0	1583.3	12.2	0.1	0	1580.8	6.6	0	0	13
14	1583.6	13.0	0.2	0	1585.6	19.1	0.1	0	1583.2	11.9	0.1	0	1580.7	6.5	0	0	14
15	1583.6	13.0	0.2	0	1585.6	19.1	0.1	0	1583.1	11.7	0	0	1580.6	6.3	0	0	15
16	1583.6	13.0	0.2	0	1585.5	18.8	0.1	0	1583.0	11.4	0	0	1580.5	6.1	0	0	16
17	1583.6	13.0	0.2	0	1585.4	18.4	0.1	0	1582.9	11.2	0	0	1580.3	5.7	0	0	17
18	1583.5	12.7	0.2	0	1585.3	18.1	0.1	0	1582.8	10.9	0	0	1580.2	5.6	0	0	18
19	1583.5	12.7	0.2	0	1585.2	17.7	0.1	0	1582.7	10.7	0	0	1580.1	5.4	0	0	19
20	1583.5	12.7	0.2	0	1585.1	17.4	0.1	0	1582.6	10.5	0	0	1580.0	5.2	0	0	20
21	1583.4	12.4	0.2	0	1585.0	17.0	0.1	0	1582.6	10.5	0	0	1579.9	5.1	0	0	21
22	1583.4	12.4	0.1	0	1584.9	16.7	0	0	1582.5	10.3	0	0	1579.7	4.8	0	0	22
23	1583.4	12.4	0.1	0	1584.8	16.4	0	0	1582.4	10.0	0	0	1579.6	4.6	0	0	23
24	1583.4	12.4	0.1	0	1584.7	16.1	0	0	1582.3	9.8	0	0	1579.5	4.5	0	0	24
25	1584.4	15.2	1.6	0	1584.6	15.8	0	0	1582.2	9.6	0	0	1579.4	4.3	0	0	25
26	1585.2	17.7	1.4	0	1584.5	15.5	0	0	1582.4	10.0	0.3	0	1579.2	4.0	0	0	26
27	1585.5	18.6	0.8	0	1584.4	15.2	0	0	1582.5	10.3	0.2	0	1579.1	3.9	0	0	27
28	1585.7	19.5	0.5	0	1584.2	14.6	0	0	1582.5	10.3	0.2	0	1579.0	3.7	0	0	28
29	1585.8	19.8	0.4	0	1584.1	14.3	0	0	1582.4	10.0	0.1	0	1578.9	3.6	0	0	29
30					1584.0	14.0	0	0	1582.3	9.8	0.1	0	1578.7	3.4	0	0	30
31					1584.6	15.8	1.1	0					1578.6	3.3	0	0	31
TOTAL			11.4	0			4.2	0			2.6	0			0	0	
Inf. Ac. Ft.			22.6				8.3				5.2				0	4.9.2	
Outf. Ac. Ft.			0 + (11.1)*				0 + (12.3)*				0 + (11.1)*				0 + (6.5)*	0+(45.8)*	
Maximum Mean Daily Inflow			1.6				1.1				0.7				0	4.5	
Minimum Mean Daily Inflow			0.1				0				0				0	0	
Storage Change			+11.5				- 4.0				-6.0				- 6.5	+ 3.3	

REMARKS *( ) = Evaporation and Percolation loss, estimated at 0.1 second foot below 10 A.F. storage, 0.2 s.f. for 10 A.F. and above. % Year

Max. W. S. Elev.	1585.8 feet on Various Times	Storage 19.8 Acre Feet	RECORDS COLLECTED BY		COMPUTATIONS	Date
Min. W. S. Elev.	1572.0 feet on Various Times	Storage None Acre Feet		Dam Tender	Gage Hts. copied	HAV
Max. Peak Inf.	26.0 C. F. S. from Midnight on 1-7-40 to 2:45 a.m. on 1-8-40		H. A. van der Goot	Hydrographer	Storage applied	HAV
Max. Peak Outf.	None C. F. S. from on to on		W. T. Lind	Hydrographer	Inf. & Outf. computed	HAV
Gage heights and storage as of midnight on day shown. [Mean for period.					Checked	

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 THOMPSON CREEK Dam

In / On Thompson Creek for the Year Ending September 30, 19 40

Continuous Water Stage Recorder None

Drainage Area 3.70 Square Miles. Capacity of Reservoir 812.0 Ac. Ft. at Spillway Elev. 1640.0 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	1578.5	3.2	0	0	1575.4	0.6	0	0	1573.3	0.2							1
2	1578.4	3.0	0	0	1575.3	0.8	0	0	1573.3	0.2							2
3	1578.3	2.9	0	0	1575.2	0.7	0	0	1573.2	0.1							3
4	1578.2	2.8	0	0	1575.0	0.6	0	0	1573.2	0.1							4
5	1578.1	2.7	0	0	1574.9	0.6	0	0	1573.1	0.1							5
6	1577.9	2.5	0	0	1574.8	0.5	0	0	1573.1	0.1							6
7	1577.8	2.4	0	0	1574.7	0.5	0	0	1573.0	0.1							7
8	1577.7	2.3	0	0	1574.6	0.5	0	0									8
9	1577.6	2.2	0	0	1574.5	0.5	0	0									9
10	1577.5	2.2	0	0	1574.4	0.4	0	0									10
11	1577.4	2.1	0	0	1574.3	0.4	0	0									11
12	1577.3	2.0	0	0	1574.2	0.4	0	0									12
13	1577.2	1.9	0	0	1574.1	0.3	0	0									13
14	1577.1	1.8	0	0	1574.1	0.3	0	0									14
15	1577.0	1.7	0	0	1574.0	0.3	0	0									15
16	1576.9	1.6	0	0	1574.0	0.3	0	0									16
17	1576.8	1.6	0	0	1573.9	0.3	0	0									17
18	1576.7	1.5	0	0	1573.9	0.3	0	0									18
19	1576.6	1.5	0	0	1573.8	0.3	0	0									19
20	1576.5	1.4	0	0	1573.8	0.3	0	0									20
21	1576.4	1.3	0	0	1573.7	0.2	0	0									21
22	1576.3	1.3	0	0	1573.7	0.2	0	0									22
23	1576.2	1.2	0	0	1573.6	0.2	0	0									23
24	1576.1	1.2	0	0	1573.6	0.2	0	0									24
25	1576.0	1.1	0	0	1573.5	0.2	0	0									25
26	1575.9	1.1	0	0	1573.5	0.2	0	0									26
27	1575.8	1.0	0	0	1573.5	0.2	0	0									27
28	1575.7	1.0	0	0	1573.5	0.2	0	0									28
29	1575.6	0.9	0	0	1573.5	0.2	0	0									29
30	1575.5	0.9	0	0	1573.4	0.2	0	0	1572.0	0							30
31					1573.4	0.2	0	0	Dry	0							31
TOTAL			0	0			0	0			0	0			0	0	
Inf. Ac. Ft.			0				0				0				0	4.9.2	
Outf. Ac. Ft.			0 + *(2.4)				0 + *(0.7)				0 + *(+0.2)				0	0+*(49.1)	
Maximum Mean Daily Inflow			0				0				0				0	4.5	
Minimum Mean Daily Inflow			0				0				0				0	0	
Storage Change			- 2.4				- 0.7				- 0.2				0	0	

REMARKS ( )* Evaporation and Percolation Loss. Yearly Totals

Max. W. S. Elev.	1585.8 feet on Various Times	Storage 19.8 Acre Feet	RECORDS COLLECTED BY		COMPUTATIONS	Date
Min. W. S. Elev.	1572.0 feet on Various Times	Storage None Acre Feet		Dam Tender	Gage Hts. copied	HAV
Max. Peak Inf.	26.0 C. F. S. from Midnight on 1-7-40 to 2:45 a.m. on 1-8-40		H. A. van der Goot	Hydrographer	Storage applied	HAV
Max. Peak Outf.	None C. F. S. from on to on		W. T. Lind	Hydrographer	Inf. & Outf. computed	HAV
Gage Heights and Storage as of Midnight on day shown.					Checked CCG	11-13-40

RUNOFF RECORDS

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
Hydraulic Division

RUNOFF RECORDS

Season 1939-40

Foreword:

This report is the tenth of a series of annual or biennial reports summarizing the collection of runoff data by the District. These reports cover 13 years* of records on various streams and channels throughout the County. Stations have been added, moved or abandoned as the need for particular records increased or diminished.

Purpose:

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

1. Streamflow measurements and records on channels below dams and in the valley reaches are essential to proper reservoir operation. Such measurements provide the information necessary to properly correlate flood releases with valley runoff and channel capacities. Continuous streamflow records also provide a correct knowledge of percolation rates thereby enabling a reservoir to be operated for a maximum conservation benefit as well as determining the actual extent of such benefit.

2. The determination of proper design and economic feasibility of adequate channels and flood control structures depends on the extent and length of streamflow records.

3. Proper planning of present and future conservation works and determining available water supply is entirely dependent on streamflow records. This type of data becomes more valuable to future planning as the length of record increases.

Extent and Method of Collecting Data:

The Flood Control District operated 59 recording streamflow stations during the current season. These stations are distributed on the main streams and tributaries of the various drainage systems as follows:

Antelope Valley Drainage	1	stations
Santa Clara River Drainage	1	"
Santa Monica Mountains - Coastal Drainage	3	"
Ballona Creek Drainage	2	"
Los Angeles River Drainage	21	"
Rio Hondo Drainage	13	"
San Gabriel River Drainage	17	"
San Antonio Creek Drainage	1	"

* See Note on Page 56.

The locations of all stations are shown on Map II, Page 57.

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. Due to the shifting bottoms at many locations, the reliability of the records depends largely on the number of measurements made during each storm.

Type of Records in Use.

Type	No. in Use	Time - Duration
AU	20	continuous
*HCF	25	continuous
Stevens (Type A)	2	continuous
Stevens (Type L)	6	weekly or daily
Rational (Horizontal)	3	weekly
Rational (Duplex)	1	12 days or daily
Leitz (Horizontal)	1	continuous
Friez	1	continuous

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

Records Presented

Records of recording streamflow stations.

(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 2654 measurements taken by the District during 1939-40 at 59 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.

Included in this report as additional information are the records of the thirteen streamflow recording stations owned and operated in this district by the United States Geological Survey Water Resources Branch. The Flood Control District cooperates with the U.S.G.S. by taking streamflow measurements at these stations. During the current season 255 such measurements were taken. The U.S.G.S., in turn, publishes the records of sixteen flood control stations in their "Pacific Slope Water Supply" publications.

Records of 412 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 574 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.

Eight sets of percolation measurements were taken on Arroyo Seco, Big Tujunga and Eaton Washes, and are shown beginning on Page 191.

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.

Runoff Summary:

Rainfall and runoff were both below normal during the 1939-40 season. No important storms occurred throughout the season with the exception of the January 7 and 8, 1940 storm. During this storm, moderate to heavy intensities occurred in some portions of the District resulting in fairly heavy runoff in isolated sections. Generally light to moderate runoff occurred during the storm of February 1 to 4, 1940, the only other storm of consequence.

Beginning on Page 196 of this report is a complete summary of the annual runoff in acre feet and the peak flows for each year of record on all the stations at which the Flood Control District has kept records.

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 for all periods. These periods are frequently estimated and are denoted by the letter "E" preceding the flow value for such days. These periods are estimated by various methods. In general, estimates were made by comparison with other flow records and rainfall or by interpolation between known values.

(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 Description. "Good" indicates that error in the record is probably less than 10%. "Fair" indicates a possible error greater than 10% but probably less than 20%. "Poor" indicates a possible error greater than 20%.

(5) 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 the U.S.G.S., Water Resources Branch, 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.

Responsibility:

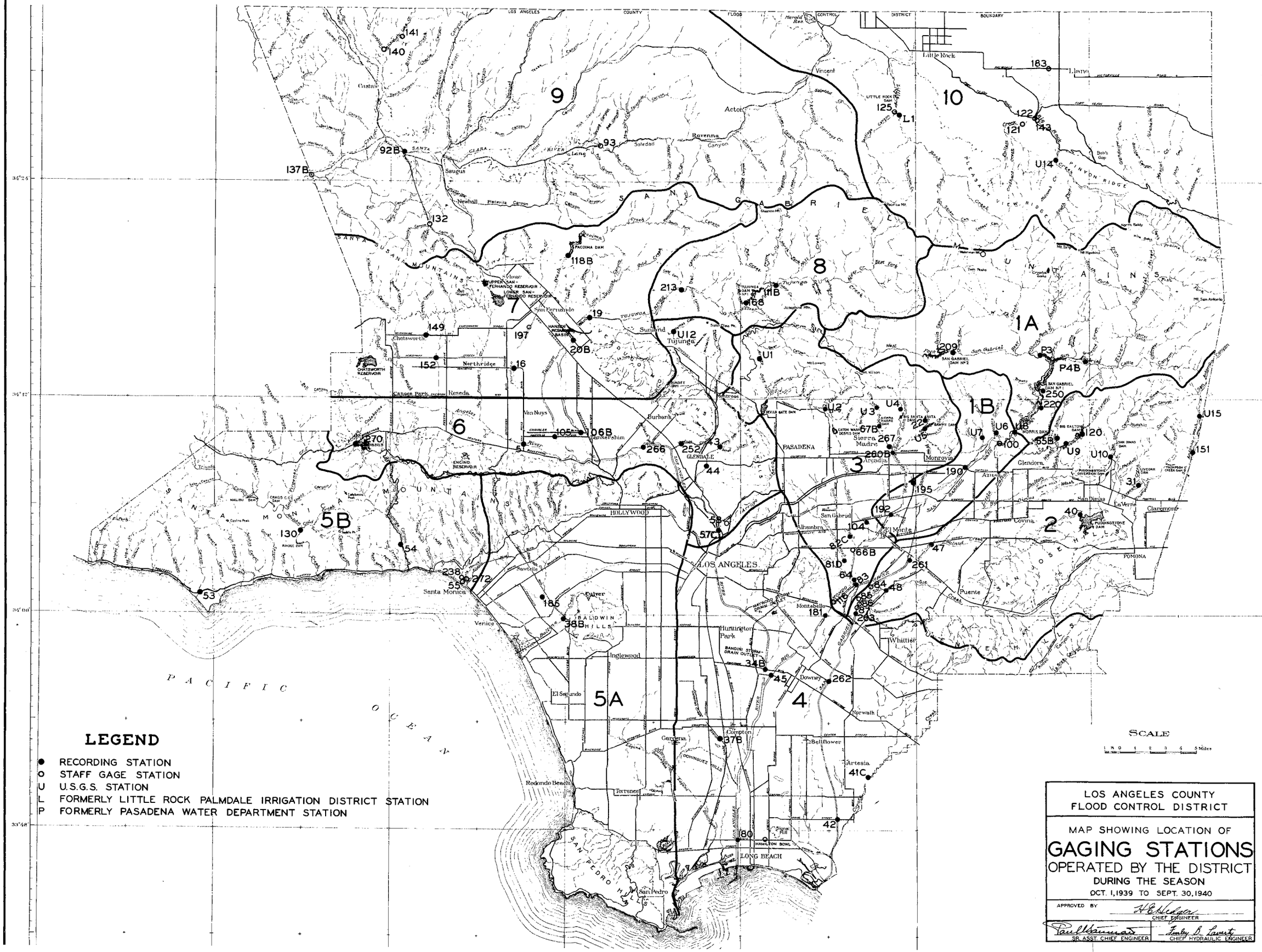
The collection of the field data was the responsibility of the following district hydrographers:

District	Name
1 A	T. A. Cooper assisted by E. K. Devore, E. W. Godfrey, G. Brown, G. H. Middleton and A. A. Ingram.
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. vander Goot 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.

* 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.


LOS ANGELES COUNTY FLOOD CONTROL DISTRICT BOUNDARY
Little Rock
Vincent
Acton
Ravenna
Canyon
Soledad
Saugus
Newhall
Elizabeth Lake Canyon
Pacoima
Sylmar
San Fernando
Sunland
Tujunga
Chatsworth
Northridge
Canoga Park
Reseda
Van Nuys
Burbank
Glendale
Pasadena
Sierra Madre
Arcadia
Monrovia
Glendora
Azusa
San Dimas
La Verne
Claremont
San Gabriel
Alhambra
El Monte
Covina
Pomona
Puente Hills
Whittier
Montebello
Hollywood
Los Angeles
Santa Monica
Venice
Culver
Inglewood
Huntington Park
Downey
Norwalk
El Segundo
Gardena
Compton
Bellflower
Artesia
Redondo Beach
Torrance
San Pedro
Long Beach
Santa Monica Mountains
San Gabriel Mountains
San Jose Hills
Puente Hills
Pacific Ocean
San Pedro Hills
Baldwin Hills
Verdugo Hills
Pleasant View Ridge
Pinyon Ridge
Mt. Lowe
Mt. Wilson
Mt. San Antonio
Mt. Disappointment
Mt. Hawkins
Mt. Harvard
Mt. Gleason
Mt. Thom
Mt. Lukens
Mt. Hollywood
Castaic Creek
Santa Clara River
San Gabriel River
Big Tujunga Creek
Little Tujunga Canyon
Arroyo Seco
Big Dalton Wash
Eaton Wash
Rubio Canyon
Millard Canyon
Devils Gate Dam
Pacoima Dam
Upper San Fernando Reservoir
Lower San Fernando Reservoir
Hansen Flood Control Basin
Chatsworth Reservoir
Encino Reservoir
Hansen Dam
Sunset Blvd.
Tujunga Wash
Big Santa Anita Dam
Sierra Madre Debris Dam
Eaton Wash Debris Dam
Morris Dam
Big Dalton Dam
Santa Anita Dam
Sawpit Dam
Big Santa Anita Debris Dam
Big Santa Anita Spreading Grounds
Pudingstone Diversion Dam
Live Oak Dam
San Dimas Dam
Thompson Creek Dam
Puddingstone Dam
Malibu Dam
Ridge Dam
Crags Dam
Castro Peak
Saddle Peak
Topanga Canyon
Malibu Canyon
Las Virgenes Canyon
Las Virgenes Creek
Triunfo Creek
Arroyo Calabasas
Arroyo Sequit
Arroyo Hondo
Arroyo Verde
Arroyo Seco
Arroyo Parkway
Arroyo Drive
Arroyo Boulevard
Arroyo Avenue
Arroyo Terrace
Arroyo Road
Arroyo Street
Arroyo Place
Arroyo Court
Arroyo Lane
Arroyo Circle
Arroyo Way
Arroyo Crest
Arroyo Vista
Arroyo Grande
Arroyo Del Mar
Arroyo Del Rey
Arroyo Del Sol
Arroyo Del Valle
Arroyo Del Oro
Arroyo Del Norte
Arroyo Del Este
Arroyo Del Oeste
Arroyo Del Centro
Arroyo Del Medio
Arroyo Del Fondo
Arroyo Del Cielo
Arroyo Del Mundo
Arroyo Del Universo
Arroyo Del Infinito
Arroyo Del Eterno
Arroyo Del Tiempo
Arroyo Del Espacio
Arroyo Del Vacio
Arroyo Del Nada
Arroyo Del Todo
Arroyo Del Uno
Arroyo Del Dos
Arroyo Del Tres
Arroyo Del Cuatro
Arroyo Del Cinco
Arroyo Del Seis
Arroyo Del Siete
Arroyo Del Ocho
Arroyo Del Nueve
Arroyo Del Diez
Arroyo Del Once
Arroyo Del Doce
Arroyo Del Trece
Arroyo Del Catorce
Arroyo Del Quince
Arroyo Del Dieciseis
Arroyo Del Diecisiete
Arroyo Del Dieciocho
Arroyo Del Diecinueve
Arroyo Del Veinte
Arroyo Del Veintiuno
Arroyo Del Veintidos
Arroyo Del Veintitres
Arroyo Del Veinticuatro
Arroyo Del Veinticinco
Arroyo Del Veintiseis
Arroyo Del Veintisiete
Arroyo Del Veintiocho
Arroyo Del Veintinueve
Arroyo Del Treinta
Arroyo Del Treinta y Uno
Arroyo Del Treinta y Dos
Arroyo Del Treinta y Tres
Arroyo Del Treinta y Cuatro
Arroyo Del Treinta y Cinco
Arroyo Del Treinta y Seis
Arroyo Del Treinta y Siete
Arroyo Del Treinta y Ocho
Arroyo Del Treinta y Nueve
Arroyo Del Cuarenta
Arroyo Del Cuarenta y Uno
Arroyo Del Cuarenta y Dos
Arroyo Del Cuarenta y Tres
Arroyo Del Cuarenta y Cuatro
Arroyo Del Cuarenta y Cinco
Arroyo Del Cuarenta y Seis
Arroyo Del Cuarenta y Siete
Arroyo Del Cuarenta y Ocho
Arroyo Del Cuarenta y Nueve
Arroyo Del Cincuenta
Arroyo Del Cincuenta y Uno
Arroyo Del Cincuenta y Dos
Arroyo Del Cincuenta y Tres
Arroyo Del Cincuenta y Cuatro
Arroyo Del Cincuenta y Cinco
Arroyo Del Cincuenta y Seis
Arroyo Del Cincuenta y Siete
Arroyo Del Cincuenta y Ocho
Arroyo Del Cincuenta y Nueve
Arroyo Del Sesenta
Arroyo Del Sesenta y Uno
Arroyo Del Sesenta y Dos
Arroyo Del Sesenta y Tres
Arroyo Del Sesenta y Cuatro
Arroyo Del Sesenta y Cinco
Arroyo Del Sesenta y Seis
Arroyo Del Sesenta y Siete
Arroyo Del Sesenta y Ocho
Arroyo Del Sesenta y Nueve
Arroyo Del Setenta
Arroyo Del Setenta y Uno
Arroyo Del Setenta y Dos
Arroyo Del Setenta y Tres
Arroyo Del Setenta y Cuatro
Arroyo Del Setenta y Cinco
Arroyo Del Setenta y Seis
Arroyo Del Setenta y Siete
Arroyo Del Setenta y Ocho
Arroyo Del Setenta y Nueve
Arroyo Del Ochenta
Arroyo Del Ochenta y Uno
Arroyo Del Ochenta y Dos
Arroyo Del Ochenta y Tres
Arroyo Del Ochenta y Cuatro
Arroyo Del Ochenta y Cinco
Arroyo Del Ochenta y Seis
Arroyo Del Ochenta y Siete
Arroyo Del Ochenta y Ocho
Arroyo Del Ochenta y Nueve
Arroyo Del Noventa
Arroyo Del Noventa y Uno
Arroyo Del Noventa y Dos
Arroyo Del Noventa y Tres
Arroyo Del Noventa y Cuatro
Arroyo Del Noventa y Cinco
Arroyo Del Noventa y Seis
Arroyo Del Noventa y Siete
Arroyo Del Noventa y Ocho
Arroyo Del Noventa y Nueve
Arroyo Del Cien
1A
1B
2
3
4
5A
5B
6
7
8
9
10
34°24'
34°12'
34°00'
33°48'
118°12'
118°00'
117°48'
LEGEND
● RECORDING STATION
o STAFF GAGE STATION
U U.S.G.S. STATION
L FORMERLY LITTLE ROCK PALMDALE IRRIGATION DISTRICT STATION
P FORMERLY PASADENA WATER DEPARTMENT STATION
SCALE
1 0 1 2 3 4 5 Miles
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
MAP SHOWING LOCATION OF
GAGING STATIONS
OPERATED BY THE DISTRICT
DURING THE SEASON
OCT. 1, 1939 TO SEPT. 30, 1940
APPROVED BY
H. E. Hasbrouck
CHIEF ENGINEER
Paul Sammon
SR. ASST. CHIEF ENGINEER
Finley B. Laverty
CHIEF HYDRAULIC ENGINEER

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, 1939 to September 30, 1940.

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, 1940.

EXTREMES OF DISCHARGE:

1939-1940
Maximum 912 second-feet, February 1.
Minimum no flow at various times.
1929-1940 (Stations F81R, F81B-R, F81C-R, F81D-R)
Maximum 4890 second-feet January 1, 1934.
Minimum no flow at various times.

ACCURACY:

Fair.
Low flow records occasionally interpolated due to sand deposits in channel.

OPERATION:

Located, 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. Dist. Form 82 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

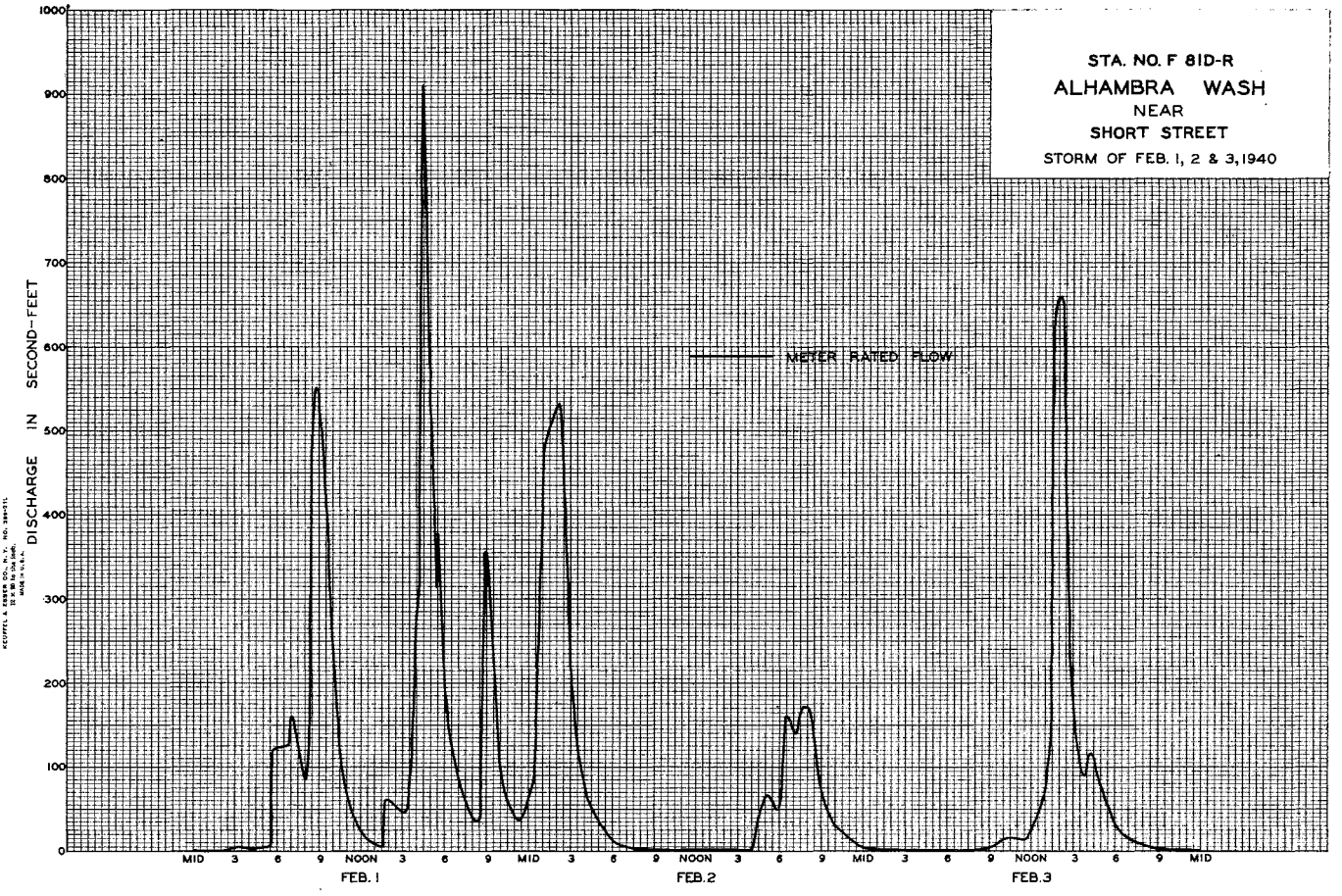
Sta. No. F81D-R

Daily discharge, in second-feet of ALHAMBRA WASH near Short St., for the year ending September 30, 1940

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	+	+	+	+	127	0.2	15	0.4	+	0	+	+
2	+	0.1	+	+	79	+	+	0.4	+	0	+	+
3	+	+	+	+	51	+	+	+	+	+	+	+
4	+	+	+	36	0.2	+	+	+	+	+	+	+
5	+	+	0.2	+	0.1	+	+	+	+	+	+	0.1
6	0.6	+	+	4.2	+	0.1	+	+	+	+	+	0.1
7	15	+	+	130	+	+	+	0.1	+	+	+	+
8	+	1.6	+	38	+	+	+	+	+	+	+	+
9	+	0.7	+	10	+	+	+	+	+	+	+	+
10	+	+	+	23	0.1	+	+	+	+	+	+	+
11	+	+	1.1	13	+	0.1	+	+	+	+	+	+
12	+	+	0.4	0.9	+	0.3	+	+	+	+	+	+
13	+	+	0.3	+	+	0.1	+	+	+	0	+	+
14	+	+	0.2	+	11	0.1	+	+	+	+	+	+
15	+	+	0.1	+	+	0.1	0.7	+	+	+	+	+
16	+	+	+	+	+	+	1.4	+	+	0	+	+
17	+	+	+	+	+	+	1.4	+	+	+	+	+
18	+	+	0.1	+	+	+	0.5	+	+	+	+	+
19	+	+	0.1	+	0.1	+	+	+	+	+	+	+
20	0.1	+	0.1	+	0.1	+	+	0.1	+	+	0	+
21	+	+	+	+	0.1	+	+	0.1	+	0	+	+
22	+	+	+	+	0.2	+	+	0.2	+	+	+	+
23	+	+	17	27	+	+	0.6	0.2	+	+	0.1	+
24	+	+	0.1	0.1	+	+	+	+	+	+	0.1	0.1
25	+	+	+	+	3.2	0.1	0.1	+	+	+	0.1	0.1
26	+	+	+	0.4	0.4	1.0	69	+	+	+	0.1	0.1
27	+	+	+	+	0.3	6	+	0.1	+	+	+	0.1
28	+	+	+	+	3.7	+	+	+	+	+	0.1	0.1
29	+	0.1	+	+	19	+	0.6	+	+	+	0.1	+
30	+	+	+	+		+	0.3	+	+	+	0.2	+
31	+		+	8.5		70		+		+	+	
	15.7	2.5	19.7	291.1	374.3	78.1	89.8	1.6	+	+	1.0	0.7
MEAN	0.51	0.08	0.64	9.39	12.9	2.52	2.99	0.05	+	+	0.03	0.02
ACRE-FEET	31	5.0	39	577	742	155	178	3.2	+	+	2.0	1.4

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

YEAR OR PERIOD MEAN 2.39
ACRE-FEET 1730



STATION F152R

ALISO WASH at Nordhoff Street

LOCATION:

On the right (west abutment of the highway bridge at Nordhoff Street about 1 mile northwest of Northridge.

DRAINAGE AREA:

7.15 square miles.

CHANNEL AND CONTROL:

Channel - clay and sand.
Control - channel forms control.

DISCHARGE MEASUREMENTS:

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

RECORDER:

Installed November 3, 1939.
An H.C.F. recorder was in service from November 3, 1939 to September 30, 1940.

REGULATION AND/OR DIVERSIONS:

None.

RECORDS AVAILABLE:

November 3, 1939 to September 30, 1940.

EXTREMES OF DISCHARGE:

1939-1940
Maximum 285 second-feet, January 8.
Minimum no flow at various times.

ACCURACY:

Fair.

OPERATION:

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

F. C. D. FORM 104 1M 6-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 152-R

DISCHARGE MEASUREMENTS OF ALISO CANYON CREEK

at Nordhoff Street DURING THE YEAR ENDING SEPTEMBER 30, 1940

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Dif.	METH OD	MEAN SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
1	1/9	Luce	1.5	.14	.86	.76	.12		.6	3	+.01	800A 805A	FC 39
2	1/11	Luce-Pardieck	2.0	.23	1.00	.85	.23		.6	4	+.01	125P 130P	"
3	1/23	Luce	6.0	1.89	2.95	1.21	5.5		.6	6	+.07	600P 607P	"
4	2/1	Luce-Pardieck	13.0	6.46	3.91	1.63	25.		.6	7	-.05	409P 414P	FC 41
5	2/1	" "	12.3	5.48	3.28	1.55	18.		.6	8	-.06	420P 430P	"
6	2/1	" "	14.0	8.32	3.74	1.70	31.		.6	9	-.10	912P 920P	"
7	2/1	Miller-Truitt	10.5	3.01	1.53	1.23	4.6		.6	7	0	1110P 1115P	FC 35
8	2/3	" "	10.5	4.67	3.07	1.45	14.		.6	7	-.02	405P 415P	"
9	2/3	" "	10.5	4.05	2.85	1.41	11.		.6	8	-.02	430P 440P	"
10	2/25	" "	12.5	6.99	3.91	1.80	27.		.6	7	0	525P 535P	"
11	2/25	" "	12.0	5.72	4.14	1.72	24.		.6	7	-.04	545P 555P	"
12	2/26	Luce-Pardieck	2.0	.28	1.04	1.20	.29		.6	4	0	102P 103P	FC 39
13	2/29	Luce	1.0	.09	.78	.95	.07		.6	2	0	835A 837A	"
14	3/31	"	10.0	2.49	2.88	1.46	7.2		.6	6	-.03	825A 835A	"
15	4/1	"	4.0	.80	2.16	1.19	1.7		.6	5	-.02	347A 350A	"
16	4/4	"	10.0	3.86	4.46	1.48	17.		.6	6	+.07 -.10	140P 147P	"
17	4/4	"	10.8	4.20	4.43	1.52	19.		.6	6	+.04 -.01	201P 207P	"
18	4/26	"	2.4	.26	1.58	1.21	.41		.6	4	-.01	525A 530A	"
19	7/25	"	1.6	.25	1.36	.77	.34		.6	3	0	215P 220P	"
20	8/22	"	1.2	.08	.50	.74	.04		.6	2	0	540P 542P	"
21	8/29	"	1.3	.08	.87	.75	.07		.6	3	.0	1242P 1245P	"

F.C. Dist. Form 52 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

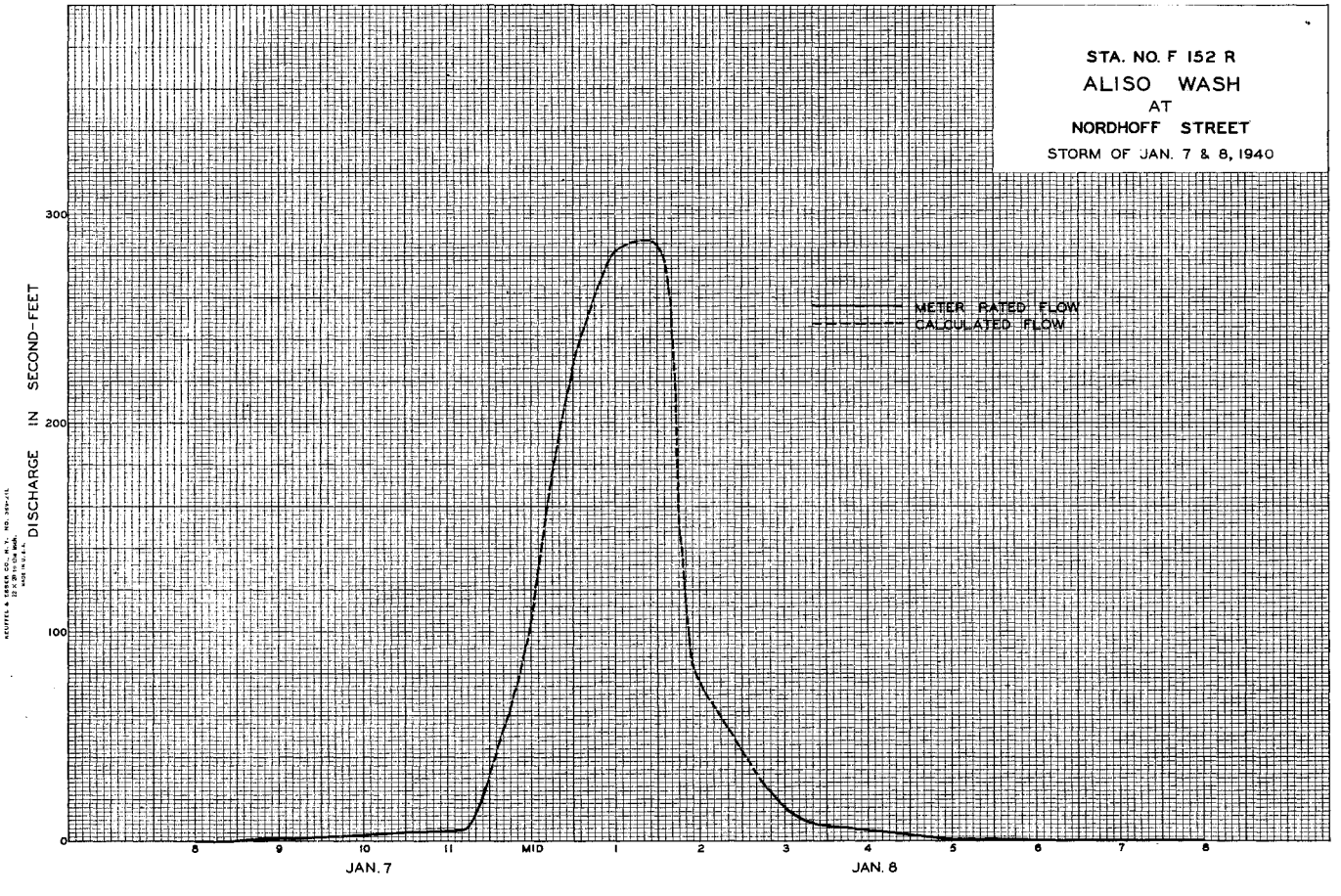
Sta. No. F152R

Daily discharge, in second-feet of ALISO WASH at Nordhoff Street, for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	+	0	0	0	21	0	0.5	0	0	+	+	+
2	+	0	0	0	6	0	+	0	0.2	+	0	0
3	+	0	0	0	16	0	0	0	0	+	0	0
4	+	0	0	0.2	0	0	0.8	0	0	+	0	0
5	+	0	0	0	0	0	0	0	0	+	+	0
6	+	0	0	0	0	0	0	0	+	+	+	0
7	+	0	0	1.9	0	0	0	0	0.7	+	0.1	0
8	+	0	0	21	0	0	0	0	0.5	+	+	0
9	+	0	0	0.5	0	0	0	0	0.6	+	0	0
10	+	0	0	0.4	0	0	0	0	0	+	0	+
11	+	0	0	0.3	+	0	0	0	1.2	+	0	0.1
12	+	0	0	0.2	0	0	0	0	0	0.2	0	0.1
13	+	0	0	+	0	0	0	0	+	0.2	0	+
14	+	0	0	0	0.2	0	0	0	0.2	+	0	0.2
15	+	0	0	0	0	0.1	0	0	0	0	0	0
16	+	0	0	0	0	+	0	0	0	0	0	0
17	+	0	0	0	0	0	0	0	+	0	0	0
18	+	0	0	0	0	0	0	0	+	0	0	0
19	+	0	0	0	0	0	0	0	+	0	0	0
20	+	0	0	0	0	0	0	0	+	+	+	0
21	+	0	0	0	0	0.4	0	0	+	+	+	0
22	+	0	0	0	0	+	0	0	+	0.4	+	0
23	+	0	0	0.9	0	0	0	0	+	0.2	+	0
24	+	0	0	+	0	0	0	0	+	0.7	0	0
25	+	0	0	0	4.5	0	0	0	+	0.6	0	0
26	+	0	0	0	0.1	0	0.4	0	+	0.2	0	0
27	+	0	0	0	+	0	0.1	0	+	0	+	0
28	+	0	0	0	+	0	0	0	+	0	+	0
29	+	0	0	+	0.2	0	0	0	+	0	+	0
30	+	0	0	+		0	0	0	+	0	+	0
31	+		0	0		1.8		0.1		0	0.1	
	+	0	0	25.4	48.0	2.3	1.8	0.1	3.4	2.7	0.2	0.4
MEAN	+	0	0	0.82	1.66	0.07	0.06	+	0.11	0.09	0.01	0.01
ACRE-FEET	+	0	0	50	95	4.6	3.6	0.2	6.7	5.4	0.4	0.08

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

YEAR OR PERIOD — MEAN 0.230 — ACRE-FEET 167



STATION F38B-R

BALLONA CREEK at Sawtelle Boulevard

LOCATION:

On the downstream side of Sawtelle Boulevard bridge 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, 1939 to September 30, 1940.

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, 1940.

EXTREMES OF DISCHARGE:

1939-1940
Maximum 9730 second-feet, February 3.
Minimum 0 second-feet, May 2.
1928-1940 (Stations F38R and F38B-R)
Maximum 19000 second-feet March 2, 1938.
Minimum no flow at various times.

ACCURACY:

Fair.
Low flows occasionally estimated due to channel shifting.

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 IM 6-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 38 B-R

DISCHARGE MEASUREMENTS OF BALLONA CREEK

AT ~~XXX~~ Sawtelle Blvd. DURING THE YEAR ENDING SEPTEMBER 30, 1940

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Dif.	METH OD	MEAS SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
274	10/5	Moon	14.	6.04	0.97	1.95	5.9		.6	9	+0.02	1112A 1127A	FC 36
275	10/11	"	11.	4.87	0.61	1.83	3.0		.6	7	-0.02	1107A 1116A	"
276	10/19	"	10.8	6.38	1.20	2.03	7.6		.6	9	0	1011A 1022A	22
277	10/26	"	11.4	6.19	0.66	1.84	4.1		.6	9	0	1053A 1106A	"
278	11/2	Moon-Mitchell	10.8	4.93	0.55	1.78	2.7		.6	7	0	1017A 1030A	"
279	11/9	Moon	25.5	14.59	0.79	2.21	12.		.6	10	-0.02	847A 901A	"
280	11/16	"	12.	7.70	1.50	2.17	12.		.6	8	0	1113A 1125A	"
281	11/22	"	11.	5.30	0.75	1.95	4.0		.6	8	-0.01	1048A 1059A	"
282	11/30	"	11.5	5.91	0.64	2.00	3.8		.6	6	-0.01	1046A 1059A	"
283	12/7	"	12.5	5.91	0.76	1.96	4.5		.6	7	-0.01	1121A 1130A	"
284	12/11	Moon-Mitchell	37.	38.4	1.57	2.70	60.		.6	8	-0.04	508A 518A	"
285	12/14	Moon	12.5	5.03	1.18	2.03	6.0		.6	8	-0.01	1005A 1017A	"
286	12/20	"	13.	4.55	0.75	1.87	3.4		.6	9	0	949A 1000A	"
287	12/23	Moon-Andren	66.	79.2	2.72	3.73	215.		.6	8	-0.20	350P 409P	"
288	12/28	Moon	10.5	4.49	0.80	2.15	3.6		.6	6	0	1045A 1055A	FC 22
289	1/4	Moon-Mitchell	75.	159.6	4.02	4.82	642.		.6	9	-0.36	718A 745A	"
290	1/4	" "	29.	23.33	2.55	2.82	59.		.6	9	-0.06	342P 350P	"
291	1/6	" "	53.	71.05	3.11	3.63	220.		.6	10	+0.02	946A 956A	"
292	1/7	Moon	29.5	21.5	2.15	2.77	46.		.6	8	-0.01	152P 203P	"
293	1/7	Moon-Mitchell	107.	489.	6.43	8.09	3140.		.6	8	-1.18	614P 641P	"
294	1/7	" "	113.	706.7	7.48	9.78	5280.		.6	9	+0.70 -0.80	812P 843P	"
295	1/8	U.S.E.D. # 1	74.	177.4	3.68	4.73	653.		.6		-0.14 +0.25	145A 221A	35632
296	1/8	" # 2	70.	122.5	2.74	3.99	336.		.6		-0.16	414A 434A	"
297	1/8	" # 3	63.	89.2	2.88	3.50	257.		.6		-0.16	551A 610A	"
298	1/8	U.S.E.D. #4	50.5	34.3	1.61	2.78	55.		.6			931A 1000A	35632
299	1/8	" #5	76.	1950	2.81	4.76	707.		.6		+.31 -.11	1206P 1239P	"
300	1/8	" #6	66.	95.0	2.02	3.63	237.		.6		-.28	144P 210P	"
301	1/9	Moon-Mitchell	47.5	53.9	2.57	3.25	139.		.6	11	-.07	1011A 1025A	FC 22
302	1/10	" "	90.	270.4	5.80	6.08	1570.		.6	8	+.08 -.10	515P 540P	"
303	1/10	U.S.E.D. #7	70.	134.1	3.06	4.03	410.		.6		-.49	800P 836P	35632
304	1/11	" #8	48.5	38.9	1.89	2.81	74.		.6		-.08	118A 145A	"
305	1/11	" #9	42.	21.2	1.87	2.46	30.		.6		+.04	1030A 1050A	"
306	1/11	" #10	47.4	42.1	2.51	2.84	106.		.6		+.02 -.04	1145A 1210P	"
307	1/13	Moon	16.5	5.54	1.20	2.08	6.6		.6	7	0	250P 259P	FC 22
308	1/18	"	15.	3.40	.92	1.96	3.1		.6	6	0	1054A 1105A	"
309	1/23	U.S.E.D. #11	101.	495.3	5.68	7.66	2810.		.6		-1.91	621P 659P	35632
310	1/23	" #12	47.	53.7	1.83	3.05	98.		.6		-.12	1015P 1035P	"
311	1/24	Moon-Blunt	18.5	7.90	1.08	2.15	8.6		.6	8	0	936A 948A	FC 22
312	1/25	Moon	13.	7.23	.89	2.14	6.4		.6	7	0	1256P 106P	"
313	1/31	Moon-Blunt	13.5	6.88	.84	2.12	5.8		.6	8	0	904A 913A	"
314	1/31	U.S.E.D. #13	71.	154.2	3.02	4.39	466.		.6		-.28	509P 534P	35632
315	1/31	Moon-Blunt	31.	32.4	2.78	2.88	90.		.6	10	-.07	740P 757P	FC 22
316	2/1	U.S.E.D. #14	111.	609.6	7.64	9.02	4650.		.6		-2.34	945A 1027A	35632
317	2/1	" #15	93.	325.2	5.18	6.39	1680.		.6		-1.14	1047A 1118A	"
318	2/1	" #16	82.	257.1	4.67	5.60	1200.				+1.45	111P 137P	"
319	2/1	" #17	77.	183.5	4.30	4.70	789.		.6		+1.55	402P 431P	"
320	2/1	" #18	85.	236.0	4.53	5.45	1070.		.6		+.10	442P 502P	"
321	2/1	" #19	99.	434.8	7.29	7.36	3160.		.6		+3.35	506P 545P	"
322	2/1	U.S.E.D. #20	102.	448.3	5.88	7.27	2630.		.6		-1.10	604P 646P	35632
323	2/1	" #21	89.	314.3	5.28	6.00	1660.		.6		+.60 +.12	855P 930P	"
324	2/2	" #22	118.	802.4	7.98	10.10	6400.		.6		-2.52	155A 240A	"
325	2/2	" #23	49.	57.5	1.91	3.05	110.		.6			715A 736A	"
326	2/2	" #24	64.	116.9	2.64	3.60	309.	Sur &	.6		+.87 -.52	156P 240P	"
327	2/2	" #25	79.	248.6	4.27	5.02	1060.	Sur &	.6		+2.00	304P 336P	"
328	2/2	" #26	81.	229.5	4.52	5.38	1040.		.6		-.15	340P 356P	"
329	2/2	" #27	72.	149.4	3.56	4.39	531.		.6		-.35	532P 559P	"
330	2/2	" #28	47.	27.7	1.87	2.55	52.		.6		-.02	958P 1014P	"
331	2/3	" #29	46.	16.2	1.24	2.31	22.		.6		+.04	717A 730A	"
332	2/3	Moon-Blunt	40.4	51.0	1.93	2.76	98.		.6	9	+.14	938A 951A	FC 22
333	2/3	U.S.E.D. #30	67.	118.8	3.22	3.78	359.		.6		+.20	1032A 1045A	35632
334	2/3	" #31	70.	131.2	2.99	3.95	392.		.6		+.14	1047A 1101A	"
335	2/3	" #32	72.	147.3	3.96	4.50	583.		.6		+.50	1108A 1126A	"
336	2/3	" #33	81.	219.3	4.47	5.15	979.		.6		+.72	1127A 1150A	"
337	2/3	" #34	93.	330.1	6.52	6.40	2150.		.6		+.94 -.15	1158A 1224P	"
338	2/3	" #35	94.	322.2	5.35	6.45	1720.		.6		+.13	1250P 111P	"
339	2/3	" #36	115.	730.5	8.84		6460.		.6		+4.15	119P 156P	"
340	2/3	" #37	119.	782.8	7.90	10.30	6180.		.6		-2.40	209P 243P	"
341	2/3	" #38	102.	376.0	5.80	7.50	2180.		.6		-1.36	300P 339P	"
342	2/3	" #39	90.	304.0	4.13	5.81	1260.		.6		-.55	437P 455P	"
343	2/3	" #40	47.	37.4	2.26	2.72	84.		.6		-.05	933P 948P	"
344	2/4	" #41	45.6	23.4	1.68	2.43	40.		.6		-.01	1239A 1254A	"
345	2/5	Moon	32.	16.96	.92	2.08	16.		.6		0	3294 3442A	FC 22

F. C. D. FORM 104 1M 5-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 38B-R

DISCHARGE MEASUREMENTS OF BALLONA CREEK

at Sawtelle Blvd. DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.	METH OD	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
												1104A	
346	2/8	Moon-Foote	Two Channels			1.86	4.8		.6	12	0	1114A	FC 22
												1048A	
347	2/14	" "	89.	284.4	5.10	6.00	1450.		.6	9	+.65	1112A	"
												320P	
348	2/14	" "	39.5	44.17	1.77	2.57	78.		.6	9	-.04	329P	"
												344P	
349	2/15	Moon	15.5	5.40	1.33	2.10	7.2		.6	7	0	351P	"
												1044A	
350	2/21	"	19.5	8.05	.55	2.00	4.4		.6	7	0	1053A	"
												922A	
351	2/23	"	23.5	9.66	.60	2.00	5.8		.6	8	0	933A	"
												230P	
352	2/25	Moon-Foote	98.	415.8	6.33	7.05	2630.		.6	10	+1.20	254P	"
											+.97	320P	
353	2/25	U.S.E.D. #42	114.	707.6	8.18	9.39	5780.		.6		-.27	405P	35632
												419P	
354	2/25	" #43	104.	480.4	5.75	8.18	2760.		.6		-.74	440P	"
												543P	
355	2/25	" #44	80.	258.0	3.48	5.47	898.		.6		-.65	603P	"
												1040A	
356	2/26	Moon-Foote	23.5	10.63	1.21	2.23	13.		.6	8	0	1048A	FC 22
												1044A	
357	2/26	U.S.E.D. #45	47.	11.6	1.09	2.23	13.		.6		0	1112A	35632
												1050P	
358	2/28	Moon-Foote	54.	76.75	3.03	3.44	233.		.6	11	+.52	1104P	FC 22
												1006A	
359	2/29	" "	34.	23.95	1.50	2.41	36.		.6	7	-.02	1013A	"
												1118A	
360	3/7	Moon	Two Channels			2.06	3.4		.6	11	0	1131A	"
												1046A	
361	3/14	"	"	"		2.03	2.3		.6	9	0	1058A	"
												1215P	
362	3/21	"	"	"		2.06	3.2		.6	10	0	1227P	"
												1024A	
363	3/28	"	22.5	5.55	.86	2.05	4.7		.6	8	-.01	1033A	"
												850A	
364	3/31	"	76.	191.4	4.61	4.93	881.		.6	8	-.35	905A	"
												230P	
365	3/31	"	36.	24.1	1.32	2.23	32.		.6	8	-.06	242P	"
												940P	
366	3/31	Moon-Foote	85.	282.0	5.46	5.94	1540.		.6	8	+.78	1001P	"
											+.30	1020P	
367	3/31	" "	96.	397.4	6.13	7.12	2440.		.6	8	-.30	1042P	"
												1207A	
368	4/1	" "	73.	163.2	3.47	4.77	566.		.6	7	-.34	1227A	"
												1044A	
369	4/1	" "	30.5	17.69	1.59	2.32	28.		.6	12	-.02	1056A	"

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.	METH OD	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
												1004A	
370	4/4	Moon	20.	4.70	1.08	2.09	5.1		.6	8	0	1012A	FC 22
												1010A	
371	4/11	"	17.	3.89	1.07	2.08	4.2		.6	7	0	1021A	"
												949A	
372	4/18	"	12.	4.28	1.03	1.94	4.4		.6	6	0	957A	"
												106P	
373	4/25	"	Two Channels			1.83	.15		.6	4	0	112P	"
												105A	
374	4/26	"	92.	327.5	5.25	6.66	1720.		.6	7	-.55	130A	"
												305A	
375	4/26	Moon-Andren	60.	228.5	4.64	5.35	1060.		.6	8	-.40	323A	"
												1227P	
376	4/27	Moon	Two Channels			1.92	8.3		.6	11	-.01	1245P	"
												1124A	
377	5/2	"	7.0	1.47	.26	1.72	.38		.6	5	-.01	1131A	"
												1227P	
378	5/9	"	11.5	2.98	1.20	1.84	3.6		.6	6	0	1235P	"
												942A	
379	5/16	"	13.8	4.29	1.23	1.87	5.3		.6	7	0	951A	"
												937A	
380	5/23	"	18.2	5.49	1.36	1.88	7.5		.6	9	0	950A	"
												252P	
381	5/28	Moon-Bollinger	15.0	5.50	1.27	1.94	7.		.6	8	+.02	301P	"
												345P	
382	5/29	Moon	15.	4.80	1.17	1.90	5.6		.6	7	+.02	353P	"
												818A	
383	6/6	"	8.8	1.78	.24	1.70	.42		.6	6	-.01	826A	"
												928A	
384	6/13	"	10.5	2.59	.88	1.79	2.3		.6	6	0	936A	"
												912A	
385	6/20	"	11.0	2.39	.56	1.79	1.3		.6	5	0	919A	"
												1014A	
386	6/27	"	19.0	7.01	1.30	2.03	9.1		.6	9	+.04	1025A	"
												1139A	
387	7/3	"	18.5	7.26	1.33	2.05	9.7		.6	9	-.01	1150A	"
												204P	
388	7/11	"	16.0	5.92	.92	1.97	5.5		.6	8	-.02	214P	"
												1108A	
389	7/18	"	14.0	3.67	.49	1.86	1.8		.6	7	0	1118A	"
												1015A	
390	7/25	"	14.0	4.88	.56	1.89	2.7		.6	7	-.02	1024A	"
												1108A	
391	7/31	Bonadiman	16.	7.78	1.39	2.11	11.		.6	5	-.02	1115A	FC 40
												1136A	
392	8/8	Moon	16.	6.16	1.15	2.15	7.1		.6	8	-.01	1146A	FC 22
												1058A	
393	8/14	Bonadiman	13.	4.03	.66	2.02	2.7		.6	5	0	1105A	FC 40
												1058A	
394	8/21	Bonadiman	16.	6.16	.87	2.11	5.4		.6	5	0	1105A	FC 40
												1001A	
395	8/28	"	14.5	4.67	.66	2.02	3.1		.6	4	0	1010A	"
												1008A	
396	9/5	Moon	12.	3.75	.72	1.98	2.7		.6	6	+.04	1015A	FC 22
												1015A	
397	9/12	"	12.	4.15	.74	2.01	3.1		.6	6	+.01	1024A	"
												1027A	
398	9/19	"	13.	5.04	1.03	2.03	5.2		.6	7	0	1037A	"
												920A	
399	9/26	"	13.5	4.65	.86	2.24	4.0		.6	7	0	928A	"

F.C. Dist. Form 52 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

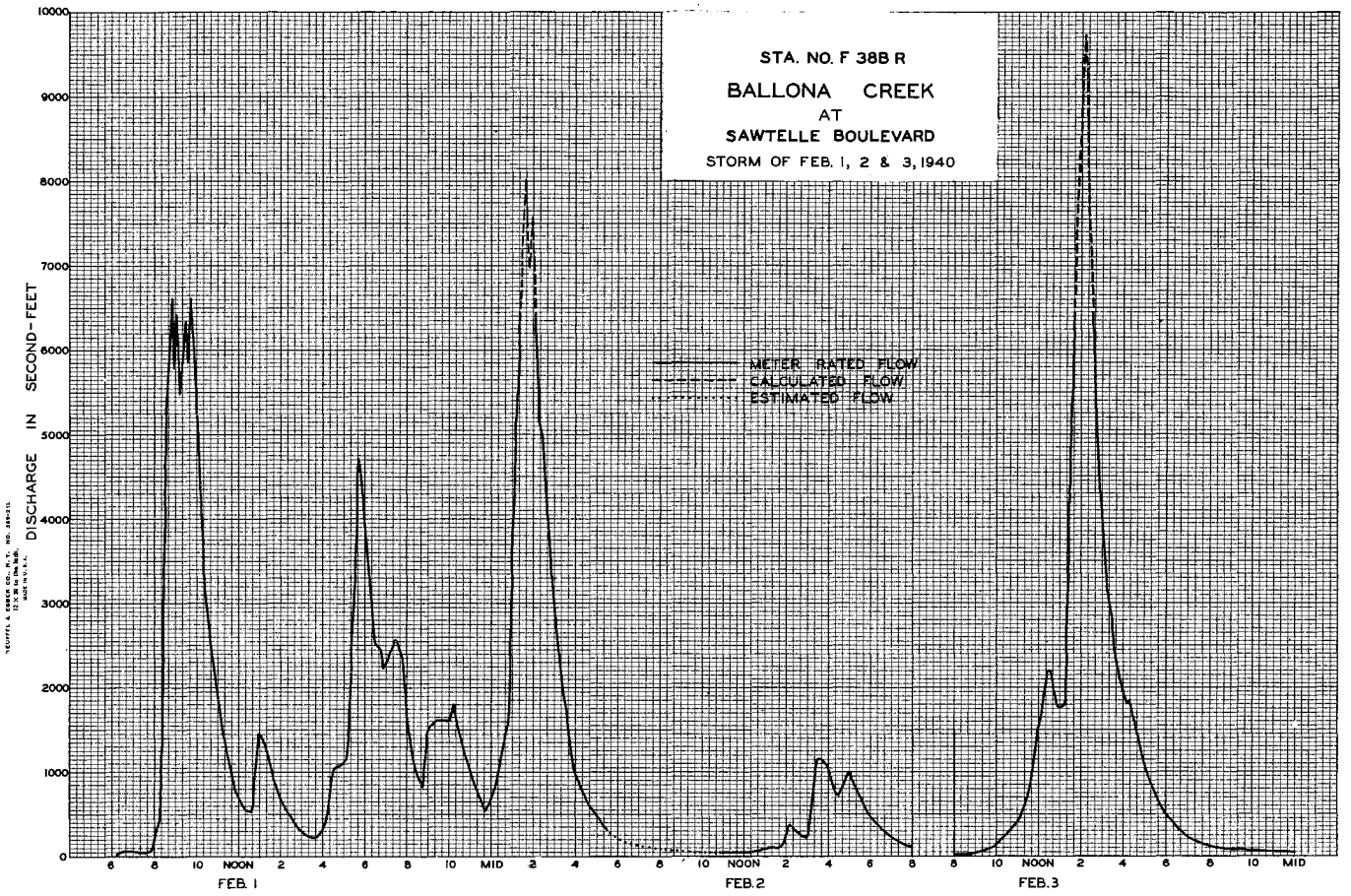
Sta. No F38B-R

Daily discharge, in second-feet of BALLONA CREEK at Sawtelle Blvd., for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	7	7.5	4.2	1270	13	113	2.0	6	10	7	8
2	8	7.5	7.5	10	883	9	9.5	1.3	3.3	9.5	9.5	4.8
3	10	10	4.2	8	872	6.5	6.5	2.0	4.2	8	7	6.5
4	6.5	10	5.5	296	22	10	5.5	2.6	4.2	6	5	5
5	8.5	7.5	12	4.6	14	8	6	2.2	3.7	8	6.5	6
6	20	8.5	11	56	10	6.5	6	4.2	4.8	7	7	5
7	16	10	7.5	1160	7.5	5.5	5	3.9	3.5	4.8	7	6.5
8	8	26	7	254	6.5	6	5.5	5	6	8	7	6.5
9	9.5	11	9	70	6.5	4.2	4.8	6	3.3	5	6.5	6
10	9.5	6.5	4.8	248	6	3.5	3.9	6	6	4.8	6	4.5
11	7	5	47	58	5	3.7	4.8	6.5	5.5	5.5	3.9	3.3
12	9.5	2.8	7.5	E 8	6	3.9	5	3.7	6	5	5.5	3.7
13	7	6.5	4.5	E 7	7	3.3	4.5	3.9	6	5	5.5	5.5
14	6	8	5	6.5	183	2.8	3.7	6.5	6	4.2	3.9	5
15	3.9	8	3.1	6	8.5	3.1	43	7	5	6.5	5.5	3.9
16	8	9.5	3.5	8.5	6.5	3.1	7.5	6	3.9	5.5	7	7
17	9.5	8.5	2.6	9.5	7	2.8	7	7.5	5	4.5	4.2	5
18	7	11	3.3	6	6	3.3	5	8.5	4.5	3.9	3.3	6.5
19	7.5	3.9	9	6	7	3.9	3.3	5.5	5	5	4.5	6.5
20	9.5	5.5	5.5	4.2	7.5	4.2	3.7	6.5	4.2	4.2	4.8	6.5
21	8.5	9	3.3	3.3	6.5	4.5	1.7	6.5	6.5	6.5	6	6
22	6.5	7.5	3.9	3.9	39	3.5	3.7	7	6	4.8	6	6
23	8.5	6.5	157	681	8	3.5	4.8	9	4.8	5.5	7	9.5
24	8	7	E 6.5	11	6	3.3	6	6.5	7	7	6	8
25	9	7.5	E 4.6	6.5	615	3.9	12	6.5	8.5	4.8	3.3	6
26	8	4.5	E 4.5	7	19	3.5	404	5	7	6	6	4.5
27	6.5	6	E 6.4	5.5	11	15	8	6	6.5	7.5	4.2	3.9
28	8	6	4.2	5	44	5.5	5.5	7.5	9.5	7	4.2	2.6
29	8	8	3.7	5	140	4.2	4.8	6.5	7	8	3.9	3.1
30	7.5	5	3.9	5		4.6	3.5	5	6	8	5	4.5
31	8		3.5	69		773		6		8	5	
	267.4	239.7	368.9	3032.9	4249.5	931.0	707.2	168.3	164.9	191.3	173.2	165.8
MEAN	8.63	7.99	11.9	97.8	146	30.0	23.6	5.43	5.50	6.17	5.59	5.53
ACRE-FEET	530	475	732	6020	8390	1850	1400	334	327	379	344	329

Remarks: E indicates discharge estimated.

YEAR OR PERIOD MEAN 29.1
ACRE FEET 21110



STATION F12OR

BIG DALTON CREEK below Big Dalton Dam

LOCATION:

On the left (southeast) bank about 200 feet below the old toe wall on the downstream side of Big Dalton Dam and about 5 miles northeast of Glendora.

DRAINAGE AREA:

4.8 square miles

CHANNEL AND CONTROL:

Channel - gravel and rock lined with willows.
Control - concrete cutoff with a Cipolletti weir and a removable V. notch weir.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
No facilities for measuring high flows.

RECORDER:

Installed June 3, 1940 in a box type house over an 18 inch corrugated iron pipe stilling well. A Stevens type L recorder was in service from June 3, 1940 to September 30, 1940.

REGULATION:

4.5 squre miles regulated by Big Dalton Dam.
0.3 square miles unregulated flow from Keril Canyon.

DIVERSIONS:

None.

RECORDS AVAILABLE:

Reservoir outflow records from October, 1929 to June 3, 1940. Recorder records from June 3, 1940 to September 30, 1940.

EXTREMES OF DISCHARGE:

1939-1940
Record incomplete for year.

ACCURACY:

Good.

OPERATION:

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

F. C. D. FORM 104 1M 6-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F12OR

DISCHARGE MEASUREMENTS OF BIG DALTON CREEK

~~at~~ below Big Dalton Dam DURING THE YEAR ENDING SEPTEMBER 30, 1940

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Adjng Percent Dif.	METH OD	MEAS SEC. NO.	G. HT. CHANGE TOTAL	BEGIN. END	METER NO.
1	6-12	Brewster	3.0	1.12	.83	.69	.95		.6	6	0	1020A 1030A	FC24
2	6-19	"	2.5	1.05	1.09	.72	1.1		.6	5	0	948A 955A	"
3	6-26	"	2.5	.93	1.11	.70	1.0		.6	5	0	1008A 1015A	"
4	7-3	"	2.5	.97	1.04	.69	1.0		.6	5	0	1032A 1040A	"
5	7-10	"	2.5	.97	1.06	.70	1.0		.6	5	0	1018A 1025A	"
6	7-17	"	2.5	.99	1.04	.70	1.0		.6	5	0	917A 925A	"
7	7-24	"	2.5	.99	1.04	.69	1.0		.6	5	0	530P 538P	"
8	7-31	"	2.5	.88	1.16	.69	1.0		.6	5	0	952A 1000A	"
9	8-7	"	2.5	.97	1.06	.69	1.0		.6	5	0	322A 330P	"
10	8-14	Lindsay				.70	1.0		V Notch Weir			340P	-
11	8-21	Brewster	2.5	.98	1.02	.69	1.0		.6	5	0	1100A 1110A	FC24
12	8-28	"	2.5	.97	1.01	.68	1.0		.6	5	0	415P 420P	"
13	9-4	"	2.5	.97	1.07	.70	1.0		.6	5	0	740A 747A	"
14	9-11	"	5.0	1.96	1.41	1.03	2.8		.6	5	0	235P 245P	"
15	9-18	"	0.5	.18	.28	.22	.05		.6	1	0	1042A 1045A	"
16	9-25	"				.16	.03		V Notch Weir			140P	-

F. C. Dist. Form 52 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

Sta. No. F120R

Daily discharge, in second-feet of BIG DALTON CREEK below Big Dalton Dam, for the year ending September 30, 1940

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1									0	1.0	1.0	0.9
2									0	1.0	1.0	0.9
3									0.7	1.0	1.0	0.9
4									1.1	1.0	1.0	1.0
5									1.1	1.0	1.0	1.0
6									1.1	1.0	1.0	0.9
7									1.1	1.0	1.0	0.9
8									1.1	1.1	1.0	1.0
9									1.1	1.0	1.0	1.0
10									1.0	1.0	1.0	0.8
11									1.0	1.0	1.0	1.3
12									1.0	1.0	1.0	1.0
13									1.0	1.0	1.0	1.0
14									1.0	1.0	1.0	0.2
15									1.0	1.0	1.0	+
16									1.0	1.0	1.0	+
17									1.1	1.0	1.0	+
18									1.1	1.0	1.0	0.1
19									1.1	1.0	1.0	0.1
20									1.1	1.0	1.0	+
21									1.1	1.0	1.0	+
22									1.1	1.0	1.0	+
23									1.1	1.0	1.0	+
24									1.1	1.0	1.0	+
25									1.1	1.0	1.0	+
26									1.0	1.0	1.0	+
27									1.0	1.0	1.0	+
28									1.0	1.0	1.0	+
29									1.0	1.0	1.0	+
30									1.0	1.0	0.9	+
31										1.0	0.9	
									29.2	31.1	30.8	13.0
MEAN									0.97	1.00	0.99	0.43
ACRE-FEET									58	62	61	26

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

YEAR OR PERIOD MEAN ACRE-FEET 207 (6/1-9/30)

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 at 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, 1939 to September 30, 1940.

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, 1940.

EXTREMES OF DISCHARGE:

1939-1940
Maximum not determined January 8, 1940.
Minimum + for several hours August 21, 1940.
1930-1940 (Stations F111R and F111B-R)
Maximum not determined March 2, 1938.
Minimum no flow at various times.

ACCURACY:

Poor.
Records poor for the month of February.
High flows frequently estimated due to unreliable gage height discharge relation.

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 1M 6-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 111B-R

DISCHARGE MEASUREMENTS OF BIG TUJUNGA CREEK

~~MX POST~~ above Edison Road DURING THE YEAR ENDING SEPTEMBER 30, 1940

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.
216	10/5	Turner	7.0	2.94	1.38	6.26	4.0		.6	7	0	1140A 1150A	FC 5
217	10/11	"	7.0	2.68	1.13	6.23	3.0		.6	7	0	1245P 1255P	"
218	10/17	Turner-Lindsay	7.0	2.60	1.27	6.24	3.3		.6	7	0	940A 948A	"
219	10/26	Turner	7.0	2.42	1.32	6.24	3.2		.6	7	0	230P 240P	"
220	11/2	"	7.0	2.38	1.27	6.23	3.0		.6	7	0	235P 245P	"
221	11/8	"	7.5	3.57	1.81	6.32	6.5		.6	7	0	130P 140P	"
222	11/16	"	7.0	2.49	1.32	6.24	3.3		.6	7	0	100P 110P	"
223	11/22	"	7.0	2.45	1.26	6.24	3.1		.6	7	0	145P 155P	"
224	11/30	"	7.0	2.50	1.32	6.25	3.3		.6	7	0	150P 200P	"
224A	12/14	"	7.0	2.56	1.41	6.25	3.6		.6	7	0	1215P 1225P	"
225	12/21	"	7.0	2.52	1.34	6.25	3.4		.6	7	0	1125A 1135A	"
226	12/28	"	7.0	2.79	1.53	6.10	4.3		.6	7	0	125P 135P	"
227	1/4	"	7.5	3.27	1.64	6.16	5.4		.6	6	+.01	950A 955A	"
228	1/10	"	13.5	4.57	3.87	7.52	18.		.6	8	0	1250P 100P	"
229	1/16	"	10.0	2.84	3.28	7.05	9.3		.6	6	0	1210P 1220P	"
230	1/25	"	9.8	2.41	3.42	7.07	8.2		.6	7	0	1120A 1130A	"
231	1/31	"	9.6	2.55	2.93	6.95	7.5		.6	6	0	1235P 1245P	"
232	2/2	"	25.0	11.80	4.71	7.57	56.		.6	8	0	1230P 1240P	"
233	2/7	Moon	9.5	5.18	4.43	6.99	23.		.6	10	0	1256P 116P	FC 22
234	2/20	Turner	11.5	3.52	2.93	6.70	10.		.6	7	0	1240P 1250P	FC 5
235	2/26	"	25.0	11.27	4.43	7.40	50.		.6	13	0	1120A 1130A	"
236	3/1	"	21.0	7.56	3.12	6.75	24.		.6	11	0	1145A 1155A	"
237	3/7	"	13.0	4.56	3.18	6.64	14.		.6	9	0	220P 230P	"
238	3/15	Turner-Wood	11.0	3.35	2.64	6.57	8.8		.6	12	0	157P 205P	FC 43
239	3/21	Turner	12.0	3.84	2.38	6.46	9.1		.6	6	0	205P 215P	FC 5
240	3/28	"	10.0	3.70	2.16	6.44	8.0		.6	6	0	320P 330P	"
241	4/1	"	21.0	8.10	3.37	6.67	27.		.6	11	0	1210P 1220P	"
242	4/4	"	12.0	5.29	2.39	6.42	13.		.6	9	0	215P 225P	"
243	4/9	"	12.0	5.03	2.17	6.33	11.		.6	8	0	1045A 1055A	"
244	4/18	"	12.0	5.20	1.77	6.28	9.2		.6	12	0	1055A 1105A	"
245	4/25	"	10.7	3.68	1.97	6.25	7.3		.6	11	0	1045A 1055A	"
246	4/27	"	13.0	5.21	2.46	6.37	13.		.6	7	0	1055A 1105A	"
247	5/9	"	10.7	3.29	1.74	6.18	5.7		.6	11	0	1020A 1030A	"
248	5/16	"	10.5	2.81	1.48	6.13	4.2		.6	10	0	1145A 1155A	"
249	5/22	"	9.0	2.58	1.56	6.12	4.0		.6	9	0	940A 950A	"
250	5/28	"	8.5	2.53	1.51	6.11	3.8		.6	9	0	810A 820A	"
251	6/4	"	7.0	2.34	1.35	6.07	3.2		.6	7	0	1115A 1125A	"
252	7/2	Bollinger	6.5	1.40	.88	5.98	1.2		.6	7	0	850A 900A	FC 6
253	8/8	Turner	2.5	.85	.71	5.92	.6		.6	5	0	920A 925A	FC 5
254	9/11	Bollinger	6.0	.97	.54	5.92	.5		.6	5	0	935A 940A	FC 6

F.C. Dist. Form 52 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

Sta. No F111B-R

Daily discharge, in second-feet of BIG TUJUNGA CREEK above Edison Rd. for the year ending September 30, 1940

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.6	2.7	3.2	4.3	E 60	25	25	7	2.7	1.0	0.6	0.4
2	4.6	2.9	3.2	4.3	68	21	22	6	2.7	0.8	0.6	0.5
3	4.3	2.9	3.2	4.3	E 125	19	18	6	2.9	0.7	0.5	0.6
4	4.0	2.9	3.2	5.5	E 84	19	14	6.5	2.9	0.6	0.5	0.7
5	4.0	2.9	3.2	4.6	E 62	21	13	7	2.9	0.6	0.5	0.6
6	4.6	2.9	3.2	4.9	E 41	17	12	6.5	2.9	0.6	0.5	0.6
7	4.9	2.9	3.2	9	24	14	11	6	2.7	0.6	0.5	0.5
8	4.3	5	3.2	E 27.5	26	13	11	5.5	2.4	0.6	0.5	0.4
9	3.7	5	3.2	E 27	27	13	10	4.9	2.2	0.5	0.4	0.5
10	2.9	4.6	3.2	18	26	12	9.5	4.9	1.9	0.5	0.3	0.5
11	2.7	4.0	4.3	16	25	11	8.5	4.6	1.7	0.5	0.3	0.5
12	2.7	4.0	4.0	16	24	10	8	4.3	1.5	0.5	0.3	0.5
13	2.7	3.7	3.7	10	24	9.5	8.5	4.0	1.2	0.5	0.3	0.6
14	2.7	3.7	3.5	8.5	25	9.5	9	3.7	1.2	0.6	0.4	0.6
15	2.7	3.2	3.5	8.5	24	8.5	10	3.5	1.2	0.5	0.5	0.6
16	2.7	3.2	3.5	9	21	9	10	3.5	1.2	0.7	0.5	0.7
17	2.7	3.2	3.5	9	14	9.5	9.5	4.3	1.2	0.8	0.5	0.6
18	2.7	3.2	3.5	8.5	9	10	8.5	5	1.2	1.0	0.4	0.8
19	2.7	3.2	3.5	8.5	10	10	8.5	5	1.2	0.9	0.3	0.8
20	2.7	3.2	3.5	8.5	10	10	8	4.0	1.2	0.8	0.2	0.8
21	2.4	3.2	3.5	8.5	10	9	8	3.5	1.2	0.8	0.2	0.7
22	2.4	3.2	3.5	8.5	10	8.5	6.5	3.5	1.2	0.8	0.3	0.6
23	2.7	3.2	9	11	12	8.5	7.5	3.2	1.2	0.7	0.4	0.6
24	2.9	3.2	7	10	16	8.5	7.5	2.9	1.2	0.6	0.4	0.6
25	3.2	3.5	6	8.5	38	7.5	7.5	2.7	1.0	0.6	0.4	0.5
26	3.2	3.2	4.6	8.5	52	8	19	2.7	1.0	0.6	0.4	0.5
27	3.2	3.2	4.3	6.5	36	8	14	3.2	1.0	0.8	0.5	0.5
28	2.9	3.2	4.3	6.5	25	8	12	3.2	1.0	0.9	0.5	0.5
29	2.7	3.2	4.3	6.5	31	8	9.5	3.2	1.0	0.9	0.4	0.6
30	2.7	3.2	4.3	6.5		7.5	8	2.9	1.0	0.7	0.3	0.6
31	2.7		4.3	7		34		2.7		0.6	0.3	
	99.9	101.6	123.6	548.4	959	386.5	333.5	135.9	49.8	21.3	12.7	17.5
MEAN	3.22	3.39	3.99	17.7	33.1	12.5	11.1	4.38	1.66	0.69	0.41	0.58
ACRE-FEET	198	202	245	1090	1900	767	661	270	99	42	25	35

Remarks: E indicates discharge estimated.

YEAR OR PERIOD MEAN 7.62 ACRE-FEET 5530

STATION F168R

BIG TUJUNGA CREEK below Big Tujunga Dam No. 1

LOCATION:

On the right (northwest) bank, 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 at approximately the same location as the old well. An Au continuous recorder was in service from October 1, 1939 to September 30, 1940.

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, 1940.

EXTREMES OF DISCHARGE:

1939-1940
Maximum 747 second-feet, January 8.
Minimum 0.2 second-feet at various times.
1932-1940
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 sluicing at the dam, communication to stilling well was unreliable.
Flows occasionally estimated or interpolated between measurements.

OPERATION:

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

F. C. D. FORM 104 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F168R

DISCHARGE MEASUREMENTS OF BIG TUJUNGA CREEK

at below Big Tujunga Dam #1 DURING THE YEAR ENDING SEPTEMBER 30, 1940

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.
361	10-5	Turner	28.0	24.96	1.93	5.19	48.		.6	15	0	130P 145P	FC5
362	10-11	"	51.0	38.93	2.24	5.52	87.		.6	15	0	225P 240P	"
363	10-19	"	10.0	4.68	.91	4.52	4.2		.6	10	0	1110A 1120A	"
364	10-26	"	2.8	.59	.53	4.22	.31		.6	5	0	1120A 1125A	"
365	11-2	"	3.0	.74	.68	4.26	.50		.6	5	0	1240P 1245P	"
366	11-8	"	3.0	.80	.81	4.28	.65		.6	5	0	1230P 1235P	"
367	11-16	"	3.0	.85	.64	4.28	.55		.6	5	0	1150A 1155A	"
368	11-22	"	3.2	.89	.62	4.27	.55		.6	5	0	1030A 1035A	"
369	11-30	"	3.2	.85	.40	4.26	.34		.6	5	0	1105A 1110A	"
370	12-14	"	3.3	.88	.52	4.30	.46		.6	5	0	1015A 1020A	"
371	12-21	"	3.3	1.00	.50	4.30	.50		.6	5	0	910A 915A	"
372	12-28	"	3.3	.97	.54	4.30	.50		.6	5	0	1005A 1010A	"
373	1-4	"	3.3	.93	.57	4.30	.55		.6	5	0	145P 150P	"
374	1-8	Turner-Robertson	63.0	138.4	5.42	7.50	747.		.6	12	0	710A 730A	"
375	1-8	Turner and Robertson	57.0	109.1	4.00	7.03	437.		.6	12	0	940A 955A	FC5
376	1-8	" "	29.0	23.81	2.32	5.32	55.		.6	14	-.01	1115A 1130A	"
377	1-9	Turner	27.0	15.38	1.14	4.86	17.6		.6	14	0	312P 327P	"
378	1-11	"	27.0	15.31	1.10	4.85	16.9		.6	14	0	900A 915A	"
379	1-18	"	27.0	14.66	1.01	4.80	14.8		.6	15	0	1140A 1150A	"
380	1-19	Robertson	26.5	12.98	.89	4.72	11.6		.6	13	-	1005A	FC31
381	1-24	Turner	12.0	10.10	.85	4.67	8.6		.6	12	0	1015A 1025A	FC5
382	1-24	"	12.0	11.50	1.09	4.79	12.5		.6	12	0	1225P 1235P	"
383	1-31	"	10.7	8.57	.57	4.54	4.9		.6	12	0	400P 410P	"
384	2-2	Turner-Robertson	31.0	31.06	2.06	5.35	64.		.6	7	0	515A 525A	"
385	2-2	Turner-Robertson	27.0	24.63	1.83	5.20	45.		.6	14	0	715A 730A	FC5
386	2-3	" "	51.5	47.02	1.82	5.60	86.		.6	17	0	720A 735A	"
387	2-3	" "	57.0	69.09	2.76	6.10	190.		.6	12	0	105P 120P	"
388	2-3	" "	60.0	81.40	3.20	6.42	260.		.6	13	0	1115P 1130P	"
389	2-4	" "	28.0	31.16	2.25	5.50	70.		.6	14	0	310P 325P	"
390	2-5	Turner	59.0	85.10	3.32	6.49	283.		.6	13	0	240P 255P	"
391	2-5	Turner-Robertson	60.0	89.65	3.13	6.54	281.		.6	13	0	905P 920P	"
392	2-6	Turner	60.0	86.16	3.15	6.48	272.		.6	13	0	705A 720A	
393	2-6	Robertson	59.0	89.8	3.03	6.42	272.		.6	12	-	-	FC31
394	2-6	Turner-Robertson	60.0	98.77	3.43	6.70	339.		.6	13	0	335P 350P	FC5
395	2-6	" "	60.0	96.45	3.33	6.67	322.		.6	13	0	555P 610P	"
396	2-7	Turner	60.0	90.42	3.05	6.50	276.		.6	13	0	635A 650A	"
397	2-7	Turner-Robertson	57.0	76.25	2.85	6.25	218.		.6	12	0	105P 115P	"
398	2-7	" "	57.0	69.92	2.72	6.09	190.		.6	12	-	730P 745P	"
399	2-8	Turner	5.0	2.39	.58	4.34	1.4		.6	7	0	925A 935A	"
400	2-8	"	30.0	33.99	2.16	5.50	74.		.6	7	0	545P 555P	"
401	2-10	"	26.0	16.00	.99	4.87	16.		.6	13	-.06	755A 810A	"
402	2-13	"	15.5	7.24	2.58	5.10	18.6		.6	8	0	705A 715A	"
403	2-14	"	12.0	6.70	2.62	5.10	17.6		.6	12	0	745A 800A	"
404	2-14	"	12.5	6.91	3.02	5.10	21.		.6	13	+.03 -.01	950A 1010A	"
405	2-14	"	12.5	7.67	2.92	5.07	22.		.6	13	0	1140A 1152A	"
406	2-14	"	13.0	9.40	2.95	5.18	28.		.6	13	+.01	325P 335P	"
407	2-15	"	11.5	6.09	3.09	5.06	18.8		.6	12	0	755A 805A	"
408	2-15	"	12.5	6.33	2.86	5.06	18.1		.6	13	0	330P 340P	"
409	2-17	Turner	9.5	1.87	1.43	4.78	2.7		.6	10	0	420P 430P	FC5
410	3-1	"	2.6	.40	1.10	4.65	.44		.6	4	0	820A 825A	"
411	3-7	"	11.5	3.19	1.78	4.80	5.7		.6	12	0	945A 955A	"
412	3-7	"	12.0	6.08	2.74	5.06	16.7		.6	13	+.02	1145A 1156A	"
413	3-14	Turner-Robertson	13.0	7.82	2.97	5.14	23.		.6	13	0	1206P 1215P	"
414	3-21	Turner	12.5	10.79	2.07	5.00	22.		.6	13	0	1125A 1135A	"
415	3-28	"	6.2	1.45	.74	4.33	1.1		.6	8	0	1115A 1125A	"
416	4-4	"	5.0	1.02	.70	4.28	.7		.6	6	0	1045A 1045A	"
417	4-25	"	2.3	.41	.98	4.26	.40	Float	5	0		100P 105P	-
418	5-2	"	2.4	.67	.45	4.26	.30		.6	5	0	130P 130P	FC5
419	5-9	"	2.4	.70	.38	4.30	.27		.6	5	0	130P 135P	"
420	5-16	"	2.4	.68	.44	4.28	.30		.6	5	0	320P 325P	"
421	5-23	"	2.3	.68	.47	4.26	.32		.6	5	0	835A 840A	"
422	5-29	"	2.0	.48	.46	4.24	.22		.6	4	0	125P 130P	"
423	6-6	"	2.2	.60	.50	4.26	.30		.6	5	0	940A 945A	"
424	6-13	"	2.2	.59	.44	4.22	.26		.6	5	0	1140A 1145A	"
425	6-13	"	5.5	2.46	1.13	4.44	2.8		.6	7	0	215P 225P	"
426	6-20	"	9.0	2.76	.94	4.50	2.6		.6	9	0	1030A 1040A	"
427	6-26	Bollinger	9.0	3.26	.93	4.52	3.0		.6	8	0	135P 143P	FC6
428	7-2	"	10.0	6.14	1.79	4.77	11.0		.6	10	0	110P 120P	"
429	7-9	Turner	10.2	4.90	1.36	4.66	6.7		.6	11	0	415P 425P	FC5
430	7-11	"	11.5	5.37	1.59	4.70	8.5		.6	12	0	915A 925A	"
431	7-18	"	10.5	5.51	1.49	4.69	8.2		.6	11	0	925A 935A	"
432	7-25	"	10.3	5.73	1.36	4.68	7.8		.6	11	0	935A 945A	"

F. C. D. FORM 104 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F168R

DISCHARGE MEASUREMENTS OF BIG TUJUNGA CREEK

~~AT~~ below Big Tujunga Dam #1 DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
433	8-1	Turner	10.0	4.23	.97	4.56	4.1		.6	11	0	940A 950A	FC5
434	8-1	Turner-Robertson	10.5	5.61	1.50	4.70	8.4		.6	11	0	100P 110P	"
435	8-1	" "	12.5	5.25	1.37	4.67	7.2		.6	11	0	225P 235P	"
436	8-1	" "	10.5	4.95	1.09	4.62	5.4		.6	11	0	330P 340P	"
437	8-8	Turner	10.3	4.75	1.08	4.61	5.1		.6	11	0	1205P 1215P	FC 5
438	8-15	"	10.0	4.68	1.10	4.59	5.1		.6	10	0	105P 115P	"
439	8-22	"	10.0	4.44	1.06	4.60	4.7		.6	10	0	925A 935A	"
440	8-28	"	11.0	4.83	.94	4.59	4.6		.6	12	0	140P 150P	"
441	9-5	"	11.0	4.59	1.06	4.59	4.9		.6	12	0	1005A 1015A	"
442	9-11	Bollinger-Robertson	11.0	12.18	2.27	5.12	28.		.6	8	-.01	145P 152P	FC6
443	9-18	Bollinger	11.5	11.10	1.72	4.95	19.1		.6	12	0	1225P 1240P	"
444	9-26	Turner	12.0	11.03	1.55	4.91	17.2		.6	13	0	1250P 105P	FC5

F.C. Dist. Form 52 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

Sta. No. F168R

Daily discharge, in second-feet of BIG TUJUNGA CREEK below Big Tujunga Dam No. 1, for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	56	0.4	0.4	0.5	3.6	0.4	1.2	0.2	0.2	3.5	5.1	4.8
2	54	0.4	0.4	0.5	37	0.4	1.0	0.3	0.2	7.5	5.1	4.8
3	52	0.5	0.5	0.5	131	0.4	1.0	0.3	0.2	10.2	5.1	4.8
4	50	0.5	0.5	0.6	183	0.4	0.8	0.3	0.2	8.4	5.1	4.8
5	48	0.6	0.5	0.5	163	0.4	0.7	0.3	0.2	8.0	5.1	4.8
6	29	0.8	0.5	0.5	285	0.4	0.7	0.3	0.2	7.6	5.1	7.0
7	38	0.6	0.6	1.2	235	6.7	0.7	0.3	0.2	7.6	5.1	12.6
8	60	0.6	0.6	179	E 48	23	0.6	0.3	0.3	7.6	5.1	12.1
9	40	0.6	0.6	38	25	29	0.6	0.3	0.3	7.2	5.1	11.6
10	21	0.6	0.6	16.8	E 28	27	0.4	0.3	0.3	9.2	5.1	11.6
11	34	0.6	0.6	16.8	E 190	28	0.4	0.3	0.3	8.7	5.4	16.4
12	25	0.6	0.6	18.1	E 190	29	0.3	0.3	0.3	9.1	5.4	19.8
13	5.1	0.6	0.5	19.2	E 18.6	28	0.3	0.3	1.4	8.7	5.4	19.2
14	E 4.8	0.6	0.5	19.2	E 22	24	0.3	0.3	2.9	8.7	5.4	19.2
15	E 4.5	0.8	0.5	16.8	19.2	23	0.3	0.3	3.1	8.4	5.1	19.2
16	E 4.5	0.6	0.5	16.2	9.2	23	0.3	0.3	3.1	8.4	5.1	19.2
17	4.5	0.5	0.5	15.6	1.3	23	0.3	0.4	2.9	8.4	5.1	19.2
18	4.3	0.5	0.5	15.0	2.8	22	0.3	0.4	2.9	8.4	4.8	19.2
19	4.3	0.6	0.4	12.4	1.3	22	0.3	0.3	2.8	8.0	4.8	19.2
20	4.3	0.6	0.5	10.2	E 0.5	22	0.3	0.3	2.8	8.0	4.8	18.6
21	E 4.3	0.6	0.5	11.6	E 0.5	22	0.3	0.3	2.8	8.0	4.8	18.6
22	E 4.5	0.6	0.4	6.5	E 0.5	9.8	0.4	0.3	2.9	8.0	4.8	18.6
23	4.5	0.5	0.7	0.5	E 0.5	1.1	0.4	0.3	2.9	8.0	4.8	18.0
24	E 3.1	0.5	0.5	7.5	E 0.5	1.0	0.4	0.3	3.1	8.0	4.8	18.0
25	E 1.3	0.5	0.5	13.1	E 1.6	1.1	0.4	0.3	3.1	8.0	4.8	16.8
26	0.3	0.5	0.5	13.6	E 0.4	1.1	0.7	0.3	3.3	7.0	4.8	16.8
27	E 0.3	0.5	0.5	13.6	0.4	1.2	0.5	0.3	3.3	4.3	4.8	16.8
28	E 0.3	0.4	0.5	13.6	0.4	1.1	0.4	0.3	3.3	4.3	4.8	16.8
29	E 0.3	0.4	0.5	9.8	0.6	1.1	0.4	0.2	3.3	4.3	4.8	16.8
30	0.5	0.4	0.4	5.1		1.1	0.3	0.2	3.3	4.3	4.8	16.8
31	0.3		0.4	4.8		1.5		0.2		4.3	4.8	
	563.0	16.5	15.7	497.3	1256.9	374.2	15.0	9.2	56.1	230.1	155.1	442.1
MEAN	18.2	0.55	0.51	16.0	43.3	12.1	0.50	0.30	1.87	7.42	5.00	14.7
ACRE-FEET	1120	33	31	986	2490	742	30	18	111	456	308	877

Remarks: E indicates discharge estimated or interpolated between measurements.

YEAR OR PERIOD — MEAN 9.92 — ACRE-FEET 7200

STATION F213R

BIG TUJUNGA CREEK above Gold Canyon

LOCATION:

On the left (south) bank 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.

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, 1939 to September 30, 1940.

REGULATION:

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

EXTREMES OF DISCHARGE:

1939-1940
Maximum not determined.
Minimum 1.4 second-feet, October 29, 1939.
1932-1940
Maximum 50000 second-feet, estimated, March 2, 1938.
Minimum 0.8 second-foot November 18, 1936.

ACCURACY:

Fair.
High flows frequently estimated by comparison.

OPERATION:

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

DIVERSIONS:

There are several small irrigation diversions above the station.

RECORDS AVAILABLE:

October 1, 1932 to September 30, 1940.
(Records at U.S.G.S. Station, Tujunga Creek, near Sunland, are available from October 1, 1916 to September 30, 1932).

F. C. D. FORM 104 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F-213-R

DISCHARGE MEASUREMENTS OF BIG TUJUNGA CREEK

at above Gold Canyon DURING THE YEAR ENDING SEPTEMBER 30, 1940.

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.
247	10/5	Turner	34.	31.37	1.61	7.67	51.		.6	12	0	835A 850A	FC 5
248	10/11	"	13.	12.92	.60	7.08	7.7		.6	8	0	840A 850A	"
249	10/19	"	13.	12.64	.56	7.06	7.1		.6	8	0	835A 845A	"
250	10/26	"	12.8	10.63	.34	6.92	3.6		.6	8	0	910A 920A	"
251	11/2	"	8.5	6.81	.36	6.80	2.4		.6	10	0	955A 1005A	"
252	11/8	"	7.8	6.82	.40	6.79	2.7		.6	9	0	930A 940A	"
253	11/16	"	8.3	6.06	.40	6.80	2.4		.6	9	0	825A 835A	"
254	11/22	"	8.3	5.87	.36	6.77	2.1		.6	9	0	810A 820A	"
255	11/30	"	8.3	5.89	.36	6.77	2.1		.6	9	0	920A 930A	"
256	12/7	"	8.3	5.85	.36	6.77	2.1		.6	9	0	740A 750A	"
257	12/14	"	8.3	5.98	.40	6.79	2.4		.6	9	0	825A 835A	"
258	12/21	"	8.3	5.96	.38	6.78	2.3		.6	9	0	735A 745A	"
259	12/28	"	8.3	6.31	.44	6.82	2.8		.6	9	0	840A 850A	"
260	1/4	Luce	12.7	6.06	1.28	7.02	7.8		.6	8	0	130P 140P	FC 39
261	1/8	Luce-Pardieck	43.	26.96	3.73	9.26	100.		.6	11	0	310P 325P	"
262	1/15	Turner	18.	9.44	3.10	8.82	29.		.6	10	0	920A 930A	FC 5
263	1/18	Luce	14.5	6.24	4.03	9.04	25.		.6	8	+.02	400P 415P	FC 39
264	1/23	Turner-Bonadiman	11.5	2.88	2.62	8.48	7.5		.6	6	0	1124A 1130A	FC 5
265	1/24	Turner	12.	4.52	3.53	8.64	16.		.6	6	0	345P 355P	"
266	1/31	"	11.	3.41	2.82	8.49	9.6		.6	6	0	830A 840A	"
267	2/1	Luce-Pardieck	33.	18.53	3.55	9.28	66.		.6	10	-.01	1230P 1242P	FC 39
268	2/1	" "	33.	18.01	3.55	9.27	64.		.6	10	-.01	1245P 100P	"
269	2/2	" "	44.	29.53	3.92	9.53	116.		.6	10	0	300A 315A	FC 41
270	2/2	" "	33.	20.75	4.45	9.48	92.		.6	10	0	1145A 1200N	"
271	2/2	Luce-Pardieck	33.	19.72	4.51	9.47	89.		.6	10	0	1215P 1230P	FC 41
272	2/3	" "	34.	24.39	4.72	9.65	115.		.6	11	+.01	1045A 1100A	"
273	2/3	" "	34.5	25.62	4.78	9.70	122.		.6	11	+.02	1250P 102P	"
274	2/3	" "	57.	52.08	5.32	10.00	277.		.6	14	+.02	227P 247P	"
275	2/3	" "	58.5	60.51	5.34	10.03	323.		.6	12	+.02	300P 311P	"
276	2/3	" "	57.	54.67	5.28	10.02	289.		.6	13	-.02	325P 337P	"
277	2/3	" "	56.5	48.44	5.30	9.97	257.		.6	13	-.02	420P 430P	"
278	2/3	" "	56.2	45.57	4.90	9.94	223.		.6	13	-.01	455P 510P	"
279	2/5	Turner	Two Channels			9.72	81.		.6	10	0	1155A 1210P	FC 5
280	2/9	Luce	10.5	7.97	2.39	7.76	19.		.6	6	-.19	507P 511P	FC 39
281	2/9	"	34.5	29.22	2.84	8.24	83.		.6	10	0	915P 930P	"
282	2/15	"	15.	10.55	2.86	7.80	30.		.6	7	0	400P 410P	"
283	2/19	"	12.5	7.23	2.01	7.51	15.		.6	7	0	1000A 1010A	"
284	2/20	Turner	16.	5.55	1.66	7.38	9.2		.6	9	0	845A 855A	FC 5
286	2/25	Luce-Pardieck	30.	27.14	3.44	8.44	93.		.6	9	-.02	933P 942P	FC 39
287	2/25	" "	30.5	27.09	3.57	8.44	97.		.6	9	-.02	942P 955P	"
288	2/25	" "	30.5	26.45	3.29	8.44	87.		.6	9	+.02	955P 1003P	"
289	2/25	" "	30.5	23.38	3.37	8.37	79.		.6	9	-.01	1049P 1054P	"
290	2/25	Luce-Pardieck	30.5	23.32	3.30	8.36	78.		.6	9	-.02	1055P 1102P	FC39
291	2/26	" "	19.0	8.48	2.36	7.80	20.		.6	8	-.01	304P 310P	"
292	2/26	" - B. Luce	18.5	8.02	2.59	7.80	21.		.6	9	0	314P 320P	"
293	2/26	" - Pardieck	18.5	7.76	2.48	7.79	19.		.6	9	0	415P 421P	"
294	2/26	" "	18.5	7.53	2.35	7.79	18.		.6	9	0	421P 426P	"
295	2/27	Turner	17.	6.54	2.06	7.53	13.		.6	9	0	450P 500P	FC 5
296	2/29	Luce	19.	9.57	2.42	7.79	23.		.6	8	-.01	1030A 1040A	FC 39
297	3/7	Turner	12.	4.97	1.86	7.44	9.3		.6	8	0	740A 750A	FC 5
298	3/14	"	23.	10.86	2.85	8.02	31.		.6	12	0	920A 930A	"
299	3/21	"	23.	10.34	2.78	8.00	29.		.6	12	0	805A 815A	"
300	3/22	"	17.	4.75	1.78	7.65	8.5		.6	10	-.02	510P 520P	"
301	3/28	"	10.5	3.76	1.86	7.40	7.0		.6	7	0	835A 845A	"
302	3/31	Luce	17.2	9.40	2.38	7.90	22.		.6	8	-.01	1148A 1158A	FC 39
303	3/31	"	17.0	9.09	2.18	7.80	20.		.6	8	-.01	105P 115P	"
304	3/31	"	17.0	9.09	2.39	7.77	22.		.6	8	-.01	140P 150P	"
305	4/1	"	15.5	9.34	2.21	7.74	21.		.6	8	0	715A 720A	"
306	4/1	Turner	17.5	6.84	2.02	7.58	14.		.6	10	+.12	355P 405P	FC 5
307	4/4	"	10.5	3.86	2.26	7.47	8.7		.6	7	0	805A 815A	"
308	4/11	"	10.0	3.38	1.52	7.20	5.2		.6	9	0	335P 345P	"
309	4/18	"	10.0	3.30	1.40	7.26	4.6		.6	9	0	735A 745A	"
310	4/25	"	9.8	3.19	1.42	7.25	4.5		.6	9	0	800A 810A	"
311	4/26	Luce	22.5	16.82	2.36	8.07	40.		.6	12	0	435A 445A	FC 39
312	4/26	"	19.5	11.10	2.16	7.83	24.		.6	10	-.01	702A 712A	"
313	4/27	Turner	17.5	4.60	2.01	7.69	9.3		.6	10	0	830A 840A	FC 5
314	5/2	"	8.5	2.99	1.58	7.36	4.7		.6	9	0	955A 1005A	"
315	5/9	"	6.5	2.08	1.41	7.24	2.9		.6	7	0	420P 430P	"
316	5/16	"	7.0	1.84	1.26	7.26	2.3		.6	7	0	453P 500P	"
317	5/23	"	9.5	2.63	1.19	7.26	3.1		.6	9	0	720A 730A	"
318	5/29	"	9.0	4.05	.71	7.67	2.9		.6	8	0	805A 815A	"
319	6/6	"	8.0	2.00	1.06	7.63	2.1		.6	8	0	825A 835A	"
320	6/13	Turner	8.0	1.83	.99	7.56	1.8		.6	8	0	815A 825A	FC 5
321	6/17	"	8.7	2.14	1.36	7.28	2.9		.6	9	0	400P 410P	"
322	6/20	"	9.5	2.67	1.32	7.32	3.5		.6	9	0	855A 905A	"
323	6/26	Bollinger	9.0	2.60	1.26	7.31	3.3		.6	7	-.02	318P 325P	FC 6
324	7/2	"	8.2	2.61	1.23	7.30	3.2		.6	8	0	245P 255P	"
325	7/11	Turner	10.0	5.36	1.75	7.47	9.4		.6	9	0	800A 810A	FC 5
326	7/18	"	10.5	5.72	1.69	7.45	9.7		.6	10	0	820A 830A	"
327	7/25	"	10.0	5.34	1.72	7.43	9.2		.6	10	0	805A 815A	"
328	8/1	"	9.0	3.98	1.25	7.30	5.0		.6	9	0	845A 855A	"
329	8/8	"	9.3	4.23	1.22	7.30	5.2		.6	9	0	225P 235P	"
330	8/15	"	9.0	4.28	1.37	7.32	5.9		.6	9	0	1100A 1110A	"
331	8/22	"	9.0	4.18	1.31	7.31	5.5		.6	9	0	820A 830A	"
332	8/28	"	9.0	4.04	1.20	7.28	4.9		.6	9	0	255P 305P	"
333	9/5	"	9.0	4.22	1.31	7.32	5.5		.6	9	0	905A 915A	"
334	9/11	Bollinger	14.0	8.16	1.51	7.54	12.		.6	8	0	300P 308P	FC 6
335	9/18	"	22.0	11.54	1.04	7.65	19.		.6	12	0	210P 222P	"
336	9/26	Turner	22.0	10.73	1.62	7.64	17.		.6	13	0	1110A 1120A	FC 5

F.C. Dist. Form 52 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

Sta. No. F213R

Daily discharge, in second-feet of BIG TUJUNGA CREEK above Gold Canyon, for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	57	23	20	23	58	13	16	5	22	32	5	5
2	56	23	20	23	97	11	11	41	21	49	55	5
3	55	23	20	23	161	11	11	35	19	95	5	5
4	52	23	19	6	234	10	9	35	19	85	55	5
5	51	23	19	41	E200	10	75	38	19	8	55	5
6	42	25	20	34	E350	95	7	38	18	8	55	55
7	28	29	20	95	E300	12	7	36	16	8	55	11
8	57	29	20	E320	E 70	22	75	35	18	8	55	12
9	51	29	20	E 96	E 35	31	75	33	16	75	55	12
10	27	23	20	E 50	E 40	28	65	33	17	85	55	12
11	38	23	20	42	40	28	6	28	16	9	55	15
12	27	19	20	39	36	29	6	27	17	85	55	20
13	12	19	20	38	34	30	55	25	16	9	55	20
14	9	18	23	34	35	30	55	24	24	9	55	20
15	8	19	23	30	33	30	55	23	25	9	55	19
16	75	23	20	26	27	28	5	24	28	9	55	19
17	75	19	20	26	19	29	47	26	30	95	55	19
18	7	19	23	22	16	31	42	32	32	95	5	19
19	7	19	23	25	14	30	41	31	33	9	5	19
20	7	19	23	18	9	30	40	26	34	9	5	19
21	65	20	23	18	85	29	36	30	34	9	5	18
22	65	20	23	17	9	19	42	29	34	95	5	18
23	65	20	65	13	8	9	44	27	34	9	5	18
24	65	19	55	14	8	8	44	26	33	9	5	18
25	7	18	39	19	34	75	45	26	33	9	5	18
26	39	18	34	18	31	75	20	26	33	9	5	17
27	27	19	31	19	14	7	9	28	33	5	5	17
28	20	19	27	19	13	65	95	27	33	47	5	17
29	16	19	27	17	22	65	8	26	33	47	5	17
30	18	20	25	12		65	6	23	33	5	5	17
31	23		23	95		20		22		5	5	
	6533	639	785	9714	1955.5	5790	2143	932	777	2435	1625	4415
MEAN	21.1	2.13	2.53	31.3	67.4	18.7	7.14	3.01	2.59	7.85	5.24	14.7
ACRE-FEET	1300	127	156	1930	3880	1150	425	185	154	483	322	876

Remarks: E indicates discharge estimated.

YEAR OR PERIOD MEAN 15.1
ACRE-FEET 10990

STATION F20B-R

TUJUNGA WASH at Remsen Avenue

LOCATION:

On the downstream side of the Remsen Avenue bridge approximately 3 miles southeast of San Fernando and 1/2 mile below Hansen Dam.

DRAINAGE AREA:

148 square miles.

CHANNEL AND CONTROL:

Channel is wide and composed of sand, gravel, and boulders. The flow past the gage is frequently in several channels during intermediate flows.
No artificial control.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows to be measured at Hansen Dam outlet channel and from upstream side of bridge.

RECORDER:

Installed April 29, 1932 at Station F20-R at Stonehurst Avenue. Washed out during the March 2, 1938 flood. Reinstalled at Station F20B-R at Remsen Avenue, July 25, 1940, in a standard house over a 21 inch corrugated iron pipe stilling well. A horizontal rational recorder was in service from July 25, 1940 to September 30, 1940.

REGULATION:

Flow partially regulated by Big Tujunga Dam No. 1, by Haines Canyon Debris Basin and by Hansen Dam (under construction).

DIVERSIONS:

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

RECORDS AVAILABLE:

January 1931 to April 1932 random measurements available. Recorder records from April 29, 1932 to December 31, 1933. No communication from December 31, 1933 to March 9, 1934, random measurements available. Recorder records from March 9, 1934 to March 2, 1938. From March 2, 1938 to July 25, 1940 random measurements available. Recorder records from July 25, 1940 to September 30, 1940.

EXTREMES OF DISCHARGE:

1932-1938 at Station F-20-R
Maximum 54000 second feet, estimated, March 2, 1938.
Minimum no flow part of each year.
1940 at Station F-20B-R
Maximum and minimum not determined due to incomplete yearly record.

ACCURACY:

Poor due to sand obstructing communication and flow shifting in the existing wide channel.

OPERATION:

Located and constructed by the Los Angeles County Flood Control District. Operated in co-operation with United States Engineer Dept.

F. C. D. FORM 104 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 20B-R

DISCHARGE MEASUREMENTS OF TUJUNGA WASH

AT Remsen Avenue DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
												432P	
1	1/11	Luce	24.5	21.23	1.98	4.63	42.		.6	13	0	437P	FC 39
2	1/22	Luce-Miller	12.0	6.45	2.15	4.40	14.		.6	8	0	355P 400P	"
3	2/6	Luce-Bollinger	63.4	59.28	4.67	4.84	277.		.6	16	0	935A 950A	"
4	2/8	Luce	21.0	18.95	2.60	4.47	49.		.6	9	0	510P 516P	"
5	3/1	"	12.0	7.99	2.77	4.25	22.		.6	9	-.01	830A 845A	"
6	3/8	"	11.0	7.27	2.49	4.25	18.		.6	8	0	1000A 1010A	"
7	3/14	"	10.0	8.93	2.55	4.30	23.		.6	7	0	245P 255P	"
8	3/21	"	12.5	8.87	2.72	4.26	24.		.6	9	0	900A 910A	"
9	3/27	"	7.0	2.94	1.45	3.95	4.3		.6	7	0	310P 325P	"
10	4/4	"	11.6	3.72	1.67	4.09	6.2		.6	7	+.01	415P 422P	"
11	4/11	"	11.3	2.77	1.28	4.00	3.6		.6	8	0	445P 455P	"
12	4/25	"	1.3	.12	.67	3.67	.08		.6	3	0	610 612	"
13	5/29	"	5.2	1.97	1.93	4.03	3.8		.6	5	0	130P 135P	"
14	6/6	"	6.0	1.71	1.43	3.95	2.4		.6	6	-.01	405P 410P	"
15	7/3	"	5.0	1.85	1.35	--	2.5		.6	5	--	300P 310P	"
16	8/1	"	3.5	.37	.97	2.76	.36		.6	6	0	1220P 1225P	"
17	9/17	Bollinger	3.6	.66	.89	2.82	.60		.6	6	0	320P 327P	FC 6
18	9/26	Luce	3.8	1.78	1.68	2.97	3.0		.6	5	0	945A 955A	FC 39

P.C. Dist. Form 52 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

Sta. No. F20B-R

Daily discharge, in second-feet of TUJUNGA WASH at Remsen Ave., for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1											1.2	0
2											0.2	0
3											0.2	0
4											0	0
5											0	0
6											0	0
7											0	0
8										7/25/40	0.1	0
9											0.4	0
10											0.2	0
11											0	0
12											0.6	0
13											1.3	0.6
14											1.4	2.6
15											0	4.1
16											0	4.4
17											0	4.0
18											0	1.5
19											0	1.6
20											0	1.7
21											0	0.6
22											0	1.7
23											0	1.0
24											0	1.9
25											0	E 1.7
26										0	0	E 1.2
27										0	0	1.1
28										0	0	1.7
29										0	0	1.5
30										0	0	1.7
31										0.1	0	
										0.1	5.6	34.6
Mean											0.18	1.15
Acre-Feet											11	80

Remarks: E indicates discharge estimated.

Year or Period: Mean Acre Feet Incomplete

STATION F106B-R

TUJUNGA WASH CENTRAL BRANCH at Chandler Boulevard

LOCATION:

On the south side of the upstream bridge at Chandler Blvd., North Hollywood.

DRAINAGE AREA:

Indeterminate due to a natural split which divides 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 October 1, 1939 to September 30, 1940.

REGULATION:

Flow partially regulated by Big Tujunga Dam No. 1 and Haines Debris Basin.

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, 1940.

EXTREMES OF DISCHARGE:
1939-1940
Maximum not determined.
Minimum no flow most of year.
1930-1940
Maximum not determined March 2, 1938.
Minimum no flow most of year.

ACCURACY:

Poor.
Flow estimated for the season.
Communication to gage unreliable.

OPERATION:

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

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 106B-R

DISCHARGE MEASUREMENTS OF TUJUNGA WASH - CENTRAL BRANCH

AT ~~NEAR~~ Chandler Blvd. DURING THE YEAR ENDING SEPTEMBER 30, 19 40

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Formula Bib.	METH OD	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
1	10/4	Bollinger	1.0	.12	.67	10.03	.08	Float	2	-.01		1117A 1120A	Floats
2	1/8	Bollinger-Koch	28.5	11.17	2.46	10.42	27.		.6	8	-.05	1218A 1225A	FC 6
3	1/8	" "	229.0	284.2	6.44	11.65	1830.		.6	12	-.30	404A 504A	"
4	2/1	" "	51.0	13.8	2.26	10.16	31.		.6	14	+.01	1010A 1020A	"
5	2/1	" "	70.0	37.8	3.48	10.22	132.		.6	12	-	140P 155P	"
6	2/2	" "	Two Channels			--	102.		.6	20	-	535A 600A	"
7	2/3	" "	71.0	20.65	2.72	10.12	56.		.6	14	-.09	302P 310P	"
8	2/3	" "	Two Channels			10.20	71.		.6	18	+.03	1110P 1128P	"
9	2/6	Luce-Bollinger	Four	"		10.19	77.		.6	28	-.01	1248P 115P	FC 39
10	2/15	Bollinger	4.2	1.09	1.63	10.16	1.8		.6	5	0	237P 243P	FC 6
11	2/25	Bollinger-Koch	10.0	6.72	3.86	10.42	26.		.6	6	-.04	830P 837P	"
12	2/29	Bollinger	10.5	2.56	2.12	9.85	5.4		.6	6	+.02	1045A 1053A	"
13	3/31	Bollinger-Koch	19.8	5.61	2.21	10.0	12.		.6	9	-.01	1143A 1152A	"
14	3/31	" "	Two Channels			9.99	7.8		.6	9	-.02	113P 122P	"
15	4/1	" "	10.3	2.16	1.31	-	2.8		.6	7	-	930A 936A	"

F.C. Dist. Form 52 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

Sta. No F105B-R

Daily discharge, in second-feet of TUJUNGA WASH CENTRAL BRANCH at Chandler Blvd., for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	E +	E 0	0	0	E 66	E 0	E 2.3	0	0	0	0	0
2	E +	E 0	0	0	E 55	E 0	E 0.2	0	0	0	0	0
3	E +	E 0	0	0	E 33	E 0	0	0	0	0	0	0
4	E +	E 0	0	E +	E 29	E 0	0	0	0	0	0	0
5	E +	E 0	0	0	E 1.5	E 0	0	0	0	0	0	0
6	E +	E 0	0	0	E 50	E 0	0	0	0	0	0	0
7	E +	E 0	0	3.3	E 16	E 0	0	0	0	0	0	0
8	E +	E 0	0	E 4.72	0	E 0	0	0	0	0	0	0
9	E +	E 0	0	E 9.5	0	E 0	0	0	0	0	0	0
10	E +	E 0	0	E 0.2	E +	E 0	0	0	0	0	0	0
11	E 0	0	0	E 1.0	E 1.8	E 0	0	0	0	0	0	0
12	E +	0	0	E 0.8	E 3.0	E 0	0	0	0	0	0	0
13	E 0	0	0	E 0.6	E 4.0	E 0	0	0	0	0	0	0
14	E +	0	0	E 0.4	E 4.5	E +	0	0	0	0	0	0
15	E 0	0	0	E 0.2	E 2.0	E 0	0	0	0	0	0	0
16	E 0	0	0	E +	E +	E 0	0	0	0	0	0	0
17	E 0	0	0	E +	E 0	E 0	0	0	0	0	0	0
18	E 0	0	0	E 0.1	E 0	E 0	0	0	0	0	0	0
19	E 0	0	0	E 0.1	E 0	E 0	0	0	0	0	0	0
20	E 0	0	0	E 0.1	E 0	E 0	0	0	0	0	0	0
21	E 0	0	0	E +	E 0	E 0	0	0	0	0	0	0
22	E 0	0	0	E +	E 0	E 0	0	0	0	0	0	0
23	E 0	0	E +	E 0.2	E 0	E 0	0	0	0	0	0	0
24	E 0	0	0	E 0.3	E 2.2	E 0	0	0	0	0	0	0
25	E 0	0	0	E +	E 1.8	E 0	0	0	0	0	0	0
26	E 0	0	0	E 0	E 3.9	E 0	0	0	0	0	0	0
27	E 0	0	0	E 0	0	E 0	0	0	0	0	0	0
28	E 0	0	0	E 0	0	E 0	0	0	0	0	0	0
29	E 0	0	0	E 0	E 0.7	E 0	0	0	0	0	0	0
30	E 0	0	0	E 0		E 0	0	0	0	0	0	0
31	E 0		0	E 0		3.4		0		0	0	
	0	0	0	E 488.8	E 290.6	E 3.4	E 2.5	0	0	0	0	0
MEAN	0	0	0	15.8	10.0	0.11	.08	0	0	0	0	0
ACRE-FEET	0	0	0	E 970	E576	E 6.7	E 5.0	0	0	0	0	0

Remarks:
E Estimated

YEAR OR PERIOD — MEAN 8.14 — ACRE FEET 1560.

STATION F105R

TUJUNGA 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 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. standard type house over a 21 inch diameter corrugated iron pipe stilling well.
A Stevens type L recorder was in service from October 1, 1939 to September 30, 1940.

REGULATION:

Flow partially regulated by Big Tujunga Dam No. 1 and Haines Debris Basin.

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, 1940.

EXTREMES OF DISCHARGE:

1939-1940
Maximum not determined.
Minimum no flow most of year.
1930-1940
Maximum not determined March 2, 1938.
Minimum no flow most of year.

ACCURACY:

Poor.
Flow estimated for the season. No gage height discharge relation. Infrequent communication.

OPERATION:

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

F. C. D. FORM 104 IM 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F105R

DISCHARGE MEASUREMENTS OF TUJUNGA WASH

AT ~~XXXX~~ Magnolia Blvd. DURING THE YEAR ENDING SEPTEMBER 30, 19 40

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Permit No.	METH OD	MEAN SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
6	2-2	Bollinger-Koch	31.7	10.45	1.60	6.89	17.		.6	9	-.02	314A 322A	F.C.6

F. C. Dist. Form 52 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

Sta. No F105R

Daily discharge, in second-feet of TUJUNGA WASH at Magnolia Blvd., for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0	0	E 17	0	0	0				
2	0	0	0	0	E 11	0	0	0				
3	0	0	0	0	E 13	0	0	0				
4	0	0	0	0	0	0	0	0				
5	0	0	0	0	0	0	0	0				
6	0	0	0	0	0	0	0	0				
7	0	0	0	E +	0	0	0	0				
8	0	0	0	E 19	0	0	0	0				
9	0	0	0	0	0	0	0	0				
10	0	0	0	E +	0	0	0	0				
11	0	0	0	E +	0	0	0	0				
12	0	0	0	0	0	0	0	0				
13	0	0	0	0	0	0	0	0				
14	0	0	0	0	0	0	0	0				
15	0	0	0	0	0	0	0	0	No flow	No flow	No flow	No flow
16	0	0	0	0	0	0	0	0				
17	0	0	0	0	0	0	0	0				
18	0	0	0	0	0	0	0	0				
19	0	0	0	0	0	0	0	0				
20	0	0	0	0	0	0	0	0				
21	0	0	0	0	0	0	0	0				
22	0	0	0	0	0	0	0	0				
23	0	0	0	E +	0	0	0	0				
24	0	0	0	0	0	0	0	0				
25	0	0	0	0	0	0	0	0				
26	0	0	0	0	0	0	0	0				
27	0	0	0	0	0	0	0	0				
28	0	0	0	0	0	0	0	0				
29	0	0	0	0	0	0	0					
30	0	0	0	0		0	0					
31	0		0	0		0						
	0	0	0	19	293	0	0	0	0	0	0	0
MEAN	0	0	0	.613	1.01	0	0	0	0	0	0	0
ACRE-FEET	0	0	0	38.	58.	0	0	0	0	0	0	0

Remarks: E Estimated

YEAR OR PERIOD MEAN 0.124
ACRE-FEET 96

STATION F27OR

CALABASAS CREEK at Ventura Boulevard

LOCATION:

On the right (east) bank of Calabasas Creek at the upstream end of a concrete horse shoe culvert under Ventura Blvd., and about 100 feet west of the westerly city limited of Los Angeles.

DRAINAGE AREA:

2.4 square miles.

CHANNEL AND CONTROL:

Channel-sand and clay adobe.
Control - entrance to a concrete horse shoe culvert, 6.0 feet wide and 5.0 feet deep.

DISCHARGE MEASUREMENTS:

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

RECORDER:

Installed February 17, 1940 in a box type house over a 24 inch corrugated iron pipe stilling well. A horizontal rational recorder was in service from February 17, 1940 to September 30, 1940.

REGULATION: and/or DIVERSIONS

The existence of small dams upstream has been verified by local residents. However, the number and extent of regulation is not known.

RECORDS AVAILABLE:

February 17, 1940 to September 30, 1940.

EXTREMES OF DISCHARGE:

1939-1940
Record incomplete.

ACCURACY:

Fair. Station rating incomplete due to insufficient flow.

OPERATION:

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

REMARKS:

Measurable flow occurred on only one day. Total flow for the period of record 0.3 acre feet.

F. C. D. FORM 104 (M. 5-40)

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F27OR

DISCHARGE MEASUREMENTS OF CALABASAS CREEK

AT ~~XXXX~~ Ventura Blvd. DURING THE YEAR ENDING SEPTEMBER 30, 19 40

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Adj.	METH OD	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
1	2-25	Bollinger-Koch	4.0	0.75	0.24	1.36	.18		.6	3	0	1056P 1059P	FC6

STATION F37B-R

COMPTON CREEK near Greenleaf Street

LOCATION:

On the left (east) bank of the concrete channel, 120 feet South of the center line of Greenleaf Street 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 October 1, 1939 to September 30, 1940.

REGULATION:

None.

DIVERSION:

None.

RECORDS AVAILABLE:

At Station F37R
January 22, 1928 to June 9, 1938.
At Station F37B-R
October 3, 1938 to September 30, 1940.

EXTREMES OF DISCHARGE:

1939-1940
Maximum 1630 second-feet, February 3.
Minimum 0.1 second-foot at various times.
1928-1940 (Stations F-37-R and F-37B-R)
Maximum not determined, overflowed banks March 2, 1938.
Minimum no flow at various times.

ACCURACY:

Fair.
Low flows frequently interpolated due to obstruction of communication by mud.
Gage heights interpolated due to recorder clock failure at various times during low flows.

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 Dept.

F. C. D. FORM 104 1M 6-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 37 B-R

DISCHARGE MEASUREMENTS OF COMPTON CREEK

AT OR NEAR Greenleaf Street DURING THE YEAR ENDING SEPTEMBER 30, 1940

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.
40	12/14	Bonadiman	18.	1.10	0.50	0.39	0.55		F1			1040A	
41	12/28	"	10.	0.66	0.48	0.39	0.32		F1			1137A	
42	1/4	U.S.E.D. # 1	60.	51.8	1.82	1.06	94.		.6			1043A 1110A	35661
43	1/4	" # 2	60.	92.	3.64	1.77	335.		.6			1146A 1245P	"
44	1/4	" # 3	55.	55.	1.66	1.04	91.		.6			217P 315P	"
45	1/5	Bonadiman	24.	2.36	0.26	0.38	0.60		Bur			1200N	FC 40
46	1/7	U.S.E.D. # 4	60.	154.	5.10	2.67	785.		.6			725P 811P	35661
47	1/7	" # 5	60.	178.	5.85	3.09	1040.		.6			918P 952P	"
48	1/8	" # 6	60.	98.8	3.47	1.82	343.		.6			1204A 1250A	"
49	1/8	" # 7	60.	57.5	2.07	1.14	119.		.6			240A 250A	"
50	1/8	" # 8	60.	77.	2.95	1.45	227.		.6			433A 503A	"
51	1/8	" # 9	55.	64.	2.14	1.26	137.		.6			118P 143P	"
52	1/8	" # 10	54.	62.1	2.10	1.25	130.		.6			158P 211P	"
53	1/9	Jackman Bonadiman	59.	21.7	0.53	0.65	11.		.6	8	0	336P 355P	FC 40
54	1/10	U.S.E.D. # 11	60.	79.8	2.79	1.44	223.		.6			715P 745P	35661
55	1/23	" # 12	60.	104.	3.83	1.88	397.		.6			440P 513P	"
56	1/23	" # 13	60.	171.	5.85	2.96	1000.		.6			611P 647P	"
57	1/24	Bonadiman Jackman	21.	3.11	0.54	0.48	1.7		.6	4	0	1120A 1126A	FC40
58	1/31	U.S.E.D. # 14	60.	50.5	1.95	0.99	98.		.6			605P 626P	35661
59	2/1	" # 15	60.	181.	6.64	3.09	1200.		.6			933A 1016A	"
60	2/1	" # 16	60.	71.3	2.83	1.40	202.		.6			322P 348P	"
61	2/1	" # 17	60.	51.0	1.75	1.04	89.		.6			950P 1009P	"
62	2/2	" # 18	60.	178.	6.07	3.12	1080.		.6			224A 251A	"
63	2/2	" # 19	60.	90.	3.39	1.72	305.		.6			422A 449A	"
64	2/2	U.S.E.D. # 20	60.	50.8	1.75	1.08	89.		.6			650A 706A	35661
65	2/3	" # 21	60.	101.	4.37	1.98	441.		.6			1222P 1248P	"
66	2/3	" # 22	60.	143.	5.41	2.67	774.		.6			110P 128P	"
67	2/3	" # 23	60.	199.	7.17	3.45	1420.		.6			204P 231P	"
68	2/3	" # 24	60.	179.	6.24	3.10	1120.		.6			350P 416P	"
69	2/3	" # 25	60.	119.	4.24	2.12	505.		.6			500P 520P	"
70	2/5	Bonadiman Jackman	24.	3.24	0.50	0.42	1.6		.6	4	0	945A 950A	FC 40
71	2/15	Bonadiman	28.	5.08	0.60	0.48	3.1		.6	4	0	1050A 1100A	"
72	2/25	U.S.E.D. # 26	60.	149.	4.93	2.65	733.		.6			340P 410P	35661
73	2/25	" # 27	60.	163.	5.36	2.80	871.		.6			421P 447P	"
74	2/26	Bonadiman Jackman	59.	24.2	0.58	0.56	14.		.6	6	+0.12	205P 212P	FC 40
75	2/29	"	59.	27.4	0.70	0.62	19.		.6	6	+0.10	1110A 1120A	"
76	3/14	Bonadiman	26.	4.1	0.47	0.41	1.9		.6	5	0	905A 910A	"
77	3/21	"	22.	3.9	0.43	0.45	1.7		.6	3	0	1007A 1010A	"
78	3/28	"	31.	6.1	0.51	0.49	3.1		.6	4	0	1045A 1051A	"
79	3/31	Bonadiman Jackman	60.	62.7	2.27	1.32	142.		.6	9	+0.05	822A 833A	"
80	4/1	"	59.	22.4	0.52	0.54	12.		.6	6	0	112P 116P	"
81	4/4	Bonadiman	31.	5.33	0.50	0.44	2.7		.6	4	0	947A 954A	"
82	4/11	"	33.	5.37	0.43	0.47	2.3		.6	5	0	917A 925A	"
83	4/18	"	31.	5.18	0.67	0.47	3.5		.6	4	0	1007A 1012A	"
84	4/25	"	30.	5.18	0.67	0.49	3.5		.6	4	0	1040A 1050A	"
85	4/26	"	59.	21.1	0.51	0.57	11.		.6	6	0	1245P 100P	"
86	5/2	"	59.	18.8	0.56	0.57	11.		.6	7	0	1002A 1015A	"
87	5/9	"	50.	14.95	0.30	0.51	4.5		.6	4	0	1021A 1027A	"
88	5/16	Bonadiman	40.	14.5	0.52	0.54	7.5		.6	6	0	1040A 1050A	FC 40
89	5/23	"	54.5	16.2	0.33	0.52	5.4		.6	5	0	1001A 1010A	"
90	5/29	"	59.	17.7	0.29	0.51	5.0		.6	6	0	140P 147P	"
91	6/6	"	59.	22.2	0.24	0.43	5.3		.6	7	0	1036A 1048A	"
92	6/13	"	59.	20.9	0.30	0.48	6.2		.6	7	0	1039A 1100A	"
93	6/26	Moon	19.	8.71	0.39	0.43	3.4		.6	7	-0.01	439P 452P	22
94	7/31	Bonadiman	17.	8.26	0.56	0.43	4.6		.6	6	0	216P 230P	40
95	8/28	"	15.5	7.62	0.70	0.47	5.3		.6	5	0	159P 210P	"
96	9/26	"	25.	10.4	0.37	0.44	3.9		.6	5	0	933A 942A	"

F.C. Dist. Form 52 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

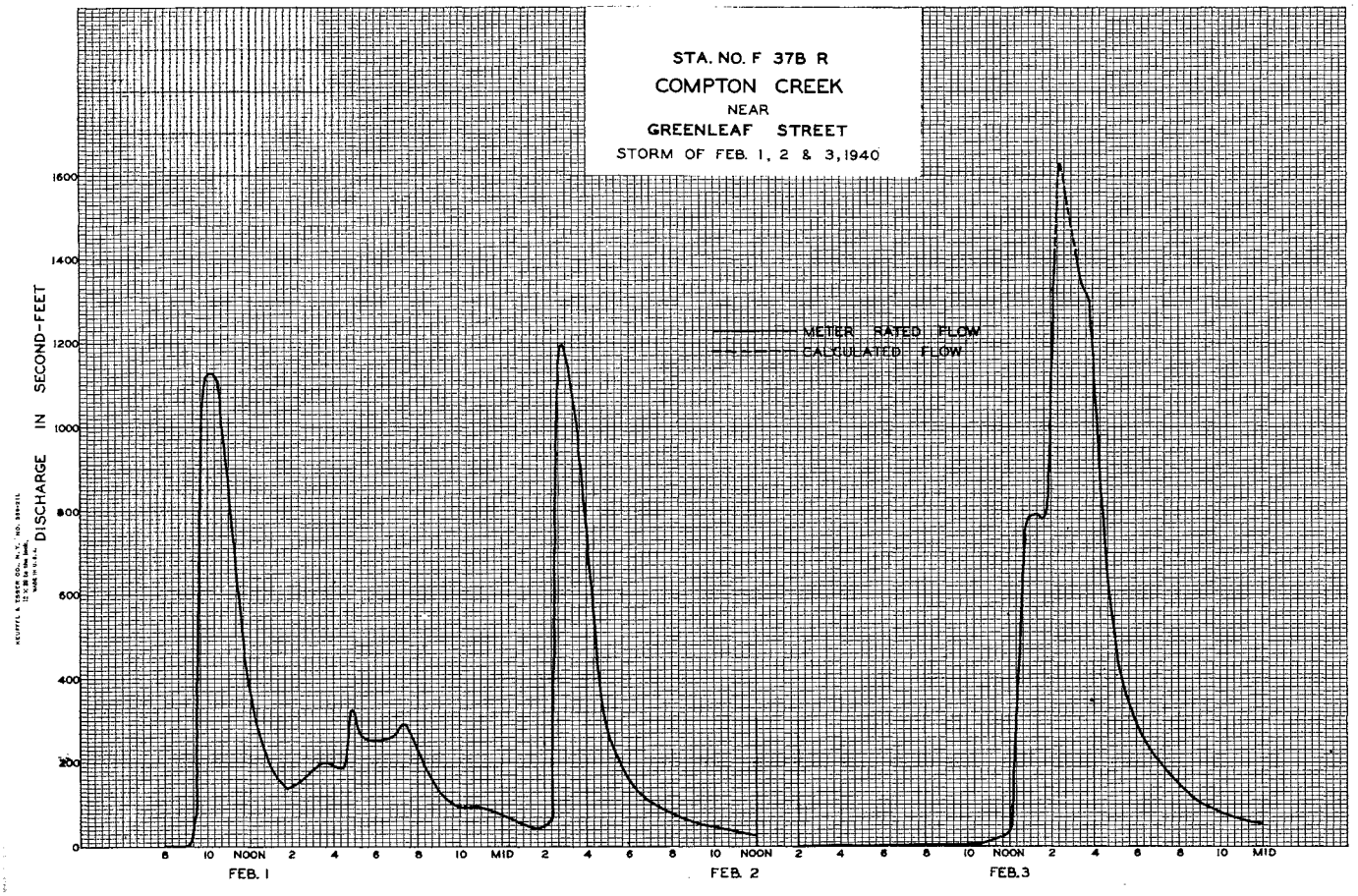
Sta. No. F37B-R

Daily discharge, in second-feet of COMPTON CREEK near Greenleaf St., for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	E 2.2	0.2	0.2	0.2	182	2.2	48	3.9	2.8	3.9	6.2	3.9
2	E 1.8	0.2	0.2	1.1	124	2.2	6.9	3.9	2.8	5.4	6.2	E 4.1
3	E 0.9	0.2	0.1	E 0.5	256	1.8	5.4	E 3.3	E 3.3	5.4	4.6	E 4.3
4	E 0.2	0.2	0.2	60	15.8	0.9	4.6	E 2.8	E 3.9	3.9	4.6	E 4.5
5	0.2	0.2	0.2	1.6	2.2	1.3	5.4	E 2.2	E 5.4	1.3	5.4	E 4.7
6	E 0.2	0.2	0.2	12.0	2.6	1.8	3.9	E 1.8	E 6.9	6.9	5.4	E 5.0
7	E 0.2	0.2	0.2	199	2.8	1.8	2.2	1.3	6.9	6.9	6.2	E 5.2
8	E 0.2	1.6	0.2	91	1.6	1.8	1.3	1.3	5.4	6.9	5.4	E 5.4
9	E 0.2	0.9	0.2	24	1.8	1.8	2.8	3.3	E 5.4	4.6	6.2	E 5.6
10	E 0.2	0.2	0.2	36	1.8	1.3	2.8	5.4	E 5.4	4.6	6.2	E 5.8
11	E 0.1	0.2	3.9	15.5	0.5	0.5	3.3	3.3	E 4.6	5.4	5.4	E 6.0
12	E 0.1	0.1	1.3	0.2	0.2	3.3	3.3	3.9	4.6	6.2	6.9	6.2
13	E 0.1	0.2	0.5	E 0.1	0.2	4.6	5.4	5.4	4.6	5.4	6.9	5.4
14	E 0.1	0.2	0.5	E 0.2	39	4.6	2.8	6.9	4.6	3.9	7.9	4.6
15	E 0.1	0.5	2.8	E 0.2	E 2.2	4.6	3.8	E 7.9	3.9	3.3	6.9	3.9
16	E 0.1	0.2	1.8	E 0.2	1.8	3.3	3.0	8.8	3.3	3.9	6.2	4.6
17	E 0.1	0.2	0.2	E 0.2	0.9	0.9	3.9	8.8	3.3	6.2	5.4	6.2
18	E 0.1	0.2	0.2	E 0.5	0.2	0.5	4.6	8.6	3.3	6.2	E 5.4	4.6
19	0.1	0.2	0.2	0.5	0.2	2.8	4.6	6.9	3.9	4.6	E 5.4	4.6
20	0.1	0.6	0.9	0.2	0.5	0.9	6.9	6.9	5.4	5.4	E 5.4	4.6
21	0.1	0.2	2.2	0.2	0.9	1.3	3.9	8.8	6.2	7.9	E 5.4	3.9
22	0.1	0.2	2.2	0.2	100	0.2	3.9	8.8	4.6	4.6	E 5.4	3.3
23	0.1	0.5	14.2	103	E 0.5	1.3	5.4	7.9	3.9	8.8	E 5.3	3.9
24	0.1	0.2	E 0.9	2.6	E 0.5	0.2	7.9	7.9	3.9	8.8	E 5.3	5.4
25	0.1	0.2	E 0.9	0.2	108	0.2	5.4	7.9	4.6	8.8	E 5.3	4.6
26	0.1	0.2	E 0.9	0.1	8.5	2.2	138	5.4	5.4	7.9	E 5.3	4.6
27	0.1	0.2	E 0.2	0.2	1.3	E 2.8	7.6	E 6.2	4.6	8.8	E 5.3	4.6
28	0.1	0.2	0.2	0.1	0.9	E 3.3	1.3	E 6.9	3.9	5.4	E 5.3	5.4
29	0.1	0.2	0.2	0.1	43		0.9	7.9	4.6	E 5.1	6.2	3.3
30	0.1	0.2	0.5	0.2			2.8	3.3	7.9	3.9	E 4.9	6.9	3.3
31	0.2		0.9	9.2			9.2		E 4.6		E 4.6	6.2	
	8.5	8.8	37.5	559.5	810.3	154.6	302.5	177.0	135.3	175.9	180.1	141.5
MEAN	0.27	0.29	1.21	18.0	27.9	4.99	10.1	5.71	4.51	5.67	5.81	4.72
ACRE FEET	17	17	74	1110	1610	307	600	351	268	349	357	281

Remarks: E indicates discharge estimated or interpolated between measurements.

YEAR OR PERIOD — MEAN 7.35 — ACRE-FEET 5340



STATION F41C-R

COYOTE CREEK at Del Amo Street

LOCATION:

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 mile

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 diamster, corrugated iron pipe stilling well.
An Au continuous recorder was in service from October 1, 1939 to September 30, 1940.

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, 1940.

EXTREMES OF DISCHARGE:
1939-1940
Maximum 827 second-feet, February 3.
Minimum no flow at various times.
1929-1940 (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
Low flows occasionally estimated or interpolated due to obstruction of communication.

OPERATION:

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

F. C. D. FORM 104 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 41C R

DISCHARGE MEASUREMENTS OF COYOTE CREEK

AT Del Amo Street DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
118	10/5	Bonadiman	4.	1.00	1.60	3.52	1.6		.6	2	0	300P	FC 40
119	10/11	"	3.	.66	2.06	3.48	1.4		.6	2	0	440P	"
120	10/19	"	4.	1.20	1.26	3.48	1.5		.6	2	0	932A 934A	"
121	10/26	"	5.	1.70	1.05	3.44	1.8		.6	2	0	857A 859A	"
122	11/1	"	2.5	0.55	2.33	3.43	1.3		.6	2	0	240P	"
123	11/9	Bonadiman	4.	0.80	1.82	3.43	1.5		.6	2	0	220P 222P	FC40
124	11/16	"	3.	0.54	1.80	3.36	1.0		.6	2	0	226P	"
125	11/30	"	3.	0.44	1.08	3.33	0.48		.6	2	0	315P	"
126	12/7	"	2.	0.26	0.92	3.22	0.24		.6	2	0	300P 302P	"
127	12/14	"	3.	0.52	1.96	3.39	1.00		.6	2	0	225P 227P	"
128	12/20	"	3.	0.40	1.62	3.29	0.65		.6	2	0	240P	"
129	12/29	"	3.	0.60	1.43	3.40	0.85		.6	2	0	1028A	"
130	1/4	"	2.	1.50	1.31	2.26	2.0		.6	2	0	425P	"
131	1/8	Bonadiman Jackman	62.	200.4	3.53	6.39	708.		.6	8	-.04	950A 1000A	"
132	1/8	"	60.	175.8	3.27	6.07	575.		.6	8	-.06	1105A 1112A	"
133	1/8	"	58.	128.2	2.61	5.49	335.		.6	9	-.01	152P 200P	"
134	1/8	"	50.	86.4	3.04	5.21	263.		.6	5	-.02	602P 608P	"
135	1/9	"	2 Channels			3.86	40.		.6	10	0	1015A 1025A	"
136	1/11	"	2.1	3.7	1.84	2.20	6.8		.6	2	0	210P 215P	"
137	1/18	Bonadiman	2.	1.95	1.11	1.51	2.2		.6	2	0	210P	"
138	1/24	Bonadiman Jackman	2.2	5.00	5.15	3.18	26.		.6	2	0	355P 400P	"
139	2/1	"	2.3	3.20	2.07	2.07	6.6		.6	2	+.42	533P 537P	"
140	2/1	Bonadiman Jackman	60.	213.9	3.40	6.41	727.		.6	12	+.08	726P 744P	FC 40
141	2/1	"	60.	219.1	3.31	6.40	726.		.6	12	-.07	852P 900P	"
142	2/1	"	60.	187.4	3.04	5.90	571.		.6	12	-.09	1103P 1112P	"
143	2/2	"	50.	70.7	3.05	4.81	216.		.6	11	-.02	812A 820A	"
144	2/3	"	2 Channels			3.32	37.		.6	4	0	146P 150P	"
145	2/3	"	70.	203.7	3.78	6.85	770.		.6	14	-.10	850P 905P	"
146	2/3	"	70.	197.3	3.69	6.76	728.		.6	14	-.08	910P 917P	"
147	2/4	"	50.	67.7	2.44	4.66	166.		.6	10	-.04	956A 1010A	"
148	2/8	Bonadiman	3.	2.56	0.56	1.92	1.4		.6	6	0	200P	"
149	2/15	"	4.6	4.38	3.06	2.24	7.0		.6	6	0	320P 330P	"
150	2/21	"	2.6	2.54	1.59	1.81	4.		.6	2	0	230P	"
151	2/26	Bonadiman Jackman	4.4	5.74	2.29	2.58	13.		.6	6	0	1050A 1058A	"
152	2/29	"	2.	1.87	1.42	1.76	2.6		.6	2	0	1008A 1012A	"
153	3/8	Bonadiman	2.	0.40	0.30	1.56	0.12		.6	2	0	1220P	"
154	3/14	"	2.	0.94	1.37	1.68	1.3		.6	2	0	201P	"
155	3/21	"	2.	1.12	1.39	1.14	1.6		.6	4	0	205P 210P	"
156	3/28	"	3.	1.71	0.92	1.12	1.6		.6	4	0	205P 209P	"
157	4/1	Bonadiman Jackman	5.	10.07	4.0	3.25	40.		.6	4	-.02	800A 810A	"
158	4/4	Bonadiman	3.1	2.16	1.17	1.30	2.5		.6	4	0	130P 133P	"
159	4/11	"	3.3	2.12	0.74	1.22	1.6		.6	4	0	100P 107P	"
160	4/18	"	1.5	0.15	0.27	0.82	.04		.6	2	0	151P 155P	"
161	4/25	"	3.6	2.23	0.58	1.38	1.3		.6	4	0	230P 236P	"
162	4/27	Bonadiman Jackman	4.0	4.96	1.43	2.21	7.1		.6	4	0	1035A 1040A	"
163	5/2	Bonadiman	3.4	2.50	0.78	1.26	1.8		.6	4	0	200P 210P	"
164	5/9	Bonadiman	3.0	1.7	0.73	1.15	1.2		.6	4	0	130P 140P	FC 40
165	5/16	"	3.5	0.49	0.29	0.86	0.14		.6	2	0	310P 317P	"
166	5/23	"	3.0	0.97	0.68	0.98	0.65		.6	2	0	100P 106P	"
167	5/29	"	2.3	1.08	1.23	0.86	1.3		.6	3	0	1140A 1150A	"
168	6/6	"	4.8	1.39	0.78	0.84	1.1		.6	5	0	150P 200P	"
169	6/26	Moon	2.0	0.34	0.59	0.72	0.20		.6	2	0	551P 553P	FC 22
170	7/11	Bonadiman	4.0	0.68	0.53	0.79	0.36		.6	2	0	1100A 1102A	FC 40
171	8/1	"	3.5	0.60	0.35	0.70	0.21		.6	2	0	132P 135P	"
172	8/22	"	4.0	1.59	0.53	0.88	0.85		.6	4	0	240P 246P	"
173	9/26	"	2 Channels			0.90	0.55		.6	6	0	201P 208P	"

F.C. Dist. Form 52 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

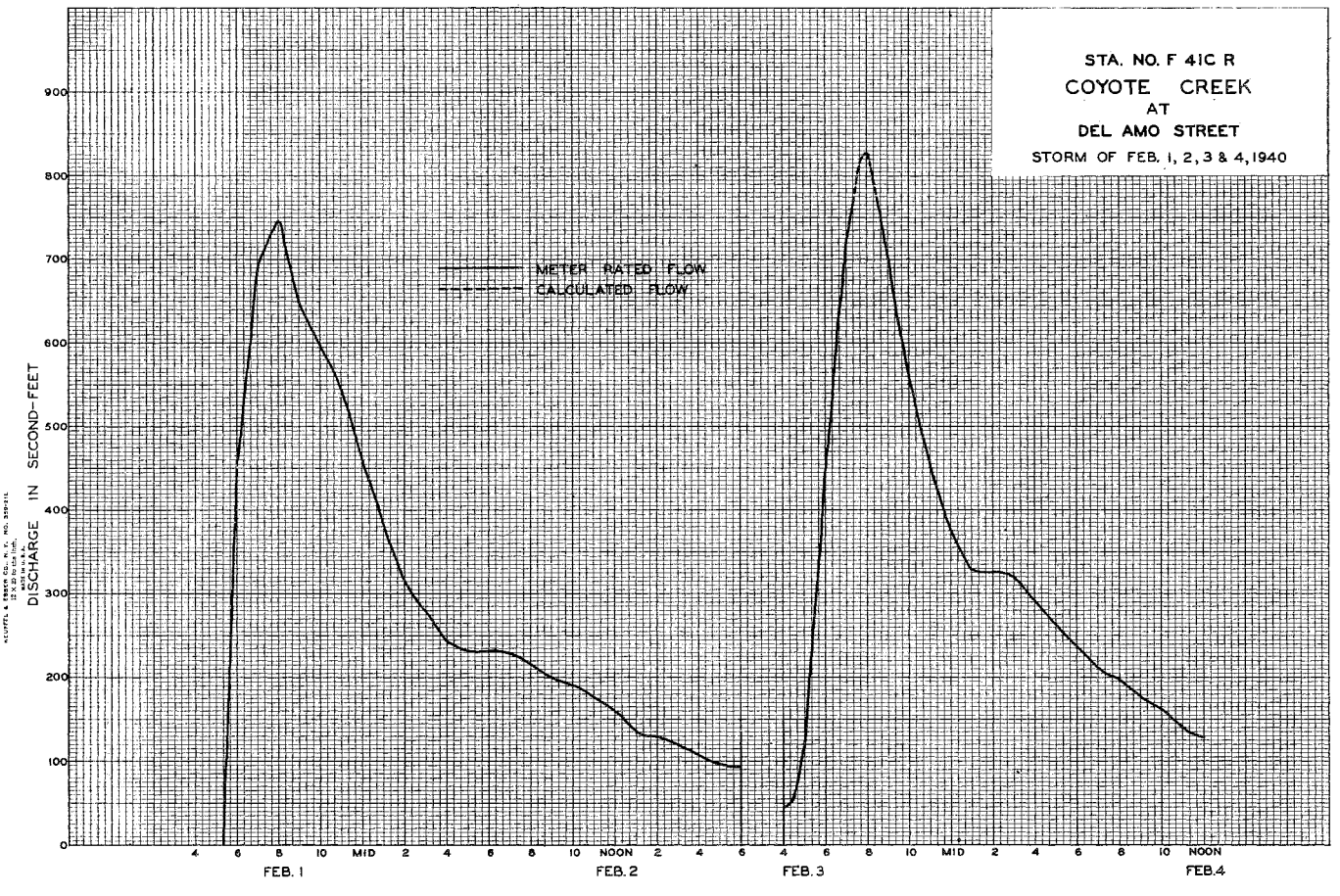
Sta. No F41-C-R

Daily discharge, in second-feet of COYOTE CREEK at Del Amo St. for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.8	1.3	0.5	1.3	162	3.5	22	1.8	1.4	0.4	0.2	1.1
2	2.0	1.6	0.1	1.3	176	1.6	5	1.8	1.4	0.5	0.1	1.0
3	1.2	1.4	0.1	E 1.3	200	1.7	2.6	1.8	E 1.1	0.6	0.2	1.1
4	1.3	1.6	0.1	E 2.0	163	1.1	2.6	1.7	0.9	0.7	0.2	1.1
5	1.8	1.8	+	E 1.4	25	0.7	2.3	1.7	0.8	0.6	0.4	1.1
6	1.6	1.6	0.1	0.8	6.5	0.4	2.1	1.7	1.0	0.6	0.5	0.3
7	1.9	1.4	0.2	1.6	3.1	0.2	1.7	1.5	0.8	0.6	0.3	0.2
8	3.0	1.4	0.3	276	1.7	4.3	1.7	1.4	0.7	0.4	0.2	0.1
9	2.2	1.6	0.3	50	1.6	2.9	E 1.7	1.3	0.9	0.4	0.3	0
10	1.2	1.8	0.3	13	1.7	1.8	E 1.6	1.2	1.1	0.4	0.3	0.2
11	1.4	1.8	0.4	7	1.9	1.6	E 1.6	1.2	0.8	0.4	0.3	0.2
12	1.6	1.8	0.6	5	2.2	1.4	1.4	1.1	0.7	0.3	0.3	0.2
13	1.6	1.8	0.8	3.8	2.4	1.4	E 1.3	1.0	0.7	0.4	0.6	0.4
14	1.9	1.6	1.0	3.2	2.9	1.4	E 1.1	0.8	1.1	0.3	0.7	0.6
15	1.8	1.3	1.2	3.2	5	1.7	E 0.8	E 0.6	2.0	0.4	0.8	1.0
16	1.6	1.2	0.7	3.7	3.9	2.2	E 0.6	E 0.2	1.1	0.2	0.8	0.9
17	1.3	0.6	0.8	E 2.2	3.1	2.7	E 0.3	0.1	1.2	0.3	0.8	0.2
18	1.3	0.2	1.4	E 2.2	3.3	3.7	2.8	0.1	0.9	0.3	0.9	0.6
19	1.4	0.1	1.4	E 1.8	3.5	E 2.7	1.3	0.3	0.9	0.3	0.9	1.1
20	1.9	0.1	0.6	1.4	3.3	E 2.1	1.0	0.3	0.8	0.2	0.8	1.2
21	1.9	0.1	0.6	1.4	3.5	5.5	1.0	0.3	0.8	0.2	0.7	1.0
22	1.8	+	1.3	1.4	3.6	3.6	1.4	0.4	0.7	0.2	0.8	0.4
23	1.9	+	1.6	2.0	3.7	3.1	1.7	0.7	0.7	0.1	0.7	0.2
24	1.6	+	1.9	35	3.4	2.3	1.3	0.9	0.9	+	1.0	0.1
25	1.8	+	1.8	8	3.8	1.9	1.2	1.2	1.2	+	1.0	0.3
26	1.9	+	1.3	4.2	10	1.6	2.0	1.5	0.5	0	0.5	0.5
27	1.8	+	1.0	2.3	5.5	1.7	5.5	1.3	0.4	0	0.7	0.9
28	1.6	0.1	1.0	2.0	2.8	1.8	2.2	1.2	0.5	0	0.8	1.2
29	1.4	0.3	0.8	2.1	3.4	1.7	2.4	1.3	0.5	0.1	0.9	1.0
30	1.4	0.5	1.2	2.1		1.7	1.8	1.3	0.4	0.1	0.9	0.8
31	1.2		1.3	2.0		2.9		1.3		0.1	1.0	
	52.1	27.0	24.7	444.7	811.8	66.9	76.0	33.0	26.9	9.1	18.6	19.0
MEAN	1.68	0.90	0.80	14.3	28.0	2.16	2.53	1.06	0.90	0.29	0.60	0.63
ACRE-FEET	103	54	49	882	1610	133	151	65	53	18	37	38

Remarks: + indicates discharge 0.05 sec. ft. or less.
E indicates estimated or interpolated between meas.

YEAR OR PERIOD — MEAN 4.40 — ACRE FEET 3190



LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 53-R

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 October 1, 1939 to September 30, 1940.

REGULATION:

None.

DIVERSIONS:

None.

RECORDS AVAILABLE:

January 15, 1930 to November 26, 1937.
November 3, 1938 to September 30, 1940.

EXTREMES OF DISCHARGE:

1939-1940
Maximum 183 second-feet February 2.
Minimum no flow for several months.
1930-1940
Maximum not determined March 2, 1938.
Minimum no flow at times each year.

ACCURACY:

Fair.
Records occasionally estimated or interpolated due to recorder clock failure or loss of communication caused by channel shifts.

OPERATION:

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

DISCHARGE MEASUREMENTS OF DUME CREEK

AT Roosevelt Highway DURING THE YEAR ENDING SEPTEMBER 30, 19 40

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Estimated Percent Diff.	METHOD	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
16	1/8	Moon-Mitchell	17.	6.45	2.90	3.96	19.		.6	7	-.07	408A / 418A	FC 22
17	1/8	" "	17.	4.95	2.30	3.90	11.		.6	7	-.04	435A / 446A	"
18	1/8	" "	17.	4.03	2.00	3.80	8.1		.6	6	-.04	505A / 514A	"
19	2/1	Moon-Blunt	23.	11.35	3.29	4.27	37.		Sur	8	+.02	1055A / 1107A	"
20	2/1	" "	23.5	12.75	3.60	4.27	47.		Sur	8	-.02	1116A / 1125A	"
21	2/1	" "	24.0	11.58	4.96	4.25	49.		Sur	8	-.02	1133A / 1143A	"
22	2/1	" "	24.0	12.5	4.54	4.23	48.		Sur	8	-.02	1150A / 1201P	"
23	2/1	" "	22.5	8.53	3.57	4.03	30.		.6	8	-.01	1259P / 108P	"
24	2/1	" "	19.0	7.48	3.38	3.97	25.		.6	7	-.02	119P / 126P	"
25	2/1	" "	18.8	7.25	3.51	3.93	25.		.6	7	-.02	135P / 145P	"
26	2/1	" "	17.9	6.26	3.08	3.90	19.		.6	7	-.08	223P / 231P	"
27	2/1	" "	17.3	5.58	3.12	3.90	17.		.6	7	0	251P / 300P	"
28	2/1	" "	17.3	5.70	3.12	3.88	18.		.6	7	-.01	311P / 318P	"
29	2/2	Andren-Eckert	17.	7.85	3.34	3.65	26.		.6	9	0	851A / 904A	FC 12
30	2/2	" "	17.	7.60	3.16	3.64	24.		.6	9	-.01	907A / 920A	"
31	2/3	" "	18.	11.72	3.91	3.87	46.		.6	9	+.06	156P / 209P	"
32	2/3	" "	18.	12.50	4.56	3.95	57.		.6	9	+.05	210P / 221P	"
33	2/3	" "	23.	16.30	4.50	4.15	73.		.6	11	+.30	223P / 237P	"
34	2/3	" "	26.	32.75	4.37	4.48	143.		.6	8	-.15	315P / 347P	"
35	2/3	" "	27.	30.50	5.34	4.40	163.		.6	7	0	350P / 408P	"
36	2/3	" "	23.	29.05	4.09	4.33	119.		.6	8	-.06	440P / 458P	"
37	2/5	Moon	1.8	.10	.50	2.90	.05		.6	2	0	1251P / 1252P	FC 22
38	2/25	Andren-Eckert	14.4	7.69	3.05	3.54	23.		.6	8	0	700P / 715P	FC 12
39	2/25	" "	14.4	7.69	3.07	3.54	24.		.6	7	0	717P / 730P	"
40	2/25	Andren-Eckert	14.4	7.79	3.29	3.56	26.		.6	7	0	800P / 812P	FC 12
41	2/25	" "	14.4	7.86	3.37	3.56	26.		.6	7	0	915P / 930P	"
42	2/26	Moon-Foote	1.6	.08	.50	2.92	.04		.6	2	0	310P / 312P	FC 22
43	3/31	Moon	1.2	.06	.50	2.90	.03	Float	2	0		1235P / 1236P	-
44	5/27	"	1.6	.13	.55	2.97	.07	Float	2	-		1108A / 1109A	-
45	6/27	"	1.8	.16	.38	3.12	.06		.6	2	0	441P / 442P	FC 22
46	7/25	"	1.5	.12	.17	3.12	.02		.6	2	0	339P / 340P	"
47	8/21	Bonadiman	1.0	.10	.30	3.04	.03		.6	2	0	330P	FC 40
48	9/26	Moon	0.80	.04	.75	3.02	.03	Float	2	0		431P / 432P	-

F.C. Dist. Form 52 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

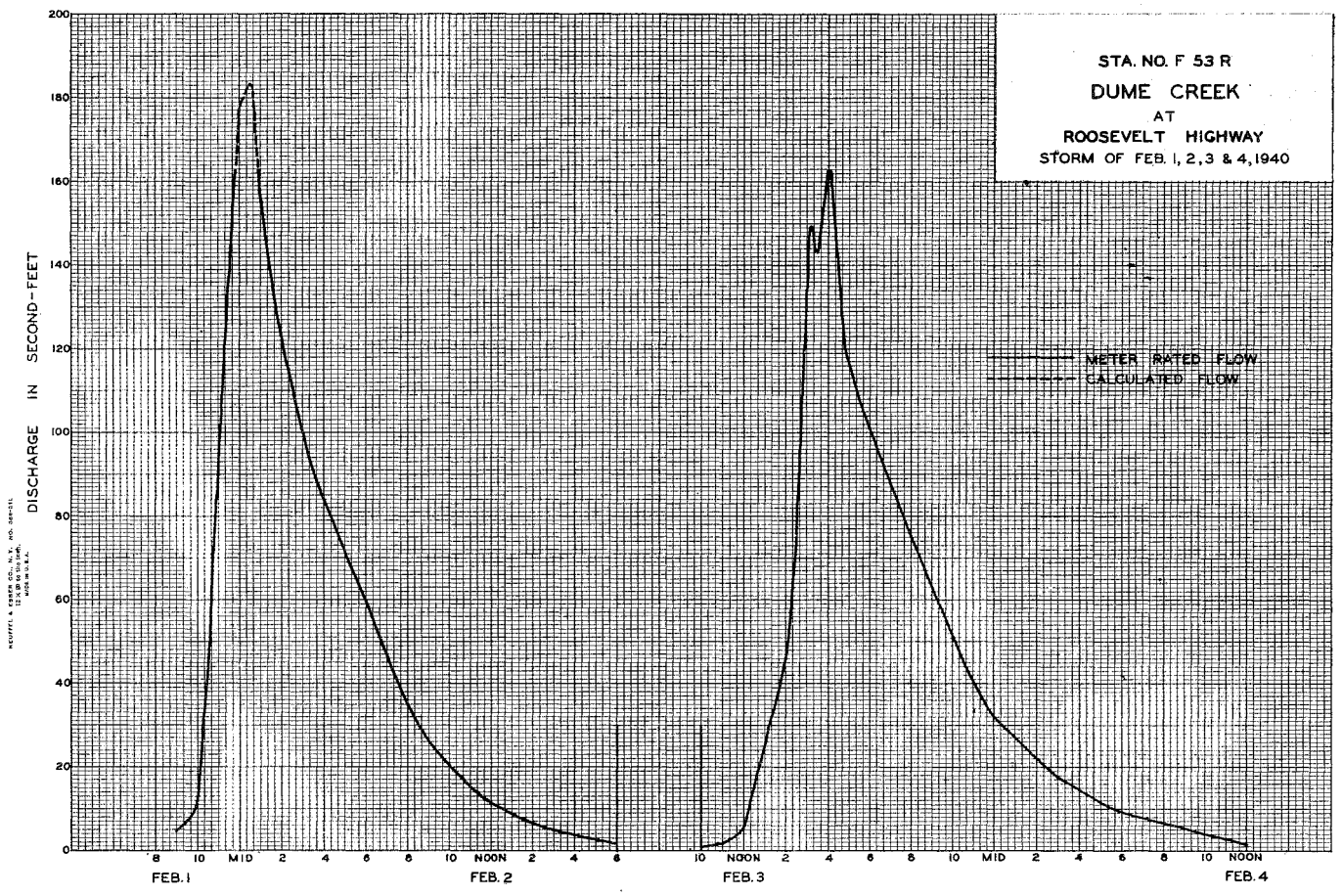
Sta. No. F53R

Daily discharge, in second-feet of DUME CREEK at Roosevelt Highway, for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0	0	17	0	0	0.1	0.1	0.1	+	+
2	0	0	0	0	37	0	0	+	0.1	0.1	+	+
3	0	0	0	0	39	0	+	+	0.1	0.1	+	+
4	0	0	0	0	65	+	+	0	0.1	0.1	+	+
5	0	0	0	0	E 0.1	0.1	+	0	0.1	0.1	+	+
6	0	0	0	0	E +	0.1	0.1	0	0.1	0.1	+	+
7	0	0	0	0	E +	0	0.1	+	0.1	0.1	+	+
8	0	0	0	E 3.2	0	0	+	+	0.1	+	+	+
9	0	0	0	0	0	0	+	+	0.1	+	+	+
10	0	0	0	0	0	0	+	0	0.1	+	+	+
11	0	0	0	0	0	0	+	0	0.1	+	+	+
12	0	0	0	0	0	0	+	0	0.1	+	+	+
13	0	0	0	0	0	0	+	0	0.1	+	+	+
14	0	0	0	0	E +	0	+	0	0.1	+	+	+
15	0	0	0	0	0	0	+	0	0.1	+	+	+
16	0	0	0	0	0	0	0	+	0.1	+	+	+
17	0	0	0	0	0	0	0	0.1	0.1	+	+	+
18	0	0	0	0	0	0	+	+	0.1	+	+	+
19	0	0	0	0	0	E +	+	0.1	0.1	+	+	+
20	0	0	0	0	0	E +	+	0.1	0.1	+	+	+
21	0	0	0	0	0	E +	+	0.1	0.1	+	+	+
22	0	0	0	0	0	E +	+	0.1	0.1	+	+	+
23	0	0	0	0	0	E +	+	0.1	0.1	+	+	+
24	0	0	0	0	0	E +	+	0.1	0.1	+	+	+
25	0	0	0	0	5	E +	+	0.1	0.1	+	+	+
26	0	0	0	0	17	E +	0.1	0.1	0.1	+	+	+
27	0	0	0	0	0.1	E +	0.1	0.1	0.1	+	+	+
28	0	0	0	0	+	E +	+	0.1	0.1	+	+	+
29	0	0	0	0	0	E +	+	0.1	0.1	+	+	+
30	0	0	0	0		E +	0.1	0.1	0.1	+	+	+
31	0		0	0		E 0.1		0.1		+	+	
	0	0	0	3.2	106.4	0.3	0.5	1.5	3.0	0.7	+	+
MEAN	0	0	0	0.10	3.67	0.01	0.02	0.05	0.10	0.02	+	+
ACRE-FEET	0	0	0	6.3	211	0.60	1.0	3.0	6.0	1.4	+	+

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

YEAR OF PERIOD MEAN 0.32 ACRE-FEET 229



STATION F104R

EATON WASH at Ellis Lane

LOCATION:

On the 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, 1939 to September 30, 1940.

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, 1940. From December 28, 1930 to November 10, 1931, the recorder was located at Broadway (now designated as Station F104B-R)

EXTREMES OF DISCHARGE:

1939-1940
Maximum 341 second-feet, February 2.
Minimum no flow most of year.
1930-1940
Maximum 1900 second-feet, estimated March 2, 1938.
Minimum no flow most of each year.

ACCURARY:
Fair.
Shifting control.

OPERATION:

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

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION
STATION NO. F 104-R

DISCHARGE MEASUREMENTS OF EATON WASH
AT Ellis Lane DURING THE YEAR ENDING SEPTEMBER 30, 1940

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	RATIO Percent Dif.	METHOD	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
102	12/23	Lindsay-Ingram	10.0	1.66	1.56	3.13	2.6		.6	5	-.02	226P 230P	FC 28
103	12/23	Haig-Eckert	2.5	0.18	0.33	2.85	0.06	Surf.	.4		0	515P 520P	FC 33
104	1/4	" "	7.0	2.16	2.22	3.18	4.8		.6	4	0	1059A 1103A	"
105	1/4	" "	7.0	1.65	1.25	3.00	2.1		.6	4	-.01	147P 151P	"
106	1/4	" "	3.0	0.25	0.60	2.85	0.15		.6	4	+.02	257P 300P	"
107	1/7	" "	Two	Channels		4.07	193.		.6	13	-.05 +.10	912P 934P	"
108	1/7	" "	"	"		4.37	269.		.6	11	-.12	1055P 1112P	"
109	1/8	" "	"	"		3.73	107.		.6	8	+.04	305A 312A	"
110	1/8	Haig	1.0	.05	.40	3.14	0.02	Surf.	.1		0	735A 737A	"
111	1/23	Haig-Eckert	19.5	5.32	2.73	3.43	15.		.6	6	-.04	617P 623P	"
112	2/1	Haig-Mellen	Two	Channels		3.78	113.		.6	10	-.16	1015A 1027A	"
113	2/1	" "	23.5	10.34	3.91	3.49	40.		.6	8	-.01	1108A 1115A	"
114	2/1	Haig	3.0	0.30	0.77	3.09	0.23	Surf.	.3		0	120P 124P	"
115	2/1	Haig-Mellen	24.5	13.79	5.00	3.65	69.		.6	7	0	640P 646P	"
116	2/1	" "	11.3	2.48	2.38	3.24	5.9		.6	5	-.01	937P 940P	"
117	2/2	" "	Two	Channels		3.81	174.		.6	12	-.20	323A 347A	"
118	2/3	" "	24.0	10.86	4.41	3.54	48.		.6	7	-.01	405P 410P	"
119	2/14	Lindsay	9.5	1.44	1.82	3.27	2.6		.6	5	+.02	1136A 1141A	FC 28
120	2/25	Haig-Mellen	Two	Channels		3.94	170.		.6	13	-.06	516P 532P	FC 33
121	2/25	" "	24.0	6.22	1.94	3.50	12.	Surf.	.6	7	-.02	855P 905P	"
122	3/31	Haig	17.0	5.16	2.68	3.26	14.		.6	5	0	803A 808A	"
123	3/31	Haig-Mellen	24.0	4.79	1.88	3.26	9.0		.6	5	-.02	1132P 1136P	"
124	4/26	Lindsay	21.0	6.64	3.83	3.38	25.		.6	7	+.08	256P 303P	FC 28

F.C. Dist. Form #2 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

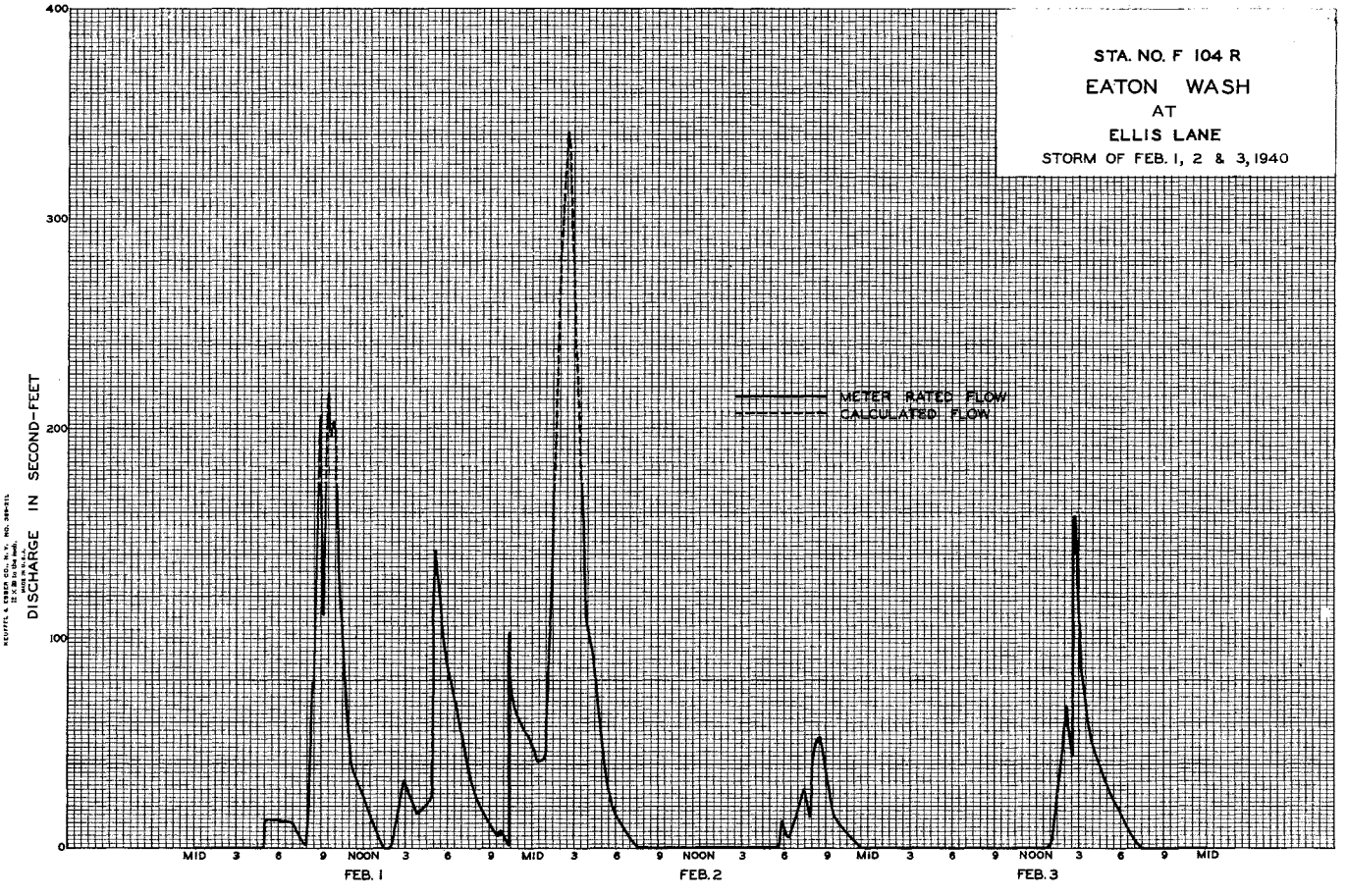
Sta. No. F104R

Daily discharge, in second-feet of EATON WASH at Ellis Lane, for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0	0	38	0	13	0	0	0	0	0
2	0	0	0	0	38	0	0	0	0	0	0	0
3	0	0	0	0	12	0	0	0	0	0	0	0
4	0	0	0	14	0	0	0	0	0	0	0	0
5	0	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	45	0	0	0	0	0	0	0	0
8	0	0	0	21	0	0	0	0	0	0	0	0
9	0	0	0	09	0	0	0	0	0	0	0	0
10	0	0	0	07	0	0	0	0	0	0	0	0
11	0	0	0	07	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	0
14	0	0	0	0	02	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	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	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	06	09	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	24	0	0	0	0	0	0	0
26	0	0	0	0	+	0	10	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
29	0	0	0	0	23	0	0	0	0	0	0	0
30	0	0	0	0		0	0	0	0	0	0	0
31	0		0	18		41		0		0		
	0	+	06	724	1145	41	113	0	0	0	0	0
MEAN	0	+	0.02	2.34	3.95	0.13	0.38	0	0	0	0	0
ACRE-FEET	0	+	1.2	144	227	8.1	22	0	0	0	0	0

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

YEAR OR PERIOD — MEAN 0.55 — ACRE-FEET 402



STATION F149R

LIMEKILN WASH at Devonshire Avenue

LOCATION:

In the center on the downstream end of a double box culvert under Devonshire Avenue about 2⅛ miles east of Chatsworth.

DRAINAGE AREA:

3.8 square miles

CHANNEL AND CONTROL:

Channel - sand, gravel and small boulders.
Control - concrete, located 15 feet below the station.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flows measured from top of culvert.

RECORDER:

Installed November 9, 1939 in an F. C. standard type house over a 12 inch iron pipe stilling well. A vertical rational recorder was in service from November 9, 1939 to September 30, 1940.

REGULATION:

None.

RECORDS AVAILABLE:

November 9, 1939 to September 30, 1940.

EXTREMES OF DISCHARGE:

1939-1940 (November 9 to September 30, 1940)
Maximum 12 second-feet January 8.
Minimum no flow most of year.

ACCURACY:

Fair.

OPERATION:

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

F. C. D. FORM 104 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 149-R

DISCHARGE MEASUREMENTS OF LIMEKILN WASH

AT ~~XXXX~~ Devonshire Avenue DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
												1255P	
1	1/11	Luce-Pardieck	2.4	.46	1.50	.88	.70		.6	5	0	100P	FC 39
2	1/23	Luce	3.0	.42	1.60	.82	.65		.6	6	0	630P 635P	"
3	2/1	Luce-Pardieck	8.3	2.31	2.94	.97	6.8		.6	6	+.01	335P 354P	FC 41
4	2/1	" "	7.2	1.52	2.31	.89	3.5		.6	6	-.12	443P 448P	"
5	2/1	" "	5.8	1.20	1.73	.70	2.1		.6	5	0	837P 842P	"
6	2/1	Miller-Truitt	4.9	.91	1.12	.58	1.0		.6	5	-.01	1030P 1035P	FC 35
7	2/3	" "	7.7	2.01	2.22	.82	4.5		.6	8	-.08	335P 345P	"
8	2/3	" "	6.8	1.21	1.53	.69	1.8		.6	6	-.02	450P 500P	"
9	2/25	" "	6.7	2.10	1.71	.59	3.6		.6	6	-.02	615P 620P	"
10	2/29	Luce	1.2	.12	.56	.24	.04		.6	2	0	852A 854A	FC 39
11	3/31	"	4.0	.95	.82	.40	.80		.6	5	-.01	810A 815A	"
12	4/1	Luce-Pardieck	4.0	.96	.99	.40	.95		.6	4	+.03	319A 326A	"

F. C. Dist. Form 52 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

Sta. No F149R

Daily discharge, in second-feet of LIMEKILN WASH at Devonshire Avenue, for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0	0	1.9	0	0.2	0	0	0	0	0
2	0	0	0	0	0.3	0	0	0	0	0	0	0
3	0	0	0	0	1.7	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
8	0	0	0	0.7	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	0.1	0	0	0	0	0	0	0	0
11	0	0	0	0.2	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	0
14	0	0	0	0	0.1	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	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	0.1	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	1.0	0	0	0	0	0	0	0
26	0	0	0	0	0.1	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		0.4		0		0	0	
	0	0	0	1.1	5.1	0.4	0.2	0	0	0	0	0
MEAN	0	0	0	0.04	0.18	0.01	0.01	0	0	0	0	0
ACRE-FEET	0	0	0	2.2	10	0.79	0.40	0	0	0	0	0

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

YEAR OR PERIOD MEAN 0.02
ACRE FEET 13

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 riprap 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 Station F65R 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 service from November 30, 1939 to September 30, 1940.

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, 1940.

EXTREMES OF DISCHARGE:

1939-1940
Maximum 63 second-feet January 7.
Minimum no flow for several months.
1929-1940
Maximum 960 second-feet, estimated, March 2, 1938.
Minimum no flow several months each year.

ACCURACY:

Fair.
Records occasionally interpolated due to recorder clock failure and obstruction of communication by sand.

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.

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 65-BR

DISCHARGE MEASUREMENTS OF LITTLE DALTON CREEK

Above Mouth of Canyon DURING THE YEAR ENDING SEPTEMBER 30, 19 40

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	RATING PERCENT DIS.	METH OD	MEAS SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
40	1/4	Brewster	1.0	.23	1.08	.31	.25		.6	2	0	730A / 733A	FC 8
41	1/7	"	5.0	1.18	2.85	.57	3.4		.6	5	+.02	520P / 526P	"
42	1/7	Brewster-Pettis	12.0	5.80	5.00	1.34	29.		.6	6	+.12	1110P / 1120P	"
43	1/8	" "	16.0	8.24	5.15	1.73	42.		.6	7	-.08	158A / 205A	"
44	1/8	" "	8.0	2.52	3.30	.73	8.3		.6	4	0	620A / 630A	"
45	1/8	" "	7.0	1.63	1.41	.63	2.3		.6	3	0	1130A / 1136A	"
46	1/9	Brewster	5.0	1.38	1.43	.48	2.0		.6	5	-.01	924A / 930A	"
47	1/11	"	4.0	.86	.92	.40	.80		.6	4	0	1124A / 1130A	"
48	1/18	"	3.0	.48	.75	.35	.36		.6	3	0	300P / 305P	"
49	1/25	"	3.0	.50	.68	.36	.34		.6	3	0	810A / 815A	"
50	2/1	"	4.0	1.18	2.81	.48	3.3		.6	4	0	100P / 107P	"
51	2/2	"	4.0	1.14	1.89	.47	2.2		.6	4	0	1225P / 1230P	"
52	2/3	"	10.0	2.68	3.37	.71	9.1		.6	5	0	210P / 217P	"
53	2/8	"	4.0	.98	.76	.40	.75		.6	4	0	335P / 340P	"
54	2/15	"	4.0	.88	.85	.37	.75		.6	4	0	310P / 315P	"
55	2/21	"	3.0	.52	.81	.34	.42		.6	3	0	220P / 225P	"
56	2/25	Brewster-Pettis	10.0	3.44	2.56	.68	8.8		.6	5	+.01	718P / 725P	"
57	2/26	" "	4.0	1.24	1.55	.49	1.9		.6	4	0	1055A / 1100A	"
58	2/29	Brewster	4.0	1.00	1.59	.48	1.6		.6	4	0	1145A / 1150A	"
59	3/7	"	4.0	.76	.88	.38	.65		.6	4	0	215P / 220P	"
60	3/14	"	4.0	.70	.76	.36	.55		.6	4	0	420P / 425P	"
61	3/28	"	3.0	.48	.75	.35	.36		.6	3	0	220P / 225P	FC 24
62	3/31	"	4.0	.86	1.07	.42	.90		.6	4	0	626A / 630A	"
63	3/31	Brewster-Pettis	4.0	1.06	1.58	.50	1.7		.6	4	-.01	1225P / 1230P	FC 24
64	4/1	Brewster	4.0	.72	1.60	.46	1.2		.6	4	0	1020A / 1026A	FC 24
65	4/4	"	4.0	.84	.74	.39	.60		.6	4	0	305P / 310P	"
66	4/11	"	2.0	.43	.81	.35	.35		.6	4	0	310P / 315P	"
67	4/18	"	3.0	.46	.54	.33	.25		.6	3	0	300P / 305P	"
68	4/25	"	3.0	.48	.60	.35	.29		.6	3	0	325P / 330P	"
69	4/27	"	4.0	.82	.89	.43	.75		.6	4	0	900A / 906A	"
70	5/2	"	3.0	.48	.50	.31	.24		.6	3	0	330P / 334P	"
71	5/9	"	1.5	.24	.50	.28	.12		.6	3	0	220P / 224P	"
72	5/16	"	1.0	.18	.56	.26	.10		.6	2	0	356P / 400P	"
73	5/23	"	1.5	.25	.44	.27	.11		.6	3	0	320P / 323P	"
74	5/28	"	2.0	.36	.39	.29	.14		.6	4	0	1100A / 1104A	"
75	6/6	"	2.0	.24	.42	.26	.10		.6	2	0	212P / 215P	"
76	6/12	"	1.0	.12	.50	.24	.06		.6	2	0	925A / 928A	"
77	6/19	"	0.5	.11	.27	.20	.03		.6	1	0	858A / 900A	"

F. C. Dist. Form 59

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

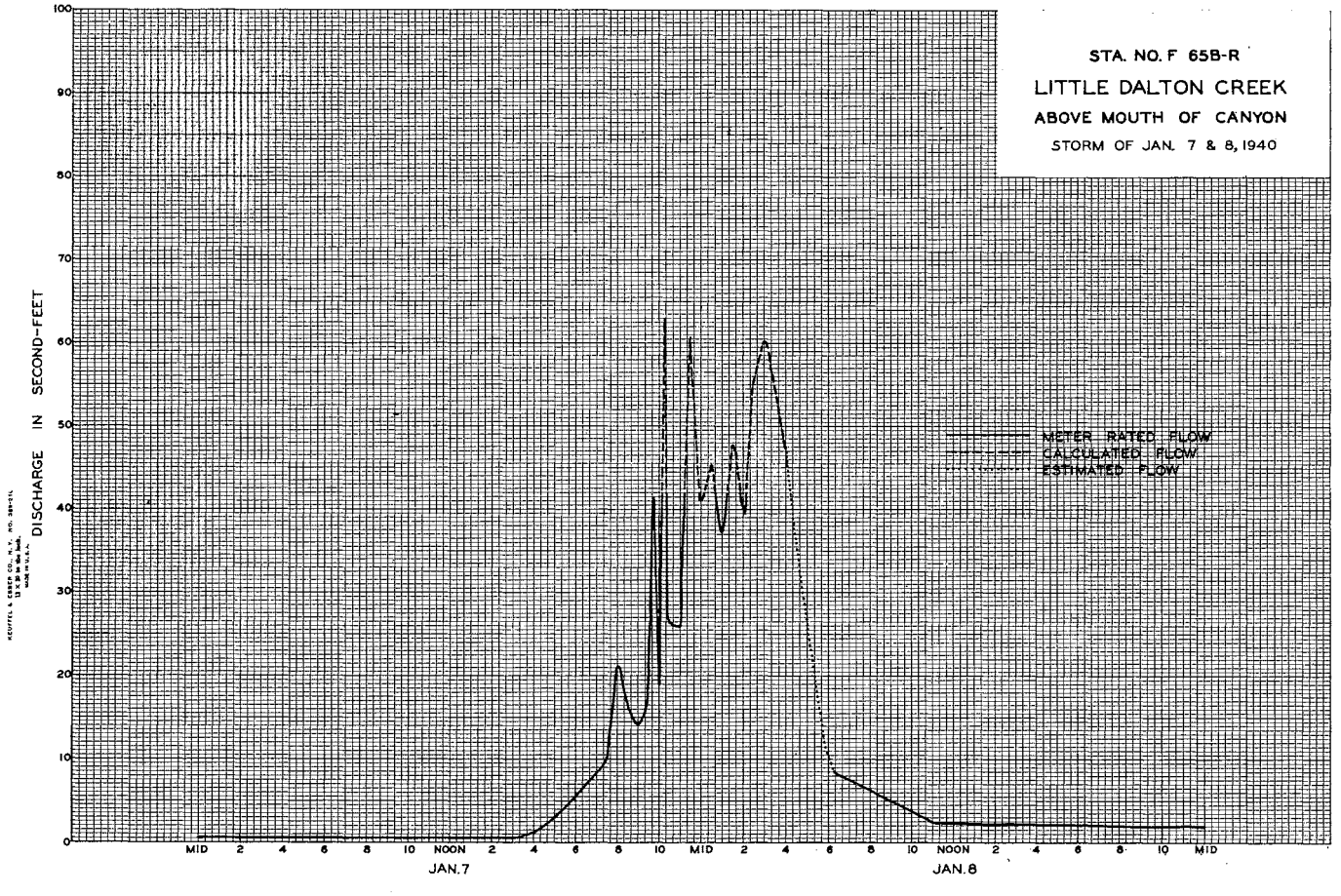
Sta. No. F65B-R

Daily discharge, in second-feet of LITTLE DALTON CREEK above Mouth of Canyon for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0	0	2.6	1.2	1.4	0.4	0.1	0	0	0
2	+	0	0	0	3.2	1.1	0.9	0.3	+	0	0	0
3	+	0	0	0	3.6	1.1	0.8	0.3	0.1	0	0	0
4	+	0	0	0.5	1.5	0.8	0.6	0.3	0.1	0	0	0
5	+	0	0	0.6	1.3	0.8	0.6	0.3	0.1	0	0	0
6	+	0	0	0.6	1.1	0.8	0.6	0.3	0.1	0	0	0
7	0.2	0	0	6.5	1.0	0.6	0.6	0.2	0.1	0	0	0
8	0.1	0	0	13	0.9	0.6	0.6	0.2	0.2	0	0	0
9	0.1	0	0	1.6	0.8	0.7	0.6	0.2	0.1	0	0	0
10	0.1	0	0	1.1	0.8	0.7	0.5	0.2	0.1	0	0	0
11	+	0	0	0.9	0.8	0.7	0.4	0.2	+	0	0	0
12	+	0	0	0.9	0.7	0.7	0.4	0.2	+	0	0	0
13	+	0	0	0.8	0.8	0.6	0.4	0.2	+	0	0	0
14	+	0	0	0.8	0.8	0.6	0.4	0.2	+	0	0	0
15	+	0	0	0.7	0.8	0.6	0.6	0.2	+	0	0	0
16	+	0	0	0.6	0.7	0.6	0.6	0.2	+	0	0	0
17	+	0	0	0.6	0.6	0.6	0.4	0.2	+	0	0	0
18	+	0	0	0.4	0.6	0.6	0.4	0.2	+	0	0	0
19	+	0	0	0.4	0.5	0.6	0.4	0.2	+	0	0	0
20	+	0	0	0.4	0.5	0.6	0.4	0.2	+	0	0	0
21	+	0	0	0.4	0.4	0.6	0.3	0.2	+	0	0	0
22	0	0	0	0.4	0.4	0.6	0.3	0.2	0	0	0	0
23	0	0	0.2	0.5	0.5	0.5	0.3	0.2	0	0	0	0
24	0	0	0.2	0.4	0.5	0.4	0.3	0.1	0	0	0	0
25	0	0	0.2	0.2	3.3	0.4	0.3	0.1	0	0	0	0
26	+	0	0.2	0.2	2.0	0.4	2.6	0.1	0	0	0	0
27	+	0	0.1	0.3	1.4	0.5	0.8	0.1	0	0	0	0
28	+	0	+	0.2	1.2	0.4	0.6	0.1	0	0	0	0
29	0	0	+	0.2	1.7	0.4	0.4	0.1	0	0	0	0
30	0	0	+	0.3		0.4	0.4	0.1	0	0	0	0
31	0		0.1	0.3		2.2		0.1		0	0	
	0.5	0	1.0	33.8	35.0	21.4	17.9	6.1	1.0	0	0	0
Mean	0.02	0	0.03	1.09	1.21	0.69	0.60	0.20	0.03	0	0	0
Acre-Feet	0.99	0	2.0	67	69	42	36	12	2.0	0	0	0

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

Year or Period — Mean 0.32 — Acre-Feet 231



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.
No artificial control.

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. Replaced masonry stilling well with a 24" corrugated iron pipe in May 1940. An Au continuous recorder was in service from October 1, 1939 to September 30, 1940.

REGULATION:

None.

DIVERSIONS:

None.

RECORDS AVAILABLE:

October 1, 1930 to September 30, 1940.

EXTREMES OF DISCHARGE:

1939-1940
Maximum 555 second-feet, January 8.
Minimum no flow part of year.
1930-1940
Maximum 17000 second-feet, estimated, March 2, 1938.
Minimum no flow at times each year.

ACCURACY:

Fair.
Low flows occasionally 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 and operated in cooperation with the U.S.G.S. Water Resources Branch.

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. L1R

DISCHARGE MEASUREMENTS OF LITTLE ROCK CREEK

~~XXXX~~ above Little Rock Dam DURING THE YEAR ENDING SEPTEMBER 30, 1940

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.
45	10-20	Luce	8.5	2.18	1.42	1.60	3.1		.6	5	-	1200N 1205P	FC39
46	10-28	"	9.2	2.51	1.28	1.58	3.2		.6	6	0	1115A 1120A	"
47	11-24	"	8.5	2.37	1.11	1.63	2.6		.6	7	0	1045A 1055A	"
48	12-8	Luce- M. Luce	9.5	2.73	1.04	1.65	2.8		.6	8	0	300P 310P	"
49	1-6	Luce	10.2	3.30	1.54	1.72	5.1		.6	9	0	833A 842A	"
50	1-9	Luce-Pardeick	26.5	15.78	3.45	2.34	55.		.6	12	0	300P 317P	"
51	2-2	Luce	23.0	12.54	2.59	2.12	33.		.6	12	0	733A 745A	FC41
52	2-2	Luce-Pardeick	23.0	13.54	2.58	2.12	35.		.6	12	0	805A 814A	"
53	2-12	Wood	16.5	9.54	2.10	1.72	20.		.6	8	-.01	117P 135P	FC42
54	2-14	Luce	15.0	8.46	2.51	1.70	21.		.6	9	0	945A 1000A	FC39
55	2-17	Luce-Wood	15.0	8.74	1.72	1.85	15.		.6	9	-.02	1113A 1124A	"
56	2-29	Luce	35.5	25.51	3.20	1.83	82.		.6	13	0	110P 120P	"
57	2-29	"	35.0	24.94	3.17	1.82	79.		.6	13	0	205P 218P	"
58	2-29	"	34.5	23.43	3.36	1.82	79.		.6	13	0	236P 248P	"
59	2-29	"	34.5	24.06	3.35	1.81	81.		.6	15	-.01	252P 303P	"
60	3-22	Luce- P. Luce	12.0	8.86	1.35	1.38	12.		.6	7	0	125P 140P	"
61	4-1	Luce-Pardeick	20.5	14.46	2.49	1.65	36.		.6	11	+.01	1139P 1147P	"
62	4-1	" "	20.5	14.58	2.47	1.65	36.		.6	12	0	1148P 1157P	"
63	4-20	Luce	12.5	8.70	1.15	1.34	10.		.6	8	0	450P 500P	"
64	5-17	Luce	11.0	6.41	.96	1.20	6.2		.6	7	0	610P 620P	"
65	5-31	"	5.5	2.08	1.38	3.01	2.9		.6	5	0	600P 610P	"
66	6-28	"	2.7	.67	.84	2.64	.55		.6	5	0	455P 500P	"
67	7-26	"	2.0	.24	.75	2.51	.2		.6	4	0	1235P 1240P	"

F.C. Dist. Form 52 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

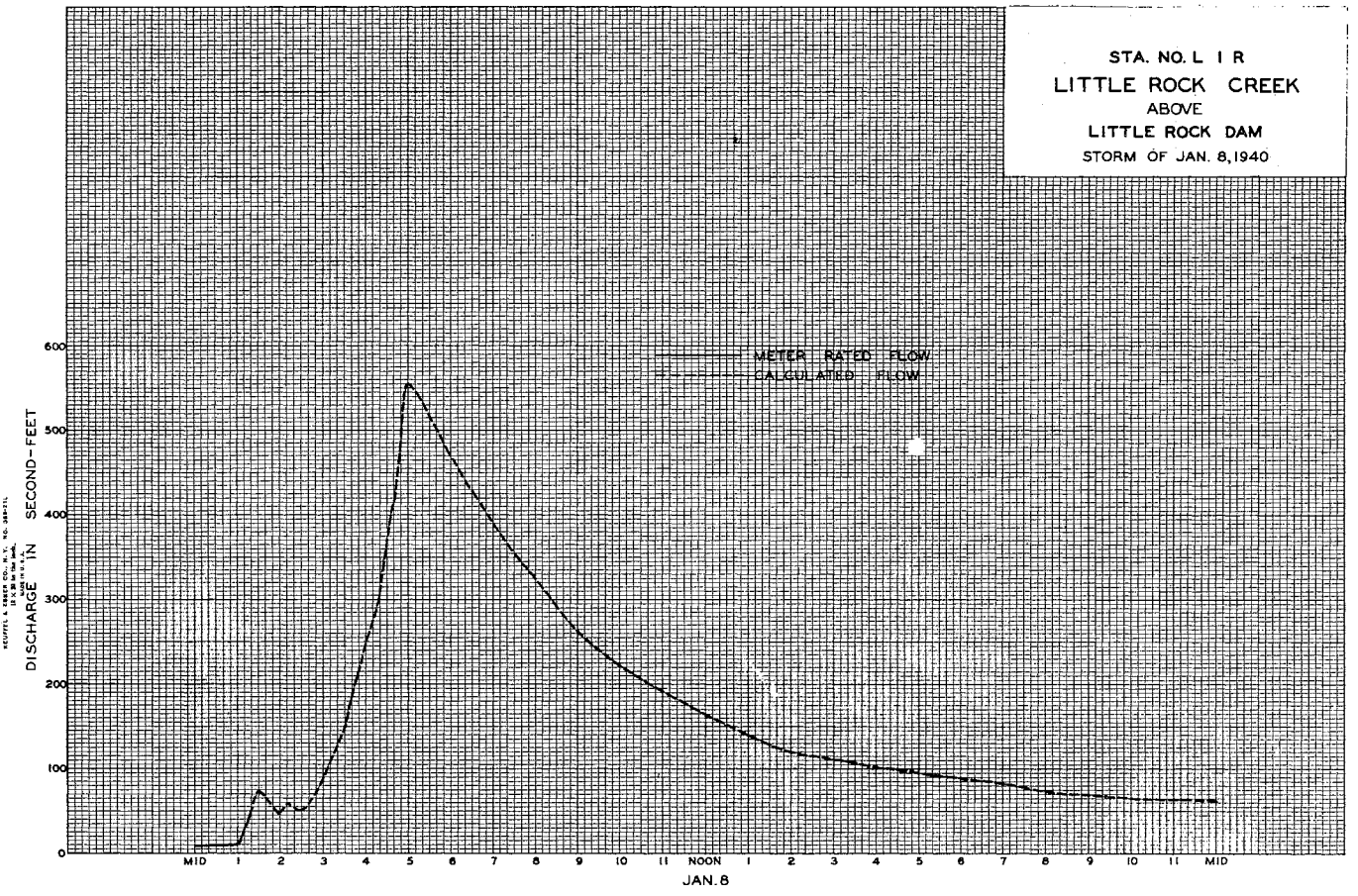
Sta. No L 1 R

Daily discharge, in second-feet of LITTLE ROCK CREEK above Little Rock Dam, for the year ending September 30, 1940

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.4	3.2	2.8	3.4	31	78	39	11	3.0	0.8	0.2	0
2	4.2	3.0	2.8	3.4	37	64	32	9.5	2.6	0.8	0.1	0
3	4.2	3.0	2.8	3.2	83	52	33	8.5	3.0	0.8	0.1	0
4	4.2	3.0	2.8	3.4	63	44	30	9	2.8	0.8	0.1	0
5	4.0	3.0	3.8	4.2	28	38	27	9.5	2.8	0.7	0.1	0
6	3.8	2.8	3.2	4.2	23	32	27	9	2.8	0.5	+	0
7	4.0	2.8	2.8	5	22	32	25	8.5	2.8	0.5	+	0
8	4.0	3.4	2.8	174	22	28	23	8	3.0	0.5	+	0
9	4.0	3.2	2.8	52	22	26	22	8	2.8	0.4	+	0
10	3.8	3.0	2.8	36	22	24	21	8	2.8	0.3	+	0
11	3.8	2.8	2.8	30	22	23	19	7.5	2.4	0.3	0	0
12	3.8	2.8	2.8	31	21	21	17	7	2.2	0.3	0	0
13	3.6	2.8	2.8	25	21	19	16	7	2.2	0.3	0	0
14	3.6	3.0	2.8	22	21	18	15	6.5	2.0	0.2	0	0
15	3.4	3.0	2.6	17	19	17	14	6.5	1.9	0.2	0	0
16	3.4	2.8	2.6	16	17	16	14	6.5	1.8	0.2	0	0
17	3.2	2.8	2.4	15	15	15	13	6.5	1.4	0.2	0	0
18	3.2	2.8	2.4	13	16	15	12	7	1.4	0.2	0	0
19	3.0	2.8	2.4	12	14	15	11	6.5	1.4	0.2	0	0
20	2.4	2.8	2.4	11	14	15	10	5.5	1.4	0.2	0	0
21	2.4	2.8	2.4	11	13	14	9.5	5.5	1.3	0.2	0	0
22	2.6	2.8	2.4	11	13	12	9	5	1.3	0.2	0	0
23	2.6	2.8	3.0	12	16	12	9	4.8	1.2	0.2	0	0
24	2.4	2.8	4.0	14	15	13	9	4.5	1.0	0.2	0	0
25	2.8	3.0	3.2	12	50	13	8.5	4.3	1.0	0.2	0	0
26	3.2	3.0	3.0	12	183	14	13	4.1	0.7	0.2	0	0
27	3.2	3.0	3.0	13	87	17	12	3.8	0.7	0.3	0	0
28	3.2	3.0	2.8	12	69	17	14	3.6	0.7	0.3	0	0
29	3.2	3.0	3.0	12	81	18	14	3.4	0.7	0.3	0	0
30	3.2	3.0	3.0	12		17	12	3.1	0.8	0.2	0	0
31	3.2		3.4	12		36		2.9		0.2	0	
	106.0	88.0	88.6	613.8	1060	772.5	530.0	200.5	56.1	10.9	0.6	0
MEAN	3.42	2.93	2.86	19.8	36.6	25.0	17.7	6.47	1.87	0.35	0.02	0
ACRE-FEET	210	175	176	1220	2100	1540	1050	398	111	22	1.2	0

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

YEAR OR PERIOD MEAN 9.64 ACRE-FEET 7000



STATION F67B-R

LITTLE SANTA ANITA CREEK below Sierra Madre Dam

LOCATION:

On the left (east)bank 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 a service October 1, 1939 to September 30, 1940.

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, 1940.

EXTREMES OF DISCHARGE:

1939-1940
Maximum 84 second-feet, January 8.
Minimum no flow several months during year.
1929-1940
Maximum 620 second-feet, estimated, March 2, 1938.
Minimum no flow several months during year.

ACCURACY:

Poor. Gage Height discharge relation is very inconsistent due to high velocities past gage, and irregularities in the channel bottom. Gage heights and discharges frequently estimated.

OPERATION:

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

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 67B-R

DISCHARGE MEASUREMENTS OF LITTLE SANTA ANITA CREEK

~~At~~ Below Sierra Madre Dam DURING THE YEAR ENDING SEPTEMBER 30, 19 40

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Factor Gil.	METH OD	MEAS. SEC. NO.	C. FT. CHANGE TOTAL	BEGIN END	METER NO.
92	1/7	Lindsay-Keim	11.0	1.46	5.89	.04	8.6		.6	6	0	1139P 1147P	FC 28
93	1/8	" "	Two Channels			-.025	3.6		.6	4	-.01	915A 919A	"
94	1/9	Lindsay	"	"		-.075	1.5		.6	4	0	105P 113P	"
95	2/1	Lindsay-Middleton	"	"		.22	3.6		.6	6	0	1126A 1131A	FC 28
96	2/2	"	"	"		.23	4.9		.6	9	0	719A 725A	"
97	2/2	"	"	"		.18	2.4		.6	7	0	340P 347P	"
98	2/3	"	Three	"		.26	15.		.6	13	0	342P 350P	"
99	2/4	"	"	"		.16	2.9		.6	11	0	1007A 1014A	"
100	2/8	Lindsay	Two	"		.10	.75		.6	6	0	1252P 1257P	"
101	2/25	Lindsay - Middleton	"	"		.23	16.		.6	6	-.02	623P 629P	"
102	2/26	"	"	"		.16	2.4		.6	8	0	938A 945A	"
103	2/26	"	"	"		.12	1.3		.6	8	0	240P 250P	"
104	2/29	"	4.8	.45	2.38	.10	1.1		.6	6	0	1128A 1137A	"
105	3/6	Lindsay	Two Channels			-	.33		.6	4	-	1235P 1238P	"
106	3/31	"	4.0	.44	2.16	-	.95		.6	4	-	845A 850A	"
107	4/1	"	1.7	.15	.80	-	.12		.6	3	-	1054A 1058A	"

F.C. Dist. Form 52 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

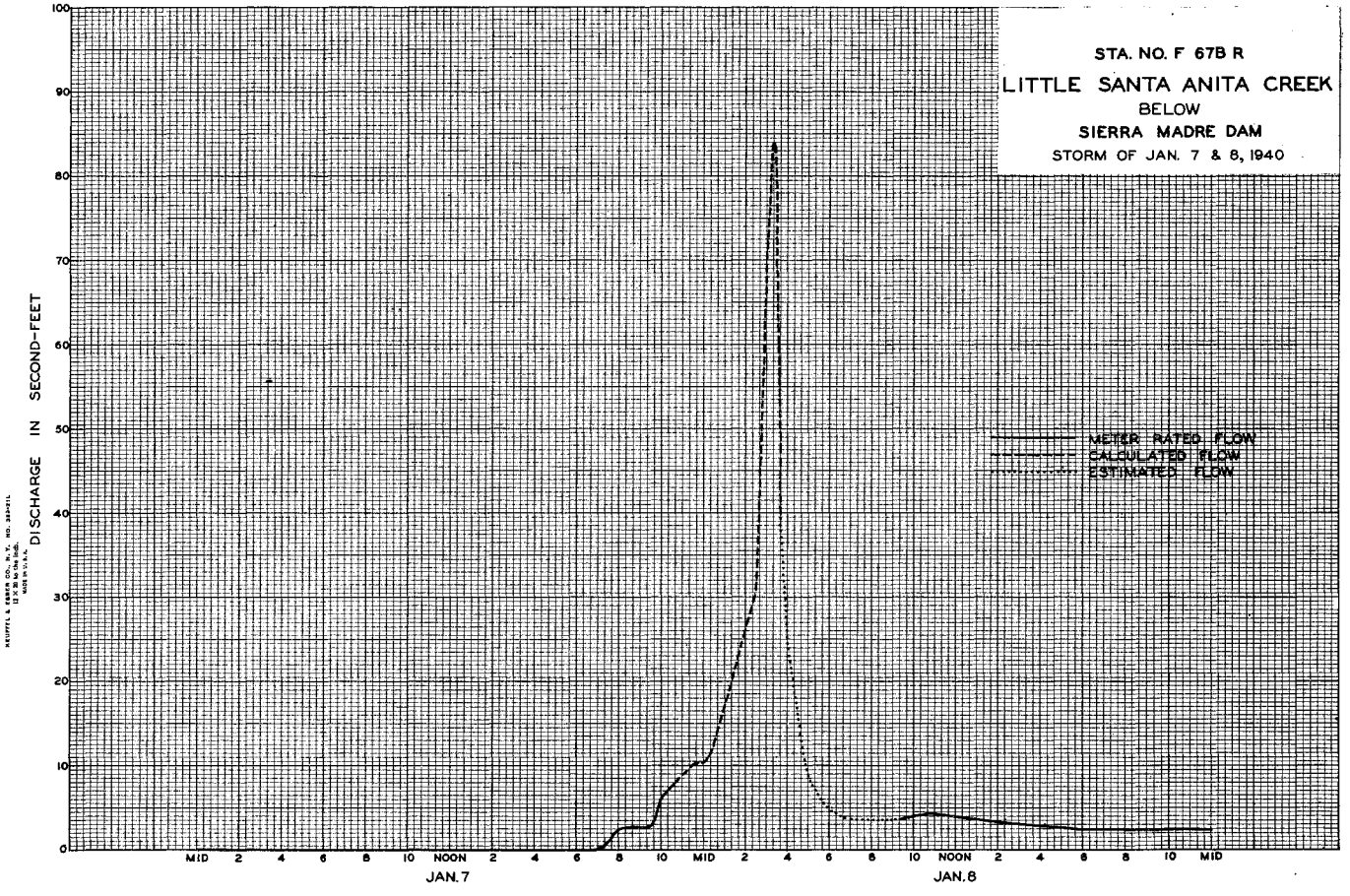
Sta. No. F67B-R

Daily discharge, in second-feet of LITTLE SANTA ANITA CREEK below Sierra Madre Dam, for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	+	0	+	0	2.0	1.2	0.1	0.8	0	0	0	0
2	+	0	+	0	9.5	0.9	0.1	0	0	0	0	0
3	0	0	+	0	10	0.7	0.1	0	0	0	0	0
4	0	0	0	0	2.8	0.7	0.1	0	0	0	0	0
5	0	0	0	0	1.7	0.5	0.1	0	0	0	0	0
6	0	0	0	0	1.4	0.3	0.1	0	0	0	0	0
7	0	0	0	1.0	1.2	0.3	0.1	0	0	0	0	0
8	0	0	0	9	0.9	0.2	0	0	0	0	0	0
9	0	0	0	1.8	0.9	0.2	0	0	0	0	0	0
10	0	0	0	1.1	0.9	0.1	0	0	0	0	0	0
11	0	0	0	1.2	0.7	0.9	0	0	0	0	0	0
12	0	0	0	1.4	0.7	0.4	0	0	0	0	0	0
13	0	0	0	1.4	0.4	+	0	0	0	0	0	0
14	0	0	0	1.4	0.2	+	0	0	0	0	0	0
15	0	0	0	1.1	0.2	+	0	0	0	0	0	0
16	0	0	0	0.8	0.2	+	0	0	0	0	0	0
17	0	0	0	0.5	0.2	0	0	0	0	0	0	0
18	0	0	0	0.9	0.1	0	0	0	0	0	0	0
19	0	0	0	0.9	0.1	0	0	0	0	0	0	0
20	0	0	0	0.9	0.1	0	0	0	0	0	0	0
21	0	0	0	0.7	0.1	0	0	0	0	0	0	0
22	0	0	0	0.4	0.1	0	0	0	0	0	0	0
23	0	0	0	0	0.1	0	0	0	0	0	0	0
24	0	+	0	0.1	0.1	0	0	0	0	0	0	0
25	0	+	0	0.1	5	0	0	0	0	0	0	0
26	0	+	0	0.1	2.8	0	1.5	0	0	0	0	0
27	0	+	0	0.9	1.2	0	2.0	0	0	0	0	0
28	0	+	0	1.2	1.2	0	3.2	0	0	0	0	0
29	0	+	0	0.9	2.7	0	2.8	0	0	0	0	0
30	0	+	0	0.4		0.5	1.7	0	0	0	0	0
31	0		0	0		0.3		0		0	0	
	+		+		47.5		11.9		0		0	
		+		28.2		7.2		0.8		0		0
MEAN	+	+	+	0.91	1.64	0.23	0.40	0.03	0	0	0	0
ACRE-FEET	+	+	+	56	94	14	24	1.6	0	0	0	0

Remarks: + indicates discharge 0.05 sec. ft. or less.
Low flows estimated.

YEAR OR PERIOD — MEAN 0.26 — ACRE-FEET 190



STATION F267R

LITTLE SANTA ANITA CREEK at Woodland Avenue

LOCATION:

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

DRAINAGE AREA:

3.8 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 October 1, 1939 to September 30, 1940.

REGULATION:

Partially regulated by Sierra Madre Dam.
Usual regulation affects 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.

EXTREMES OF DISCHARGE:

1938-1939
Maximum not determined.
Minimum no flow most of year.
1939-1940
Maximum not determined.
Minimum not determined.

ACCURACY:

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

OPERATION:

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

REMARKS:

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

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 267-R

DISCHARGE MEASUREMENTS OF LITTLE SANTA ANITA CREEK

AT Woodland Avenue DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
7	1/7	Lindsay-Keim	10.0	1.84	5.35		9.8		.6	5		1103P 1110P	FC 28
8	1/8	" "	10.0	4.58	10.87		50.		.6	4		220A 227A	"
9	1/8	" "	10.0	2.76	5.52		15.		.6	4		407A 414A	"
10	1/8	" "	10.0	1.31	2.21	.15	2.9		.6	4	-.02	832A 838A	"
11	1/11	Lindsay	10.0	.98	2.90	.17	2.8		.6	5	+.02	356P 402P	"
12	2/1	" - Middleton	10.0	1.28	3.14	.16	4.0		.6	5	+.02	308P 313P	"
13	2/3	" "	10.0	2.51	3.93	.28	9.7		.6	4		216P 220P	"
14	2/25	" "	10.0	3.93	7.73	.39	30.		.6	4		440P 448P	"
15	2/25	" "	10.0	2.87	4.73	.36	14.		.6	4		653P 701P	"
16	2/26	" "	Two Channels			.28	2.7		.6	5		908A 914A	"
17	2/26	Middleton & Lindsay	5.0	.47	2.96	.25	1.4		.6	6		305P 313P	"
18	2/29	" "	3.8	.55	3.06	.18	1.7		.6	5	-.03	1003A 1010A	"

STATION F19R

LITTLE TUJUNGA WASH at Foothill Boulevard

LOCATION:

On downstream side 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 until May 1940.
Concrete control placed below gage May 1940.

DISCHARGE MEASUREMENTS:

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

RECORDER:

Installed December, 1928 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, 1939 to September 30, 1940.

REGULATION:

None.

DIVERSIONS:

None known.

RECORDS AVAILABLE:

December 26, 1928 to September 30, 1940.

EXTREMES OF DISCHARGE:

1939-1940
Maximum 2090 second-feet January 8.
Minimum no flow part of year.
1929-1940
Maximum 8500 second-feet, estimated, March 2, 1938.
Minimum no flow part of each year.

ACCURARY:

Poor due to badly shifting control before installation of concrete control.
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 cooperation with the U.S.G.S. Water Resources Branch.

F. C. D. FORM 104 1M 6-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 19 R

DISCHARGE MEASUREMENTS OF LITTLE TUJUNGA WASH

AT ~~1900~~ Foothill Blvd. DURING THE YEAR ENDING SEPTEMBER 30, 1940

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Dif.	METH OD	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
145	1/4	Luce	9.5	1.32	2.54	2.53	3.4		.6	6	+0.01	1228P 1238P	FC 39
146	1/7	"	22.0	15.48	5.50	2.79	85.		.6	9	+0.15	1105P 1115P	"
147	1/7	"	22.0	18.30	6.59	3.16	121.		.6	9	+0.51	1115P 1125P	"
148	1/7	"	47.0	61.32	8.80	4.16	538.		.6	11	+0.01	1145P 1210A	41
149	1/8	Miller	13.5	2.55	2.13	1.29	5.4		.6	7	0	1110A 1120A	35
150	1/9	"	12.0	2.95	2.84	1.50	8.4		.6	8	0	1145A 1155A	"
151	1/10	"	16.5	2.79	2.46	1.62	6.9		.6	8	0	400P 415P	"
152	1/11	Luce-Pardieck	5.5	1.24	3.10	1.75	3.8		.6	5	0	842A 847A	39
153	1/16	Miller	4.8	.58	1.43		.85		.6	5		950A 1000A	35
154	1/17	"	2.6	.41	1.22	2.04	.50		.6	5	0	850A 900A	"
155	1/18	Luce	1.9	.20	.75	1.85	.15		.6	4	0	445P 450P	39
156	1/22	Miller	2.0	.18	.67	1.80	.12		.6	4	0	200P 210P	"
157	1/23	Luce-Miller	10.3	2.92	3.75	1.89	11.		.6	7	+0.02	750P 755P	"
158	1/24	Miller	1.0	.04	.25	1.75	.01		.6	2	0	1115A 1120A	35
159	2/1	Luce- Pardieck	26.0	8.41	4.91	2.13	41.		.6	7	-0.02	720P 735P	39
160	2/2	" "	50.5	12.87	4.13	2.51	53.		.6	12	-0.02	414A 426A	41
161	2/2	Miller-Truit	31.5	7.56	2.78	2.34	21.		.6	14	+0.02	1020A 1030A	35
162	2/3	" "	26.0	7.79	3.59	2.46	28.		.6	11	0	915P 925P	"
163	2/7	Miller-C.Miller	20.1	3.66	1.69	2.43	6.2		.6	11	0	1145A 1155A	"
164	2/8	Luce	4.0	.89	3.41	2.46	3.0		.6	5	+0.02	535P 540P	39
165	2/15	Luce	2.0	.17	1.23	2.62	.19		.6	4		510P 515P	FC39
166	2/25	Luce-Pardieck	Two channels			2.83	56.		.6	13	0	453P 502P	"
167	2/25	" "	"	"		2.91	56.		.6	13	+0.01	513P 524P	"
168	2/25	" "	"	"		2.91	48.		.6	11	-0.04	524P 533P	"
169	2/25	Luce-Pardieck	54.5	15.92	4.39	2.84	70.		.6	13	-0.07	548P 558P	FC 39
170	2/25	" "	54.5	16.19	4.23	2.84	69.		.6	13	0	558P 610P	"
171	2/25	" "	Two channels			2.94	28.		.6	10	-0.05	1149P 1156P	"
172	2/26	" "	"	"		2.94	29.		.6	11	+0.01	1210A 1218A	"
173	2/26	" "	29.5	7.40	3.65	2.93	27.		.6	10	-0.06	1218A 1226A	"
174	2/26	" "	10.0	2.16	3.80	2.66	8.2		.6	5	+0.01	1123A 1126A	"
175	2/26	" "	9.0	2.00	3.93	2.67	7.9		.6	5	0	1126A 1128A	"
176	2/27	Luce	8.5	1.27	1.98	2.68	2.5		.6	6	0	525P 530P	"
177	2/29	"	Two channels			2.67	9.7		.6	12	+0.02 -0.05	935A 945A	"
178	3/1	"	15.5	1.83	2.39	2.63	4.4		.6	9	0	951A 1000A	"
179	3/8	"	5.5	.58	1.24	2.65	.70		.6	5	0	1050A 1055A	"
180	3/14	"	1.0	.11	.46	2.47	.05		.6	2	0	101P 104P	"
181	3/21	Luce-Lundwall	1.0	.52	.30	2.57	.16		.6	2	0	920A 922A	"
182	3/31	Luce	Two channels			2.92	56.		.6	14	-0.08	930A 945A	"
183	4/1	Luce-Pardieck	"	"		2.98	15.		.6	13	-0.05	636A 645A	"
184	4/1	Miller-M.Miller	11.5	1.51	1.22	2.76	1.8		.6	8	-0.02	450P 500P	35
185	4/3	Miller	4.2	.47	.87	2.68	.41		.6	6	0	1015A 1020A	"
186	4/26	Luce	Two channels			2.83	9.6		.6	7	+0.01	610A 625A	39
187	4/26	Miller	6.5	.73	1.47	2.69	1.1		.6	7	0	1235P 1245P	35
188	4/27	"	3.5	.29	1.31	2.74	.38		.6	4	0	925A 930A	"

F.C. Dist. Form 53 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

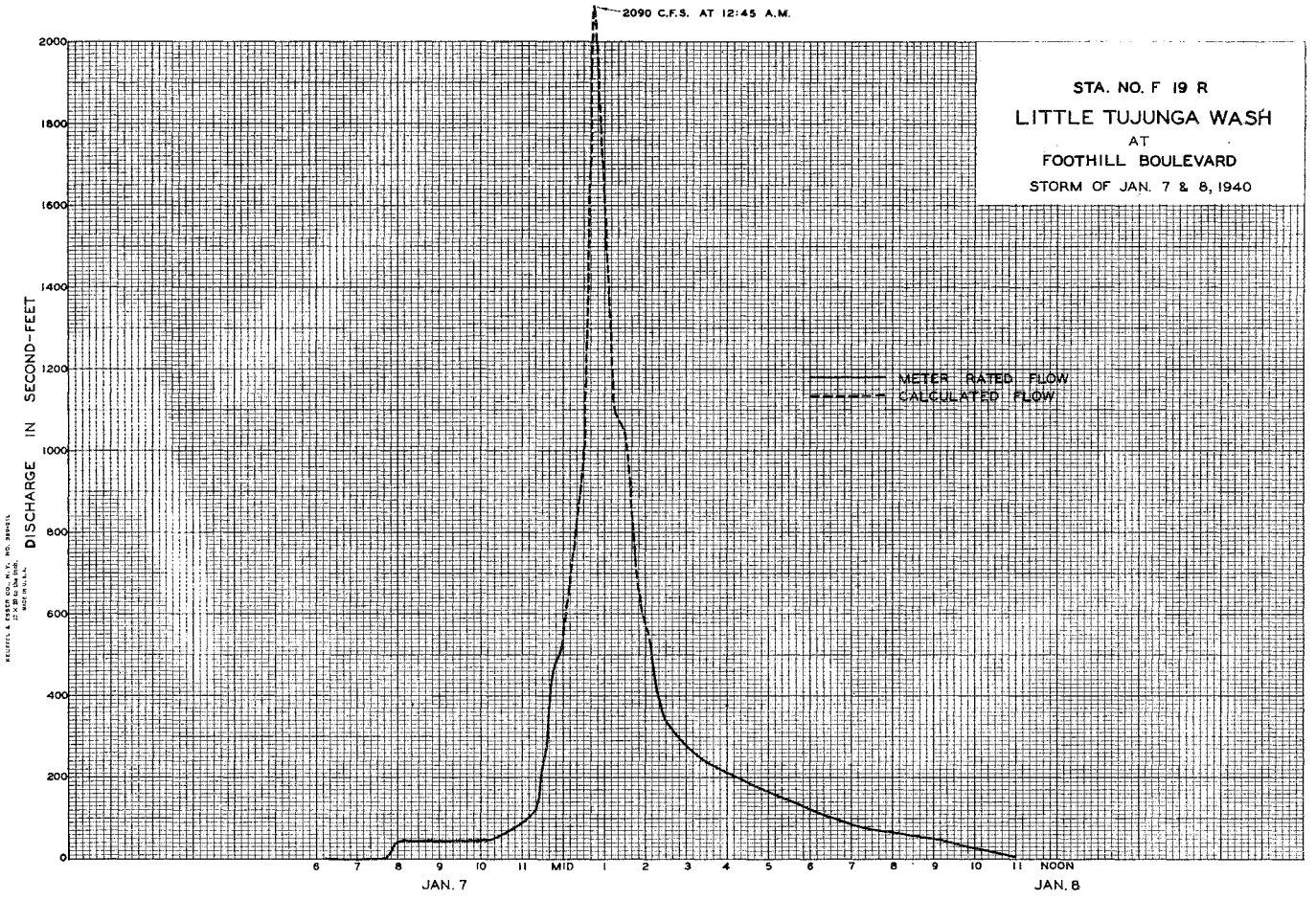
Sta. No. F 19 R

Daily discharge, in second-feet of LITTLE TUJUNGA WASH at Foothill Blvd., for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0	0	30	36	8	0	0	0	0	0
2	0	0	0	0	27	E 39	04	0	0	0	0	0
3	0	0	0	0	18	E 34	03	0	0	0	0	0
4	0	0	0	E 13	E 15	E 28	01	0	0	0	0	0
5	0	0	0	5	E 12	E 23	+	0	0	0	0	0
6	0	0	0	02	E 9	E 18	+	0	0	0	0	0
7	0	0	0	18	6.5	E 12	+	0	0	0	0	0
8	0	0	0	148	1.4	E 07	+	0	0	0	0	0
9	0	0	0	7.5	0.6	E 06	+	0	0	0	0	0
10	0	0	0	6	0.2	E 05	+	0	0	0	0	0
11	0	0	0	3.2	0.1	E 04	0	0	0	0	0	0
12	0	0	0	E 2.7	+	E 03	0	0	0	0	0	0
13	0	0	0	E 2.2	+	E 02	0	0	0	0	0	0
14	0	0	0	E 1.8	+	E 01	+	0	0	0	0	0
15	0	0	0	E 1.3	0.1	E +	+	0	0	0	0	0
16	0	0	0	E 0.8	+	+	+	0	0	0	0	0
17	0	0	0	E 0.5	+	+	0	0	0	0	0	0
18	0	0	0	E 0.2	0	+	0	0	0	0	0	0
19	0	0	0	E 0.2	0	+	0	0	0	0	0	0
20	0	0	0	E 0.1	0	0	0	0	0	0	0	0
21	0	0	0	E 0.1	+	+	0	0	0	0	0	0
22	0	0	0	E 0.1	+	+	0	0	0	0	0	0
23	0	0	0.4	0.8	+	+	0	0	0	0	0	0
24	0	0	0	0.1	+	+	+	0	0	0	0	0
25	0	0	0	+	17	0	+	0	0	0	0	0
26	0	0	0	+	10	0	19	0	0	0	0	0
27	0	0	0	+	2.1	+	0.5	0	0	0	0	0
28	0	0	0	+	3.8	+	+	0	0	0	0	0
29	0	0	0	+	10	+	0	0	0	0	0	0
30	0	0	0	0		+	0	0	0	0	0	0
31	0		0	0		38		0		0	0	
	0	0	0.4	211.8	152.8	60.0	28.3	0	0	0	0	0
MEAN	0	0	0.01	6.83	5.27	1.94	0.94	0	0	0	0	0
ACRE-FEET	0	0	0.8	420	303	119	56	0	0	0	0	0

Remarks: + indicates discharge 0.05 sec. ft. or less.
E indicates estimated or interpolated between meas.

YEAR OR PERIOD — MEAN 1.24 — ACRE FEET 899



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 foot Cipolletti 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, 1939 to December 19, 1939. A horizontal rational recorder was in service from December 19, 1939 to September 30, 1940.

REGULATION:

Flow regulated by Live Oak Dam.

DIVERSIONS:

None.

RECORDS AVAILABLE:

January 4, 1928 to September 30, 1940.

EXTREMES OF DISCHARGE:

1939-1940
Maximum 3.8 second-feet January 7.
Minimum no flow for most of year.
1928-1940
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.

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 31 R

DISCHARGE MEASUREMENTS OF LIVE OAK CREEK

XX NEAR mouth of Canyon DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
28	1/7	Brewster-Pettis	5.0	1.74	0.67	0.29	1.2		.6	4	-0.02	1150P 1155P	FC 8
29	2/3	Brewster	2.0	0.87	0.67	0.20	0.60		.6	4	-0.01	255P 300P	"
30	2/25	Brewster-Pettis	1.0	0.12	0.33	0.04	0.04		.6	2	0	800P 804P	"
31	3/31	"	0.5	0.11	0.30	0.02	0.03		.6	1	0	115P 117P	24
32	6/5	"	1.5	0.57	0.44	0.10	0.25		.6	3	0	1030A 1035A	"
33	6/12	"	0.5	0.12	0.33	0.03	0.04		.6	1	0	1140A 1143A	"
34	6/19	"	0.8	0.08	0.12	0.01	0.01		.6	2	0	1108A 1110A	"

F. C. Dist. Form 52

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

Sta. No. F 31-R

Daily discharge, in second-feet of LIVE OAK CREEK above mouth of canyon for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0	0	+	0	+	0	0.7	0	0	0
2	0	0	0	0	+	0	0	0	0.6	0	0	0
3	0	0	0	0	0.1	0	0	0	0.4	0	0	0
4	0	0	0	0	+	0	0	0	0.3	0	0	0
5	0	0	0	0	0	0	0	0	0.2	0	0	0
6	0	0	0	0	0	0	0	0	0.2	0	0	0
7	0	0	0	0.1	0	0	0	0	0.4	0	0	0
8	0	0	0	0.1	0	0	0	0	0.3	0	0	0
9	0	0	0	0	0	0	0	0	0.3	0	0	0
10	0	0	0	0	0	0	0	0	0.1	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	0.4	0	0	0
14	0	0	0	0	0	0	0	0	0.1	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
19	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
22	0	0	0	0	0	0	0	0	+	0	0	0
23	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	0.1	0	0	0	0	0	0	0
26	0	0	0	0	+	0	0.1	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		0.1		0.2		0	0	
	0	0	0	0.2	0.2	0.1	0.1	0.2	4.0	0	0	0
MEAN	0	0	0	.01	.01	+	+	.01	.13	0	0	0
ACRE-FEET	0	0	0	.40	.40	.20	.20	.40	7.9	0	0	0

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

YEAR OR PERIOD — MEAN .013 — ACRE-FEET 9.5

STATION F5R

LOS ANGELES RIVER at Van Nuys Boulevard

LOCATION:

On the downstream end 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 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, 1939 to September 30, 1940.

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.
Flow may include irrigation waste at various times.

RECORDS AVAILABLE:

December 19, 1928 to March 2, 1938 and from April 28, 1938 to September 30, 1940.

EXTREMES OF DISCHARGE:

1939-1940
Maximum 2690 second-feet, January 8.
Minimum 1.6 second feet, September 26.
1929-1940
Maximum 12000 second-feet, estimated, March 2, 1938.
Minimum flow negligible at various times.

ACCURACY:

Fair.
Low flows occasionally estimated or interpolated due to recorder clock stopping.

OPERATION:

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

F. C. D. FORM 504 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 5 R

DISCHARGE MEASUREMENTS OF LOS ANGELES RIVER

AT Van Nuys Blvd. DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
164	10/5	Bollinger	8.2	3.15	.71	6.22	2.2		.6	7	0	103P 111P	FC 6
165	10/11	"	5.5	3.73	.64	6.22	2.4		.6	5	0	930A 937A	"
166	10/19	"	5.0	2.97	.75	6.22	2.2		.6	5	0	211P 219P	"
167	10/26	"	11.2	3.17	.66	6.22	2.1		.6	10	0	138P 148P	"
168	11/2	"	11.7	3.39	.60	6.22	2.0		.6	10	0	200P 212P	"
169	11/9	"	12.0	3.37	.63	6.23	2.1		.6	9	0	1142A 1150A	"
170	11/16	"	12.0	3.52	.67	6.24	2.4		.6	8	0	136P 143P	"
171	11/22	"	10.5	4.16	.55	6.20	2.3		.6	7	0	1257P 105P	"
172	11/30	"	10.8	3.35	.71	6.19	2.4		.6	8	0	200P 210P	"
173	12/7	"	11.0	3.83	.57	6.24	2.2		.6	8	0	1144A 1152A	"
174	12/14	"	11.5	3.29	.57	6.20	1.9		.6	7	0	420P 428P	"
175	12/20	"	10.6	3.19	.68	6.21	2.2		.6	8	0	132P 140P	"
176	12/28	"	5.5	2.76	.71	6.20	2.0		.6	7	0	400P 406P	"
177	1/4	Bollinger-Kooh	5.7	3.31	1.14	6.30	3.8		.6	7	0	114P 119P	"
178	1/8	" "	76.2	540.2	4.72	16.10	2550		F1	10	+0.20	244A 248A	
179	1/11	Bollinger	6.5	5.77	1.57	6.53	9.1		.6	6	0	232P 240P	6
180	1/18	"	6.7	3.54	.75	6.16	2.7		.6	6	0	205P 212P	"
181	1/23	Bollinger-Kooh	31.2	108.4	2.00	9.27	217		.6	9	-0.03	835P 850P	"
182	1/25	Bollinger	6.7	4.61	.81	6.18	3.7		.6	7	-0.01	238P 245P	"
183	2/1	Bollinger-Kooh	56.7	320.7	4.26	12.95	1370		F1	10	+0.30	1142A 1208P	
184	2/2	" "	72.7	445.8	5.31	14.85	2370		F1	10	0	141A 146A	
185	2/2	" "	72.7	452.	4.89	14.95	2210		F1	10	0	211A 218A	
186	2/2	" "	72.7	452.	5.18	14.95	2340		F1	10	0	231A 235A	
187	2/3	" "	65.7	367.6	5.68	13.70	2090		F1	9	-0.20	435P 444P	
188	2/8	Bollinger	6.5	5.65	1.06	6.15	6.0		.6	7	0	410P 417P	FC 6
189	2/15	Bollinger	7.0	5.42	1.13	6.12	6.1		.6	7	-0.01	1220P 1227P	FC6
190	2/21	"	7.4	5.20	.81	6.07	4.2		.6	7	0	430P 437P	"
191	2/25	Bollinger-Kooh	17.2	61.9	1.92	8.56	119.		.6	5	-0.14	956P 1005P	"
192	2/29	Bollinger	7.5	5.65	.96	61.0	5.4		.6	7	0	1210P 1220P	"
193	3/7	"	7.3	5.18	.70	6.00	3.7		.6	7	0	137P 146P	"
194	3/14	"	7.0	4.53	.72	5.99	3.2		.6	9	0	217P 225P	"
195	3/21	"	7.0	4.47	.88	5.99	3.9		.6	7	0	410P 418P	"
196	3/28	"	7.5	3.74	1.10	5.98	4.1		.6	8	0	105P 113P	"
197	3/31	Bollinger-Kooh	7.5	9.62	1.49	6.51	14.		.6	8	+0.02	1246P 1256P	"
198	4/4	Bollinger	6.7	3.53	1.14	6.02	4.0		.6	7	0	450P 500P	"
199	4/11	"	5.9	3.02	1.28	6.00	3.9		.6	7	0	400P 407P	"
200	4/18	"	6.3	3.06	1.08	6.01	3.3		.6	7	0	426P 434P	"
201	4/25	"	6.5	2.74	.89	5.94	2.4		.6	7	0	415P 423P	"
202	5/2	"	6.4	3.24	1.17	6.00	3.8		.6	9	0	433P 443P	"
203	5/9	"	6.4	2.73	1.05	5.95	2.9		.6	7	0	302P 309P	"
204	5/16	"	6.2	3.27	1.04	5.98	3.4		.6	7	0	320P 327P	"
205	5/23	"	6.8	4.88	.54	5.96	2.6		.6	7	0	230P 238P	"
206	5/29	"	7.5	5.90	.53	5.99	3.2		.6	8	0	1240P 1247P	"
207	6/6	"	7.5	5.09	.54	6.00	2.8		.6	6	-0.01	125P 130P	"
208	6/20	"	6.2	2.61	.74	6.00	1.9		.6	8	0	205P 210P	"
209	7/3	"	6.4	2.43	1.00	6.00	2.4		.6	7	0	947A 954A	"
210	7/18	"	6.3	3.01	1.07	6.10	3.2		.6	8	0	415P 422P	"
211	8/1	"	6.8	3.73	1.28	6.10	4.8		.6	7	-0.01	855A 905A	"
212	8/8	Bollinger	6.5	2.55	1.08	5.94	2.8		.6	7	0	302P 310P	FC 6
213	8/14	Luce	4.8	1.93	2.22	6.03	4.3		.6	8	0	850A 900A	39
214	8/29	Bollinger	6.3	3.56	1.37	6.11	4.9		.6	7	0	107P 115P	6
215	9/5	"	6.5	3.69	1.25	6.10	4.6		.6	7	0	508P 515P	"
216	9/17	"	6.5	2.65	1.00	5.98	2.7		.6	8	0	1140A 1148A	"
217	9/26	"	6.5	2.65	.62	5.94	1.6		.6	6	0	235P 243P	"

F. C. Dist. Form 52

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

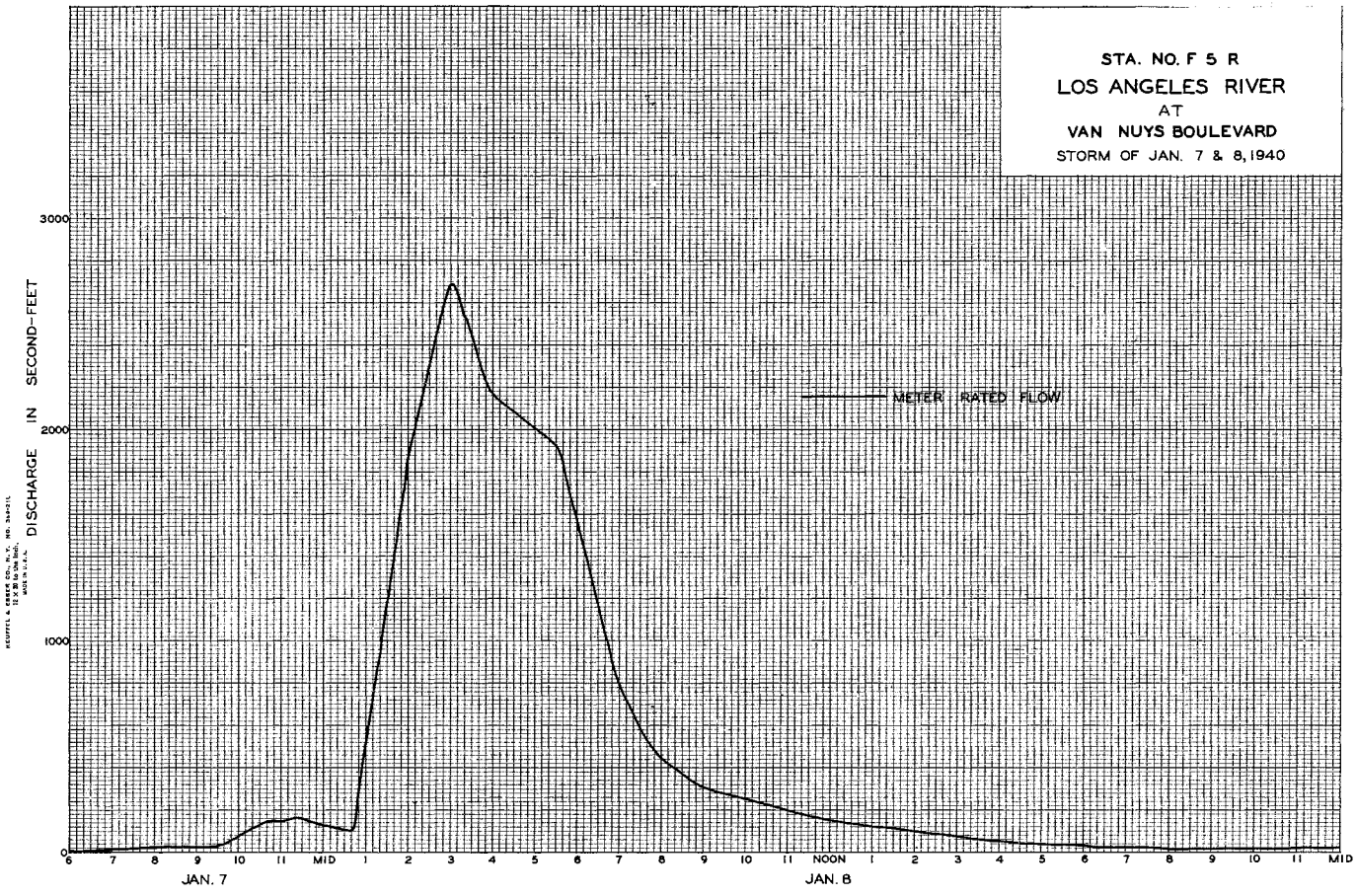
Sta. No. F 5-R

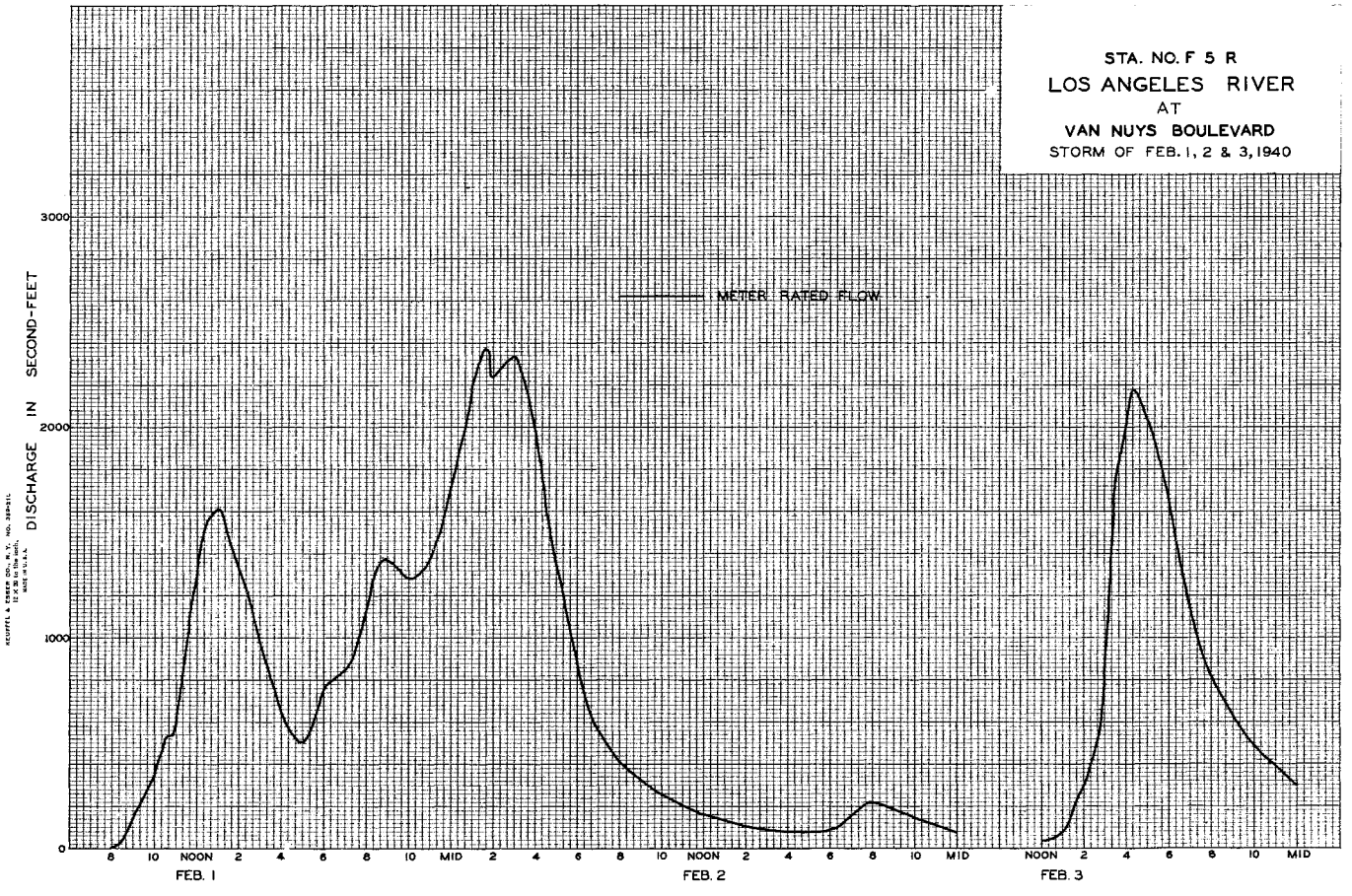
Daily discharge, in second-feet of LOS ANGELES RIVER at Van Nuys Blvd. for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.4	2.0	2.4	1.9	637	4.3	18	3.4	2.8	2.2	4.8	4.8
2	2.4	2.0	2.4	1.9	635	3.9	6	3.5	2.8	2.4	3.4	4.5
3	2.4	2.1	2.3	1.9	468	3.9	4.0	3.5	2.8	2.4	3.4	4.6
4	2.2	2.1	2.4	2.8	70	3.8	4.0	3.1	2.8	2.2	3.2	4.8
5	2.2	2.1	2.3	3.0	11	3.8	4.6	3.0	3.0	2.3	3.6	4.8
6	2.2	2.1	2.3	3.1	8	3.7	4.3	3.0	2.6	2.1	5	5
7	2.4	2.1	2.2	17	7	3.7	4.0	3.0	2.9	2.2	2.9	4.5
8	2.3	2.2	2.1	562	6.5	3.6	4.2	3.0	2.7	2.3	2.4	4.0
9	2.3	2.1	2.1	29	6	3.8	4.2	3.0	2.6	2.2	3.0	3.9
10	2.4	2.0	2.1	8.5	6	3.7	4.3	3.0	2.6	2.4	3.2	3.5
11	2.3	2.1	2.2	8	6	3.6	3.9	3.1	2.3	2.4	3.3	3.4
12	2.2	2.1	2.0	5.5	5.5	3.4	3.8	2.9	2.4	2.4	3.8	3.1
13	2.2	2.2	1.9	3.7	5.5	3.4	3.8	3.4	2.4	2.5	3.9	3.0
14	2.2	2.2	1.9	3.2	7	3.2	3.7	3.4	2.3	2.6	4.5	3.0
15	2.2	2.4	1.9	3.0	6.5	3.3	3.9	3.2	2.2	2.6	5	2.9
16	2.2	2.4	2.0	3.0	6	3.4	3.6	3.2	2.1	2.7	6	2.7
17	2.1	2.4	2.0	2.9	5.5	3.5	3.4	3.3	2.0	2.9	5.5	2.4
18	2.2	2.2	2.0	2.7	5	3.5	3.3	3.1	1.9	3.2	5	2.6
19	2.2	2.2	2.2	2.7	4.8	3.8	3.1	2.9	1.9	3.4	5	3.3
20	2.2	2.2	2.2	2.6	4.5	3.8	3.0	3.0	1.9	3.5	5.5	2.6
21	2.1	2.2	2.2	2.6	4.2	3.9	2.8	2.8	1.9	3.6	6.5	2.6
22	2.1	2.3	2.0	2.7	4.5	3.9	3.0	2.7	2.1	3.3	11	2.6
23	2.1	2.2	4.5	55	4.2	4.0	2.7	2.6	2.1	3.9	5.5	2.4
24	2.1	2.2	2.2	20	4.0	3.9	2.6	2.7	2.3	3.8	3.6	2.3
25	2.2	2.2	2.0	3.8	47	4.0	2.5	2.9	2.4	3.9	5.5	2.3
26	2.1	2.3	1.9	3.4	14	4.2	5.5	3.0	2.1	5		1.9
27	2.0	2.3	1.9	3.4	4.6	4.3	3.7	3.1	2.2	4.0	4.6	2.0
28	2.3	2.3	2.0	3.0	4.5	4.2	3.4	3.3	2.2	4.0	5	2.4
29	2.2	2.4	1.9	3.0	6.5	4.5	3.4	3.0	2.1	4.3	5.5	2.8
30	2.0	2.4	1.8	3.2		4.3	3.4	3.0	2.1	4.5	5.5	3.0
31	1.9		1.9	3.4		2.2		3.0		4.6	5	
	683	660	672	771.9	20045	1363	1261	951	705	948	1451	977
MEAN	2.20	2.20	2.17	24.9	69.1	4.40	4.20	3.07	2.35	3.06	4.68	3.26
ACRE-FEET	135.	131.	133.	1530.	3980.	270.	250.	189.	140.	188.	288.	194.

Remarks:

YEAR OR PERIOD MEAN 10.2
ACRE-FEET 7430


STA. NO. F 5 R
LOS ANGELES RIVER
AT
VAN NUYS BOULEVARD
STORM OF JAN. 7 & 8, 1940
METER RATED FLOW
DISCHARGE IN SECOND-FEET
3000
2000
1000
0
6 7 8 9 10 11 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. 7
JAN. 8


STA. NO. F 5 R
LOS ANGELES RIVER
AT
VAN NUYS BOULEVARD
STORM OF FEB. 1, 2 & 3, 1940
METER RATED FLOW
DISCHARGE IN SECOND-FEET
3000
2000
1000
0
8 10 NOON 2 4 6 8 10 MID 2 4 6 8 10 NOON 2 4 6 8 10 MID NOON 2 4 6 8 10 MID
FEB. 1
FEB. 2
FEB. 3

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-concrete 130 feet wide with 18 foot vertical side walls. Bottom forms a regular trapezoidal section 130 feet x 82 feet on the bottom by 1.25 feet deep.
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, 1939 to September 30, 1940.

REGULATION: AND/OR DIVERSIONS:

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, 1940.

EXTREMES OF DISCHARGE:

1939-1940
Maximum 3950 second-feet January 8.
Minimum 6.8 second-feet May 20 and 21.
December 20, 1938-1940
Maximum 3950 second-feet January 8.
Minimum 6.8 second-feet May 20 and 21.

ACCURACY:

Fair for high flows.
Poor for low flows due to communication being obstructed by sand and mud, at times.

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 1M 6-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO F 266-R

DISCHARGE MEASUREMENTS OF LOS ANGELES RIVER

AT Mariposa Street DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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	MEAN SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
30	10/5	Bollinger	92.0	19.85	1.04	.22	21.		.6	10	0	247P 300P	FC 6
31	10/11	"	92.5	23.0	1.01	.22	23.		.6	12	0	223P 239P	"
32	10/19	"	92.0	28.70	.80	.22	23.		.6	12	0	1200N 1220P	"
33	10/26	"	94.0	23.28	.96	.22	22.		.6	15	0	1108A 1127A	"
34	11/2	"	93.0	24.97	.99	.22	25.		.6	13	0	336P 352P	"
35	11/9	"	93.0	23.25	.93	.23	22.		.6	10	0	208P 218P	"
36	11/16	"	93.0	23.98	.88	.25	21.		.6	10	0	315P 326P	"
37	11/22	"	95.0	26.60	.98	.27	26.		.6	11	0	315P 328P	"
38	11/30	"	96.0	27.95	.95	.27	27.		.6	14	0	348P 403P	"
39	12/7	"	95.5	26.38	1.00	.26	26.		.6	14	0	225P 243P	"
40	12/14	"	96.5	27.82	1.34	.28	37.		.6	14	0	1132A 1152A	"
41	12/20	"	93.5	26.36	1.29	.28	34.		.6	14	0	1140A 1155A	"
42	12/28	"	99.0	26.86	1.40	.36	38.		.6	16	0	1245P 103P	"
43	1/4	"	95.5	31.55	1.79	.38	56.		.6	11	0	1048A 1059A	"
44	1/11	Bollinger-Koch	96.0	25.71	2.00	.55	51.		.6	12	0	1025A 1035A	"
45	1/18	Bollinger	99.0	28.05	1.52	.27	43.		.6	13	0	1213P 1232P	"
46	1/23	U.S.E.D.	115.	95.0	4.80	.99	456.		.6	11	-.06	725P 755P	35628
47	1/25	Bollinger	98.5	20.84	1.75	.62	36.		.6	18	0	105P 125P	FC 6
48	2/1	U.S.E.D.	110.	99.	5.10	1.08	500.		.6	11		1000A 1047A	35628
49	2/1	"	130.	121.	5.30	1.20	640.		.6	13		1050A 1125A	"
50	2/1	"	130.	193.	8.0	1.76	1540.		.6	13		157P 225P	"
51	2/1	"	130.	177.	7.00	1.68	1230.		.6	12		645P 710P	"
52	2/1	"	130.	210.	8.60	2.08	1800.		.6	12		930P 1010P	"
53	2/1	"	130.	203.	7.80	2.00	1580.		.6	12		1025P 1055P	"
54	2/2	U.S.E.D.	130.	291.	9.30	2.47	2700.		.6	12		1255A 135A	35628
55	2/2	"	130.	265.	9.7	2.58	2560.		.6	12		145A 230A	"
56	2/2	"	130.	273.	8.80	2.47	2400.		.6	12		345A 425A	"
57	2/2	"	130.	148.	5.6	1.54	820.		.6	13		820A 847A	"
58	2/2	"	110.	103.0	4.27		396.		.6	11		1220P 1256P	"
59	2/2	"	110.	52.0	3.25		152.		.6			825P 830P	"
60	2/3	Bollinger-Koch	113.	63.95	3.20		205.		.6	12		110P 120P	FC 6
61	2/3	U.S.E.D.	127.	140.	7.96		1070.		.6	13		400P	35628
62	2/3	"	130.	180.	9.02	1.92	1620.		.6	13		530P 550P	"
63	2/3	"	130.	164.	7.9	2.08	1290.		.6	13		650P 725P	"
64	2/3	"	130.	154.	6.8	1.63	1040.		.6	13		900P 925P	"
65	2/8	Bollinger	67.	23.10	2.16	0.54	50.		.6	11	0	1120A 1134A	FC 6
66	2/15	"	55.	24.60	1.87	0.52	46.		.6	10	0	403P 418P	"
67	2/21	"	Two Channels			0.60	40.		.6	18	-.01	1250P 115P	"
67A	2/25	U.S.E.D.	125.	86.	4.4	1.14	375.					640P 700P	35628
67B	2/25	"	117.	64.	3.7	0.95	237.					830P 845P	"
68	2/29	Bollinger-Koch	106.	31.21	1.84	0.65	57.		.6	13	0	735A 745A	FC 6
69	3/7	Bollinger	37.0	14.92	2.80	0.68	42.		.6	10	0	1225P 1237P	"
70	3/14	"	Two Channels			0.62	43.		.6	16	-.01	1118A 1138A	"
71	3/21	"	"	"		0.36	48.		.6	17	0	1038A 1100A	"
72	3/28	"	"	"		0.40	44.		.6	15	0	1115A 1140A	"
73	3/31	Bollinger-Koch	"	"		0.57	102.		.6	15	-.02	1049A 1105A	"
74	4/1	" "	"	"		0.42	74.		.6	16	+.01	821A 837A	"
75	4/4	Bollinger	"	"		0.33	46.		.6	19	0	1105A 1125A	"
76	4/11	Bollinger	Two Channels			0.24	35.		.6	20	0	1125A 1145A	FC 6
77	4/18	"	"	"		0.26	33.		.6	15	0	1125A 1140A	"
78	4/25	"	"	"		0.27	13.		.6	15	0	1135A 1150A	"
79	4/26	Bollinger-Koch	"	"		0.44	100.		.6	16	0	408A 425A	"
80	5/2	Bollinger	"	"		0.22	15.		.6	15	0	1225P 1245P	"
81	5/9	"	"	"		0.24	21.		.6	19	0	100P 122P	"
82	5/16	"	"	"		0.22	8.8		.6	18	0	1050A 1110A	"
83	5/23	"	"	"		0.28	13.		.6	18	0	1127A 1146A	"
84	5/29	"	"	"		0.28	16.		.6	19	0	1045A 1105A	"
85	6/4	Bollinger-Moon	35.0	14.09	1.78	0.40	25.		.6	14	0	235P 245P	"
86	6/6	" - Odekirk	33.0	11.30	1.56	0.36	18.		.6	13	0	445P 455P	"
87	6/13	Bollinger	35.1	11.48	1.39	0.33	16.		.6	17	0	150P 205P	"
88	6/20	"	Two Channels			0.28	18.		.6	23	0	1115A 1140A	"
89	6/27	"	"	"		0.28	16.		.6	22	0	125P 145P	"
90	7/3	"	Three	"		0.26	15.		.6	22	0	1220P 1245P	"
91	7/11	"	Two Channels			0.27	17.		.6	19	0	105P 125P	"
92	7/18	"	"	"		0.28	16.		.6	25	0	1055A 1123A	"
93	7/25	"	"	"		0.32	17.		.6	21	0	1225P 120P	"
94	8/1	"	"	"		0.30	16.		.6	18	0	225P 245P	"
95	8/8	"	"	"		0.29	14.		.6	17	0	150P 210P	"
96	8/14	Luce	"	"		0.29	16.		.6	17	0	1200N 1218P	FC 39
97	8/22	"	"	"		0.29	17.		.6	17	0	815A 840A	"
98	8/29	Bollinger	"	"		0.28	14.		.6	14	0	1110A 1125A	FC 6
99	9/5	"	"	"		0.27	13.		.6	14	0	1110A 1135A	"
100	9/12	Bollinger	Two Channels			0.25	15.		.6	16	0	140P 155P	FC 6
101	9/19	"	"	"		0.24	13.		.6	16	0	125P 142P	"
102	9/26	"	"	"		0.25	12.		.6	16	0	128P 148P	"

F.C. Dist. Form 9f 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

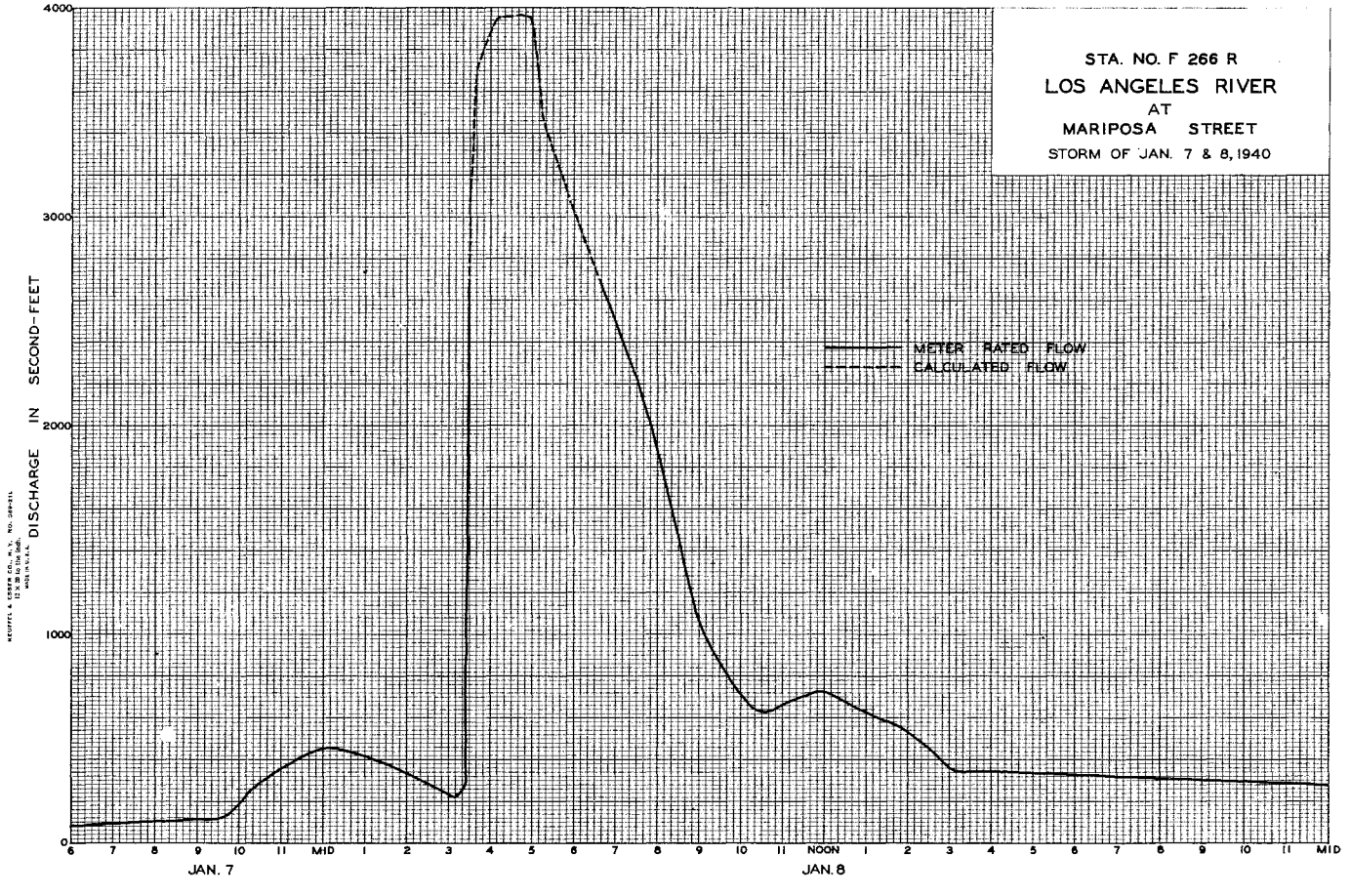
Sta. No. F266R

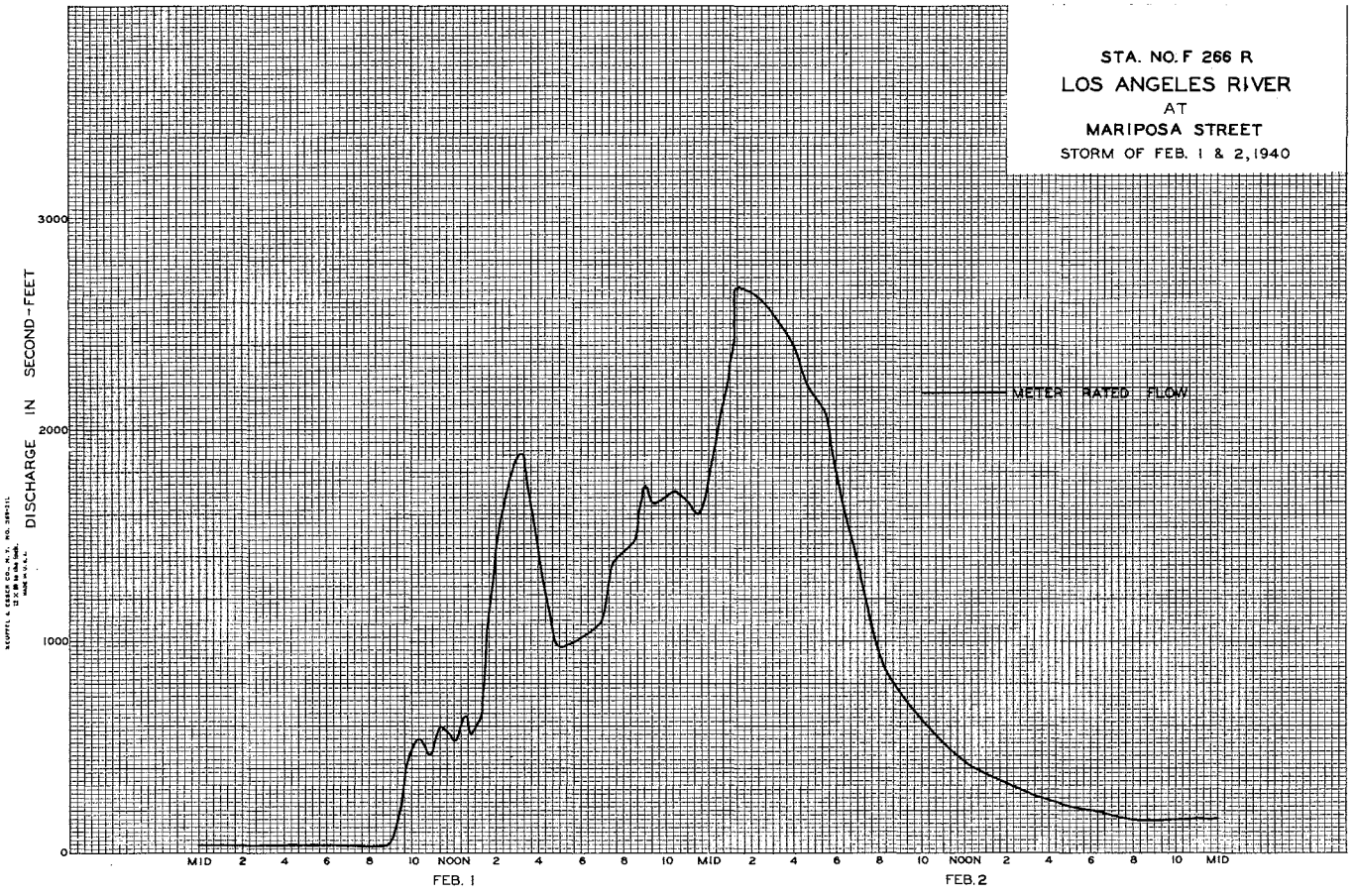
Daily discharge, in second-feet of LOS ANGELES RIVER at Mariposa St., for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	23	25	27	51	737	41	88	14	14	14	17	14
2	20	25	25	60	E935	36	63	20	14	12	15	14
3	20	25	25	73	E484	27	51	18	14	15	15	15
4	18	23	27	E 80	E190	36	47	15	23	14	15	15
5	20	23	27	E 65	E 70	36	47	17	17	14	14	14
6	18	25	27	60	E 73	36	39	20	18	15	14	14
7	20	25	27	88	E 80	41	36	36	18	15	14	14
8	18	23	27	986	51	34	34	27	18	15	E 14	14
9	18	23	27	208	73	23	36	25	17	15	E 14	17
10	18	23	27	104	67	25	39	34	18	14	E 15	15
11	23	20	34	57	96	32	34	32	18	17	E 15	14
12	23	23	34	E 55	57	32	32	32	18	15	E 15	15
13	23	20	36	E 52	54	44	27	32	17	15	E 17	12
14	23	20	36	E 50	77	41	30	30	17	17	E 17	14
15	23	20	39	E 48	47	54	34	14	17	18	17	14
16	23	20	39	E 47	47	60	32	12	17	17	15	12
17	23	20	34	E 45	70	51	30	25	18	17	18	12
18	23	20	36	E 43	60	41	34	23	18	17	18	12
19	23	25	34	44	47	39	34	18	20	17	20	12
20	23	27	34	47	E 44	44	32	12	23	15	18	12
21	23	27	E 34	47	E 41	54	25	8	20	17	17	12
22	23	27	E 34	47	44	57	18	11	23	17	17	12
23	23	30	E 44	135	32	63	11	12	23	17	18	12
24	23	30	E 35	E 60	39	57	11	15	18	17	17	12
25	23	27	E 29	E 39	137	47	14	15	15	17	15	12
26	23	27	E 25	E 54	104	44	73	17	15	15	14	12
27	23	27	30	E 47	70	54	47	17	17	15	15	11
28	23	25	39	E 41	57	44	30	17	15	17	15	11
29	23	25	39	E 39	E 47	41	23	17	14	15	14	11
30	25	27	44	E 36		32	14	15	15	15	14	11
31	25		54	E 32		97		14		17	14	
	680	727	1029	2840	3930	1363	1065	614	529	487	487	391
MEAN	21.9	24.2	33.2	91.6	136	44.0	35.5	19.8	17.6	15.7	15.7	13.0
ACRE-FEET	1350	1440	2040	5630	7800	2700	2110	1220	1050	966	966	776

Remarks: E indicates discharge estimated.

YEAR OR PERIOD — MEAN 38.7 — ACRE-FEET 28050





STATION F57C-R

LOS ANGELES RIVER above Arroyo Seco(near Dayton Avenue)

LOCATION:

On the right (west) bank 800 feet above the junction with the Arroyo Seco.
The former Station F57B-R was 450 feet above the junction with the Arroyo Seco.

DRAINAGE AREA:

510 square miles.

CHANNEL AND CONTROL:

Channel rectangular concrete 177 feet wide and 29 feet deep with an invert 20 feet wide at top, 16 feet wide at bottom and 1 foot deep near center of channel.
Channel forms control.

DISCHARGE MEASUREMENTS:

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

RECORDER:

Installed May 26, 1938 at station F57B-R. Removed April 5, 1939. Installed at station F57C-R December 8, 1939 in a 4.5 foot x 4.5 foot concrete house and stilling well combined.
A Friez continuous recorder, furnished by the United States Engineer Dept., was in service from December 8, 1939 to September 30, 1940.

REGULATION AND/OR DIVERSIONS:

Twin Lakes Dams, Chatsworth Reservoir, Upper and Lower San Fernando Reservoirs, Encino Reservoir, Pacoima Dam, Big Tujunga Dam and several debris basins. 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 AVAILABIE:

December, 1929 to May 26, 1938 at Station F57R.
May 26, 1938 to April 5, 1939 at Station F57B-R.
April 5, 1939 to December 8, 1939, bi-weekly measurements. December 8, 1939 to September 30, 1940 at Station F57C-R.

EXTREMES OF DISCHARGE:

1939-1940
Maximum 8900 second-feet, January 8.
Minimum 6 ± second-feet, at various times.
1929-1940 (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, due to frequency of measurements. Flows frequently interpolated between measurements due to poor gage height discharge relation caused by excessive mud and silt deposits.

OPERATION:

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

F. C. D. FORM 104 1M 6-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F-57C-R

DISCHARGE MEASUREMENTS OF LOS ANGELES RIVER

~~at~~ above Arroyo Seco (near Dayton Ave.) DURING THE YEAR ENDING SEPTEMBER 30, 19 40

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Dif.	METH OD	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
1	10/2	Bollinger	14.9	10.22	2.11	-	22.		.6	9	-	325P 335P	FC 6
2	10/5	"	14.0	8.85	2.13	-	19.		.6	8	-	428P 437P	"
3	10/9	"	14.2	8.29	2.16	-	18.		.6	9	-	427P 437P	"
4	10/11	"	14.5	10.77	2.63	-	28.		.6	9	-	433P 443P	"
5	10/16	"	14.4	9.90	2.65	-	26.		.6	10	-	414P 426P	"
6	10/19	"	19.2	9.89	2.35	-	23.		.6	12	-	1042A 1055A	"
7	10/23	"	23.2	11.39	1.91	-	22.		.6	13	-	425P 437P	"
8	10/26	"	22.5	11.30	2.04	-	23		.6	14	-	1000A 1012A	"
9	10/30	"	19.0	10.27	2.23	-	23.		.6	11	-	435P 445P	"
10	11/2	"	19.4	10.65	2.41	-	26.		.6	11	-	436P 446P	"
11	11/6	"	20.1	13.77	2.67	-	37.		.6	12	-	442P 456P	"
12	11/9	"	19.9	11.87	2.23	-	27.		.6	12	-	318P 333P	"
13	11/13	"	19.9	12.50	2.26	-	28.		.6	12	-	422P 437P	"
14	11/16	"	19.9	11.69	1.84	-	22.		.6	11	-	430P 443P	"
15	11/20	"	19.9	12.97	2.18	-	28.		.6	12	-	428P 442P	"
16	11/22	"	19.8	11.96	2.20	-	26.		.6	11	-	425P 437P	"
17	11/27	"	19.8	11.92	2.56	-	31.		.6	12	-	409P 423P	"
18	11/30	"	19.6	12.60	2.31	-	29.		.6	12	-	450P 503P	"
19	12/4	"	19.6	12.58	2.02	-	25.		.6	11	-	435P 447P	"
20	12/7	"	20.1	12.32	2.13	.94	26.		.6	12	-	348P 406P	"
21	12/14	"	20.0	13.86	2.44	1.02	34.		.6	12	-.01	1007A 1020A	"
22	12/20	"	20.1	15.66	2.56	1.09	40.		.6	12	0	933A 948A	"
23	12/28	"	38.5	22.73	1.76	1.12	40.		.6	14	0	1015A 1030A	"
24	1/4	Bollinger-Koch	92.5	64.92	2.66	1.30	172.		.6	15	+.02	748A 800A	FC 6
25	1/6	Bollinger-Koch	72.0	46.80	1.95	1.17	91.		.6	13	-.01	1036A 1048A	FC 6
26	1/7	" "	71.3	37.68	1.87	1.12	71.		.6	16	0	1049A 1059A	"
27	1/7	" "	177.0	26.74	6.85	1.99	1830.		.6	15	+.04 -.04	715P 742P	"
28	1/7	" "	177.0	170.5	7.25	1.82	1240.		.6	15	-.09	850P 909P	"
29	1/7 1/8	U.S.E.D. #1	177.0	193.	6.32	2.12	1220			14		1125P 1255A	35621
30	1/8	" #2	177.	196.	6.52	1.99	1280			12		340A 430A	"
31	1/8	" #5	177.	188.	4.69	2.20	882			8	-.05	1158A 1235P	35549
32	1/8	" #6	177	172	4.60	2.19	792			11	-.07	300P 336P	"
33	1/9	Bollinger-Koch	Two Channels			1.44	155		.6	16	-.01	1155A 1210P	FC 6
34	1/10	U.S.E.D. #7	" "			1.44	69		.6	7	-.03	1109P 1139P	35549
35	1/11	" #8	" "			1.33	42		.6	5	0	321A 339A	"
36	1/11	" #9	" "			1.30	60		.6	7	+.01	630A 645A	"
37	1/11	Bollinger-Koch	" "			1.42	106.		.6	17	0	851A 909A	FC 6
38	1/18	Bollinger	40.6	21.11	2.54	1.46	54.		.6	11	-.01	1025A 1040A	"
39	1/23	"	44.7	23.07	2.39	1.54	55.		.6	10	+.07	225P 238P	"
40	1/25	"	89.5	38.67	1.61	1.58	62.		.6	16	+.03	1108A 1125A	"
41	2/1	U.S.E.D. #10	177.	269.	6.90	2.76	1850.		.6	13	-	1015A 1050A	35549
42	2/1	" #11	176.	255.	7.00	2.75	1790.		.6	12	-	240P 325P	"
43	2/1	" #12	176.	290.	8.20	3.22	2390		.6	12	-	354P 441P	"
44	2/1	" #13	176	331.	8.60	3.36	2860		.6	11		500P 530P	"
45	2/3	Bollinger-Koch	84.0	50.9	2.67	2.01	136.		.6	10	0	1123A 1130A	FC 6
46	2/3	U.S.E.D. #16	176.	307.	4.90	3.26	1520.		.6	14	+.02	215P 245P	35549
47	2/3	" #17	176	302.	6.00	3.52	1820		.6	11	-	631P 658P	"
48	2/3	" #18	176.	301.	6.10	3.40	1840.		.6	11		717P 741P	"
49	2/8	Bollinger	81.3	52.9	2.06	2.08	109.		.6	13	+.01	1000A 1023A	FC 6
50	2/16	"	47.9	24.8	1.79		44.		.6	10	0	1257P 118P	"
51	2/21	"	Two Channels			1.90	53.		.6	17	0	910A 935A	"
52	2/25	Bollinger-Koch	177.	267.4	5.72	3.09	1530.		.6	19	+.46	315P 345P	"
52A	2/25	U.S.E.D. #19	176.	255.	6.10	2.96	1550.		.6	12		543P 612P	35549
52B	2/26	" #20	56.	45.3	3.0	2.34	136.		.6	10		1000A 1014A	"
52C	2/26	U.S.E.D. No.21	56.	41.8	2.5	2.27	105.		.6	10		1231P 1245P	35549
53	2/29	Bollinger-Koch	177.	99.6	2.72	2.58	271.		.6	17	-.09	603A 627A	FC 6
54	3/1	Bollinger	63.5	28.5	1.62		46.		.6	15	0	319P 336P	"
55	3/4	"	60.3	25.3	1.61		41.		.6	14	0	437P 453P	"
56	3/7	"	66.0	27.6	1.54	1.93	42.		.6	16	0	945A 1003A	"
57	3/11	"	66.5	29.65	1.71		51.		.6	14	0	418P 437P	"
58	3/14	"	55.0	27.2	1.73		47.		.6	13	0	903A 920A	"
59	3/18	"	52.5	25.6	1.91		49.		.6	14	0	428P 443P	"
60	3/21	"	48.5	22.9	1.96		45.		.6	17	0	845A 900A	"
61	3/25	"	49.0	20.8	1.90		40.		.6	13	0	230P 245P	"
62	3/28	"	48.0	26.0	1.92		50.		.6	16	0	850A 910A	"
63	3/31	Bollinger-Koch	177.	147.8	3.77	2.69	558.		.6	17	-.24	850A 926A	"
64	3/31	" "	70.0	46.4	2.41		112.		.6	10	0	320P 331P	"
65	4/1	Bollinger-Koch	Two Channels			2.45	186.		.6	17	-.10	655A 720A	"
66	4/1	Bollinger	95.0	52.5	2.03		107.		.6	18		410P 430P	"
67	4/2	"	84.5	42.8	1.87		80.		.6	19		305P 330P	"
68	4/4	"	84.5	43.2	1.88		81.		.6	17		910A 935A	"
69	4/8	"	80.5	32.2	1.71		55.		.6	16		320P 335P	"
70	4/11	Bollinger	68.4	28.6	1.64		47.		.6	18	0	940A 1005A	FC 6
71	4/15	"	72.8	30.4	1.30		39.		.6	16	0	413P 433P	"
72	4/18	"	73.1	27.5	1.47		40.		.6	15	0	950A 1007A	"
73	4/22	"	33.0	13.3	1.24		16.		.6	15	0	345P 357P	"
74	4/25	"	33.2	11.5	1.31		15.		.6	12	0	950A 1000A	"
75	4/26	Bollinger-Koch	177.	201.5	4.67	2.94	942.		.6	16	-.21	158A 238A	"
76	4/26	" "	Two Channels			2.37	228.		.6	15	-.04	555A 614A	"
77	4/26	" "	87.0	70.35	2.33		164.		.6	10	-.02	134P 144P	"
78	4/27	Bollinger	32.4	29.35	2.18		64.		.6	8	0	1030A 1040A	"
79	4/29	"	42.8	30.45	2.04		62.		.6	10	0	420P 430P	"
80	5/2	Bollinger-Miller	38.1	15.51	1.31		20.		.6	10	0	1057A 1105A	"
81	5/3	Bollinger	20.0	14.45	1.12	1.12	16.		.6	12	0	436P 450P	"
82	5/7	"	22.0	12.09	1.65	1.28	20.		.6	14	0	1025A 1040A	"
83	5/7	"	24.9	22.7	1.98	1.68	45.		.6	13	0	425P 437P	"
84	5/9	"	24.6	14.36	1.68	1.42	24.		.6	14	0	1005A 1020A	"
85	5/16	"	25.2	7.96	1.15	1.33	9.1		.6	13	0	920A 933A	"
86	5/20	Bollinger-Moon	26.0	15.6	1.94	1.68	30.		.6	14	0	843A 858A	"
87	5/23	Bollinger	24.5	8.32	1.29	1.38	11.		.6	13	0	958A 1010A	"
88	5/27	Bollinger-Moon	25.3	10.53	1.50	1.50	16.		.6	12	0	849A 858A	"
89	5/29	Bollinger	25.6	10.14	1.51	1.48	15.		.6	14	0	833A 848A	"
90	6/6	"	24.8	9.94	1.42	1.44	14.		.6	13	0	905A 918A	"
91	6/13	"	24.5	9.55	1.14	1.37	11.		.6	13	0	1142A 1155A	"
92	6/20	"	24.2	9.44	1.18	1.36	11.		.6	13	0	830A 843A	"
93	6/27	"	24.0	8.80	1.15	1.35	10.		.6	13	0	828A 841A	"
94	7/3	Bollinger	24.0	7.67	1.04	1.32	8.0		.6	13	0	145P 155P	FC 6
95	7/11	"	24.0	8.40	1.14	1.32	9.6		.6	16	0	840A 857A	"
96	7/18	"	23.9	7.62	1.10	1.33	8.4		.6	13	0	850A 902A	"
97	7/25	"	24.0	6.68	1.15	1.32	7.7		.6	15	0	853A 908A	"
98	8/1	"	23.7	7.18	1.02	1.30	7.4		.6	10	-.01	400P 412P	"
99	8/8	"	23.5	6.40	1.07	1.28	6.9		.6	12	0	825A 836A	"
100	8/14	Luce	23.5	7.05	1.04	1.27	7.4		.6	11	0	1110A 1125A	FC 39
101	8/22	"	23.5	6.97	1.21	1.30	8.4		.6	9	0	1003A 1018A	"
102	8/29	Bollinger	23.9	7.50	1.15	1.31	8.6		.6	14	0	825A 840A	FC 6
103	9/5	"	10.0	4.83	1.94		9.4		.6	9	-	855A 905A	"
104	9/7	"	22.5	8.43	1.21		10.		.6	12	-	740A 750A	"
105	9/10	"	12.5	5.64	1.62		9.1		.6	9	-	1025A 1035A	"
106	9/12	"	12.2	4.50	1.35	0.91	6.1		.6	8	0	1055A 1105A	"
107	9/17	"	9.0	3.91	1.79	0.76	7.0		.6	9	-.01	953A 1003A	"
108	9/19	"	9.3	4.21	1.83	0.76	7.7		.6	9	+.01	953A 1003A	"
109	9/26	"	16.9	4.68	1.25	0.56	5.8		.6	10	0	925A 935A	"

F.C. Dist. Form 53 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

Sta. No F57C-R

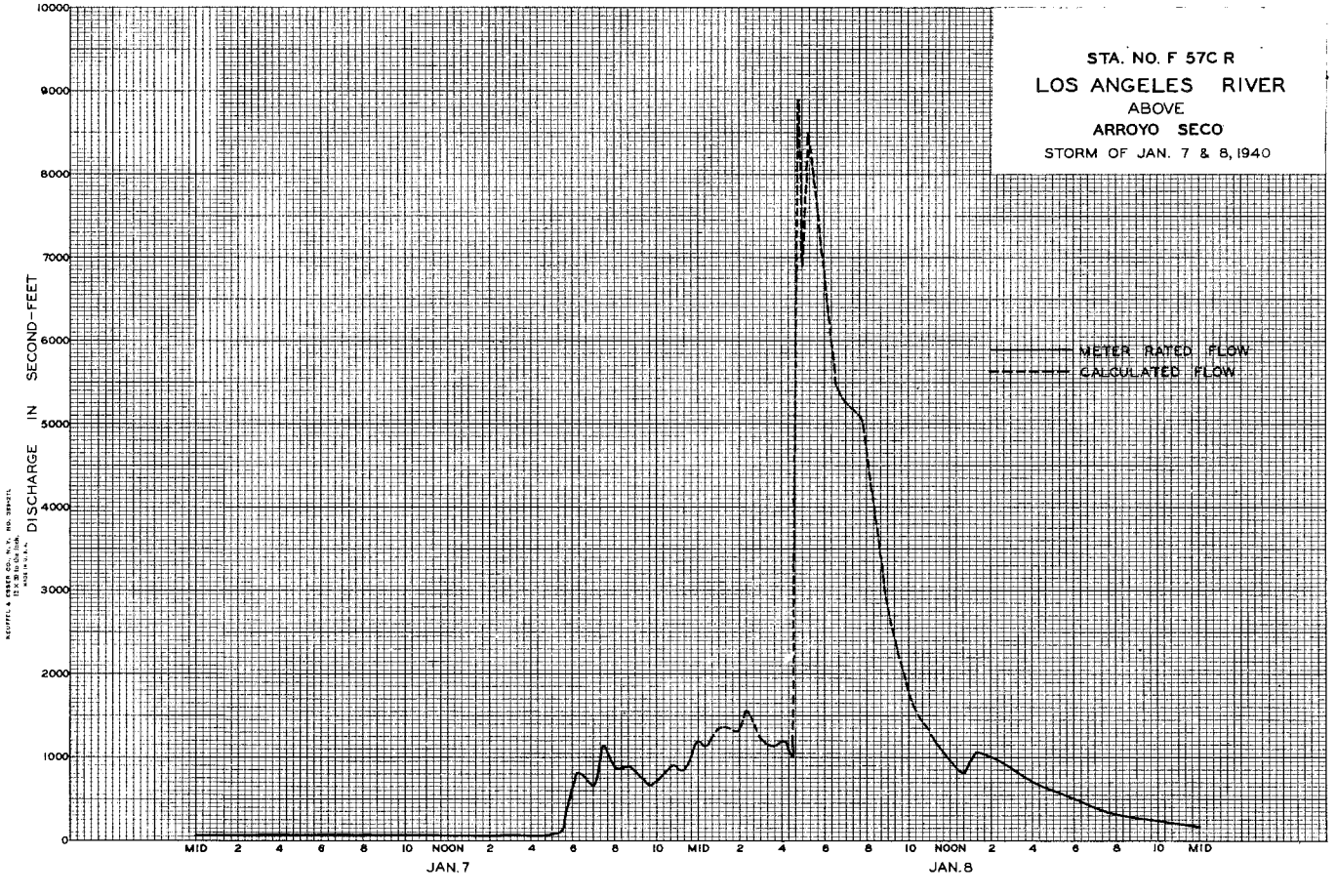
Daily discharge, in second-feet of LOS ANGELES RIVER above Arroyo Seco (near Dayton Ave.) for the year ending September 30, 19 40

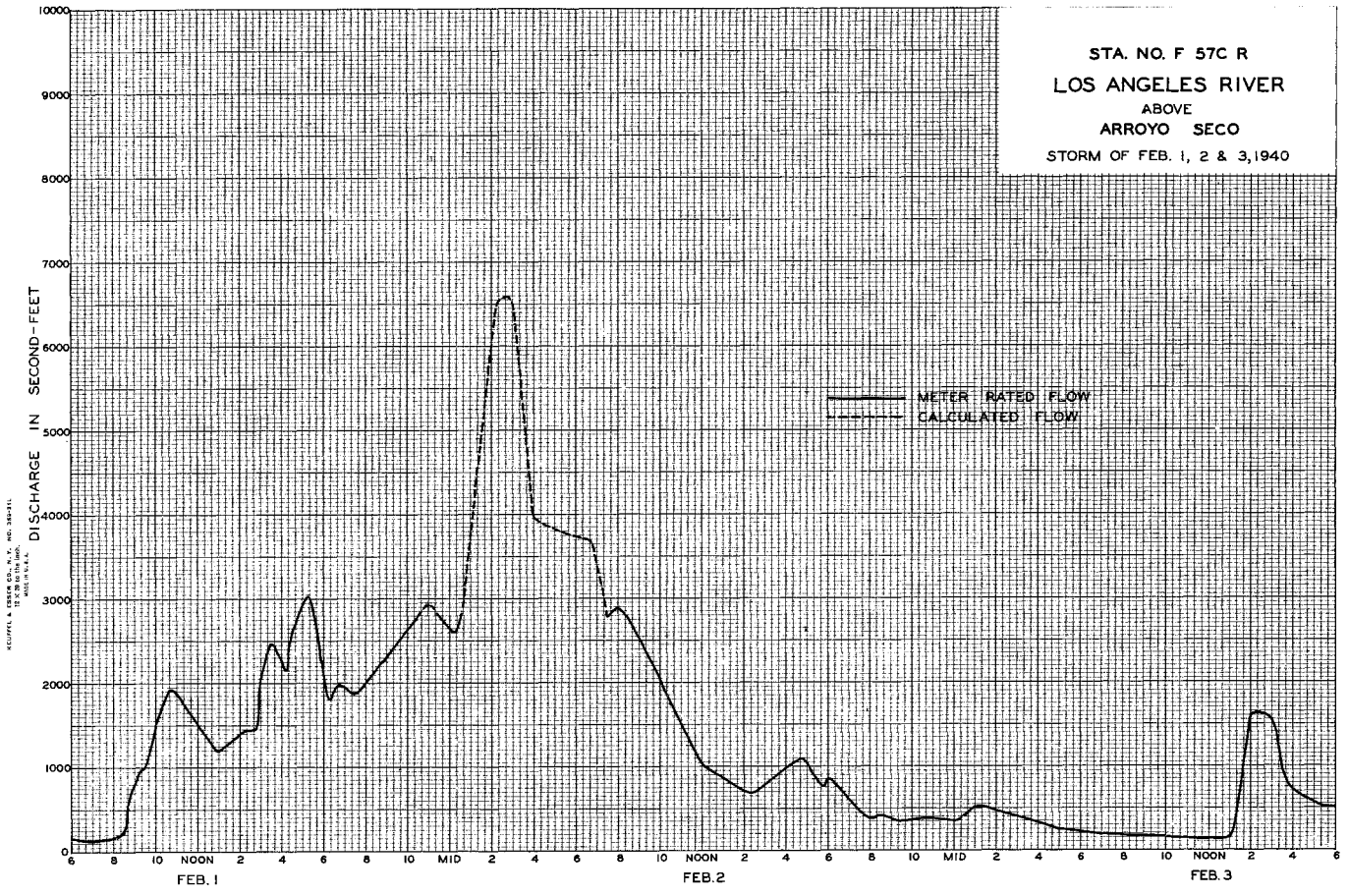
Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	23	25	E 28	76	1320	E 48	183	E 17	15	9	7.5	7
2	22	26	E 27	76	2070	E 45	E 80	E 20	14	8.5	7	6.5
3	21	28	E 26	86	603	E 43	E 81	16	15	8	6.5	E 7
4	20	31	E 25	136	372	E 41	E 81	18	19	8	6.5	E 9
5	19	34	E 25	83	103	E 41	E 74	17	15	9	6.5	E 9.5
6	19	37	E 26	73	106	E 42	E 67	20	14	8	7	E 10
7	18	33	E 26	270	130	E 42	E 60	37	12	9	7	E 10
8	18	30	E 28	1780	106	E 44	E 55	40	12	9	6.5	E 10
9	18	27	28	186	92	E 46	E 56	26	11	9	6	E 9.5
10	23	27	28	127	92	E 48	E 58	50	12	9	6.5	E 9
11	28	27	35	129	94	E 51	E 47	45	11	10	6.5	E 7.5
12	28	28	35	159	76	E 50	E 42	42	12	10	6.5	E 6
13	28	28	35	132	59	E 48	E 37	44	12	9	7	7
14	27	26	37	155	91	E 47	E 38	40	11	8.5	7.5	7
15	27	24	37	155	62	E 47	E 39	32	10	8.5	8	6.5
16	26	22	37	92	56	E 48	E 38	9.5	11	8.5	7.5	7
17	25	23	37	59	61	E 48	E 37	34	14	9	7.5	7
18	24	25	39	60	62	E 49	E 40	35	11	8	7	7
19	23	27	42	E 64	66	E 48	E 40	25	10	8	7	E 7.5
20	23	28	42	E 62	66	E 46	E 38	26	11	8	8	E 7.5
21	23	27	39	E 48	56	E 45	E 28	8.5	11	8	9	E 7
22	22	26	42	E 46	64	47	E 16	8.5	10	7.5	9	E 7
23	22	27	59	154	43	E 42	E 10	10	10	7.5	11	E 6.5
24	22	28	44	73	40	E 41	E 10	13	11	7.5	9.5	E 6.5
25	23	29	42	E 62	563	E 40	E 15	15	11	7.5	8	E 6
26	23	30	35	E 61	274	E 43	331	16	10	7.5	8	E 6
27	23	31	30	66	77	E 60	E 64	17	10	8	11	E 6
28	23	30	39	106	78	E 50	E 63	15	10	8	9	E 6
29	23	30	49	90	152	E 50	E 62	15	10	7	8.5	E 6
30	23	29	52	79		E 50	E 36	15	8.5	7.5	8.5	E 6
31	24		57	98		362		14		7.5	8	
	711	843	1131	4843	7034	1752	1826	740.5	3535	257.5	239.0	220.5
Mean	22.9	28.1	36.5	156	243	56.5	60.9	23.9	11.8	8.30	7.71	7.35
Acre-Feet	1410	1670	2240	9610	13970	3480	3620	1470	701	511	474	437

ESTIMATED ESTIMATED

Remarks: E indicates discharge estimated or interpolated between measurements.

Year on Period — Mean 54.5 — Acre-Feet 39590





STATION F34B-R

LOS ANGELES RIVER at Firestone Boulevard

LOCATION:

On the downstream side 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. (A concrete control was under construction at the end of this season)

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, 1939 to September 30, 1940.

REGULATION:

Flow is subject to same regulation as station F57B-R. In addition the flow is partially regulated by Devils Gate Dam.

DIVERSIONS:

Several irrigation diversions in the mountain tributaries; some flow is diverted at several water supply reservoirs and the Los Angeles Water Department 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, 1940

EXTREMES OF DISCHARGE:

1939-1940
Maximum 7610 second-feet, January 8.
Minimum 16 second-feet, interpolated at various times.
1928-1940 (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. Flows (below 50 second-feet) frequently interpolated between measurements.

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 IM 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 34 B-R

DISCHARGE MEASUREMENTS OF LOS ANGELES RIVER

AT Firestone Blvd. DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
116	10/5	Bonadiman	60.	25.40	1.31	3.83	33.		.6	8	0	817A 842A	FC 40
117	10/11	"	50.	22.79	1.23	3.40	28.		.6	9	0	1052A 1117A	"
118	10/19	"	70.	27.50	1.19		33.		.6	9		405P 427P	"
119	10/26	"	70.	28.90	1.18		34.		.6	9		320P 345P	"
120	11/2	"	33.	16.30	1.23	3.93	20.		.6	8	0	908A 930A	"
121	11/9	"	Two channels			3.90	41.		.6	9	0	930A 945A	"
122	11/16	"	58.	27.31	1.20	3.82	33.		.6	13	0	1005A 1025A	"
123	11/22	"	Two channels			3.95	29.		.6	12	0	917A 940A	"
124	11/30	"	65.	32.23	1.24		40.		.6	10		1040A 1105A	"
125	12/7	"	32.	22.50	1.50	3.77	34.		.6	9	0	1010A 1030A	"
126	12/14	"	Two channels			3.80	42.		.6	12	0	930A 953A	"
127	12/20	"	35.	24.74	1.68	3.72	41.		.6	9	0	915A 937A	"
128	12/23	Bonadiman Jackman	112.	212.8	2.90	4.43	620.		.6	9	-0.10	510P 525P	"
129	12/26	Bonadiman	80.	41.40	1.26	3.85	52.		.6	15	0	1120A 1145A	"
130	12/28	"	80.	32.19	1.23	3.76	40.		.6	15	0	1018A 1036A	"
131	1/4	"	117.	200.	3.21	4.37	643.		.6	12	-0.04	951A 1015A	"
132	1/4	"	110.	167.6	4.94	4.41	828.		.6	10	-0.03	255P 320P	"
133	1/5	"	67.	49.91	1.22	3.70	60.		.6	10	0	1017A 1035A	"
134	1/7	Bonadiman Jackman	350.	836.	7.39	6.57	6180.		.6	12	-0.06	900P 940P	"
135	1/8	U.S.E.D.#1	137.	583.8	6.29	5.61	3670.		.6			340A 745A	USED 35619
136	1/8	U.S.E.D.#2	217.	702.6	7.30	5.05	5120.		.6			915A 1020A	"
137	1/8	Bonadiman Jackman	100.	261.	5.36		1400		.6	7		315P 325P	40
138	1/9	Bonadiman Jackman	68.	62.	2.50		155.		.6	7		415P 430P	"
139	1/10	Bonadiman Jackman	75.	72.85	1.84	3.57	134.		.6	9	+0.02	1025A 1030A	"
140	1/11	Bonadiman Jackman	77.	68.05	1.66	3.59	113.		.6	10	-0.02	900A 915A	FC 40
141	1/18	Bonadiman	77.5	38.58	1.50	3.56	58.		.6	13	0	837A 900A	"
142	1/23	"	78.	88.4	3.60	4.04	318.		.6	9	+0.11	431P 448P	"
143	1/23	Bonadiman Jackman	125.	311.2	5.44	5.14	1690.		.6	12	-0.25	805P 820P	"
144	1/24	Bonadiman Jackman	85.	109.8	1.76	3.58	179.		.6	10	0	1025A 1045A	"
145	1/25	Bonadiman	85.	52.8	1.44	3.46	76.		.6	12	0	1007A 1030A	"
146	2/1	U.S.E.D. # 3	190.	528.8	5.42	5.79	2860.		.6			1000A 1101A	35618 35619
147	2/1	Bonadiman Jackman	Two channels			5.82	3020.		.6	16	+0.25	1016A 1040A	40
148	2/1	U.S.E.D. # 4	166.	418.7	4.82	5.13	2020.		.6			1110A 1210P	35619
149	2/1	" # 5	93.	205.8	4.86	4.40	1000.		.6			127P 205P	"
150	2/1	" # 6	334.	715.3	4.63	5.68	3310.		.6			350P 522P	"
151	2/1	" # 7	342.	1189.5	5.35	6.59	6370.		.6			530P 705P	"
152	2/1	" # 8	96.	395.	4.81	4.68	1900.		.6			1103P 1135P	"
153	2/1&2	" # 9	58.	269.4	4.54	4.62	1220.		.6			1143P 1215A	"
154	2/2	" # 10	134.	667.2	4.56	6.39	3040.		.6			145A 320A	"
155	2/2	U.S.E.D.--- Bonadiman-Jackman	358.	965.2	5.08	6.51	4900.	Bur	.6	13	-0.38	325A 415A	" FC 40
156	2/2	" "	Two channels			4.23	1350.		.6	8	-0.06	1040A 1050A	"
157	2/2	" "	75.	105.5	5.32	3.52	561.		.6	6	0	340P 400P	"
158	2/3	" "	77.	99.2	2.74	3.58	272.		.6	9	0	950A 1010A	"
159	2/3	" "	Two channels			5.93	3890.		.6	16	-0.31	312P 346P	"
160	2/4	Bonadiman	105.	103.3	3.34	3.73	346.		.6	9	0	206P 220P	FC 40
161	2/5	Bonadiman Jackman	108.	114.8	2.14	3.66	245.		.6	10	0	840A 850A	"
163	2/8	Bonadiman	93.	69.10	1.85	3.48	128.		.6	11	0	902A 920A	"
164	2/14	"	115.	186.4	4.10	4.20	765.		.6	11	-0.13	218P 240P	"
165	2/15	Bonadiman	90.	72.45	1.93	3.49	140.		.6	8	0	936A 952A	FC 40
166	2/21	"	85.	38.05	1.24	3.45	47.		.6	11	0	902A 920A	"
167	2/25	Bonadiman Jackman	Two channels			5.86	4310.		.6	14	-0.13	505P 540P	"
168	2/26	"	107.	81.6	1.85	3.53	151.		.6	10	0	315P 340P	"
169	2/29	"	149.	201.7	4.94	4.36	997.		.6	12	-0.15	535A 555A	"
170	2/29	"	120.	97.0	1.86	3.53	180.		.6	10	-0.02	115P 150P	"
171	3/8	Bonadiman	85.	36.05	1.27	3.41	47.		.6	12	0	835A 856A	"
172	3/14	"	Two channels			3.41	56.		.6	15	0	811A 835A	"
173	3/21	"	90.	39.7	1.24	3.39	52.		.6	13	0	852A 908A	"
174	3/28	"	90.	44.49	1.36	3.48	62.		.6	12	-0.01	905A 926A	"
175	3/31	Bonadiman Jackman	210.	504.8	4.35	5.12	2190.		.6	12	+0.04 -0.02	730A 745A	"
176	3/31	"	120.	141.2	3.17	3.73	449.		.6	12	-0.04	128P 140P	"
177	4/1	"	115.	171.8	3.87	3.86	664.		.6	11	-0.05	350A 405A	"
178	4/1	"	115.	102.5	2.49	3.71	255.		.6	11	-0.02	1105A 1115A	"
179	4/4	Bonadiman	105.	71.7	1.68	3.55	121.		.6	12	0	835A 855A	"
180	4/11	"	101.	47.6	1.32	3.46	63.		.6	14	0	821A 840A	"
181	4/18	"	100.	50.09	1.23	3.43	61.		.6	10	0	930A 955A	"
182	4/25	"	Two channels			3.35	25.		.6	12	0	927A 945A	"
183	4/26	"	118.	133.2	2.76	3.81	367.		.6	9	-0.04	815A 830A	"
184	4/26	"	160.	205.2	3.69	4.30	758.	Bur.	.6	12	+0.03	201P 225P	"
185	4/26	Bonadiman Jackman	150.	186.2	4.96	4.26	924.		.6	11	-0.24	705P 720P	"
186	4/27	Bonadiman	85.	59.9	1.35	3.36	81.		.6	12	0	900A 916A	"
187	5/2	"	85.	29.8	1.09	3.22	32.		.6	10	0	925A 938A	"
188	5/9	"	60.	29.6	1.42	3.26	42.		.6	8	0	846A 900A	"
189	5/16	Bonadiman	55.	22.25	1.25	3.25	28.		.6	8	0	930A 942A	FC 40
190	5/23	"	75.	23.8	.77	3.27	18.		.6	9	0	845A 917A	"
191	5/29	"	Three channels			3.35	24.		.6	14	0	822A 840A	"
192	6/6	"	Two channels				23.		.6	15		943A 1000A	"
193	6/13	"	"	"		3.48	25.		.6	15	0	915A 938A	"
194	6/19	Moon	"	"		3.52	19.		.6	21	-0.01	922A 950A	22
195	6/26	"	Three "			3.50	16.		.6	21	0	932A 958A	"
196	7/2	"	Two "			3.50	16.		.6	19	0	852A 918A	"
197	7/11	Bonadiman	Three "			3.49	19.		.6	12	0	822A 835A	40
198	7/18	"	"	"		3.50	29.		.6	16	0	301P 325P	"
199	7/25	"	48.	21.06	1.23	3.50	26.		.6	7	0	902A 925A	"
200	8/1	"	15.5	8.52	1.68		14.		.6	5		905A 925A	"
201	8/8	"	19.	13.02	2.06	3.36	27.		.6	6	0	908A 925A	"
202	8/15	"	19.	12.8	1.50	3.54	19.		.6	6	0	130P 146P	"
203	8/22	"	19.	12.1	1.37	3.50	17.		.6	7	0	901A 915A	"
204	8/28	"	20.	13.44	1.56	3.56	21.		.6	6	+0.01	232P 245P	"
205	9/4	Moon	17.5	9.56	1.72	3.50	17.		.6	9	0	921A 935A	22
206	9/11	"	19.5	12.67	1.74	3.61	22.		.6	10	0	925A 937A	"
207	9/18	"	24.3	12.76	1.36	4.55	17.		.6	10	0	907A 922A	"
208	9/26	Bonadiman	23.	15.50	1.04	3.98	16.		.6	6	0	835A 847A	40

F. C. Dist. Form 52

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

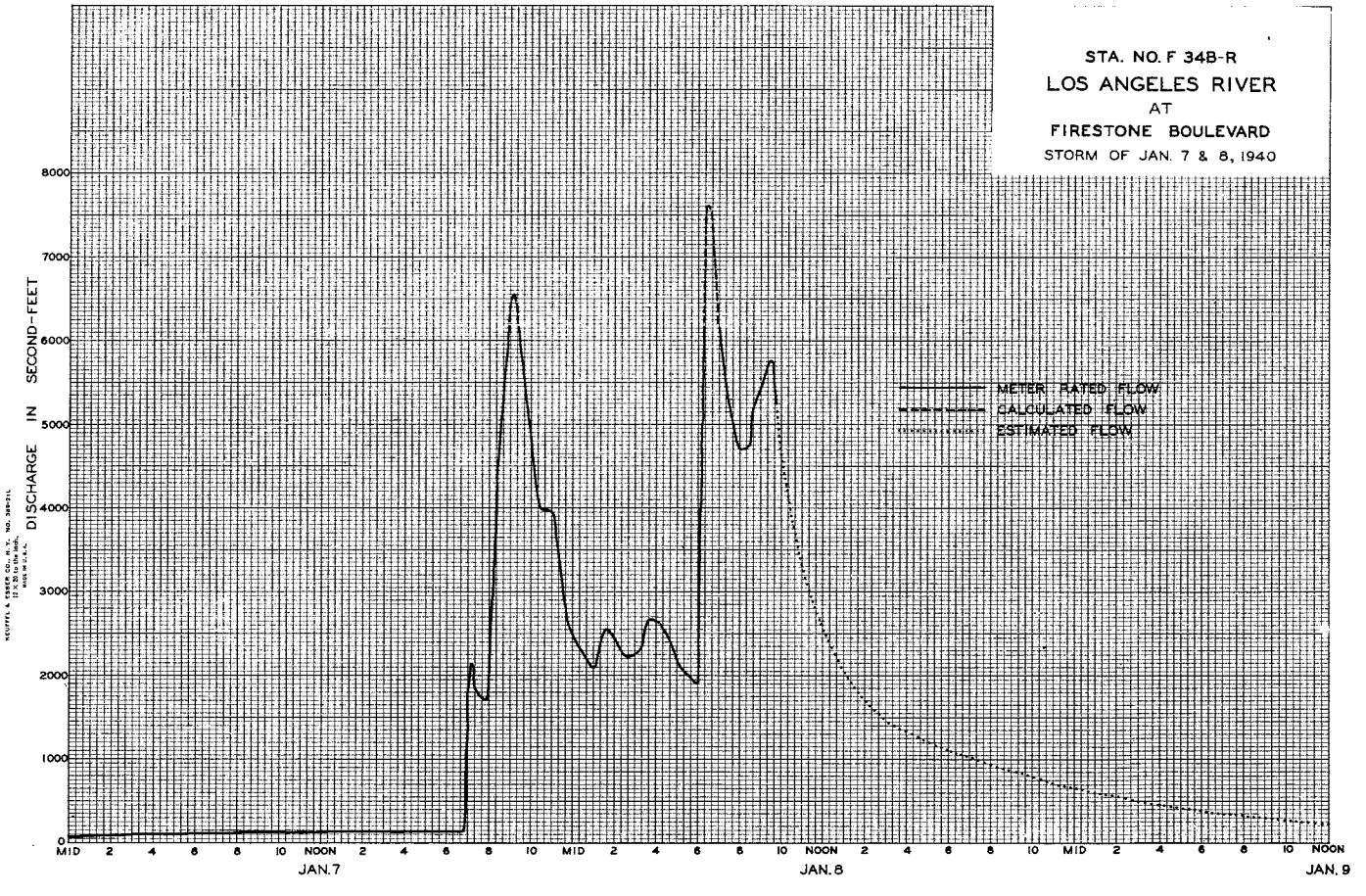
Sta. No. F 34B-R

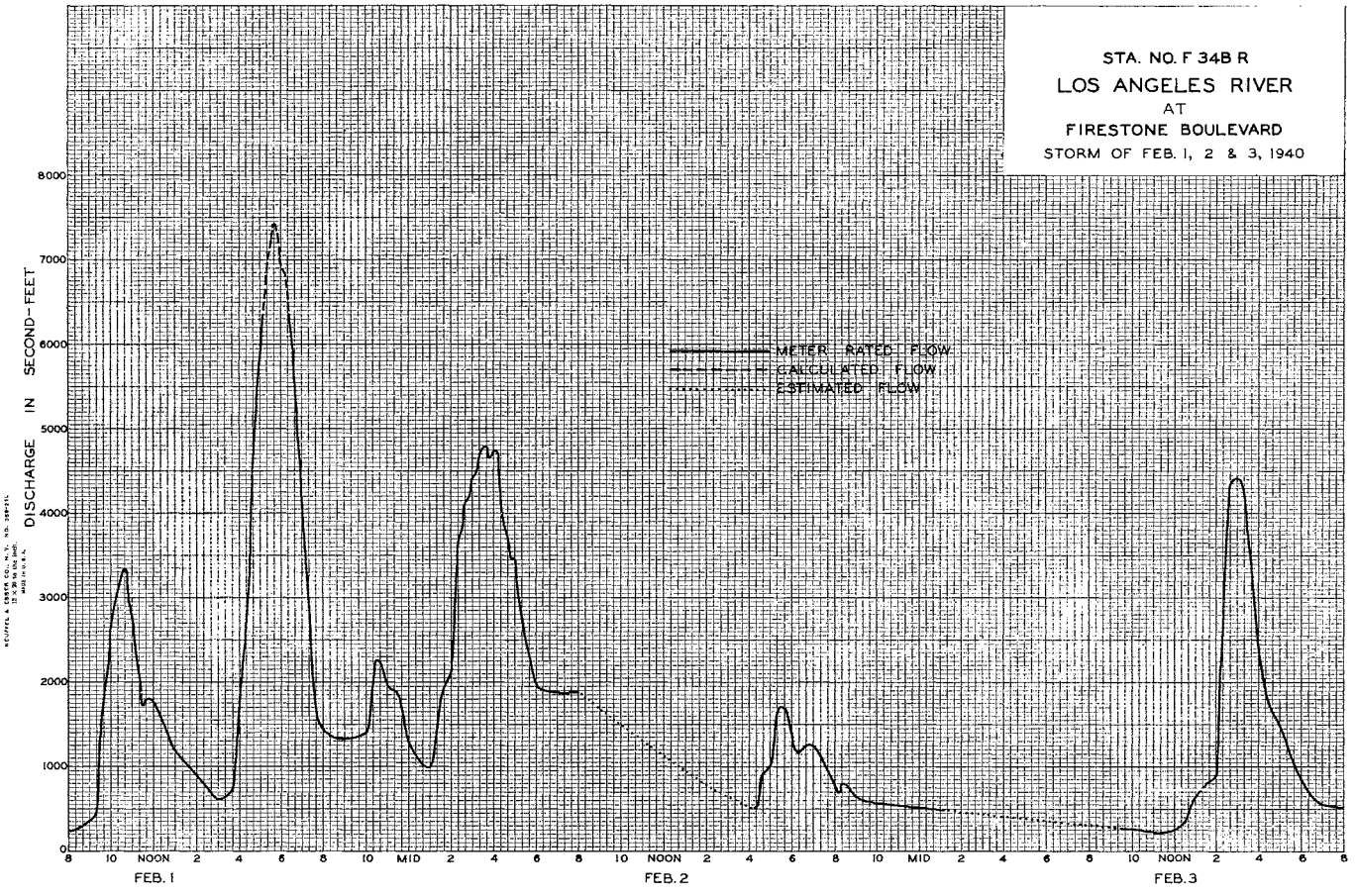
Daily discharge, in second-feet of LOS ANGELES RIVER at Firestone Blvd., for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	33	22	39	E 40	1590	E 77	446	26	24	16	14	19
2	33	20	38	E 40	1572	E 67	122	32	23	16	16	18
3	33	23	37	E 40	872	E 57	116	80	23	16	18	18
4	33	26	37	441	408	E 47	110	34	23	17	20	17
5	33	29	36	71	259	36	75	21	23	17	21	18
6	32	32	35	99	237	39	73	36	23	17	23	18
7	31	35	34	924	252	38	67	62	23	18	25	19
8	30	38	35	2410	130	41	66	89	23	18	27	20
9	30	41	36	284	106	55	70	42	24	18	26	20
10	29	40	38	256	106	40	69	73	24	19	25	21
11	28	39	39	233	123	58	69	78	24	19	24	22
12	29	38	40	231	142	60	63	44	25	20	22	21
13	29	37	41	197	123	55	63	70	25	22	21	20
14	30	36	42	224	299	56	63	81	24	23	20	20
15	31	35	42	231	E 168	68	136	68	23	25	19	19
16	31	33	42	190	E 114	58	118	17	22	26	19	18
17	32	32	42	97	E 95	53	61	70	21	28	18	18
18	33	32	41	58	E 79	65	67	90	20	29	18	17
19	33	31	41	63	E 66	83	68	87	19	29	18	17
20	33	30	41	68	E 55	76	58	66	19	28	18	17
21	33	30	41	58	47	63	E 48	24	18	28	17	17
22	33	29	41	58	194	74	E 44	15	18	27	17	17
23	34	30	173	354	114	58	E 39	18	17	27	18	16
24	34	32	84	212	49	47	E 35	E 19	17	26	18	16
25	34	33	66	70	765	41	E 30	E 20	17	26	19	16
26	34	34	52	70	236	47	665	E 21	16	24	20	16
27	32	36	45	82	108	120	117	E 22	16	23	20	16
28	30	37	40	82	96	62	64	E 23	16	21	21	16
29	28	39	40	116	368	67	92	E 24	16	19	20	16
30	26	40	40	141		78	32	E 24	16	17	20	17
31	24		40	218		841		E 24		16	19	
	968	989	1438	7658	8773	2627	3146	1400	622	675	621	540
MEAN	31.2	33.0	46.4	247.	303.	84.7	105.	45.2	20.7	21.8	20.0	18.0
ACRE-FEET	1920.	1960.	2850.	15190.	17400.	5210.	6240.	2780.	1230.	1340.	1230.	1070.

Remarks: E indicated discharge estimated or interpolated between meas.

YEAR OR PERIOD — MEAN 80.5 — ACRE-FEET 58420





STATION F18OR

LOS ANGELES RIVER at State Street, Long Beach

LOCATION:

On the downstream side of State Street bridge, 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.
Stevens continuous recorder was in service from October 1, 1939 to September 30, 1940.

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 Morris 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, 1940.
For earlier records see Station F36R - Los Angeles River at Willow Street.

EXTREMES OF DISCHARGE:

1939-1940
Maximum 8440 second-feet, February 2.
Minimum not determined.
1931-1940
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 IM 6-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 180-R

DISCHARGE MEASUREMENTS OF LOS ANGELES RIVER

AT ~~XXXXX~~ State Street, Long Beach DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
243	10/5	Bonadiman	46.	24.02	0.76	5.60	18.		.6	9	-.01	115P 145P	FC 40
244	10/11	"	21.	11.18	1.83	-	20.		.6	6	-	140P 200P	"
245	10/19	"	33.	17.6	1.58	5.10	28.		.6	8	0	140P 200P	"
246	10/26	"	38.	14.0	1.79	-	25.		.6	7	-	130P 150P	"
247	11/2	"	34.	19.38	1.24	-	24.		.6	8	-	1230P 1246P	"
248	11/9	"	Two Channels			5.67	37.		.6	9	0	1135A 1155A	"
249	11/16	"	"	"		5.46	25.		.6	11	0	1252P 110P	"
250	11/22	"	"	"		5.44	29.		.6	11	0	1100A 1125A	"
251	11/30	"	"	"		5.44	35.		.6	11	0	1230P 100P	"
252	12/7	"	"	"		5.43	35.		.6	13	-.01	1155A 1230P	"
253	12/14	"	"	"		5.44	37.		.6	15	0	1120A 1150A	"
254	12/20	"	"	"		5.43	39.		.6	15	-.01	1050A 1120A	"
255	12/28	"	"	"		5.50	44.		.6	13	0	100P 135P	"
256	1/4	"	"	"		6.23	647.		.6	15	+.20	130P 200P	"
257	1/8	Bonadiman & Jackman	"	"		8.40	5490.		.6	10	+.10	1220A 1250A	"
258	1/8	U.S.E.D. #1	256.	1020.	3.85	7.94	3930.		.6	25	-.62	155A 700A	35633
259	1/8	" #2	277.	989.	4.18	8.10	4140.		.6	27	-	710A 916A	"
260	1/8	" #3	317.	992.	3.82	7.90	3750.		.6		-	1021A 1200M	"
261	1/8	" #4	278.	929.	3.18	7.41	2950.		.6		-	1225P 214P	"
262	1/8	" #5	107.	440.	3.62	7.14	1590.		.6		-	306P 351P	"
263	1/8	Bonadiman & Jackman	Two Channels			7.07	1440.		.6	10	-.04	442P 500P	FC 40
264	1/9	"	58.	182.2	1.54	6.10	281.		.6	6	+.04	158P 200P	"
265	1/11	Bonadiman	57.	153.2	1.54	6.04	236.		.6	7	0	1020A 1038A	"
266	1/18	"	56.	64.4	0.92	5.65	59.		.6	7	0	1057A 1115A	"
267	1/23	Bonadiman & Jackman	Three Channels			7.49	2540.		.6	20	-.10	945P 1005P	FC 40
268	1/24	"	54.	131.5	1.71	5.94	209.		.6	6	0	245P 258P	"
269	1/25	Bonadiman	40.	64.95	1.32	5.88	86.		.6	5	0	1148A Noon	"
270	2/1	Bonadiman & Jackman	Three Channels			7.83	3590.		.6	24	+.07 -.19	1235P 115P	"
271	2/1	U.S.E.D. #6	325.	727.	4.45	7.80	3230.		.6		-	1208P 144P	35618
272	2/1	" #7	226.	469.	4.33	7.38	2030.		.6		0	247P 318P	"
273	2/1	" #8	314.	1190.	4.94	8.55	5880.		.6		0	634P 835P	35633
274	2/1	" #9	238.	812.	4.73	8.06	3840.		.6		0	924P 1055P	"
275	2/2	" #10	242.	773.	3.69	7.78	2850.		.6		0	1230A 147A	"
276	2/2	" #11	293.	1310.	5.27	8.70	6900.		.6		0	350A 507A	"
277	2/2	" #12	260.	1092.	4.74	8.38	5170.		.6		0	650A 726A	"
278	2/2	" #13	311.	872.	2.08	7.68	1810.		.6		0	1005A 1130A	"
279	2/2	" #14	192.	660.	1.87	7.28	1230.		.6		0	130P 210P	"
280	2/2	" #15	172.	708.	1.71	7.09	1250.		.6		-	227P 310P	"
281	2/3	Bonadiman & Jackman	133.6	183.8	2.16	6.31	398.		.6	10	0	1120A 1140A	FC 40
282	2/3	U.S.E.D. #16	353.	1515.	3.63	8.38	5500.		.6		-	445P 645P	35633
283	2/3	Bonadiman & Jackman	Three Channels			8.33	4650.		.6	25	-.06	550P 650P	FC 40
284	2/3	U.S.E.D. #17	238.	758.	2.58	7.70	1960.		.6		-	917P 1005P	35633
285	2/4	Bonadiman	Two Channels			6.67	802.		.6	17	0	1215P 1250P	FC 40
286	2/5	Bonadiman & Jackman	194.	228.4	1.64	6.36	375.		.6	14	0	1132A 1158A	FC 40
287	2/8	Bonadiman	Two Channels			6.16	133.		.6	16	0	1030A 1100A	"
288	2/14	"	"	"		6.90	603.		.6	15	+.39	342P 405P	"
289	2/14	"	"	"		7.02	833.		.6	16	-.04	410P 430P	"
290	2/15	"	"	"		6.18	165.		.6	13	0	117P 145P	"
291	2/21	Bonadiman	Two Channels			5.91	63.		.6	10	0	1142A 1210P	FC 40
292	2/25	Bonadiman & Jackman	Three Channels			8.00	3840.		.6	23	-.16	815P 905P	"
293	2/26	" "	"	"		6.38	308.		.6	20	-.01	130P 158P	"
294	2/29	" "	239.7	406.6	1.55	6.53	630.		.6	21	+.10	645A 715A	"
295	2/29	" "	Two Channels			7.14	1580.		.6	24	-.07	745A 810A	"
296	3/8	Bonadiman	86.6	75.2	0.63	5.95	45.		.6	8	0	1100A 1120A	"
297	3/14	"	89.6	81.0	0.70	5.94	57.		.6	7	0	1055A 1120A	"
298	3/21	"	112.	124.9	0.63	5.98	78.		.6	9	0	1125A 1150A	"
299	3/28	"	137.	153.4	0.73	6.10	112.		.6	11	0	1141A 1205P	"
300	3/31	Bonadiman & Jackman	Three Channels			7.56	2740.		.6	23	-.04	945A 1015A	"
301	3/31	" "	Two		"	6.89	1130.		.6	27	-.12	225P 300P	"
302	4/1	" "	"		"	7.06	1370.		.6	22	-.12	510A 540A	"
303	4/4	Bonadiman	191.2	203.9	0.67	6.22	137.		.6	17	0	1034A 1105A	"
304	4/11	"	66.	45.	1.16	6.14	52.		.6	10	0	1020A 1037A	"
305	4/18	"	61.	41.8	1.04	6.06	43.		.6	9	0	1100A 1120A	"
306	4/25	"	63.5	27.0	1.01	5.90	27.		.6	10	-.01	1132A 1155A	"
307	4/26	"	Two Channels			5.88	1040.		.6	13	-.06	952A 1025A	"
308	4/26	Bonadiman & Jackman	"	"		6.68	510.		.6	17	+.29	405P 425P	"
309	4/26	" "	"	"		7.10	1270.		.6	20	+.01 -.16	503P 530P	"
310	4/26	" "	"	"		6.71	548.		.6 & Sur.	13	+.01	847P 905P	"
311	4/27	Bonadiman	"	"		6.42	151.		.6	12	0	1140A Noon	"
312	5/2	"	67.	54.95	1.00	5.88	55.		.6	7	0	1115A 1135A	"
313	5/9	"	Two Channels			5.99	40.		.6	12	0	1130A 1150A	"
314	5/16	"	90.	63.6	0.71	6.00	45.		.6	13	0	1115A 1150A	"
315	5/23	Bonadiman	55.	29.6	0.86	5.90	25.		.6	8	0	1031A 1053A	FC 40
316	5/29	"	Two Channels			5.94	31.		.6	12	0	932A 954A	"
317	6/6	"	90.	45.6	0.79	5.97	37.		.6	11	0	1133A Noon	"
318	6/13	"	87.	44.6	0.50	5.94	22.		.6	13	0	1126A 1148A	"
319	6/19	Moon	14.	17.2	1.38	5.96	24.		.6	7	0	205P 220P	FC 22
320	6/26	"	12.3	17.7	1.40	5.97	25.		.6	7	0	249P 301P	"
321	7/2	"	13.5	16.2	1.36	5.95	22.		.6	9	0	201P 210P	"
322	7/11	Bonadiman	Two Channels			5.96	32.		.6	15	+.03	138P 200P	FC 40
323	7/18	"	88.	40.0	0.91	5.98	36.		.6	13	-.02	111P 126P	"
324	7/25	"	85.	35.1	0.73	5.96	26.		.6	14	0	105P 125P	"
325	8/1	"	93.	44.3	0.76	5.97	34.		.6	12	-.02	1010A 1025A	"
326	8/8	"	Two Channels			5.92	19.		.6	11	0	1100A 1115A	"
327	8/15	"	92.	39.6	0.72	5.96	28.		.6	14	0	1035A 1055A	"
328	8/22	"	93.	44.8	0.77	5.96	35.		.6	13	0	1052A 1110A	"
329	8/29	"	Two Channels			5.94	23.		.6	10	0	1112A 1130A	"
330	9/4	Moon	"	"		5.94	19.		.6	11	+.01	136P 150P	FC 22
331	9/11	"	"	"		5.98	22.		.6	14	0	119P 137P	"
332	9/18	"	Three	"		5.96	19.		.6	15	0	153P 210P	"
333	9/26	Bonadiman	Two	"		5.94	19.		.6	9	0	1042A 1055A	FC 40

F.C. Dist. Form St 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

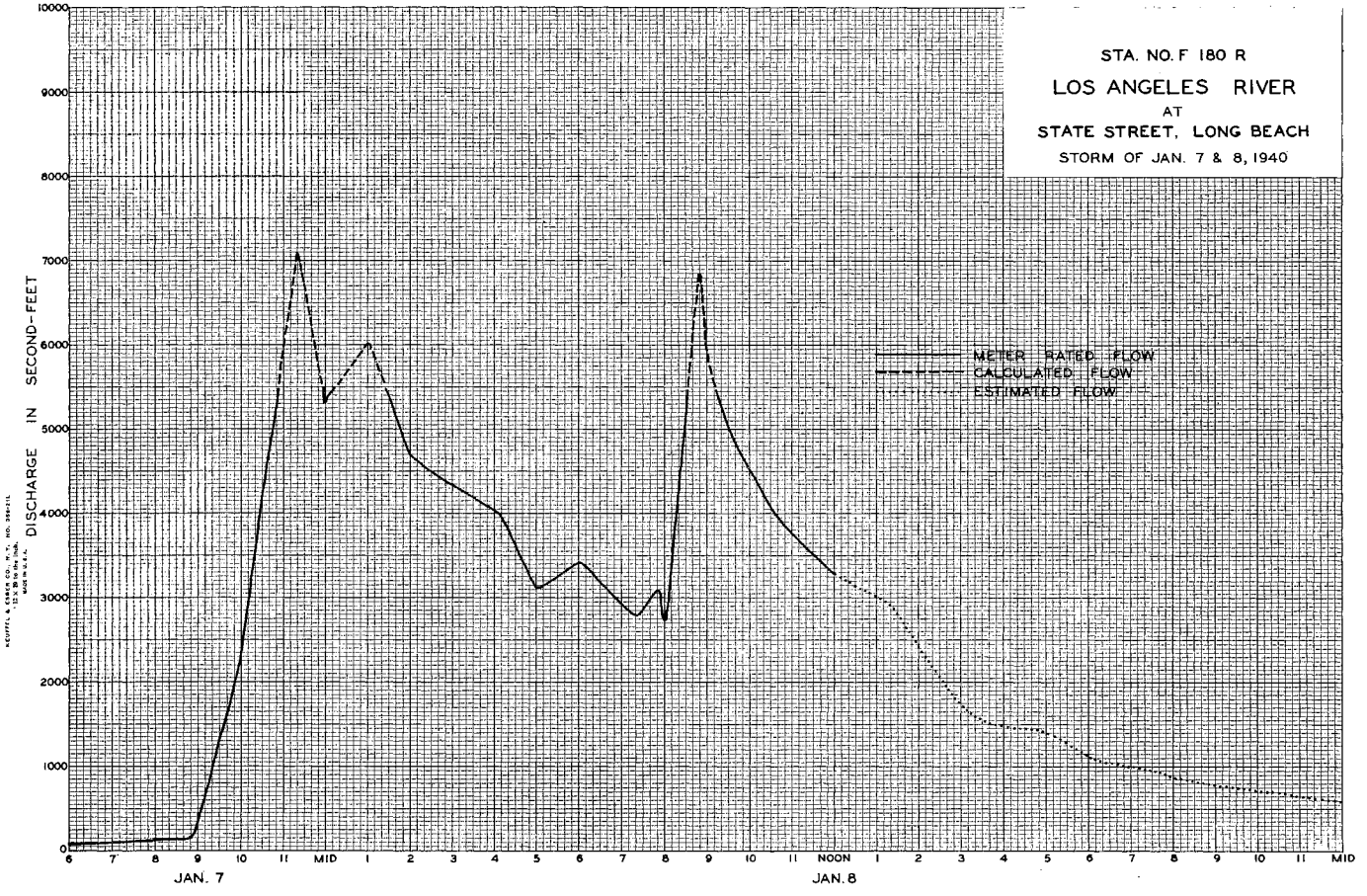
Sta. No. F180R

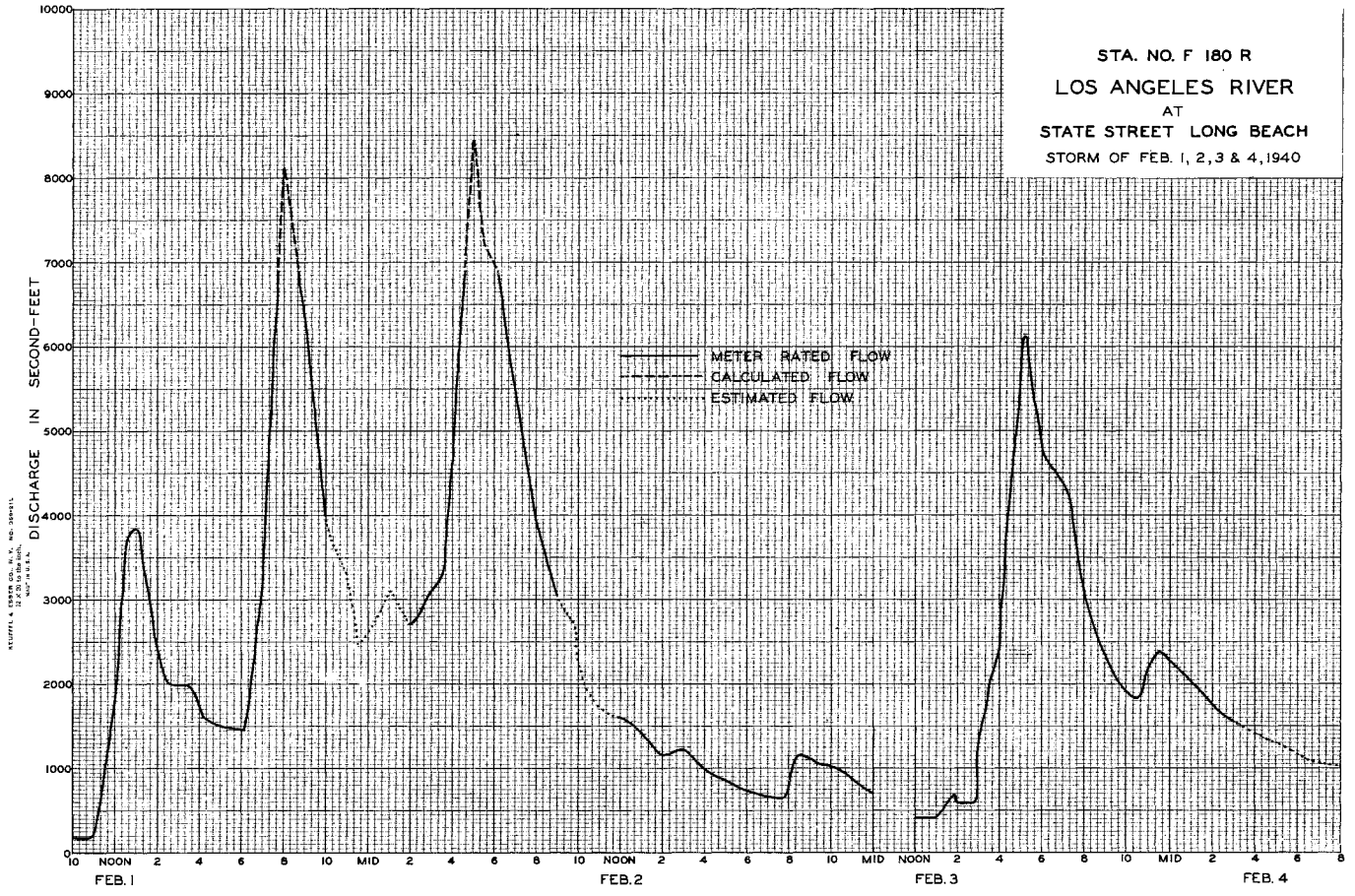
Daily discharge, in second-feet of LOS ANGELES RIVER at State Street, Long Beach, for the year ending September 30, 19 40

Day		Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		33	E 24	36	40	1780	101	803	55	27	23	32	23
2		30	E 24	36	38	2470	E 80	228	55	23	23	28	17
3		26	E 26	34	40	1590	E 73	167	63	22	22	28	15
4		22	E 28	34	401	984	E 68	133	57	34	26	22	19
5		18	E 30	33	142	374	E 63	104	40	39	20	21	20
6		18	E 31	34	86	222	E 59	83	34	39	25	21	21
7		19	E 33	34	567	191	E 55	78	40	39	27	21	23
8		19	E 35	36	E 2830	154	48	66	48	39	27	23	21
9		19	E 37	36	E 332	117	50	63	42	34	28	30	21
10		20	25	36	258	114	50	59	40	30	28	34	21
11		20	20	36	E 291	110	46	50	48	28	30	33	21
12		21	17	39	221	114	52	48	42	27	27	30	22
13		22	16	38	154	114	57	42	44	26	28	26	22
14		23	17	38	120	244	57	40	50	26	27	30	21
15		24	19	36	122	181	59	39	48	26	28	28	16
16		25	23	39	E 88	110	66	96	42	23	28	28	19
17		26	26	38	E 68	76	70	57	30	21	30	28	19
18		27	30	39	57	66	68	44	48	25	34	25	17
19		28	25	40	57	E 61	80	40	46	23	36	25	19
20		28	22	39	57	E 63	80	40	36	21	28	27	21
21		27	30	39	48	68	78	22	36	23	28	33	20
22		27	30	39	42	142	80	20	26	23	27	34	17
23		26	30	79	392	186	78	23	22	22	27	34	21
24		26	28	132	E 441	120	78	27	23	22	27	34	17
25		25	33	83	101	930	76	26	27	23	25	32	20
26		25	32	E 66	83	507	83	776	26	26	26	27	20
27		25	30	E 52	63	167	114	279	26	25	26	26	21
28		25	34	E 44	52	128	120	83	34	25	25	26	22
29		25	39	42	48	477	101	73	33	25	25	25	22
30		24	38	42	48		94	73	33	25	30	23	22
31		24		40	66		867		26		32	26	
		747	832	1388	7353	11860	3051	3682	1220	811	843	860	600
MEAN		24.1	27.7	44.8	237.	409.	98.4	123.	39.4	27.0	27.2	27.7	20.0
ACRE FEET		1480.	1650.	2750	14580.	23520	6050.	7300.	2420.	1610.	1670.	1710.	1190.

Remarks: E indicates discharge estimated or interpolated between measurements.

YEAR OR PERIOD — MEAN 90.8 — ACRE FEET 65930.





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, 1939 to September 30, 1940.

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 affect the low summer flows.

RECORDS AVAILABLE:

January 17, 1931 to September 30, 1940.

EXTREMES OF DISCHARGE:

1939-1940
Maximum 690 second-feet February 2.
Minimum + several days during year.
1930-1940
Maximum 10000 second-feet, estimated, March 2, 1938.
Minimum no flow at various times.

ACCURACY:

Fair.

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 (M 8-40)

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F130R

DISCHARGE MEASUREMENTS OF MALIBU CREEK

AT ~~XXXX~~ Crater Camp DURING THE YEAR ENDING SEPTEMBER 30, 1940

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.
115	10-19	Bollinger	6.0	1.62	.57	4.38	0.90		.6	5	0	343P 350P	FC6
116	11-2	"	5.7	1.43	.78	4.40	1.1		.6	6	0	1220P 1227P	"
117	11-16	"	5.5	1.49	.76	4.40	1.1		.6	6	0	1117A 1124A	"
118	11-30	"	6.0	1.51	.58	4.41	0.90		.6	6	0	1235P 1242P	"
119	12-14	"	6.5	1.74	.80	4.42	1.4		.6	5	0	215P 222P	"
120	12-28	"	5.7	1.54	.87	4.37	1.3		.6	7	0	232P 237P	"
121	1-4	Bollinger-Koch	7.0	1.85	1.32	4.43	2.4		.6	6	0	237P 243P	"
122	1-8	" "	37.0	22.95	2.30	5.17	53.		.6	9	+.02	921A 931A	"
123	1-11	Bollinger	30.5	21.19	2.23	5.06	47.		.6	9	-.01	116P 128P	"
124	1-16	Bollinger	18.7	5.26	.57	4.59	3.0		.6	7	0	330P 338P	"
125	2-1	Bollinger-Koch	50.5	77.5	4.58	6.29	355.		.6	8	0	415P 43BP	"
126	2-3	" "	56.0	121.4	4.48	6.80	544.		.6	10	-.03	750P 822P	"
127	2-8	Bollinger	32.0	30.35	1.05	4.81	32.		.6	13	0	225P 240P	"
128	2-15	"	10.6	6.97	2.15	4.54	15.		.6	11	0	1013A 1025A	"
129	2-21	Bollinger	10.9	6.50	2.02	4.48	13.		.6	11	0	303P 315P	FC6
130	2-25 2-26	Bollinger-Koch	43.	50.39	2.26	5.34	114.		.6	13	-.01	1156P 1209A	"
131	2-29	Bollinger	32.5	27.57	1.44	4.82	40.		.6	15	0	200P 216P	"
132	3-6	"	31.7	20.31	1.09	4.61	22.		.6	13	0	1135A 1150A	"
133	3-14	"	10.7	7.36	1.75	4.45	13.		.6	10	0	320P 332P	"
134	3-21	"	11.0	6.94	1.50	4.42	10.		.6	10	0	115P 125P	"
135	3-28	"	10.5	6.09	1.24	4.36	7.6		.6	10	0	215P 225P	"
136	4-4	"	10.9	6.62	1.38	4.38	9.1		.6	10	0	137P 147P	"
137	4-11	"	10.4	5.51	1.07	4.34	5.9		.6	10	0	200P 210P	"
138	4-18	"	10.2	5.64	.93	4.32	5.2		.6	10	0	223P 233P	"
139	4-25	Bollinger	10.4	5.64	.84	4.32	4.7		.6	9	0	230P 240P	FC6
140	5-2	"	10.2	4.97	.93	4.32	4.6		.6	10	0	300P 310P	"
141	5-16	"	8.0	3.38	.95	4.28	3.2		.6	7	0	143P 150P	"
142	5-29	"	6.7	2.33	.73	4.26	1.7		.6	7	0	205P 212P	"
143	6-6	"	7.7	2.95	.76	4.24	2.2		.6	7	0	1125A 1133A	"
144	6-12	"	10.2	3.60	.42	4.23	1.5		.6	7	0	212P 217P	"
145	7-18	"	5.0	1.23	.32	4.19	.39		.6	5	-	235P 241P	"
146	8-29	"	8.5	2.38	.08	4.18	.19		.6	5	0	310P 315P	"
147	9-5	"	4.0	.71	.56	4.18	.40		.6	3	0	412P 415P	"

F.C. Dist. Form 52 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

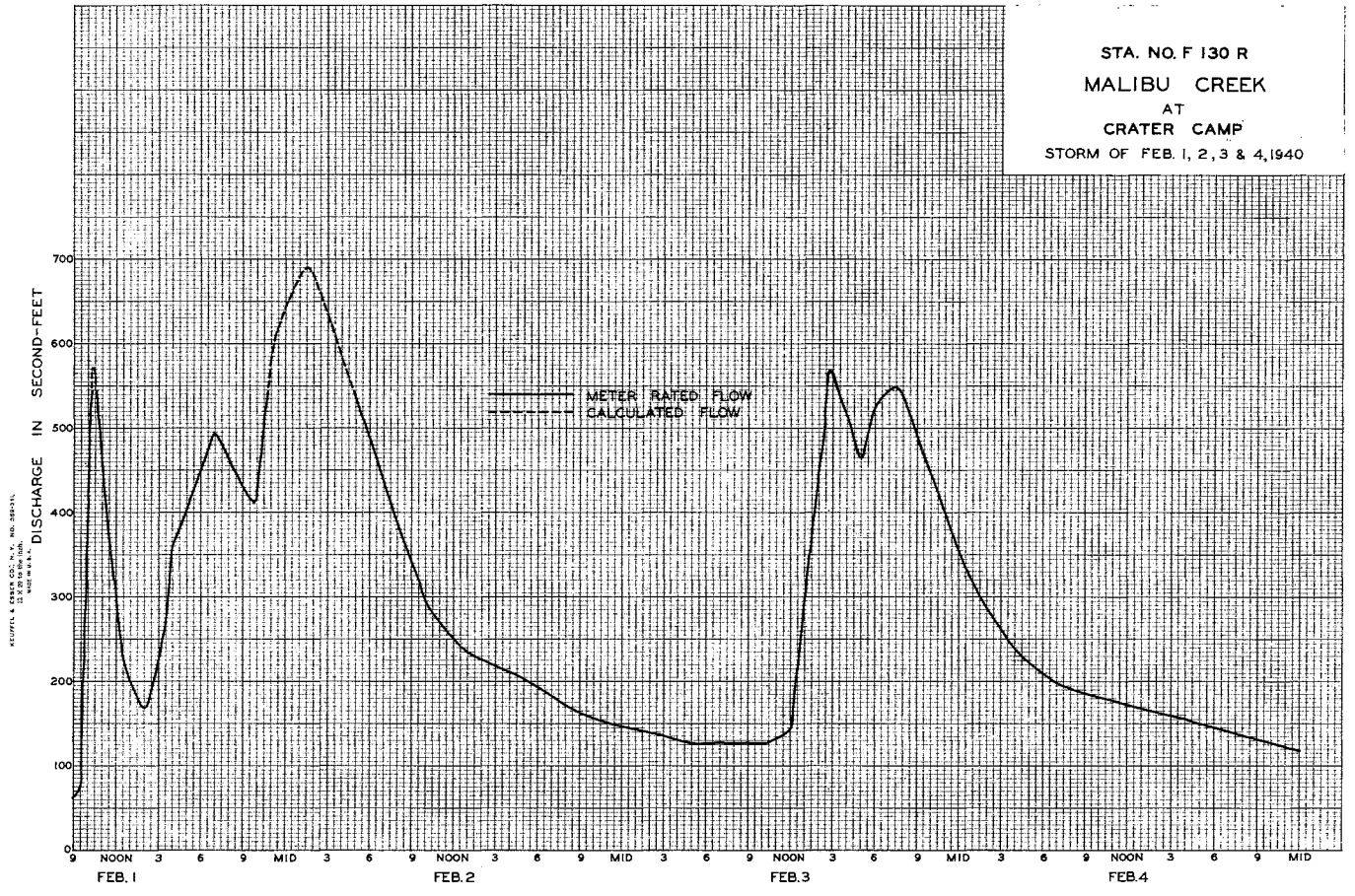
Sta. No F130R

Daily discharge, in second-feet of MALIBU CREEK at Crater Camp for the year ending September 30, 1940

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.1	0.2	10	0.6	246	31	15	5.5	2.5	0.6	+	E 0.4
2	0.8	0.6	2.9	0.4	335	32	10	4.9	2.5	0.4	+	E 0.4
3	0.1	1.1	0.8	0.6	294	30	9	4.1	2.1	0.4	0.1	E 0.4
4	0.4	1.1	0.6	2.1	188	24	9	4.1	2.5	0.4	0.1	E 0.4
5	0.4	1.4	0.6	1.7	86	23	8.5	3.7	2.9	0.4	0.1	E 0.4
6	0.4	1.4	0.6	1.4	56	21	8.5	3.3	2.1	0.4	0.1	0.4
7	0.8	1.4	0.8	6	42	20	6.5	3.3	2.1	0.4	0.1	0.6
8	0.6	2.1	1.1	64	34	18	6	2.9	2.1	0.4	0.2	0.6
9	0.4	2.9	1.1	51	27	17	6	3.3	2.0	0.4	0.2	0.4
10	0.2	1.7	1.1	23	25	15	6	3.7	1.4	0.4	0.2	0.4
11	0.4	1.4	1.7	41	23	15	5.5	3.3	1.4	0.4	0.2	0.6
12	0.4	1.4	1.4	17	20	14	4.9	3.3	1.4	0.4	0.2	0.6
13	0.4	1.4	1.4	12	19	13	4.9	3.3	1.4	0.4	0.2	0.6
14	0.4	1.1	1.4	9	30	12	4.1	3.3	1.4	0.4	0.2	0.6
15	0.4	1.1	1.1	6.5	16	12	4.9	3.3	1.4	0.4	0.2	0.6
16	0.4	1.1	1.4	4.9	10	11	4.9	3.3	1.7	0.4	0.2	0.6
17	0.2	1.1	1.4	4.1	13	11	4.9	2.9	1.4	0.4	0.2	0.6
18	0.4	0.8	1.4	2.9	13	10	5.5	2.5	1.4	0.4	0.1	0.6
19	0.6	0.8	1.4	2.9	13	10	5.5	1.7	1.9	0.4	0.1	0.4
20	0.6	0.6	1.4	2.9	12	10	4.9	1.7	1.4	0.4	0.1	0.2
21	0.4	0.6	1.4	2.9	12	9	4.9	1.7	1.1	0.2	0.2	0.2
22	0.4	0.6	1.7	3.3	25	8	4.9	1.7	1.1	0.2	0.2	0.2
23	0.4	0.4	4.0	18	38	8.5	4.9	2.1	1.1	0.2	0.2	0.2
24	0.4	0.2	1.7	25	9.5	8	4.9	2.1	1.4	0.1	0.1	0.2
25	0.4	0.2	1.4	7	56	7.5	6	1.7	1.4	0.1	0.1	0.1
26	0.4	0.4	1.1	5.5	62	8	10	1.7	1.1	0.1	+	0.1
27	0.2	0.6	1.4	4.5	50	8.5	9	1.7	1.1	0.1	+	0.1
28	0.1	0.6	1.4	4.1	45	7.5	7	1.7	0.8	0.1	0.1	0.1
29	0.1	0.6	1.1	3.7	45	7.5	6	1.7	0.8	0.1	0.2	0.1
30	0.1	0.8	0.8	3.3		8	5.5	1.7	0.8	+	E 0.4	0.1
31	0.1		0.8	3.3		16		2.5		+	E 0.4	
	12.4	29.7	50.4	334.6	1844.5	445.5	197.6	87.7	47.7	9.4	4.7	11.2
MEAN	0.40	0.99	1.63	10.8	63.6	14.4	6.59	2.83	1.59	0.30	0.15	0.37
ACRE-FEET	25	59	100	664	3660	884	392	174	95	19	9.3	22

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

YEAR OR PERIOD MEAN 8.40
ACRE-FEET 6100



STATION F22R

MONROVIA CREEK above Sawpit Creek

LOCATION:

On the right (south) bank of the creek 200 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-natural channel forms control.

DISCHARGE MEASUREMENTS:

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

RECORDER:

Installed November 10, 1927 in F.C. Standard house over 4 ft. x 3 ft. concrete stilling well. An continuous recorder was in service from October 1, 1939 to October 30, 1939. An H.C.F. continuous recorder was in service from October 30, 1939 to September 30, 1940.

REGULATION:

None.

DIVERSIONS:

Monrovia pipe line diverts water above gage.

RECORDS AVAILABLE:

November 10, 1927 to September 30, 1940.

EXTREMES OF DISCHARGE:

1939-1940
Maximum 68 second feet, January 8.
Minimum + at various times.
1927-1940
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.

OPERATION:

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

F. C. D. FORM 104 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 22 R

DISCHARGE MEASUREMENTS OF MONROVIA CREEK

~~XXX~~ above Sawpit Creek

DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
211	10/5	Lindsay	2.8	0.37	0.30	4.35	0.11		.6	4	0	855A	859A	FC 28
212	10/11	"	1.9	0.19	0.47	4.34	0.09		.6	4	0	145P	150P	"
213	10/19	"	2.0	0.24	0.42	4.32	0.10		.6	4	0	846A	850A	"
214	10/26	"	2.0	0.18	0.38	4.33	0.07		.6	4	0	923A	928A	"
215	11/2	"	1.9	0.19	0.21	4.32	0.04		.6	4	0	1052A	1056A	"
216	11/9	"	1.9	0.16	0.35	4.32	0.06		.6	4	0	851A	856A	"
217	11/16	"	1.9	0.16	0.31	4.32	0.05		.6	4	0	831A	834A	"
218	11/22	"	1.9	0.16	0.31	4.32	0.05		.6	4	0	900A	904A	"
219	11/30	"	1.9	0.14	0.36	4.32	0.05		.6	4	0	1038A	1042A	"
220	12/7	"	1.9	0.14	0.36	4.33	0.05		.6	4	0	849A	853A	"
221	12/14	"	1.9	0.13	0.38	4.32	0.05		.6	4	0	855A	859A	"
222	12/21	"	1.9	0.14	0.36	4.32	0.05		.6	4	0	913A	917A	"
223	12/28	"	1.9	0.16	0.37	4.33	0.06		.6	4	0	306P	310P	"
224	1/4	"	1.9	0.23	0.69	4.38	0.16		.6	4	0	245P	249P	"
225	1/8	Lindsay-Keim	11.5	5.59	3.03	4.88	17.		.6	7	+0.01	1232A	1247A	"
226	1/8	" "	7.5	1.57	3.63	4.70	5.7		.6	7	-0.01	630A	636A	"
227	1/8	" "	5.5	0.82	2.56	4.59	2.1		.6	5	0	1117A	1122A	"
228	1/9	Lindsay	3.4	0.50	2.20	4.46	1.1		.6	5	0	1023A	1028A	"
229	1/11	"	3.8	0.56	1.52	4.46	0.85		.6	5	0	507A	512A	"
230	1/18	"	1.3	0.14	0.79	4.30	0.11		.6	3	0	855A	858A	"
231	1/23	Lindsay Middleton	3.4	0.54	2.30	4.50	1.2		.6	5	+0.01	735P	741P	"
232	1/24	Lindsay	2.5	0.24	1.17	4.35	0.28		.6	5	0	950A	955A	"
233	1/31	"	1.0	0.08	0.50	4.29	0.04		.6	2	0	929A	932A	"
234	2/1	Lindsay Middleton	5.0	0.62	1.82	4.49	1.1		.6	5	0	1209P	1214P	"
235	2/2	Middleton Lindsay	6.0	1.16	3.01	4.55	3.5		.6	6	0	454A	459A	FC 28
236	2/2	Lindsay Middleton	4.5	0.62	2.28	4.50	1.4		.6	5	0	432P	436P	"
237	2/3	Lindsay Middleton	5.10	1.62	3.56	4.66	5.8		.6	6	-0.01	245P	250P	"
238	2/4	Middleton	5.6	0.97	1.59	4.48	1.5		.6	6	+0.01	1047A	1054A	"
239	2/7	Lindsay Ingram	4.0	0.45	1.82	4.42	0.80		.6	5	0	133P	138P	FC 28
240	2/14	Lindsay	3.7	0.35	1.17	4.39	0.41		.6	5	0	301P	307P	"
241	2/21	"	1.4	0.11	0.73	4.28	0.08		.6	3	0	930A	933A	"
242	2/25	Lindsay Middleton	9.0	3.68	3.56	4.72	13.		.6	8	-0.03	528P	533P	"
243	2/25	Lindsay Middleton	10.8	3.11	3.36	4.78	10.		.6	7	0	850P	858P	"
244	2/26	Middleton	6.5	0.88	1.76	4.40	1.6		.6	8	0	1034A	1044A	"
245	2/29	"	3.8	0.54	3.43	4.42	1.8		.6	6	0	840A	848A	"
246	3/6	Lindsay	2.0	0.12	0.92	4.24	0.11		.6	4	0	932A	936A	"
247	3/13	"	1.3	0.09	0.78	4.22	0.07		.6	3	0	905A	908A	"
248	3/20	"	1.5	0.11	0.82	4.22	0.09		.6	3	0	925A	928A	"
249	3/28	"	1.5	0.09	1.11	4.24	0.10		.6	3	0	914A	918A	"
250	3/31	"	4.8	0.68	1.62	4.40	1.1		.6	5	0	925A	930A	"
251	4/1	"	4.9	0.71	0.93	4.33	0.65		.6	5	0	931A	937A	"
252	4/4	"	1.5	0.11	0.82	4.22	0.09		.6	3	0	836A	840A	"
253	4/11	"	1.4	0.09	0.78	4.20	0.07		.6	3	0	847A	851A	"
254	4/18	"	0.5	0.07	1.00	4.21	0.07		.6	1	0	843A	845A	"
255	4/25	"	1.5	0.18	0.89	4.25	0.16		.6	3	0	904A	908A	"
256	4/26	"	4.8	0.62	1.97	4.40	1.2		.6	5	-0.01	417P	423P	"
257	5/2	"	0.7	0.08	1.00	4.22	0.08		.6	2	0	917A	920A	"
258	5/9	"	0.5	0.08	0.87	4.20	0.07		.6	1	0	818A	820A	"
259	5/16	Lindsay	0.5	0.07	0.86	4.20	0.06		.6	1	0	943A	945A	FC 28
260	5/23	"	0.5	0.06	0.87	4.20	0.05		.6	1	0	903A	905A	"
261	5/29	"	0.5	0.06	1.00	4.22	0.06		.6	1	0	913A	914A	"
262	6/6	"	0.5	0.07	0.86	4.22	0.06		.6	1	0	907A	908A	"
263	6/13	"	0.5	0.07	0.86	4.22	0.06		.6	1	0	908A	910A	43
264	6/27	"	0.5	0.07	0.71	4.21	0.05		.6	1	0	958A	1000A	"
265	7/18	"	0.5	0.05	0.77	4.20	0.04		.6	1	0	859A	900A	"
266	8/1	"	0.5	0.05	0.60	4.20	0.03		.6	1	0	848A	850A	"
267	8/15	"	0.5	0.05	0.66	4.20	0.03		.6	1	0	843A	844A	"
268	8/21	"	0.5	0.05	0.45	4.19	0.02		.6	1	0	108P	110P	"
269	9/6	Brewster	0.5	0.11	0.27	4.20	0.03		.6	1	0	1020A	1023A	24
270	9/19	Lindsay	0.5	0.05	0.60	4.19	0.03		.6	1	0	932A	933A	43

F.C. Dist. Form 52 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

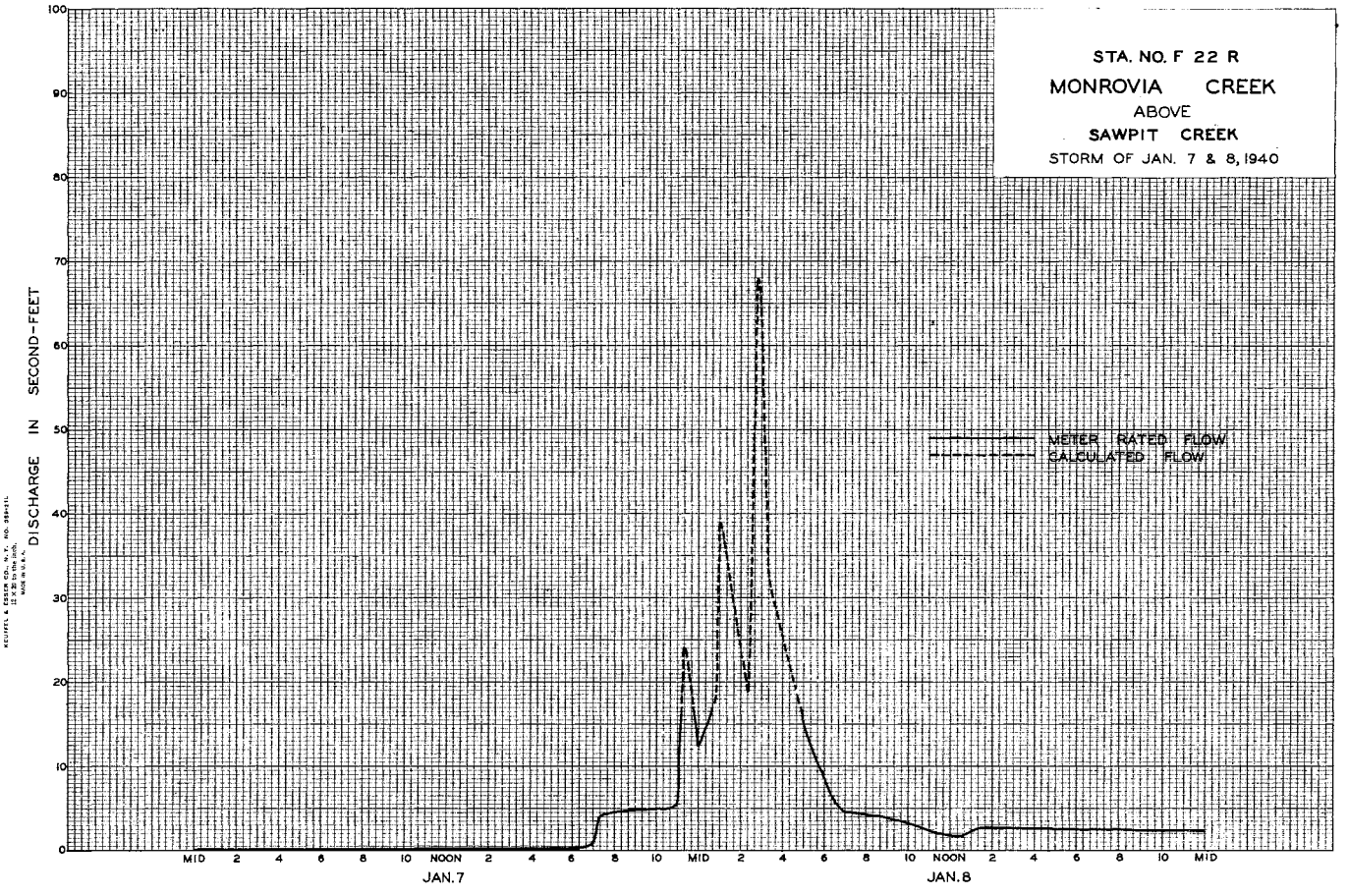
Sta. No F22R

Daily discharge, in second-feet of MONROVIA CREEK above Sawpit Creek, for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.1	0.05	0.05	0.1	2.5	1.0	0.6	0.1	0.05	0.05	0.05	0.05
2	0.1	0.05	0.05	0.1	2.3	0.6	0.2	0.1	0.05	0.05	0.05	0.05
3	0.1	0.05	0.05	0.1	1.8	0.4	0.1	0.1	0.05	0.05	0.05	0.05
4	0.1	0.05	0.05	0.2	1.7	0.3	0.1	0.1	0.05	0.05	0.05	0.05
5	0.1	0.05	0.05	0.2	1.6	0.2	0.1	0.1	0.05	+	0.05	0.05
6	0.1	0.05	0.05	0.2	1.1	0.2	0.1	0.1	0.05	+	0.05	0.05
7	0.2	0.05	0.05	1.7	0.7	0.2	0.1	0.1	0.05	+	0.05	0.05
8	0.1	0.05	0.05	8.5	0.4	0.2	0.1	0.1	0.05	+	0.05	+
9	0.1	0.05	0.05	1.1	0.4	0.1	0.1	0.1	0.05	+	0.05	+
10	0.1	0.05	0.05	0.8	0.2	0.2	0.1	0.1	0.05	+	0.05	+
11	0.1	0.05	0.05	0.8	0.2	0.1	0.1	0.1	0.05	+	0.05	+
12	0.1	0.05	0.05	1.0	0.1	0.1	0.1	0.1	0.05	0.05	0.05	+
13	0.1	0.05	0.05	0.6	0.05	0.1	0.1	0.05	0.05	0.05	0.05	0.05
14	0.1	0.05	0.05	0.4	0.2	0.1	0.1	0.05	0.05	0.05	0.05	0.05
15	0.2	0.05	0.05	0.4	0.2	0.1	0.05	0.05	0.05	0.05	0.05	0.05
16	0.2	0.05	0.1	0.2	0.05	0.1	0.1	0.05	0.05	0.05	0.05	0.05
17	0.2	0.05	0.1	0.1	+	0.1	0.1	0.05	0.05	0.05	0.05	0.05
18	0.2	0.05	0.1	0.1	+	0.1	0.1	0.05	0.05	0.05	0.05	0.05
19	0.1	0.05	0.1	0.2	0.05	0.1	0.1	0.05	0.05	0.05	+	0.05
20	0.1	0.05	0.1	0.2	0.05	0.1	0.1	0.05	0.05	0.05	+	0.05
21	0.1	0.05	0.05	0.2	0.1	0.1	0.1	0.05	0.1	0.05	+	0.05
22	0.1	0.05	0.05	0.2	0.2	0.1	0.05	0.05	0.1	0.05	+	0.05
23	0.1	0.05	0.1	0.3	0.3	0.1	0.05	0.05	0.1	0.05	+	0.05
24	0.1	0.05	0.1	0.3	0.2	+	0.1	0.05	0.1	0.05	+	0.05
25	0.1	0.05	0.1	0.2	4.4	+	0.1	0.05	0.1	0.05	0.05	0.05
26	0.1	0.05	0.1	0.1	2.3	+	2.0	0.05	0.1	0.05	0.05	0.05
27	0.1	0.05	0.05	0.1	1.3	+	0.5	0.05	0.05	0.05	0.05	+
28	0.1	0.05	0.05	0.1	1.1	0.1	0.1	0.05	0.05	0.05	0.05	+
29	0.05	0.05	0.05	0.05	1.8	0.1	0.1	0.05	0.05	0.05	0.05	+
30	0.05	0.05	0.1	0.05		0.1	0.1	0.05	0.05	0.05	0.05	+
31	0.05		0.1	0.05		0.7		0.05		0.05	0.05	
	3.45	1.50	2.10	18.65	25.30	5.7	5.75	2.15	1.80	1.20	1.25	1.05
MEAN	0.11	0.05	0.07	0.61	0.87	0.18	0.19	0.07	0.06	0.04	0.04	0.04
ACRE-FEET	6.8	3.0	4.2	37	50	11	11	4.3	3.6	2.4	2.5	2.1

Remarks: + indicates discharge less than 0.03 sec. ft.

YEAR OR PERIOD — MEAN 0.19 — ACRE-FEET 138



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, 1939 to September 30, 1940.

REGULATION:

None.

DIVERSIONS:

None.

RECORDS AVAILABLE:

April 25, 1932 to September 30, 1940.

EXTREMES OF DISCHARGE:

1939-1940
Maximum 422 second-feet January 7.
Minimum no flow most of the year.
1932-1940
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. Dist. Form 52 3-41"

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

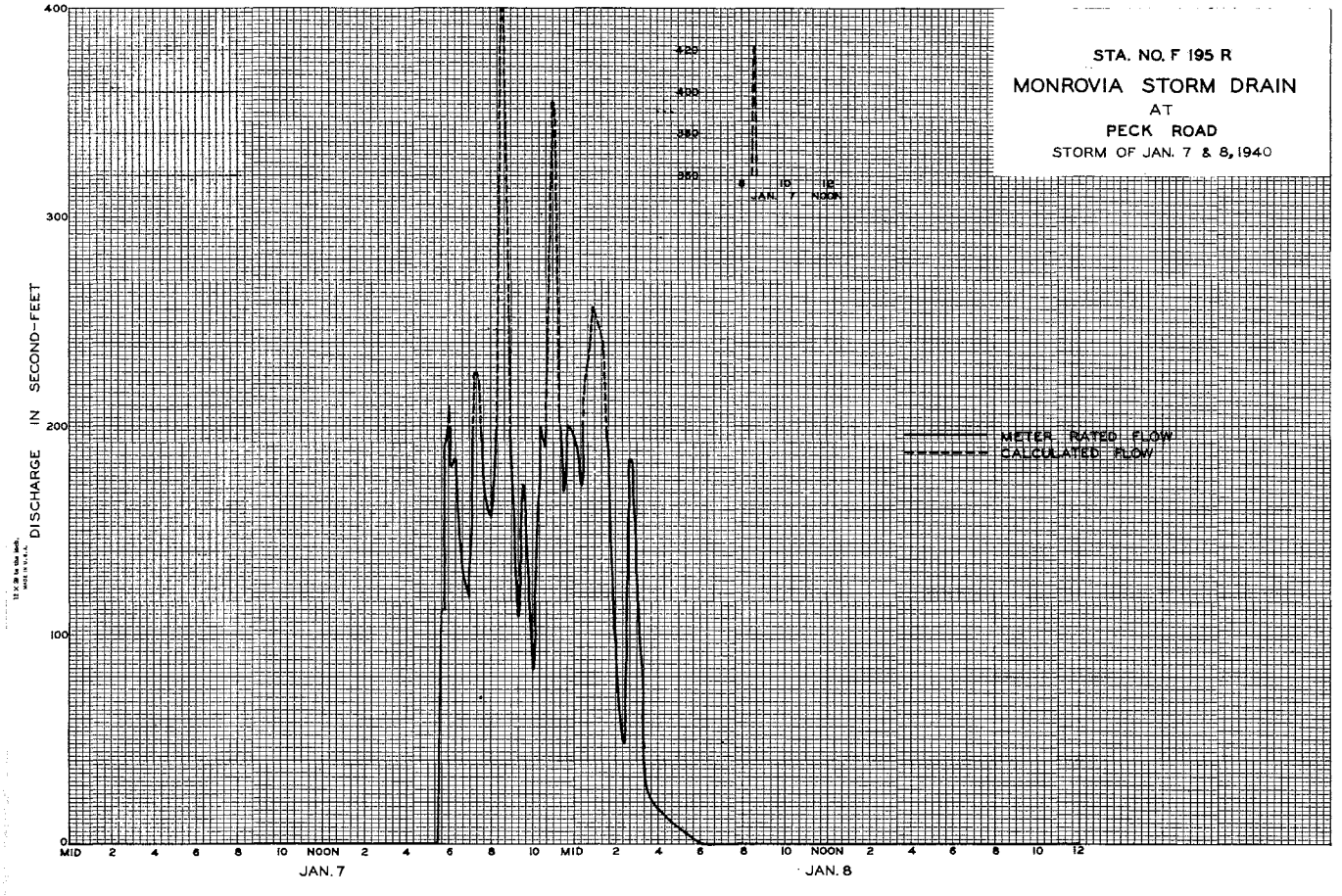
Sta. No. F195R

Daily discharge, in second-feet of MONROVIA STORM DRAIN at Peck Rd., for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0	0	25	0	3.0	0	0	0	0	0
2	0	0	0	0	22	0	0	0	0	0	0	0
3	0	0	0	0	14	0	0	0	0	0	0	0
4	0	0	0	7.5	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0.6	0	0	0	0	0	0	0	0
7	0	0	0	52	0	0	0	0	0	0	0	0
8	0	0	0	24	0	0	0	0	0	0	0	0
9	0	0	0	0.9	0	0	0	0	0	0	0	0
10	0	0	0	1.2	0	0	0	0	0	0	0	0
11	0	0	0	3.4	0	0	0	0	0	0	0	0
12	0	0	0	0.1	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	1.2	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	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	5	3.8	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	2.8	0	0	0	0	0	0	0
26	0	0	0	0	0.5	0	2.9	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0.4	0	0	0	0	0	0	0
29	0	0	0	0	7	0	0	0	0	0	0	0
30	0	0	0	0		0	0	0	0	0	0	0
31	0		0	0.3		20		0		0		
	0	0	5	93.8	98.1	20	32.0	0	0	0	0	0
MEAN	0	0	0.2	3.03	3.38	0.6	1.07	0	0	0	0	0
ACRE-FEET	0	0	9.9	186	195	40	63	0	0	0	0	0

Remarks:

YEAR OR PERIOD — MEAN 0.680 — ACRE-FEET 494



STATION F181R

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.
An H.C.F. continuous recorder was in service from October 1, 1939 to September 30, 1940.

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, 1940.

EXTREMES OF DISCHARGE:

1939-1940
Maximum 729 second-feet, February 1.
Minimum no flow at various times.
1931-1940
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.
Low flows usually estimated due to poor communication.

OPERATION:

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

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 181-R

DISCHARGE MEASUREMENTS OF MONTEBELLO STORM DRAIN

~~at~~ Outlet into Rio Hondo DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
45	12/23	Bonadiman & Jackman	14.	10.	4.00	.61	40.		.6	7	-.12	220P 232P	FC 40
46	12/23	" "	14.	7.8	2.26	.44	18.		.6	8	-.03	252P 305P	"
47	12/23	" "	14.	5.65	1.78	.34	10.		.6	8	-.02	322P 340P	"
48	12/23	" "	14.	4.23	1.56	.30	6.6		.6	8	-.01	402P 410P	"
49	12/23	" "	13.5	3.12	1.13	.27	3.5		.6	6	0	430P 435P	"
50	1/4	Bonadiman	14.	8.13	2.82	.46	23.		.6	7	-.01	816A 834A	"
51	1/4	"	14.	5.87	2.59	.42	15.		.6	9	-.04	841A 853A	"
52	1/7	" -Jackman	14.	22.4	9.61	1.77	217.		Sur.	9	+.30	746P 755P	"
53	1/7	" "	14.	25.7	10.1	2.03	260.		"	9	+.05	800P 810P	"
54	1/9	Bonadiman	14.	3.30	1.51	0.27	5.0		.6	4	0	801A 810A	"
55	1/11	"	14.	4.0	1.5	0.28	6.0		.6	6	0	418P 427P	"
56	1/23	Bonadiman & Jackman	14.	7.42	5.12	0.68	38.		.6	8	-.05	710P 715P	"
57	1/23	" "	14.	6.39	4.92	0.62	31.		.6	9	-.06	716P 721P	"
58	2/1	" "	14.	20.1	8.37	1.62	168.		.6 & Sur.	7	+.27	845A 853A	"
59	2/1	" "	14.	24.2	9.45	1.91	228.		Sur.	7	0	906A 916A	"
60	2/1	" "	14.	22.	9.47	1.76	208.		"	7	+.12	921A 927A	"
61	2/14	Bonadiman	14.	5.76	3.63	.42	21.		.6	8	-.04	1245P 1254P	"
62	2/14	"	14.	4.78	2.25	.36	11.		.6	6	-.02	109P 116P	"
63	2/14	"	14.	3.92	1.90	.32	7.5		.6	6	-.01	125P 134P	"
64	2/25	"	14.	18.1	8.83	1.44	160.		.6	7	-.08 +.05	412P 420P	"
65	2/25	"	14.	17.9	8.63	1.42	154.		.6	7	-.11	420P 430P	"
66	2/29	Bonadiman & Jackman	14.	6.15	4.28	.57	26.		.6	5	-.05	455A 500A	"

F.C. Dist. Form 52 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

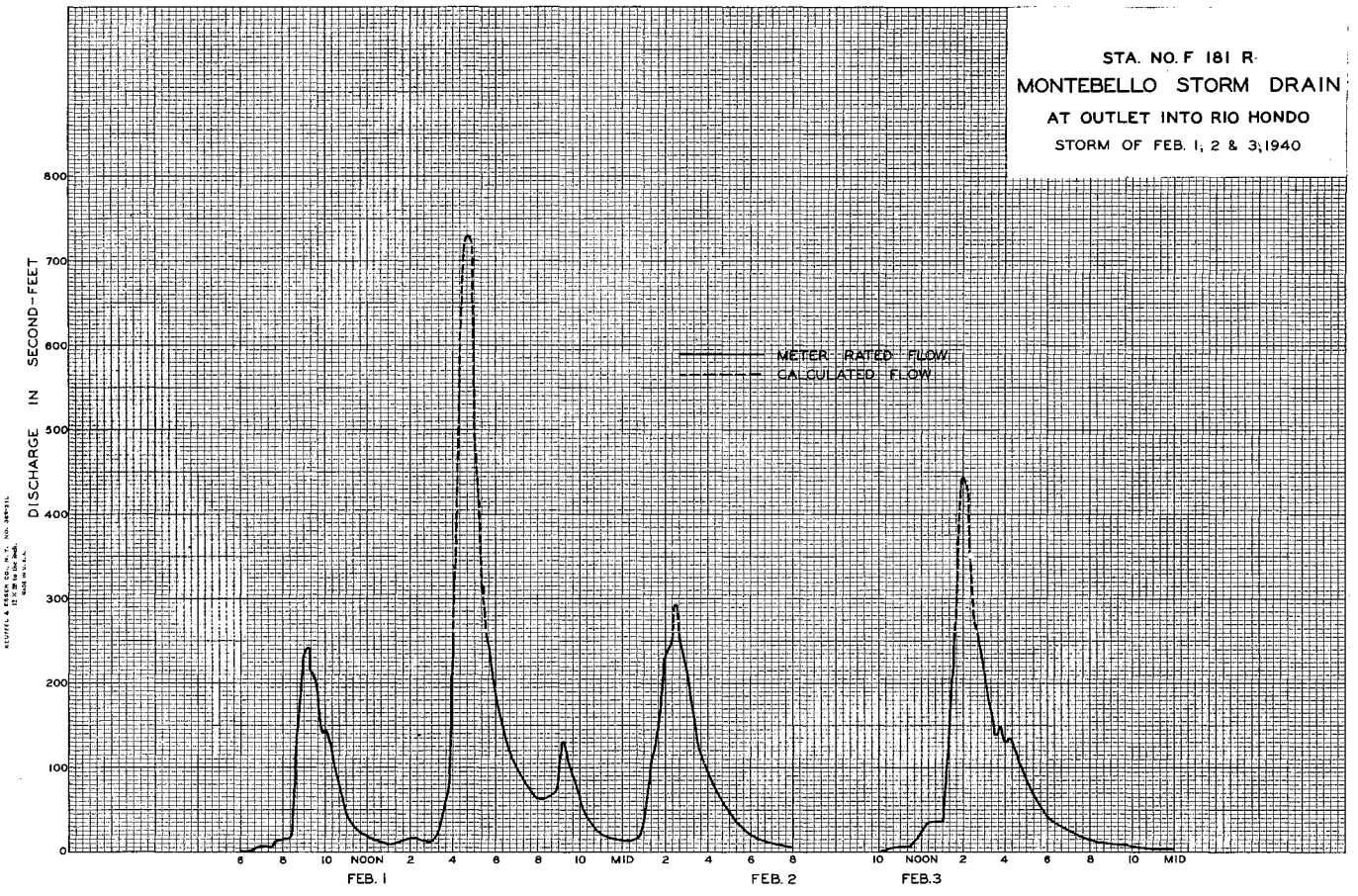
Sta. No F181R

Daily discharge, in second-feet of MONTEBELLO STORM DRAIN at Outlet into Rio Hondo, for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.1	0.1	0.1	0.1	77	0.1	7.5	0.1	0.1	0.1	0.1	0.1
2	0.5	0.1	0.1	0.1	41	0.1	E 0.5	0.1	0.1	0.1	0.1	0.1
3	0.1	0.1	0.1	0.1	43	0.1	E 0.3	0.1	0.1	0.1	0.1	0.1
4	0.1	0.1	0.1	11	1.7	0.1	0.1	0.1	0.1	0.1	0.1	0.1
5	0.1	0.1	E 0.5	0.3	E 1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
6	0.1	0.1	E 0.3	1.3	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1
7	1.1	0.1	0.1	49	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
8	0.1	E 0.2	0.1	22	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
9	0.1	E 0.3	0.1	4.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
10	0.1	E 0.5	0.1	8.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
11	0.1	0.1	E 0.5	3.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
12	0.1	0.1	0.1	1.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
13	0.1	0.1	0.1	0.9	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
14	0.1	E 0.2	0.1	0.1	4.9	0.1	0.1	0.1	0.1	0.1	0.1	0.1
15	0.1	E 0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
16	0.1	E 0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
17	0.1	E 0.5	0.1	0.1	0.1	0.1	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	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	0.1	0.1	0.1	0.1	0.1	0.1
20	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
21	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
22	0.1	0.1	0.1	0.1	0.7	0.1	0.1	0.1	0.1	0.1	0.1	0.1
23	0.1	0.1	4.5	9	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
24	0.1	0.1	0.1	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25	0.1	0.1	0.1	0.1	25	0.1	0.5	0.1	0.1	0.1	0.1	0.
26	0.1	0.1	0.1	0.1	1.3	0.1	49	0.5	0.1	0.1	0.1	0.1
27	0.1	0.1	0.1	0.1	0.3	1.9	1.1	0.7	0.1	0.1	0.1	0.1
28	0.1	0.1	0.1	0.1	0.6	0.1	0.1	0.1	0.1	0.1	0.1	0.1
29	0.1	0.1	0.1	0.1	6	0.1	0.1	0.1	0.1	0.1	0.1	0.1
30	0.1	0.1	0.1	0.1		0.1	0.1	0.1	0.1	0.1	0.1	0.1
31	0.1		0.1	3.5		24		0.1		0.1	0.1	
	4.5	4.8	8.5	117.0	204.6	28.8	61.3	4.1	3.0	3.1	3.1	3.0
MEAN	0.14	0.16	0.27	3.77	7.06	0.93	2.04	0.13	0.10	0.10	0.10	0.10
ACRE-FEET	8.9	9.5	17	232	406	57	122	8.1	6.0	6.1	6.1	6.0

Remarks: E indicates estimated.

YEAR OR PERIOD MEAN 1.22 ACRE-FEET 885



STATION F118B-R

PACOIMA CREEK FLUME below Pacoima Dam

LOCATION:

About 600 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, 1939 to September 30, 1940.

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, 1940.

EXTREMES OF DISCHARGE:

1939-1940
Maximum 169 second-feet February 4, 1940
Maximum + at various times.
1929-1940 (Stations F118R, F118B-R, and Parshall flume and dam records)
Maximum 685 second-feet March 2, 1938.
Minimum no flow at various times.
1916-1929 (Station U13R)
Maximum 1860 second-feet February 16, 1927.
Minimum no flow at various times.

ACCURARY:

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.

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 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 118B-R

DISCHARGE MEASUREMENTS OF PACOIMA CREEK FLUME

~~at~~ below Pacoima Dam DURING THE YEAR ENDING SEPTEMBER 30, 19 40

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Dif.	METHOD	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
71	2/4	Luce	10.0	15.31	9.57	1.56	147.		.6	7	+.03	223P 238P	FC 41
72	3/2	Luce-Waddicor	10.0	12.26	10.58	1.05	130.		.6	12	0	240P 300P	FC 39
73	5/18	Bollinger-DeVore	36.	41.95	2.77	.98	116.		.6	12	0	1128A 1145A	FC 6
74	5/18	" "	10.	12.30	9.34	1.03	115.		.6	12	0	216P 236P	"
75	5/18	" "	36.	44.25	2.82	1.08	125.		.6	14	0	335P 348P	"

F.C. Dist. Form 82 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

Sta. No. F118B-R

Daily discharge, in second-feet of PACOIMA CREEK FLUME below Pacoima Dam, for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.2	2.3	1.2	0.6	3.5	4.5	0.6	0.1	2.8	2.1	3.3	3.1
2	2.6	2.3	1.3	0.6	2.8	9.7	1.2	0.1	2.9	0.1	3.3	3.1
3	1.4	2.3	0.3	0.6	2.5	12.2	1.1	0.1	2.9	+	3.3	3.1
4	1.3	2.3	0.6	0.7	11.9	4.1	1.1	0.1	2.9	+	3.3	2.8
5	1.3	2.3	0.7	0.6	13.6	7.1	1.1	0.1	2.9	+	3.3	3.0
6	2.0	2.3	0.7	0.6	3.1	6.6	0.1	1.7	2.9	+	3.3	2.9
7	2.5	2.3	0.7	0.7	6.1	6.1	0.3	5.3	2.9	+	3.3	2.8
8	2.5	2.3	0.7	0.9	5.3	6.0	1.4	3.8	2.9	0.6	3.3	2.8
9	2.5	2.3	0.7	0.8	5.1	6.0	1.1	2.9	2.9	2.7	3.3	2.6
10	2.4	2.3	0.7	0.7	5.0	5.8	0.1	2.9	2.8	2.8	3.3	2.5
11	2.4	2.3	0.7	0.8	5.0	5.8	+	2.9	2.8	2.8	3.3	2.5
12	2.5	2.3	0.6	0.8	5.4	2.5	+	2.9	2.8	2.8	3.3	2.5
13	2.5	2.3	0.6	0.7	5.9	0.5	0.1	3.0	2.8	2.7	3.3	2.5
14	2.5	2.3	0.6	0.7	5.7	0.5	0.1	3.0	2.8	2.8	3.3	2.6
15	2.5	2.3	0.6	0.7	5.6	0.5	0.1	3.0	2.8	2.8	3.3	2.7
16	2.4	2.3	0.6	0.7	5.5	0.5	0.1	3.0	2.8	2.7	3.5	2.5
17	2.4	2.3	0.6	0.7	5.5	0.5	0.1	3.0	2.8	2.7	3.9	2.5
18	2.4	1.0	0.6	0.8	5.3	0.5	0.1	10.2	2.8	2.7	3.0	2.4
19	2.5	2.2	0.6	0.8	4.9	0.5	0.1	12.3	2.8	3.1	1.9	2.5
20	2.5	2.4	0.6	0.8	4.8	0.5	0.1	2.0	2.8	3.5	2.3	4.9
21	2.5	1.3	0.6	0.8	4.8	0.4	0.1	2.1	2.8	3.4	2.9	13.4
22	2.5	1.3	0.6	0.8	4.8	0.4	0.1	0.2	1.4	3.4	2.8	13.7
23	2.5	1.2	0.7	0.8	4.8	0.4	0.1	0.1	0.1	3.4	3.1	6.2
24	2.5	1.2	0.6	0.8	4.8	0.4	0.1	0.1	0.4	3.4	3.1	1.8
25	2.4	1.2	0.6	0.8	4.8	0.4	0.1	0.1	2.8	3.4	3.0	1.8
26	2.4	1.2	0.6	0.8	4.7	0.3	0.2	0.6	2.8	3.4	3.0	1.8
27	2.4	1.2	0.6	0.7	4.7	0.1	0.1	2.9	2.8	3.4	3.0	4.6
28	2.4	1.2	0.6	0.7	4.6	+	0.1	2.9	2.8	3.4	2.8	13.0
29	2.3	1.2	0.6	2.7	4.6	+	0.1	2.8	2.8	3.4	2.9	13.8
30	2.3	1.2	0.6	4.2		+	0.1	2.8	2.8	3.4	3.0	6.3
31	2.3		0.6	3.9		0.1		2.8		3.4	3.1	
	71.8	56.9	20.4	31.3	412.5	316.9	10.0	300.3	78.3	74.3	96.8	132.7
MEAN	2.32	1.90	0.66	1.01	14.2	10.2	0.33	9.69	2.61	2.40	3.12	4.42
ACRE-FEET	142	113	40	62	818	629	20	596	155	147	192	263

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

YEAR OR PERIOD — MEAN 4.38 — ACRE-FEET 3180

STATION F16R

PACOIMA WASH at Parthenia Street

LOCATION:

On the downstream side of Parthenia Street bridge 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.
An H.C.F. continuous recorder was in service from October 1, 1939 to September 30, 1940.

REGULATION:

Flow partially regulated by the Pacoima Dam, and Pacoima Spreading Grounds.

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, 1940.

EXTREMES OF DISCHARGE:

1939-1940
Maximum 584 second-feet, January 8.
Minimum no flow most of year.
1929-1940
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 1M 6-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F16R

DISCHARGE MEASUREMENTS OF PACOIMA WASH

AT Parthenia Street DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
89	1-7	Miller-Truitt	8.0	1.19	.92	4.22	1.1		.6	5	0	1035P 1045P	FC35
90	1-7 1-8	" "	24.0	13.22	3.41	4.97	45.		.6	11	-.04 +.08	1150P 1205A	"
91	1-8	" "	59.0	80.70	4.42	5.55	356.		.6	12	-.90	155A 240A	"
92	1-8	" "	7.0	1.63	1.63	4.10	2.7		.6	6	-.04	745A 800A	"
93	1-8	" "	5.6	.68	.68	4.00	.46		.6	5	-.01	940A 950A	"
94	1-9	" "	1.1	.07	.14	3.90	.01		.6	2	0	900A 905A	"
95	1-23	Miller	17.4	3.92	2.02	4.20	7.9		.6	9	-.04	555P 710P	"
96	2-1	Miller-Truitt	7.3	1.43	.94	3.98	1.3		.6	7	-.01	1000A 1010A	"
97	2-1	" "	24.0	13.70	4.75	4.57	65.		.6	10	+.15	1025A 1040A	"
98	2-1	" "	25.5	14.89	5.44	4.71	81.		.6	12	+.02	1050A 1105A	"
99	2-1	" "	20.6	12.87	4.45	4.74	57.		.6	11	0	1120A 1130A	"
100	2-1	" "	3.0	.54	.55	4.08	.30		.6	4	0	430P 435P	"
101	2-1	" "	2 Channels			4.74	67.		.6	15	-.02	720P 730P	"
102	2-1	" "	"	"		4.70	45.		.6	14	0	840P 855P	"
103	2-2	" "	22.5	9.50	2.63	4.26	25.		.6	11	-.01	330A 340A	"
104	2-2	" "	4.3	.51	.55	3.91	.28		.6	4	0	910A 915A	"
105	2-3	" "	2 Channels			4.68	45.		.6	12	-.05	250P 300P	"
106	2-3	" "	18.3	4.70	1.64	4.20	7.7		.6	10	-.01	535P 545P	"
107	2-3	" "	2.2	.35	.49	4.00	.17		.6	4	0	1020P 1025P	"
108	2-4	Luce	12.7	3.73	3.81	4.38	14.		.6	8	0	1225P 1232P	FC41
109	2-25	Miller-M. Miller	3.5	.33	.61	4.06	.20		.6	5	-.01	415P 420P	FC35
110	3-2	Luce	21.0	8.80	4.50	4.63	40.		.6	7	+.02	1025A 1030A	FC39
111	4-15	Miller-Miller	5.0	.89	1.07	4.25	.95		.6	6	0	730P 740P	FC35
112	4-26	Luce	1.5	.14	1.36	4.12	.19		.6	3	0	508A 510A	FC39

F.C. Dist. Form 92 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

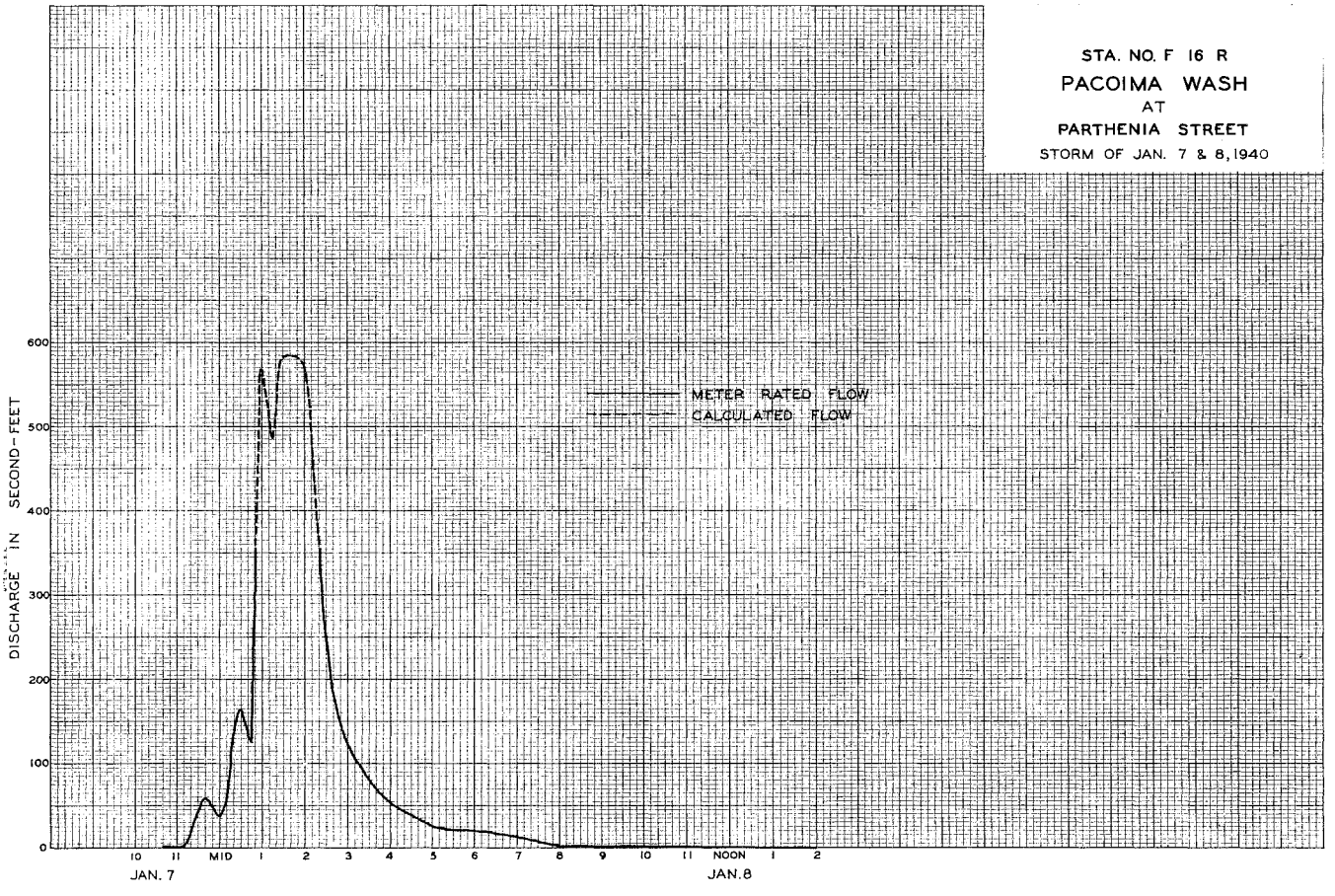
Sta. No. F 16 R

Daily discharge, in second-feet of PACOIMA WASH at Parthenia St. for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0	0	20	0	+	0	0	0	0	0
2	0	0	0	0	6.5	1.2	0	0	0	0	0	0
3	0	0	0	0	4.1	0.3	0	0	0	0	0	0
4	0	0	0	0	12	0.3	0	0	0	0	0	0
5	0	0	0	0	23	0	0	0	0	0	0	0
6	0	0	0	0	6	0	0	0	0	0	0	0
7	0	0	0	1.1	0	0	0	0	0	0	0	0
8	0	0	0	50	0	0	0	0	0	0	0	0
9	0	0	0	0.7	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
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	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	0.4	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
26	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
31	0		0	0		0.4		0		0		
	+	0	0	52.2	71.6	2.2	+	0	0	0	0	0
MEAN	+	0	0	1.68	2.33	0.07	+	0	0	0	0	0
ACRE-FEET	+	0	0	104	142	4.4	+	0	0	0	0	0

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

YEAR OR PERIOD — MEAN 0.33 — ACRE-FEET 250



STATION F40R

PUDDINGSTONE CREEK below Puddingstone Dam

LOCATION:

On the right (east) bank about 1000 feet below Puddingstone Dam near San Dimas.

DRAINAGE AREA:

32.3 square miles, including area above diversion dam on San Dimas Creek.

CHANNEL AND CONTROL:

Channel-sand, gravel and puddingstone. 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.
An H.C.F. continuous recorder was in service from October 1, 1939 to September 30, 1940.

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 Reservoir at Puddingstone Diversion Dam.

DIVERSIONS:

San Dimas Water Company diverts outflow from dam above the station.

RECORDS AVAILABLE:

December 28, 1927 to September 30, 1940.

EXTREMES OF DISCHARGE:

1939-1940
Maximum 7.0 second-feet, January 7.
Minimum + at various times.
1929-1940
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 1M 6-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 40-R

DISCHARGE MEASUREMENTS OF PUDDINGSTONE CREEK
~~XXXX~~ below Puddingstone Dam DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
157	10/5	Brewster	1.0	.18	.89	.08	.16		.6	2	0	330P 334P	FC 8
158	10/11	"	1.4	.60	.43	.14	.26		.6	3	0	225P 230P	"
159	10/19	"	1.5	.59	.53	.14	.31		.6	3	0	300P 303P	"
160	10/26	"	1.0	.23	.57	.07	.13		.6	2	0	400P 404P	"
161	11/2	Brewster	1.5	.56	.25	.07	.14		.6	3	0	350P 355P	FCB
162	11/9	"	2.0	.56	.50	.15	.28		.6	4	0	351P 355P	"
163	11/16	"	0.5	.12	.50	.04	.06		.6	1	0	305P 308P	"
164	11/22	"	1.5	.38	.63	.13	.24		.6	3	0	126P 130P	"
165	11/30	"	1.5	.29	.62	.11	.18		.6	3	0	440P 443P	"
166	12/7	"	1.0	.30	.33	.07	.10		.6	2	0	305P 308P	"
167	12/14	"	0.5	.15	.47	.05	.07		.6	1	0	448P 450P	"
168	12/21	"	2.0	.59	.42	.12	.25		.6	4	0	355P 400P	"
169	12/28	"	1.5	.36	.67	.12	.24		.6	3	0	330P 334P	"
170	1/4	"	1.5	.59	.46	.14	.27		.6	3	0	355P 400P	"
171	1/11	"	1.5	.64	.47	.13	.30		.6	3	0	240P 245P	"
172	1/18	"	1.0	.22	.82	.10	.18		.6	2	0	455P 458P	"
173	1/25	"	1.0	.23	.74	.11	.17		.6	2	0	312P 315P	"
174	2/1	"	1.8	.45	.96	.20	.43		.6	3	0	430P 434P	"
175	2/8	"	2.0	.62	.42	.15	.26		.6	4	0	511P 515P	"
176	2/15	"	1.5	.47	.55	.17	.26		.6	3	0	425P 429P	"
177	2/21	"	1.5	.47	.68	.14	.32		.6	3	+.01	320P 325P	"
178	2/29	"	1.5	.41	.41	.10	.17		.6	3	0	100P 105P	"
179	3/7	"	1.5	.43	.40	.08	.17		.6	3	0	350P 355P	"
180	3/14	"	1.5	.46	.33	.08	.15		.6	3	0	255P 300P	"
181	3/28	Brewster	1.5	.62	.23	.08	.14		.6	3	0	350P 354P	FC 24
182	4/4	"	1.5	.64	.25	.09	.16		.6	3	0	430P 433P	"
183	4/11	"	1.0	.40	.35	.09	.14		.6	2	0	356P 400P	"
184	4/18	"	1.0	.42	.38	.09	.16		.6	2	0	351P 355P	"
185	4/25	"	2.0	.55	.49	.14	.27		.6	4	0	415P 420P	"
186	5/2	"	1.5	.56	.39	.13	.22		.6	3	0	425P 430P	"
187	5/9	"	1.5	.50	.44	.12	.22		.6	3	0	435P 440P	"
188	5/16	"	1.5	.50	.46	.13	.23		.6	3	0	502P 506P	"
189	5/22	"	0.5	.11	.82	.06	.09		.6	1	0	900A 902A	"
190	5/28	"	0.5	.11	.73	.05	.08		.6	1	0	940A 942A	"
191	6/5	"	1.5	.56	.36	.11	.20		.6	3	0	840A 844A	"
192	6/12	"	1.0	.24	.67	.09	.16		.6	2	0	857A 900A	"
193	6/19	"	0.5	.12	.58	.05	.07		.6	1	0	822A 825A	"
194	6/26	"	0.5	.17	.82	.08	.14		.6	1	0	830A 832A	"
195	7/3	"	0.5	.18	.72	.08	.13		.6	1	0	843A 845A	"
196	7/10	"	1.0	.25	.52	.08	.13		.6	2	0	810A 813A	"
197	7/17	"	0.5	.12	.75	.05	.09		.6	1	0	805A 808A	"
198	7/24	"	1.0	.17	.53	.06	.09		.6	2	0	817A 820A	"
199	7/31	"	0.5	.12	.67	.05	.08		.6	1	0	830A 833A	"
200	8/6	"	0.5	.14	.93	.08	.13		.6	1	0	142P 145P	"
201	8/22	"	0.5	.11	.45	.04	.05		.6	1	0	350P 353P	FC 24
202	8/28	"	0.5	.12	.80	.06	.10		.6	1	0	817A 820A	"
203	9/4	"	0.5	.13	.62	.05	.08		.6	1	0	102P 105P	"
204	9/12	"	1.0	.30	.33	.07	.10		.6	2	0	330P 333P	"
205	9/19	Brewster	1.5	.57	.49	.15	.28		.6	3	0	326P 330P	FC 24
206	9/24	"	1.0	.37	.43	.10	.16		.6	2	0	1257P 100P	"

F. C. Dist. Form 58

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

Sta. No. F 40-R

Daily discharge, in second-feet of PUDDINGSTONE CREEK, below Puddingstone Dam for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.3	0.3	0.2	0.2 E	0.4 E	0.2	0.2	0.2	0.2	0.1	0.1	0.1
2	0.3	0.2	0.3	0.2 E	0.7	0.2	0.2	0.2	0.2	0.1	0.1	0.1
3	0.3	0.1	0.3	0.2	1.0	0.2	0.2	0.2	0.1	0.1	0.1	0.1
4	0.3	0.1	0.2	0.2	0.5	0.2	0.2	0.2	0.2	0.1	0.1	0.1
5	0.3	0.1	0.1	0.2 E	0.3 E	0.2	0.2	0.2	0.2	0.1	0.1	0.1
6	0.3	0.2	0.1	0.2 E	0.3 E	0.2	0.2	0.2	0.2	0.1	0.2	0.1
7	0.4	0.1	0.2	0.7 E	0.3 E	0.2	0.2	0.3	0.2	0.1	0.1	0.1
8	0.4	0.2	0.2	1.0 E	0.3 E	0.2	0.1	0.2	0.1	0.1	0.1	0.1
9	0.3	0.3	0.2	0.4	0.3 E	0.2	0.1	0.2	0.1	0.1	0.1	0.2
10	0.3	0.3	0.3	0.3	0.3 E	0.2	0.1	0.2	0.2	0.1	0.1	0.1
11	0.3	0.3	0.3	0.3	0.3 E	0.2	0.1	0.2	0.2	0.1	0.1	0.1
12	0.3	0.3	0.3	0.3	0.3 E	0.1	0.1	0.2	0.2	0.1	0.1	0.1
13	0.3	0.1	0.2	0.3	0.3 E	0.1	0.1	0.2	0.2	+	0.1	0.1
14	0.3	0.1	0.2	0.2	0.3 E	0.1	0.1	0.2	0.2	0.1	0.1	0.1
15	0.3	0.1	0.1	0.2	0.3 E	0.1	0.2	0.2	0.2	0.1	0.1	0.2
16	0.3	0.1	0.1	0.2	0.3 E	0.2	0.2	0.2	0.2	0.1	0.1	0.2
17	0.4	0.2	0.1	0.2	0.3 E	0.2	0.2	0.2	0.2	0.1	0.1	0.2
18	0.4	0.1	0.2	0.2	0.4 E	0.2	0.2	0.2	0.2	0.1	0.1	0.2
19	0.4	0.2	0.2	0.2	0.4 E	0.2	0.2	0.2	0.2	0.1	0.1	0.2
20	0.3	0.2	0.3	0.2	0.4 E	0.2	0.2	0.2	0.2	0.1	+	0.2
21	0.3	0.3	0.2	0.2	0.4 E	0.2	0.2	0.1	0.1	0.1	0.1	0.1
22	0.3	0.3	0.2	0.2	0.3 E	0.2	0.2	0.1	0.1	0.1	0.1	0.1
23	0.3	0.1	0.3	0.2	0.3 E	0.2	0.2	0.2	0.1	0.1	0.1	0.2
24	0.3	0.1	0.3	0.2	0.3 E	0.2	0.2	0.2	0.1	0.1	0.1	0.1
25	0.3	0.1	0.3	0.2	0.4 E	0.2	0.2	0.1	0.1	0.1	0.2	0.2
26	0.3	0.2	0.3 E	0.2	0.3 E	0.1	0.4	0.2	0.1	0.1	0.1	0.2
27	0.3	0.2	0.3 E	0.2	0.2 E	0.1	0.3	0.2	0.1	0.1	0.1	0.1
28	0.2	0.2 E	0.3 E	0.2	0.2 E	0.1	0.3	0.2	0.1	0.1	0.1	0.1
29	0.2	0.2 E	0.3 E	0.2	0.2 E	0.2	0.3	0.2	0.1	0.1	0.1	0.1
30	0.3	0.1 E	0.3 E	0.2	0.2 E	0.2	0.2	0.2	0.1	0.1	0.2	0.2
31	0.3		0.3 E	0.2		0.2		0.2		0.1	0.1	
	9.6	5.4	7.2	8.1	10.3	5.5	5.8	6.0	4.6	3.0	3.3	4.1
Mean	.31	.18	.23	.26	.36	.18	.19	.19	.15	.10	.11	.14
Acre-Feet	19.	11.	14.	16.	20.	11.	12.	12.	9.1	6.0	6.5	8.1

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

Year or Period — Mean .20 — Acre-Feet 145

STATION F192R

RIO HONDO at Lower Azusa Road

LOCATION:

On the downstream side of the 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, 1939 to September 30, 1940.

REGULATION:

Flow partially regulated by Sierra Madre Dam, Big Santa Anita Dam, Sawpit Dam, San Gabriel Dams 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, 1940, recorder records.

EXTREMES OF DISCHARGE:

1939-1940
Maximum - 288 second-feet, January 7.
Minimum no flow several months.
1932-1940
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. Flows occasionally estimated due to sand obstructing communication.

OPERATION:

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

F. C. D. FORM 104 1M 6-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 192-R

DISCHARGE MEASUREMENTS OF RIO HONDO

at Lower Azusa Road DURING THE YEAR ENDING SEPTEMBER 30, 19 40

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Dif.	METER NO.	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
												455P	
195	12/23	Haig-Eckert	5.0	1.16	.93	2.50	1.1		.6	5	-.01	505P	FC 33
												205P	
196	1/4	" "	Two Channels			2.72	8.2		.6	8	-.02	210P	"
												317P	
197	1/4	" "	4.2	.79	1.10	2.40	.85		.6	4	-.01	320P	"
												1005P	
198	1/7	" "	Three Channels			3.31	123.		.6	21	-.06	1024P	"
												226A	
199	1/8	" "	"	"		3.35	167.		.6	18	-.20	245A	"
											Surf,	755A	
200	1/8	Haig	13.0	5.89	1.54	2.76	9.1		.6	7	-.01	802A	"
		Lindsay &										938P	
201	1/23	Middleton	7.5	1.24	.88	2.43	1.1		.6	8	-.03	945P	FC 28
												1045A	
202	2/1	Haig-Mellen	53.	29.79	2.05	3.15	61.		.6	7	-.05	1050A	FC 33
												141P	
203	2/1	" "	2.5	.51	1.43	2.68	.75		.6	3	0	144P	"
												710P	
204	2/1	Haig	45.	16.48	1.37	2.90	23.		.6	8	+.01	716P	"
												410A	
205	2/2	Haig-Mellen	51.5	35.47	2.58	3.24	92.		.6	8	-.04	418A	"
												422P	
206	2/3	" "	51.	23.22	1.91	3.01	44.		.6	7	-.02	426P	"
												1132P	
207	2/3	" "	Two Channels			2.73	7.1		.6	8	0	1140P	"
												308P	
208	2/4	Middleton	12.	6.30	2.58	2.78	16.		.6	7	+.01	316P	FC 28
												932A	
209	2-8	Lindsay	4.5	.61	.59	2.39	.36		.6	5	0	937A	FC 28
												553P	
210	2-25	Haig-Mellen	54.	27.28	2.94	3.20	80.		.6	7	-.04	602P	FC 33
												940P	
211	2-25	" "	Two Channels			2.85	6.3		.6	8	0	946P	"
												1141A	
212	2-26	Middleton	7.5	1.20	1.38	2.68	1.6		.6	8	0	1150A	FC 28
												731A	
213	3-31	Haig	46.	17.15	1.90	3.02	33.		.6	9	-.25	741A	FC 33
												1144A	
214	3-31	Lindsay	6.0	.76	.96	2.44	.75		.6	5	0	1150A	FC 28
												1154P	
215	3-31	Haig-Mellen	8.9	3.22	1.53	2.60	4.9		.6	6	0	1159P	FC 33
												342P	
216	4-26	Lindsay	12.5	3.84	2.09	3.03	8.0		.6	6	-.02	348P	FC 28
											+.01	155P	
217	6-19	"	Two Channels			3.47	59.		.6	13	-.01	215P	FC 43
											+.02	1205P	
218	6-20	"	"	"		3.73	125.		.6	14	-.01	1228P	"
												1235P	
219	6-21	"	26.	35.24	3.16	3.68	111.		.6	9	0	1252P	"
		Lindsay, J. &										110P	
220	6-23	Lindsay, R.	47.	58.43	2.87	3.81	168.		.6	13	0	130P	"
		Lindsay, J. &										222P	
221	6-24	Lindsay, R	79.	74.73	2.96	3.89	221.		.6	16	-.02	242P	"
												1112A	
222	6-30	Lindsay	75.	57.97	2.72	3.64	157.		.6	14	-.01	1140A	"
												1105A	
223	7-1	"	77.	56.46	2.81	3.63	159.		.6	15	+.02	1125A	"
												105P	
224	7-2	"	77.	70.74	2.77	3.73	196.		.6	15	0	130P	"
												1144A	
225	7-3	"	76.	72.04	2.66	3.72	192.		.6	15	+.01	1205P	"

F.C. Dist. Form 92 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

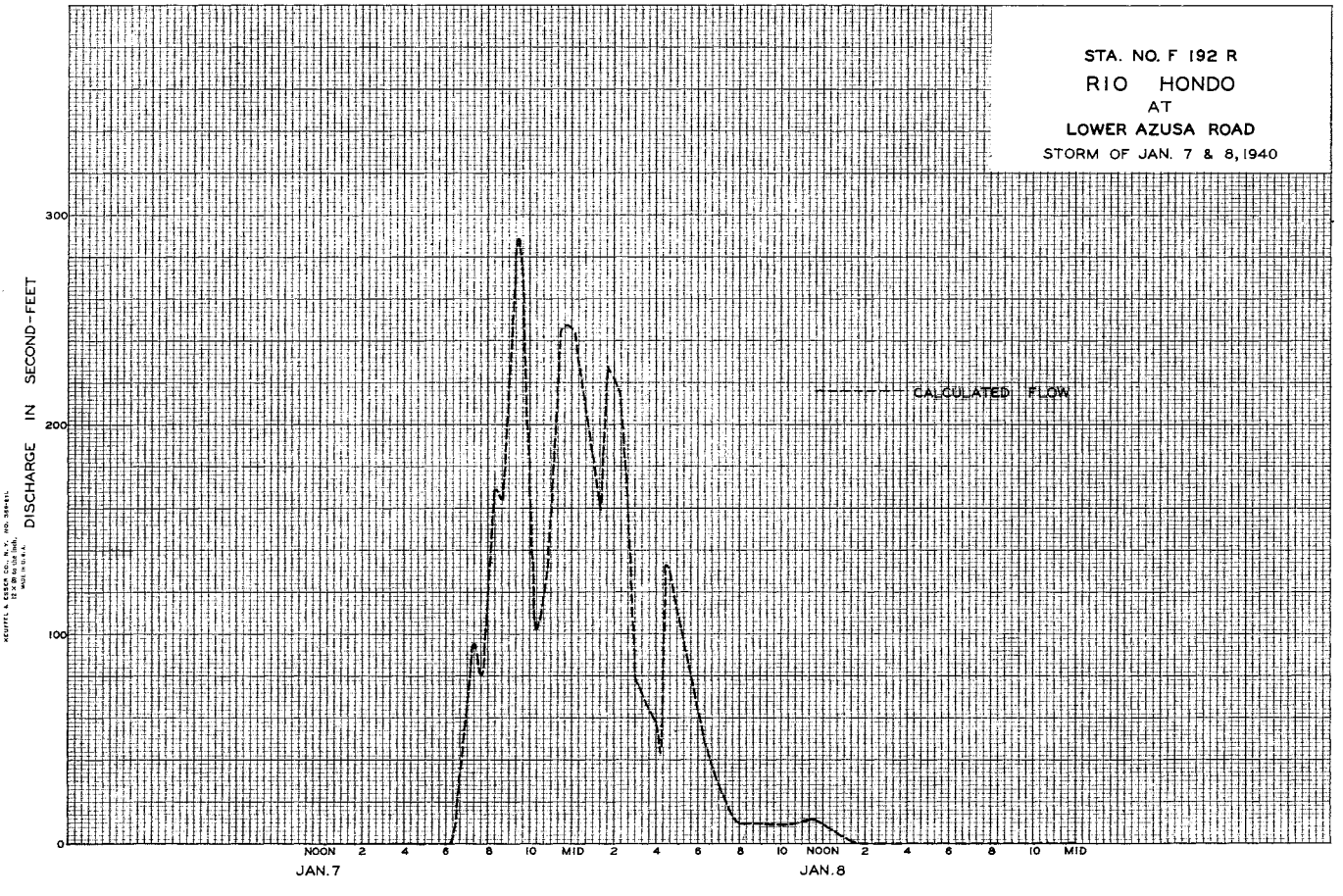
Sta. No F192R

Daily discharge, in second-feet of RIO HONDO at Lower Azusa Rd., for the year ending September 30, 1940

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0	+	15	0	1.4	0	0	149	0	0
2	0	0	0	+	17	0	0	0	0	185	0	0
3	0	0	0	+	17	0	0	0	0	145	0	0
4	0	0	0	1.6	15	0	0	0	0	E +	0	0
5	0	0	0	+	12	0	0	0	0	E +	0	0
6	0	0	0	+	7.5	0	0	0	0	+	0	0
7	0	0	0	37	2.2	0	0	0	0	0	0	0
8	0	0	0	39	0.2	0	0	0	0	0	0	0
9	0	0	0	E +	E +	0	0	0	0	0	0	0
10	0	0	0	E 1.0	E +	0	0	0	0	0	0	0
11	0	0	0	1.6	.03	0	0	0	0	0	0	0
12	0	0	0	+	+	0	0	0	0	0	0	0
13	0	0	0	+	+	0	0	0	0	0	0	0
14	0	0	0	+	+	0	0	0	0	0	0	0
15	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
19	0	0	0	+	0	0	0	0	44	0	0	0
20	0	0	0	+	0	0	0	0	108	0	0	0
21	0	0	0	+	0	+	0	0	110	0	0	0
22	0	0	0	+	0	+	0	0	104	0	0	0
23	0	0	0.3	1.3	0	+	0	0	164	0	0	0
24	0	0	0	0	0	+	0	0	224	0	0	0
25	0	0	0	0	15	+	0	0	184	0	0	0
26	0	0	0	0	0.4	+	13	0	45	0	0	0
27	0	0	0	0	0	+	0.4	0	+	0	0	0
28	0	0	+	0	+	+	0	0	0	0	0	0
29	0	0	+	0	6	+	0	0	13	0	0	0
30	0	0	+	0		+	0	0	147	0	0	0
31	0		+	+		6.5		0		0	0	
	0	0	0.3	81.5	107.6	6.5	14.8	0	1143	479	0	0
MEAN	0	0	0.01	2.62	3.71	0.21	0.49	0	38.1	15.4	0	0
ACRE-FEET	0	0	0.60	162	213	13	29	0	2270	950	0	0

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

YEAR OR PERIOD MEAN 5.01
ACRE-FEET 3640



STATION F64R

RIO HONDO above Mission Bridge

LOCATION:

On the right (west) bank approximately 1000 feet above Mission Bridge (San Gabriel Blvd.) and two miles northeast of Montebello.
This supplements the station operated from 1923 to 1928 by the State Division of Water Rights at Mission Bridge.

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, 1939 to September 30, 1940.

REGULATION:

Flow partially regulated by Sierra Madre Dam, Big Santa Anita Dam, Sawpit Dam, San Gabriel Dams 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.
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, 1940 (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 Station F64B-R).

EXTREMES OF DISCHARGE:

1939-1940
Maximum 2380 second-feet, January 7.
Minimum 5.0 second-feet, September 4.
1928-1940
Maximum 28000 second-feet, estimated, March 2, 1938.
Minimum 0.3 second-feet, December 1, 1933.

ACCURACY:

Fair.
Control shifts during high flows.

OPERATION:

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

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO F 64-R

DISCHARGE MEASUREMENTS OF RIO HONDO

Above Mission Bridge

DURING THE YEAR ENDING SEPTEMBER 30, 19 40

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	RATING PERMN. DIF.	METH OD	MEAS SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
373	10/5	Brewster	45.0	15.17	1.18	5.03	18.		.6	7	0	855A 910A	FC 8
374	10/7	Bonadiman	113.0	126.5	3.33	6.38	421.		.6	11	-.10	230P 247P	FC 40
375	10/11	Brewster	34.0	12.14	1.31	4.99	16.		.6	8	0	900A 915A	FC 8
376	10/19	"	37.0	13.69	1.24	4.95	17.		.6	6	0	910A 925A	"
377	10/26	"	Two Channels			4.88	16.		.6	9	0	852A 908A	"
378	11/2	"	37.0	12.72	1.20	4.91	15.		.6	10	0	840A 855A	"
379	11/9	"	56.0	14.88	1.10	4.87	16.		.6	7	0	854A 910A	"
380	11/16	"	53.0	15.07	1.06	4.86	16.		.6	7	0	855A 910A	"
381	11/22	"	55.0	16.62	.98	4.89	16.		.6	7	0	850A 905A	"
382	11/30	Brewster	54.0	13.96	1.05	4.88	15.		.6	7	0	903A 916A	FC8
383	12/7	"	50.0	14.50	1.12	4.87	16.		.6	7	0	910A 925A	"
384	12/14	"	Two Channels			4.85	15.		.6	11	0	900A 915A	"
385	12/21	"	49.0	14.68	1.18	4.86	17.		.6	8	0	915A 930A	"
386	12/23	Haig-Eckert	92.0	102.6	2.79	6.14	317.		.6	9	-.19	255P 315P	FC 33
387	12/23	" "	56.0	45.93	1.44	5.25	66.		.6	11	-.06	543P 559P	"
388	12/28	Brewster	38.0	14.13	1.43	4.85	20.		.6	8	0	900A 915A	FC 8
389	1/4	Haig-Eckert	104.	109.0	3.12	6.16	340.		.6	12	+.07	1130A 1143A	FC 33
390	1/4	Anderson-Linden	92.	115.2	2.13	6.00	245.		.6	13	-.20	140P 210P	FC 36
391	1/4	" "	92.	98.2	2.12	5.83	208.		.6	12	-.08	215P 235P	"
392	1/4	Haig-Eckert	48.	51.52	1.60	5.33	83.		.6	9	-.05	440P 451P	FC 33
393	1/5	Brewster	47.	22.22	1.65	5.05	37.		.6	6	0	245P 300P	FC 8
394	1/7	Lindsay-Keim	118.	205.2	6.19	6.83	1270.		.6	8	-.07	703P 718P	FC 28
395	1/7	" "	120.	191.2	6.38	6.74	1220.		.6	8	-.05	718P 733P	"
396	1/7	" "	140.	260.7	7.0	7.21	1820.		.6	9	+.09 -.07	831P 853P	"
397	1/7	Lindsay-Keim	140.	250.0	6.3	7.14	1580.		.6	9	-.08	853P 910P	FC 28
398	1/8	Anderson-Linden	128.	235.5	6.72	7.00	1580.		.6	13	-.08 +.03	1215A 1245A	FC 36
399	1/8	" "	123.	214.5	6.10	6.92	1310.		.6	13	-.10	1245A 110A	"
400	1/8	" "	113.	165.2	4.15	6.43	686.		.6	12	-.10	410A 435A	"
401	1/8	Haig-Eckert	75.	63.35	2.39	5.52	152.		6.	11	-.02	1100A 1110A	FC 33
402	1/9	Lindsay	40.0	30.3	1.75	5.24	53.		.6	11	-.01	248P 302P	FC 28
403	1/10	Haig-Eckert	97.0	88.3	2.26	5.74	199.		.6	12	+.09	610P 625P	FC 33
404	1/12	Brewster	72.0	32.08	1.65	5.20	53.		.6	8	0	1042A 1055A	FC 8
405	1/18	"	71.0	21.28	1.20	5.01	26.		.6	9	0	1005A 1020A	"
406	1/23	Haig-Eckert	94.0	88.0	1.93	5.64	170.		.6	12	-.03	502P 514P	FC 33
407	1/23	" "	76.0	51.4	1.72	5.34	88.		.6	9	-.09	953P 1007P	"
408	1/24	Lindsay	63.0	24.1	1.58	5.10	38.		.6	13	+.01	1207P 1224P	FC 28
409	1/25	Brewster	65.0	22.61	1.22	5.00	28.		.6	8	0	1002A 1014A	FC 8
410	2/1	Lindsay	113.0	197.4	5.60	6.74	1110.		.6	10	-.02 +.05	907A 923A	FC 28
411	2/1	"	113.0	209.8	6.13	6.74	1290.		.6	10	-.05 +.03	923A 940A	"
412	2/1	Haig-Mellen	103.0	94.51	2.30	5.82	218.		.6	15	-.01	247P 305P	FC 33
413	2/1	" "	111.0	208.0	6.38	6.70	1330.		.6	11	-.07	543P 605P	"
414	2/2	Lindsay-Middleton	113.0	208.1	6.73	6.79	1400		.6	10	-.06	307A 322A	FC 28
415	2/2	" "	113.0	194.7	6.53	6.72	1270.		.6	9	-.09	322A 337A	"
416	2/2	Linden-Wallace	111.0	134.0	5.30	6.45	710.		.6	14	-.30	410A 530A	FC 36
417	2/2	" "	105.0	119.8	4.29	6.19	513.		.6	14	-.14	530A 606A	"
418	2/2	Haig-Mellen	65.0	67.8	2.34	5.54	159.		.6	10	+.01	558P 615P	FC 33
419	2/3	Brewster	33.0	25.03	2.48	5.18	62.		.6	6	0	930A 945A	FC 8
420	2/3	Linden-Wallace	111.0	193.8	7.09	6.78	1370.		.6	15	-.31	245P 315P	FC 36
421	2/3	Linden-Wallace	111.0	176.1	5.97	6.48	1050.		.6	15	-.18	320P 340P	FC 36
422	2/3	" "	82.0	63.8	2.15	5.58	137.		.6	6	-.04	955P 1015P	"
423	2/4	Haig-W. Haig	80.0	51.2	1.69	5.32	87.		.6	10	0	112P 126P	FC 33
424	2/5	Haig	43.5	28.32	1.98	5.14	56.		.6	11	+.01	922A 937A	"
425	2/8	Brewster	44.0	15.82	1.44	5.02	23.		.6	6	0	943A 957A	FC 8
426	2/14	Lindsay	110.0	111.8	2.72	5.96	304.		.6	10	+.09	1224P 1240P	FC 28
427	2/14	"	110.0	117.9	2.69	5.99	317.		.6	10	-.05	1243P 1258P	"
428	2/15	Brewster	50.0	17.55	1.41	4.93	25.		.6	8	0	907A 923A	FC 8
429	2/21	"	57.0	16.93	1.25	4.94	21.		.6	7	0	903A 918A	"
430	2/25	Haig-Mellen	109.	199.	3.88	6.75	770.		.6	10	+.14	311P 325P	FC 33
431	2/25	" "	109.	234.2	4.26	6.90	997.		.6	10	+.22	326P 345P	"
432	2/25	" "	135.	278.5	6.52	7.20	1820.		.6	11	-.16	409P 425P	"
433	2/25	" "	135.	277.6	6.72	7.07	1870.		.6	10	-.06	426P 437P	"
434	2/25	Linden-Wallace	112.	181.0	6.20	6.50	1120.		.6	13	0	600P 620P	FC 36
435	2/25	" "	112.	169.2	5.97	6.44	1010.		.6	13	-.07	630P 650P	"
436	2/25	Middleton-Lindsay	Two Channels			5.60	148.		.6	9	-.04	1054P 1105P	FC 28
437	2/26	Middleton	33.5	24.85	1.98	5.06	49.		.6	13	-.01	110P 125P	"
438	2/29	Middleton-Lindsay	43.5	26.63	1.92	5.05	51.		.6	14	0	218P 234P	"

F. C. D. FORM 104 1M 9-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 64-R

DISCHARGE MEASUREMENTS OF RIO HONDO

Above Mission Bridge DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
439	3/1	Brewster	45.0	19.50	1.74	4.99	34.		.6	6	0	1012A 1021A	FC 8
440	3/7	"	47.0	17.45	1.43	4.90	25.		.6	6	0	920A 932A	"
441	3/14	"	45.0	19.58	1.25	4.89	25.		.6	6	0	912A 924A	"
442	3/21	"	51.0	17.15	1.22	4.85	21.		.6	6	0	857A 910A	"
443	3/28	"	48.0	17.34	1.38	4.86	24.		.6	7	0	850A 900A	FC 24
444	3/31	Haig	109.	216.0	3.40	6.47	736.		.6	10	+.20	608A 628A	FC 33
445	3/31	Lindsay	77.0	68.05	2.42	5.58	165.		.6	9	-.05	1100A 1111A	FC 28
446	3/31	"	97.0	84.6	2.49	5.66	210.		.6	11	+.14	1032P 1048P	"
447	4/1	"	63.0	31.9	1.54	5.10	49.		.6	13	-.01	117P 132P	"
448	4/4	Brewster	62.0	16.86	1.32	4.88	22.		.6	8	0	900A 915A	FC 24
449	4/11	"	36.0	17.50	1.35	4.91	24.		.6	4	0	855A 905A	"
450	4/18	"	Two Channels			4.85	19.		.6	9	0	910A 925A	"
451	4/25	"	67.0	17.53	1.07	4.83	19.		.6	8	0	902A 915A	"
452	4/26	Lindsay	57.0	34.6	1.73	5.11	60.		.6	12	-.02	922A 935A	FC 28
453	4/26	"	107.0	97.2	2.67	5.95	260.		.6	12	+.24	1245P 1257P	"
454	4/26	"	107.0	130.9	2.81	6.08	368.		.6	12	+.07	1257P 111P	"
455	4/26	"	108.0	138.0	2.90	6.20	401.		.6	11	+.02	126P 136P	"
456	4/27	"	53.0	22.2	1.56	4.98	33.		.6	11	+.01	1026A 1040A	"
457	5/2	Brewster	52.0	16.68	1.27	4.86	21.		.6	9	0	910A 930A	FC 24
458	5/9	"	Two Channels			4.81	18.		.6	10	0	853A 909A	"
459	5/16	"	57.0	18.21	1.00	4.80	18.		.6	8	0	900A 915A	"
460	5/23	"	61.0	17.08	.99	4.79	17.		.6	9	0	824A 836A	"
461	5/29	"	Two Channels			4.77	16.		.6	11	0	836A 856A	"
462	6/6	Brewster	"		"	4.73	15.		.6	10	0	840A 855A	FC24
463	6/13	"	"		"	4.76	16.		.6	11	0	845A 905A	"
464	6/19	Lindsay	63.	25.46	1.40	4.96	36.		.6	14	+.03	257P 315P	FC 43
465	6/20	Brewster	78.	64.98	1.92	5.36	125.		.6	15	+.02	925A 945A	FC 24
466	6/20	Lindsay	71.	63.86	1.93	5.43	123.		.6	13	+.01	146P 205P	FC 43
467	6/21	"	74.	63.20	2.12	5.48	134.		.6	15	0	208P 225P	"
468	6/23	Lindsay Lindsay	82.	86.4	2.25	5.70	194.		.6	11	0	218P 233P	"
469	6/24	Lindsay Lindsay	94.	96.3	2.39	5.89	230.		.6	14	0	326P 343P	FC 43
470	6/26	Lindsay	59.	26.30	1.36	5.02	36.		.6	13	0	333P 348P	"
471	6/27	Brewster	Two Channels			4.87	16.		.6	10	0	825A 843A	FC 24
472	6/30	Lindsay	88.	78.29	2.17	5.67	170.		.6	16	+.01	1257P 115P	FC 43
473	7/1	"	Two Channels			5.68	176.		.6	15	+.01	1227P 1245P	"
474	7/2	"	"		"	5.82	210.		.6	14	0	225P 245P	"
475	7/3	"	"		"	5.80	200.		.6	15	-.01	1247P 107P	"
476	7/5	Brewster	"		"	4.87	16.		.6	10	0	845A 900A	FC 24
477	7/11	"	"		"	4.80	15.		.6	12	0	840A 900A	"
478	7/18	"	"		"	4.77	13.		.6	10	0	845A 900A	"
479	7/25	"	"		"	4.77	13.		.6	10	0	910A 930A	"
480	8/1	"	"		"	4.75	12.		.6	10	0	905A 920A	"
481	8/7	"	"		"	4.73	12.		.6	9	0	910A 925A	"
482	8/14	Lindsay	42.	9.59	.99	4.70	9.5		.6	14	-.01	905A 923A	FC 43
483	8/22	Brewster	Two Channels			4.68	13.		.6	9	0	910A 926A	FC 24
484	8/29	"	32.0	9.42	1.29	4.66	12.		.6	7	0	845A 900A	"
485	9/5	"	30.0	10.0	1.20	4.68	12.		.6	7	0	920A 935A	"
486	9/12	"	31.0	10.01	1.19	4.68	12.		.6	7	0	911A 927A	"
487	9/19	"	32.0	9.56	1.20	4.66	11.		.6	7	0	915A 930A	"
488	9/26	"	29.0	9.93	1.25	4.68	12.		.6	8	0	900A 915A	"

F.C. Dist. Form 52 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

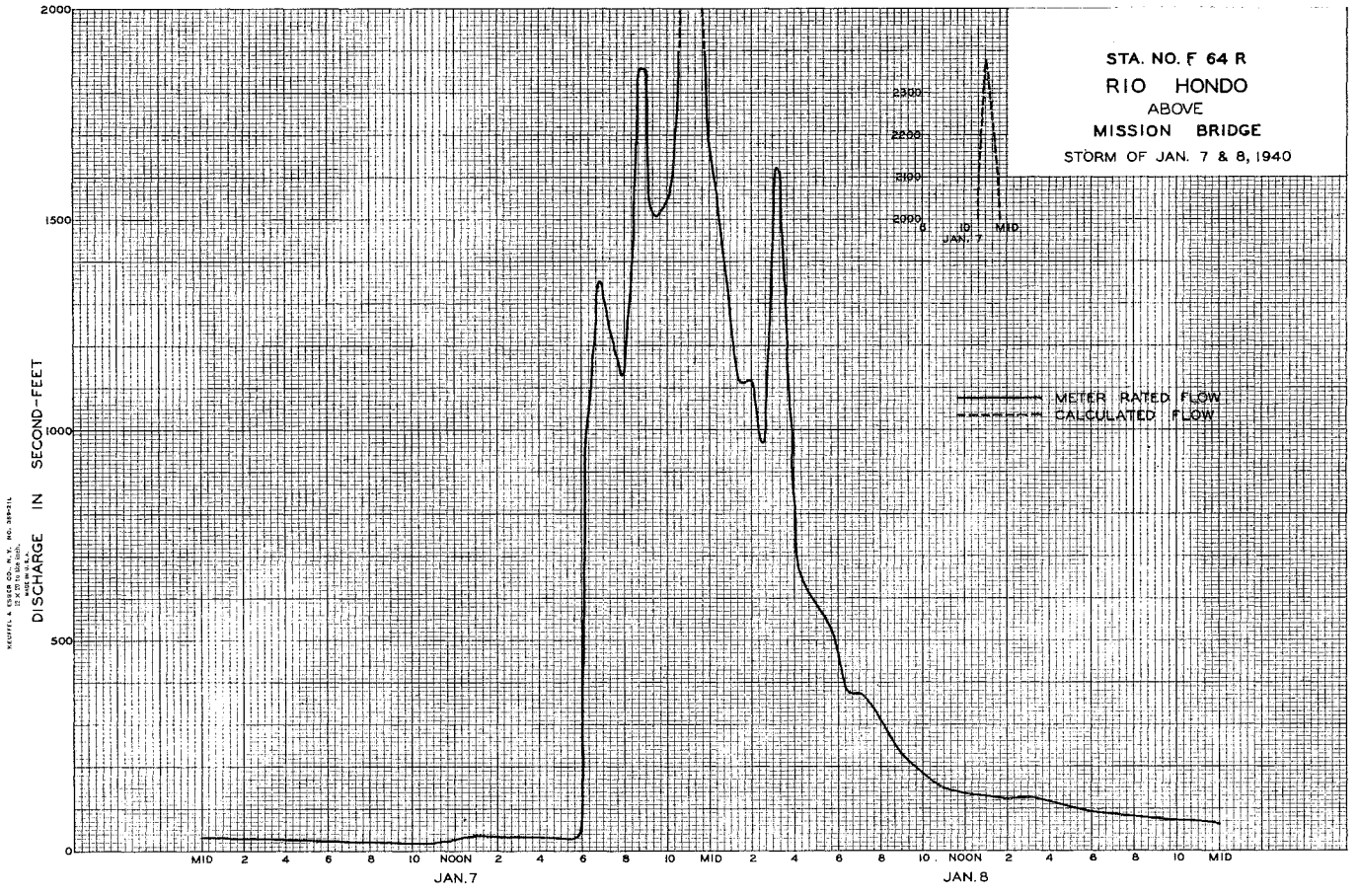
Sta. No F64R

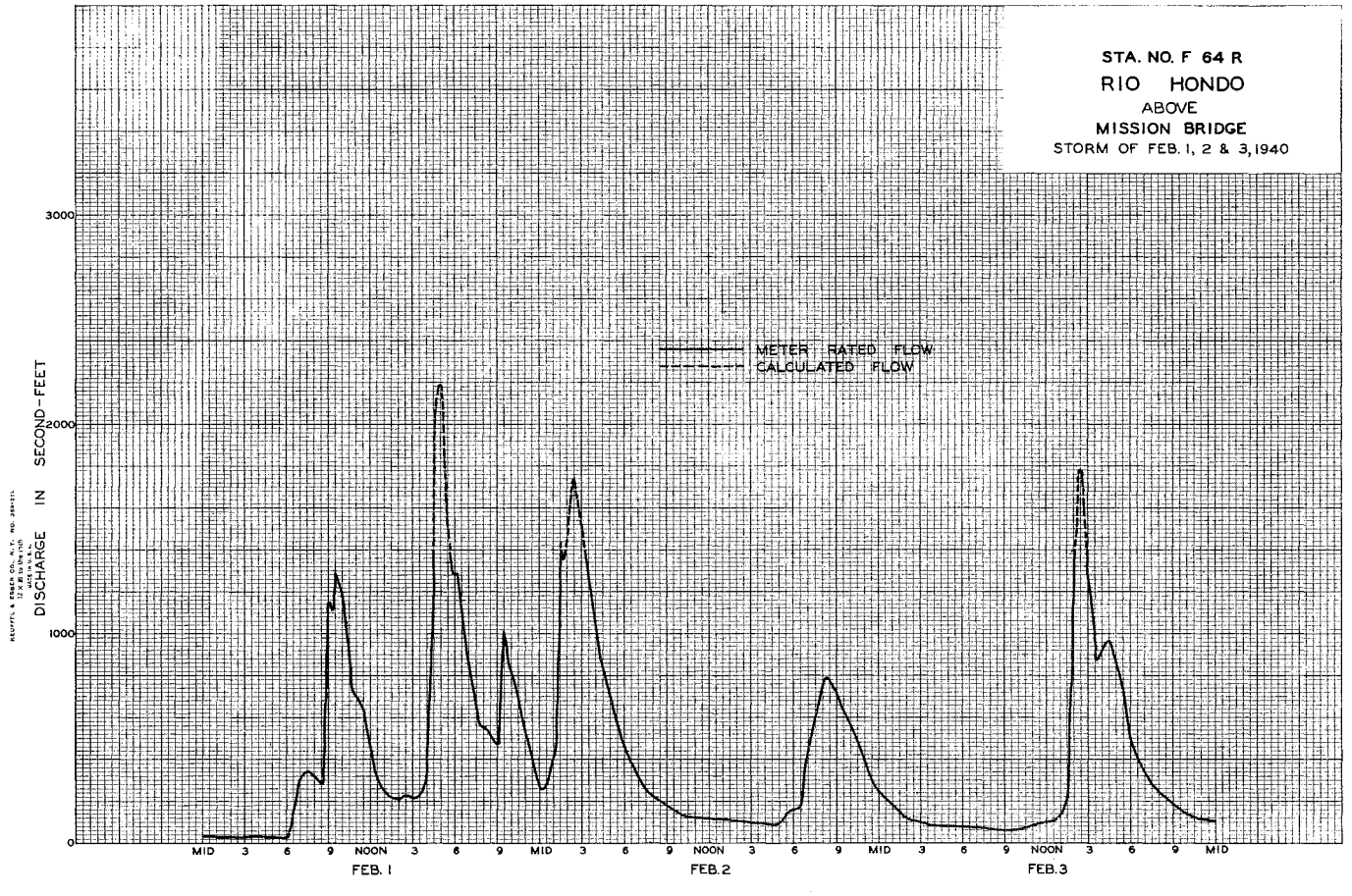
Daily discharge, in second-feet of RIO HONDO above Mission Bridge, for the year ending September 30, 1940

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	31	24	21	31	505	34	100	28	22	172	18	15
2	36	24	22	27	444	27	33	28	21	190	16	14
3	31	23	22	31	300	26	33	27	18	186	20	17
4	33	26	22	103	77	30	30	24	23	29	18	13
5	28	23	23	27	63	30	30	23	23	16	20	20
6	30	24	26	40	47	31	31	27	21	18	20	20
7	60	28	27	410	37	31	27	26	23	18	18	22
8	26	37	22	372	30	33	27	26	26	17	17	21
9	31	28	24	64	23	31	27	24	22	17	16	21
10	27	28	23	86	24	28	27	26	20	18	21	20
11	26	31	34	83	21	30	26	26	18	21	18	18
12	23	28	27	56	23	30	23	26	17	18	16	18
13	20	27	26	45	23	30	26	24	21	20	17	21
14	24	27	26	31	56	30	21	26	22	18	14	23
15	21	28	27	33	37	24	26	26	23	18	13	21
16	23	28	27	34	37	28	27	E 27	23	17	17	22
17	27	28	22	31	33	26	24	27	18	17	18	21
18	27	26	27	28	27	26	26	26	20	17	18	22
19	30	27	28	28	30	23	24	23	34	16	16	20
20	28	24	27	28	28	22	22	27	116	18	15	22
21	28	21	27	26	27	26	22	24	132	18	18	26
22	31	24	22	28	24	23	23	22	135	17	20	22
23	27	23	66	92	24	26	26	22	171	18	18	23
24	33	22	31	35	22	24	23	24	217	18	21	21
25	33	23	26	31	335	28	24	27	220	18	21	20
26	30	21	28	33	51	31	252	26	104	20	20	21
27	33	23	30	31	33	37	34	26	20	20	18	20
28	30	22	31	26	32	28	22	23	18	21	20	26
29	27	18	33	28	106	28	27	22	17	22	21	24
30	28	23	36	27		28	26	22	143	21	21	24
31	24		33	44		222		20		21	21	
	906	759	866	1989	2519	1071	1089	775	1708	1075	565	618
MEAN	29.2	25.3	27.9	64.2	86.9	34.5	36.3	25.0	56.9	34.7	18.2	20.6
ACRE-FEET	1800	1500	1720	3950	5000	2120	2160	1540	3390	2130	1120	1230

Remarks: E indicates estimated.

YEAR OR PERIOD MEAN 38.1
ACRE-FEET 27660


STA. NO. F 64 R
RIO HONDO
ABOVE
MISSION BRIDGE
STORM OF JAN. 7 & 8, 1940
METER RATED FLOW
CALCULATED FLOW
DISCHARGE IN SECOND-FEET
2000
1500
1000
500
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
JAN. 7
JAN. 8


STA. NO. F 64 R
RIO HONDO
ABOVE
MISSION BRIDGE
STORM OF FEB. 1, 2 & 3, 1940
METER RATED FLOW
CALCULATED FLOW
DISCHARGE IN SECOND-FEET
3000
2000
1000
0
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
FEB. 1
FEB. 2
FEB. 3

STATION F45R

RIO HONDO at Stewart and Gray Road

LOCATION:

On downstream side of highway bridge, 1/2 mile upstream from junction of Rio Hondo and Los Angeles River and 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 left (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, 1939 to September 30, 1940.

REGULATION:

Flow partially regulated by Sierra Madre Dam, Big Santa Anita Dam, Sawpit Dam, San Gabriel Dams 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. The City of Sierra Madre diverts water from Little Santa Anita Canyon.

RECORDS AVAILABLE:

March, 1928 to September 30, 1940. (For records prior to March, 1928, see State Division of Water Rights Bulletins.)

EXTREMES OF DISCHARGE:

1939-1940
Maximum 1930 second-feet, January 8.
Minimum no flow at various times.
1929-1940
Maximum 24400 second-feet, estimated, March 3, 1938.
Minimum no flow at various times.

ACCURACY:

Fair. Control shifts, communication frequently obstructed by sand at low flows.

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.

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F45R

DISCHARGE MEASUREMENTS OF RIO HONDO

AT Stewart and Gray Road DURING THE YEAR ENDING SEPTEMBER 30, 19 40

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Dif.	METH OD	MEAS SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
260	10-26	Bonadiman	8	1.92	0.66	5.12	1.3		.6	3	0	8:11A 8:13A	FC40
261	11-2	"	11	3.45	.70	5.18	2.4		.6	4	0	8:32A 8:40A	"
262	11-16	"	9	2.92	.77	5.11	2.3		.6	4	0	8:30A 8:38A	"
263	11-22	"	20	5.64	.87	5.27	4.9		.6	6	0	8:24A 8:30A	"
264	11-30	"	9	4.88	.77	5.02	3.8		.6	4	0	10:04A 10:09A	"
265	12-7	Bonadiman	17	6.83	.71	5.08	4.8		.6	5	0	9:25A 9:35A	FC40
266	12-14	"	20	7.99	1.02	5.11	8.2		.6	6	0	8:41A 8:53A	"
267	12-20	"	20	7.95	1.01	5.12	8.0		.6	6	0	8:55A 9:08A	"
268	12-28	"	14	5.52	.73	5.05	4.1		.6	4	0	8:50A 9:00A	"
269	1-4	"	12	4.24	.33	4.96	1.4		.6	4	0	9:21A 9:27A	"
270	1-7	Bonadiman-Jackman	135	232.8	5.30	7.26	1230.		.6	10	+.27	11:00P 11:20P	"
271	1-8	Jordan-Thomsen	135	275.	5.40	7.56	1480.		.6	13	+.10	12:25A 12:45A	FC21
272	1-8	" "	135	268.	5.90	7.54	1580		.6	13	-.23	1:45A 2:10A	"
273	1-8	" "	88	64.3	2.30	6.25	148		.6	9	-.04	10:44A 10:55A	"
274	1-9	Bonadiman-Jackman	9	4.2	.78	5.28	3.3		.6	4	0	4:55P 5:00P	FC40
275	1-11	" "	9	5.76	1.18	5.33	6.8		.6	5	0	8:00A 8:10A	"
276	1-24	Bonadiman	5.5	1.36	.46	5.10	0.60		.6	3	0	9:10A 9:16A	"
277	2-1	Bonadiman-Jackman	127	123.4	2.26	6.56	278.		.6	9	-.12	2:35P 2:51P	"
278	2-1	" "	95	115.	2.15	6.48	247.		.6	7	-.03	2:52P 3:00P	"
279	2-2	" "	127	114.8	2.71	6.53	312.		.6	9	-.15	1:10A 1:20A	"
280	2-2	Jordan	132	221.	5.34	7.30	1180.		.6	10	-.15	5:15A 5:37A	FC21
281	2-3	Bonadiman	28	21.	1.02	5.58	21.		.6	5	0 +.10	8:50A 9:05A 4:30P	FC40
282	2-3	Bonadiman-Jackman	135	280.8	5.84	7.52	1640.		.6	11	-.08	4:45P	"
283	2-4	Bonadiman	35	17.99	.77	5.58	14.		.6	6	0	2:42P 2:58P	"
284	2-5	Bonadiman-Jackman	23	6.96	.37	5.42	2.6		.6	5	0	8:20A 8:30A	FC40
285	2-25	" "	130	162.3	4.10	6.78	666.		.6	10	+.01	7:13P 7:27P	"
286	2-26	Bonadiman	5	1.38	.75	5.27	1.0		.6	3	0	4:20P 4:26P	"
287	2-29	Bonadiman-Jackman	16	13.99	1.12	5.62	16.		.6	5	0	11:50A 11:55A	"
288	3-28	"	11.5	3.45	0.70	5.34	2.4		.6	3	0	8:17A 8:26A	"
289	3-31	Jordan	33.	15.3	2.39	5.71	37.		.6	11	+.02	11:35A 11:45A	FC21
290	3-31	Bonadiman-Jackman	38	23.6	1.48	5.69	35.		.6	8	-.01	12:45P 12:55P	FC40
291	4-1	" "	38	27.	1.11	5.74	30.		.6	8	-.02	10:23A 10:33A	"
292	4-4	Bonadiman	9.	2.35	0.91	5.32	2.2		.6	3	0	8:05A 8:10A	"
293	4-11	"	15.	3.56	0.63	5.30	2.3		.6	4	0	8:03A 8:08A	"
294	4-25	"	17	5.29	0.79	5.34	4.2		.6	6	0	8:11A 8:20A	"
295	4-26	"	29	19.6	1.01	5.56	20.		.6	6	0	8:56A 9:15A	"
296	4-27	"	6	1.84	1.30	5.38	2.4		.6	4	0	8:20A 8:28A	"
297	5-2	"	4	1.28	0.38	5.15	0.49		.6	2	0	8:55A 8:58A	"
298	5-9	"	12	3.69	1.01	5.33	3.7		.6	5	0	8:11A 8:19A	"
299	5-16	"	14	2.84	0.35	5.25	1.0		.6	4	0	8:48A 8:55A	"
300	5-23	"	34	8.33	0.80	5.38	6.7		.6	6	0	8:18A 8:29A	"
301	5-29	"	13	5.39	0.73	5.32	3.9		.6	3	0	8:07A 8:12A	"
302	6-6	"	12	5.2	0.56	5.29	2.9		.6	4	0	8:45A 8:51A	"
303	6-13	"	10	5.5	0.49	5.25	2.7		.6	4	0	8:50A 8:58A	"
304	6-19	Moon	7.	1.24	0.82	5.14	1.0		.6	6	0	10:27A 10:33A	FC22
305	6-26	"	7.	1.4	0.75	5.17	1.0		.6	4	-.02	10:35A 10:39A	"
306	7-2	"	4.5	0.53	0.79	5.06	0.42		.6	5	0	9:46A 9:52A	"
307	7-11	Bonadiman	10.	5.1	1.00	5.37	5.1		.6	4	0	7:55A 8:00A	FC40
308	7-18	Bonadiman	6.	0.36	0.50	5.13	0.18		.6	2	0	2:16P 2:18P	FC40
309	7-25	"	13.	3.99	0.85	5.26	3.4		.6	5	0	8:28A 8:35A	"
310	8-1	"	13	3.38	0.74	5.24	2.5		.6	5	0	8:35A 8:40A	"
311	8-8	"	14	3.82	0.69	5.31	2.5		.6	4	0	8:46A 8:50A	"
312	8-15	"	13	3.34	0.69	5.28	2.3		.6	4	0	3:00P 3:10P	"
313	8-22	"	12	3.47	0.51	5.27	1.8		.6	4	0	8:35A 8:45A	"
314	8-28	"	4	0.78	0.47	5.06	0.37		.6	3	0	3:07P 3:11P	"
315	9-4	Moon	10.5	3.88	1.03	5.37	4.0		.6	6	0	10:08A 10:16A	FC22
316	9-11	"	7.0	1.5	0.89	5.21	1.3		.6	4	0	10:18A 10:24A	"
317	9-18	"	12:0	3.42	0.92	5.32	3.1		.6	7	-.02	9:55A 10:04A	"
318	9-26	Bonadiman	6.0	1.44	0.66	5.20	0.95		.6	4	0	8:06A 8:12A	FC40

F.C. Dist. Form 52 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

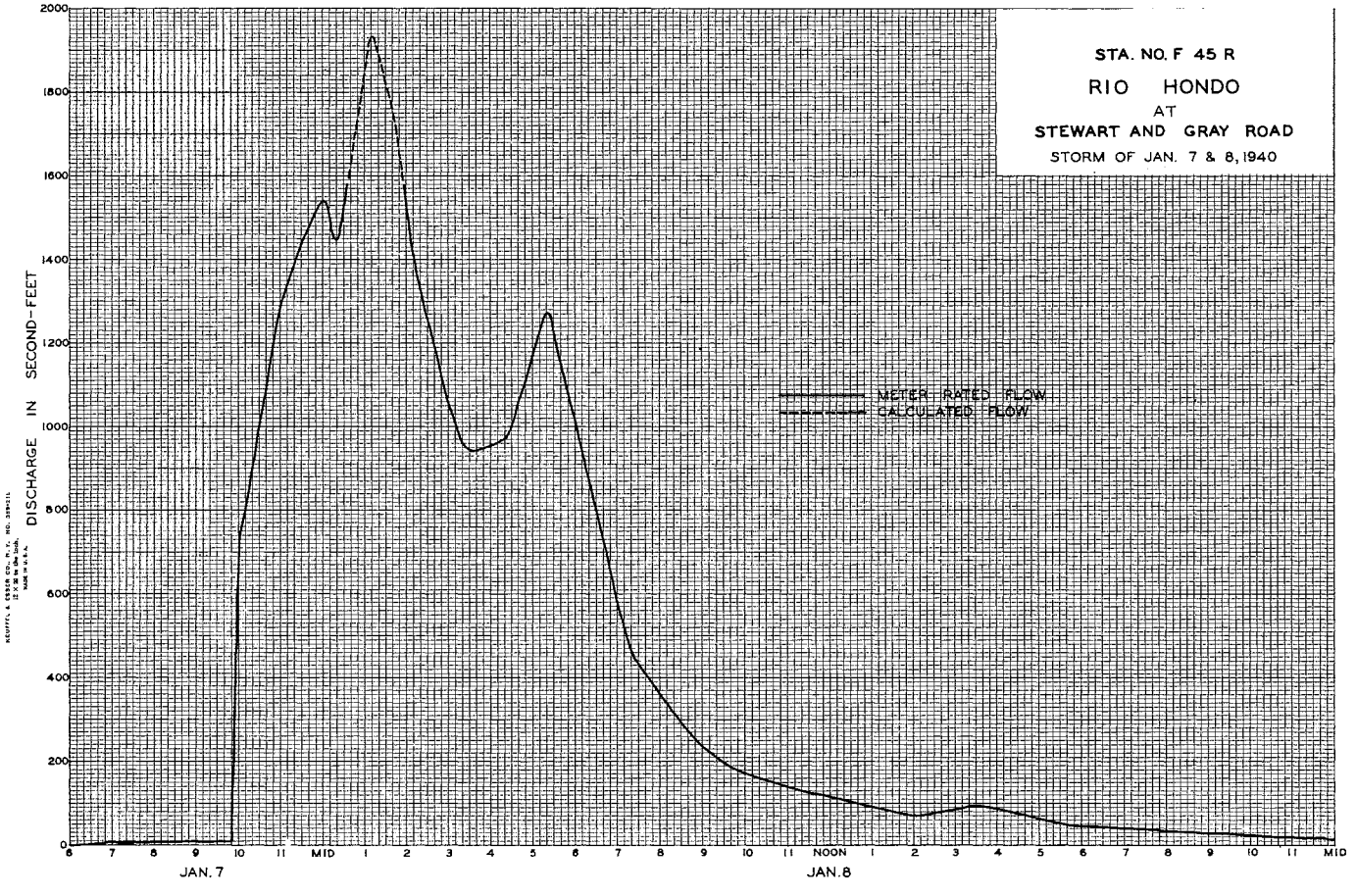
Sta. No. F45R

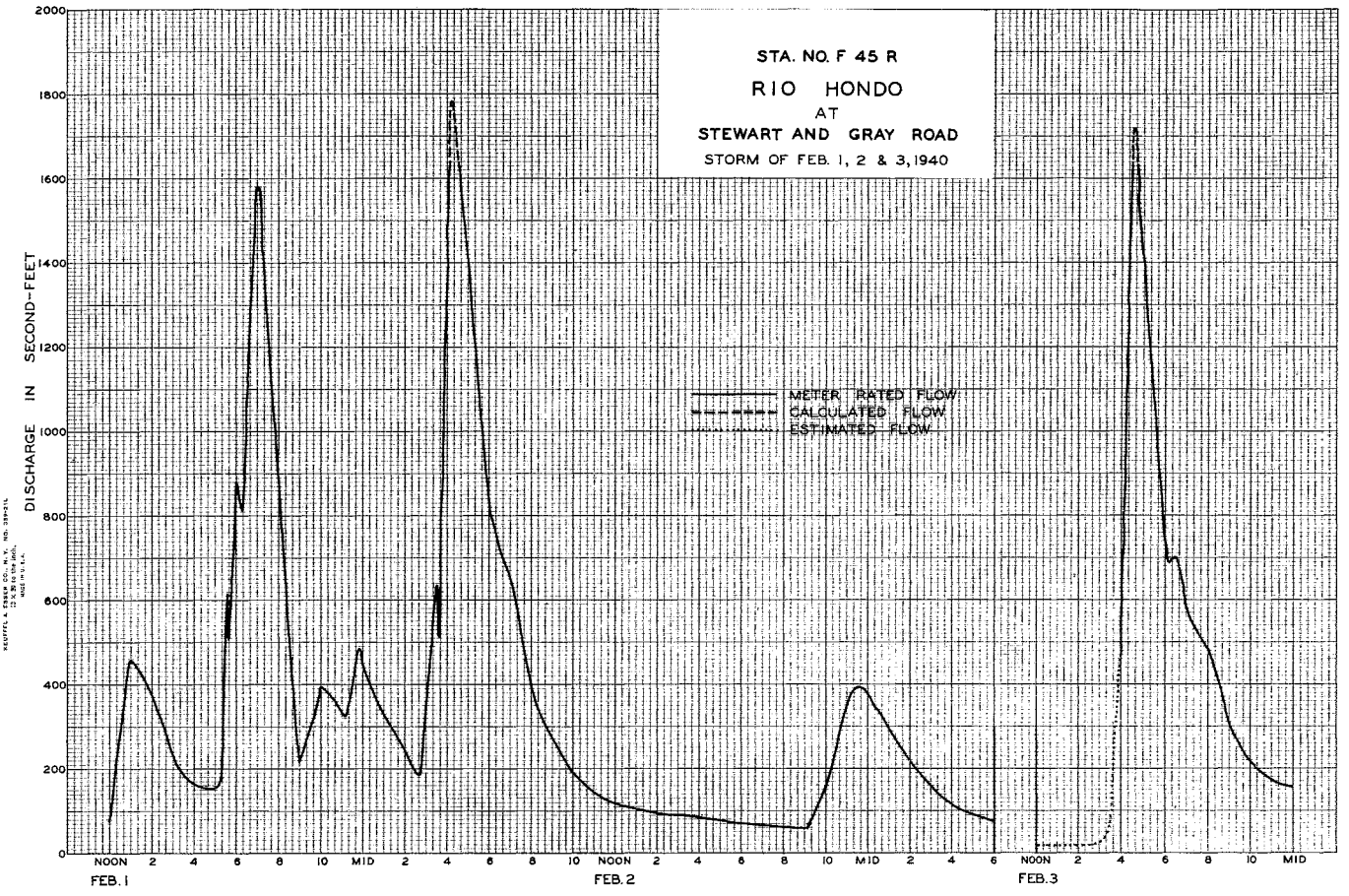
Daily discharge, in second-feet of RIO HONDO at Stewart and Gray Rd., for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	2.1	4.7	2.5	238	0.1	35	3.9	1.7	6	2.3	2.8
2	0	1.6	3.4	+	329	+	0.2	2.4	0.7	0.7	2.5	2.3
3	0	2.3	6	0	E 256	0	0.9	2.1	E 1.9	6	2.1	3.2
4	0	1.5	5.5	0.6	38	0.1	1.8	2.1	2.2	5.5	3.2	2.5
5	0	0.2	6	0	2.8	0	0.2	3.2	2.5	4.9	2.3	1.5
6	0	0.4	5	0	0	0	0.3	3.4	2.8	7	2.1	3.2
7	0	1.6	6	107	0	0	1.2	1.8	3.1	7	2.2	3.9
8	0	0.7	5	442	0	1.5	1.2	2.8	3.3	3.4	2.0	8
9	0	0	6.5	6.5	0	0.3	0.3	3.0	4.3	3.6	1.4	5.1
10	0	+	6.5	3.7	0	0	1.6	2.3	2.8	7	0.8	2.3
11	0	1.8	5.5	14	0	0	1.8	1.3	3.1	3.5	1.8	2.1
12	0	3.0	3.7	3.5	0	1.2	1.2	2.8	1.8	1.6	0.6	2.3
13	0	2.1	5.5	E 0	0	0	0.1	2.3	4.2	1.6	0.8	1.6
14	0.4	2.5	5	E 0	+	0	1.6	1.7	2.3	3.9	1.5	1.4
15	1.6	3.0	6	E 0	0	0	2.8	1.1	2.5	3.7	1.2	2.8
16	+	2.8	6.5	0	0	1.4	1.8	1.6	1.7	2.6	1.6	3.4
17	+	2.8	6	0	0	0.1	2.1	2.5	1.6	1.2	1.6	1.6
18	1.0	2.5	6	0	0	1.3	0.3	2.8	2.5	2.2	0.6	2.8
19	0	2.1	6	0	0	0.2	1.6	3.1	0.6	2.2	2.1	4.3
20	0	1.1	6	0	0	+	0.8	2.9	3.0	1.2	0.6	1.6
21	0	2.1	6.5	0	0	0.6	0.8	3.7	3.1	5	1.2	2.1
22	0	3.0	7	E +	0	0.7	1.1	3.8	2.6	4.3	1.5	2.5
23	0.6	2.8	6.5	0.4	0	0.5	3.9	4.3	3.7	3.3	1.2	1.4
24	2.8	2.5	+	3.3	0	+	4.7	3.7	2.5	2.8	3.6	1.6
25	0.2	2.5	0	0	104	0	4.3	3.6	1.4	2.6	5.5	1.5
26	0.7	5	0.6	0	25	0.9	80	3.3	2.1	2.0	4.1	2.1
27	0.1	6	4.7	0	0	3.0	12	3.2	1.5	2.0	3.4	2.5
28	1.6	8	4.7	0	0	2.0	0.1	3.0	2.8	1.0	3.7	2.5
29	1.4	7.5	3.9	0	5.5	0.7	+	2.7	2.1	3.2	7	E 3.4
30	0.4	6	3.9	0		0.5	0.6	3.2	4.3	2.7	4.7	4.7
31	0.8		3.7	0.1		1.5		2.5		3.1	3.9	
	11.6	79.5	152.3	583.6	998.3	30.1	164.3	86.1	74.7	106.8	73.1	82.9
MEAN	0.37	2.65	4.91	18.8	34.4	0.97	5.48	2.78	2.49	3.45	2.36	2.77
ACRE-FEET	23	158	302	1160	1980	60	326	171	148	212	145	165

Remarks: + indicates discharge 0.05 sec. ft. or less.
E indicates estimated or interpolated between meas.

YEAR OR PERIOD — MEAN 6.67 — ACRE-FEET 4850





STATION F83R

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, 1939 to September 30, 1940.

REGULATION:

Some water pumped just downstream from bridge.

DIVERSIONS:

None.

RECORDS AVAILABLE:

Recorder records June 14, 1930 to September 30, 1940. Some weekly stream measurements were taken prior to installation of recorder.

EXTREMES OF DISCHARGE:

1939-1940
Maximum 74 second-feet, January 8.
Minimum 15 second feet, August 14.
1930-1940
Maximum not determined, March 2, 1938.
Minimum 4.8 second-feet October 4, 1934.

ACCURARY:

Fair.
Control conditions affected by unknown parties building obstructions in streambed. Flows occasionally interpolated.

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 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 83-R

DISCHARGE MEASUREMENTS OF RIO HONDO SLOUGH

AT San Gabriel Blvd. DURING THE YEAR ENDING SEPTEMBER 30, 19 40

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Period Bill.	METH OD	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
154	10/5	Brewster	14.0	13.36	1.73	6.60	23.		.6	7	0	950A 1002A	FC 8
155	10/11	"	13.0	13.25	1.72	6.58	23.		.6	7	0	930A 942A	"
156	10/19	"	14.0	13.00	1.65	6.54	21.		.6	7	0	935A 947A	"
157	10/26	"	16.0	15.12	1.40	6.59	21.		.6	8	0	950A 1002A	"
158	11/2	"	14.0	14.20	1.54	6.60	22.		.6	7	0	930A 945A	"
159	11/9	"	14.0	13.78	1.70	6.71	23.		.6	7	0	940A 952A	"
160	11/16	"	14.0	13.64	1.72	6.63	23.		.6	7	0	920A 935A	"
161	11/22	"	14.0	13.30	1.69	6.64	22.		.6	7	0	915A 930A	"
162	11/30	"	14.0	13.48	1.76	6.66	24.		.6	7	0	930A 942A	"
163	12/7	"	14.0	13.62	1.69	6.65	23.		.6	7	0	928A 940A	"
164	12/14	"	14.0	13.90	1.73	6.69	24.		.6	7	0	930A 944A	"
165	12/21	"	14.0	13.84	1.74	6.75	24.		.6	7	0	1000A 1015A	"
166	12/28	"	14.0	13.86	1.69	6.68	23.		.6	7	0	1000A 1015A	"
167	1/4	"	14.0	14.36	1.75	6.78	25.		.6	7	0	855A 910A	"
168	1/5	"	15.0	15.07	1.80	6.75	27.		.6	7	0	320P 335P	"
169	1/12	"	14.0	14.92	1.95	6.76	29.		.6	7	-.01	1120A 1135A	"
170	1/18	"	14.0	13.88	1.90	6.61	26.		.6	7	0	1040A 1055A	"
171	1/25	"	14.0	14.12	1.97	6.63	28.		.6	7	0	1035A 1050A	"
172	2/1	"	15.0	16.05	2.00	6.89	32.		.6	5	-.02	840A 850A	"
173	2/3	"	14.0	17.04	1.88	6.77	32.		.6	5	0	1010A 1020A	"
174	2/8	"	14.0	14.22	1.93	6.57	27.		.6	7	0	1020A 1032A	"
175	2/15	"	14.0	13.92	1.95	6.50	27.		.6	7	0	945A 1000A	"
176	2/21	"	14.0	13.08	1.88	6.48	25.		.6	7	0	925A 937A	"
177	2/29	"	15.0	14.34	1.91	6.58	27.		.6	7	0	840A 855A	"
178	3/1	Brewster	15.0	13.86	1.80	6.55	25.		.6	7	0	1030A 1042A	FC 8
179	3/7	"	15.0	13.92	1.73	6.49	24.		.6	7	0	945A 957A	"
180	3/14	"	15.0	13.59	1.73	6.51	23.		.6	7	0	940A 952A	"
181	3/21	"	15.0	13.40	1.73	6.51	23.		.6	7	0	930A 945A	"
182	3/28	Brewster	15.0	13.67	1.69	6.55	23.		.6	7	0	915A 930A	FC 24
183	4/4	"	15.0	14.22	1.60	6.58	23.		.6	7	0	930A 945A	"
184	4/11	"	15.0	13.74	1.67	6.45	23.		.6	7	0	915A 927A	"
185	4/18	"	15.0	13.46	1.68	6.41	23.		.6	7	0	950A 1005A	"
186	4/25	"	15.0	13.17	1.79	6.44	24.		.6	7	0	926A 940A	"
187	5/2	"	15.0	13.22	1.69	6.50	22.		.6	7	0	945A 957A	"
188	5/9	"	15.0	12.93	1.68	6.45	22.		.6	7	0	920A 935A	"
189	5/16	"	15.0	12.18	1.76	6.42	21.		.6	8	-.01	1015A 1030A	"
190	5/23	"	15.0	12.46	1.75	6.43	22.		.6	7	0	850A 905A	"
191	5/29	"	14.0	12.72	1.70	6.41	22.		.6	7	0	920A 935A	"
192	6/6	"	14.0	12.08	1.78	6.25	22.		.6	7	0	907A 919A	"
193	6/13	"	14.0	11.28	1.86	6.25	21.		.6	7	0	1000A 1015A	"
194	6/20	"	15.0	11.49	1.70	6.58	20.		.6	7	0	852A 907A	"
196	6/21	Lindsay	11.0	7.02	2.48	6.64	17.		.6	7	0	235P 245P	"
197	6/23	Lindsay-Lindsay	10.5	6.75	2.46	6.66	17.		.6	9	-	235P 247P	"
198	6/24	" "	13.5	8.58	2.10	6.68	18.		.6	8	-	353P 400P	"
199	6/27	Brewster	15.0	10.99	1.65	6.95	18.		.6	8	0	900A 915A	FC 24
200	6/30	Lindsay	13.2	8.71	2.04	7.07	18.		.6	8	-	124P 134P	FC 43
201	7/1	"	13.0	9.19	1.94	7.17	18.		.6	8	-	117P 127P	"
202	7/2	"	13.0	9.34	2.03	6.63	19.		.6	8	0	255P 305P	"
203	7/5	Brewster	14.0	12.32	1.59	6.68	20.		.6	7	0	948A 1000A	FC 24
204	7/11	"	15.0	11.26	1.73	6.57	19.		.6	8	-.02	915A 930A	"
205	7/18	"	13.0	12.06	1.17	6.50	19.		.6	7	0	925A 940A	"
206	7/25	"	14.0	10.90	1.67	6.59	18.		.6	7	0	940A 955A	"
207	8/1	"	14.0	10.70	1.66	6.52	18.		.6	7	0	830A 842A	"
208	8/7	"	15.0	11.81	1.54	6.54	18.		.6	8	0	822A 835A	"
209	8/14	Lindsay	14.0	10.21	1.66	6.84	17.		.6	8	0	930A 943A	FC 43
210	8/22	Brewster	14.0	10.60	1.66	6.76	18.		.6	7	0	945A 1000A	FC 24
211	8/29	"	14.0	10.92	1.81	6.82	20.		.6	7	0	925A 940A	"
212	9/5	"	14.0	11.08	1.64	6.72	18.		.6	7	0	950A 1005A	"
213	9/12	"	14.0	11.46	1.55	6.70	18.		.6	7	0	938A 954A	"
214	9/19	"	14.0	11.28	1.57	6.60	18.		.6	7	0	945A 1000A	"
215	9/26	"	14.0	11.64	1.64	6.41	19.		.6	7	0	1000A 1015A	"

F.C. Dist. Form 82 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

Sta. No F83R

Daily discharge, in second-feet of RIO HONDO SLOUGH at San Gabriel Blvd., for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25	22	22	25	41	25	28	22	21	E 18	18	18
2	25	21	23	25	43	25	24	22	21	E 18	19	20
3	24	22	23	26	44	25	22	22	21	18	20	19
4	24	22	23	28	35	24	22	22	21	19	19	18
5	23	22	23	28	30	24	22	22	21	E 19	18	18
6	24	22	23	27	29	24	22	22	21	19	19	18
7	24	22	22	33	28	24	24	22	21	20	18	17
8	24	23	22	52	27	24	24	22	21	20	17	18
9	23	22	22	33	26	24	23	22	21	18	16	18
10	23	20	22	32	26	24	23	21	21	18	17	17
11	22	22	23	32	27	23	22	21	20	20	17	17
12	22	22	24	29	27	24	22	22	20	19	17	17
13	22	23	24	27	26	23	22	22	20	18	18	18
14	22	22	24	27	27	23	22	22	20	20	16	17
15	23	23	25	26	27	23	22	22	20	20	17	17
16	23	23	25	26	27	23	22	22	20	20	20	17
17	22	22	25	26	26	24	22	21	20	19	20	17
18	23	23	25	26	26	23	22	22	20	19	18	18
19	22	22	25	26	26	23	22	22	17	17	15	18
20	21	22	24	26	25	23	22	22	18	17	18	19
21	21	22	24	27	24	23	23	22	16	18	20	19
22	22	22	24	26	25	23	23	22	16	18	18	20
23	22	22	26	28	25	23	23	22	16	18	18	19
24	22	22	27	29	25	23	23	22	18	19	18	19
25	22	23	27	28	30	23	24	22	18	19	18	19
26	20	24	24	27	28	23	25	22	17	19	19	18
27	20	24	25	27	27	24	25	22	18	19	19	19
28	20	24	24	27	26	23	23	22	E 18	20	18	19
29	21	24	24	27	27	22	22	21	E 17	19	18	19
30	21	24	25	27		22	22	21	E 17	19	17	19
31	20		25	28		27		21		18	18	
	692	673	744	881	830	731	688	676	576	582	558	546
MEAN	22.3	22.4	24.0	28.4	28.6	23.6	22.9	21.8	19.2	18.8	18.0	18.2
ACRE-FEET	1370	1330	1480	1750	1650	1450	1360	1340	1140	1150	1110	1080

Remarks: E indicates estimated discharge or interpolated between measurements.

YEAR OR PERIOD MEAN 22.3
ACRE-FEET 16210

STATION F82C-R

RUBIO WASH at Glendon Way

LOCATION:

On the left (east) side of channel 10 feet south of the westerly extension of Glendon Way, Rosemead.

DRAINAGE AREA:

13.4 square miles.

CHANNEL AND CONTROL:

Channel-rectangular concrete 48.1 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, 1939 to September 30, 1940.

REGULATION:

Flow partially regulated by Los Flores and Rubio Debris Basins.

DIVERSIONS:

None.

RECORDS AVAILABLE:

November 6, 1936 to September 30, 1940. (For previous records on Rubio Wash see Stations F82R, F107R, F82B-R in previous reports.)

EXTREMES OF DISCHARGE:

1939-1940
Maximum 1000 second-feet, January 7.
Minimum no flow at various times.
1930-1940 (For Stations F82R, F107R, F82B-R and F82C-R)
Maximum 2400 second-feet, estimated, March 2, 1938.
Minimum no flow at times each year.

ACCURACY:

Fair.

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.

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 82C-R

DISCHARGE MEASUREMENTS OF RUBIO WASH

AT Glendon Way DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
44	1/7	Haig-Eckert	48.	54.8	16.	1.35	875.	Float				624P	
45	1/7	" "	48.	34.2	11.83	0.92	405.		.6	8	+.09	730P 749P	Pitot Tube
46	1/7	" "	48.	37.1	12.51	0.97	464.		.6	8	-.06	753P 808P	"
47	1/7	" "	48.	40.1	11.67	1.01	468.		.6	8	-.17	830P 844P	"
48	1/7 1/8	" "	47.	26.5	10.91	0.78	289.		.6	8	-.08	1156P 1216A	"
49	2/1	Haig-Mellen	47.5	39.5	14.50	1.07	572.		.6	8	-.08	851A 911A	"
50	2/1	" "	48.	38.4	14.	1.04	538.	Float	3			912A	
51	2/1	" "	47.8	36.44	13.25	1.00	484.		.6	8	-.08	913A 922A	Pitot Tube
52	2/1	" "	47.8	32.33	12.68	0.92	410.	Vert. vel.	.6 & .8	8	-.04	922A 932A	"
53	2/1	" "	47.4	29.51	12.15	0.88	358.		.6	8	-.04	933A 942A	"
54	2/1	" "	47.	28.2	12.1	0.83	340.	Float	3			945A	
55	2/1	" "	47.	27.7	11.85	0.82	328.		.6	8	-.04	946A 953A	Pitot Tube
56	2/1	" "	47.3	34.2	12.73	0.93	435.		.6	8	+.18	358P 407P	"
57	2/1	" "	47.9	40.0	13.23	1.01	529.		.6	8	-.04	407P 418P	"
58	2/1	" "	47.9	39.3	13.64	1.02	536.		.6	8	-.02	419P 429P	"
59	2/1	" "	47.4	39.2	13.23	0.99	518.		.6	8	+.04	432P 436P	"
60	2/1	" "	47.8	36.5	13.1	1.00	476.	Float				440P	
61	2/1	" "	47.8	39.5	12.99	0.98	513.		.6	8	-.05	444P 452P	Pitot Tube

F.C. Dist. Form 57 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

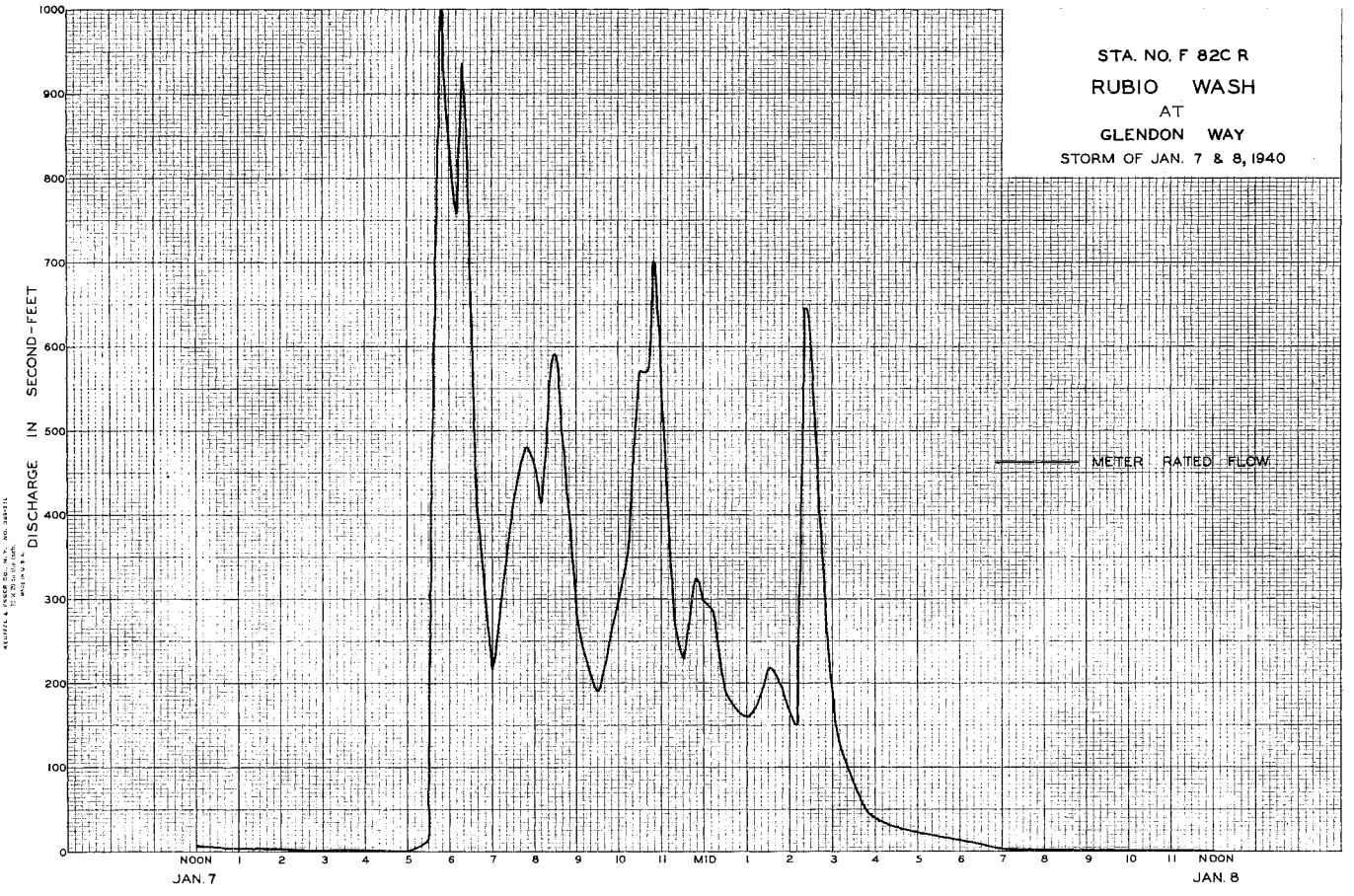
Sta. No. F82C-R

Daily discharge, in second-feet of RUBIO WASH at Glendon Way for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	+	0.1	0	0	111	0.7	17	+	0	0.2	0.1	0.4
2	0.2	0.3	0	0	73.	0.3	3.8	+	0	0.3	0.2	0.2
3	0.1	0.2	0	+	37	0.2	2.0	0.2	+	0.3	0.1	0.3
4	+	0.1	0	27	0.1	0.1	0.3	0.1	+	0.4	+	0.2
5	+	0.1	0	+	0.1	0.1	1.0	+	0	0.2	+	+
6	5.5	+	0	4.7	0.1	0.7	0.7	+	0	0.1	0	+
7	21	0.1	0	122	0.1	1.7	0.3	+	0	+	0	0.2
8	0.2	3.3	+	41	0.1	0.3	0.2	+	0	+	0	0.2
9	0.1	2.0	0.2	6	+	0.2	0.3	+	0	0	0	+
10	+	+	+	1.5	0.1	0.1	0.7	0.1	0	+	0.1	+
11	+	0	0.7	1.6	0.1	0.1	1.7	0.2	+	+	0.1	+
12	+	0	+	3.5	+	0.1	0.4	0.1	+	0.1	+	+
13	+	0	+	0.2	+	1.0	0.1	0.1	0	0.2	+	0
14	+	0	+	+	10	1.4	0.2	0.1	0	0.2	+	0
15	+	0	+	0.1	+	0.2	0.7	0.1	0	0.1	0.4	0
16	+	0	0	0.3	0.3	+	0.4	0.1	0	0.1	0.4	0
17	0.1	0	0	0.2	0	+	0.3	0.1	0	0.2	0.3	0
18	0.1	0	0	+	0	0.1	0.1	0.1	0	+	0.1	0
19	0.1	0	0	+	+	0.1	0.7	0.1	+	+	+	0
20	+	0	0	+	+	0.3	0.1	0	+	0	+	0
21	+	0	0	0	0.1	0.1	+	0	+	0	+	0
22	+	0	0	0	0.3	0.3	1.0	+	0	0	0	0
23	+	+	21	23	0.2	0.1	0.2	+	0	0	0.1	0
24	+	0	0.2	0.2	0.2	0.1	+	+	0	0	0.4	0.4
25	0	0	+	+	8.6	0.4	+	0	0.1	0	0.3	0.2
26	0	0	0.1	+	1.0	0.7	7.0	0	0.2	0.1	0.1	+
27	0.1	0	+	+	0.5	1.7	0.2	0.1	0.1	0.7	0.1	+
28	0.2	0	0	0	3.7	1.0	0.1	0.7	0.1	0.4	+	+
29	0.1	0	0	0	24	0.7	0.1	0.1	0.3	0.7	+	+
30	+	0	+	+		0.2	0.1	0	0.3	0.2	0.3	+
31	0.2		+	6.5		7.0		0		0.1	0.4	
	28.0	6.2	22.2	265.5	347.7	83.0	102.6	2.3	1.1	4.6	3.5	2.1
MEAN	0.90	0.21	0.72	8.56	12.0	2.68	3.42	0.08	0.04	0.15	0.11	0.07
ACRE FEET	56	12	44	527	690	165	204	4.6	2.2	9.1	6.9	4.2

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

YEAR OR PERIOD MEAN 2.37
ACRE FEET 1720



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.

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 B.C.F. continuous recorder was in service from October 1, 1939 to September 30, 1940.

REGULATION:

None.

DIVERSIONS:

Two diversions for irrigation.

RECORDS AVAILABLE:

February 20, 1931 to September 30, 1940.

EXTREMES OF DISCHARGE:

1939-1940
Maximum 296 second-feet January 8.
Minimum no flow for several months.
1930-1940
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 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 151-R

DISCHARGE MEASUREMENTS OF SAN ANTONIO CREEK

AT ~~XXXX~~ Mouth of Canyon DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
226	10/1	Brewster	14.	5.84	3.68	9.89	21.		.6	5	0	900A 910A	FC 8
227	10/3	"	6.	1.49	1.52	9.54	2.3		.6	5	0	345P 350P	"
228	10/5	"	3.	.56	1.04	9.34	.60		.6	3	0	435P 440P	"
229	10/7	"	6.	1.84	1.65	9.52	3.0		.6	6	0	445P 451P	"
230	10/8	"	6.	1.66	1.69	9.45	2.8		.6	4	0	925A 931A	"
231	10/10	"	3.	.46	.72	9.28	.33		.6	3	-.01	245P 250P	"
232	1/8	Brewster-Pettis	18.	13.11	6.61	10.41	87.		.6	6	-.08	1220A 1236A	"
233	1/8	" "	29.	32.04	6.47	11.42	207.		.6	7	-.05	240A 300A	"
234	1/8	" "	Two Channels			10.44	87.		.6	11	-.08	750A 810A	"
235	1/8	" "	18.	10.96	4.32	10.00	47.		.6	5	0	205P 215P	"
236	1/9	Brewster	18.	8.86	3.91	9.95	35.		.6	5	-.02	1002A 1012A	"
237	1/10	"	11.	2.03	4.46	9.86	9.		.6	5	0	940A 945A	"
238	1/11	"	6.	1.04	3.01	9.78	3.1		.6	5	0	124P 130P	"
239	1/23	"	10.	3.40	4.31	10.19	15.		.6	5	+.02	602P 610P	"
240	1/24	"	5.	.87	3.40	9.91	3.0		.6	4	0	1107A 1115A	"
241	2/1	"	14.	5.68	5.43	10.12	31.		.6	5	+.01	245P 255P	"
242	2/2	"	10.	2.20	3.03	9.72	6.7		.6	4	+.01	120P 125P	"
243	2/3	"	16.	7.50	5.76	9.90	43.		.6	5	+.02	330P 340P	"
244	2/5	"	11.	3.24	2.56	9.57	8.3		.6	5	0	830A 840A	"
245	2/7	Brewster	10.	2.88	1.96	9.51	5.6		.6	4	0	200P 210P	FC8
246	2/14	"	10.	3.00	2.13	9.52	6.4		.6	5	0	1032A 1040A	"
247	2/21	"	9.	2.39	1.46	9.53	3.5		.6	4	0	458P 500P	"
248	2/25	Brewster-Pettis	17.	15.05	6.54	10.45	98.		.6	5	-.02	900P 920P	"
249	2/25	" "	16.	15.22	5.99	10.42	91.		.6	5	-.01	1013P 1022P	"
250	2/26	Brewster-Pettis	18.	10.90	4.86	10.02	53.		.6	5	0	920A 930A	FC 8
251	2/28	Brewster	11.	4.93	3.00	9.54	15.		.6	6	0	1045A 1055A	"
252	2/29	"	16.	7.35	3.29	9.81	24.		.6	5	0	225P 235P	"
253	3/6	"	14.	7.98	2.84	9.71	23.		.6	4	0	220P 230P	"
254	3/13	"	14.	7.22	2.65	9.61	19.		.6	5	0	235P 245P	"
255	3/20	"	13.	6.23	2.65	9.54	16.		.6	4	0	1230P 1240P	"
256	3/27	"	13.	5.00	2.17	9.47	11.		.6	6	0	150P 200P	FC 24
257	3/31	"	14.	6.42	2.26	9.53	15.		.6	4	0	740A 750A	"
258	3/31	Brewster-Pettis	16.	8.80	3.48	9.84	31.		.6	5	-.01	145P 155P	"
259	4/1	Brewster	15.	7.93	2.51	9.67	20.		.6	6	0	850A 900A	"
260	4/3	"	12.	5.24	2.65	9.47	14.		.6	6	0	1120A 1130A	"
261	4/10	"	10.	3.92	2.52	9.42	9.9		.6	5	0	920A 930A	"
262	4/17	"	7.	2.13	1.94	9.28	4.1		.6	4	0	1020A 1030A	"
263	4/24	"	5.	1.14	1.12	9.18	1.3		.6	5	0	140P 145P	"
264	4/27	"	8.	3.00	1.89	9.32	5.7		.6	4	-.01	1020A 1030A	"
265	5/1	"	6.	1.58	1.32	9.20	2.1		.6	5	0	1007A 1015A	"
266	5/8	"	1.5	.23	.22	8.96	.05		.6	3	0	306P 310P	"
267	5/15	"	2.	.37	.41	8.97	.15		.6	4	0	1220P 1224P	"

F.C. Dist. Form 52 2-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

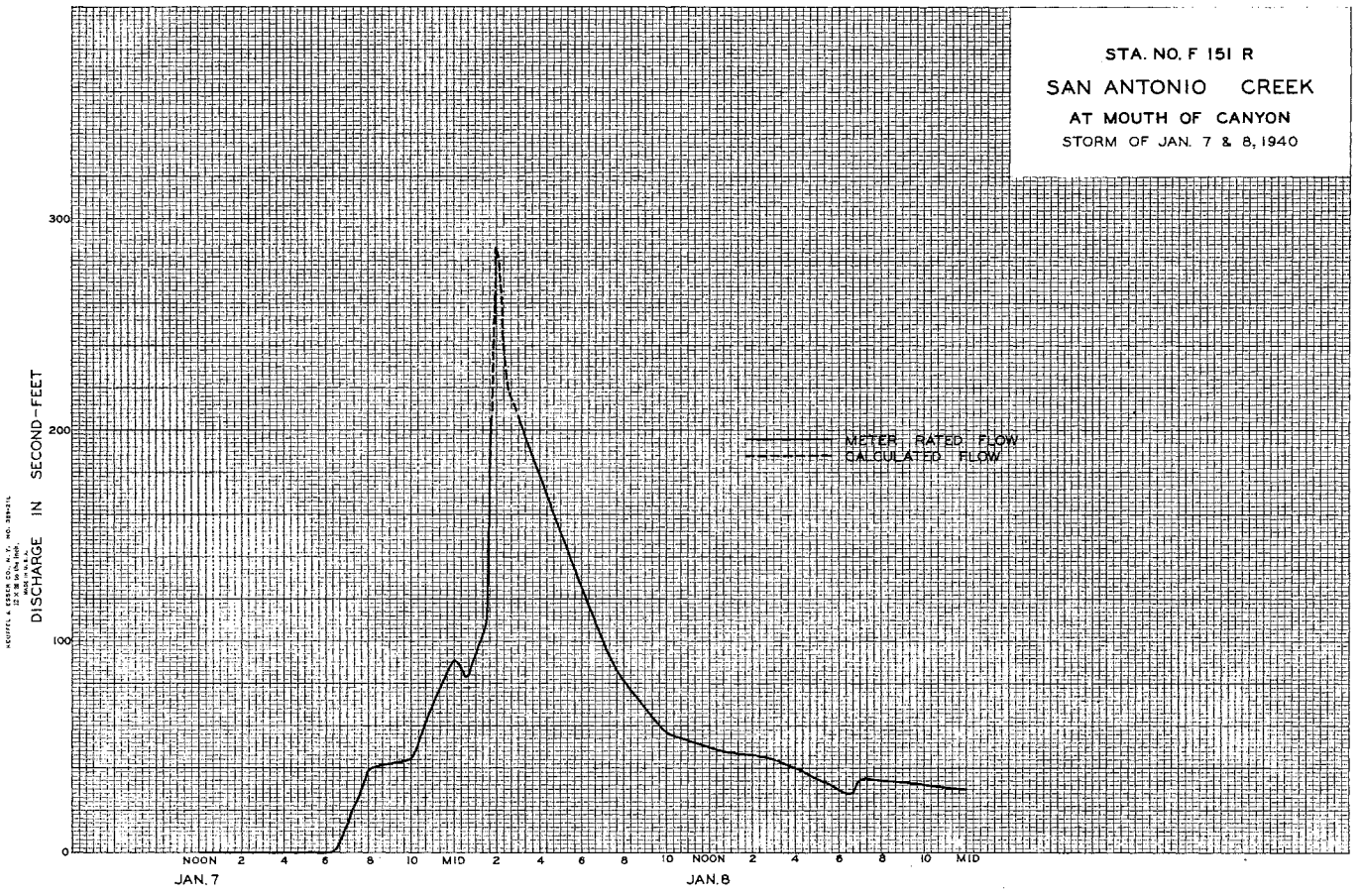
Sta. No F151R

Daily discharge, in second-feet of SAN ANTONIO CREEK at mouth of canyon, for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	E 1.6	0	0	0	2.0	2.2	E 1.8	1.8	0	0	0	0
2	E 3.4	0	0	0	E 1.8	2.5	E 1.8	1.2	0	0	0	0
3	2.6	0	0	0	3.0	2.7	1.4	0.8	0	0	0	0
4	2.0	0	0	0	1.3	2.8	1.3	0.6	0	0	0	0
5	1.6	0	0	0	.8	2.6	1.0	0.6	0	0	0	0
6	3.0	0	0	0	6.5	2.5	1.0	0.5	0	0	0	0
7	1.8	0	0	1.0	6.	2.5	1.0	0.3	0	0	0	0
8	2.8	0	0	E 7.8	6.	2.5	1.0	0.2	0	0	0	0
9	3.7	0	0	3.3	5.5	2.5	8.5	0.2	0	0	0	0
10	0.8	0	0	8.5	5.5	2.5	6.5	0.2	0	0	0	0
11	0.4	0	0	5.	5.5	2.5	3.3	0.2	0	0	0	0
12	0.1	0	0	1.8	5.5	2.3	0.8	0.2	0	0	0	0
13	+	0	0	8.	5.5	2.1	1.2	0.2	0	0	0	0
14	0	0	0	0	7.	1.8	1.2	0.2	0	0	0	0
15	0	0	0	0	5.5	1.8	4.2	0.2	0	0	0	0
16	0	0	0	0	5.5	1.7	5.	0	0	0	0	0
17	0	0	0	0	5.5	1.7	4.2	0	0	0	0	0
18	0	0	0	0	5.	1.6	3.4	0	0	0	0	0
19	0	0	0	9.	4.5	1.9	2.5	0	0	0	0	0
20	0	0	0	2.0	4.0	1.6	1.7	0	0	0	0	0
21	0	0	0	2.2	3.7	1.6	1.5	0	0	0	0	0
22	0	0	0	6.5	4.0	1.4	1.8	0	0	0	0	0
23	0	0	0	3.7	4.5	1.3	1.4	0	0	0	0	0
24	0	0	0	4.0	7.	1.2	1.2	0	0	0	0	0
25	0	0	0	6.	4.1	1.2	1.4	0	0	0	0	0
26	0	0	0	2.2	4.9	1.2	1.7	0	0	0	0	0
27	0	0	0	0	E 3.0	1.2	1.2	0	0	0	0	0
28	0	0	0	0	E 1.8	1.6	4.2	0	0	0	0	0
29	0	0	0	0	2.8	9.5	2.9	0	0	0	0	0
30	0	0	0	0		8.5	2.0	0	0	0	0	0
31	0		0	0		2.7		0		0	0	
	38.2	0	0	233.9	357.2	595.0	190.9	7.4	0	0	0	0
MEAN	1.23	0	0	7.55	12.3	19.2	6.36	0.24	0	0	0	0
ACRE-FEET	76	0	0	464	708	1180	379	15	0	0	0	0

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

YEAR OR PERIOD MEAN 3.89
ACRE-FEET 2820



STATION F209R

SAN GABRIEL RIVER WEST FORK below S. G. Dam No. 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.
Control - a control constructed of materials from the streambed remained practically unchanged during the 1939-1940 season. Mud from sluicing operations at San Gabriel Dam No. 2 made the control ineffective during low flows in the early part of the season. A concrete control with a 12 inch x 12 foot cipolletti weir containing a smaller 6 inch x 48 inch cipolletti notch in the center was constructed about 35 feet below the station in June 1940.

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, 1939 to September 30, 1940.

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, 1940.

EXTREMES OF DISCHARGE:

1939-1940
Maximum 1240 second-feet, January 15.
Minimum not determined.
1933-1940
Maximum 25000 second-feet, estimated, March 2, 1938.
Minimum + several times.

ACCURACY:

Fair.
Communication to stilling well during the early part of the season was frequently obstructed by mud due to sluicing operations at San Gabriel Dam No. 2. Low flows frequently estimated.

OPERATION:

Located, constructed and operated by the Los Angeles County Flood Control District, for measuring outflow from San Gabriel Dam No. 2.

F. C. D. FORM 104 IM 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 209-R

DISCHARGE MEASUREMENTS OF SAN GABRIEL RIVER, WEST FORK

~~xxix~~ below S. G. Dam #2 DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
702	10/3	Godfrey	22.5	23.5	.54	5.83	13.		.6	10	0	1005A 1022A	FC 20
703	10/4	"	22.5	23.5	.50	5.79	12.		.6	10	0	100P 115P	"
704	10/5	"	49.0	37.0	3.21	7.00	118.		.6	10	-1.20	907A 920A	"
705	10/6	"	11.0	5.25	2.44	6.02	13.	Float	6		0	225P 238P	"
706	10/6	"	14.0	6.21	2.82	5.83	18.	Float	14		0	345P 415P	"
707	10/7	"	12.0	4.0	3.99	6.12	16.	Float	6		0	1015A 1027A	"
708	10/10	"	13.0	2.93	2.74	6.84	8.3	Float	7		0	939A 948A	"
709	10/13	"	7.5	3.6	2.24	7.81	8.0		.6	11	0	955A 1012A	"
710	10/17	"	5.5	2.43	2.56	8.20	6.2		.6	9	0	1000A 1023A	"
711	10/20	"	7.0	2.48	2.54	8.41	6.3		.6	11	0	857A 923A	"
712	10/24	"	9.0	2.2	2.69	8.54	5.9		.6	8	0	902A 918A	"
713	10/27	"	6.6	2.31	2.50	8.46	5.8		.6	12	0	926A 955A	"
714	10/31	"	6.4	2.31	2.65	8.18	6.1		.6	11	0	1025A 1045A	"
715	11/3	"	7.1	2.63	1.94	7.81	5.1		.6	12	0	1108A 1127A	"
716	11/7	"	7.3	2.06	2.26	7.05	4.7		.6	13	0	333P 355P	"
717	11/9	"	8.5	2.48	2.36		5.8		.6	14	0	950A 1017A	"
718	11/14	"	7.5	2.41	2.20		5.3		.6	7		1000A 1010A	"
719	11/17	"	5.9	2.09	2.56		5.4		.6	10		900A 918A	"
720	11/21	"	6.0	2.5	2.07		5.2		.6	10		244P 300P	"
721	11/24	"	7.3	2.78	1.81		5.0		.6	13		918A 938A	"
722	11/28	"	6.5	2.72	1.75		4.8		.6	11		914A 930A	"
723	12/1	"	8.0	2.93	1.68		4.9		.6	12		940A 955A	"
724	12/4	De Vore	9.2	3.12	1.58		4.9		.6	9		1148A 1201P	FC 32
725	12/8	Godfrey	6.5	2.31	1.90	5.67	4.4		.6	12	0	848A 909A	FC 20
726	12/11	De Vore	10.8	3.75	1.70	5.74	6.4		.6	10	0	843A 857A	FC 32
727	12/15	Godfrey	8.7	3.15	1.42	5.68	4.5		.6	9	0	922A 942A	FC 20
728	12/18	De Vore	9.8	3.08	1.56	5.67	4.8		.6	9	0	842A 856A	FC 32
729	12/23	Godfrey	8.6	3.17	1.36	5.66	4.3		.6	9	0	920A 937A	FC 20
730	12/23	"	11.0	3.6	2.08	5.79	7.5		.6	6	0	436P 446P	"
731	12/24	De Vore	10.2	3.14	1.98	5.82	6.2		.6	11	0	928A 944A	FC 32
732	12/26	" "	6.5	2.94	1.75	5.68	5.1		.6	11	0	933A 949A	"
733	12/28	Godfrey	9.4	3.7	1.32	5.67	4.9		.6	9	0	1024A 1035A	FC 20
734	12/31	De Vore	7.0	3.22	1.65	5.66	5.3		.6	8	0	139P 150P	FC 32
735	1/4	" "	9.1	3.43	1.54	5.66	5.3		.6	10	0	1112A 1126A	"
736	1/5	Godfrey	5.0	1.2	.50	5.41	.65		.6	6	0	940A 950A	FC 20
737	1/6	"	10.0	3.9	1.28	5.66	5.0		.6	5	0	958A 1004A	"
738	1/6	"	10.0	3.7	1.43	5.68	5.3		.6	9	0	1110A 1124A	"
739	1/9	De Vore-De Vore	12.4	3.83	2.89	5.96	11.		.6	8	+.03	846A 855A	FC 32
740	1/9	De Vore-Godfrey	53.0	50.4	5.18	7.31	261.		.6	12	+.03 -.03	1143A 1155A	"
741	1/10	De Vore-De Vore	54.2	64.39	3.16	7.09	203.		.6	13	-.01	807A 824A	"
742	1/10	De Vore-Godfrey	55.8	69.20	3.01	7.07	208.		.6	15	0	212P 230P	"
743	1/11	De Vore	4.9	1.40	1.18	5.51	1.7		.6	7	0	842A 852A	"
744	1/12	" "	6.7	2.05	1.19	5.52	2.4		.6	10	0	847A 902A	"
745	1/13	Godfrey & Harrison	53.6	58.2	2.51	6.78	146.		.6	13	0	938A 1000A	FC 20
746	1/14	De Vore-De Vore	53.0	56.40	2.28	6.66	128.		.6	14	0	918A 936A	FC 32
747	1/14	De Vore	6.7	2.37	.65	5.30	1.6		.6	7	0	317P 327P	"
748	1/14	" "	39.0	45.2	2.38	6.50	107.		.6	6	0	435P 441P	"
749	1/14	" "	32.4	22.85	1.02	5.79	23.		.6	8	0	530P 541P	"
750	1/15	De Vore	28.2	16.57	1.48	5.79	25.		.6	10	0	844A 900A	FC 32
751	1/15	" "	28.6	17.94	1.69	5.87	30.		.6	10	0	1030A 1042A	"
752	1/15	De Vore	22.5	18.45	2.51	6.17	46.		.6	8	-.06	156P 208P	FC32
753	1/15	" "	38.5	30.40	2.87	6.55	87.		.6	9	-.02	234P 243P	"
754	1/16	" "	28.9	12.60	1.28	5.79	16.		.6	11	0	851A 907A	"
755	1/16	" "	35.5	28.15	2.04	6.27	57.		.6	13	0	1121A 1139A	"
756	1/16	" "	37.5	35.9	2.27	6.50	82.		.6	11	0	1217P 1228P	"
757	1/17	Moon	29.5	17.40	1.71	5.98	30.		.6	12	0	1054A 1110A	FC 22
758	1/17	"	28.0	14.81	1.64	5.87	24.		.6	12	-.02	137P 156P	"
759	1/17	"	27.5	12.04	1.76	5.80	21.		.6	13	0	410P 430P	"
760	1/18	Godfrey	34.0	22.38	.80	5.80	18.		.6	11	0	908A 933A	FC 20
761	1/20	"	33.5	21.7	.68	5.75	15.		.6	11	0	920A 942A	"
762	1/20	"	34.7	25.82	.87	5.86	22.		.6	8	0	254P 304P	"
763	1/20	"	33.9	21.5	.60	5.71	13.		.6	11	0	406P 423P	"
764	1/21	De Vore	17.5	9.69	1.43	5.69	14.		.6	10	0	937A 952A	FC 32
765	1/22	" "	16.7	9.41	1.41	5.69	13.		.6	9	0	657A 711A	"
766	1/23	" "	16.0	8.88	1.62	5.69	14.		.6	10	0	852A 908A	"
767	1/24	" "	5.6	1.41	.64	5.34	.90		.6	7	0	921A 931A	"
768	1/29	" "	5.7	1.44	.78	5.34	1.1		.6	7	0	833A 845A	"
769	2/1	De Vore-Godfrey	6.8	2.28	1.16	5.41	2.6		.6	7	0	152P 205P	"
770	2/2	De Vore-De Vore	38.0	41.64	2.29	6.56	95.0		.6	9	0	1126A 1134A	"
771	2/2	" "	36.8	37.68	2.41	6.52	91.		.6	9	0	1258P 111P	"
772	2/2	" "	50.0	56.08	2.72	6.91	152.		.6	12	0	302P 312P	"
773	2/2	" "	Two Channels			6.79	125.		.6	11	0	402P 412P	"
774	2/3	De Vore-De Vore	39.5	45.70	2.56	6.72	117.		.6	11	0	659A 711A	FC 32
775	2/4	" "	39.9	47.69	2.61	6.75	124.		.6	11	0	645A 659A	"
776	2/5	De Vore	40.0	46.92	2.56	6.73	120.		.6	12	0	928A 945A	"
777	2/6	" "	39.6	46.59	2.52	6.70	117.		.6	12	0	843A 900A	"
778	2/7	Godfrey	41.0	42.3	2.48	6.68	105.		.6	9	0	905A 922A	FC 20
779	2/8	De Vore-De Vore	39.2	45.31	2.41	6.65	109.		.6	13	0	730A 749A	FC 32
780	2/8	De Vore	34.2	22.71	1.11	5.86	25.		.6	7	+.01	840A 850A	"
781	2/8	" "	34.5	24.50	1.22	5.94	30.		.6	7	0	927A 935A	"
782	2/8	" "	36.0	27.65	1.45	6.07	40.		.6	7	0	1032A 1040A	"
783	2/8	" "	35.4	28.93	1.37	6.07	40.		.6	13	0	1100A 1121A	"
784	2/9	Godfrey	35.5	29.6	1.24	6.08	37.		.6	11	0	1014A 1037A	FC 20
785	2/10	"	35.5	31.5	1.30	6.07	41.		.6	12	0	855A 914A	"
786	2/11	De Vore	37.0	29.08	1.41	6.06	41.		.6	14	0	935A 959A	FC 32
787	2/12	" "	36.7	28.83	1.40	6.06	40.		.6	14	0	842A 906A	"
788	2/13	" "	36.6	29.31	1.39	6.05	41.		.6	14	0	841A 903A	"
789	2/14	Godfrey	36.0	29.7	1.19	6.05	35.		.6	10	0	935A 952A	FC 20
790	2/15	"	35.0	34.3	1.03	6.04	35.		.6	13	0	932A 957A	"
791	2/16	"	7.7	2.65	.45		1.2		.6	8		1030A 1052A	"
792	2/19	De Vore	8.0	2.62	.64	5.34	1.7		.6	14	0	907A 929A	FC 32
793	2/19	" "	37.8	49.8	2.06	6.62	103.		.6	8	0	1138A 1147A	"
794	2/19	" "	37.8	50.48	2.14	6.62	108.		.6	14	0	1257P 119P	"
795	2/20	" "	38.0	48.69	2.01	6.56	98.		.6	15	0	827A 851A	"
796	2/21	" "	9.3	3.75	1.06	5.45	4.0		.6	10	0	936A 950A	"
797	2/22	Godfrey	6.7	2.49	.51	5.32	1.3		.6	12	0	916A 936A	FC 20
798	2/26	De Vore-De Vore	9.4	3.79	1.09	5.46	4.1		.6	10	0	634A 646A	FC 32
799	2/29	Godfrey	9.9	4.90	1.63	5.58	8.0		.6	10	0	1207P 1230P	FC 20
800	3/2	"	39.8	34.2	1.80	6.37	62.		.6	5	+.16	501P 509P	"
801	3/2	"	40.0	38.2	2.00	6.45	76.		.6	8	0	519P 530P	"
802	3/2	"	41.5	46.5	2.38	6.72	110.		.6	7	0	603P 612P	"
803	3/3	De Vore	40.3	49.78	2.52	6.73	125.		.6	15	0	925A 951A	FC 32
804	3/4	De Vore-De Vore	40.2	48.97	2.44	6.71	119.		.6	16	0	847A 913A	"
805	3/6	Godfrey-De Vore	9.8	4.4	1.04	5.48	4.6		.6	10	0	1150A 1209P	FC 20
806	3/8	Godfrey	9.8	4.4	1.09	5.50	4.8		.6	10	0	945A 1000A	"

F. C. D. FORM 104 1M 6-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 209-R

DISCHARGE MEASUREMENTS OF SAN GABRIEL RIVER, WEST FORK

~~at~~ below S. G. Dam #2 ... DURING THE YEAR ENDING SEPTEMBER 30, 1940

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Dif.	METHOD	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
807	3/10	De Vore	39.7	41.50	2.04	6.50	85.		.6	13	0	855A 917A	FC 32
808	3/11	" "	37.	40.97	1.91	6.48	78.		.6	14	0	859A 927A	"
809	3/12	" "	37.3	40.70	1.90	6.46	77.		.6	14	0	835A 857A	"
810	3/14	Godfrey	9.0	3.85	.96	5.46	3.7		.6	9	0	943A 953A	FC 20
811	3/18	De Vore	9.7	4.29	.98	5.47	4.2		.6	10	0	724A 738A	FC 32
812	3/18	" "	36.7	41.18	1.69	6.44	69.		.6	10	0	831A 845A	"
813	3/18	" "	37.4	46.96	1.78	6.54	84.		.6	10	0	938A 950A	"
814	3/19	Brown-Godfrey	41.3	41.51	2.11	6.53	87.		.6	14	0	857A 917A	"
815	3/20	Brown	41.3	40.46	2.06	6.51	83.		.6	14	0	819A 842A	"
816	3/21	"	41.3	40.46	2.03	6.49	82.		.6	14	0	813A 834A	"
817	3/22	Godfrey	41.0	39.8	1.88	6.47	75.		.6	14	0	957A 1022A	FC 20
818	3/23	"	41.0	38.77	1.90	6.44	73.		.6	14	0	912A 939A	"
819	3/24	Brown	8.7	2.58	.78	5.37	2.0		.6	8	0	958A 1008A	FC 32
820	3/25	"	43.5	58.4	2.90	7.04	169.		.6	11	0	545P 600P	"
821	3/25	"	43.0	52.7	2.63	6.84	138.		.6	11	0	822P 838P	"
822	3/26	Godfrey	43.0	52.1	2.50	6.80	130.		.6	11	0	919A 937A	FC 20
823	3/26	"	40.5	38.49	1.92	6.45	74.		.6	11	0	119P 138P	"
824	3/26	"	41.3	44.00	2.10	6.59	92.		.6	13	0	234P 253P	"
825	3/27	Brown	9.6	3.82	1.26	5.49	4.8		.6	9	-.02	830A 843A	FC 32
826	3/27	"	29.1	19.73	.57	5.67	11.		.6	15	0	1141A 1200N	"
827	3/28	"	28.8	18.37	.51	5.61	9.4		.6	11	0	837A 850A	"
828	3/28	"	28.8	18.80	.51	5.62	9.6		.6	13	0	953A 1010A	"
829	4/1	Godfrey	9.0	2.69	.61	5.36	1.6		.6	9	0	753A 810A	FC 20
830	4/4	Brown	9.4	3.01	.68	5.36	2.0		.6	9	0	814A 824A	FC 32
831	4/5	Godfrey	29.8	22.29	.77	5.78	17.		.6	11	+.01	955A 1010A	FC 20
832	4/5	"	30.2	22.55	.81	5.82	18.		.6	8	0	1127A 1140A	"
833	4/7	Brown	28.7	22.70	.85	5.81	19.		.6	14	0	828A 846A	FC 32
834	4/9	"	28.8	22.31	.82	5.80	18.		.6	14	0	819A 835A	"
835	4/11	"	9.1	3.13	.68	5.36	2.1		.6	8	0	219P 228P	"
836	4/15	"	9.2	3.15	.75	5.38	2.4		.6	9	0	808A 817A	"
837	4/18	"	9.4	3.28	.74	5.38	2.4		.6	9	0	800A 810A	"
838	4/22	"	9.6	3.40	.81	5.39	2.8		.6	9	0	755A 806A	"
839	4/25	Godfrey	9.5	3.41	.68	5.40	2.3		.6	9	0	911A 925A	FC 20
840	4/28	Brown	9.6	3.70	.93	5.42	3.4		.6	9	0	840A 850A	FC 32
841	5/2	" 4	9.6	3.70	.96	5.43	3.5		.6	9	0	835A 845A	"
842	5/8	Godfrey	9.6	3.56	.96	5.44	3.4		.6	9	0	1027A 1042A	FC 20
843	5/11	"	9.9	3.69	.92	5.44	3.4		.6	9	0	1007A 1019A	"
844	5/14	"	9.6	3.86	.91	5.45	3.5		.6	9	0	1120A 1135A	"
845	5/17	"	9.6	3.69	.98	5.45	3.6		.6	9	0	140P 155P	"
846	5/21	Godfrey	9.6	3.79	1.03	5.45	3.9		.6	9	0	1002A 1017A	FC 20
847	5/24	"	9.6	3.81	.92	5.45	3.5		.6	9	0	837A 852A	"
848	5/28	"	9.6	3.85	1.04	5.45	4.0		.6	9	0	1004A 1020A	"
849	5/31	"	9.6	3.78	.97	5.45	3.7		.6	9	0	910A 927A	"
850	6/4	"	9.6	3.82	1.08	5.45	4.1		.6	9	0	1055A 1111A	"
851	6/7	"	9.6	3.93	1.09	5.46	4.3		.6	9	0	856A 909A	"
852	6/11	"	9.6	3.95	1.08	5.46	4.2		.6	9	0	900A 916A	"
853	6/14	"	9.6	4.05	1.10	5.48	4.4		.6	9	0	920A 935A	"
854	6/18	"	9.6	4.08	1.10	5.48	4.5		.6	9	0	910A 928A	"
855	6/21	"	9.9	4.11	1.08	5.48	4.5		.6	9	0	900A 921A	"
856	6/25	"	10.5	3.95	1.04	3.58	4.1		.6	10	0	1104A 1120A	"
857	6/28	Godfrey	8.3	3.19	1.54	3.08	4.9		.6	8	0	915A 930A	FC20
858	7/2	"	8.0	2.86	1.58	3.07	4.5		.6	8	0	859A 913A	"
859	7/5	"	8.5	3.01	1.56	3.04	4.7		.6	9	0	912A 930A	"
860	7/9	"	15.0	9.77	.92	3.18	9.0		.6	8	0	852A 911A	"
861	7/9	"	16.0	10.60	.93	3.19	9.9		.6	8	0	1037A 1050A	"
862	7/9	"	17.0	11.28	.98	3.23	11.		.6	9	0	1235P 1253P	"
863	7/9	"	17.0	12.23	1.09	3.28	13.		.6	8	0	347P 251P	"
864	7/10	"	17.0	12.56	1.07	3.28	13.		.6	8	0	836A 851A	"
865	7/12	"	17.0	12.45	1.02	3.27	13.		.6	9	0	845A 901A	"
866	7/16	"	16.7	11.84	.97	3.23	12.		.6	8	0	834A 848A	"
867	7/16	"	17.2	13.40	1.09	3.31	15.		.6	8	0	1045A 1100A	"
868	7/17	"	17.0	12.45	1.01	3.25	13.		.6	8	0	835A 850A	"
869	7/17	"	15.5	10.44	.89	3.16	9.3		.6	8	0	120P 133P	"
870	7/17	Godfrey	16.5	11.71	.93	3.22	11.		.6	8	0	235P 250P	FC 20
871	7/17	"	17.0	12.52	.98	3.26	12.		.6	8	0	344P 359P	"
872	7/18	"	15.5	11.14	.96	3.24	11.		.6	8	0	845A 900A	"
873	7/18	"	17.0	13.43	1.14	3.32	15.		.6	8	0	1047A 1100A	"
874	7/19	"	17.0	13.06	1.07	3.30	14.		.6	8	0	828A 840A	"
875	7/20	"	17.0	12.85	1.05	3.29	14.		.6	8	0	900A 917A	"
876	7/23	"	17.0	12.52	1.02	3.28	13.		.6	8	0	837A 853A	"
877	7/24	"	17.0	12.93	.98	3.28	13.		.6	8	0	903A 914A	"
878	7/24	"	17.7	14.94	1.17	3.38	17.		.6	8	0	952A 1011A	"
879	7/25	"	17.5	13.97	1.18	3.35	16.		.6	8	0	857A 911A	"
880	7/26	"	17.5	13.96	1.19	3.35	17.		.6	8	0	835A 847A	"
881	7/27	"	17.5	13.87	1.12	3.34	16.		.6	8	0	908A 922A	"
882	7/30	"	17.3	13.50	1.11	3.32	15.		.6	8	0	828A 842A	"
883	7/30	"	17.5	14.82	1.28	3.40	19.		.6	8	0	1046A 1100A	"
884	7/31	"	17.5	14.69	1.27	3.39	19.		.6	8	0	846A 900A	"
885	8/2	"	17.5	14.36	1.27	3.38	18.		.6	8	0	921A 934A	"
886	8/6	"	17.5	13.60	1.19	3.35	16.		.6	8	0	859A 913A	"
887	8/8	"	17.5	13.65	1.13	3.34	15.		.6	8	0	840A 852A	"
888	8/9	"	17.5	13.68	1.10	3.33	15.		.6	8	0	841A 858A	"
889	8/10	"	5.0	1.90	1.12	3.41	2.1		.6	9	0	225P 240P	"
890	8/10	"	26.0	25.28	2.29	4.11	58.		.6	13	+.01	502P 520P	"
891	8/12	Brown	29.8	33.11	2.71	4.39	90.		.6	11	+.01	853A 905A	FC 32
892	8/12	"	29.8	33.54	2.60	4.39	87.		.6	11	0	938A 952A	"
893	8/12	"	30.3	38.35	3.01	4.52	115.		.6	11	0	1105A 1123A	"
894	8/13	Godfrey	26.0	22.50	2.01	3.98	45.		.6	13	0	945A 1011A	FC 20
895	8/13	"	27.0	27.90	2.45	4.21	68.		.6	13	0	110P 126P	"
896	8/14	"	18.0	10.45	0.97	3.59	10.		.6	9	0	849A 905A	"
897	8/15	Brown-Godfrey	5.3	1.48	1.19	3.37	1.8		.6	6	0	405P 412P	"
898	8/16	" "	5.3	1.32	1.17	3.36	1.5		.6	6	0	1247P 1255P	FC 32
899	8/17	Brown	5.3	1.38	1.09	3.35	1.5		.6	6	0	343P 348P	"
900	8/19	"	5.3	1.24	0.93	3.34	1.2		.6	9	0	345P 355P	"
901	8/23	Godfrey	7.0	2.50	0.50	3.34	1.2		.6	7	0	904A 918A	FC 20
902	8/28	Brown	5.2	1.14	0.90	3.33	1.0		.6	9	0	918A 925A	FC 32
903	8/30	"	5.3	1.22	0.93	3.32	1.1		.6	10	0	700A 710A	"
904	9/3	"	5.2	1.17	0.95	3.32	1.1		.6	9	0	805A 815A	"
905	9/5	"	5.3	1.18	0.81	3.32	0.95		.6	9	0	900A 910A	"
906	9/10	"	5.3	1.17	0.83	3.31	0.95		.6	9	0	740A 750A	"
907	9/12	"	5.3	1.14	0.94	3.32	1.1		.6	9	0	850A 900A	"
908	9/16	"	5.4	1.17	0.90	3.31	1.0		.6	9	0	925A 935A	"
909	9/19	"	5.4	1.20	0.86	3.34	1.0		.6	9	0	805A 815A	"
910	9/23	"	4.4	1.19	0.87	3.11	1.0		.6	8	0	820A 830A	"
911	9/26	"	4.4	1.11	0.86	3.11	0.95		.6	8	0	925A 935A	"

F.C. Dist. Form 82 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

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 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	6	E 4.9	5.5	E 2.2	7.5	1.6	3.2	3.7	4.7	18	0.9
2	14	5.5	E 4.9	5	61	38	1.7	3.4	4.0	E 4.7	18	0.9
3	13	5	E 4.9	5.5	119	120	1.9	3.4	4.2	4.7	18	1.1
4	16	4.9	E 4.9	4.3	123	83	2.1	3.4	4.2	4.7	18	0.9
5	19	4.6	E 4.8	1.1	120	E 4.6	12	3.2	4.5	4.7	16	0.9
6	E 16	4.8	E 4.6	4.8	117	E 4.6	19	3.2	4.2	4.7	16	0.9
7	E 14	4.7	E 4.5	6.5	105	4.5	19	3.2	4.2	4.7	16	0.9
8	E 12	5.5	E 4.4	16	62	4.7	19	3.4	4.2	4.7	16	0.9
9	E 10	6	4.5	141	37	4.7	18	3.4	4.2	9.5	15	0.9
10	E 8.5	6	4.8	140	41	56	13	3.4	4.2	13	33	0.9
11	E 8.5	6	5.5	E 1.7	41	78	2.1	3.4	4.2	13	54	0.9
12	E 8.5	5.5	4.2	2.4	40	42	2.1	3.7	E 4.2	13	87	1.1
13	E 8	5.5	4.8	94	41	E 4.0	2.2	3.4	E 4.0	13	57	1.1
14	E 7.5	5.5	4.8	77	35	E 3.7	2.2	3.4	4.5	13	9	1.1
15	E 7	5.5	4.5	62	35	E 3.9	2.4	3.4	4.7	12	E 1.9	1.1
16	E 6.5	5.5	4.5	22	13	E 4.1	2.4	3.7	5	13	1.5	1.1
17	E 6	5.5	4.5	13	E 1.4	E 4.2	2.4	3.7	E 4.7	12	1.5	0.9
18	E 6	5.5	4.8	13	E 1.6	56	2.4	3.7	4.5	13	1.5	0.9
19	E 6.5	5	4.8	18	57	86	2.4	3.7	4.5	14	1.3	1.1
20	E 6.5	5	5	14	68	82	2.4	4.0	4.5	14	1.3	1.1
21	E 6.5	5	5	14	E 3.0	82	2.7	4.0	4.5	14	1.3	1.1
22	E 6	5	4.8	13	E 1.3	74	2.9	4.0	4.5	13	1.3	1.1
23	E 6	5	6	13	E 1.3	39	2.7	3.7	4.5	13	1.3	1.1
24	E 6	5	6	E 0.9	E 1.3	E 2.0	2.4	3.4	E 4.3	15	1.3	1.1
25	E 6	5	4.8	E 0.9	E 2.0	43	2.2	3.4	E 4.1	16	1.1	0.9
26	E 6	4.9	5	E 1.0	E 4.1	110	3.2	3.7	E 4.4	16	1.1	0.9
27	E 6	4.8	4.8	E 1.0	E 5.5	34	3.2	4.0	E 4.6	16	1.1	0.9
28	E 6	4.6	4.8	E 1.1	E 6.5	7	3.4	4.0	E 4.9	15	1.1	0.9
29	E 6	4.6*	4.8	E 1.1	E 8	0.8	3.4	4.0	5	16	1.1	0.9
30	E 6	4.9	5	E 1.2		0.6	3.4	3.7	5	17	1.1	0.9
31	E 6		5.5	E 1.7		1.7		3.7		18	1.1	
	274.0	156.9	151.1	700.7	1153.2	1085.6	159.8	110.9	132.2	359.1	412.9	29.4
MEAN	8.84	5.23	4.87	22.6	39.8	35.0	5.33	3.58	4.40	11.6	13.3	0.98
ACRE-FEET	543	311	300	1390	2290	2150	317	220	262	712	819	58

ESTIMATED

Remarks: E indicates discharge estimated or interpolated between measurements.

YEAR OR PERIOD — MEAN 12.9 — ACRE-FEET 9370

STATION P3R

SAN GABRIEL RIVER W. FORK above Forks

LOCATION:

On the right (south)bank, one-quarter mile above Rincon Ranger Station, 2 miles above East Fork and above 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 at the original location. Removed July 12, 1938 and installed at the temporary station known as Station P3B-R. Removed on September 27, 1938 and reinstalled at original location 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, 1939 to September 30, 1940.

REGULATION:

Flow partially regulated by San Gabriel Dam No. 2.

DIVERSIONS:

None.

RECORDS AVAILABLE:

December 3, 1930 to September 30, 1940.
For records prior to December 3, 1930 on file at 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:

1939-1940
Maximum 1220 second-feet, January 8.
Minimum 6.5 second-feet on various days.
1930-1940 (Stations P1R, P3R and P3BR)
Maximum 34000 second-feet, estimated, March 2, 1938.
Minimum 0.3 second feet, October 17, 1931.

ACCURACY:

Fair. Flows occasionally estimated or interpolated due to mud obstructing communication.

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 IM 6-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. P 3 R

DISCHARGE MEASUREMENTS OF SAN GABRIEL RIVER - WEST FORK

~~at~~ above Forks DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
788	10/3	De Vore	23.2	18.10	2.19	8.61	40.		.6	11	0	145P / 159P	FC 32
789	10/5	"	20.1	13.95	1.99	8.51	28.		.6	11	0	957A / 1011A	"
790	10/12	"	18.2	10.90	2.38	Est. 8.42	26.		.6	10	-0.01	209P / 220P	"
791	10/19	Cooper	18.0	9.84	2.31	8.41	23.		.6	9	0	1004A / 1018A	11
792	10/26	"	17.8	9.44	2.12	8.36	20.		.6	9	-0.01	1154A / 1206P	"
793	11/2	DeVore	17.5	9.26	2.09	8.32	19.		.6	9	0	954A / 1008A	32
794	11/9	Cooper-Ingram	17.7	11.16	2.28	8.41	26.		.6	13	0	1109A / 1120A	11
795	11/16	Cooper	17.4	9.80	2.09	8.33	21.		.6	13	0	1032A / 1052A	"
796	11/22	"	17.4	9.30	1.86	8.33	17.		.6	13	0	1022A / 1042A	"
797	11/30	"	17.4	9.69	1.90	8.34	18.		.6	13	0	1030A / 1050A	"
798	12/7	"	17.4	10.18	1.86	8.33	19.		.6	13	0	1005A / 1025A	"
799	12/14	"	17.4	9.31	1.86	8.33	17.		.6	13	0	1005A / 1025A	"
800	12/21	"	17.5	8.71	1.84	8.33	16.		.6	13	0	1010A / 1030A	"
801	12/23	"	18.0	14.98	2.28	8.63	34.		.6	13	0	506P / 526P	"
802	12/26	"	17.5	9.81	2.10	8.35	21.		.6	13	0	1110A / 1130A	"
803	12/28	"	17.5	9.45	2.04	8.35	19.		.6	13	0	1010A / 1030A	"
804	1/4	"	17.7	9.97	2.16	8.38	22.		.6	13	+0.01	1018A / 1038A	"
805	1/4	Cooper - Ingram	17.8	10.75	2.27	8.41	24.		.6	13	0	342P / 400P	"
806	1/7	Ingram-Shipley	49.0	33.20	3.52	Est. 8.93	117.		.6	11	0	838P / 900P	18
807	1/7	" "	Two Channels			Est. ±9.32	168.		.6	11	+0.01	942P / 957P	"
808	1/7	" "	"	"		9.39	204.		.6	12	-0.02	1101P / 1118P	"
809	1/8	" "	70.0	154.5	6.04	Est. ±9.83	934.		.6	5	+0.15	220A / 250A	"
810	1/8	" "	70.0	196.0	5.89	Est. ±10.06	1155		.6	6	-0.10	335A / 400A	"
811	1/8	" "	65.0	111.2	5.42	9.58	603.		.6	6	-0.10	530A / 550A	"
812	1/8	Ingram-Shipley	60.	85.5	5.00	9.39	427.		.6	11	-0.06	637A / 700A	FC 18
813	1/8	" "	57.	67.32	4.82	9.02	325.		.6	11	-0.04	824A / 840A	"
814	1/9	Ingram	32.	24.69	4.19	8.60	103.		.6	9	+0.01	910A / 930A	2
815	1/9	Cooper-Ingram	60.5	62.17	5.54	9.03	344.		.6	13	-0.03	156P / 218P	"
816	1/9	" "	60.	60.12	5.73	8.97	344.		.6	13	0	235P / 248P	"
817	1/10	Ingram	32.4	24.96	2.64	8.46	66.		.6	8	0	1155P / 1214A	18
818	1/11	"	31.	20.67	2.48	8.43	51.		.6	10	-0.01	914A / 932A	2
819	1/12	"	27.	17.83	2.59	8.36	46.		.6	11	0	848A / 907A	"
820	1/14	Cooper-Putnam	31.3	24.74	3.28	Est. 8.58	81.		.6	14	-0.08	805P / 825P	18
821	1/16	Cooper	28.	17.05	3.09	8.40	53.		.6	12	0	140P / 200P	11
822	1/18	"	25.8	16.86	2.74	8.39	46.		.6	12	-0.01	112P / 128P	"
823	1/24	Brown	23.	15.79	2.08	8.18	33.		.6	12	0	301P / 316P	"
824	1/31	Cooper	22.	13.45	1.74	8.06	23.		.6	12	0	1202P / 1220P	"
825	2/1	"	22.	13.52	1.74	8.08	23.		.6	12	+0.01	630A / 648A	"
826	2/1	Ingram	40.	34.90	3.53	8.72	123.		.6	10	+0.04	1138A / 1155A	2
827	2/1	"	41.	34.17	3.67	8.77	125.		.6	10	0	145P / 204P	"
828	2/1	"	49.	40.24	4.27	8.88	172.		.6	11	+0.05	322P / 340P	"
829	2/1	"	63.	54.18	4.64	9.02	252.		.6	11	+0.04	358P / 418P	"
830	2/1	"	45.	41.34	3.59	8.87	148.		.6	10	-0.01	1140P / 1155P	"
831	2/2	"	64.	55.11	3.74	8.96	206.		.6	12	+0.02	322A / 346A	"
832	2/2	"	64.	50.8	4.42	9.03	225.		.6	12	-0.02	427A / 447A	"
833	2/2	"	48.	41.5	4.19	8.77	174.		.6	10	-0.02	732A / 747A	"
834	2/2	"	47.	43.35	3.33	8.75	144.		.6	9	+0.02	842A / 857A	"
835	2/2	"	42.	39.4	3.30	8.75	130.		.6	9	+0.02	1045A / 1058A	"
836	2/3	Ingram-Shipley	65.	84.25	5.16	9.32	435.		.6	11	0	640P / 655P	FC 2
837	2/3	Ingram-Shipley	64.	84.9	4.68	9.33	397.		.6	11	0	827P / 845P	FC2
838	2/3	" "	64.	81.2	4.98	9.28	404.		.6	11	-0.01	953P / 1010P	"
839	2/4	" "	64.	74.4	4.91	9.24	364.		.6	12	-0.02	1205A / 1219A	"
840	2/4	" "	64.	75.3	5.07	9.21	382.		.6	15	-0.01	107A / 124A	"
841	2/4	" "	64.	78.3	4.88	9.20	382.		.6	15	0	200A / 218A	"
842	2/8	Cooper	37.5	40.85	2.74	8.49	112.		.6	13	-0.02	1125A / 1145A	11
843	2/15	"	31.5	32.30	2.44	8.32	79.		.6	15	0	1035A / 1055A	"
844	2/20	"	36.5	43.63	3.25	8.62	142.		.6	12	0	130P / 148P	"
845	2/25	Ingram	40.	41.36	2.90	8.52	120.		.6	8	+0.12	447P / 500P	2
846	2/25	Ingram-Whisler	64.	78.10	4.36	9.21	340.		.6	11	+0.01	640P / 654P	"
847	2/25	" "	65.	85.9	5.00	9.36	430.		.6	11	0	820P / 836P	"
848	2/25	" "	65.	97.65	5.45	9.44	532.		.6	11	-0.01	1018P / 1036P	"
849	2/26	" "	65.	84.6	4.38	9.28	371.		.6	12	-0.03	1238A / 1256A	"
850	2/26	" "	65.	82.9	3.94	9.14	326.		.6	12	-0.03	226A / 236A	"
851	2/26	" "	64.	78.1	3.81	9.04	298.		.6	11	0	335A / 346A	"
852	2/26	" "	62.	69.95	3.35	8.96	235.		.6	11	-0.02	453A / 508A	"
853	2/26	Ingram	38.5	45.65	3.36	8.60	153.		.6	9	0	125P / 140P	"
854	2/29	"	36.	37.67	3.27	8.49	123.		.6	9	+0.02	448A / 508A	"
855	2/29	Cooper	36.8	37.04	3.24	8.50	120.		.6	12	-0.02	1035A / 1053A	11
856	3/7	"	26.5	25.24	2.16	8.17	55.		.6	11	0	1025A / 1041A	"
857	3/13	"	25.	21.44	1.96	8.05	42.		.6	10	0	400P / 416P	"
858	3/21	"	35.3	35.88	3.28	8.53	118.		.6	12	0	1020A / 1040A	"
859	3/28	"	24.4	22.26	1.86	8.04	42.		.6	10	0	645A / 701A	"
860	3/31	Cooper	30.5	32.55	2.74	8.38	89.		.6	13	+0.01	225P / 245P	FC 11
861	3/31	Ingram	35.	39.41	3.13	8.55	124.		.6	9	0	1125P / 1145P	2
862	4/1	"	35.	38.35	3.09	8.53	119.		.6	10	-0.01	120A / 140A	"
863	4/3	Cooper	26.2	23.91	1.99	8.10	48.		.6	11	0	510P / 526P	11
864	4/10	"	26.8	25.42	2.05	8.13	52.		.6	12	0	425P / 445P	"
865	4/18	"	23.3	20.79	1.53	7.93	32.		.6	11	0	645A / 703A	"
866	4/25	"	22.7	21.00	1.31	7.89	28.		.6	11	0	648A / 704A	"
867	4/26	"	29.	30.87	2.53	8.32	78.		.6	10	-0.01	652A / 704A	"
868	5/2	"	22.5	19.87	1.64	7.93	33.		.6	12	0	630A / 648A	"
869	5/9	"	21.9	18.81	1.47	7.87	28.		.6	11	0	645A / 700A	"
870	5/16	"	21.2	17.68	1.38	7.83	24.		.6	10	0	658A / 712A	"
871	5/23	Brown	27.6	16.66	1.33	7.82	22.		.6	12	0	628A / 645A	"
872	5/28	Cooper	21.2	17.35	1.33	7.82	23.		.6	10	0	1000A / 1016A	"
873	6/6	"	20.6	15.19	1.41	7.82	21.		.6	10	0	732A / 750A	"
874	6/13	"	20.	14.42	1.31	7.77	19.		.6	10	0	620A / 634A	"
875	6/20	"	19.6	13.85	1.26	7.78	17.		.6	10	0	710A / 724A	"
876	6/27	"	19.7	13.74	1.23	7.73	17.		.6	10	0	652A / 708A	"
877	7/3	"	19.5	13.56	1.19	7.72	16.		.6	10	0	548A / 604A	"
878	7/11	"	21.2	16.08	1.44	7.86	23.		.6	11	0	655A / 711A	"
879	7/15	"	20.8	14.47	1.31	7.79	19.		.6	11	0	355P / 415P	"
880	7/18	"	21.4	15.51	1.35	7.82	21.		.6	11	0	648A / 704A	"
881	7/25	"	21.9	16.60	1.53	7.89	25.		.6	11	0	615A / 631A	"
882	8/1	"	22.4	17.12	1.55	7.91	27.		.6	11	0	658A / 714A	"
883	8/8	Brown	27.8	15.46	1.42	7.86	22.		.6	13	0	740A / 755A	"
884	8/15	Cooper	19.9	14.05	0.85	7.63	12.		.6	9	0	1010A / 1024A	FC 11
885	8/22	Lindsay	18.0	9.72	0.75	7.53	7.3		.6	11	0	1052A / 1108A	43
886	8/29	Cooper	18.4	11.78	0.62	7.52	7.3		.6	9	0	635A / 651A	11
887	9/5	"	19.2	12.49	0.71	7.54	8.9		.6	10	0	644A / 700A	"
888	9/12	"	18.0	12.10	0.59	7.50	7.1		.6	9	0	1120A / 1136A	"
889	9/19	"	19.0	11.93	0.68	7.52	8.1		.6	9	0	1130A / 1146A	"
890	9/26	"	18.0	12.12	0.67	7.50	8.1		.6	9	0	654A / 710A	18

F.C. Dist. Form 52 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

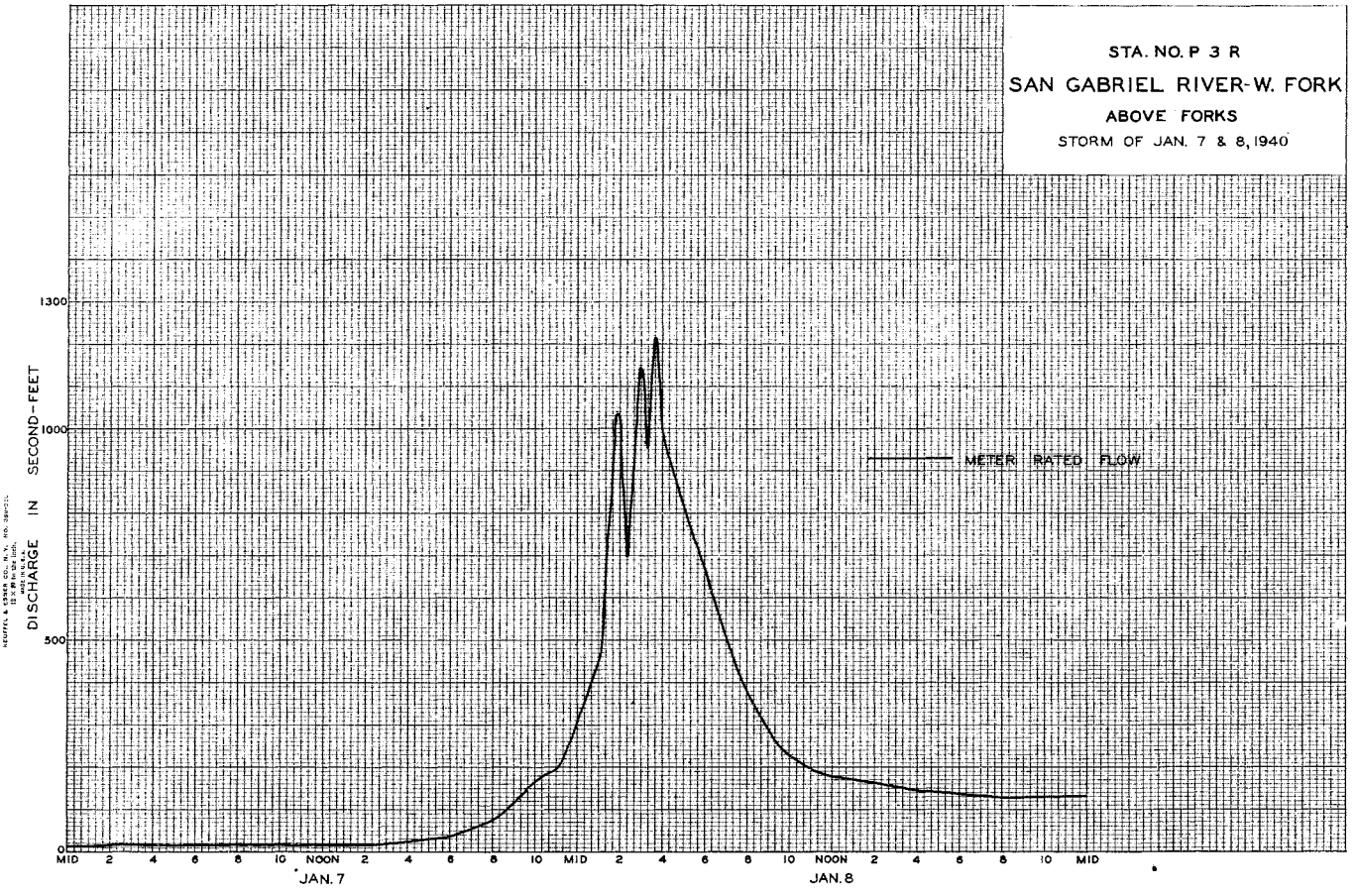
Sta. No P 3 R

Daily discharge, in second-feet of SAN GABRIEL RIVER - W. FORK above Forks, for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	50	18	17	20	106	36	82	33	19	16	26	6.5
2	44	19	17	20	204	94	56	32	19	16	24	7.5
3	37	19	18	20	369	198	50	31	19	16	24	8
4	39	18	18	20	340	168	47	31	19	15	23	8.5
5	33	16	19	20	252	65	50	30	19	15	22	8.5
6	32	15	19	19	229	58	61	30	20	14	22	8
7	32	14	19	45	222	54	59	30	20	14	21	7.5
8	31	22	19	363	151	52	58	28	20	14	21	7.5
9	31	25	19	234	103	50	56	27	20	16	20	7
10	29	17	19	278	97	88	52	26	19	22	35	7
11	28	12	21	48	91	125	36	25	19	23	70	7
12	26	14	19	47	86	97	34	25	19	21	96	6.5
13	26	15	18	109	82	44	33	24	19	21	85	7
14	25	18	17	109	86	40	31	23	19	21	25	7.5
15	25	19	18	83	81	39	34	23	20	20	12	7.5
16	24	19	18	88	62	39	34	23	19	20	9.5	7.5
17	24	19	18	52	38	38	32	24	19	20	8	7.5
18	24	18	17	44	36	76	31	25	18	21	8	8
19	22	15	15	41	73	120	30	25	18	23	7.5	8
20	20	14	16	41	121	117	29	23	16	22	7.5	8
21	20	15	16	34	35	115	28	22	16	21	7	8
22	20	16	16	36	29	111	27	22	16	21	7	8
23	19	16	21	42	34	87	27	21	17	20	6.5	8
24	20	16	22	37	23	33	27	20	16	21	6.5	8.5
25	20	16	21	24	132	51	27	20	16	24	6.5	8
26	19	16	21	22	192	155	60	21	16	23	7	8
27	14	17	20	20	99	85	44	22	16	23	7	8
28	13	17	19	18	81	42	37	22	16	23	6.5	7.5
29	13	18	19	18	110	42	37	21	16	23	6.5	7.5
30	14	18	19	20		41	34	20	16	23	6.5	7.5
31	16		19	23		82		20		26	6.5	
	790	511	574	1995	3564	2492	1243	769	541	618	640.0	229.5
MEAN	25.5	17.0	18.5	64.4	123	80.4	41.4	24.8	18.0	19.9	20.6	7.65
ACRE-FEET	1570	1010	1140	3960	7070	4940	2470	1530	1070	1230	1270	455

Remarks:

YEAR OR PERIOD MEAN 38.2 ACRE FEET 27720



STATION P4B-R

SAN GABRIEL RIVER E. FORK above Forks

LOCATION:

On the right (north) bank 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:

68.2 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, 1939 to September 30, 1940.

REGULATION:

None.

DIVERSIONS:

Some water diverted for placer mining.

RECORDS AVAILABLE:

At Stations P4R and P4B-R
November 30, 1932 to September 30, 1940.

EXTREMES OF DISCHARGE:

1939-1940
Maximum 1360 second-feet, January 8.
Minimum 13 second-feet, September 30.
1932-1940
Maximum 46000 second-feet, estimated by U.S.G.S. March 2, 1938.
Minimum 1.5 second-feet October 1, 1934.

ACCURACY:

Good. Records occasionally estimated due to sand obstructing communication.

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.C.S. Water Resources Branch.

F. C. D. FORM 104 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. P 4 B-R

DISCHARGE MEASUREMENTS OF SAN GABRIEL RIVER - EAST FORK

~~XXX~~ above Forks DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
319	10/5	DeVore	23.3	12.31	2.16	6.52	27.		.6	10	0	151P 206P	FC 32
320	10/12	"	23.3	12.10	2.14	6.53	26.		.6	12	0	1051A 1112A	"
321	10/19	Cooper	20.3	11.74	2.20	6.51	26.		.6	13	0	136P 156P	11
322	10/26	"	20.0	11.20	2.20	6.49	25.		.6	12	0	330P 350P	"
323	11/2	"	20.2	11.35	2.04	6.47	23.		.6	13	0	1225P 1245P	"
324	11/9	DeVore	20.0	11.60	2.02	6.48	23.		.6	12	0	1119A 1137A	32
325	11/16	Cooper	20.0	10.27	1.96	6.43	20.		.6	10	0	213P 229P	11
326	11/22	"	19.8	9.96	2.00	6.44	20.		.6	12	0	235P 255P	"
327	11/30	"	19.7	10.17	2.07	6.44	21.		.6	12	-0.01	236P 252P	"
328	12/7	"	19.5	9.88	1.98	6.41	20.		.6	12	0	235P 255P	"
329	12/14	"	20.0	9.85	1.93	6.44	19.		.6	12	0	148P 208P	"
330	12/21	"	17.8	9.35	1.99	6.42	19.		.6	12	0	150P 210P	"
331	12/28	Cooper	17.8	9.66	2.03	6.42	20.		.6	12	0	255P 315P	FC11
332	1/4	Middleton-Graf	22.8	10.95	1.68	6.43	18.		.6	11	0	805A 819A	2
333	1/4	" "	23.7	12.24	2.08	6.48	26.		.6	12	0	1043A 1053A	"
334	1/4	" "	24.6	13.27	2.15	6.51	28.		.6	12	0	1244P 1254P	"
335	1/4	" "	24.8	13.65	2.15	6.53	29.		.6	12	+0.01	155P 208P	"
336	1/4	" "	25.0	14.21	2.21	6.54	31.		.6	12	0	314P 326P	"
337	1/7	" "	23.8	12.10	2.11	6.49	26.		.6	12	0	1200M 1212P	29
338	1/7	" "	23.6	11.56	2.24	6.53	26.		.6	12	+0.01	411P 423P	"
339	1/7	" "	23.5	12.99	2.38	6.57	31.		.6	11	+0.03	508P 520P	"
340	1/7	" "	25.3	18.78	3.04	6.80	57.		.6	10	+0.02	702P 711P	"
341	1/7	" "	27.9	28.48	2.84	6.95	82.		.6	11	+0.02	804P 816P	"
342	1/7	" "	28.3	32.44	4.42	7.13	146.		.6	10	+0.04	922P 934P	"
343	1/7	Middleton-Graf	54.5	42.21	4.33	7.23	186.		.6	12	0	1014P 1027P	FC 29
344	1/7	" "	57.0	49.31	5.02	7.47	248.		.6	12	+0.04	1053P 1105P	"
345	1/8	" "	47.0	72.50	7.40	8.11	539.		.6	9	+0.21	1255A 133A	"
346	1/8	" "	49.0	76.20	9.00	8.37	689.		.6	10	-0.06	200A 215A	"
347	1/8	" "	49.0	77.60	10.48	8.37	817.		.6	10	+0.04	234A 250A	"
348	1/8	" "	120.	152.	7.05	8.26	1070.		.6	17	-0.58	310A 345A	"
349	1/8	" "	120.	130.8	8.93	8.65	1170.		.6	12	-0.14	445A 510A	"
350	1/8	" "	Two Channels			8.42	812.		.6	12	-0.08	613A 637A	"
351	1/8	" "	"	"		8.05	318.		.6	7	+0.03	1040A 1054A	"
352	1/8	" "	"	"		7.79	207.		.6	8	-0.02	218P 228P	"
353	1/8	" "	"	"		7.74	146.		.6	12	0	516P 530P	"
354	1/10	" "	34.8	23.36	3.48	7.58	81.		.6	18	0	1013A 1030A	"
355	1/10	" "	35.8	21.64	3.70	7.57	80		.6	14	0	126P 140P	"
356	1/10	" "	34.8	21.08	3.50	7.56	74.		.6	15	0	711P 725P	"
357	1/10	" "	34.7	20.63	3.46	7.53	71.		.6	16	-0.01	940P 956P	"
358	1/11	" "	34.7	18.82	3.41	7.49	64.		.6	15	0	748A 805A	"
359	1/11	" "	34.7	18.21	3.41	7.48	62.		.6	16	0	1026A 1042A	"
360	1/11	" "	34.7	19.04	3.28	7.47	62.		.6	17	0	143P 203P	"
361	1/11	" "	34.8	17.10	3.47	7.46	59.		.6	16	0	456P 512P	"
362	1/11	" "	34.8	18.28	3.53	7.47	64.		.6	17	0	718P 737P	"
363	1/11	" "	34.8	19.78	3.44	7.48	68.		.6	16	0	1008P 1026P	"
364	1/12	" "	34.8	18.41	3.44	7.47	63.		.6	17	0	725A 744A	"
365	1/16	Middleton	Three Channels			7.33	42.		.6	21	0	150P 220P	"
366	1/16	"	28.5	15.13	2.84	7.33	43.		.6	16	0	300P 322P	"
367	1/17	Middleton	29.0	16.03	2.68	7.33	43.		.6	17	0	850A 920A	FC 29
368	1/17	"	29.0	16.19	2.63	7.33	43.		.6	17	0	1045A 1115A	"
369	1/17	"	29.0	15.86	2.71	7.32	43.		.6	17	0	1145A 1215P	"
370	1/17	"	29.0	16.16	2.65	7.32	43.		.6	17	0	145P 213P	"
371	1/17	"	29.0	15.70	2.55	7.31	40.		.6	17	0	335P 405P	"
372	1/18	"	29.0	15.07	2.64	7.30	40.		.6	17	0	1051A 1120A	"
373	1/18	"	29.0	15.24	2.65	7.30	40.		.6	17	0	1153A 1217P	"
374	1/18	"	29.0	15.37	2.57	7.29	39.		.6	17	0	125P 150P	"
375	1/23	Brown-Spangler	37.0	22.44	3.54	7.39	80		.6	14	+0.01	834P 851P	"
376	1/23	" "	36.0	21.92	3.36	7.41	74.		.6	12	-0.01	1019P 1033P	"
377	1/24	" "	29.0	15.83	2.78	7.30	44.		.6	11	0	802A 815A	"
378	2/1	Brown	Two Channels			7.24	36.		.6	15	0	751A 810A	"
379	2/1	"	29.0	16.50	3.22	7.31	53.		.6	12	+0.03	929A 945A	"
380	2/1	"	30.3	21.02	3.99	7.42	84.		.6	11	+0.04	1011A 1023A	"
381	2/1	"	37.5	26.68	4.60	7.60	123.		.6	13	+0.03	1107A 1125A	"
382	2/1	"	38.2	29.09	4.92	7.64	143.		.6	13	-0.02	1207P 1224P	"
383	2/1	"	37.0	26.96	4.45	7.54	120.		.6	13	0	144P 204P	"
384	2/1	"	35.3	22.64	2.98	7.49	90.		.6	13	-0.01	308P 325P	"

F. C. D. FORM 104 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. P 4 B-R

DISCHARGE MEASUREMENTS OF SAN GABRIEL RIVER - EAST FORK

~~at~~ above Forks DURING THE YEAR ENDING SEPTEMBER 30, 1940

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	RATING PERCENT DIF.	METH OD	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
385	2/1	"	34.9	22.07	3.93	7.43	87.		.6	13	-0.02	445P 500P	"
386	2/2	"	35.8	22.65	4.55	7.51	103.		.6	12	+0.02	224A 300A	"
387	2/2	"	37.0	24.36	4.68	7.56	114.		.6	13	-0.01 +0.01	356A 420A	"
388	2/2	"	36.0	23.80	4.53	7.55	108.		.6	13	-0.02	453A 516A	"
389	2/2	"	35.0	22.44	4.36	7.48	98.		.6	13	-0.01	636A 652A	"
390	2/2	"	32.0	20.50	4.14	7.44	85.		.6	12	0	839A 854A	"
391	2/2	Brown	32.0	20.60	4.06	7.40	84.		.6	12	-0.02	1055A 1111A	FC 29
392	2/2	"	34.8	19.71	3.94	7.40	76.		.6	12	0	350P 405P	"
393	2/2	"	35.0	21.77	4.03	7.41	88.		.6	13	0	531P 549P	"
394	2/2	"	35.8	23.71	4.29	7.45	102.		.6	13	0	818P 834P	"
395	2/3	"	35.0	22.90	3.92	7.43	90.		.6	13	0	638A 655A	"
396	2/3	"	35.4	21.28	4.06	7.44	86.		.6	13	0	957A 1014A	"
397	2/3	"	35.3	22.33	3.91	7.46	87.		.6	13	0	1140A 1155A	"
398	2/3	"	35.8	24.19	4.18	7.51	101.		.6	13	+0.03	1252P 112P	"
399	2/3	"	38.1	27.42	4.76	7.56	130.		.6	13	+0.03	149P 203P	"
400	2/3	"	38.4	32.58	4.85	7.67	158.		.6	13	+0.08	240P 255P	"
401	2/3	"	39.3	33.86	5.02	7.73	170.		.6	13	0	308P 323P	"
402	2/3	"	40.9	34.99	5.12	7.73	179.		.6	14	-0.01 +0.03	349P 408P	"
403	2/3	"	41.2	38.05	5.31	7.82	202.		.6	11	+0.02	451P 505P	"
404	2/3	"	40.7	36.60	5.46	7.80	200.		.6	11	-0.01	530P 545P	"
405	2/3	"	40.5	37.31	5.44	7.75	203.		.6	11	-0.01	727P 746P	"
406	2/3	"	40.5	35.20	5.08	7.72	179.		.6	11	0	850P 908P	"
407	2/4	"	40.3	27.96	4.82	7.64	135.		.6	14	0	713A 733A	"
408	2/4	"	39.7	27.29	4.65	7.61	127.		.6	14	-0.02	1143A 1201P	"
409	2/8	Cooper	31.0	19.33	3.66	7.38	71.		.6	15	0	355P 415P	"
410	2/11	Munsen van der Goot	31.7	18.37	3.38	7.32	62.		.6	14	0	340P 400P	"
411	2/15	Cooper	30.0	16.11	3.58	7.27	58.		.6	15	0	225P 245P	"
412	2/20	"	27.7	15.04	3.24	7.20	49.		.6	14	0	355P 413P	"
413	2/25	Brown	31.5	29.96	4.83	7.55	145.		.6	8	+0.02	447P 457P	"
414	2/25	"	43.3	34.12	4.95	7.65	169.		.6	13	+0.02	537P 555P	"
415	2/25	Brown	44.0	39.17	5.25	7.72	206.		.6	12	+0.01	646P 706P	FC 29
416	2/25	"	44.0	44.67	5.72	7.83	255.		.6	12	0	808P 825P	"
417	2/25	"	Two Channels			8.14	528.		.6	15	-0.02 -0.01	1045P 1125P 1225A	"
418	2/26	"	"	"		8.08	572.		.6	15	+0.01	102A	"
419	2/26	"	"	"		7.80	516.		.6	14	+0.02	414A 450A	"
420	2/26	"	"	"		7.86	309.		.6	19	+0.02	719A 746A	"
421	2/26	"	47.0	51.00	5.96	7.95	304.		.6	10	-0.02	830A 845A	"
422	2/26	"	48.0	49.15	5.56	7.74	273.		.6	12	-0.02	1033A 1050A	"
423	2/26	"	47.0	44.67	5.15	7.65	231.		.6	12	-0.01	241P 256P	"
424	2/26	"	47.0	43.30	5.04	7.60	218.		.6	12	0	529P 544P	"
425	2/27	"	47.0	35.41	4.70	7.44	166.		.6	13	0	638A 655A	"
426	2/27	"	39.0	33.28	4.40	7.57	146.		.6	13	0	1257P 113P	"
427	2/29	Cooper Ingram	57.5	37.63	4.63	7.88	174.		.6	18	0	320P 340P	"
428	3/7	Middleton	27.5	22.26	4.01	7.37	89.		.6	13	0	952A 1002A	"
429	3/7	Cooper Middleton	27.0	28.50	3.47	7.90	99.		.6	11	0	404P 416P	"
430	3/8	Middleton Ingram	25.0	27.63	3.84	7.91	106.		.6	12	0	848A 904A	"
431	3/8	"	24.5	23.72	4.23	7.97	100.		.6	12	-0.04 +0.02	330P 340P	"
432	3/14	Cooper	25.8	20.99	3.73	7.66	78.		.6	12	0	1120A 1138A	"
433	3/21	Cooper	25.6	17.67	3.64	7.65	64.		.6	12	0	120P 140P	FC29
434	3/28	"	25.6	17.36	3.65	7.63	63.		.6	13	0	1220P 1240P	"
435	3/31	Middleton	40.0	28.00	3.66	7.78	103.		.6	14	+0.01	830A 850A	"
436	3/31	"	34.0	26.15	3.92	7.78	102.		.6	11	+0.01	915A 930A	"
437	3/31	"	34.0	25.58	4.01	7.77	102.		.6	11	0	930A 942A	"
438	3/31	"	34.0	27.65	3.92	7.77	108.		.6	12	-0.01	1011A 1030A	"
439	3/31	Middleton	34.0	27.52	4.03	7.76	111.		.6	11	+0.01	1030A 1045A	FC 29
440	3/31	"	43.5	30.16	4.29	7.72	129.		.6	15	0	1215P 1240P	"
441	3/31	"	43.5	30.69	4.28	7.72	131.		.6	15	0	1240P 100P	"
442	3/31	"	34.0	29.06	3.75	7.70	109.		.6	11	+0.01	215P 230P	"
443	3/31	"	34.0	29.39	3.87	7.71	114.		.6	12	+0.01	230P 245P	"
444	3/31	"	33.8	28.58	3.46	7.71	99.		.6	11	0	420P 433P	"
445	3/31	"	33.8	29.86	3.37	7.71	101.		.6	11	0	433P 450P	"
446	3/31	"	33.8	29.95	3.47	7.70	104.		.6	11	0	620P 634P	"
447	3/31	"	34.0	30.93	3.61	7.71	111.		.6	11	+0.02	720P 740P	"
448	3/31	"	34.0	32.33	4.09	7.73	132.		.6	11	-0.02	935P 951P	"
449	3/31	"	34.0	32.56	4.12	7.78	134.		.6	11	+0.01	1110P 1125P	"
450	4/1	"	43.0	32.32	4.31	7.81	139.		.6	10	0	1225A 1240A	"
451	4/1	"	43.0	32.93	4.08	7.80	134.		.6	12	-0.01	125A 142A	"
452	4/1	"	42.5	31.13	4.11	7.78	128.		.6	12	0	310A 328A	"
453	4/1	"	42.5	31.50	3.86	7.75	122.		.6	12	0	508A 528A	"
454	4/1	"	42.3	27.94	3.48	7.75	97.		.6	12	0	735A 752A	"
455	4/1	"	27.5	25.11	3.60	7.77	90.		.6	13	0	900A 915A	"
456	4/1	"	27.5	24.61	3.81	7.76	94.		.6	13	0	1100A 1115A	"
457	4/1	"	27.5	24.49	3.59	7.76	88.		.6	13	+0.01	104P 121P	"
458	4/1	"	27.5	24.17	3.68	7.78	89.		.6	13	0	225P 240P	"
459	4/4	Cooper	23.8	20.46	3.79	7.71	78.		.6	12	0	242P 300P	"
460	4/11	"	25.3	18.98	3.51	7.70	67.		.6	13	0	135P 153P	"
461	4/18	"	25.2	17.04	3.40	7.62	58.		.6	13	0	510P 530P	"
462	4/25	"	25.2	17.28	3.46	7.67	60.		.6	13	0	240P 300P	"
463	5/2	Cooper	25.2	18.22	3.52	7.47	64.		.6	13	0	150P 210P	FC 29
464	5/9	"	25.0	16.32	3.20	7.45	52.		.6	13	0	1105A 1125A	"
465	5/16	"	25.0	16.35	2.96	7.43	48.		.6	13	0	1255P 115P	"
466	5/23	Brown	22.4	14.72	2.83	7.41	42.		.6	11	0	1045A 1101A	"
467	5/28	Cooper	24.8	14.73	2.77	7.39	41.		.6	12	0	140P 200P	"
468	6/6	"	24.8	14.04	2.51	7.36	35.		.6	12	0	1122A 1140A	"
469	6/13	"	24.8	13.36	2.32	7.32	31.		.6	11	0	1235P 1251P	"
470	6/20	"	24.0	12.43	2.22	7.28	28.		.6	11	0	320P 334P	"
471	6/27	"	21.8	11.70	2.21	7.27	26.		.6	11	0	225P 241P	"
472	7/3	"	22.8	12.29	2.18	7.27	27.		.6	11	0	1145A 1201P	"
473	7/11	"	21.8	10.97	2.04	7.22	22.		.6	11	0	205P 223P	"
474	7/18	"	21.8	10.99	2.05	7.22	22.		.6	11	0	225P 241P	"
475	7/25	"	21.8	10.58	1.98	7.20	21.		.6	11	0	1158A 1214P	"
476	8/2	Brown-Ingram	22.3	10.95	1.81	7.20	20.		.6	12	0	845A 858A	"
477	8/8	Brown	22.0	10.20	1.88	7.18	19.		.6	11	0	1034A 1047A	"
478	8/15	Cooper	21.6	10.01	1.91	7.17	19.		.6	11	0	1235P 1253P	"
479	8/22	Lindsay	19.0	11.07	1.30	7.13	14.		.6	13	0	155P 215P	43
480	8/29	Cooper	23.4	8.81	1.79	7.11	16.		.6	9	0	105P 121P	29
481	9/5	"	21.4	9.11	1.91	7.12	17.		.6	10	0	115P 131P	"
482	9/12	"	18.5	8.57	1.78	7.10	15.		.6	10	-0.01	325P 341P	"
483	9/19	Cooper van der Goot	21.3	8.52	1.83	7.11	16.		.6	10	0	252P 310P	"
484	9/26	Cooper	21.3	8.68	1.76	7.09	15.		.6	10	0	208P 222P	"

F. C. Dist. Form 59

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

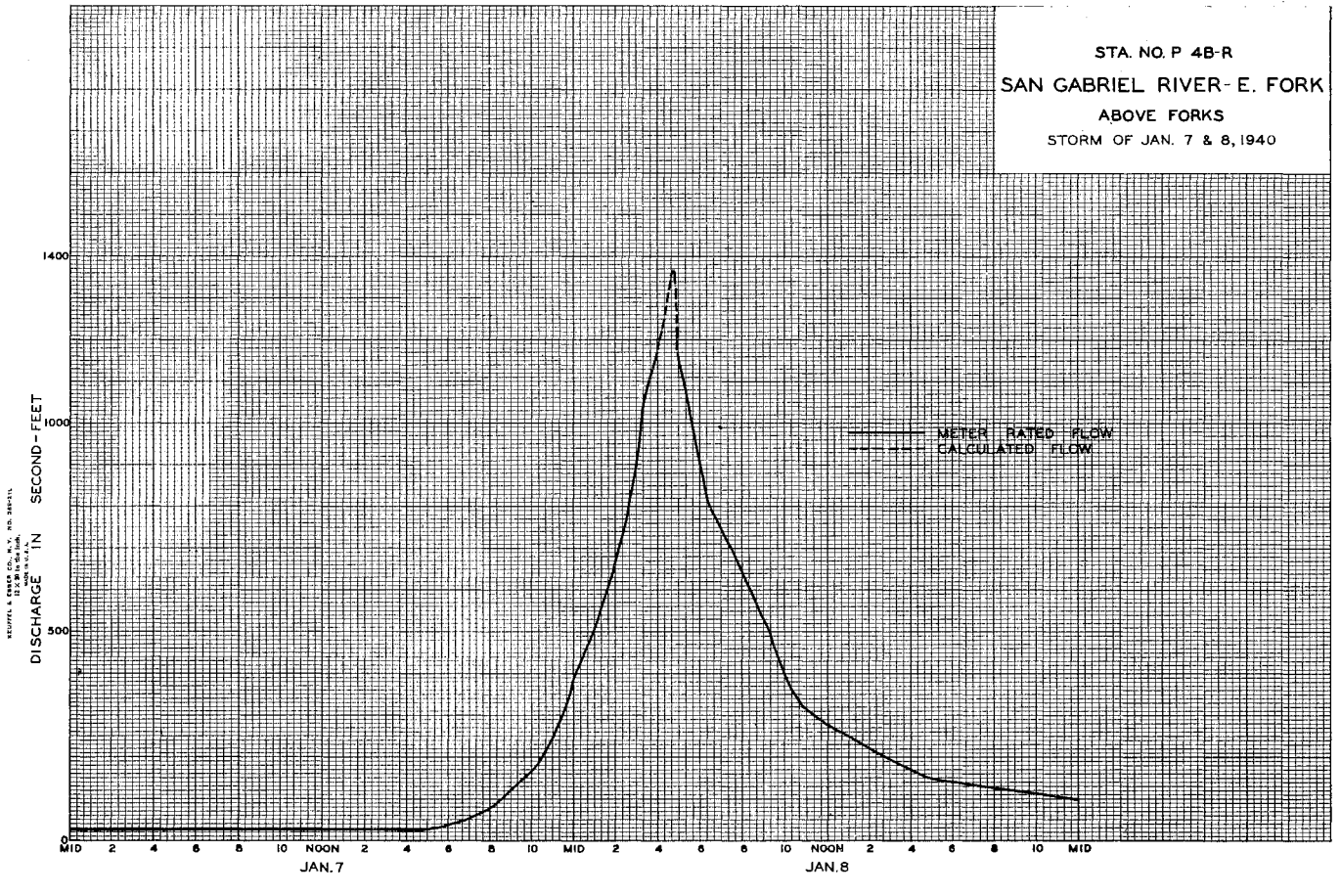
Sta. No P 4B-R

Daily discharge, in second-feet of SAN GABRIEL RIVER - EAST FORK above Forks, for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	36	23	21	18	74	E155	100	69	37	28	20	15
2	34	22	22	17	93	E140	80	67	36	26	19	17
3	32	22	21	16	131	E129	78	67	36	26	18	17
4	29	22	20	25	130	E120	78	62	35	26	18	17
5	27	22	20	28	100	E112	78	60	35	25	18	18
6	28	21	20	27	85	E106	78	60	35	25	19	18
7	31	20	21	57	80	100	75	58	36	25	19	18
8	28	22	23	430	75	95	73	54	35	24	18	17
9	26	23	22	100	71	91	71	52	34	24	18	17
10	24	22	22	80	69	88	69	51	34	23	18	17
11	25	22	21	62	67	85	67	51	32	23	18	17
12	25	21	21	62	64	82	64	51	32	23	19	17
13	25	21	20	54	60	80	67	49	31	23	19	16
14	25	21	19	48	62	78	69	48	31	23	19	16
15	26	20	19	46	60	76	73	48	31	23	19	16
16	25	21	19	42	54	73	73	48	31	23	19	16
17	25	22	19	42	52	71	71	48	31	23	19	16
18	26	21	19	40	51	73	69	48	31	23	18	16
19	26	21	20	40	52	71	69	45	30	22	17	16
20	26	20	19	42	49	67	67	43	30	22	17	16
21	25	20	19	45	49	64	64	42	30	21	17	15
22	25	20	19	49	52	62	67	42	29	21	17	15
23	25	20	28	62	56	62	64	40	29	20	17	16
24	25	20	23	45	54	60	62	40	28	20	17	16
25	25	20	21	38	139	60	60	40	28	20	17	15
26	25	21	21	37	315	60	75	40	29	20	17	15
27	25	21	21	35	154	62	80	42	28	21	17	15
28	25	22	20	34	122	62	78	42	28	21	17	15
29	24	21	20	34	168	58	73	40	29	21	17	15
30	23	21	19	34		56	71	37	28	20	16	14
31	23		19	35		98		37		20	15	
	819	635	638	1724	2588	2596	2163	1521	949	705	553	484
Mean	26.4	21.2	20.6	55.6	89.2	83.7	72.1	49.1	31.0	22.7	17.8	16.1
Acre-Feet	1620.	1260.	1270.	3420.	5130.	5150.	4290.	3020.	1880.	1400.	1100.	960.

Remarks: E indicates discharge estimated.

Year or Period: Mean 42.0, Acre Feet 30500.



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 head on the 25 foot weir; Station F220R gives a record of the flow down the Azusa Conduit below the Tainter 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, 1939 to September 30, 1940.

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, 1940.
Azusa Conduit was inoperative from March 2, 1938 to March 27, 1940.

EXTREMES OF DISCHARGE:

1938-1939
Maximum 109 second-feet April 18.
Minimum no flow for several months.
1935-1940
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.

F.C. Dist. Form № 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

Sta. No F250R

Daily discharge, in second-feet of SAN GABRIEL - AZUSA CONDUIT at sand box weir, for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	39	42	41	38	65	0	86	90	70	76	25	78
2	19.4	40	41	38	0	0	89	91	70	79	25	77
3	0	40	41	40	0	0	90	90	73	79	25	76
4	0	40	41	43	0	0	90	90	76	78	25	76
5	0	40	39	43	0	0	90	90	75	78	25	75
6	0	40	38	43	0.1	0	90	89	75	78	25	74
7	0	38	38	43	+	0	90	89	75	77	25	74
8	0	39	38	44	54	0	90	89	74	79	25	73
9	0	40	38	15.0	81	0	90	89	74	77	25	72
10	0	40	38	0	82	0	90	89	74	56	25	71
11	0	40	38	0	82	0	90	89	74	30	25	74
12	0	40	38	0	82	0	90	89	75	30	25	37
13	0	40	38	0	82	0	90	81	75	29	25	26
14	0	40	38	0	82	0	90	65	75	29	26	26
15	0	40	38	26	82	0	91	65	74	31	68	26
16	0	40	38	32	31	0	94	65	E 73	33	83	26
17	0	40	38	0	0	0	92	65	72	33	83	26
18	0	41	38	28	0	0	92	65	71	37	82	26
19	0	41	38	82	0	0	91	65	70	40	81	26
20	0	41	38	85	0	0	91	65	70	41	79	26
21	0	41	38	85	0	0	91	65	70	41	78	26
22	0	41	38	81	0	0	90	68	71	67	81	26
23	0	41	38	62	0	57	89	70	71	79	82	26
24	0	41	38	0	0	86	89	70	71	79	81	27
25	0	41	38	0	0	86	89	70	71	79	79	27
26	2.0	41	38	36	0	86	90	70	71	79	81	22
27	33	41	38	78	0	86	90	70	71	82	82	20
28	46	41	38	78	0	86	90	70	71	45	79	20
29	44	41	38	78	0	86	90	70	71	25	79	20
30	44	41	38	78		86	90	70	71	25	79	20
31	44		38	78		86		70		25	78	
	271.4	1212	1191	1254.0	723.1	745	2704	2373	2174	1716	1706	1299
MEAN	8.75	40.4	38.4	40.5	24.9	24.0	90.1	76.5	72.5	55.4	55.0	43.3
ACRE-FEET	538	2400	2360	2490	1430	1480	5360	4710	4310	3400	3380	2580

Remarks: E indicates estimated

YEAR OR PERIOD MEAN 47.4
ACRE-FEET 34440

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 may 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. The conduit was repaired and began operating March 27, 1940. An H.C.F. continuous recorder was in service from March 25, 1940 to September 30, 1940.

RECORDS AVAILABLE:

February 26, 1933 to September 30, 1940.
(See "Recorder")

EXTREMES OF DISCHARGE

1938-1940
Maximum 91 second-feet August 15, 1940.
Minimum + at various times.
1933-1940
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.

F. C. D. FORM 104 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F220R

DISCHARGE MEASUREMENTS OF SAN GABRIEL-AZUSA CONDUIT

At North Portal #4B Tunnel DURING THE YEAR ENDING SEPTEMBER 30, 1940

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.
												1115A	
165	3-27	Cooper	4.6	3.99	2.41	.82	9.6		.6	10	0	1131A	FC11
												1140A	
166	3-27	"	4.6	3.94	2.52	.82	9.2		.6	10	0	1156A	"
												1030A	
167	4-4	"	4.6	14.44	4.55	3.12	66.		.6	10	0	1050A	"
												212P	
168	4-9	"	4.6	18.93	4.79	4.12	91.		.6	10	0	238P	FC34
									.2			232P	
169	4-9	"	4.6	18.90	4.77	4.12	90.		.8	10	0	256P	"
												1215P	
170	4-18	"	4.6	18.88	4.78	4.11	90.		.6	10	0	1230P	"
												328P	
171	4-24	"	4.6	18.69	4.76	4.07	89.		.6	10	0	342P	"
												240P	
172	5-1	"	4.6	18.58	4.86	4.07	90.		.6	10	0	254P	"
												1115A	
173	5-10	"	4.6	18.58	4.82	4.09	90.		.6	10	0	1131A	"
												955A	
174	5-17	"	4.6	14.28	4.55	3.13	65.		.6	10	0	1010A	FC11
												202P	
175	5-22	Brown	4.6	15.04	4.54	3.31	68.		.6	10	0	212P	"
												1052A	
176	5-31	Cooper	4.6	15.38	4.52	3.32	69.		.6	10	0	1110A	"
												945A	
177	6-7	"	4.6	16.29	4.57	3.52	74.		.6	10	0	1001A	"
												958A	
178	6-14	"	4.6	16.32	4.57	3.53	75.		.6	10	0	1014A	"
												1130A	
179	6-21	"	4.6	15.85	4.56	3.42	72.		.6	10	0	1146A	"
												1048A	
180	6-28	"	4.6	15.67	4.60	3.38	72.		.6	10	0	1106A	"
												1052A	
181	7-5	"	4.6	17.12	4.50	3.70	77.		.6	10	0	1110A	"
												1132A	"
182	7-12	"	4.6	7.86	3.89	1.69	31.		.6	10	0	1150A	"
												1020A	
183	7-19	"	4.6	10.17	4.19	2.20	43.		.6	10	0	1036A	"
												1048A	
184	7-26	"	4.6	17.66	4.69	3.84	83.		.6	10	0	1104A	"
												340P	
185	8-1	"	4.6	7.13	3.65	1.55	26.		.6	10	0	356P	"
												411P	
186	8-8	Brown	4.6	7.16	3.81	1.56	27.		.6	10	0	420P	"
												148P	
187	8-14	Cooper	4.6	7.30	3.75	1.59	27.		.6	10	0	204P	"
												1040A	
188	8-23	Lindsay	4.6	17.74	4.64	3.84	82.		.6	10	0	1055A	FC43
												1104A	
189	8-30	Cooper	4.6	17.28	4.54	3.75	79.		.6	10	0	1120A	FC11
												1018A	
190	9-6	"	4.6	16.66	4.70	3.62	78.		.6	10	0	1032A	"
												150P	
191	9-11	"	4.6	17.66	4.56	3.85	81.		.6	10	0	210P	"
									.2			215P	
192	9-11	"	4.6	17.67	4.50	3.85	79.		.8	10	0	245P	"
		Cooper and										1250P	
193	9-19	Van der Goot	4.6	7.48	3.61	1.62	27.		.6	10	0	100P	FC18
												1130A	
194	9-26	Cooper	4.6	5.98	3.49	1.30	21.		.6	10	0	1142A	"

P.C. Dist. Form 52 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

Sta. No. F220R

Daily discharge, in second-feet of SAN GABRIEL - AZUSA CONDUIT at N. Portal #4 B Tunnel, for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							37	89	70	76	26	80
2							51	90	70	81	26	79
3							63	90	73	80	26	79
4							63	90	76	80	26	78
5							65	90	75	80	26	78
6							80	89	75	79	26	78
7							90	89	75	78	26	77
8							90	89	75	80	26	76
9							90	89	74	78	26	76
10							90	89	74	57	27	75
11							90	89	74	30	27	80
12							90	89	75	30	27	40
13	+	+	+	+	+	+	90	81	75	30	27	27
14	ESTIMATED	ESTIMATED	ESTIMATED	ESTIMATED	ESTIMATED	ESTIMATED	90	65	75	30	27	27
15							89	65	74	33	69	28
16							90	65	74	35	84	27
17							90	65	73	35	84	28
18							89	65	71	39	82	28
19							89	65	71	42	81	28
20							89	65	71	43	80	28
21							89	65	72	43	78	28
22							89	68	72	70	81	28
23							89	70	72	82	83	28
24							89	70	72	82	82	28
25							89	70	72	82	81	28
26							89	70	72	82	83	23
27						6.1	90	70	72	82	83	20
28						11.2	90	70	72	47	82	20
29						6.9	90	70	71	26	81	E 20
30						0.6	89	70	71	26	80	E 20
31						21		70		26	80	
	+		+		+		2508		2188		1743	
		+		+		45.8		2371		1764		1360
MEAN	+	+	+	+	+	1.48	83.6	76.5	72.9	56.9	56.2	45.3
ACRE-FEET	+	+	+	+	+	91	4970	4700	4340	3500	3460	2700

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

YEAR OR PERIOD — MEAN 32.7 — ACRE-FEET 23760

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO F 190-R

STATION F190R

SAN GABRIEL RIVER at Foothill Boulevard

LOCATION:

On the downstream side of the 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, 1939 to September 30, 1940.

REGULATION:

Flow partially regulated by San Gabriel Dams 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, 1940.

EXTREMES OF DISCHARGE:

1939-1940
Maximum 400 second-feet June 25.
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.
Flows occasionally estimated due to recorder failure and unknown parties building dams affecting control conditions.

OPERATION:

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

DISCHARGE MEASUREMENTS OF SAN GABRIEL RIVER

~~x25x~~ Foothill Blvd. DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
167	1/10	Lindsay	32.0	35.1	1.57	6.77	55.		.6	11	0	800A 815A	FC 28
168	1/11	"	34.0	36.3	1.63	6.76	60.		.6	12	0	1040A 1055A	"
169	1/18	"	11.0	4.48	.94	5.80	4.2		.6	10	0	302P 312P	"
170	1/25	"	8.0	2.14	.62	5.58	1.3		.6	8	0	1120A 1130A	"
171	2/1	Lindsay & Middleton	38.0	36.06	.93	6.56	33.		.6	12	0	348P 400P	"
172	2/8	Lindsay	12.2	6.62	1.27	6.00	8.4		.6	8	0	237P 247P	"
173	2/15	Lindsay-Lindsay	12.0	5.44	1.16	5.90	6.3		.6	11	0	328P 337P	"
174	2/23	Lindsay	10.0	4.21	.96	5.80	4.0		.6	9	0	1015A 1023A	"
175	2/26	Middleton	24.0	15.94	1.63	6.34	26.		.6	11	0	343P 355P	"
176	3/7	Lindsay	13.0	5.48	1.04	5.88	5.7		.6	11	0	1200P 1213P	"
177	3/13	"	12.7	4.85	.96	5.82	4.7		.6	11	0	316P 330P	"
178	3/21	"	11.5	3.75	1.01	5.86	3.8		.6	7	0	1210P 1218P	"
179	3/28	"	11.0	3.97	.50	5.73	2.0		.6	7	0	250P 258P	"
180	4/4	"	11.0	4.11	.49	5.74	2.0		.6	9	0	158P 208P	"
181	4/11	"	11.0	3.90	.55	5.73	2.2		.6	8	0	210P 220P	"
182	4/18	"	12.5	4.40	.44	5.80	1.9		.6	7	0	237P 246P	"
183	4/25	"	14.0	5.93	.43	5.82	2.5		.6	8	0	305P 315P	"
184	5/2	"	12.5	5.47	.62	5.84	3.4		.6	8	0	245P 255P	"
185	5/9	"	11.0	4.69	.60	5.82	2.8		.6	7	0	250P 302P	"
186	5/16	"	11.5	4.32	.46	5.76	2.0		.6	7	0	251P 300P	"
187	5/23	"	11.5	3.17	.43	5.53	1.4		.6	7	0	142P 150P	"
188	6/17	"	25.0	23.63	2.54	6.74	60.		.6	13	+.04	154P 209P	FC 43
189	6/18	"	32.0	33.33	2.99	7.06	100.		.6	16	0	622A 644A	"
190	6/18	"	84.0	89.8	2.21	7.65	199.		.6	11	+.09	825P 847P	"
191	6/19	Lindsay	85.0	94.1	2.36	7.78	222.		.6	11	0	1015A 1037A	FC 43
192	6/20	"	85.5	103.4	2.57	7.93	266.		.6	14	0	908A 933A	"
193	6/21	"	85.0	103.0	2.54	7.94	262.		.6	12	0	932A 952A	"
194	6/23	Lindsay-Lindsay	86.0	114.3	2.88	8.19	329.		.6	11	0	948A 1013A	"
195	6/24	" "	86.0	122.1	3.18	8.36	389.		.6	11	0	1015A 1040A	"
196	6/30	Lindsay	86.0	106.4	2.51	7.96	267.		.6	12	0	830A 852A	"
197	7/1	"	86.0	107.4	2.54	7.96	272.		.6	12	0	930A 950A	"
198	7/2	"	86.0	117.0	2.85	8.16	333.		.6	12	0	930A 950A	"
199	8/30	Brewster	2.0	.35	.80	5.38	.28		.6	3	0	902A 905A	FC 24
200	9/6	"	4.0	1.22	.89	5.51	1.1		.6	5	0	1108A 1115A	"

F.C. Dist. Form 52 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

Sta. No F190R

Daily discharge, in second-feet of SAN GABRIEL RIVER at Foothill Blvd., for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0	0	25	13	9	3.7	0.1	273	0.4	1.1
2	0	0	0	0	50	12	3.3	3.5	0.1	324	0.3	0.5
3	0	0	0	0	48	12	2.4	3.5	0.3	233	0.1	0.4
4	0	0	0	0	32	12	2.1	3.7	0	6	0.3	0.5
5	0	0	0	0	20	8.5	1.9	3.7	0.1	0.4	0	0.7
6	0	0	0	0	15	7.5	1.8	3.7	0.3	0.3	0.1	0.8
7	0	0	0	3.0	10	5.5	1.9	3.5	0.3	0.4	+	1.3
8	0	0	0	72	8.5	5.5	1.9	3.3	+	0.6	0.1	1.4
9	0	0	0	29	7.5	5.5	2.2	3.1	0.1	0.1	0.2	0.8
10	0	0	0	54	7	5	2.3	2.9	0.2	0.1	0.3	0.6
11	0	0	0	E 60	6.5	5	2.3	2.8	0.1	+	0.4	0.1
12	0	0	0	E 60	6.5	4.8	2.1	2.7	0.1	0	0.2	0.2
13	0	0	0	E 60	6	4.6	1.9	2.5	0.1	0	0	0
14	0	0	0	E 60	7	4.4	1.7	2.4	0	+	0.1	0
15	0	0	0	E 60	7	12	1.8	2.3	0	0	0.2	0
16	0	0	0	E 4.2	6	16	1.9	2.1	0	0	+	0
17	0	0	0	E 4.2	6	11	2.1	2.5	36	0	0	0
18	0	0	0	E 4.2	5.5	7	1.9	3.5	118	+	+	0
19	0	0.1	0	4.0	5	7.5	2.1	4.0	230	0.8	0.2	0
20	0	0	0	3.7	4.4	8	2.2	3.5	265	1.2	+	0
21	0	0	0	3.8	4.0	3.3	2.3	4.6	268	0.8	+	0
22	0	0	0	3.8	3.8	2.5	2.7	4.0	274	0.6	0.2	0
23	0	+	+	2.8	3.8	2.4	2.7	3.7	335	0.5	+	0
24	0	0	+	3.5	3.7	E 2.4	2.7	3.1	386	0.3	0.2	0
25	0	0	0	E 1.1	30	2.3	2.9	2.4	388	+	0.4	0
26	0	0	0	E 0.7	38	2.3	12	2.2	164	0.3	0.5	0
27	0	0	0	0.7	17	2.4	7	1.7	0.4	0.6	0.4	0
28	0	0	+	0.7	13	2.3	5	1.1	0	0.6	0.4	0
29	0	0	0	0.8	22	1.8	4.4	1.1	133	0.2	0.5	0
30	0	0	0	1.0		1.8	4.4	0.7	273	0.1	0.4	0
31	0		0	1.5		9		0.3		0.3	0.5	
	0		+		418.2		94.9		2872.2		6.4	
		0.1		498.7		199.3		87.8		843.1		8.4
MEAN	0	+	+	16.1	14.4	6.43	3.16	2.83	95.7	27.2	0.21	0.28
ACRE-FEET	0	0.2	+	989	829	395	188	174	5700	1670	13	17

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

YEAR OR PERIOD MEAN 13.7
ACRE-FEET 9980

STATION F261R

SAN GABRIEL RIVER at Elliot Avenue

LOCATION:

On the left (east) bank 200 feet downstream from the extension of Elliot Avenue, 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 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 and gravel. Banks protected by piling and wire mesh.
Channel forms control.

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, 1939 to September 30, 1940.

REGULATION:

Flow partially regulated by San Gabriel Dams 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, 1940.

EXTREMES OF DISCHARGE:

Not determined.

ACCURACY:

Poor.
Frequently estimated by 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. Monthly totals estimated for high flow periods.

F. C. D. FORM 104 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F261R

DISCHARGE MEASUREMENTS OF SAN GABRIEL RIVER

NEAR Elliot Street DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
111	10-11	Lindsay	5.2	.82	.72	3.30	0.60		.6	6	0	945A 953A	FC28
112	10-19	"	5.5	.84	.75	3.34	0.65		.6	6	0	1200P 1206P	"
113	11-2	"	6.0	1.14	.47	3.34	0.55		.6	6		153P 200P	"
114	11-30	"	6.5	.94	.47	3.26	0.44		.6	6	0	228P 235P	"
115	1-11	"	20.0	4.28	1.36	3.54	5.8		.6	9	0	140P 150P	"
116	1-18	"	4.5	.68	.96	3.46	0.65		.6	6	0	113P 120P	"
117	2-1	Lindsay-Middleton	27.0	9.80	1.93	3.86	18.		.6	10	0	140P 150P	"
118	2-8	Lindsay	Two Channels			3.77	2.0		.6	9	0	1020A 1030A	"
119	2-15	"	7.0	.93	.71	3.68	0.66		.6	6	0	1120A 1127A	"
120	2-23	"	8.5	1.05	.72	3.67	0.75		.6	8	0	1100A 1108A	"
121	2-29	Middleton-Lindsay	26.0	7.78	1.33	3.90	10.		.6	13	0	350P 403P	"
122	3-7	Lindsay	Two Channels			3.59	0.75		.6	4	0	905A 910A	"
123	3/29	Lindsay	5.2	.87	.86	3.56	0.75		.6	5	0	830A 837A	FC 28
124	4/4	"	9.0	.93	.76	3.55	0.70		.6	6	0	100P 108P	"
125	4/18	"	6.0	.60	.85	3.54	0.50		.6	6	0	136P 143P	"
126	5/2	"	5.5	0.70	.91	3.54	0.65		.6	6	0	132P 140P	"
127	5/16	"	4.9	0.57	.91	3.56	0.50		.6	5	0	142P 150P	"
128	6/6	"	6.0	0.64	.73	3.58	0.47		.6	6	0	158P 204P	"
129	6/20	Haig	6.5	0.86	.52	3.65	0.45	Sur.	.6	4	0	855A 859A	FC 33
130	6/27	Lindsay	4.5	0.79	.49	3.66	0.39		.6	5	0	1156A 1201P	FC 43
131	7/3	Haig	4.5	0.63	.57	3.66	0.36		.6	6	0	300P 305P	FC 33
132	8/8	Lindsay	5.0	0.60	.58	3.68	0.35		.6	5	0	212P 218P	FC 43
133	9/5	Brewster	3.0	0.62	.58	3.70	0.36		.6	3	0	1030A 1035A	FC 24

F.C. Dist. Form 82 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

Sta. No F261R

Daily discharge, in second-feet of SAN GABRIEL RIVER at Elliot Ave. for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	E 0.8	0.4	0.5	0.5	E 35	2.2	1.7	0.7	0.5	0.4	0.4	0.4
2	E 0.7	0.5	0.7	0.8	E 15	1.6	0.8	0.7	0.7	0.4	0.4	0.4
3	E 0.7	E 0.5	0.8	0.5	E 30	1.3	0.7	0.7	0.7	0.4	0.4	0.4
4	E 0.7	E 0.5	0.5	0.5	27	1.0	0.7	0.7	0.6	0.4	0.4	0.4
5	E 0.6	E 0.5	0.7	0.5	11	0.8	0.7	0.7	0.5	0.4	0.4	0.4
6	E 0.6	E 0.5	0.5	0.4	4.7	0.8	0.8	0.7	0.5	0.4	0.4	0.4
7	E 0.6	E 0.5	0.5	E 45	2.2	0.8	0.7	0.7	0.5	0.4	0.4	0.4
8	E 0.6	E 0.5	0.5	E125	1.6	0.7	0.7	0.7	0.5	0.4	0.4	0.4
9	E 0.5	0.5	0.5	0.5	0.8	0.5	0.7	0.7	0.5	0.4	0.4	0.4
10	E 0.5	0.5	0.5	0.5	0.5	0.5	0.8	0.8	0.5	0.4	0.4	0.4
11	0.5	0.5	0.5	1.7	0.5	0.5	0.8	E 0.8	0.5	0.4	0.4	0.4
12	0.7	0.5	0.5	35	0.5	0.5	0.8	E 0.7	0.5	0.4	0.4	0.4
13	0.7	0.5	0.5	30	0.7	0.5	0.8	E 0.6	0.5	0.4	0.4	0.4
14	0.7	0.5	0.5	32	0.8	0.5	0.7	E 0.6	0.4	0.4	0.4	0.4
15	0.7	0.5	0.5	27	0.7	0.5	0.7	E 0.5	0.4	0.4	0.4	0.4
16	0.7	0.5	0.5	0.8	0.7	0.7	0.7	0.5	0.4	0.4	0.4	0.4
17	0.7	0.5	0.5	0.7	1.0	0.7	0.5	0.5	0.4	0.4	0.4	0.4
18	E 0.7	0.4	0.7	0.7	1.0	0.7	0.5	0.5	0.4	0.4	0.4	0.4
19	0.7	0.5	0.7	0.7	1.0	0.7	0.5	0.5	0.4	0.4	0.4	0.4
20	0.7	0.4	0.7	0.7	1.0	0.7	0.5	0.5	0.4	0.4	0.4	0.4
21	0.8	0.4	0.5	0.7	1.0	0.7	0.7	0.5	0.4	0.4	0.4	0.5
22	1.0	0.7	0.5	0.7	0.8	0.7	0.7	0.5	0.4	0.4	0.4	0.5
23	0.7	0.7	0.7	0.7	0.8	0.5	0.7	0.5	0.4	0.4	0.4	0.5
24	0.7	0.4	0.8	0.7	0.8	0.5	0.7	0.4	0.4	0.4	0.4	0.5
25	0.7	0.5	0.8	0.7	E 7	0.7	0.7	0.4	0.4	0.4	0.4	0.5
26	0.5	0.7	1.0	0.7	E 5	0.8	2.1	0.5	0.4	0.4	0.4	0.5
27	0.5	0.8	0.5	0.7	5	0.8	1.5	0.5	0.4	0.4	0.4	0.5
28	0.5	0.5	0.5	0.7	3.4	0.8	1.0	0.5	0.4	0.4	0.4	0.5
29	0.5	0.4	0.2	0.7	7	0.8	0.8	0.5	0.4	0.4	0.4	0.5
30	0.4	0.4	0.5	0.7		0.8	0.7	0.7	0.4	0.4	0.4	0.5
31	0.4		0.2	0.7		1.7		0.5		0.4	0.4	
	19.8	15.2	17.5	326.5	166.5	25.0	24.4	18.3	13.8	12.4	12.4	13.0
MEAN	.64	.51	.56	10.5	5.7	0.81	0.81	0.59	0.46	0.40	0.40	0.43
ACRE-FEET	39.	30.	35.	648.	330.	50.	48.	36.	27.	25.	25.	26.

Remarks: E indicates estimated or interpolated between measurements.

YEAR OR PERIOD MEAN 1.82 ACRE-FEET 1320.

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 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 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, 1939 to September 30, 1940.

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, 1940.
(For records prior to February 4, 1937 see Station F63R, San Gabriel River at Whittier Boulevard in previous reports.)

EXTREMES OF DISCHARGE:

1939-1940
Maximum 2110 second-feet, February 1.
Minimum no flow for various months.
1936-1940
Maximum 22700 second-feet, estimated, March 2.
Minimum no flow for several months.
(For earlier years see Station F63R.)

ACCURACY:

Fair.
Occasionally estimated due to sand obstructing communication.

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 IM 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 263-R

DISCHARGE MEASUREMENTS OF SAN GABRIEL RIVER

AT Beverly Boulevard DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
160	10/5	Brewster	Two Channels			4.45	40.		.6	11	0	1145A 1205P	FC 8
161	10/11	"	75.0	29.61	1.34	4.47	40.		.6	10	0	1140A 1158A	"
162	10/19	"	105.0	31.67	1.11	4.44	35.		.6	12	0	1150A 1210P	"
163	10/26	"	Two Channels			4.44	34.		.6	10	0	1235P 1250P	"
164	11/2	"	"	"		4.44	24.		.6	12	0	1250P 110P	"
165	11/9	"	"	"		4.42	20.		.6	10	0	1210P 1225P	"
166	11/16	"	41.0	14.52	1.19	4.41	17.		.6	7	0	1215P 1227P	"
167	11/22	"	37.0	12.77	1.35	4.43	17.		.6	5	0	1105A 1115A	"
168	11/30	"	Two Channels			4.40	8.6		.6	8	0	1130A 1145A	"
169	12/7	"	"	"		4.44	16.		.6	10	0	1115A 1130A	"
170	12/14	"	24.0	6.04	1.17	4.30	7.1		.6	7	0	1145A 1155A	"
171	12/21	"	Two Channels			4.48	26.		.6	10	0	1205P 1220P	"
172	12/23	Haig-Eckert	"	"		4.45	16.		.6	15	0	340P 400P	FC 33
173	12/28	Brewster	"	"		4.49	20.		.6	11	0	1250P 110P	FC 8
174	1/4	"	"	"		4.49	20.		.6	12	0	950A 1005A	"
175	1/8	Anderson & Linden	"	"		5.42	933.		.6	26	-.10	725A 805A	FC 36
176	1/8	Haig-Eckert	145.0	147.9	2.93	5.00	434.		.6	19	-.04	1019A 1038A	FC 33
177	1/10	Brewster	Two Channels			4.47	64.		.6	13	0	230P 245P	FC 8
178	1/11	"	98.0	43.44	1.60	4.46	69.		.6	11	-.01	925A 945A	"
179	1/18	"	Two Channels			4.50	47.		.6	11	0	1206P 1224P	"
180	1/25	"	"	"		4.46	51.		.6	11	0	1205P 1225P	"
181	2/1	"	124.0	48.14	1.64	4.64	79.		.6	10	-.02	930A 945A	"
182	2/2	Haig-Mellen	141.0	116.8	2.51	4.86	292.		.6	17	+.01	1205A 1227A	FC 33
183	2/2	Linden & Wallace	202.0	170.9	3.91	5.04	669.		.6	20	-.08	715A 745A	FC 36
184	2/2	Wallace-Linden	202.0	153.0	3.67	4.94	561.		.6	14	-.12	745A 820A	FC 36
185	2/2	Haig-Mellen	146.5	82.1	2.23	4.76	183.		.6	16	-.02	513P 530P	FC 33
186	2/3	Lindsay-Middleton	141.0	56.46	1.79	4.63	101.		.6	19	0	1145A 1200N	FC 28
187	2/3	Wallace-Linden	Two Channels			5.56	1690.		.6	19	-.12	515P 600P	FC 36
188	2/3	" "	197.0	187.7	5.22	5.30	980.		.6	11	-.20	800P 845P	"
189	2/4	Middleton	138.0	78.28	1.83	4.62	145.		.6	19	-.01	110P 130P	FC 28
190	2/5	Haig	Two Channels			4.54	86.		.6	22	+.03	957A 1040A	FC 33
191	2/8	Brewster	"	"		4.47	53.		.6	10	0	1250P 110P	FC 8
192	2/15	"	62.0	28.98	1.78	4.50	52.		.6	8	0	1100A 1120A	"
193	2/21	"	88.0	34.32	1.51	4.48	52.		.6	11	0	1038A 1058A	"
194	2/25	Brewster-Pettis	144.0	56.12	1.35	4.53	76.		.6	16	+.02	507P 527P	"
195	2/29	Brewster	142.0	46.00	1.39	4.53	64.		.6	15	0	920A 940A	"
196	3/7	"	Two Channels			4.49	51.		.6	12	0	1110A 1130A	"
197	3/14	"	"	"		4.48	51.		.6	12	0	1125A 1145A	"
198	3/21	"	"	"		4.47	49.		.6	13	0	1055A 1115A	"
199	3/28	"	"	"		4.49	40.		.6	10	0	1040A 1100A	FC 24
200	3/31	Brewster-Pettis	"	"		4.55	57.		.6	15	0	1025A 1045A	"
201	4/4	Brewster	95.0	36.00	1.26	4.53	45.		.6	11	0	1055A 1115A	"
202	4/11	"	75.0	27.54	1.25	4.49	34.		.6	9	0	1050A 1110A	"
203	4/18	"	Two Channels			4.40	20.		.6	9	0	1202P 1212P	"
204	4/25	"	"	"		4.28	2.0		.6	7	0	1120A 1130A	"
205	5/2	"	"	"		4.48	24.		.6	9	0	1130A 1150A	"
206	5/9	"	"	"		4.36	10.		.6	8	0	1056A 1110A	"
207	5/16	"	16.0	5.80	1.33	4.36	7.7		.6	6	0	1215P 1225P	"
208	5/23	"	14.0	3.38	1.08	4.29	3.7		.6	6	0	1110A 1117A	"

F.C. Dist. Form 82 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

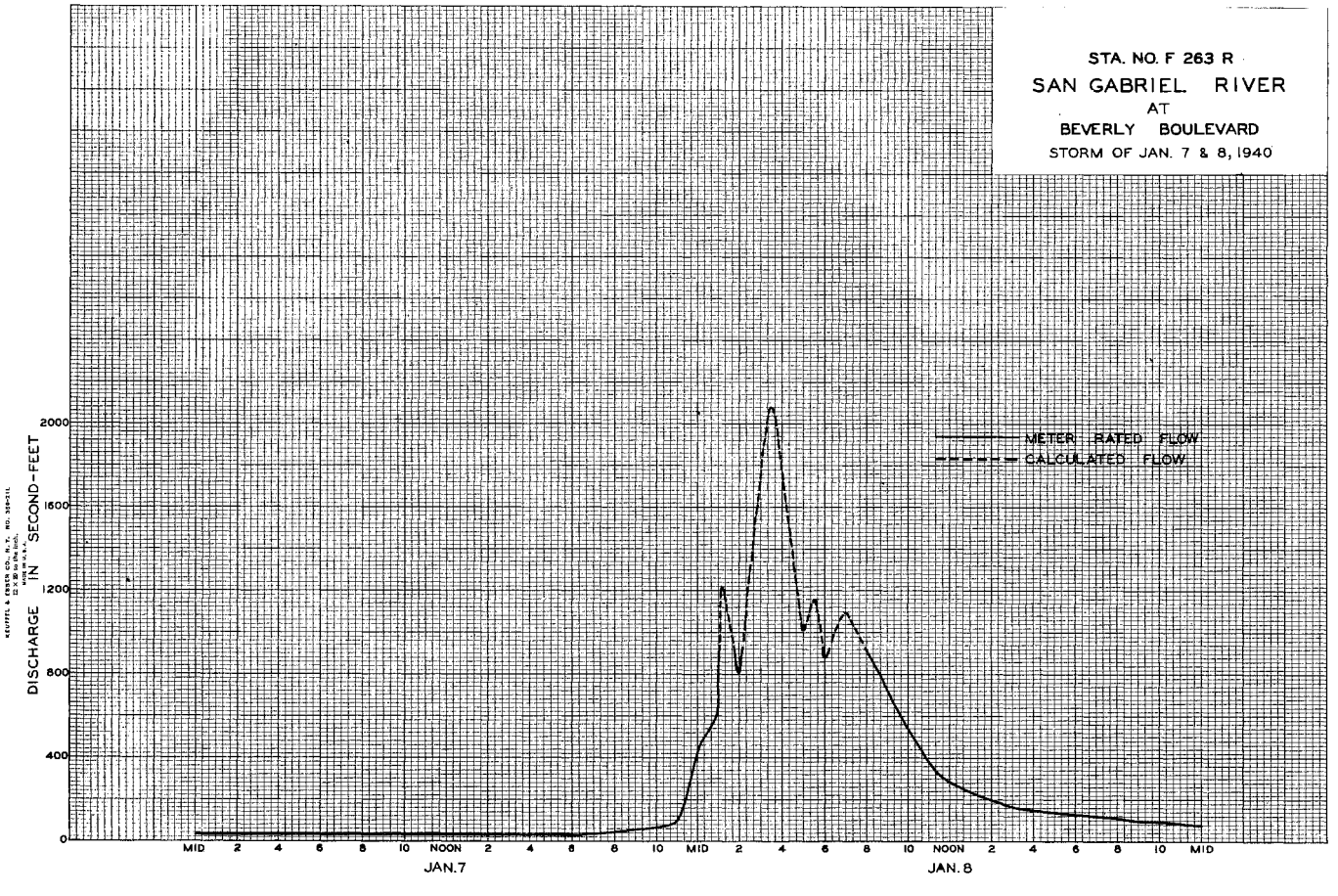
Sta. No. F263R

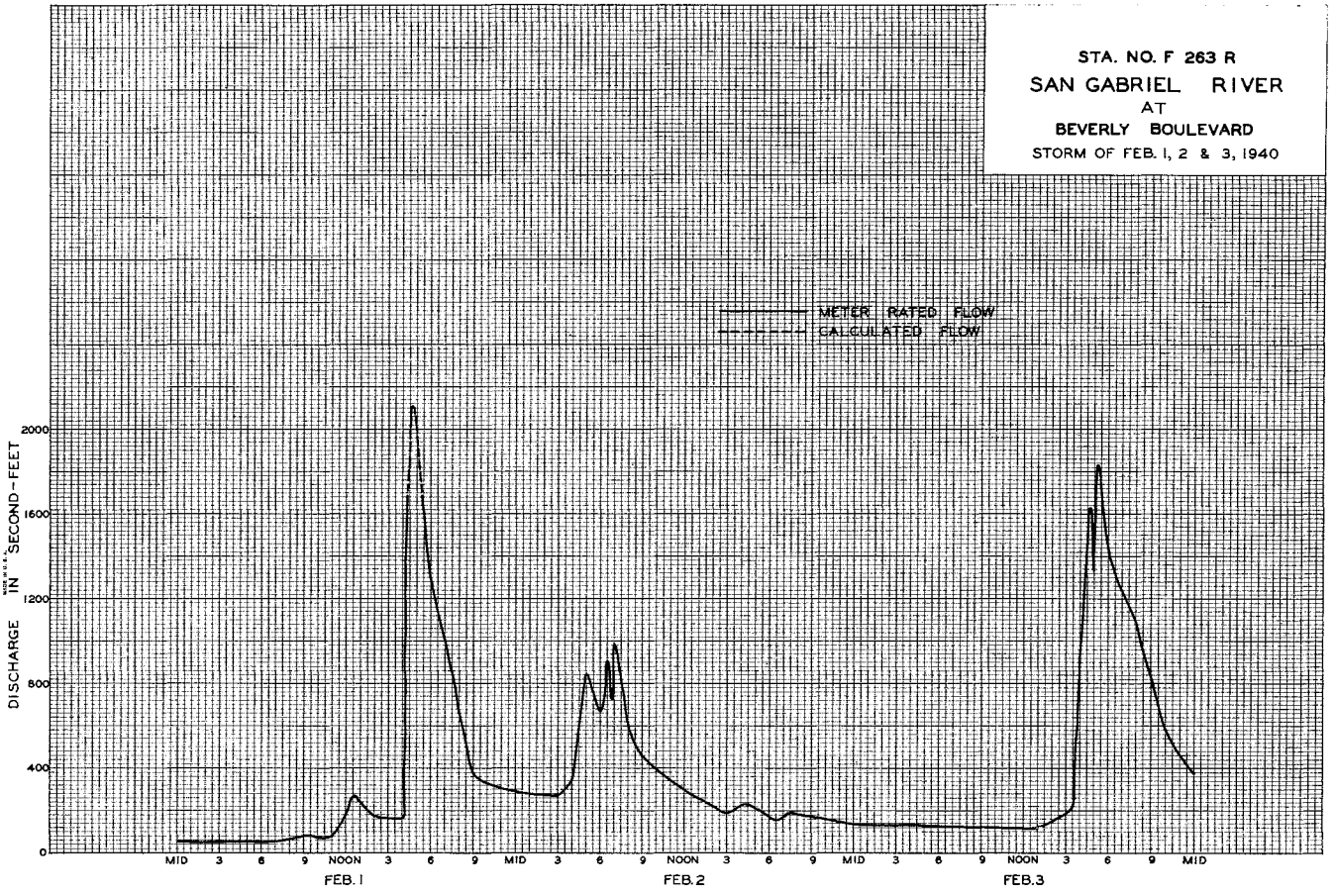
Daily discharge, in second-feet of SAN GABRIEL RIVER at Beverly Blvd., for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	38	19	9	26	346	58	84	29	0	0	0	0
2	32	24	7.5	29	341	46	49	24	0	0	0	0
3	26	24	10	29	434	42	53	21	0	0	0	0
4	34	21	13	26	178	58	49	21	0	0	0	0
5	38	24	E 16	29	78	53	46	19	0	0	0	0
6	46	29	E 16	34	53	49	42	13	0	0	0	0
7	49	32	E 16	47	58	46	42	9	0	0	0	0
8	46	26	24	544	53	49	38	10	0	0	0	0
9	38	21	24	78	49	49	42	11	0	0	0	0
10	32	15	34	73	42	53	34	12	0	0	0	0
11	42	11	19	91	42	53	29	13	0	0	0	0
12	49	12	13	144	46	49	9	9	0	0	0	0
13	38	11	13	124	49	53	1.8	11	0	0	0	0
14	34	11	15	104	53	49	0.5	16	0	0	0	0
15	46	18	21	97	58	49	0.8	16	0	0	0	0
16	38	16	29	46	53	53	4.3	7.5	0	0	0	0
17	38	19	34	38	53	58	10	8	0	0	0	0
18	46	19	29	46	58	63	24	10	0	0	0	0
19	34	21	32	46	53	53	E 19	24	0	0	0	0
20	42	19	34	53	49	49	E 11	8	0	0	0	0
21	53	15	29	53	58	49	E 8	4.7	0	0	0	0
22	49	16	21	53	63	53	E 7.5	3.4	0	0	0	0
23	49	18	16	68	46	46	10	3.8	0	0	0	0
24	49	12	19	91	42	58	5.5	3.0	0	0	0	0
25	46	15	19	63	61	46	2.1	2.9	0	0	0	0
26	38	16	19	73	125	42	10	4.3	0	0	0	0
27	38	15	21	84	68	49	2.9	1.6	0	0	0	0
28	34	10	21	68	63	46	2.1	0	0	0	0	0
29	38	10	21	58	68	46	2.4	0	0	0	0	0
30	29	8	19	49		49	2.6	0	0	0	0	0
31	19		21	58		58		0		0	0	
	1228		634.5	2740			731.5		0		0	
		527		2422		1574		315.2		0		0
MEAN	39.6	17.6	20.5	78.1	94.5	50.8	24.4	10.2	0	0	0	0
ACRE-FEET	2440	1050	1260	4800	5430	3120	1450	625	0	0	0	0

Remarks: E indicates discharge estimated.

YEAR OR PERIOD — MEAN 27.8 — ACRE FEET 20180





STATION F262R

SAN GABRIEL RIVER at Florence Avenue

LOCATION:

On the downstream side of the Florence Avenue (formerly Easy Street) 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. An H.C.F. recorder was in service from October 1, 1939 to September 30, 1940.

REGULATION:

Flow partially regulated by San Gabriel Dams 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, 1940. Recorder record lost from August 19, 1938 to November 23, 1938 due to theft of recorder. For earlier records see Station F237R San Gabriel River at Telegraph Road.

EXTREMES OF DISCHARGE:

1939-1940
Maximum 1148 second-feet, January 8.
Minimum no flow at various times.
1937-1940
Maximum not determined.
Minimum no flow at various times.

ACCURACY:

Poor due to badly shifting control. Frequently estimated by comparison due to extreme control shifts or loss of communication.

OPERATION:

Located and constructed by the Los Angeles County Flood Control District; and operated in co-operation with the San Gabriel Valley Protective Association.

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 262-R

DISCHARGE MEASUREMENTS OF SAN GABRIEL RIVER

AT Florence Avenue DURING THE YEAR ENDING SEPTEMBER 30, 1940

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.
126	1/8	Jordan & Thomsen	Two Channels			3.40	548.		.6	12	-.08	945A 1005A	FC 21
127	1/9	Bonadiman & Jackman	19.	10.05	0.90	2.14	9.1		.6	6	0	930A 935A	FC 40
128	1/11	"	7.	2.25	0.66	1.62	1.5		.6	4	0	350P	"
129	2/1	"	95.	49.35	2.06	2.55	102.		.6	7	+.02	336P 400P	"
130	2/2	Jordan	Three Channels			3.09	476.		.6	19	+.02	820A 900A	FC 21
131	2/3	Bonadiman & Jackman	39.	23.1	1.76	2.54	41.		.6	7	0	250P 305P	FC 40
132	2/4	"	Two Channels			2.50	71.		.6	13	0	900A 915A	"
133	2/26	"	40.	19.56	1.67	1.90	33.		.6	8	0	1015A 1025A	"
134	4/1	"	20.	12.9	2.03	2.06	26.		.6	6	+.03	905A 914A	"
135	4/1	"	20.	12.8	2.02	2.06	26.		.6	7	-.01	915A 925A	"
136	4/1	"	20.	12.5	1.74	2.04	22.		.6	7	0	930A 935A	"
137	4/1	"	20.	12.6	1.62	2.04	20.		.6	7	0	937A 942A	"
138	4/27	Bonadiman	4.2	0.71	0.80	1.78	0.55		.6	4	0	1005A 1011A	"
139	5/23	"	3.0	1.2	1.25	1.78	1.5		.6	2	0	230P 235P	"

F.C. Dist. Form 52 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

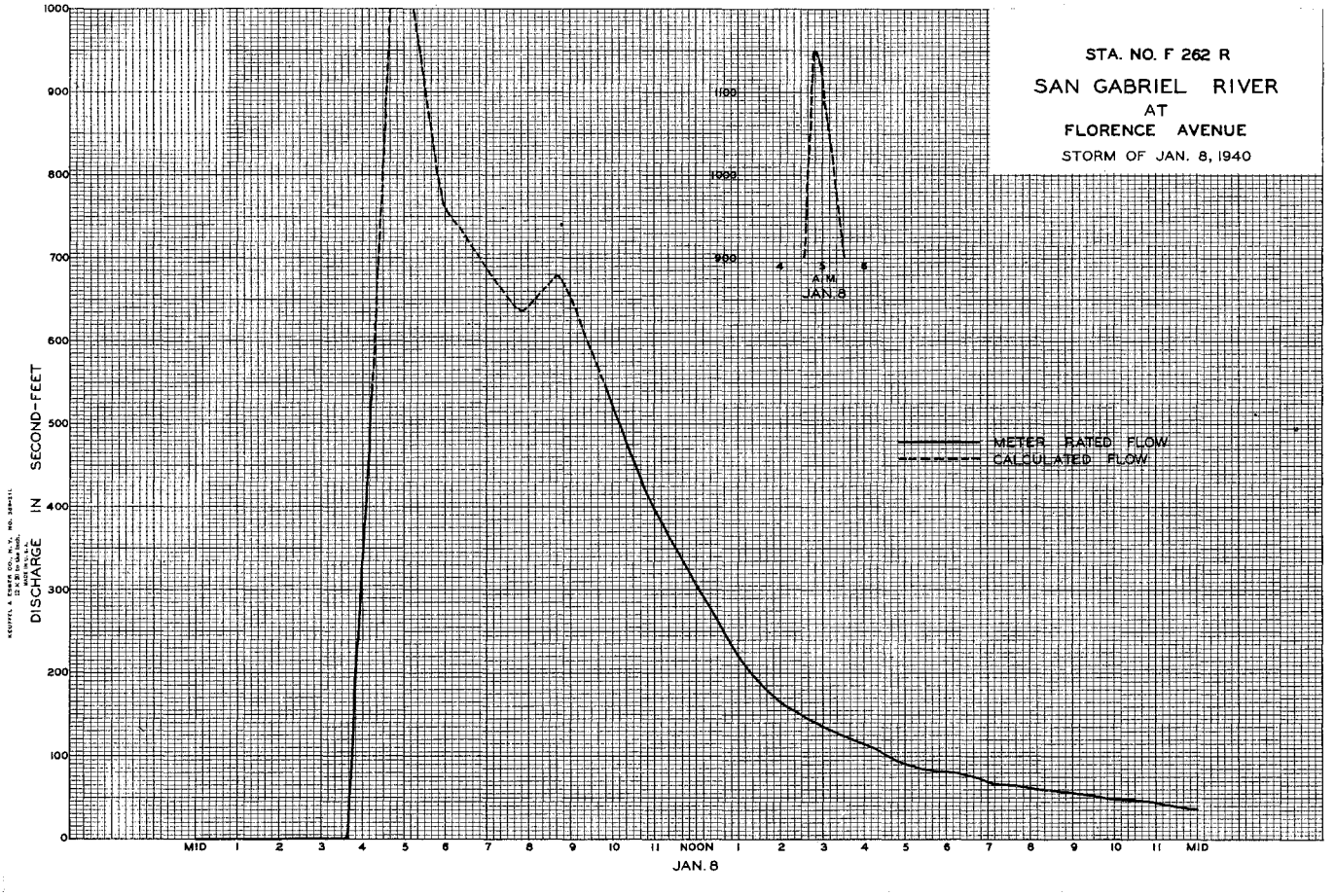
Sta. No. F262R

Daily discharge, in second-feet of SAN GABRIEL RIVER at Florence Ave., for the year ending September 30, 1940

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0	0	127	0	8	0	0.5	0	0	0
2	0	0	0	0	E175	0	0.4	0	0	0	0	0
3	0	0	0	0	E202	0	0	0	0	0	0	0
4	0	0	0	0	E 73	0	0	0	0	0	0	0
5	0	0	0	0	E 6	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	+	0	0	+	0
7	0	0	0	0	0	0	0	1.5	0	0	+	0
8	0	0	0	2.1	0	0	0	2.1	+	0	0	0
9	0	0	0	1.0	0	0	0	2.3	0	0	+	+
10	0	0	0	0.9	0	0	0	0	0.2	0	+	0.2
11	0	0	0	9	0	0	0	0	0	0	0.1	+
12	0	0	0	0	0	0	2.7	0	+	0	+	0
13	0	0	0	0	0	0	0	0	0.6	0	0	0
14	0	0	0	0	0	0	0.2	0	0.1	0	0	0
15	0	0	0	0	0	0	0.7	0	0	0	0	0
16	0	0	0	0	0	0	1.3	0.8	0	0	0	0
17	0	0	0	0	0	0	1.8	1.3	0	0	0	0
18	0	0	0	0	0	0	0	1.9	+	0	0	0
19	0	0	0	0	0	0	0	1.8	+	0	0	0.5
20	0	0	0	0	0	0	0.1	1.8	0	0	0	1.3
21	0	0	0	0	0	0		0.8	0	0	0	0
22	0	0	0	0	0	0	0.1	1.2	0.1	0	0	0.8
23	0	0	0	0	0	0	0	1.7	0	0	0	2.1
24	0	0	0	0	0	0	0	2.0	0	0	0	0
25	0	0	0	0	E 1.8	0	0	0.9	0	0	0	0
26	0	0	0	0	E 34	0	0.2	+	0	0	0	0.1
27	0	0	0	0	0	0	0.3	+	0	0	0	+
28	0	0	0	0	0	0	0	0	0	0	0	0.4
29	0	0	0	0	0	0	0	+	0	0	0	1.5
30	0	0	0	0		0	0	0.8	0	0	0	1.1
31	0		0	0		0		0.2		0	0	
	0	0	0	2909	618.8	0	15.8	21.1	1.5	0	0.1	8.0
MEAN	0	0	0	9.38	21.3	0	0.53	0.68	0.05	0	+	0.27
ACRE-FEET	0	0	0	577	1230	0	31	42	3.0	0	0.2	16

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

YEAR OR PERIOD — MEAN 2.61 — ACRE-FEET 1900



STATION F42R

SAN GABRIEL RIVER at Spring Street, Long Beach

LOCATION:

On downstream side of Spring Street bridge about 4 miles east of Signal Hill, near 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.
Au continuous recorder in service October 1, 1939 to September 30, 1940.

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:

1939-1940
Maximum 1400 second-feet, February 3.
Minimum no flow most of year.
1927-1940
Maximum 27000 second-feet, estimated March 2, 1938.
Minimum no flow most of each year.

RECORDS AVAILABLE:

February 6, 1928 to September 30, 1940.
(For periods prior to February, 1928 see State Division of Water Rights Bulletins)

ACCURACY:

Poor.
Communication frequently obstructed by sand.

OPERATION:

Operated by the Los Angeles County Flood Control District. Located by the State Division of Water Rights.

F. C. D. FORM 104 1M 6-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F42R

DISCHARGE MEASUREMENTS OF SAN GABRIEL RIVER

AT ~~INDEX~~ Spring Street, Long Beach DURING THE YEAR ENDING SEPTEMBER 30, 19 40

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	RATING PERCENT DIF.	METH OD	MEAS SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
89	1-8	Bonadiman-Jackman	121	240.8	2.96	6.45	716.		.6	13	-.10	8:30A 8:50A	FC40
90	1-8	" "	121	228.	3.07	6.38	699.		.6	11	-.03	9:03A 9:13A	"
91	1-8	" "	121	166.4	2.41	5.93	401.		.6	12	-.07	1:10P 1:25P	"
92	1-8	" "	2 Channels			5.34	117.		.6	12	-.01	5:30P 5:40P	"
93	1-9	" "	" "			4.95	1.8		.6	6	-.02	10:45A 10:50A	"
94	2-1	" "	121	232.2	3.68	6.52	855.		.6	10	-.06	9:40P 9:50P	"
95	2-1	" "	121	220.	3.65	6.42	803.		.6	11	-.14	10:00P 10:12P	"
96	2-1	" "	121	180.6	2.95	5.94	534.		.6	11	-.12	11:40P 11:55P	"
97	2-2	" "	2 Channels			5.38	92.		.6	8	0	↺6:11A 6:27A	"
98	2-3	" "	20.	16.2	1.96	5.01	32.		.6	5	0	1:15P 1:25P	"
99	2-3	" "	121.5	307.4	4.09	6.56	1260.		.6	11	-.12	10:00P 10:22P	"
100	2-3	" "	121.5	278.3	4.01	6.47	1110.		.6	11	-.06	10:25P 10:45P	"
101	2-4	" "	2 Channels			5.00	72.		.6	9	0	10:47A 10:55A	"
102	2-5	Bonadiman	9.5	2.55	0.54	4.56	1.4		.6	4	0	3:00P 3:10P	"

F.C. Dist. Form 52 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

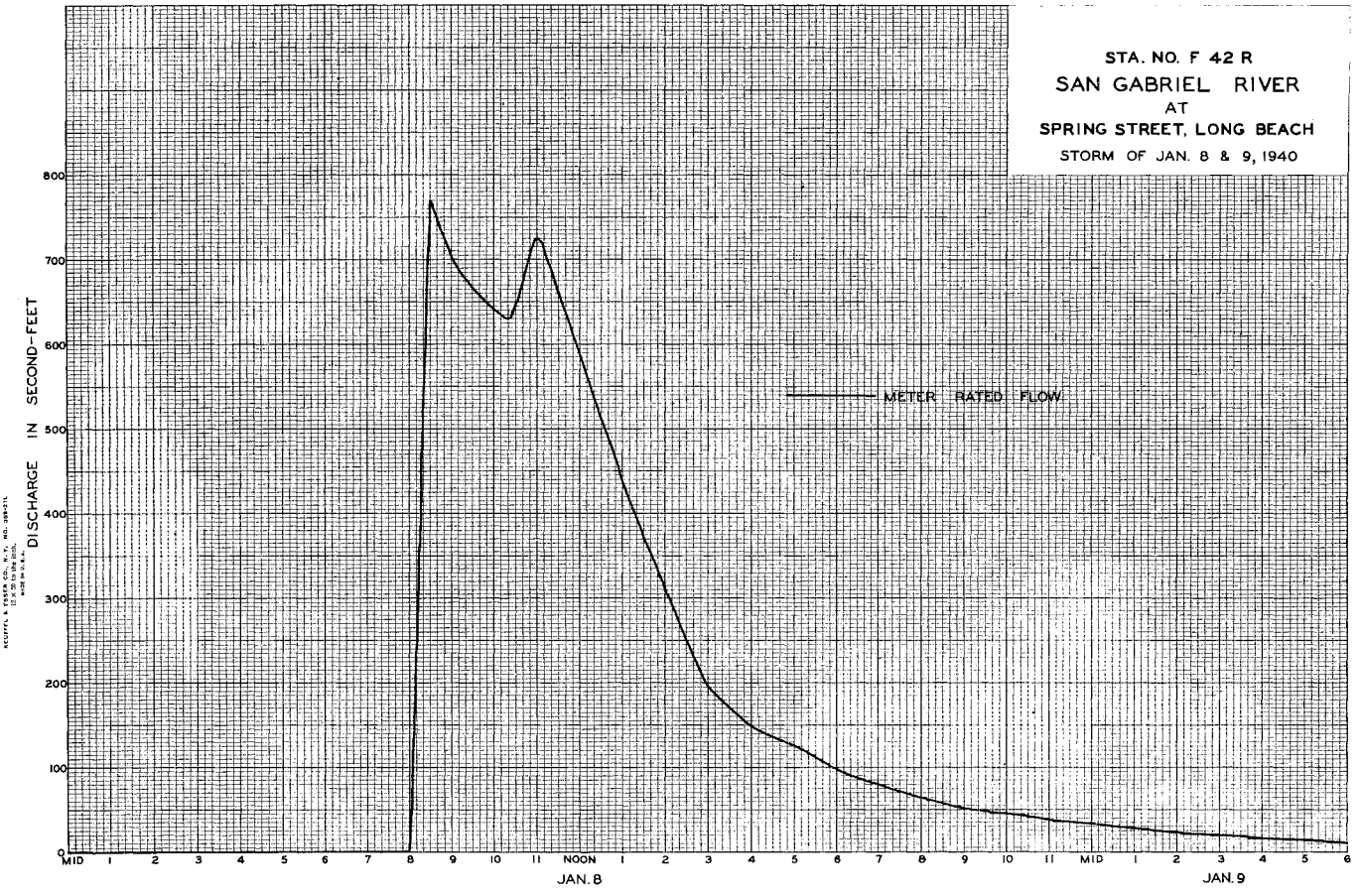
Sta. No F42R

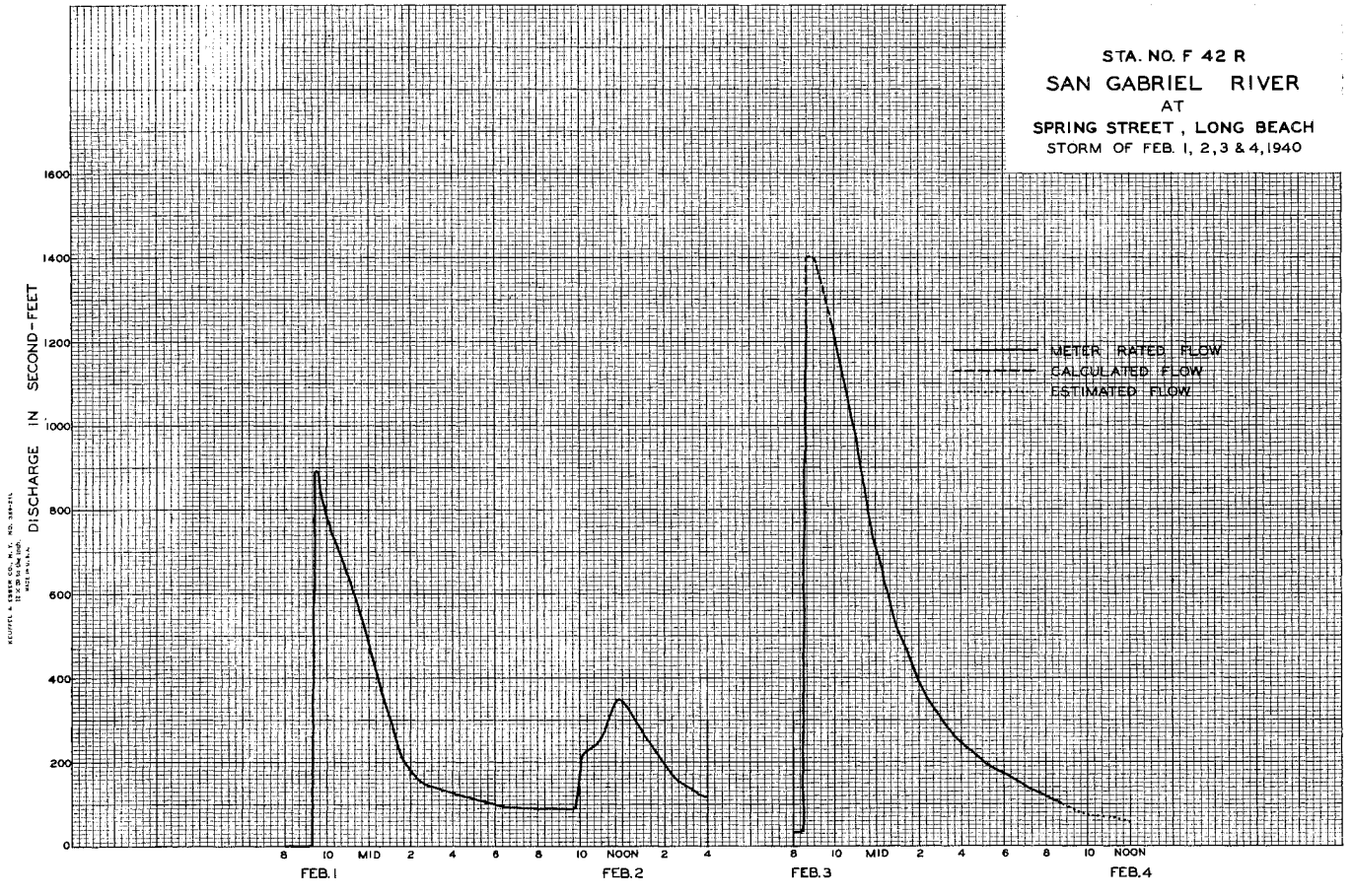
Daily discharge, in second-feet of SAN GABRIEL RIVER at Spring St., Long Beach for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0	0	74	0	0	0	0	0	0	0
2	0	0	0	0	E146	0	0	0	0	0	0	0
3	0	0	0	0	E192	0	0	0	0	0	0	0
4	0	0	0	0	E129	0	0	0	0	0	0	0
5	0	0	0	0	E 2.8	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	186	0	0	0	0	0	0	0	0
9	0	0	0	6.5	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	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	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	0
30	0	0	0	0		0	0	0	0	0	0	0
31	0		0	0		0		0		0	0	
	0	0	0	192.5	543.8	0	0	0	0	0	0	0
MEAN	0	0	0	6.21	18.8	0	0	0	0	0	0	0
ACRE-FEET	0	0	0	382	1080	0	0	0	0	0	0	0

Remarks: E indicates discharge estimated.

YEAR OR PERIOD MEAN 2.02
ACRE-FEET 1460


STA. NO. F 42 R
SAN GABRIEL RIVER
AT
SPRING STREET, LONG BEACH
STORM OF JAN. 8 & 9, 1940
DISCHARGE IN SECOND-FEET
METER RATED FLOW
0
100
200
300
400
500
600
700
800
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 1 2 3 4 5 6
JAN. 8
JAN. 9


STA. NO. F 42 R
SAN GABRIEL RIVER
AT
SPRING STREET, LONG BEACH
STORM OF FEB. 1, 2, 3 & 4, 1940
DISCHARGE IN SECOND-FEET
METER RATED FLOW
CALCULATED FLOW
ESTIMATED FLOW
0
200
400
600
800
1000
1200
1400
1600
8 10 MID 2 4 6 8 10 NOON 2 4 8 10 MID 2 4 6 8 10 NOON
FEB. 1
FEB. 2
FEB. 3
FEB. 4

STATION F48R

SAN JOSE CREEK at Workman Mill Road

LOCATION:

On downstream side of highway 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, 1939 to September 30, 1940

REGULATION:

Flow partially regulated by Thompson Creek Dam.

DIVERSIONS:

Small diversion for spreading.

RECORDS AVAILABLE:

January 2, 1929 to September 30, 1940.
(For records prior to January 2, 1929 see State Division of Water Rights Bulletins)

EXTREMES OF DISCHARGE:

1939-1940
Maximum 1570 second-feet February 1.
Minimum 0.1 second-foot August 19.
1928-1940
Maximum 13100 second-feet January 1, 1934.
Minimum no flow at various times.

ACCURACY:

Fair.
Estimated or interpolated occasionally 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 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F. 48-R

DISCHARGE MEASUREMENTS OF SAN JOSE CREEK

AT Workman Mill Road NEAR

DURING THE YEAR ENDING SEPTEMBER 30, 19 40

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rising Recession Diff.	METH OD	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
237	10/5	Brewster	6.0	1.38	1.02	1.45	1.4		.6	4	0	1225P 1230P	FC 8
238	10/11	"	6.0	1.29	1.18	1.42	1.5		.6	4	0	1220P 1225P	"
239	10/19	"	6.0	1.12	1.03	1.42	1.2		.6	3	0	1220P 1226P	"
240	10/26	"	6.0	1.35	.90	1.42	1.2		.6	4	0	200P 205P	"
241	11/2	"	8.0	1.56	.84	1.42	1.3		.6	4	0	200P 206P	"
242	11/9	"	6.0	1.24	.96	1.43	1.2		.6	3	0	1255P 100P	"
243	11/16	"	8.0	1.56	.79	1.44	1.2		.6	4	0	1235P 1240P	"
244	11/22	"	4.0	1.10	1.22	1.46	1.3		.6	4	0	1125A 1130A	"
245	11/30	"	8.0	1.60	.91	1.46	1.4		.6	4	0	225P 230P	"
246	12/7	"	9.0	1.85	.77	1.46	1.4		.6	5	0	1250P 1256P	"
247	12/14	"	8.0	1.56	.81	1.46	1.3		.6	4	0	1215P 1221P	"
248	12/21	"	10.0	1.66	.77	1.49	1.3		.6	4	0	110P 118P	"
249	12/23	Haig & Eckert	11.0	1.47	.72	1.49	1.1		.6	5	0	412P 421P	FC 33
250	12/28	Brewster	9.0	1.67	.64	1.49	1.1		.6	4	0	120P 126P	FC 8
251	1/4	"	8.0	1.60	.80	1.50	1.3		.6	4	0	1020A 1025A	"
252	1/7	"	16.0	5.52	.87	1.72	4.8		.6	4	+.05	900P 910P	"
253	1/8	Anderson & Linden	101.	164.1	3.25	3.74	534.		.6	12	+.05	540A 610A	FC 36
254	1/8	Anderson-Linden	101.	158.7	3.41	3.72	540.		.6	11	-.11	610A 635A	FC36
255	1/8	Haig & Eckert	Two Channels			2.86	176.		.6	13	-.03	940A 951A	FC 33
256	1/10	Brewster	10.0	2.04	1.06	1.34	2.2		.6	4	0	125P 130P	FC 8
257	1/11	"	5.0	1.68	1.80	1.38	3.0		.6	5	0	1000A 1010A	"
258	1/18	"	8.0	1.96	.79	1.34	1.6		.6	4	0	100P 105P	"
259	1/24	Lindsay	18.0	5.70	.73	1.40	4.1		.6	8	0	1120A 1130A	FC 28
260	1/25	Brewster	7.0	2.10	.79	1.28	1.6		.6	4	0	125P 130P	FC 8
261	2/1	Brewster	24.0	12.88	1.55	1.84	20.		.6	6	+.04	1000A 1010A	FC 8
262	2/1	Haig & Mellen	54.0	42.7	2.92	2.52	125.		.6	7	-.03	1116P 1128P	FC 33
263	2/2	" "	93.0	104.26	3.57	3.14	373.		.6	10	-.06	558A 615A	"
264	2/2	Brewster	58.0	50.05	2.49	2.32	125.		.6	7	-.03	1045A 1100A	FC 8
265	2/2	Haig-Mellen	33.0	25.7	2.52	1.92	65.		.6	7	-.02	445P 450P	FC 33
266	2/3	Lindsay Middleton	24.0	8.04	.96	1.26	7.7		.6	8	0	1055A 1105A	FC 28
267	2/3	Haig & Mellen	100.0	186.8	4.63	4.13	865.		.6	15	-.14	528P 555P	FC 33
268	2/3	Linden Wallace	101.0	154.04	4.30	3.78	662.		.6	13	-.30	700P 735P	FC 36
269	2/4	Lindsay	Two Channels			1.59	15.		.6	12	0	1215P 1230P	FC 28
270	2/5	Haig	9.5	3.17	1.00	1.33	3.2		.6	5	0	1115A 1127A	FC 33
271	2/8	Brewster	9.0	2.12	.90	1.28	1.9		.6	4	0	140P 146P	FC 8
272	2/15	"	10.0	2.60	1.15	1.33	3.0		.6	5	0	1230P 1236P	"
273	2/21	"	10.0	2.24	1.01	1.30	2.3		.6	5	0	1148A 1154A	"
274	2/25	Brewster-Pettis	16.0	5.28	1.23	1.44	6.5		.6	5	0	542P 550P	"
275	2/25	Haig & Mellen	18.0	12.83	1.88	1.67	24.		.6	5	-.02	1054P 1058P	FC 33
276	2/26	Brewster-Pettis	10.0	3.0	1.00	1.32	3.0		.6	5	0	125P 130P	FC 8
277	2/29	Brewster	10.0	3.2	.94	1.34	3.0		.6	5	0	1015A 1023A	"
278	3/7	"	9.0	2.32	.78	1.30	1.8		.6	5	0	1220P 1225P	"
279	3/14	"	7.0	1.53	1.14	1.30	1.7		.6	4	0	1220P 1225P	"
280	3/21	"	8.0	1.84	.77	1.30	1.4		.6	4	0	1230P 1235P	"
281	3/28	"	8.0	1.48	.70	1.28	1.0		.6	4	0	1158A 1203P	FC 24
282	3/31	Brewster-Pettis	10.0	2.88	.95	1.38	2.8		.6	5	0	1100A 1106A	"
283	4/1	Haig-Mellen	8.8	6.46	1.18	1.49	7.7		.6	5	0	106A 111A	FC 33
284	4/1	Brewster	21.0	7.56	1.25	1.50	9.4		.6	5	-.01	220P 230P	FC 24
285	4/4	Brewster	10.0	3.00	.54	1.30	1.6		.6	5	0	130P 135P	FC 24
286	4/11	"	10.0	2.72	.60	1.31	1.6		.6	5	0	125P 130P	"
287	4/18	"	8.0	2.76	.50	1.32	1.4		.6	4	0	1250P 1255P	"
288	4/25	"	8.0	1.84	.76	1.32	1.4		.6	4	0	1255P 100P	"
289	5/2	"	9.0	2.01	.84	1.30	1.7		.6	5	0	102P 107P	"
290	5/9	"	8.0	2.40	.57	1.28	1.4		.6	4	0	1220P 1225P	"
291	5/16	"	12.0	2.58	.52	1.30	1.4		.6	5	0	206P 212P	"
292	5/23	"	9.0	1.68	.64	1.28	1.1		.6	4	0	1220P 1226P	"
293	5/29	"	9.0	1.97	.68	1.30	1.3		.6	5	0	1209P 1217P	"
294	6/6	"	8.0	1.56	.70	1.30	1.1		.6	4	0	1202P 1208P	"
295	6/13	"	9.0	1.80	.72	1.31	1.3		.6	5	0	1240P 1248P	"
296	6/20	"	8.0	1.56	.67	1.30	1.0		.6	4	0	230P 236P	"
297	6/27	"	8.0	1.52	.80	1.30	1.2		.6	4	0	130P 136P	"
298	7/5	"	7.0	1.49	.68	1.31	1.0		.6	4	0	1258P 104P	"
299	7/11	"	8.0	1.40	.70	1.27	1.0		.6	4	0	1205P 1211P	"
300	7/18	"	8.0	1.48	.69	1.30	1.0		.6	4	0	101P 107P	"
301	7/25	"	8.0	1.40	.54	1.32	.75		.6	4	0	107P 112P	"
302	8/1	"	8.0	1.40	.59	1.34	.80		.6	4	0	1224P 1230P	"
303	8/7	"	7.0	1.57	.59	1.36	.90		.6	4	-.01	1239P 1245P	"
304	8/14	Lindsay	2.5	1.14	.46	1.34	.50		.6	5	0	1230P 1235P	FC 43
305	8/22	Brewster	8.0	1.60	.64	1.38	1.0		.6	4	0	142P 150P	FC 24
306	8/29	"	8.0	1.52	.50	1.38	.75		.6	4	0	110P 116P	"
307	9/5	"	8.0	1.72	.55	1.40	.95		.6	4	0	145P 151P	"
308	9/12	Brewster	8.0	1.84	.59	1.38	1.1		.6	4	0	120P 125P	FC 24
309	9/19	"	8.0	1.60	.54	1.40	.85		.6	4	0	120P 126P	"
310	9/26	"	8.0	1.60	.59	1.40	.95		.6	4	0	131P 137P	"

F.C. Dist. Form 52 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

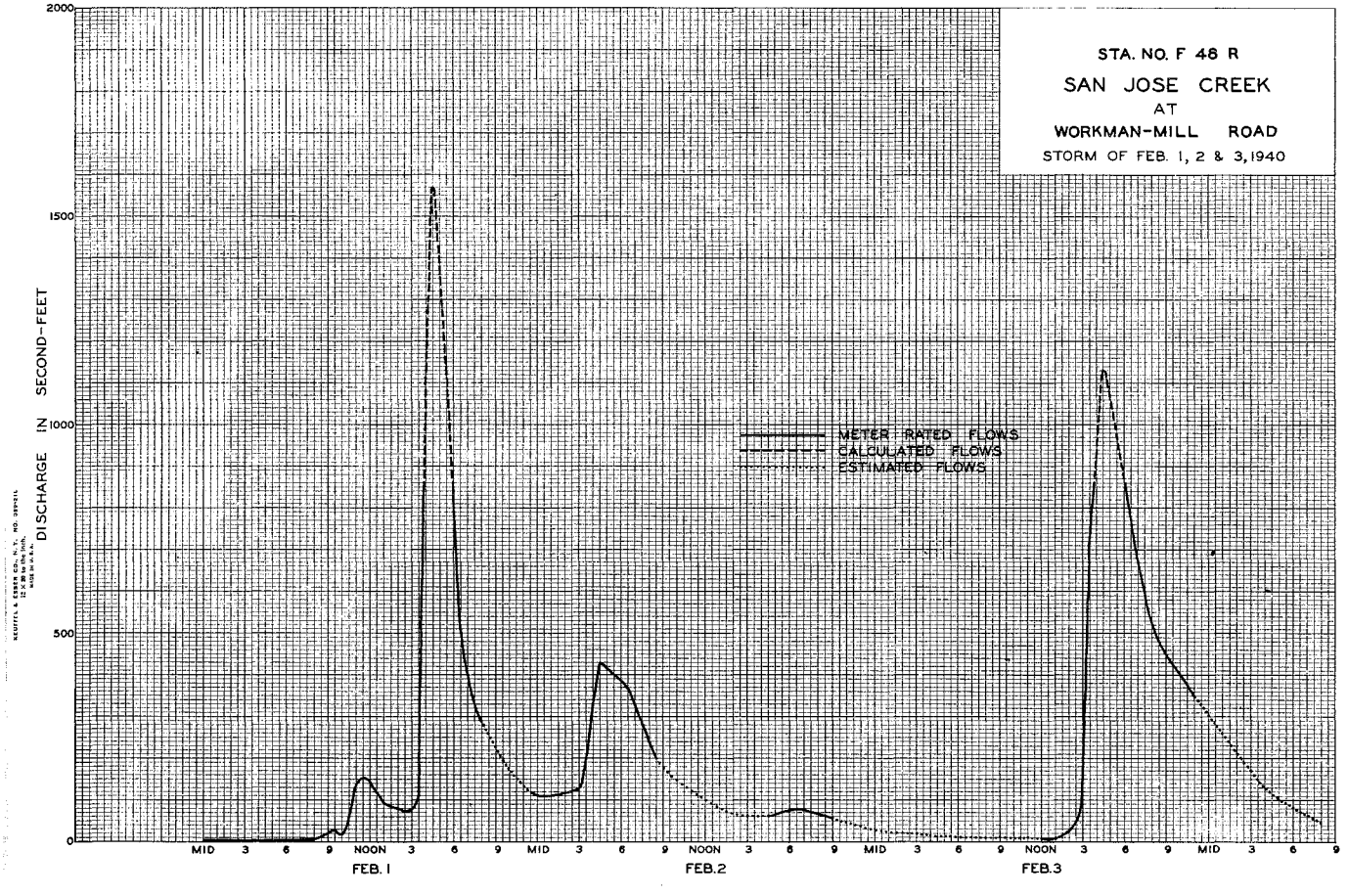
Sta. No F49R

Daily discharge, in second-feet of SAN JOSE CREEK at Workman-Mill Rd., for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.8	3.8	1.9	0.4	213	2.6	1.8	1.6	0.5	1.3	0.8	0.8
2	1.0	2.9	2.2	0.4	E 143	2.2	2.9	1.6	0.4	1.6	1.3	1.0
3	1.0	1.6	1.9	0.4	E 246	1.9	1.6	1.6	0.7	1.6	1.3	0.8
4	1.0	1.6	1.0	1.3	E 60	2.2	1.6	1.6	0.7	1.9	0.8	0.6
5	1.3	1.6	1.0	0.8	E 2.9	2.2	1.9	1.0	0.8	1.3	1.0	1.0
6	1.3	2.6	1.0	0.8	E 2.2	2.2	2.2	1.3	1.3	1.3	1.0	1.0
7	1.6	2.6	1.3	14	E 2.6	2.2	2.2	1.6	1.3	1.6	1.3	1.0
8	1.6	2.9	1.3	211	E 2.6	1.6	1.9	1.3	1.3	1.6	1.0	1.0
9	1.9	1.9	0.8	E 8.5	2.9	1.9	1.6	1.3	1.3	1.6	0.8	0.8
10	1.6	0.8	0.8	E 2.6	3.2	2.8	1.6	1.9	E 1.3	1.9	0.7	0.5
11	1.6	0.7	0.8	3.2	3.6	1.9	1.6	4.1	E 1.6	1.6	0.5	0.7
12	1.9	0.7	0.7	1.3	3.2	1.9	1.6	3.5	E 1.6	2.6	0.5	1.3
13	1.9	0.5	0.5	1.3	2.9	1.9	2.9	4.1	1.3	2.2	0.7	1.3
14	2.6	0.7	0.8	1.3	2.9	1.6	2.6	1.9	1.9	1.9	0.4	1.3
15	2.6	0.8	0.7	E 0.7	2.9	1.6	3.2	1.9	1.9	1.3	0.2	0.8
16	2.2	1.3	0.7	1.9	3.2	1.6	3.2	1.3	1.6	1.6	0.4	1.0
17	2.2	1.0	1.3	1.9	3.8	1.6	3.2	0.8	1.6	1.3	0.2	0.8
18	2.2	0.8	1.6	1.6	3.8	1.3	2.6	1.0	1.9	1.3	0.5	0.8
19	1.3	0.8	1.9	2.6	4.1	1.6	1.6	1.3	1.6	1.0	0.2	0.8
20	1.6	1.6	1.6	3.2	2.2	1.3	2.2	1.9	1.3	1.0	0.2	0.8
21	1.6	1.0	1.9	3.2	2.2	1.3	1.9	3.5	1.0	1.3	0.5	0.8
22	1.6	1.3	1.6	2.2	2.9	1.3	1.3	1.9	1.3	1.0	1.0	0.6
23	2.6	1.3	1.0	5.5	3.8	1.3	1.6	1.0	1.0	1.0	0.8	0.8
24	3.5	1.0	1.3	6.5	4.1	1.0	1.3	1.6	1.3	0.8	1.3	1.0
25	2.6	1.3	1.0	1.9	12	1.6	1.9	1.6	1.3	1.0	0.8	1.6
26	2.2	1.6	1.0	1.6	E 6.5	1.3	14	1.3	1.6	1.0	0.5	1.3
27	1.6	1.9	1.0	1.9	2.2	1.6	7.5	0.8	1.6	0.8	0.4	1.6
28	1.6	1.9	0.8	2.2	2.6	1.0	2.9	0.7	1.6	0.8	0.8	0.8
29	2.6	2.6	0.5	2.2	3.8	1.3	2.2	1.0	1.9	0.8	0.8	1.0
30	2.2	1.9	0.4	2.2		1.3	1.6	0.8	1.6	0.5	0.8	1.0
31	3.2		0.4	2.6		6.5		0.5		0.7	1.0	
	58.5	47.0	34.7	291.2	751.3	57.0	96.4	51.3	40.1	41.2	22.5	29.0
MEAN	1.89	1.57	1.12	9.39	25.9	1.84	3.21	1.65	1.34	1.33	0.73	0.97
ACRE-FEET	116	93	69	578	1490	113	191	102	80	82	45	58

Remarks: E indicates discharge estimated.

YEAR OR PERIOD — MEAN 4.15 — ACRE-FEET 3020



STATION F-260B-R

SANTA ANITA WASH at Foothill Boulevard

LOCATION:

On the downstream side on left (east) end of Foothill Boulevard 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 3/8 mile upstream.

DRAINAGE AREA:

17.2 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, 1939 to September 30, 1940.

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.
Maximum known Diversion 2.0 second-feet.

RECORDS AVAILABLE:

April 22, 1938 to September 30, 1940.

EXTREMES OF DISCHARGE:

1939-1940
Maximum 248 second-feet, January 8.
Minimum no flow at various times.
1936-1940 (Stations F260R and F260B-R)
Maximum not determined March 2, 1938.
Minimum no flow at various times.

ACCURACY:

Fair.
Low flows occasionally estimated due to sand obstructing communication.

OPERATION:

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

F. C. D. FORM 104 IM 6-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 260B-R

DISCHARGE MEASUREMENTS OF SANTA ANITA WASH

AT ~~XXXX~~ Foothill Blvd. DURING THE YEAR ENDING SEPTEMBER 30, 19 40

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Incident Dif.	METH OD	MEAS SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
84	10/3	Lindsay	10.0	1.22	.85	4.68	1.0		.6	6	0	934A 944A	FC 28
85	10/11	"	3.2	.62	.50	4.57	.31		.6	6	0	105P 112P	"
86	11/9	"	2.4	.24	.83	4.54	.20		.6	5	0	915A 921A	"
87	11/22	"	2.7	.35	.77	4.56	.27		.6	5	0	924A 930A	"
88	1/4	"	4.5	.48	.60	4.56	.29		.6	4	-.02	120P 125P	"
89	1/7	Lindsay-Keim	18.0	14.04	3.71	5.63	52.		.6	9	-.06	1035P 1045P	"
90	1/8	" "	38.0	47.1	4.37	6.21	206.		.6	10	-.12	335A 348A	"
91	1/8	" "	49.0	34.96	4.43	5.83	155.		.6	12	-.02	505A 520A	"
92	1/8	" "	Two Channels			5.41	52.		.6	13	0	744A 755A	"
93	1/8	" "	17.0	6.69	3.14	5.18	21.		.6	8	+.01	1038A 1047A	"
94	1/9	Lindsay	5.0	.47	.83	4.69	.39		.6	4	0	1115A 1120A	"
95	1/10	"	17.0	6.13	2.55	5.12	16.		.6	8	+.01	430P 443P	"
96	1/11	"	17.0	5.84	2.54	5.12	15.		.6	8	-.01	424P 431P	"
97	1/12	"	15.5	5.41	2.38	5.06	13.		.6	9	0	240P 255P	"
98	1/17	"	6.5	.56	.84	4.69	.47		.6	7	+.02	943A 950A	"
99	1/24	"	4.5	.45	.82	4.67	.37		.6	5	0	325P 333P	"
100	1/31	"	7.2	.83	.95	4.70	.80		.6	7	-.01	1017A 1025A	"
101	2/1	Lindsay & Middleton	17.	4.10	1.73	4.98	7.1		.6	9	-.03	1054A 1101A	"
102	2/2	Middleton	18.9	6.50	3.20	5.22	21.		.6	10	-.01	830A 842A	"
103	2/3	"	19.3	8.13	2.95	5.26	24.		.6	10	+.01	1000A 1014A	"
104	2/3	Lindsay & Middleton	Two Channels			5.64	70.		.6	14	+.01	200P 209P	"
105	2/3	"	"	"		5.46	42.		.6	14	0	418P 432P	"
106	2/4	Middleton	"	"		5.57	56.		.6	15	0	918A 937A	"
107	2/5	Lindsay	"	"		5.63	63.		.6	15	0	910A 930A	"
108	2/7	Lindsay	Two Channels			5.46	36.		.6	13	-.01	843A 858A	FC 28
109	2/8	"	17.0	5.23	1.74	5.02	9.1		.6	9	-.01	207P 218P	"
110	2/15	"	13.	3.51	1.31	4.91	4.6		.6	7	0	913A 920A	FC 28
111	2/21	"	1.8	.11	.82	4.59	.09		.6	4	0	1012A 1016A	"
112	2/25	Lindsay & Middleton	19.0	8.77	2.85	5.27	25.		.6	10	-.10	724P 733P	"
113	2/26	Middleton	Two Channels			5.18	19.		.6	14	0	842A 858A	"
114	2/27	Lindsay	14.0	3.85	2.03	4.99	7.8		.6	10	0	933A 945A	"
115	2/29	Middleton & Lindsay	Two Channels			5.10	9.0		.6	10	0	934A 945A	"
116	3/1	Lindsay	"	"		5.10	9.4		.6	13	0	437P 450P	"
117	3/6	"	13.6	3.74	2.19	5.10	8.2		.6	9	0	1040A 1050A	"
118	3/13	"	8.0	1.32	1.06	4.93	1.4		.6	8	-.01	1003A 1010A	"
119	3/20	"	3.0	.35	.77	4.79	.27		.6	5	0	957A 1004A	"
120	3/28	"	4.0	.76	1.14	4.85	.85		.6	6	0	957A 1005A	"
121	3/31	"	13.0	2.51	1.31	5.04	3.4		.6	7	-.03	812A 823A	"
122	4/1	"	6.0	.70	1.07	4.86	.75		.6	6	0	1021A 1028A	"
123	4/4	"	1.2	.07	.86	4.72	.06		.6	3	0	912A 916A	"
124	4/18	"	2.5	.16	.88	4.74	.14		.6	5	0	923A 928A	"

F. C. Dist. Form 32 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

Sta. No F26QB-R

Daily discharge, in second-feet of SANTA ANITA WASH at Foothill Blvd., for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	E 0.8	0.1	0	+	5	10	0.8	+	0	+	0	0
2	E 0.8	0.1	0	0	2.3	9.5	0.4	0	0	+	+	0
3	0.6	0.1	0	0	3.4	9	0.2	0	0	+	0	0
4	0.8	0.1	0	0.5	5.5	8.5	+	+	0	+	0	0
5	0.5	+	0	E 0	5.8	8.5	+	+	0	+	0	0
6	0.7	0.1	0	+	4.2	8.5	0	+	0	0	0	0
7	1.1	0	0	5.5	F 2.3	6	0	+	0	+	0	0
8	0.6	0.1	0	4.0	E 9	3.0	0	+	+	0	0	0
9	0.6	0.2	0	0.4	8	2.8	0	0	+	0	0	+
10	0.4	0.3	0	6	6	2.6	+	0	0	0	0	0
11	0.3	0.2	0	1.4	5.5	2.4	+	0	0	+	0	+
12	0.2	0.2	0	1.3	4.2	1.9	0	0	0	0	+	0
13	0.1	0.1	0	7	2.4	1.6	+	0	0	+	0	+
14	0.1	0.1	0	E 0.5	0.6	1.1	0	0	0	0	0	0
15	0.1	0.1	0	E 0.5	3.8	1.2	+	0	0	+	0	+
16	0.1	+	0	E 0.5	2.0	0.9	0.1	0	0	0	+	+
17	0.1	0.1	+	E 0.4	0	0.3	0.2	0	0	+	0	+
18	+	0.1	+	0.3	0.2	0.6	0.1	0	0	0	0	+
19	+	0.1	0	0.3	0.2	0.6	0	0	0	0	0	+
20	0.1	0.1	+	0.5	0.1	0.3	+	0	0	+	0	+
21	0.1	0.1	0	0.3	0.1	0.2	0	0	0	+	0	+
22	0.1	0.1	0	0.3	0.1	0.1	+	0	0	0	0	+
23	0.1	0.1	1.0	0.8	+	0.3	0.1	0	+	0	0	+
24	0.1	0.1	0.2	0.4	0.1	0.2	0.1	+	0	0	0	+
25	0	+	+	0.3	9	0.2	0.1	0	0	0	0	+
26	+	0.1	+	0.5	1.5	0.4	1.1	0	0	0	0	+
27	0.1	0.1	+	0.8	7.5	0.7	0	+	+	+	0	+
28	0.1	0.1	0	0.7	5.5	0.8	0	0	0	0	0	+
29	0.1	+	0	0.7	9	0.7	0	0	0	0	0	+
30	0.1	0	0	0.8		0.5	+	0	0	+	0	+
31	0		+	0.9		2.3		0		+	0	
	9.2		10.2		328.5		3.2		+		+	
		2.9		95.9		85.7		+		+		+
MEAN	0.30	0.10	0.33	3.09	11.3	2.76	0.11	+	+	+	+	+
ACRE-FEET	18	5.8	20	190	652	170	6.3	+	+	+	+	+

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

YEAR OR PERIOD — MEAN 1.46 — ACRE FEET 1060

STATION F92B-R

SANTA CLARA RIVER at Highway 99

LOCATION:

On the downstream side 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 18, 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, 1939 to September 30, 1940.

REGULATIONS:

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 18, 1930 to March 28, 1938. Some weekly stream measurements were taken prior to January 18, 1930 and subsequent to March 28, 1938.
At Station F92B-R
Recorder records available from October 1, 1938 to September 30, 1940.

EXTREMES OF DISCHARGE:

1939-1940
Maximum 676 second-feet, February 1.
Minimum 0.3 ± second-foot at various times.
1930-1940 (Stations F92R and F92B-R)
Maximum 24000 second-feet, estimated March 2, 1938.
Minimum no flow at various times.

ACCURACY:

Poor, due to extreme control shifts. Records occasionally interpolated due to recorder failure.

OPERATION:

Located and constructed 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 1M 6-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 92B-R

DISCHARGE MEASUREMENTS OF SANTA CLARA RIVER

~~at~~ Highway No. 99 DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
												415P	
31	10/5	Luce	5.0	.94	1.26	4.50	1.2		.6	5	0	420P	FC 39
												440P	
32	11/16	"	4.0	.70	1.34	4.54	.95		.6	5	0	447P	"
												305P	
33	11/30	"	4.0	.89	1.87	4.58	1.7		.6	5	0	312P	"
												120P	
34	12/7	"	3.6	1.07	1.43	4.62	1.5		.6	5	0	130P	"
												1140A	
35	1/4	"	5.5	2.14	1.09	4.74	2.3		.6	6	0	1150A	"
												405A	
36	1/8	Miller-Truitt	10.0	3.68	1.41	4.88	5.2		.6	6	+.17	415A	FC 35
												540A	
37	1/8	" "	25.0	13.60	2.40	5.09	33.		.6	9	-.02	550A	"
												625A	
38	1/8	" "	21.0	9.39	1.86	4.99	17.		.6	8	-.02	635A	"
												1215P	
39	1/8	Miller	30.5	12.79	2.20	5.03	28.		.6	9	-.03	1230P	"
												1113A	
40	1/9	Luce-Pardeick	4.5	1.40	2.04	4.58	2.9		.6	7	0	1118A	FC 39
												249P	
41	1/11	" "	4.2	1.32	1.88	4.56	2.5		.6	5	0	254P	"
												550P	
42	1/25	Luce	4.2	.99	1.62	4.50	1.6		.6	4	0	555P	"
												100P	
43	2/1	Miller-Truitt	58.0	91.82	4.32	5.88	378.		.6	10	-.20	125P	FC 35
												155P	
44	2/1	" "	80.0	48.86	3.63	5.40	178.		.6	20	-.15	215P	"
												245P	
45	2/1	" "	27.5	22.95	3.65	5.17	84.		.6	13	-.02	300P	"
												105A	
46	2/2	" "	21.0	7.99	2.92	4.75	23.		.6	8	-.02	115A	"
												215A	
47	2/2	" "	24.7	8.07	2.57	4.66	21.		.6	9	+.02	225A	"
												135P	
48	2/2	" "	13.0	2.33	.93	4.54	2.2		.6	7	0	145P	"
												715P	
49	2/3	" "	26.0	14.82	3.10	4.77	46.		.6	10	-.02	730P	"
												750P	
50	2/3	" "	25.2	11.09	2.81	4.71	31.		.6	8	-.02	805P	"
												440P	
51	2/6	Luce-Luce	8.5	1.88	1.15	4.38	2.2		.6	7	0	450P	FC 39
												1040A	
52	2/7	Miller	8.0	1.91	.90	4.35	1.7		.6	7	0	1050A	FC 35
												1120A	
53	2/8	Luce	3.0	1.19	1.69	4.36	2.0		.6	5	0	1125A	FC 39
												335P	
54	2/24	"	4.0	1.38	1.35	4.32	1.9		.6	5	0	342P	"
												840P	
55	2/25	Miller-Truitt	19.0	10.41	3.06	4.72	32.		.6	7	-.04	850P	FC 35
												955P	
56	2/25	" "	23.0	12.55	3.41	4.76	43.		.6	10	0	1005P	"
												805A	
57	2/26	Luce-Pardeick	10.6	3.1	1.65	4.42	5.8		.6	7	0	810A	FC 39
												810A	
58	2/26	" "	10.5	3.24	1.70	4.42	5.5		.6	6	0	815A	"
												440P	
59	3/3	Luce	7.5	1.61	1.33	4.30	2.1		.6	7	0	450P	"
												1210P	
60	3/21	"	4.8	1.87	1.54	4.32	2.9		.6	5	0	1212P	"
												1145A	
61	3/31	Miller-Miller	17.5	5.21	1.67	4.41	8.7		.6	10	-.02	1200M	FC 35
												1205P	
62	3/31	" "	17.1	4.62	1.62	4.39	7.5		.6	9	-.02	1215P	"
												500P	
63	3/31	Luce	9.0	2.45	1.52	4.31	3.7		.6	5	0	510P	FC 39
												540A	
64	4/1	Miller	18.2	5.53	2.16	4.49	12.		.6	9	-.01	555A	FC 35
												630A	
65	4/1	"	18.0	4.97	1.77	4.45	8.8		.6	10	-.02	645A	"
												550P	
66	4/1	Miller-Miller	8.5	1.79	1.31	4.28	2.4		.6	7	0	600P	"
												1120A	
67	4/3	Miller	11.5	2.12	.91	4.29	1.9		.6	9	0	1135A	"
												1215P	
68	4/11	Luce	6.0	1.49	1.11	4.26	1.6		.6	6	0	1225P	FC 39
												422P	
69	4/25	"	5.5	1.46	1.14	4.25	1.7		.6	8	0	427P	"
												1125A	
70	4/26	Miller	10.3	2.67	1.15	4.34	3.1		.6	8	0	1135A	FC 35
												100P	
71	4/27	"	6.8	1.69	1.36	4.28	2.3		.6	7	0	110P	"
												1047A	
72	5/2	Luce	6.5	1.11	1.14	4.25	1.3		.6	7	+.01	1057A	FC 39
												745A	
73	5/16	"	5.5	1.15	1.15	4.25	1.3		.6	6	0	755A	"
												520P	
74	5/30	Luce-Lundwall	5.7	.93	.77	4.24	.70		.6	6	0	525P	"
												220P	
75	6/6	Luce	6.5	1.41	1.06	4.24	1.5		.6	6	0	230P	"
												735P	
76	7/10	"	4.6	1.34	1.08	4.25	1.4		.6	5	0	745P	"
												347P	
77	7/25	"	4.0	1.07	1.20	4.22	1.3		.6	6	0	352P	"
												405P	
78	8/14	"	4.3	.71	.73	4.16	.50		.6	5	0	415P	"
												1035A	
79	9/11	"	2.5	.37	.97	4.20	.36		.6	5	0	1043A	"

F. C. Dist. Form 58

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DEPT.

Sta. No. F92B-R

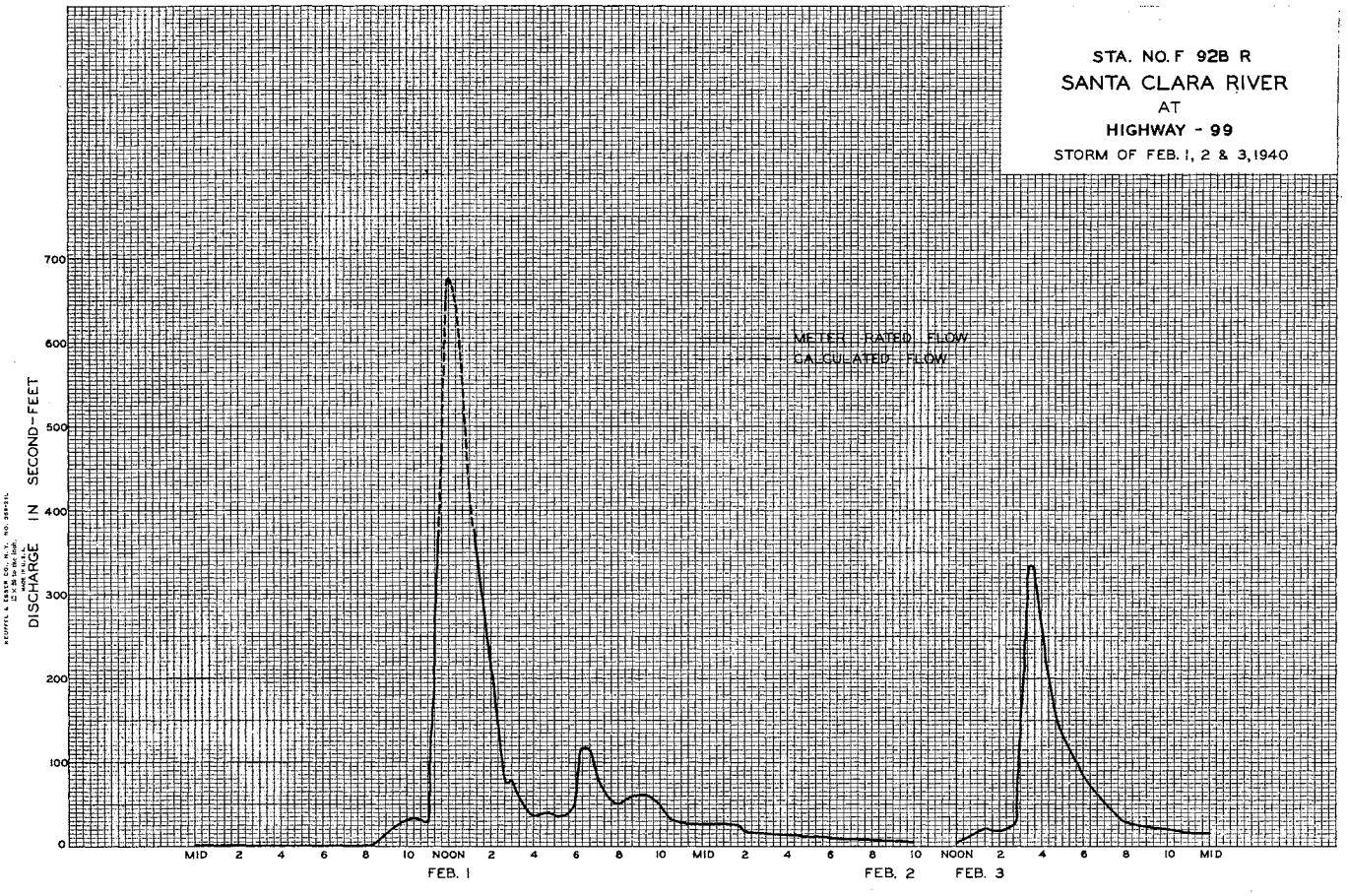
Daily discharge, in second-feet of SANTA CLARA RIVER at Highway 99, for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.2	1.0	1.6	1.6	79	2.4	4.6	1.6	1.1	1.1	0.9	0.4
2	1.2	1.0	1.4	1.8	7	2.6	2.0	1.6	0.9	1.1	0.9	0.4
3	1.4	1.0	1.2	1.6	36	2.2	1.8	1.6	1.1	1.1	0.9	0.4
4	1.4	0.9	1.1	2.0	9.5	2.2	1.6	1.3	1.6	1.1	1.3	0.4
5	1.4	0.9	1.6	1.4	5.5	2.2	1.8	1.3	1.8	1.1	1.1	0.4
6	1.4	0.9	1.4	1.2	2.2	2.2	1.8	1.1	1.6	1.3	1.1	0.4
7	1.2	1.0	1.4	1.3	1.8	2.2	1.8	1.1	1.3	1.3	1.1	0.4
8	1.2	1.1	1.4	19	2.0	2.2	1.8	1.1	1.3	1.6	1.3	0.4
9	1.1	1.0	1.4	3.2	2.0	2.2	1.8	1.1	1.1	1.6	1.3	0.4
10	1.2	0.9	1.4	2.9	1.8	2.2	0.9	0.7	1.1	1.6	0.7	0.4
11	1.0	1.0	1.4	2.2	1.8	12	1.3	1.3	1.1	1.6	0.7	0.4
12	1.1	1.0	1.2	2.2	2.0	25	1.8	0.7	1.1	1.3	0.5	0.4
13	1.1	1.0	1.2	2.2	2.0	24	1.6	0.9	1.1	1.6	0.5	0.4
14	1.1	1.0	1.2	2.2	2.4	22	1.3	0.9	1.1	1.6	0.5	0.4
15	1.1	1.0	1.2	2.2	1.6	11	2.0	0.9	1.1	1.6	0.7	0.4
16	1.1	1.0	1.2	2.2	1.8	E 3.4	1.8	0.9	1.3	1.8	0.7	0.4
17	1.0	1.1	1.2	2.5	1.8	E 3.4	1.6	1.1	1.3	1.6	0.7	0.4
18	1.0	1.1	1.2	2.5	1.6	E 3.4	1.6	1.3	1.1	1.8	0.5	0.4
19	1.1	1.1	1.1	2.7	1.6	E 3.0	1.6	1.3	0.9	1.8	0.5	0.4
20	1.1	1.1	1.1	2.7	1.6	E 3.0	1.6	0.9	0.9	2.0	0.5	0.3
21	1.0	1.2	1.2	2.9	1.8	3.0	1.6	0.9	1.1	2.0	0.5	0.3
22	1.1	1.2	1.2	3.1	2.0	3.0	1.8	0.9	1.1	1.6	0.5	0.3
23	1.0	1.2	1.8	13	2.0	3.0	2.0	0.9	1.1	1.8	0.5	0.3
24	1.0	1.2	1.6	4.8	2.0	2.6	1.8	1.1	1.3	1.8	0.5	0.3
25	1.0	1.4	1.6	1.6	1.6	2.6	1.8	0.7	1.1	1.8	0.4	0.3
26	1.0	1.4	1.4	1.4	8	2.6	8	1.1	1.1	2.2	0.4	0.3
27	1.0	1.6	1.4	1.4	3.0	2.6	3.9	1.1	1.3	2.2	0.4	0.3
28	1.0	1.6	1.4	1.2	2.4	2.4	2.4	1.1	1.6	1.6	0.4	0.3
29	0.9	1.6	1.6	1.1	4.7	2.4	2.2	1.3	1.6	1.3	0.4	0.3
30	0.9	1.6	1.4	1.0		3.0	1.8	1.1	1.1	2.0	0.4	0.3
31	1.0		1.4	0.8		7.5		1.1		1.3	0.4	
	34.3	34.1	41.9	91.9	206.9	167.5	63.6	34.0	36.3	49.2	21.2	10.9
MEAN	1.11	1.14	1.35	2.94	7.13	5.40	2.12	1.10	1.21	1.59	0.68	0.36
ACRE-FEET	68	68	83	182	410	332	126	67	72	98	42	22

Estimated

Remarks: E indicates discharge estimated or interpolated between measurements.

YEAR OR PERIOD MEAN 2.16
ACRE-FEET 1570



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; reinstalled August 11, 1937; removed March 3, 1938 due to the stilling well being washed out; reinstalled July 7, 1938, in box type house over 20" corrugated iron pipe stilling well.
An H.C.F. recorder was in operation from October 1, 1939 to September 30, 1940.

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, 1940.

EXTREMES OF DISCHARGE:

1939-1940
Maximum 1890 second-feet, February 2.
Minimum no flow at various times.
1932-1940
Maximum 3100 second-feet, estimated, March 2, 1938.
Minimum no flow at times each year.

ACCURACY:

Fair.
Low flows occasionally estimated due to sand obstructing communication and recorder failure.

OPERATION:

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

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 185-R

DISCHARGE MEASUREMENTS OF SEPULVEDA CREEK

AT ~~NEAR~~ Charnock Road DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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. COD.	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
												112P	
170	10/5	Moon	2.5	.48	.29	3.97	.13		Fl.	5	0	115P	
												910A	
171	10/11	"	2.7	.47	.38	3.96	.18		Fl.	4	0	915A	
												1201P	
172	10/19	"	2.8	.52	.40	4.03	.21		Fl.	4	0	1205P	
												909A	
173	10/26	"	2.7	.49	.49	4.07	.24		.6	4	-.01	914A	FC 22
												1144A	
174	11/2	Moon-Mitchell	2.5	.43	.60	4.04	.26		.6	4	0	1149A	"
												805A	
175	11/9	Moon	2.4	.24	.67	4.08	.16		.6	3	0	809A	"
												924A	
176	11/16	"	2.5	.30	.67	4.08	.20		.6	3	0	930A	"
												920A	
177	11/22	"	2.5	.29	.76	4.07	.22		.6	3	0	924A	"
												921A	
178	11/30	"	2.0	.18	.65	4.08	.12		.6	2	0	924A	"
												924A	
179	12/7	"	5.0	1.64	.52	4.24	.85		.6	4	0	930A	"
												150A	
180	12/11	Moon-Mitchell	19.0	10.74	1.84	4.93	20.		.6	8	-.06	203A	"
												211P	
181	12/14	Moon	2.5	.25	1.12	4.13	.28		Fl.	3	0	215P	"
												1052A	
182	12/20	"	3.5	.65	.60	4.15	.39		.6	5	0	1056A	"
												225P	
183	12/23	Moon-Andren	21.0	25.25	1.53	5.28	39.		.6	7	-.08	230P	"
												953A	
184	12/28	Moon	3.0	.48	.56	4.08	.27		.6	5	0	1001A	"

F. C. D. FORM 104 1M 5-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 185-R

DISCHARGE MEASUREMENTS OF SEPULVEDA CREEK

AT Charnock Road DURING THE YEAR ENDING SEPTEMBER 30, 19 40

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Dif.	METH OD	MEAS SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
185	1/4	Moon-Mitchell	27.	28.46	2.27	5.42	65.		.6	9	-.06	1116A 1123A	"
186	1/4	" "	8.	2.20	.79	4.34	1.7		.6	5	-.01	305P 310P	"
187	1/6	" "	7.	3.01	1.94	4.55	5.8		.6	6	-.02	1142A 1146A	"
188	1/7	" "	37.	125.0	7.01	8.87	876.		.6	6	-.10	1004P 1020P	"
189	1/8	" "	25.5	15.95	1.28	4.90	20.		.6	6	-.06	1110A 1114A	"
190	1/9	" "	2.0	.34	1.59	4.28	.55		.6	2	0	1251P 1253P	"
191	1/10	" "	23.0	38.7	3.01	5.65	117.		.6	6	-.14	655P 704P	"
192	1/11	" "	2.0	.24	1.67	4.09	.40		.6	2	0	957A 959A	"
193	1/18	Moon	2.0	.26	1.04	3.95	.27		.6	2	0	951A 952A	"
194	1/23	Moon-Blunt	25.5	31.13	.93	5.04	29.		.6	8	-.05	749P 800P	FC 22
195	1/24	Moon	3.0	.48	.48	4.34	.23		.6	4	0	1100A 1104A	"
196	1/25	"	1.8	.18	.78	4.31	.14		.6	2	0	1138A 1140A	"
197	1/31	Moon-Blunt	2.0	.44	1.05	4.24	.46		.6	2	0	1138A 1140A	"
198	2/1	" "	36.	150.75	7.99	9.36	1200.		.6	7	-.30	925A 935A	"
199	2/1	" "	32.	92.5	7.20	7.88	666.		.6	6	+1.36	449P 501P	"
200	2/2	" "	Two Channels			4.42	5.9		.6	7	0	1105A 1111A	"
201	2/3	" "	33.5	36.8	2.91	5.50	107.		.6	9	+.02	1018A 1025A	"
202	2/5	Moon	1.5	.16	1.00	4.10	.16		.6	2	0	1030A 1031A	"
203	2/8	Moon-Foote	2.0	.44	.48	3.96	.25		.6	2	0	1000A 1003A	"
204	2/14	" "	25.5	26.3	1.80	5.04	47.		.6	8	-.09	1213P 1222P	"
205	2/14	" "	2.2	.48	.90	4.03	.43		.6	2	0	401P 405P	"
206	2/21	Moon	1.8	.14	0.93	3.92	.13		.6	2	0	955A 956A	"
207	2/23	"	4.0	1.34	1.50	4.07	2.		.6	5	+.02	836A 849A	"
208	2/25	Moon-Foote	32.	101.4	6.68	7.89	678.		.6	7	-.38	339P 351P	FC 22
209	2/26	" "	2.4	.48	.79	4.05	.38		.6	2	-.02	1146A 1149A	"
210	2/29	" "	3.8	1.69	1.13	4.10	1.9		.6	3	0	922A 926A	"
211	3/7	Moon	3.5	1.5	1.27	4.04	1.9		.6	5	0	1016A 1024A	"
212	3/14	"	1.2	.14	1.00	3.82	.14		.6	2	0	920A 922A	"
213	3/21	"	2.2	.44	.91	3.97	.40		.6	2	-.02	1036A 1037A	"
214	3/28	"	1.8	.18	.56	3.77	.10		.6	2	0	913A 914A	"
215	3/31	"	20.5	9.09	1.02	4.35	9.3		.6	7	-.04	948A 956A	"
216	4/1	Moon-Foote	1.8	.16	1.57	3.93	.25		.6	2	0	1147A 1151A	"
217	4/4	Moon	1.0	.20	.50	3.89	.10		.6	2	0	859A 900A	"
218	4/11	Moon	1.6	.16	.68	3.84	.10		.6	2	0	928A 929A	FC 22
219	4/18	"	1.4	.36	.72	3.72	.26		.6	2	-.01	857A 858A	"
220	4/25	"	2.2	.20	.50	3.68	.10		.6	2	0	1056A 1057A	"
221	4/26	Moon-Andren	12.0	4.83	1.52	4.27	7.4		.6	6	-.05	433A 439A	"
222	4/27	Moon	1.5	.14	1.00	3.78	.14		.6	2	0	206P 207P	"
223	5/2	"	1.4	.42	.42	3.81	.18		.6	2	0	450P 451P	"
224	5/9	"	2.5	.48	.73	3.83	.35		.6	3	0	133P 139P	"
225	5/16	"	1.2	.12	.67	3.78	.08		.6	2	0	118P 119P	"
226	5/23	"	1.8	.18	.78	3.77	.14		.6	2	0	1017A 1018A	"
227	5/29	"	2.2	.44	.80	3.84	.35	Surf	2		0	423P 424P	"
228	6/13	"	1.0	.03	.27	3.58	.01	Fl.	2		0	1121A 1122A	"
229	7/18	"	3.0	.78	.72	3.72	.55		.6	4	0	332P 336P	"
230	7/25	"	3.0	.60	.58	3.68	.35		.6	4	0	908A 911A	"
231	8/8	"	2.0	.30	.60	3.64	.18		.6	4	0	1034A 1037A	"
232	8/21	Bonadimann	2.5	.44	.54	3.72	.24		.6	3	0	932A 935A	FC 40
233	9/5	Moon	4.0	1.24	.45	3.90	.60		.6	4	-.01	932A 935A	FC 22
234	9/19	"	1.8	.18	.39	3.66	.07	Fl.	2		0	1122A 1123A	"
235	9/26	"	2.0	.16	.38	3.70	.06	Fl.	2		0	1016A 1017A	"

F.C. Dist. Form 52 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

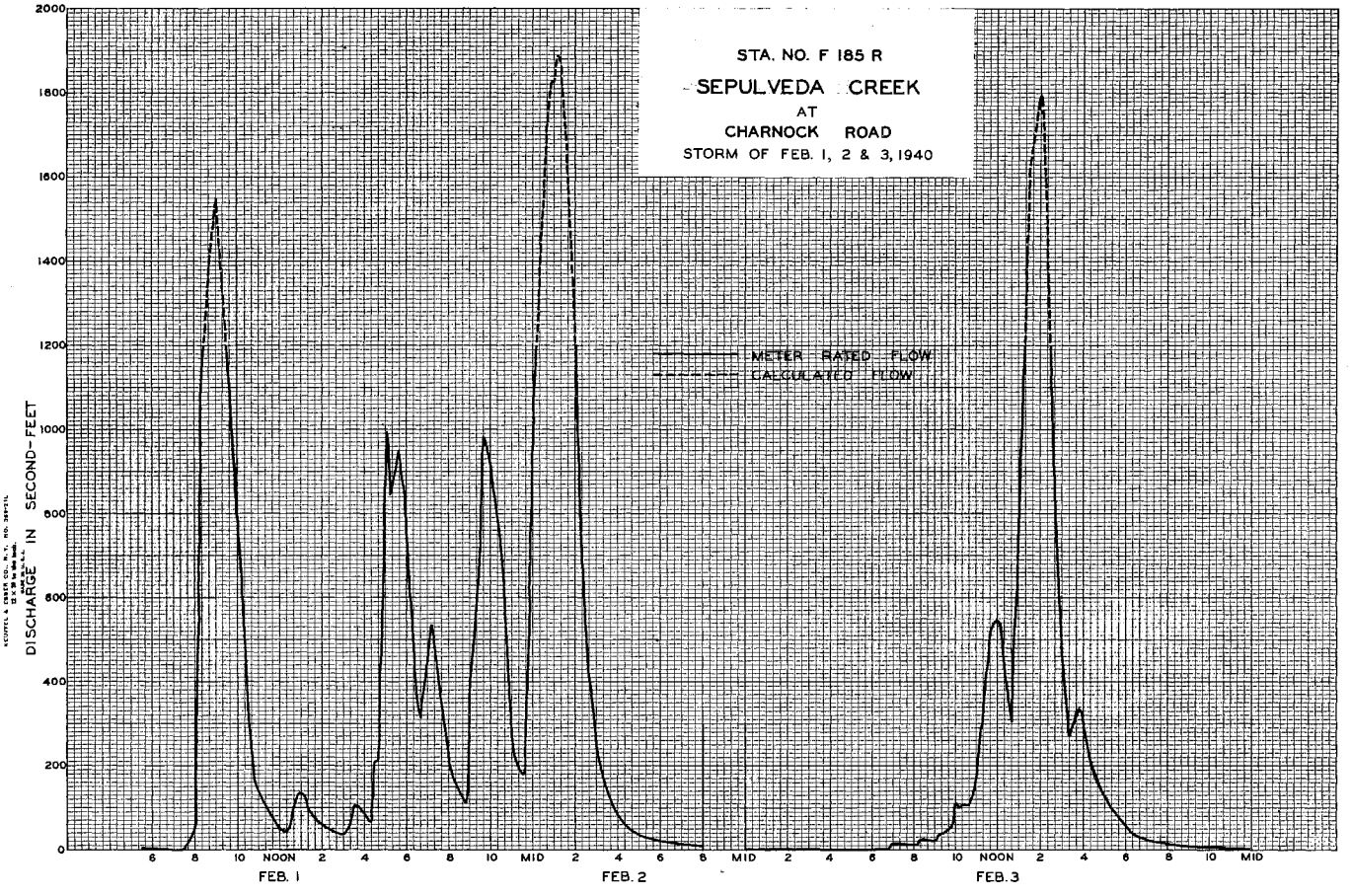
Sta. No F185R

Daily discharge, in second-feet of SEPULVEDA CREEK at Charnock Rd., for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	E 0.1	0.3	0.1	0.3	291	1.7	9	0.1	0.2	0	0.3	0.6
2	↑ 0.1	0.3	0.1	0.6	177	1.7	0.1	0.2	0.1	+	0.4	0.3
3	| 0.1	0.2	0.2	0.3	179	1.8	0.1	0.3	0.1	+	0.4	0.4
4	↓ 0.1	0.2	0.3	23	0.3	1.9	0.2	0.3	0.2	+	0.3	0.2
5	E 0.1	0.4	0.4	0.1	0.2	1.9	0.1	0.3	0.4	0.1	0.3	0.2
6	0.1	0.6	0.4	3.9	0.3	1.9	0.3	0.3	0.4	0.3	0.3	0.1
7	0.2	0.8	0.6	148	0.2	1.7	0.2	0.3	0.2	0.1	0.3	0.1
8	0.1	1.4	0.3	15	0.1	1.1	0.2	0.3	0.5	0.2	0.3	+
9	0.1	0.3	0.5	4.1	0.1	0.3	1.1	0.3	0.6	0.3	0.3	0.1
10	0.2	0.2	0.2	48	0.1	0.2	0.1	0.3	0.6	0.2	0.3	0.2
11	0.2	0.2	2.9	7	0.1	0.3	E +	0.2	+	0.3	0.2	0.1
12	0.2	0.2	0.5	1.0	0.1	0.3	E +	0.1	+	0.3	0.3	0.1
13	0.3	0.2	0.3	1.1	0.1	0.3	E +	0.3	+	0.2	0.3	0.1
14	0.3	1.0	0.4	1.1	16	0.2	0.1	0.1	0.2	0.1	0.3	0.3
15	0.3	0.3	0.5	0.7	0.1	0.6	+	0.1	0.1	0.2	0.3	1.0
16	0.3	0.2	0.3	0.3	0.1	0.2	+	0.1	0	0.1	0.4	0.1
17	0.2	0.2	0.3	0.3	0.2	0.1	+	0.1	0	0.2	0.2	0.2
18	0.2	0.2	0.2	0.3	0.1	0.1	0.1	0.1	0.2	0.4	0.2	0.1
19	0.3	0.6	0.3	0.3	0.5	0.1	+	0.1	0.2	0.4	0.2	0.1
20	0.6	0.2	0.4	0.4	0.4	0.1	0.1	0.1	+	0.3	0.2	0.2
21	0.6	0.2	0.4	0.4	0.3	0.2	0.1	0.1	+	0.4	0.3	0.1
22	0.6	0.2	0.3	0.8	5.5	0.0	0.1	0.2	+	1.3	0.6	0.1
23	0.8	0.2	12	117	1.3	0.2	+	+	0	2.8	0.5	+
24	0.6	0.6	0.3	0.2	1.7	0.4	+	+	0	0.5	0.6	+
25	0.3	0.1	0.3	0.1	89	0.1	11	0.2	+	0.4	0.4	0.2
26	0.3	0.2	0.3	0.2	0.4	0.1	27	0.1	0	0.3	0.6	0.1
27	0.6	0.2	0.6	0.1	0.9	E 0.2	0.2	0.2	0	0.3	0.6	0.1
28	0.9	0.2	0.5	0.1	6	E 0.2	0.2	0.1	0	0.3	0.6	0.2
29	1.0	0.2	0.5	E 0.2	8.5	0.2	0.2	0.2	+	0.3	0.3	0.1
30	0.5	0.1	0.3	0.2		0.2	0.2	0.2	0	1.2	0.5	0.2
31	0.5		0.3	3.7		89		0.2		0.4	0.5	
	10.8	10.2	25.0	378.8	779.6	107.4	50.7	5.5	4.0	11.9	11.3	5.6
MEAN	0.35	0.34	0.81	12.2	26.9	3.46	1.69	0.18	0.13	0.38	0.36	0.19
ACRE-FEET	21	20	50	751	1550	213	101	11	7.9	24	22	11

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

YEAR OR PERIOD MEAN 3.83
ACRE-FEET 2780



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 Street and Chevy 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 foot below bottom of vertical side walls. Channel forms control.

DISCHARGE MEASUREMENTS:

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

RECORDER:

Installed December 15, 1927 underground in a 3.0 foot by 4.0 foot concrete house and stilling well combined.
An H.C.F. continuous recorder was in service from October 1, 1939 to September 30, 1940.

REGULATION:

None.

DIVERSIONS:

None.

RECORDS AVAILABLE:

December 15, 1927 to September 30, 1940.

EXTREMES OF DISCHARGE:

1939-1940
Maximum 492 second-feet, January 7.
Minimum no flow at various times.
1927-1940
Maximum 2800 second-feet, estimated, March 2, 1938.
Minimum no flow at various times.

ACCURACY:

Fair.
Stopped clock for summer months.
Low flows estimated or interpolated between weekly measurements.

OPERATION:

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

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 44-R

DISCHARGE MEASUREMENTS OF SYCAMORE LOWER STORM DRAIN

AT Adams Square DURING THE YEAR ENDING SEPTEMBER 30, 1940

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	RATED FLOW? DIF.	METH OD	MEAN SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
30	3/7	Bollinger	4.0	.24	2.0	.08	.48	Floats		4	0	840A 844A	
31	3/25	"	4.0	.28	1.46	.09	.41	Floats		4	0	355P 358P	
32	4/4	"	4.0	.28	1.46	.08	.41	Floats		4	0	800A 803A	
33	4/18	"	3.6	.10	1.40	.08	.14	Floats		4	0	840A 844A	
34	4/25	"	3.3	.10	1.30	.08	.13	Floats		3	0	843A 847A	
35	5/9	"	3.5	.10	1.10	.08	.11	Floats		3	0	845A 848A	
36	5/23	"	2.8	.07	1.00	.07	.07	Floats		3	0	850A 853A	

F. C. Dist. Form 52 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

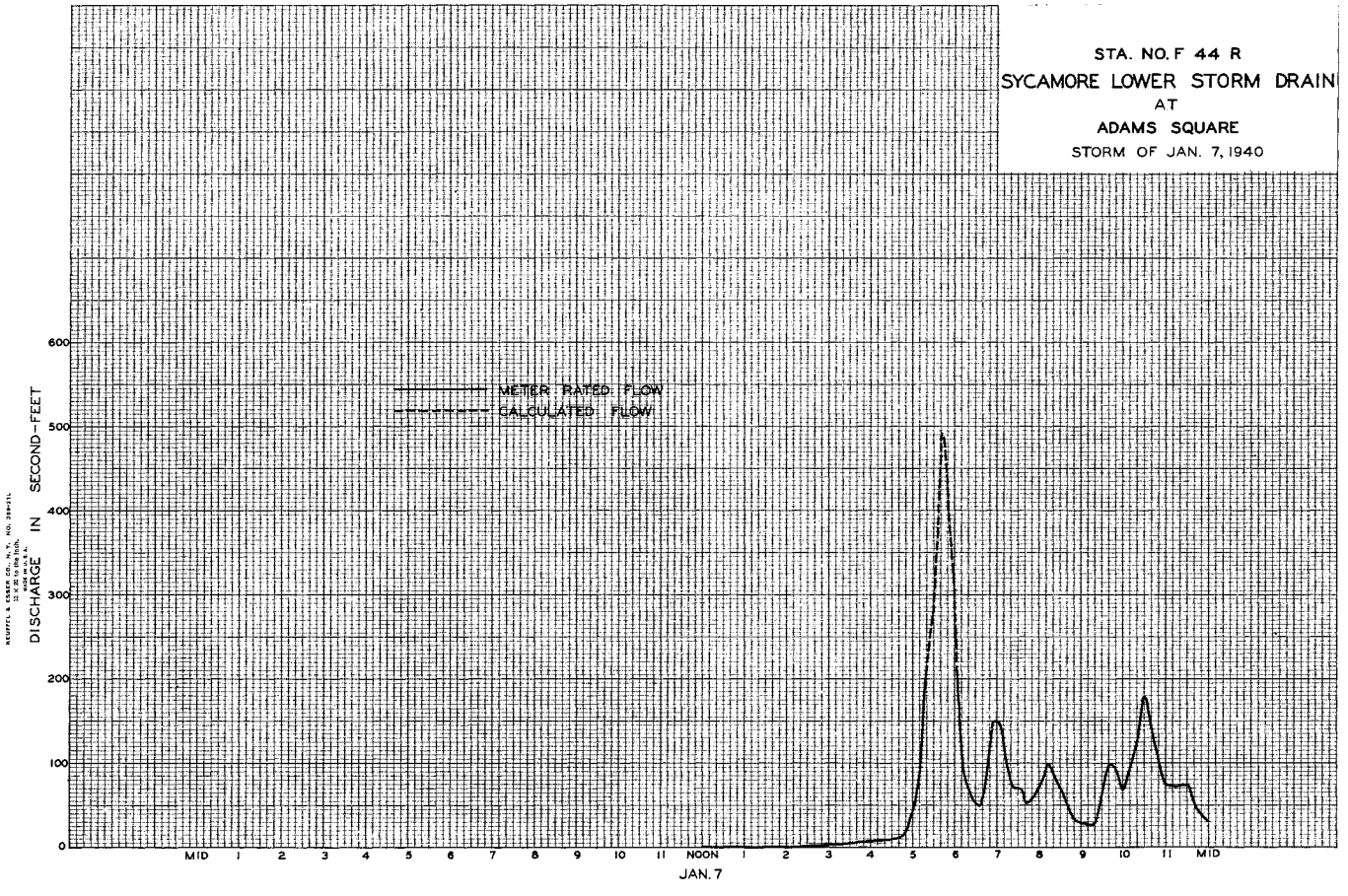
Sta. No. F44R

Daily discharge, in second-feet of SYCAMORE LOWER STORM DRAIN at Adams Square, for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	+	+	+	+	33	2.3	4.1	0.2	+	+	0	0
2	+	+	+	+	27	E 2.0	0.4	0.2	+	+	0	0
3	+	+	+	+	19	E 1.7	0.4	0.1	+	+	0	0
4	+	+	+	8	5	E 1.3	0.5	0.1	+	+	0	0
5	+	+	+	+	1.9	E 1.0	0.8	0.1	+	+	0	0
6	0.6	+	+	1.2	E 0.2	E 0.7	0.6	0.1	+	+	0	0
7	1.2	+	+	3.3	E 0.2	0.4	1.1	0.1	+	+	0	0
8	+	0.5	+	8	E 0.2	0.4	0.6	0.1	+	+	0	0
9	+	0.1	+	0.2	E 0.2	0.4	0.4	0.1	+	+	0	0
10	+	0.1	+	4.4	E 0.2	0.4	0.3	0.1	+	+	0	0
11	+	+	1.2	4.1	E 0.2	0.4	0.2	0.2	+	+	0	0
12	+	+	+	1.1	E 0.2	0.4	0.4	0.2	+	+	0	0
13	+	+	+	E 0.2	E 0.2	0.4	0.1	0.1	+	+	0	0
14	+	+	+	+	5.5	E 0.4	0.2	0.1	+	+	0	0
15	+	+	+	+	0.1	E 0.3	0.4	0.1	+	+	0	0
16	+	+	+	+	0.1	E 0.3	0.3	0.1	+	0	0	0
17	+	+	+	+	0.1	E 0.3	0.2	0.1	+	0	0	0
18	+	+	+	+	0.1	E 0.3	0.2	0.1	+	0	0	0
19	+	+	+	+	0.1	0.3	0.2	0.1	+	0	0	0
20	+	+	+	+	0.1	0.4	0.2	0.1	+	0	0	0
21	+	+	0.4	+	0.1	0.4	0.2	0.1	+	0	0	0
22	+	+	0.3	+	0.4	0.4	0.2	0.1	+	0	0	0
23	+	+	5.5	9.5	0.1	0.4	0.2	0.1	+	0	0	0
24	+	+	+	+	0.1	0.4	0.2	0.1	+	0	0	0
25	+	+	+	+	2.3	0.4	2.0	+	+	0	0	0
26	+	+	+	+	4.5	0.3	1.5	+	+	0	0	0
27	+	+	+	+	3.1	1.5	0.3	+	+	0	0	0
28	+	+	+	+	6	0.2	0.2	+	+	0	0	0
29	+	+	+	+	11	0.2	0.2	+	+	0	0	0
30	+	+	+	+		0.5	0.2	+	+	0	0	0
31	+		+	1.4		2.0				0	0	
	1.8	0.7	7.4	71.1	1419	38.8	30.3	2.8	+	+	0	0
MEAN	0.06	0.02	0.24	2.29	4.89	1.25	1.01	0.09	+	+	0	0
ACRE-FEET	3.6	1.4	15.	141.	281.	77.	60.	5.6	+	+	0	0

Remarks: + indicates discharge 0.05 sec. ft. or less.
E indicates discharge estimated or interpolated between measurements.

YEAR OR PERIOD — MEAN 0.81 — ACRE-FEET 585.



STATION F43R

SYCAMORE UPPER STORM DRAIN above Solway Street

LOCATION:

Right (north) side of concrete drain, approximately 80 feet above Solway Street and about 3 miles northeast of Glendale.

DRAINAGE AREA:

2.7 square miles.

CHANNEL AND CONTROL:

Channel-rectangular concrete, 8.0 feet wide and 8.0 feet deep. Invert is 0.1 foot below bottom of vertical side walls.
Channel forms control.

DISCHARGE MEASUREMENTS:

Low flows measured by wading.
High flow measured from footbridge about 80 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, 1938 to February 21, 1939.
Stevens type L recorder was in service from October 1, 1939 to September 30, 1940.

REGULATIONS:

None.

DIVERSIONS:

None.

RECORDS AVAILABLE:

From January 30, 1928 to April 6, 1932 and from October 1, 1935 to September 30, 1940. 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:
1939-1940
Maximum 55 second-feet, February 1.
Minimum no flow at various times.
1928-1940
Maximum not determined.
Minimum no flow at various times.

ACCURACY:

Fair.
Recorder removed during dry months. Low flows interpolated between weekly measurements.

OPERATION:

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

F. C. D. FORM 104 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 43-R

DISCHARGE MEASUREMENTS OF SYCAMORE UPPER STORM DRAIN

~~At~~ above Solway Street DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
12	2/3	Bollinger-Koch	4.0	.46	4.52	.06	2.1		Floats	4		1000A / 1005A	
13	3/6	Bollinger	2.5	.12	2.75	.01	.33		Floats	3		408P / 411P	
14	3/25	"	2.3	.12	2.67	.04	.32		Floats	3		440P / 444P	
15	4/18	"	2.0	.10	3.10	.04	.31		Floats	2		810A / 813A	
16	4/25	"	2.0	.10	2.20	.04	.22		Floats	2		800A / 804A	
17	5/9	"	1.8	.07	2.28	.05	.16		Floats	2		825A / 830A	
18	5/23	"	1.8	.07	2.28	.09	.16		Floats	2		810A / 813A	

F.C. Dist. Form 52 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

Sta. No F43R

Daily discharge, in second-feet of SYCAMORE UPPER STORM DRAIN above Solway Street, for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	+	+	+	+	3.3	0.2	0.5	0.2	0.2	0.1	+	0
2	+	+	+	+	2.3	0.2	0.3	0.2	0.2	0.1	+	0
3	+	+	+	+	1.4	0.2	0.3	0.2	0.2	0.1	+	0
4	+	+	+	0.4	0.3	0.3	0.3	0.2	0.2	0.1	+	0
5	+	+	+	+	0.2	0.3	0.3	0.2	0.2	0.1	+	0
6	+	+	+	0.1	0.2	0.3	0.3	0.2	0.2	0.1	+	0
7	+	+	+	2.2	0.1	0.3	0.3	0.2	0.2	0.1	+	0
8	+	+	+	0.8	0.1	0.3	0.3	0.2	0.2	0.1	+	0
9	+	+	+	0.2	0.1	0.3	0.3	0.2	0.2	0.1	+	0
10	+	+	+	0.2	0.1	0.3	0.3	0.2	0.2	0.1	+	0
11	+	+	+	0.2	0.1	0.3	0.3	0.2	0.2	0.1	+	0
12	+	+	+	0.2	0.1	0.3	0.3	0.2	0.2	0.1	+	0
13	+	+	+	0.2	0.1	0.3	0.3	0.2	0.2	0.1	+	0
14	+	+	+	0.1	0.1	0.3	0.3	0.2	0.2	0.1	+	0
15	+	+	+	0.1	0.1	0.3	0.3	0.2	0.2	0.1	+	0
16	+	+	+	0.1	0.1	0.3	0.3	0.2	0.2	0.1	+	0
17	+	+	+	0.1	0.1	0.3	0.3	0.2	0.2	0.1	+	0
18	+	+	+	+	0.1	0.3	0.3	0.2	0.2	0.1	+	0
19	+	+	+	+	0.1	0.3	0.3	0.2	0.2	0.1	+	0
20	+	+	+	+	0.1	0.3	0.3	0.2	0.2	0.1	+	0
21	+	+	+	+	0.1	0.3	0.3	0.2	0.2	0.1	+	0
22	+	+	+	+	0.1	0.3	0.3	0.2	0.2	0.1	+	0
23	+	+	0.3	0.3	0.1	0.3	0.2	0.2	0.2	0.1	+	0
24	+	+	+	+	0.1	0.3	0.2	0.2	0.2	0.1	+	0
25	+	+	+	+	1.0	0.3	0.2	0.2	0.2	0.1	+	0
26	+	+	+	+	0.1	0.3	0.3	0.2	0.2	0.1	+	0
27	+	+	+	+	0.1	0.3	0.2	0.2	0.2	0.1	+	0
28	+	+	+	+	0.1	0.3	0.2	0.2	0.2	0.1	+	0
29	+	+	+	+	0.2	0.3	0.2	0.2	0.2	0.1	+	0
30	+	+	+	+		0.3	0.2	0.2	0.2	0.1	+	0
31	+		+	0.1		0.8		0.2		0.1	+	
	+	+	0.3	5.3	11.0	9.5	8.5	6.2	6.0	3.1	+	0
MEAN	+	+	.01	0.17	0.38	0.31	0.28	0.20	0.20	0.10	+	0
ACRE-FEET	+	+	0.6	11.	22.	19.	17.	12.	12.	6.1	+	0

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

YEAR OR PERIOD MEAN 0.14 ACRE-FEET 100.

STATION F54R & F54B-R

TOPANGA CREEK above mouth of canyon

LOCATION:

Station F54R
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.
Station F54B-R
On right (west) canyon wall about 400 feet upstream from the location of F54R.

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 at Station F54R. Removed June 4, 1940. Installed June 5, 1940 at station F54B-R 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 October 1, 1939 to September 30, 1940.

REGULATION:

None.

DIVERSIONS:

None.

RECORDS AVAILABLE:

January 1, 1930 to September 30, 1940.

EXTREMES OF DISCHARGE:

1939-1940
Maximum 1280 second-feet, February 1.
Minimum + at various times.
1930-1940
Maximum 9300 second-feet, estimated, March 2, 1938.
Minimum no flow at various times.

ACCURACY:

Poor.
Records frequently estimated or interpolated due to recorder clock stopping or extreme control shifts. Communication occasionally obstructed by sand.

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 1M 6-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 54-R and F 54B-R

DISCHARGE MEASUREMENTS OF TOPANGA CREEK

~~at~~ above Mouth of Canyon DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
162	10/1	Moon	1.6	.19	.74	6.57	.14		F1	4	0	312P 315P	
163	10/11	"	1.5	.20	.40	6.56	.08		F1	3	0	415P 417P	
164	10/19	"	1.5	.24	.29	6.56	.07		F1	2	0	137P 140P	
165	11/2	Moon-Mitchell	1.5	.17	.41	6.57	.07		F1	3	0	130P 134P	
166	11/30	Moon	1.8	.12	.33	6.79	.04		F1	2	0	402P 405P	
167	12/14	"	2.0	.18	.56	6.80	.10		F1	4	0	330P 335P	
168	12/20	"	1.5	.10	.70	6.80	.07		F1	4	0	300P 304P	
169	12/28	"	2.0	.19	.79	7.04	.15		F1	4	0	336P 340P	
170	1/4	Moon-Mitchell	3.0	.56	1.16	7.14	.65		.6	4	0	105P 110P	FC 22
171	1/8	" "	25.0	33.75	9.35	7.90	316.		.6	4	+.20	205A 227A	"
172	1/8	" "	14.5	4.29	3.19	6.80	14.		.6	7	0	850A 857A	"
173	1/8	" "	14.5	3.65	3.07	6.79	11.		.6	5	-.02	955A 1000A	"
174	1/9	Moon-Mitchell	10.5	2.34	3.00	6.48	7.		.6	5	0	344P 349P	FC22
175	1/10	Andren-Mellen	18.	5.90	3.45	6.59	20.		.6	9	-.05	750P 810P	FC 12
176	1/10	" "	18.	6.20	3.27	6.57	20.		.6	9	-.01	825P 840P	"
177	1/10	" "	18.	6.00	3.34	6.55	20.		.6	9	0	850P 900P	"
178	1/10	Moon-Mitchell	18.	5.20	3.00	6.54	16.		.6	9	0	950P 958P	FC 22
179	1/10	" "	17.8	4.70	2.66	6.53	13.		.6	9	0	1113P 1124P	"
180	1/11	" "	17.5	4.20	2.74	6.51	12.		.6	9	0	1209A 1220A	"
181	1/11	" "	14.0	2.96	2.16	6.46	6.4		.6	7	0	252P 259P	"
182	1/11	" "	14.	2.96	2.23	6.45	6.6		.6	7	0	320P 328P	"
183	1/24	Moon-Blunt	9.	1.70	2.28	7.21	3.9		.6	7	0	235P 244P	"
184	2/1	Andren-Eckert	30.	60.55	5.80	8.38	351.		.6	11	-.35	1021A 1110A	FC 12
185	2/1	" "	22.	40.9	4.33	8.10	177.		.6	7	-.19	1121A 1145A	"
186	2/1	Andren-Eckert	21.	34.95	3.02	7.14	106.		.6	8	-.03	113P 130P	FC 12
187	2/1	" "	22.	36.25	2.62	7.82	95.		.6	8	-.02	135P 155P	"
188	2/1	" "	22.	43.40	3.99	7.89	173.		.6	9	+.22 -.21	335P 412P	"
189	2/1	" "	24.	49.45	2.85	7.78	141.		.6	7	-.02	420P 435P	"
190	2/1	Moon-Blunt	24.	50.6	4.92	7.72	249.		.6	4	+.05 -.03	753P 820P	FC 22
191	2/2	Moon-Eckert	24.	33.7	6.09	8.57	205.		.6	8	-.06	502A 520A	"
192	2/2	" "	23.	35.25	4.53	8.30	160.		.6	6	-.20	630A 645A	"
193	2/3	Moon-Blunt	29.	71.70	6.91	7.88	496.		.6	7	+.28	133P 150P	"
194	2/3	" "	29.	65.75	5.14	7.95	338.		.6	6	-.08	255P 308P	"
195	2/3	" "	26.	57.6	5.56	7.48	320.		.6	6	-.06	408P 427P	"
196	2/3	" "	22.	48.35	5.12	7.30	248.		.6	5	-.03	515P 526P	"
197	2/3	" "	20.	32.4	4.05	6.98	131.		.6	5	-.04	655P 706P	"
198	2/5	Moon	15.	9.68	2.19	5.60	21.		.6	7	0	341P 353P	"
199	2/8	Moon-Foote	9.	4.46	1.60	5.28	7.1		.6	7	0	340P 356P	"
200	2/14	" "	9.	4.28	1.58	5.31	6.8		.6	7	0	121P 130P	"
201	2/21	Moon	7.	2.30	.76	5.08	1.7		.6	5	0	325P 334P	"
202	2/25	Andren-Eckert	28.	61.30	4.66	7.83	285.		.6	11	-.38	420P 500P	FC 12
203	2/25	Moon-Foote	23.	39.0	6.60	7.40	257.		.6	5	-.16	521P 537P	FC 22
204	2/25	" "	23.	38.60	6.30	7.25	243.		.6	5	0	555P 609P	"
205	2/25	" "	49.	38.1	4.86	7.00	185.		.6	10	-.08 -.02	743P 758P 804P	"
206	2/25	" "	49.	35.85	4.52	6.91	162.		.6	10	+.02	817P 838P	"
207	2/25	" "	48.	30.0	4.15	6.73	124.		.6	10	-.06	851P 930P	"
208	2/25	" "	Two Channels			6.57	110.		.6	8	-.08	945P	"
209	2/25	" "	"	"		6.52	86.		.6	8	-.04	950P 959P	"
210	2/26	Moon-Foote	17.	9.00	2.44	5.89	22.		.6	8	0	147P 155P	FC 22
211	2/29	" "	15.	8.03	1.23	5.67	9.9		.6	7	0	224P 232P	"
212	3/14	Moon	6.	1.45	1.11	5.37	1.6		.6	5	0	420P 426P	"
213	3/21	"	6.	1.44	1.03	5.36	1.5		.6	5	0	558P 603P	"
214	3/28	"	5.9	1.12	.93	5.34	1.0		.6	5	0	311P 318P	"
215	3/31	"	12.0	7.68	1.31	5.60	10.		.6	6	-.01	1123A 1132A	"
216	4/1	Moon-Foote	11.5	5.80	.93	5.48	5.4		.6	6	0	120P 126P	"
217	4/11	Moon	9.0	1.87	.58	5.26	1.1		.6	5	0	420P 428P	"
218	4/25	"	8.7	1.55	.50	5.22	.80		.6	5	0	401P 409P	"
219	5/9	"	2.2	.35	1.03	5.20	.35		.6	4	0	315P 320P	"
220	5/16	"	3.0	.28	.79	5.19	.22		.6	4	0	316P 320P	"
221	5/27	" "	3.0	.28	.75	5.17	.21		.6	5	0	340P 345P	"
222	6/5	"	2.0	.27	.74		.20		.6	4	0	910A 914A	"
223	6/27	"	2.0	.14	.43	2.59	.06		.6	2	0	236P 237P	"
224	7/11	"	1.5	.12	.25	2.55	.03		.6	2	0	1010A 1011A	"
225	7/25	"	1.5	.10	.20	2.52	.02		.6	2	0	206P 207P	"
226	8/21	Bonadiman	2.0	.2	.38	2.03	.08		.6	2	0	230P	FC 40
227	9/5	Moon	1.5	.12	.42	1.94	.10	F1.			0	317P 318P	
228	9/26	"	1.6	.10	.28	1.78	.03		.6	2	0	258P 259P	FC 22

F.C. Dist. Form 52 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

F54R & Sta. No F54B-R

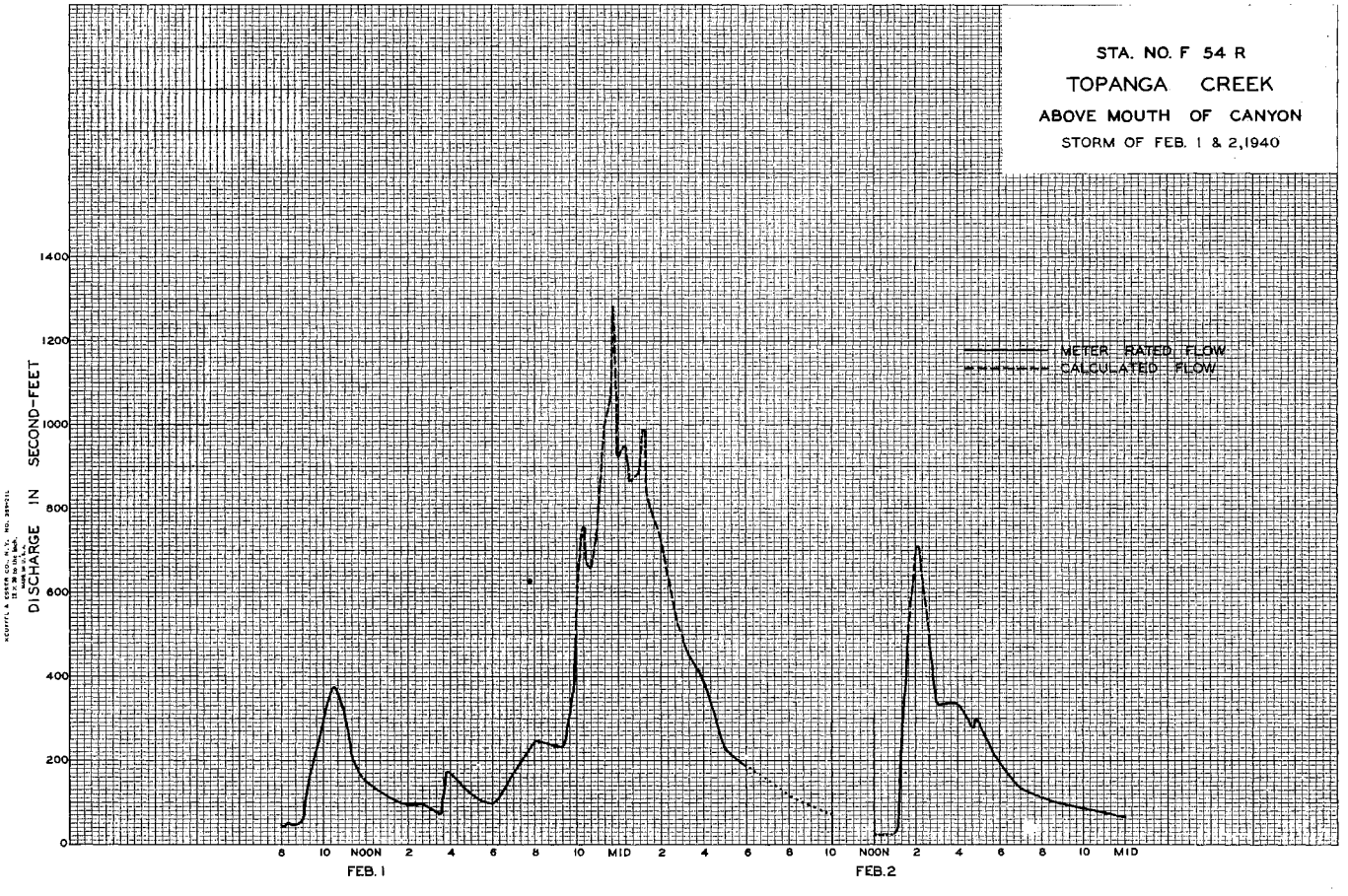
F54R, F54B-R

Daily discharge, in second-feet of TOPANGA CREEK above mouth of canyon, for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.1	0.1	0.1	0.1	172	8	7.5	0.5	0.2	0.1	+	0.1
2	0.1	0.1	0.1	0.1	183	6.5	3.1	0.5	0.2	0.1	+	0.1
3	0.1	0.1	0.1	0.1	116	5.5	2.6	0.4	0.2	0.1	+	0.1
4	0.1	0.1	0.1	0.5	30	4.4	2.1	0.4	E 0.2	0.1	+	0.1
5	0.1	0.1	0.1	0.2	E 21	3.9	2.0	0.4	E 0.2	+	+	0.1
6	0.1	0.1	0.1	0.2	15	E 3.4	1.9	0.4	0.2	+	+	0.1
7	0.1	0.1	0.1	E 3.0	10	E 3.2	1.7	0.4	E 0.2	+	+	0.1
8	0.1	0.1	0.1	5.4	8	E 2.9	1.6	0.4	E 0.2	+	+	0.1
9	0.1	0.1	0.1	1.2	6	E 2.7	1.3	0.4	E 0.2	+	+	0.1
10	0.1	0.1	0.1	1.2	5.5	E 2.4	1.2	0.4	E 0.2	+	+	0.1
11	0.1	0.1	0.1	7.5	4.4	E 2.3	1.1	0.4	E 0.2	+	0.1	0.1
12	0.1	0.1	0.1	4.9	3.9	E 2.0	1.0	0.3	E 0.2	+	0.1	0.1
13	0.1	0.1	0.1	E 3.8	3.7	E 1.8	0.9	0.3	E 0.2	+	0.1	0.1
14	0.1	0.1	0.1	E 2.9	4.6	E 1.6	0.9	0.3	E 0.2	+	0.1	0.1
15	0.1	0.1	0.1	E 2.2	3.1	1.4	0.9	0.3	E 0.2	+	0.1	0.1
16	0.1	0.1	0.1	E 1.7	2.4	1.4	0.9	0.2	0.1	+	0.1	0.1
17	0.1	0.1	0.1	E 1.3	2.1	1.4	0.9	0.2	0.1	+	0.1	0.1
18	0.1	0.1	0.1	E 1.0	1.9	E 1.4	0.9	0.2	0.1	+	0.1	+
19	0.1	0.1	0.1	E 1.0	1.9	E 1.4	0.9	0.2	0.1	+	0.1	+
20	0.1	0.1	0.1	E 1.0	1.7	E 1.6	0.9	0.2	0.1	+	0.1	+
21	0.1	0.1	0.1	E 1.0	1.7	E 1.6	0.9	0.2	0.1	+	0.1	+
22	0.1	0.1	0.1	E 1.2	3.0	1.4	0.9	0.2	0.1	+	0.1	+
23	0.1	0.1	E 0.5	E 15	2.6	1.3	0.8	0.2	0.1	+	0.1	+
24	0.1	0.1	E 0.2	E 10	2.1	1.2	0.8	0.2	0.1	+	0.1	+
25	0.1	0.1	E 0.1	3.2	72	E 1.1	0.9	0.2	0.1	+	0.1	+
26	0.1	0.1	E 0.1	E 2.9	26	E 1.1	2.8	0.2	0.1	+	0.1	+
27	0.1	0.1	E 0.1	E 2.5	15	E 1.0	0.8	0.2	0.1	+	0.1	+
28	0.1	0.1	0.1	E 2.3	10	E 1.0	0.7	0.2	0.1	+	0.1	+
29	0.1	0.1	0.1	E 2.0	12	1.0	0.6	0.2	0.1	+	0.1	+
30	0.1	0.1	0.1	E 1.8		E 1.5	0.6	0.2	0.1	+	0.1	+
31	0.1		0.1	E 1.8		E 13		0.2		+	0.1	
	3.1	3.0	3.6	153.2	740.6	84.4	44.1	9.0	4.5	0.4	2.1	1.7
MEAN	0.10	0.10	0.12	4.94	25.5	2.72	1.47	0.29	0.15	0.01	0.07	0.06
ACRE-FEET	6.1	6.0	7.1	304	1470	167	87	18	8.9	0.8	4.2	3.4

Remarks: + indicates discharge 0.05 sec. ft. or less.
E indicates estimated or interpolated between meas.

YEAR OR PERIOD — MEAN 2.86 — ACRE-FEET 2080



STATION F252R

VERDUGO CHANNEL at Estelle Avenue

LOCATION:

On the right (north) side of 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, 1939 to September 30, 1940.

REGULATION:

Flow partially regulated by Verdugo and other Debris Basins.

DIVERSIONS:

Several diversions for domestic water supply and irrigation.

RECORDS AVAILABLE:

December 2, 1935 to September 30, 1940.
For earlier records see Stations F9R Verdugo at Glen Oaks Blvd., and F244R Verdugo at Don Carlos Street.

EXTREMES OF DISCHARGE:

1939-1940
Maximum 533 second-feet January 8.
Minimum + at various times.
1935-1940
Maximum 4400 second-feet, estimated, March 2, 1938.
Minimum no flow at various times.

ACCURACY:

Fair.

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 1M 6-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 252-R

DISCHARGE MEASUREMENTS OF VERDUGO CHANNEL

~~AT~~ Estelle Avenue ...DURING THE YEAR ENDING SEPTEMBER 30, 19 40

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Bill	METHOD	MEAS SEC NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
21	2/25	Bollinger-Koch	41.2	10.71	8.03	.52	86.	Floats		6	-.02	515P 520P	
22	3/21	Bollinger	2.8	.17	3.24	.12	.55	"		4	0	526P 530P	
23	3/28	"	3.2	.22	2.04	.13	.45	"		4	0	447P 450P	
24	5/9	"	2.3	.11	2.18	.11	.24	"		3	-	1128A 1131A	

F.C. Dist. Form St 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

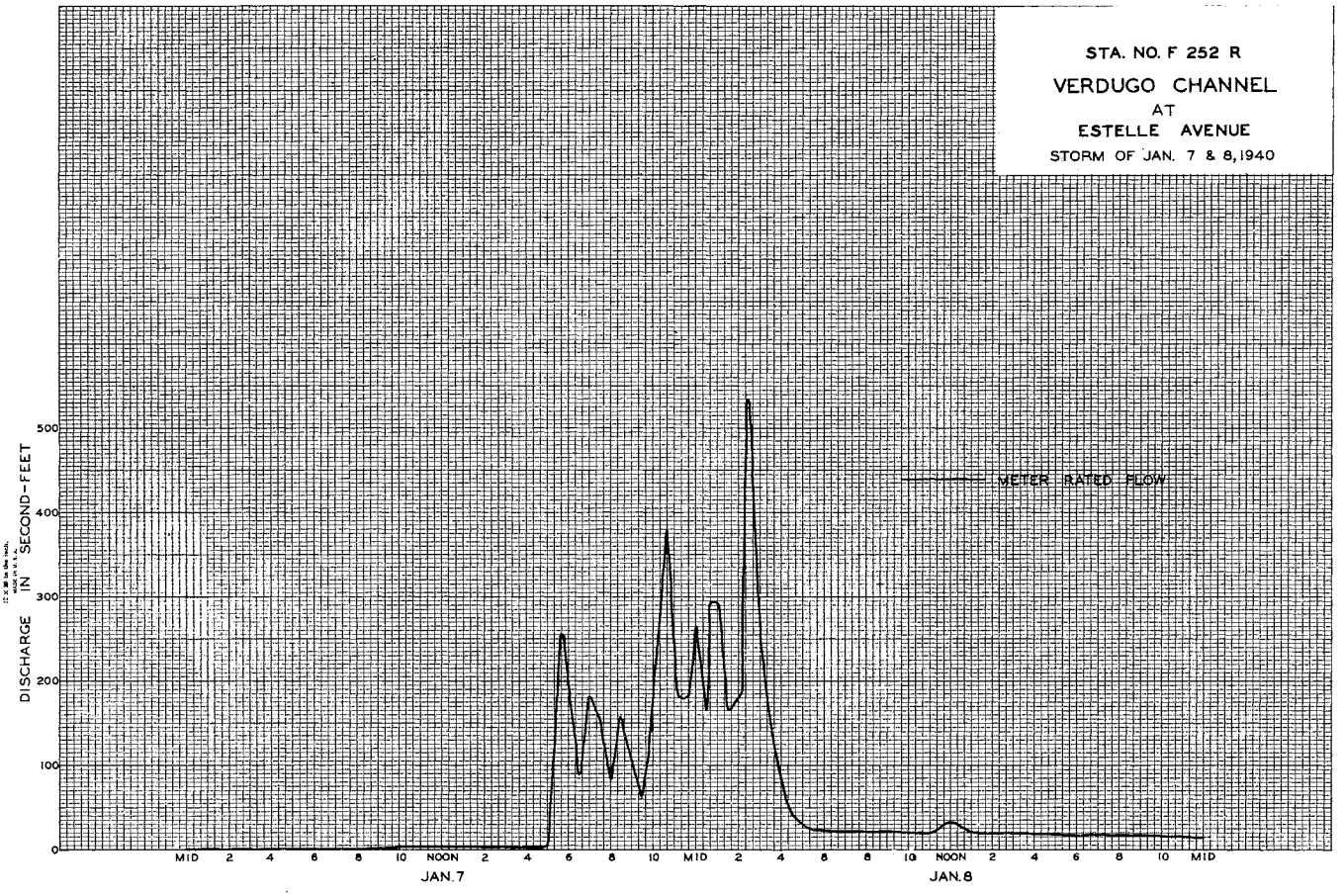
Sta. No F252R

Daily discharge, in second-feet of VERDUGO CHANNEL at Estelle Ave. for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.4	0.2	0.8	1.1	56	2.5	9.5	1.1	0.3	0.2	0.2	0.1
2	0.4	0.2	0.8	1.1	53	1.4	3.0	0.8	0.2	0.2	0.2	0.1
3	0.2	0.2	0.8	1.1	24	0.8	2.5	0.1	0.2	0.2	0.2	+
4	0.3	0.2	1.1	15	4.9	1.1	1.4	+	0.2	0.2	0.2	+
5	0.2	0.2	0.8	2.5	2.1	1.4	0.6	+	0.2	0.2	0.2	+
6	1.3	0.2	0.8	2.9	2.1	0.6	0.6	0.1	0.2	0.2	0.2	+
7	2.8	0.2	0.8	50	0.6	0.6	0.6	0.1	0.2	0.2	0.1	+
8	1.4	2.1	1.1	60	1.4	0.6	0.6	0.1	0.2	0.2	0.1	+
9	0.8	1.4	1.1	12	1.4	0.8	0.8	0.4	0.2	0.2	0.1	+
10	0.4	0.6	1.1	7.5	1.7	0.8	0.6	0.6	0.2	0.2	0.1	+
11	0.3	0.3	2.8	6	1.1	0.8	0.4	0.6	0.2	0.2	0.1	+
12	0.3	0.3	0.8	4.0	0.8	0.6	0.2	0.8	0.2	0.2	0.1	+
13	0.3	0.2	0.6	1.4	1.1	0.8	0.1	1.1	0.2	0.2	0.1	0.1
14	0.3	0.3	0.6	1.1	7.5	0.6	0.1	0.8	0.2	0.2	0.1	0.1
15	0.4	0.2	0.6	0.8	2.7	0.8	0.2	0.6	0.2	0.2	0.1	0.1
16	0.3	0.2	0.8	1.1	1.4	1.1	0.1	0.4	0.2	0.2	0.1	0.1
17	0.4	0.2	0.8	1.1	3.0	1.1	0.1	0.8	0.2	0.2	0.1	0.1
18	0.6	0.2	1.1	1.1	1.4	1.1	0.1	1.7	0.2	0.2	0.1	0.1
19	0.3	0.2	0.8	1.1	1.7	1.1	0.4	1.1	0.2	0.2	0.1	0.1
20	0.2	0.3	0.6	2.1	1.4	0.8	0.3	1.1	0.2	0.2	0.1	0.1
21	0.2	0.3	0.8	2.1	0.6	0.8	0.4	1.1	0.2	0.2	0.1	0.1
22	0.1	0.3	1.1	1.7	3.0	0.8	0.6	0.8	0.2	0.2	0.1	0.1
23	0.2	0.4	13	16	1.7	0.8	0.8	0.6	0.2	0.2	0.1	0.1
24	0.2	0.4	2.5	3.6	0.8	0.8	0.6	0.8	0.2	0.2	0.1	0.1
25	0.3	0.6	1.4	2.1	41	0.6	5	0.8	0.2	0.2	0.1	0.1
26	0.1	0.6	1.4	1.4	17	0.4	35	1.1	0.2	0.2	0.1	0.1
27	0.1	0.4	0.8	1.7	4.2	1.7	3.8	0.8	0.2	0.2	0.1	0.1
28	0.1	0.4	0.8	1.7	6	1.1	1.4	0.6	0.2	0.2	0.1	0.1
29	0.1	0.8	1.1	4.2	21	1.1	0.8	0.6	0.2	0.2	0.1	0.1
30	0.1	0.6	1.1	3.6		0.6	0.6	0.6	0.2	0.2	0.1	0.1
31	0.1		1.1	4.2		3.4		0.4		0.2	0.1	
	132	12.7	440	215.3	264.6	62.1	71.4	20.5	6.1	6.2	3.7	2.0
MEAN	0.43	0.42	1.42	6.95	9.12	2.00	2.38	0.66	0.20	0.20	0.12	0.07
ACRE-FEET	26	25	87	427	525	123	142	41	12	12	7.3	4.0

Remarks: + indicatee discharge 0.05 sec. ft. or less.
E indicates estimated.

YEAR OR PERIOD MEAN 1.97
ACRE-FEET 1430



STATION F47R

WALNUT CREEK at Covina Boulevard

LOCATION:

On downstream side 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 upstream 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, 1939 to September 30, 1940.

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, 1940.
(For records prior to December 15, 1928 see State Division of Water Rights Bulletins).

EXTREMES OF DISCHARGE:

1939-1940
Maximum 1870 second-feet, January 7.
Minimum no flow most of year.
1928-1940
Maximum 8060 second-feet January 1, 1934.
Minimum no flow most of each year.

ACCURACY:

Fair.
Communication occasionally poor due to shifting sand control. Stopped clock during dry summer months.

OPERATION:

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

F. C. D. FORM 104 1M 6-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 47-R

DISCHARGE MEASUREMENTS OF WALNUT CREEK

AT ~~xxxx~~ Covina Blvd. DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
132	1/8	Haig-Eckert	100.0	156.	6.12	3.16	955.		.6	18	-.42	1254A 1140A	FC 33
133	1/8	" "	20.0	11.48	1.92	1.87	22.		.6	8	-.02	856A 902A	"
134	2/1	Brewster	50.0	35.76	1.88	2.08	67.		.6	6	-.01	1145A 1155A	FC 8
135	2/1	Haig-Mellen	20.6	8.60	1.87	1.87	16.		.6	6	0	207P 213P	FC 33
136	2/1	" "	11.0	3.43	1.65	1.78	5.6		.6	6	-.01	1024P 1028P	"
137	2/2	" "	96.0	85.69	4.02	2.62	345.		.6	14	-.04	444A 516A	"
138	2/2	Brewster	18.0	5.36	1.50	1.80	8.1		.6	6	-.01	955A 1007A	FC 8
139	2/2	"	3.0	.52	1.21	1.60	.65		.6	3	-.01	1145A 1150A	"
140	2/3	Haig-Mellen	107.0	98.55	3.45	2.50	340.		.6	13	-.04	446P 459P	FC 33
141	2/25	Brewster-Pettis	50.0	46.30	3.38	2.26	156.		.6	7	-.03	615P 625P	FC 8
142	2/25	Haig-Mellen	24.0	14.01	.69	1.78	9.6		.6	7	-.01	1013P 1024P	FC 33
143	2/29	Brewster	3.0	.56	.75	1.56	.42		.6	3	-.01	1050A 1055A	FC 8
144	3/31	Brewster-Pettis	50.0	28.16	2.02	2.09	57.		.6	6	0	958A 1005A	FC 24
145	3/31	" "	24.0	15.00	1.30	1.87	19.		.6	5	-.02	1152A 1158A	"
146	4/1	Haig-Mellen	26.0	11.65	1.22	1.80	14.		.6	6	-.01	1226A 1231A	FC 33

F.C. Dist. Form 52 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

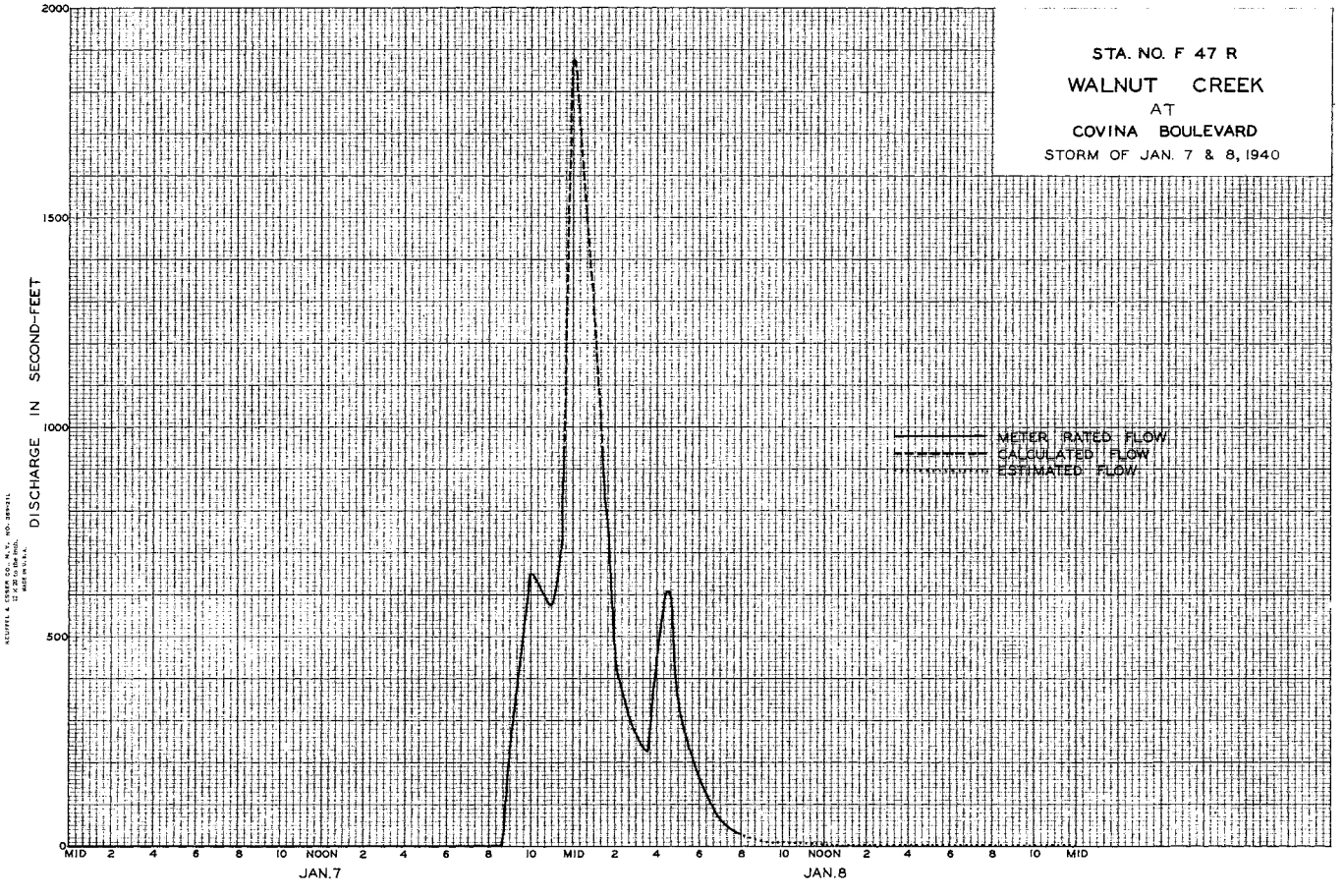
Sta. No. F47R

Daily discharge, in second-feet of WALNUT CREEK at Covina Blvd. for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0	0	58	2.0	4.2	0	0	0	0	0
2	0	0	0	0	34	1.7	4.0	0	0	0	0	0
3	0	0	0	0	65	0.1	0	0	0	0	0	0
4	0	0	0	0	+	0.2	0	0	0	0	0	0
5	0	0	0	0	0	0	1.0	0	0	0	0	0
6	0	0	0	0	0	0	0.2	0	0	0	0	0
7	0	0	0	46	0	0	0	0	0	0	0	0
8	0	0	0	173	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	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
24	0	0	+	0	0	0	0	0	0	0	0	0
25	0	0	0	0	16	0	0	0	0	0	0	0
26	0	0	0	0	0.8	0	11	0	0	0	0	0
27	0	0	0	0	0	0	0.4	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	1.1	0	0	0	0	0	0	0
30	0	0	0	0		0	0	0		0	0	
31	0		0	0		6.5		0				
	0	0	+	259	1749	105	208	0	0	0	0	0
MEAN	0	0	+	8.35	6.03	0.34	0.69	0	0	0	0	0
ACRE-FEET	0	0	+	514	347	21	41	0	0	0	0	0

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

YEAR OR PERIOD — MEAN 1.27 — ACRE FEET 923



THE FOLLOWING RECORDS ARE PUBLISHED THRU THE COURTESY OF THE

U.S.G.S. WATER RESOURCES BRANCH-LOS ANGELES OFFICE

STATION U1R

LOS ANGELES RIVER BASIN Arroyo Seco near Pasadena

LOCATION:

Water-stage recorder and broad-crested weir control, lat. 34°13'20", long. 118°10'40", near north line of sec. 31, T. 2 N., R. 12 W., 1-1/2 miles upstream from Millard Canyon, and 5-1/4 miles northwest of Pasadena. Altitude, about 1,400 feet.

DRAINAGE AREA:

16.4 square miles.

RECORDS AVAILABLE:

December 1910 to September 1939.

AVERAGE DISCHARGE:

26 years (1913-1915, 1916-1940), 9.37 second-feet.

EXTREMES:

Maximum discharge during year, 452 second-feet Jan. 8 (gage height, 7.92 feet); minimum daily discharge, 0.3 second-foot on several days during August and September.
1910-1940:
Maximum discharge, 8,620 second-feet Mar. 2, 1938, by slope-area method; practically dry for several months most years.

REMARKS:

Records poor to Apr. 30, fair May 1 to Sept. 30. Discharge for period of missing gage-height record, Oct. 1-9, and for periods of extremely unstable rating, Jan. 9-31, Feb. 6-21, 24, Feb. 28 to Mar. 30, computed on basis of discharge measurements, Mount Wilson rainfall record, and comparative hydrographs using Santa Anita Creek near Sierra Madre as the main comparison. No diversions above station. Several measurements furnished by Los Angeles County Flood Control District.

F. C. D. FORM 104-13M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. U1R

DISCHARGE MEASUREMENTS OF ARROYO SECO

NEAR Pasadena DURING THE YEAR ENDING SEPTEMBER 30, 1940

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rising Falling Diff.	METH OD	MEAS SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
1128	10-10	Wittman				5.78	3.1		.6	9	0		
1129	10-18	"				5.74	2.2		.6	8	0		
1130	10-19	Lindsay	4.9	1.10	1.36	5.72	1.5		.6	6	0	1047A 1054A	FC28
1131	10-26	Wittman				5.74	1.6		.6	5	0		
1132	10-30	"				5.71	1.5		.6	8	0		
1133	11-9	Lindsay	5.0	1.12	1.88	5.75	2.1		.6	5	0	1124A 1130A	FC28
1134	11-16	"	4.6	.95	1.47	5.69	1.4		.6	6	0	1117A 1124A	"
1135	11-24	Wittman				5.69	1.9		.6	8	0		
1136	11-30	Lindsay	3.5	.92	1.41	5.71	1.3		.6	6	0	121P 128P	FC28
1137	12-11	Wittman				5.74	2.5		.6	8	0		
1138	12-14	Lindsay	4.6	1.11	1.26	5.70	1.4		.6	6	0	1130A 1138A	FC28
1139	12-21	Wittman											
1140	12-26	"				5.68	2.7		.6	8	0		
1141	1-8	"				6.44	88		.6	16	-.03		
1142	1-9	"				6.58	26.9		.6	15	-.03		
1143	1-11	"				6.72	22.4		.6	14	+.01		
1144	1-16	"				6.48	6.3		.6	15	0		
1145	1-22	"				6.12	5.0		.6	9	+.01		
1146	2-1	"				6.90	92		.6	17	+.02		
1147	2-1	Whittman				6.49	52		.6	14	-.08		
1148	2-3	Wittman				7.02	131		.6	17	-.04		
1149	2-5	"				6.60	31.6		.6	19	+.01		
1150	2-12	"				6.44	13.0		.6	15	-.03		
1151	2-19	"				5.70	8.5		.6	9	-.02		
1152	2-22	"				5.57	9.1		.6	10	0		
1153	2-26	"				6.60	36.8		.6	20	0		
1154	2-29	Edgecomb				6.62	26.4		.6	17	0		
1155	3-8	Wittman				5.45	9.1		.6	10	0		
1156	3-18	"				5.40	7.0		.6	8	0		
1157	3-25	"				5.30	6.0		.6	10	0		
1158	4-1	"				5.94	17.5		.6	15	-.04		
1159	4-11	Lindsay	2.9	1.16	3.99	5.02	4.6		.6	6	0	1146A 1153A	FC28
1160	4-15	Wittman				5.00	5.7		.6	9	0		
1161	4-18	Lindsay	2.9	1.08	3.52	4.96	3.8		.6	6	0	1229P 1235P	FC28
1162	4-22	Wittman				4.95	4.7		.6	9	0		
1163	4-27	"				5.35	14.1		.6	13	0		
1164	4-29	"				5.08	7.2		.6	9	0		
1165	5-2	Lindsay	2.9	1.20	3.75	4.97	4.5		.6	6	0	1143A 1149A	FC28
1166	5-8	Wittman				4.94	4.1		.6	11	0		
1167	5-16	Lindsay	2.8	.84	2.88	4.85	2.4		.6	6	0	1152A 1158A	FC28
1168	5-20	Wittman				4.87	3.3		.6	8	0		
1169	5-27	"				4.88	3.4		.6	10	0		
1170	5-29	Lindsay	2.8	.84	2.78	4.83	2.3		.6	6	0	1058A 1104A	FC28
1171	6-3	Wittman				4.83	2.8		.6	8	0		
1172	6-10	"				4.82	2.6		.6	10	-.02		
1173	6-13	Lindsay	4.9	1.82	.92	4.77	1.7		.6	6	0	1117A 1125A	FC43
1174	6-20	Wittman				4.78	1.7		.6	18	0		
1175	6-20	Haig	2.7	.54	1.44	4.76	.80		.6	6	0	122P 135P	FC33
1176	7-1	Wittman				4.69	.86		.6	7	0		
1177	7-3	Haig	2.7	.58	1.45	4.72	.85		.6	6	+.01	952A 1003A	FC33
1178	7-3	"	2.7	.58	1.83	4.73	1.1		P1-tot	6	0	1104A 1110A	
1179	7-9	Wittman				4.67	.44		.6	7	0		
1180	7-18	Lindsay	4.5	1.09	.54	4.67	.59		.6	8	0	1059A 1110A	FC43
1181	7-20	Wittman				4.68	.67		.6	11	0		
1182	7-25	"				4.68	.54		.6	11	0		
1183	8-1	Lindsay	4.5	1.00	.60	4.68	.60		.6	7	0	943A 952A	FC43
1184	8-6	Wittman				4.67	.52		.6	11	0		
1185	8-13	"				4.66	.39		.6	11	0		
1186	8-15	Lindsay	3.9	.68	.75	4.66	.50		.6	6	0	1155A 1202P	FC43
1187	8-27	Wittman				4.65	.27		.6	13	0		
1188	8-30	Brewster	3.0	.68	.63	4.64	.43		.6	4	0	1025A 1030A	FC24
1189	9-11	"	2.0	.48	.69	4.68	.33		.6	4	0	1100A 1106A	"
1190	9-16	Wittman				4.67	.25		.6	13	0		
1191	9-26	Lindsay	2.6	.38	.83	4.65	.31		.6	5	0	1116A 1121A	FC28

F.C. Dist. Form 92 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

Sta. No U1R

Daily discharge, in second-feet of ARROYO SECO near Pasadena, for the year ending September 30, 1940

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	E 9	1.4	1.3	1.8	55	E 18	18	5	2.0	0.9	0.6	0.3
2	E 8	1.6	1.3	1.8	99	15	10	4.6	2.0	1.0	0.6	0.3
3	E 7	1.4	1.3	1.8	100	12	8.5	4.6	2.1	0.9	0.6	0.4
4	E 6	1.4	1.3	9	54	11	7.5	4.4	2.2	0.8	0.4	0.4
5	E 5.5	1.6	1.3	4.2	32	10	7	4.3	2.4	0.7	0.4	0.4
6	E 5	1.8	1.3	3.1	E 25	9.5	6.5	4.3	2.2	0.6	0.5	0.3
7	E 4.5	1.6	1.3	21	20	9	6.5	4.0	2.2	0.6	0.5	0.3
8	E 4.0	2.2	1.3	114	18	9	6.5	3.8	2.1	0.5	0.5	0.3
9	E 3.5	2.2	1.3	E 27	16	8.5	6	3.2	2.0	0.4	0.5	0.3
10	3.1	1.6	1.3	24	15	8.5	5.5	3.0	2.0	0.4	0.5	0.3
11	3.1	1.4	2.2	22	14	8	5	2.9	1.9	0.5	0.5	0.4
12	3.1	1.4	1.8	18	13	8	5	2.7	1.8	0.4	0.5	0.3
13	2.8	1.4	1.4	13	12	8	4.8	2.6	1.7	0.4	0.5	0.3
14	2.8	1.4	1.4	11	12	7.5	4.8	2.5	1.6	0.5	0.5	0.3
15	2.6	1.6	1.4	9	11	7.5	5	2.4	1.5	0.5	0.4	0.3
16	2.4	1.4	1.3	8	10	7.5	5	2.4	1.5	0.5	0.4	0.3
17	2.4	1.4	1.4	7	9	7	5	2.6	1.5	0.6	0.4	0.3
18	2.2	1.4	1.4	6.5	8.5	7	4.6	2.9	1.3	0.6	0.4	0.3
19	1.6	1.4	1.4	6.5	8.5	7	4.6	2.6	1.2	0.7	0.4	0.3
20	1.6	1.4	1.4	6.5	8	7	4.6	2.6	1.1	0.7	0.4	0.3
21	1.4	1.4	1.4	6	E 8	6.5	4.4	2.5	1.1	0.7	0.4	0.3
22	1.4	1.4	1.6	6	9	6.5	4.6	2.5	1.0	0.6	0.4	0.3
23	1.4	1.6	4.5	8	9	6.5	4.8	2.5	1.0	0.6	0.4	0.3
24	1.6	1.6	3.6	8	E 8.5	6	5	2.4	1.0	0.5	0.4	0.3
25	1.6	1.6	2.6	7	60	6	4.8	2.2	1.0	0.5	0.4	0.3
26	1.4	1.4	2.6	6.5	49	6	25	2.4	1.0	0.5	0.4	0.3
27	1.4	1.3	2.2	6.5	21	6	14	2.6	0.9	0.6	0.3	0.3
28	1.3	1.3	2.2	6	E 18	5.5	9	2.5	0.8	0.6	0.3	0.3
29	1.3	1.3	2.0	6	E 26	5.5	6.5	2.2	0.8	0.6	0.3	0.3
30	1.3	1.3	1.8	6		E 5.5	6	2.0	0.8	0.6	0.3	0.4
31	1.4		1.8	E 6		30		2.0		0.6	0.3	
	95.7	45.2	54.4	387.2	748.5	275.0	214.5	93.2	45.7	18.6	13.4	9.5
MEAN	3.09	1.51	1.75	12.5	25.8	8.87	7.15	3.01	1.52	0.60	0.43	0.32
ACRE-FEET	190	90	108	768/	1480	545	425	185	91	37	27	19

Remarks: E Indicates Estimated.

YEAR OR PERIOD — MEAN 5.47 — ACRE-FEET 3960

STATION U9R

SAN GABRIEL RIVER BASIN Dalton Creek near Glendora

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 Co.'s dam, a quarter of a mile upstream from mouth and 2-1/2 miles northeast of Glendora. Altitude, about 1,150 feet.

DRAINAGE AREA:

7.5 square miles.

RECORDS AVAILABLE:

December 1919 to September 1940.

AVERAGE DISCHARGE:

20 years (1920-1940), 1.17 second-feet.

EXTREMES:

Maximum discharge during year, 8.5 second-feet Jan. 8 (gage height, 0.86 foot); no flow for parts of several months.

1919-1940:
Maximum discharge, about 850 second-feet Mar. 2, 1938, from record of release from reservoir upstream; no flow for several months of each year.

REMARKS:

Records fair. Discharge for the period of missing gage heights, Jan. 12-15, was computed by comparison with Rogers Creek near Azusa. Glendora Irrigation Co. 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 104 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. U9R

DISCHARGE MEASUREMENTS OF DALTON CREEK

NEAR Glendora DURING THE YEAR ENDING SEPTEMBER 30, 1940

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Period No.	METHOD	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
562	10-10	Wittman				0.07	.10		.6	4	0		
563	10-18	"				.06	.07		.6	3	0		
564	1-8	Brewster-Pettis	4.0	1.30	1.01	.50	1.3		.6	4	-.01	1203P 1209P	FC8
565	1-11	Brewster	1.5	.51	.47	.19	.24		.6	3	0	1140A 1144A	"
566	1-16	Wittman				.15	.20		.6	4	0		
567	1-18	Brewster	1.0	.28	.71	.12	.20		.6	2	0	327P 330P	FC8
568	1-23	Wittman				.08	.05		.6	3	0		
569	1-25	Brewster	1.0	.24	.62	.12	.15		.6	2	0	750A 754A	FC8
570	1-29	Wittman				.08	.10		.6	4	0		
571	2-1	Brewster	4.0	1.45	.86	.42	1.2		.6	4	0	120P 126P	FC8
572	2-2	Ebert				.50	.95		.6	7	-.01		
573	2-6	Wittman				.40	.84		.6	7	+.04		
574	2-8	Brewster	1.5	.47	.89	.27	.42		.6	3	0	400P 404P	FC8
575	2-13	Wittman				.22	.30		.6	6	0		
576	2-15	Brewster	1.5	.46	.74	.21	.34		.6	3	0	250P 254P	FC8

F. C. D. FORM 104 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. U9R

DISCHARGE MEASUREMENTS OF DALTON CREEK

AT NEAR Glendora DURING THE YEAR ENDING SEPTEMBER 30, 1940

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.
577	2-20	Wittman				.15	.17		.6	5	0		
578	2-21	Brewster	1.5	.46	.57	.15	.26		.6	3	0	200P 204P	FC8
579	2-26	Dalton-Ebert				.58	1.2		.6	7	0		
580	2-26	Brewster-Pettis	3.0	1.22	1.00	.56	1.2		.6	4	0	245P 250P	FC8
581	2-29	Brewster	3.0	1.26	.99	.58	1.2		.6	4	0	1130A 1135A	"
582	3-1	Wittman				.47	1.0		.6	7	-.01		
583	3-7	Brewster	1.5	.51	.92	0.28	0.47		.6	3	0	155P 200P	FC8
584	3-12	Wittman				.24	.32		.6	6	0		
585	3-14	Brewster	1.5	.43	.70	.19	.30		.6	3	0	400P 405P	FC8
586	3-19	Wittman				.17	.16		.6	6	0		
587	3-26	"				.18	.22		.6	6	0		
588	3-28	Brewster	1.5	.41	.68	.17	.28		.6	3	0	200P 205P	FC24
589	3-31	Brewster-Pettis	3.0	1.16	.86	.50	1.0		.6	6	-.01	1240P 1245P	"
590	4-1	Ebert				.53	.93		.6	7	0		
591	4-3	Wittman				.30	.56		.6	7	0		
592	4-4	Brewster	1.5	.45	1.04	.27	.47		.6	3	0	245P 250P	FC24
593	4-11	"	1.0	.24	.79	.14	.19		.6	2	0	255P 258P	"
594	4-16	Wittman				.16	.20		.6	6	0		
595	4-18	Brewster	1.0	.30	.53	.11	.16		.6	2	0	240P 243P	FC24
596	4-22	Wittman				.11	.07		.6	6	0		
597	4-25	Brewster	1.0	.27	.56	.10	.15		.6	2	0	300P 303P	FC24
598	4-30	Wittman				.20	.23		.6	7	0		
599	5-2	Brewster	1.0	.27	.70	.11	.19		.6	2	0	310P 314P	FC24
600	5-8	Wittman & Colby				.09	.06		.6	4	0		
601	5-9	Brewster	1.0	.26	.50	.09	.13		.6	2	0	305P 308P	FC24
602	5-16	"	0.5	.13	.69	.08	.09		.6	1	0	412P 414P	"
603	5-23	Brewster	0.5	.13	.46	0.08	0.06		.6	1	0	302P 304P	FC24
604	5-28	"	0.5	.13	.62	.05	.08		.6	1	0	1035A 1037A	FC24
605	6-12	"	0.5	.11	.60	.04	.07		.6	1	0	942A 945A	"
606	6-19	"	0.5	.11	.36	.03	.04		.6	1	0	915A 917A	"
607	6-26	"	1.0	.12	.08	.04	.01		.6	2	0	934A 937A	"
608	7-31	"	0.5	.11	.82	.03	.09		.6	1	0	907A 910A	"
609	8-21	"	0.5	.11	.64	.03	.07		.6	1	0	1040A 1043A	"
610	8-26	Wittman				.02	.01		.6	4	0		
611	8-28	Brewster	0.5	.11	.27	.02	.03		.6	1	0	400P 402P	FC24
612	9-4	"	0.5	.14	.36	.03	.05		.6	1	0	807A 810A	"
613	9-9	Wittman				.04	.04		.6	6	0		
614	9-11	Brewster	0.5	.11	.64	.04	.07		.6	1	0	200P 203P	FC24
615	9-18	"	0.5	.12	.42	.03	.05		.6	1	0	952A 955A	"

F.C. Dist. Form 52 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

Sta. No U9R

Daily discharge, in second-feet of DALTON CREEK near Glendora, for the year ending September 30, 1940

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0			0	0.6	0.9	1.1	0.2	0.1	0	0	0
2	0			0	1.2	0.8	0.7	0.2	0.1	0	0	0
3	0			0	1.4	0.7	0.6	0.2	0.1	0	0	0
4	0			0	1.4	0.6	0.5	0.1	0.1	0	0	0
5	0			0	1.0	0.5	0.4	0.1	0.1	0	0	0.1
6	0			0	0.6	0.5	0.4	0.1	0.1	0	0	0
7	0.1			0	0.6	0.5	0.4	0.1	0.1	0	0	0
8	0.2			2.3	0.5	0.4	0.4	0.1	0.1	0	0	0
9	0.1			0.4	0.4	0.4	0.3	0.1	0.1	0	0	0
10	0.1			0.2	0.4	0.4	0.3	0.1	0.1	0	0	0.1
11	0.1			0.2	0.4	0.4	0.2	0.1	0.1	0	0.1	0.4
12	0.1			E 0.3	0.3	0.3	0.2	0.1	0.1	0	0.1	0.3
13	0.1			E 0.2	0.3	0.3	0.2	0.1	0.1	0	0.1	0.1
14	0			E 0.2	0.4	0.3	0.2	0.1	0.1	0	0.1	0.1
15	0			E 0.2	0.3	0.2	0.2	0.1	0.1	0	0.1	0.1
16	0	NO FLOW	NO FLOW	0.2	0.3	0.2	0.2	0.1	0.1	0	0.1	0.1
17	0.1			0.2	0.2	0.2	0.2	0.1	0.1	0	0.1	0.1
18	0.1			0.2	0.2	0.2	0.2	0.1	0	0	0.1	0.1
19	0.1			0.1	0.2	0.2	0.1	0.1	0	0	0.1	0
20	0			0.1	0.2	0.2	0.1	0.1	0	0	0.1	0
21	0			0.1	0.2	0.2	0.1	0.1	0	0	0.1	0
22	0			0.1	0.2	0.2	0.1	0.1	0	0	0.1	0
23	0			0.2	0.2	0.2	0.1	0.1	0	0	0	0
24	0			0.2	0.2	0.2	0.1	0.1	0	0	0	0
25	0			0.2	0.8	0.2	0.1	0.1	0	0	0	0
26	0			0.1	1.0	0.2	1.8	0.1	0	0	0	0
27	0			0.1	0.6	0.3	0.6	0.1	0	0	0	0
28	0			0.1	0.5	0.3	0.3	0.1	0	0	0	0
29	0			0.1	1.0	0.2	0.3	0.1	0	0	0	0
30	0			0.1		0.2	0.2	0.1	0	0.1	0	0
31	0			0.1		0.9		0.1		0.1	0	
	1.1	0	0	6.2	15.8	11.3	10.6	3.4	1.7	0.2	1.2	1.5
MEAN	0.04	0	0	0.20	0.54	0.36	0.35	0.11	0.06	0.01	0.04	0.05
ACRE-FEET	2.2	0	0	12	31	22	21	6.7	3.4	0.4	2.4	3.0

Remarks: E - Indicates Estimated.

YEAR OR PERIOD MEAN 0.14
ACRE-FEET 104

STATION U2R

LOS ANGELES RIVER BASIN Eaton Creek near Pasadena

LOCATION:

Water-stage recorder and broad-crested weir control, lat. 34°11'40", long. 118°06'15", in SE 1/4 sec. 2, T. 1 N., R. 12 W., 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 1940

AVERAGE DISCHARGE:

22 years, 2.31 second-feet. Average combined discharge of creek and diversion, 22 years, 3.33 second-feet.

EXTREMES:

Maximum discharge during year, 220 second-feet Jan. 8 (gage height, 2.40 feet) from rating curve extended above 40 second-feet on basis of computed rating for broad-crested control; no flow for several months.

1918-1940:
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 3 discharge measurements furnished by Los Angeles County Flood Control District.

Monthly diversion, in acre-feet, from Eaton Creek by City of Pasadena, water year 1939-1940.

October	99	May	126
November	54	June	74
December	53	July	45
January	144	August	32
February	174	September	27
March	228		
April	180	The year	1,240

F. C. D. FORM 104 IN 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. U2R

DISCHARGE MEASUREMENTS OF EATON CREEK

NEAR Pasadena DURING THE YEAR ENDING SEPTEMBER 30, 19 40

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	RATING POINT(S) USED	METH OD	MEAS SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO
309	12-26	Wittman				.03	.04		.6	4	0		
310	1-9	"				.65	11.6		.6	12	0		
311	1-11	Edgecomb				.29	2.6		.6	15	0		
312	2-1	Wittman				.81	18.9		.6	19	-.06		
313	2-2	Lindsay & Middleton	17.5	7.63	1.80	.83	13.7		.6	10	0	1204P 1212P	FC28
314	2-2	Wittman				.81	18.0		.6	18	0		
315	2-3	"				.94	24.2		.6	20	+.12		
316	2-8	Lindsay	4.7	0.97	.41	.11	.40		.6	5	0	1117A 1123A	FC28
317	2-26	Wittman				.88	14.6		.6	14	0		
318	2-29	Lord				.73	16.0		.6	13	-.01		
319	2-29	Edgecomb				.73	14.6		.6	15	-.01		
320	2-29	Lord				.73	15.2		.6	11	0		
321	2-29	Lindsay & Middleton	14.3	5.21	2.60	.66	13.6		.6	9	0	1207P 1217P	FC28
322	3-6	Lindsay	6.0	1.04	.86	.17	.89		.6	7	0	110P 120P	FC28
323	4-1	Wittman				.45	7.7		.6	11	0		

F.C. Dist. Form 52 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

Sta. No U2R

Daily discharge, in second-feet of EATON CREEK near Pasadena, for the year ending September 30, 1940

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			0	0	15	4.6	6					
2			0	0.1	25	2.4	0.2					
3			0	0.1	28	2.7	0.1					
4			0	0.1	22	2.6	0.4					
5			0	0.1	12	1.6	0.4					
6			0	0.1	6	0.8	0					
7			0	6.5	5	0.5	0					
8			0	36	5	0.2	0					
9			0	12	1.5	0.4	0					
10			0	6	0.5	0.1	0					
11			0	5.5	0.5	0	0					
12			0	6	0	0	0					
13			0	4.3	0	0	0					
14			0	3.1	0.1	0	0					
15			0	1.6	0.2	0	0					
16			0	0.8	0	0	0					
17			0	0	0	0	0					
18			0	0	0	0	0					
19			0	0	0	0	0					
20			0	0	0	0	0					
21			0	0	0	0	0					
22			0	0	0.1	0	0					
23			0	0.7	0	0	0					
24			0	0.3	0	0	0					
25			0	0	15	0	0					
26			0.1	0	16	0	9					
27			0.1	0	5.5	0	2.0					
28			0.2	0	4.2	0	0					
29			0.1	0	14	0	0					
30			0	0		0	0					
31			0	0		11						
	0	0	0.5	833	175.6	27.1	18.1	0	0	0	0	0
Mean	0	0	.02	2.69	6.06	.87	.60	0	0	0	0	0
Acre-Feet	0	0	1.0	165	348	54	36	0	0	0	0	0

Remarks:

YEAR OR CALENDAR YEAR Mean .83
Acre-Feet 604

STATION U7R

SAN GABRIEL RIVER BASIN Fish Creek near Duarte

LOCATION:

Water-stage recorder and broad-crested weir control, lat. 34°10'00", long. 117°55'25", in SW 1/4 SW 1/4 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 1940.

AVERAGE DISCHARGE:

23 years (1917-1940), 3.98 second-feet.

EXTREMES:

Maximum discharge during year, 225 second-feet 3 a.m. Jan. 8 (gage height, 2.80 feet) from rating curve extended above 45 second-feet on basis of broad-crested weir control formula; minimum discharge, 0.1 second-foot many days July, August, and September.

1916-1940:
Maximum discharge, about 2,180 second-feet Apr. 4, 1925; no flow during periods in 1919-21, 1924, 1929-30.

REMARKS:

Records fair. Discharge for periods of missing gage heights, Dec. 10-12, Jan. 15-21, and Feb. 16-19, was computed on the basis of daily staff gage readings combined with interpolation of discharge. No diversions or regulation above station. Los Angeles County Flood Control District furnished some measurements.

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. U7R

DISCHARGE MEASUREMENTS OF FISH CREEK

NEAR Duarte DURING THE YEAR ENDING SEPTEMBER 30, 1940.

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.
1291	10-5	Lindsay	7.5	1.93	.54	.11	1.0		.6	8	0	308P 316P	FC28
1292	10-11	Wittman				.12	1.1		.6	12	0		
1293	10-17	"				.12	1.1		.6	7	0		
1294	10-19	Lindsay	7.3	1.69	.47	.12	.80		.6	7	0	120P 126P	FC28
1295	10-25	Wittman				.12	1.1		.6	10	0		
1296	10-30	"				.15	.70		.6	7	0		
1297	11-2	Lindsay	6.2	1.70	.41	.19	.74		.6	6	0	950A 958A	FC28
1298	11-22	"	7.0	1.72	.41	.23	.67		.6	7	0	148P	FC28
1298A	11-29	Wittman				.28	.70		.6	5	0		
1299	12-12	"				.31	1.0		.6	10	0		
1300	12-14	Lindsay	7.0	1.90	.42	.31	.82		.6	7	0	232P 240P	FC28
1301	12-26	Wittman				.31	.91		.6	10	0		
1302	1-8	Edgecomb				1.03	15.2		.6	12	-.22		
1303	1-8	Edgecomb				.92	13.1		.6	12	-.01		
1304	1-8	"				.86	12.6		.6	13	-.01		
1305	1-9	"				.77	11.7		.6	12	-.02		
1306	1-9	"				.69	9.8		.6	14	-.02		
1307	1-11	"				.44	5.5		.6	12	+.01		
1308	1-11	"				.66	5.7		.6	12	0		
1309	1-12	"				.80	7.1		.6	11	0		
1310	1-18	Lindsay	6.1	1.37	1.24	.35	1.7		.6	6	0	223P 230P	FC28
1311	1-22	Wittman				0.24	1.9		.6	9	0		
1312	1-29	"				.23	1.2		.6	11	0		
1313	2-2	Dalton				1.26	27.3		.6	18	-.03		
1314	2-3	"				1.22	25.4		.6	18	-.01		
1315	2-6	Wittman				.75	9.9		.6	11	0		
1316	2-7	Lindsay - Ingram	10.5	3.95	1.87	.61	7.4		.6	8	0	250P 300P	FC28
1317	2-20	Wittman				.32	2.6		.6	9	0		
1318	2-29	Dalton				.80	12.2		.6	14	-.02		
1319	3-1	Wittman				.54	8.5		.6	12	0		
1320	3-6	Lindsay	10.7	2.89	1.52	.31	4.4		.6	10	0	318P 330P	FC28
1321	3-12	Wittman				.28	3.7		.6	11	0		
1322	3-14	Lindsay	8.5	1.99	1.26	.29	2.5		.6	8	0	835A 846A	FC28
1323	3-18	Wittman				.27	3.1		.6	8	0		
1324	3-21	Lindsay	8.3	1.72	1.16	.27	2.0		.6	8	0	120P 128P	FC28
1325	3-26	Wittman				.25	2.6		.6	8	0		
1326	4-1	Dalton				.47	6.9		.6	10	0		
1327	4-4	Wittman				.32	3.0		.6	12	0		
1328	4-11	Lindsay	7.0	1.30	1.23	.23	1.6		.6	7	0	125P 133P	FC28
1329	4-15	Wittman				.24	2.1		.6	9	0		
1330	4-22	"				.21	1.9		.6	10	0		
1331	4-27	Dalton				.28	3.7		.6	9	0		
1332	4-29	Wittman				.23	2.6		.6	9	0		
1333	5-7	Wittman				0.20	2.1		.6	10	0		
1334	5-9	Lindsay	5.5	1.39	.85	.17	1.2		.6	7	0	159P 208P	FC28
1335	5-20	Wittman				.20	1.5		.6	9	0		
1336	5-23	Lindsay	4.5	1.19	.82	.18	.98		.6	7	0	228P 236P	FC28
1337	5-27	Wittman				.22	1.6		.6	9	0		
1338	6-3	"				.24	1.0		.6	9	0		
1339	6-6	Lindsay	5.8	1.17	.81	.25	.95		.6	7	0	325P 332P	FC28
1340	6-10	Wittman				.22	1.0		.6	8	0		
1341	6-17	"				.20	.73		.6	7	0		
1342	6-20	Haig	2.2	.44	.98	.20	.43	Surf	4			1110A 1116A	FC33
1343	6-29	Wittman				.18	.59		.6	10	0		
1344	7-3	Haig	2.2	.38	1.26	.18	.48		.6	5	0	1155A 1202P	FC33
1345	7-3	"	2.2	.38	1.55	.18	.59		.6	5	0	1202P 1207P	"
1346	7-9	Wittman				.12	.26		.6	9	0		
1347	7-17	"				.12	.28		.6	9	0		
1348	7-25	Lindsay	2.2	.32	.50	.08	.16		.6	4	0	852A 858A	FC43
1349	7-26	Wittman				.08	.11		.6	13	0		
1350	8-5	"				.09	.14		.6	9	0		
1351	8-13	"				.05	.10		.6	11	0		
1352	8-15	Lindsay	2.3	.33	.52	.05	.17		.6	4	0	220P 225P	FC43
1353	8-26	Wittman				.09	.11		.6	11	0		
1354	8-30	Brewster	2.0	.34	.53	.07	.18		.6	3	0	1210P 1215P	FC24
1355	9-11	"	2.0	.34	.38	.06	.13		.6	4	0	910A 915A	FC24
1356	9-17	Wittman				.07	.11		.6	11	0		

F.C. Dist. Form 52 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

Sta. No. U7R

Daily discharge, in second-feet of FISH CREEK near Duarte, for the year ending September 30, 1940

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.1	0.7	0.7	0.8	1.8	9	7.5	2.1	1.1	0.4	0.2	0.1
2	1.2	0.7	0.7	0.9	3.9	7	3.9	2.0	1.0	0.4	0.1	0.1
3	1.1	0.7	0.7	0.9	3.8	6.5	3.3	2.0	1.0	0.4	0.1	0.1
4	1.2	0.7	0.7	3.1	2.2	5.5	3.1	1.9	1.1	0.3	0.1	0.2
5	1.1	0.7	0.6	1.3	1.4	5	2.8	1.9	1.1	0.3	0.1	0.2
6	1.5	0.8	0.7	1.2	1.0	4.7	2.6	1.8	1.0	0.2	0.1	0.2
7	2.3	0.8	0.8	1.2	8.5	4.3	2.4	1.8	1.0	0.2	0.1	0.2
8	1.3	1.0	0.9	4.3	7.5	4.0	2.4	1.6	1.0	0.2	0.1	0.2
9	1.2	1.1	0.9	1.0	6.5	4.1	2.3	1.4	1.0	0.2	0.1	0.1
10	1.2	0.9	E 0.9	6	5.5	4.1	2.1	1.4	1.0	0.1	0.1	0.1
11	1.1	0.8	E 1.2	6	4.9	4.0	1.8	1.3	0.9	0.1	0.1	0.1
12	1.1	0.8	E 1.0	7	4.4	3.9	1.7	1.2	0.9	0.1	0.1	0.1
13	1.1	0.7	0.9	4.9	4.3	3.6	1.6	1.2	0.7	0.1	0.1	0.1
14	1.1	0.7	0.8	3.1	4.7	3.3	1.6	1.2	0.7	0.1	0.1	0.1
15	1.0	0.7	0.8	E 2.7	4.0	3.1	2.0	1.1	0.8	0.1	0.1	0.1
16	1.0	0.7	0.8	E 2.0	E 3.6	3.0	1.9	1.1	0.7	0.2	0.1	0.1
17	1.0	0.7	0.7	E 1.9	E 3.2	2.6	1.8	1.3	0.7	0.2	0.1	0.1
18	1.0	0.7	0.6	E 1.8	E 2.8	2.7	1.7	1.6	0.6	0.3	0.1	0.1
19	1.0	0.7	0.6	E 1.8	E 2.6	2.6	1.7	1.3	0.4	0.3	0.1	0.1
20	1.0	0.7	0.6	E 1.8	2.4	2.6	1.8	1.3	0.4	0.2	0.1	0.1
21	0.9	0.7	0.6	E 1.8	2.3	2.6	1.8	1.3	0.4	0.2	0.1	0.1
22	0.9	0.7	0.6	1.8	2.7	2.4	1.9	1.2	0.4	0.1	0.1	0.1
23	1.0	0.7	1.8	3.1	2.7	2.2	1.9	1.2	0.4	0.1	0.1	0.1
24	1.1	0.7	1.1	2.0	2.3	2.1	1.9	1.2	0.4	0.1	0.1	0.1
25	1.1	0.7	0.9	1.5	2.8	2.1	1.9	1.2	0.4	0.1	0.1	0.1
26	0.9	0.7	0.9	1.3	2.2	2.2	1.2	1.3	0.4	0.1	0.1	0.1
27	0.8	0.7	0.7	1.3	1.1	2.4	4.3	1.5	0.4	0.1	0.1	0.1
28	0.7	0.7	0.7	1.2	9	2.2	3.1	1.5	0.4	0.4	0.1	0.1
29	0.7	0.7	0.7	1.2	1.3	2.1	2.6	1.4	0.4	0.4	0.1	0.1
30	0.7	0.7	0.7	1.3		2.1	2.4	1.3	0.4	0.3	0.1	0.1
31	0.7		0.8	1.3		8.5		1.2		0.2	0.1	
	33.1	22.3	25.1	130.0	298.9	116.7	83.8	44.8	21.1	6.5	3.2	3.5
MEAN	1.07	0.74	0.81	4.19	10.3	3.76	2.79	1.45	0.70	0.21	0.10	0.12
ACRE FEET	66	44	50	258	593	231	166	89	42	13	6.3	6.9

Remarks:

E Estimated.

YEAR OR PERIOD — MEAN 2.16 — ACRE FEET 1,570

STATION U12R

LOS ANGELES RIVER BASIN Haines Creek near Tujunga

LOCATION:

Water-stage recorder and broad-crested weir control, lat. 34°15'50", long. 118°16'15", in W 1/4 NW 1/4 sec. 17, T. 2 N., R. 13 W., 800 feet upstream from mouth of canyon and 1-1/2 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 1940.

AVERAGE DISCHARGE:

22 years, 0.138 second-foot.

EXTREMES:

Maximum stage during year, 4.3 feet Jan. 8 (discharge not determined); no flow at times in September.
1917-1934, 1935-1940:
Maximum stage, 11.0 feet Jan. 1, 1934 (discharge not determined); no flow for periods nearly every year.

REMARKS:

Records good except those for periods of missing gage heights or of moss and debris effect at low water, which are fair. Mean monthly discharge is computed for July to September, flow less than 0.01 second-foot.

F. C. D. FORM 104 IM 6-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. U12R

DISCHARGE MEASUREMENTS OF HAINES CREEK

NEAR Tujunga DURING THE YEAR ENDING SEPTEMBER 30, 19 40

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Dif.	METH OD	MEAS SEC NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
248	11-28	Wittman				1.08	.02		.6	2	0		
249	12-11	"				1.12	.05		.6	3	0		
250	1-2	"				1.07	.02		.6	3	0		
251	1-8	"				1.73	.74		.6	4	-.06		
252	1-18	"				1.10	.09		.6	3	0		
253	2-1	"				1.43	.63		.6	4	-.04		
254	2-5	"				1.22	.23		.6	4	0		
255	2-20	"				1.20	.28		.6	4	0		
256	2-26	"				1.34	.20		.6	3	0		
257	3-8	"				1.21	.22		.6	4	0		
258	3-18	"				1.16	.11		.6	4	0		
259	4-1	"				1.28	.31		.6	4	-.01		
260	4-15	"				1.10	.07		.6	6	0		
261	4-27	"				1.24	.13		.6	3	0		
262	4-29	"				1.10	.06		.6	3	0		

F.C. Dist. Form 52 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

Sta. No. U12R

Daily discharge, in second-feet of HAINES CREEK near Tujunga, for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.02	0.01	E 0.02	E 0.02	2.1	0.35	0.28	0.05	0.02	↑	↑	
2	0.02	0.01	E 0.02	0.02	2.4	0.32	0.19	0.05	0.02			
3	0.02	0.01	E 0.02	0.01	2.3	0.29	0.17	0.05	E 0.02		.005	
4	0.02	0.01	E 0.02	0.08	0.78	0.26	0.15	0.05	E 0.02		↓	
5	0.03	0.02	E 0.02	0.11	0.26	0.24	0.13	0.05	E 0.02			
6	0.02	0.02	E 0.02	0.11	0.24	0.24	0.13	0.05	E 0.02			
7	0.01	0.02	E 0.02	0.50	0.21	0.24	0.11	0.05	E 0.02			
8	0.01	E 0.01	E 0.02	7.5	0.24	0.21	0.09	0.05	E 0.02			
9	0.01	E 0.01	E 0.02	0.60	0.21	0.19	0.08	0.04	E 0.01			
10	0.01	E 0.01	E 0.02	E 0.30	0.21	0.19	0.08	0.03	E 0.01			
11	0.02	E 0.01	0.03	E 0.40	0.24	0.19	0.06	0.02	E 0.01			
12	0.01	E 0.01	0.02	E 0.35	0.21	0.19	0.08	0.02	E 0.01			
13	0.01	E 0.01	E 0.02	E 0.30	0.24	0.19	0.06	0.01	E 0.01			
14	0.01	E 0.01	0.02	E 0.25	0.32	0.15	0.06	0.01	E 0.01			
15	0.01	E 0.01	0.02	E 0.20	0.32	0.15	0.08	0.01	E 0.01	.005		
16	0.01	E 0.01	0.02	E 0.15	0.32	0.13	0.08	0.02	E 0.01			
17	0.01	0.01	0.02	E 0.10	0.32	0.13	0.06	0.03	E 0.01			
18	0.01	0.02	0.02	0.09	0.29	0.11	0.06	0.04	E 0.01			
19	0.01	0.02	0.03	0.09	0.29	0.09	0.06	0.05	E 0.01			
20	0.01	0.02	0.03	0.11	0.29	0.09	0.06	0.05	↓			
21	0.01	0.02	0.03	0.13	0.29	0.09	0.06	0.05				
22	0.01	0.02	0.03	0.13	0.26	0.09	0.06	0.04				
23	0.02	0.02	0.09	0.78	0.26	0.11	0.06	0.03				
24	0.02	0.02	0.06	0.39	0.24	0.11	0.06	0.03				
25	0.01	0.02	0.05	0.19	1.4	0.13	0.06	0.05	E .005			
26	0.01	0.02	0.04	0.15	0.36	0.13	0.50	0.04				
27	0.01	0.02	0.04	E 0.12	0.17	0.13	0.11	0.03				
28	0.01	0.04	0.03	E 0.11	0.24	0.11	0.08	0.03				
29	0.01	0.02	E 0.03	E 0.11	0.78	0.11	0.06	0.03				
30	0.01	0.02	E 0.03	E 0.10		0.09	0.06	0.03				
31	0.01		E 0.02	E 0.10		0.60		0.03				
	0.41	0.48	0.86	13.60	15.79	5.65	3.20	1.12	.32	.155		
MEAN	0.013	0.016	0.028	0.439	0.544	0.182	0.107	0.036	0.011	E0.005	E 0.002	E 0.001
ACRE-FEET	0.81	0.95	1.7	27	31	11	6.3	2.2	0.64	0.31	0.12	0.06

Remarks:
E Estimated

YEAR OR ~~DURING~~ MEAN 0.114
ACRE-FEET 82

F. C. D. FORM 104 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. U3R

DISCHARGE MEASUREMENTS OF LITTLE SANTA ANITA CREEK

~~NEAR~~ Sierra Madre DURING THE YEAR ENDING SEPTEMBER 30, 19 40

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	RATING PERCENT DIF.	METH OD	MEAS SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
625	10-6	Wittman				.76	.29		.6	6	0		
626	10-26	"				.72	.28		.6	7	0		
627	11-24	"				.69	.24		.6	6	0		
628	12-15	"				.72	.29		.6	5	0		
629	12-27	"				.73	.30		.6	7	0		
630	12-27	"				.73	.24		.6	6	0		
631	1-11	"				.83	1.8		.6	8	0		
632	2-2	"				1.03	3.0		.6	8	0		
633	2-12	"				.79	.95		.6	6	0		
634	3-13	"				.78	.81		.6	5	0		
635	4-4	"				.81	.82		.6	6	0		
636	4-15	"				.75	.42		.6	6	0		
637	4-29	"				.72	.52		.6	6	0		
638	5-7	"				.68	.47		.6	6	0		
639	5-21	"				.66	.40		.6	6	0		
640	6-10	"				.63	.30		.6	8	0		
641	6-17	"				.62	.26		.6	10	0		
642	7-2	"				.58	.22		.6	10	0		
643	7-18	"				.57	.14		.6	10	0		
644	8-6	"				.52	.12		.6	10	0		
645	8-9	Colby				.52	.09		.6	10	0		
646	8-27	Wittman				.51	.06		.6	11	0		
647	9-17	"				.51	.08		.6	9	0		

STATION U3R

LOS ANGELES RIVER BASIN Little Santa Anita Creek near Sierra Madre

LOCATION:

Water-stage recorder and control, lat. 34°11'15", long. 118°02'35", near center of NW 1/4 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 1940.

AVERAGE DISCHARGE:

23 years (1916-1925, 1926-1940), 0.94 second-foot.

EXTREMES:

Maximum discharge during year, 35 second-feet Jan. 8 (gage height, 1.85 feet); minimum daily discharge, 0.1 second-foot July 13 to Sept. 30.

1916-1940:
Maximum discharge, 536 second-feet Mar. 2, 1938, computed on basis of inflow to Sierra Madre flood-control reservoir; dry during periods in 1919, 1924 and 1925.

REMARKS:

Records good except those for periods of missing gage heights, June 18 to July 17, which were interpolated and are fair. No diversions above station.

F.C. Dist. Form 52 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

Sta. No. U3R

Daily discharge, in second-feet of LITTLE SANTA ANITA CREEK near Sierra Madre, for the year ending September 30, 1940

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.4	0.3	0.3	0.3	2.0	1.5	1.4	0.5	0.4	E 0.2	0.1	0.1
2	0.4	0.3	0.3	0.3	4.3	1.4	1.1	0.5	0.4	E 0.2	0.1	0.1
3	0.4	0.3	0.3	0.3	4.3	1.3	0.9	0.5	0.4	E 0.2	0.1	0.1
4	0.4	0.3	0.3	0.7	3.2	1.2	0.8	0.5	0.4	E 0.2	0.1	0.1
5	0.4	0.3	0.3	0.4	2.4	1.2	0.6	0.5	0.4	E 0.2	0.1	0.1
6	0.5	0.3	0.3	0.4	2.0	1.1	0.7	0.5	0.4	E 0.2	0.1	0.1
7	0.5	0.3	0.3	1.2	1.6	1.1	0.6	0.5	0.3	E 0.2	0.1	0.1
8	0.4	0.3	0.3	5	1.5	1.0	0.6	0.5	0.3	E 0.2	0.1	0.1
9	0.4	0.3	0.3	2.3	1.2	1.0	0.6	0.5	0.3	E 0.2	0.1	0.1
10	0.4	0.3	0.3	1.8	1.1	0.9	0.6	0.5	0.3	E 0.2	0.1	0.1
11	0.4	0.3	0.3	2.0	1.1	0.9	0.5	0.4	0.3	E 0.2	0.1	0.1
12	0.3	0.3	0.3	2.0	0.9	0.8	0.4	0.4	0.3	E 0.2	0.1	0.1
13	0.3	0.3	0.3	1.6	0.9	0.8	0.4	0.4	0.2	E 0.1	0.1	0.1
14	0.3	0.3	0.3	1.2	0.9	0.7	0.4	0.4	0.2	E 0.1	0.1	0.1
15	0.3	0.3	0.3	1.1	0.8	0.7	0.4	0.4	0.2	E 0.1	0.1	0.1
16	0.3	0.3	0.3	0.9	0.8	0.7	0.4	0.4	0.3	E 0.1	0.1	0.1
17	0.3	0.3	0.2	0.8	0.7	0.6	0.4	0.4	0.3	E 0.1	0.1	0.1
18	0.3	0.3	0.2	0.8	0.7	0.6	0.4	0.4	E 0.3	0.1	0.1	0.1
19	0.3	0.3	0.2	0.7	0.6	0.6	0.4	0.4	E 0.3	0.1	0.1	0.1
20	0.3	0.3	0.2	0.7	0.6	0.6	0.4	0.4	E 0.3	0.1	0.1	0.1
21	0.3	0.3	0.2	0.6	0.6	0.6	0.4	0.4	E 0.2	0.1	0.1	0.1
22	0.3	0.3	0.2	0.6	0.6	0.6	0.4	0.4	E 0.2	0.1	0.1	0.1
23	0.3	0.2	0.4	0.7	0.6	0.6	0.4	0.4	E 0.2	0.1	0.1	0.1
24	0.3	0.2	0.3	0.6	0.6	0.6	0.4	0.4	E 0.2	0.1	0.1	0.1
25	0.3	0.3	0.3	0.6	2.6	0.6	0.4	0.4	E 0.2	0.1	0.1	0.1
26	0.3	0.3	0.3	0.5	2.5	0.6	1.3	0.4	E 0.2	0.1	0.1	0.1
27	0.3	0.3	0.3	0.5	1.5	0.6	0.8	0.4	E 0.2	0.1	0.1	0.1
28	0.3	0.3	0.3	0.5	1.4	0.6	0.7	0.4	E 0.2	0.1	0.1	0.1
29	0.3	0.3	0.3	0.5	2.2	0.6	0.6	0.4	E 0.2	0.1	0.1	0.1
30	0.3	0.3	0.3	0.5		0.6	0.5	0.4	E 0.2	0.1	0.1	0.1
31	0.3		0.3	0.5		1.5		0.4		0.1	0.1	
	10.6	8.8	8.8	30.6	44.2	26.2	18.1	13.4	8.3	4.3	3.1	3.0
MEAN	0.34	0.29	0.28	0.99	1.52	0.85	0.60	0.43	0.28	0.14	0.10	0.10
ACRE-FEET	21	17	17	61	88	52	36	27	16	8.5	6.1	6.0

Remarks:

E Estimated

YEAR OR ~~YEAR~~ MEAN 0.49
ACRE-FEET 356

STATION U14R

ANTELOPE VALLEY BASIN Rock Creek near Valyermo

LOCATION:

Water-stage recorder, lat. 34°25'10", long. 117°50'25", in NE 1/4 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 1940.

AVERAGE DISCHARGE:

16 years (1923-37, 1938-40) 12.6 second-feet.

EXTREMES:

Maximum discharge during year, 150 second-feet Feb. 25 (gage height, 3.28 feet) from rating curve extended above 40 second-feet on basis of velocity-mean depth relationship; minimum, 4.8 second-feet Sept. 24-30.

1923-40
Maximum discharge, 8,300 second-feet Mar. 2, 1938 by slope-area method.
Minimum 1.2 second-feet Aug. 22, 1925.

REMARKS:

Records good except those for days of high water Jan. 9, Feb. 25, 26, which are fair. No diversions upstream from station.

COOPERATION:

Results of 13 discharge measurements furnished by Los Angeles County Flood Control District.

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. U14R

DISCHARGE MEASUREMENTS OF ROCK CREEK

~~NEAR~~ AT Valyermo DURING THE YEAR ENDING SEPTEMBER 30, 1940

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Dif.	METH OD	MEAS SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
477	10-2	Melin				3.02	10.3	.6	12	0			
478	10-19	Lang				2.92	11.1	.6	9	0			
479	10-20	Luce	12.5	4.49	2.35	2.90	10.5	.6	10	-.01	445P 500P		FC39
480	11-3	Lang				2.88	10.8	.6	10	0			
481	11-17	"				2.82	8.3	.6	7	0			
482	11-24	Luce	7.5	3.15	2.31	2.81	7.3	.6	7	0	150P 200P		FC39
483	12-1	Lang				2.80	7.2	.6	9	0			
484	12-8	Luce	8.0	3.42	2.30	2.80	7.9	.6	6	0	510P 520P		FC39
485	12-16	Lang				2.80	7.2	.6	8	0			
486	12-21	Melin				2.80	6.8	.6	8	0			
487	1-4	"				2.50	7.1	.6	8	0			
488	1-5	Luce	5.2	2.42	3.07	2.53	7.4	.6	7	0	315P 325P		FC39
489	1-9	"	15.0	8.46	3.61	2.54	30.6	.6	9	0	448P 456P		"
490	1-9	Melin				2.55	26.8	.6	13	0			
491	1-16	"				2.19	10.4	.6	10	0			
492	1-25	Lang				2.20	11.2	.6	18	+.01			
493	2-9	"				2.36	20.0	.6	13	0			
494	2-17	Luce-Wood	11.5	5.93	2.45	2.31	14.6	.6	8	0	108P 116P		FC39
495	2-23	Lang				2.26	12.9	.6	11	0			
496	2-29	Melin				2.36	37.9	.6	14	0			
497	2-29	Luce	15.5	13.4	2.77	2.36	37.1	.6	12	0	625P 640P		FC39
498	3-9	Melin				2.13	17.5	.6	14	0			
499	3-18	"				2.03	12.9	.6	13	0			
500	3-22	Luce	14.3	7.33	2.00	2.03	14.7	.6	9	0	430P 436P		FC39
501	4-1	Luce-Pardieck	14.5	9.15	3.03	2.25	27.7	.6	9	0	120P 127P		"
502	4-1	Melin				2.24	22.0	.6	14	0			
503	4-6	Lang				2.20	24.4	.6	17	0			
504	4-20	Luce-M.Luce	14.5	7.34	2.14	2.13	15.7	.6	9	0	1010A 1020A		FC39
505	4-27	Lang				2.15	20.1	.6	10	0			
506	5-17	"				2.08	13.6	.6	10	0			
507	5-18	Luce	14.0	7.32	1.95	2.11	14.2	.6	9	0	740A 755A		FC39
508	6-1	Lang				2.06	12.6	.6	10	0			
509	6-29	Luce	10.5	5.06	2.06	2.03	10.5	.6	8	0	745A 755A		FC39
510	7-6	Melin				1.99	7.4	.6	15	0			
511	7-23	Lang				1.96	7.3	.6	10	0			
512	7-26	Luce	10.0	4.49	1.43	1.94	6.4	.6	9	0	305P 315P		FC39
513	8-6	Lang				1.96	6.8	.6	9	0			
514	8-20	"				1.95	6.0	.6	9	0			
515	8-23	Luce	9.8	4.36	1.43	1.95	6.2	.6	9	0	115P 125P		FC39
516	9-4	Lang				1.96	6.8	.6	12	0			
517	9-17	"				1.93	5.7	.6	10	0			
518	9-20	Luce-Koch	9.5	4.17	1.30	1.93	5.4	.6	7	0	1046A 1052A		FC39

F.C. Dist. Form 52 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

Sta. No. U14R

Daily discharge, in second-feet of ROCK CREEK near Valyermo, for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	10	7	7	13	32	27	19	12	9	7.5	7
2	11	10	7	7	11	29	24	18	12	8.5	7.5	7
3	11	10	7	6.5	25	27	24	18	12	8	7	7
4	10	10	7	7	27	24	24	18	12	8	7.5	6.5
5	10	10	7	7.5	23	23	24	17	12	8	7.5	6.5
6	10	10	7	8	21	22	24	17	12	8	7.5	6.5
7	10	10	7	11	20	20	23	16	12	7.5	7.5	6
8	10	11	7	60	20	20	22	15	12	7.5	7.5	6
9	10	11	7	31	20	19	22	14	11	7.5	7.5	6
10	10	10	7	20	18	18	21	14	11	7.5	7.5	6
11	10	10	7	16	18	18	20	14	11	7.5	7	6
12	11	9.5	7	15	17	18	20	14	11	7.5	7	6
13	12	9.5	7	14	16	17	19	13	10	7.5	6.5	6
14	12	9	7	13	17	16	18	13	10	7.5	7	6
15	12	8	7	12	16	15	18	13	10	7.5	7	6
16	11	8	7	11	15	15	18	13	11	7.5	7	5.5
17	11	8.5	7	11	15	15	17	14	11	7.5	7	6
18	11	8	7	10	14	14	17	14	11	7.5	6.5	6
19	11	8	7	10	14	15	16	13	11	7.5	6.5	5.5
20	11	8	7	10	14	14	15	13	11	7.5	6.5	5.5
21	11	8	7	10	13	14	15	12	11	7.5	6.5	5.5
22	10	7.5	7	9.5	13	14	15	12	10	7.5	6.5	5.5
23	10	7	8	10	13	13	14	12	10	7.5	6.5	5.5
24	10	7	7	10	13	13	14	12	10	7.5	6.5	5
25	11	7.5	7	11	39	13	14	12	10	7	6.5	5
26	11	7	7	11	78	13	20	12	10	7	6.5	5
27	11	7	7	12	40	14	20	12	10	7	6.5	5
28	11	8	7	11	31	14	21	12	9.5	7.5	6.5	5
29	10	7	7	11	39	13	20	12	9.5	7.5	7	5
30	10	7	7	11		12	20	12	9.5	7	7	5
31	10		7	11		26		12		7.5	7	
	331	261.5	218	404.5	633	550	586	432	324.5	235.0	215.5	174.5
Mean	10.7	8.72	7.03	13.0	21.8	17.7	19.5	13.9	10.8	7.58	6.95	6.82
Acre-Feet	657	519	432	802	1260	1090	1160	857	644	466	427	346

Remarks:

YEAR OR ~~WATER~~ MEAN 11.9
ACRE-FEET 8660

STATION U6R

SAN GABRIEL RIVER BASIN Rogers Creek near Azusa

LOCATION:

Water-stage recorder, lat. 34°09'55", long. 117°54'20", in NW 1/4 NW 1/4 sec. 23, T. 1 N., R. 10 W., half a mile upstream from mouth and 2-1/2 miles north of Azusa, Altitude, about 800 feet.

DRAINAGE AREA:

6.4 square miles.

RECORDS AVAILABLE:

October 1917 to September 1940. May 1916 to June 1917, discharge measurements only.

AVERAGE DISCHARGE:

23 years, 2.87 second-feet.

EXTREMES:

Maximum discharge during year, 196 second-feet Jan. 8 (gage height, 6.25 feet); from rating curve extended logarithmically above 30 second-feet; no flow for part of year.

1917-1940:
Maximum discharge, about 2,600 second-feet Apr. 7, 1926; no flow for several months of each year.

REMARKS:

Records fair. Discharge for periods of missing or faulty gage heights, Oct. 20-25, Nov. 21-27, Jan. 20-22, and Feb. 11-12, was obtained by interpolation and checked by comparison with Fish Creek near Duarte. Mean monthly flow computed for June on basis of two discharge measurements. 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 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. U6R

DISCHARGE MEASUREMENTS OF ROGERS CREEK

~~XX~~ NEAR Azusa DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
												813A	
898	10-6	Lindsay	4.5	1.52	.27	4.80	.37		.6	5	0	820A	FC28
899	10-11	Wittman				4.77	.51		.6	6	0		
900	10-17	"				4.72	.32		.6	7	0		
901	10-26	"				4.66	.13		.6	5	0		
902	10-31	"				4.66	.09		.6	4	0		
												835A	
903	11-2	Lindsay	2.2	.22	.36	4.66	.09		.6	4	0	840A	FC28
904	11-28	Wittman				4.64	.09		.6	5	0		
905	12-11	"				4.78	.32		.6	5	0		
906	12-27	"				4.88	.23		.6	6	0		
												420P	
907	1-4	Lindsay	7.5	2.38	.56	5.01	1.3		.6	6	0	425P	FC28
908	1-8	Ebert				4.68	11.9		.6	12	-.01		
909	1-8	Edgecomb				4.63	8.2		.6	11	0		
910	1-9	"				4.9	5.4		.6	7	0		
911	1-10	"				4.38	3.6		.6	11	0		
												920A	
912	1-11	Lindsay	7.5	2.40	1.42	4.36	3.4		.6	6	0	928A	FC28

F. C. D. FORM 104 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. U6R

DISCHARGE MEASUREMENTS OF ROGERS CREEK

NEAR Azusa DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
913	1-11	Edgecomb				4.36	2.2		.6	10	0		
914	1-12	"				4.42	3.6		.6	10	0		
915	1-16	Wittman				4.22	2.2		.6	6	-.01		
916	1-18	Lindsay	6.3	1.41	.78	4.11	.87		.6	6	0	440P 448P	FC28
917	1-23	Wittman				4.06	.55		.6	5	0		
918	1-25	Lindsay	4.5	.86	.76	4.12	.60		.6	5	0	905A 913A	FC28
919	1-30	Wittman				4.07	.68		.6	6	0		
920	2-1	Dalton				5.22	48.5		.6	14	.29		
921	2-2	Middleton & Lindsay	13.5	5.56	4.05	5.06	22.5		.6	7	0	915A 923A	FC28
922	2-2	Dalton & Ebert				4.78	15.4		.6	12	-.02		
923	2-3	Dalton				5.03	26.5		.6	14	-.04		
924	2-4	Ebert & Dalton				4.77	13.1		.6	13	0		
925	2-5	Wittman				4.66	7.8		.6	12	-.01		
926	2-8	Lindsay	9.5	1.95	1.38	4.46	2.7		.6	8	0	346P 355P	FC28
927	2-13	Wittman				4.35	1.7		.6	7	0		
928	2-15	Lindsay, R & J	7.0	1.43	1.05	4.39	1.5		.6	8	0	208P 216P	FC28
929	2-20	Wittman				4.32	1.5		.6	7	0		
930	2-23	Lindsay	7.0	1.20	1.08	4.33	1.3		.6	7	0	802A 810A	FC28
931	2-26	Dalton & Ebert				4.64	12.4		.6	12	0		
932	2-29	Dalton				4.52	9.3		.6	12	0		
933	3-1	Lindsay	10.3	2.79	1.86	4.39	5.2		.6	9	0	827A 835A	FC28
934	3-7	Lindsay	6.0	1.60	1.56	4.22	2.5		.6	6	0	243P 252P	"
935	3-12	Wittman				4.17	2.0		.6	8	0		
936	3-14	Lindsay	6.5	1.36	1.10	4.15	1.5		.6	7	0	1018A 1026A	FC28
937	3-19	Wittman				4.12	1.4		.6		0		
938	3-20	Lindsay	5.1	.93	.94	4.12	.87		.6	5	0	250P 257P	FC28
939	3-25	Wittman				4.12	1.6		.6	7	0		
940	3-28	Lindsay	5.0	1.03	1.07	4.13	1.1		.6	7	0	434P 442P	FC28
941	4-1	Ebert & Dalton				4.37	4.4		.6	8	0		
942	4-3	Wittman				4.22	2.5		.6	8	0		
943	4-4	Lindsay	7.0	1.32	1.06	4.20	1.4		.6	7	0	412P 420P	FC28
944	4-11	"	4.5	.90	.89	4.08	.80		.6	7	0	503P 510P	"
945	4-16	Wittman				4.12	1.2		.6	9	0		
946	4-18	Lindsay	3.5	.56	.52	3.99	.29		.6	5	0	338P 343P	FC28
947	4-22	Wittman				4.01	.48		.6	6	0		
948	4-25	Lindsay	3.0	.53	.75	4.01	.40		.6	6	0	403P 410P	FC28
949	4-27	Dalton				4.24	2.4		.6	7	-.02		
950	4-30	Wittman				4.14	1.5		.6	7	0		
951	5-2	Lindsay	4.8	.62	.98	4.06	.60		.6	6	0	355P 403P	FC28
952	5-8	Colby				4.06	.77		.6	6	0		
953	5-9	Lindsay	4.8	1.0	.61	4.04	.61		.6	7	0	432P 440P	FC28
954	5-16	"	3.0	.54	.65	4.01	.35		.6	6	0	343P 348P	"
955	5-21	Wittman				4.04	.59		.6	5	-.02		
956	5-23	Lindsay	2.6	.55	.55	3.99	.30		.6	5	0	352P 357P	FC28
957	5-27	Wittman				4.03	.57		.6	7	0		
958	5-29	Lindsay	2.5	.44	.25	3.93	.11		.6	5	0	215P 221P	FC28
959	6-3	Wittman				3.90	.01		.6	3	0		
960	6-20	Haig	1.0	.06	.08	3.88	.005	Surf	2	0	1030A 1032A		FC33

F.C. Dist. Form 52 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

Sta. No U6R

Daily discharge, in second-feet of ROGERS CREEK near Azusa, for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.6	0.1	0.1	0.2	18	5	5.5	1.0				
2	0.9	0.1	0.1	0.2	24	4.4	2.8	0.8				
3	0.6	0.1	0	0.2	19	3.8	2.2	0.8				
4	0.5	0.1	0	0.6	15	3.3	2.0	0.6				
5	0.4	0.1	0.1	0.4	8	3.1	1.8	0.8				
6	0.5	0.2	0.1	0.3	5	3.0	1.7	0.8				
7	1.2	0.2	0.1	5.5	3.9	2.6	1.6	0.8				
8	0.8	0.4	0.1	3.8	3.0	2.5	1.6	0.8				
9	0.7	0.6	0.2	6	2.5	2.3	1.5	0.6				
10	0.6	0.4	0.2	4.0	2.5	2.2	1.2	0.5				
11	0.5	0.3	0.3	3.0	E 2.2	2.0	1.0	0.5				
12	0.4	0.2	0.3	3.4	E 1.9	1.8	1.0	0.5				
13	0.4	0.2	0.2	2.9	1.7	1.7	0.7	0.5				
14	0.4	0.1	0.2	2.4	1.8	1.6	0.4	0.5		No flow	No flow	No flow
15	0.4	0	0.2	2.3	1.6	1.5	0.8	0.5				
16	0.4	0	0.1	2.2	1.5	1.4	1.3	0.5				
17	0.4	0	0.1	1.7	1.5	1.3	0.7	0.5				
18	0.4	0	0.1	1.1	1.5	1.3	0.4	0.6				
19	0.4	0	0.1	0.9	1.5	1.3	0.4	0.6				
20	E 0.4	0	0.2	E 0.8	1.5	1.2	0.4	0.6				
21	E 0.3	E 0	0.2	E 0.7	1.2	1.2	0.4	0.5				
22	E 0.3	E 0	0.1	E 0.6	1.3	1.2	0.4	0.5				
23	E 0.2	E 0	0.6	1.2	1.3	1.2	0.4	0.4				
24	E 0.2	E 0	0.6	1.0	1.1	1.2	0.5	0.4				
25	E 0.1	E 0.1	0.3	0.6	1.8	1.2	0.5	0.4				
26	0.1	E 0.1	0.3	0.6	12	1.3	7	0.4				
27	0.1	E 0.1	0.2	0.6	6.5	1.3	2.8	0.5				
28	0.1	0.1	0.2	0.7	5	1.1	1.8	0.5				
29	0.1	0.1	0.2	0.7	8.5	1.1	1.4	0.2				
30	0.1	0.1	0.2	0.7		1.0	1.3	0.1				
31	0.1		0.2	0.8		7		0.1				
	12.6	3.7	5.9	84.3	172.5	66.1	45.5	17.0	0.3			
MEAN	0.41	0.12	0.19	2.72	5.95	2.13	1.52	0.55	Est. 0.01	0	0	0
ACRE-FEET	25	7.3	12	167	342	131	90	34	.6	0	0	0

Remarks:

E Estimated

YEAR OR XXXX MEAN 1.11
ACRE FEET 809

STATION U15R

SANTA ANA RIVER BASIN San Antonio Creek near Claremont

LOCATION:

Water-stage recorder and broad-crested weir control, lat. 34°12'50", long. 117°40'00", in NW 1/4 SE 1/4 sec. 36, T. 2 N., R 8 W., at highway bridge, half a mile upstream from Southern California Edison Co.'s Sierra power plant, and 8 miles northeast of Claremont. Altitude, about 3,400 feet.

DRAINAGE AREA:

16.9 square miles.

RECORDS AVAILABLE:

March 1901 to September 1940.

AVERAGE DISCHARGE:

23 years (1917-1940), 10.0 second-feet. Average combined discharge of creek and conduit, 23 years (1917-1940), 22.5 second-feet.

EXTREMES:

Maximum discharge during year, 102 second-feet Jan. 8 (gage height, 2.55 feet) from rating curve extended above 30 second-feet on basis of broad-crested weir control formula; minimum, 1.4 second-feet Aug. 29, 30, and 31.

1917-1940:
Maximum discharge, 17,800 second-feet March 2, 1938, by rainfall-runoff studies; minimum, less than 0.1 second-feet for several days during October 1934.

REMARKS:

Records good. Southern California Edison Co.'s conduit diverts water above station.

The following is a table of combined monthly discharge (converted to acre-feet) of San Antonio Creek and Southern California Edison Companies Canal:

Month	Acre Feet
October	1310
November	843
December	781
January	1180
February	1600
March	2310
April	1730
May	1590
June	1150
July	932
August	780
September	682
Water year 1939-40	14890

F. C. D. FORM 104 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. U15R

DISCHARGE MEASUREMENTS OF SAN ANTONIO CREEK

NEAR Claremont DURING THE YEAR ENDING SEPTEMBER 30, 1940

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.	METH OD	MEAS SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
785	10-3	Melin				1.48	8.9		.6	11	0		
786	10-12	"				1.08	2.5		.6	10	0		
787	10-23	"				1.05	2.6		.6	15	+.01		
788	11-2	Melin & Ebert				1.06	2.5		.6	18	0		
789	11-13	Melin				1.05	2.3		.6	13	0		
790	11-21	"				1.03	2.5		.6	9	0		
791	12-5	"				1.02	1.9		.6	11	0		
792	12-18	"				1.01	1.8		.6	7	0		
793	1-2	"				1.00	1.8		.6	7	0		
794	1-8	"				1.99	39.4		.6	18	+.02		
795	1-15	"				1.09	3.5		.6	9	0		
796	1-26	"				1.07	2.8		.6	9	0		
797	2-3	"				1.56	11.4		.6	20	0		
798	2-20	"				1.25	4.6		.6	12	0		
799	2-28	"				1.52	14.2		.6	20	+.01		
800	3-11	"				1.71	21.1		.6	12	0		
801	3-25	"				1.45	12.0		.6	16	0		
802	4-2	"				1.40	10.6		.6	18	0		
803	4-17	"				1.37	9.5		.6	18	0		
804	4-27	"				1.48	9.3		.6	15	0		
805	5-6	Melin				1.36	6.8		.6	16	0		
806	5-22	Colby, Lang, Wittman, Melin				1.12	3.7		.6	9	0		
807	6-6	Melin				1.08	2.6		.6	9	0		
808	6-25	Wittman				1.00	2.0		.6	10	0		
809	7-15	Melin				1.05	2.0		.6	12	0		
810	8-2	"				1.08	1.9		.6	12	0		
811	8-26	Wittman				1.06	1.7		.6	11	0		
812	9-9	Melin				1.02	1.6		.6	16	0		
813	9-20	Colby and Melin				1.04	1.8		.6	8	0		

F. C. Dist. Form 52 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

Sta. No. U15R

Daily discharge, in second-feet of SAN ANTONIO CREEK near Claremont, for the year ending September 30, 1940

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	24	20	18	18	21	13	7	29	22	19	16
2	10	25	20	18	13	23	11	65	28	22	19	16
3	9	25	19	16	75	26	95	7	27	22	19	17
4	8	25	17	20	7	28	9	7	27	22	19	17
5	7	25	19	18	7	26	8	7	26	21	18	16
6	9	25	19	18	65	26	8	65	25	20	18	16
7	7	25	19	55	65	24	8	65	25	20	18	18
8	65	25	19	37	65	22	75	6	25	20	19	18
9	6	26	19	15	55	22	7	6	25	19	19	18
10	48	26	16	6	45	21	7	6	24	19	18	20
11	42	25	16	55	47	20	7	55	23	19	16	21
12	27	25	21	5	48	19	7	55	23	19	17	21
13	27	24	18	44	5	18	7	5	23	18	17	21
14	27	26	18	37	6	17	75	5	23	18	17	21
15	27	25	16	33	6	16	9	5	23	19	18	21
16	27	27	18	32	5	16	95	5	23	20	18	21
17	27	27	18	32	47	16	95	5	23	20	18	20
18	27	27	18	33	45	15	85	5	22	20	18	20
19	27	27	18	31	45	22	8	47	22	20	17	20
20	27	26	18	31	43	14	75	44	22	20	17	20
21	26	26	19	32	40	14	75	43	23	20	17	20
22	26	25	19	31	44	13	75	40	23	20	16	19
23	27	24	24	43	43	12	7	40	22	19	16	18
24	27	24	21	36	36	12	7	37	20	19	16	18
25	27	23	20	31	23	12	7	36	22	20	17	17
26	26	23	18	27	37	14	12	37	23	20	17	17
27	26	23	19	26	32	10	95	36	23	20	16	17
28	26	22	19	25	14	95	85	36	23	21	16	17
29	25	22	20	24	20	95	75	34	23	22	16	17
30	24	22	19	23		85	7	32	23	21	16	17
31	24		16	26		16		31		20	16	
	1382	744	588	1447	2738	5425	2490	1558	713	622	540	559
MEAN	4.46	24.8	1.90	4.67	9.44	17.5	8.30	5.03	2.38	2.01	1.74	1.86
ACRE-FEET	274	148	117	287	543	1080	494	309	141	123	107	111

Remarks:

YEAR OR PERIOD MEAN 5.14 ACRE-FEET 3730

STATION U10R

SAN GABRIEL RIVER BASIN San Dimas Creek near San Dimas

LOCATION:

Water-stage recorder and broad-crested weir control, lat. 34°08'45", long. 117°46'35", in SW 1/4 NE 1/4 sec. 25, T.1 N., R. 9 W., at mouth of San Dimas Canyon 0.7 mile downstream from flood-control reservoir, and 3 miles northeast of San Dimas. Altitude, about 1,245 feet.

DRAINAGE AREA:

18.3 square miles.

RECORDS AVAILABLE:

December 1916 to September 1940. April to September 1916, discharge measurements only.

AVERAGE DISCHARGE:

23 years (1917-1940), 4.29 second-feet.

EXTREMES:

Maximum discharge during year, 36 second-feet Feb. 4 (gage height, 1.34 feet); minimum discharge, 0.1 second-foot Oct. 4, 5, Jan. 1-3.

1916-1940:
Maximum discharge, about 4,250 second-feet Mar. 2, 1938 from records of release at the flood-control reservoir; no flow for several months during most years.

REMARKS:

Records good. 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.

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. U10R

DISCHARGE MEASUREMENTS OF SAN DIMAS

NEAR San Dimas DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
1135	10-10	Wittman				.14	.39		.6	8	0			
1136	10-11	Brewster	5.0	1.38	.50	.20	.69		.6	5	0	455P	502P	FC8
1137	10-18	Wittman				.17	.79		.6	8	0			
1138	10-19	Brewster	6.0	2.08	.62	.23	1.3		.6	6	0	335P	343P	FC8
1139	10-25	Wittman				.22	1.1		.6	10	0			
1140	10-26	Brewster	5.0	1.82	.63	.22	1.2		.6	5	0	427P	435P	FC8
1141	10-31	Wittman				.37	2.9		.6	9	0			
1142	11-2	Brewster	6.0	3.06	.79	.37	2.4		.6	6	0	420P	430P	FC8
1143	11-3	Lind	2.3	.80	2.64	.37	2.1		.6	5		405P	411P	FC19
1144	11-9	Brewster	6.0	3.06	.82	.37	2.5		.6	6	0	312P	320P	FC8
1145	11-16	"	6.0	3.08	.77	.37	2.4		.6	6	0	335P	345P	FC8
1146	11-17	Lind	7.2	3.48	.68	.38	2.4		.6	7		100P	108P	FC19
1147	11-22	Brewster	6.0	3.06	.77	.37	2.4		.6	6	0	400P	410P	FC8
1148	11-24	Wittman				.38	2.6		.6	10	0			
1149	11-30	Brewster	6.0	3.22	.78	.39	2.5		.6	6	0	415P	427P	FC8
1150	12-7	"	6.0	3.14	.79	.38	2.5		.6	6	0	405P	415P	"
1151	12-8	Lind	6.7	3.22	.65	.39	2.1		.6	8	0	315P	322P	FC19
1152	12-12	Wittman				.26	1.2		.6	9	0			
1153	12-14	Brewster	5.0	1.90	.60	.25	1.1		.6	5	0	420P	428P	FC8
1154	12-15	Lind	6.2	2.10	.46	.25	.96		.6	6		1220P	1227P	FC19
1155	12-21	Brewster	7.5	8.66	1.53	.98	13.3		.6	8	0	700A	712A	FC8
1156	12-26	Wittman				.33	2.1		.6	10	0			
1157	12-28	Brewster	4.0	1.09	.90	.23	.98		.6	4	0	430P	438P	FC8
1158	1-4	"	2.5	.48	.67	.12	.32		.6	5	0	150P	156P	"
1159	1-11	"	2.5	.88	.60	.16	.55		.6	5	0	1220P	1225P	"
1160	1-16	Wittman				.14	.36		.6	5	0			
1161	1-18	Brewster	6.0	2.96	.91	.40	2.7		.6	6	0	350P	400P	FC8
1162	1-19	Lind	7.1	3.19	.77	.40	2.4		.6	8	0	1235P	1248P	FC19
1163	1-23	Wittman				.39	2.7		.6	10	0			
1164	1-25	Brewster	5.0	2.47	.84	.36	2.1		.6	5	0	340P	350P	FC8
1165	1-26	Lind	6.5	2.69	.72	.36	2.0		.6	12	0	100P	115P	FC19
1166	1-29	Wittman				.38	2.5		.6	8	0			
1167	2-1	Brewster	6.0	3.10	.84	.44	2.6		.6	6	0	158P	207P	FC8
1168	2-2	Ebert				.89	9.7		.6	20	0			
1169	2-2	Lind	9.0	8.10	1.32	.89	10.7		.6	9	0	1230P	1240P	FC19
1170	2-4	Ebert				1.33	35.3		.6	12	0			
1171	2-6	Wittman				.90	13.1		.6	11	0			
1172	2-8	Brewster	8.0	7.48	1.41	.84	10.5		.6	8	0	432P	440P	FC8
1173	2-9	Lind	7.7	4.56	.89	.50	4.1		.6	7	0	100P	110P	FC19
1174	2-13	Wittman				.41	3.4		.6	8	0			
1175	2-15	Brewster	7.0	3.68	.87	.37	3.2		.6	7	0	345P	355P	FC8
1176	2-21	Wittman				.33	2.6		.6	10	0			
1177	2-21	Brewster	6.5	3.43	.76	.33	2.6		.6	7	0	346P	355P	FC8
1178	2-29	Brewster	6.5	3.41	.93	.39	3.2		.6	7	0	130P	140P	FC8
1179	3-1	Wittman				.37	2.8		.6	9	0			
1180	3-7	Brewster	4.0	1.21	.67	.20	.81		.6	5	0	305P	311P	FC8
1181	3-12	Wittman				.19	.66		.6	7	0			
1182	3-14	Brewster	6.0	1.90	.71	.29	1.4		.6	6	0	330P	340P	FC8
1183	3-19	Wittman				.14	.42		.6	8	0			
1184	3-26	Wittman				.15	.47		.6	8	0			
1185	3-28	Brewster	2.0	.56	.73	.08	.41		.6	4	0	300P	305P	FC24
1186	4-1	Ebert				.17	.85		.6	8	0			
1187	4-3	Wittman				.12	.68		.6	6	0			
1188	4-4	Brewster	4.0	.90	.69	.11	.60		.6	4	0	400P	406P	FC24
1189	4-11	"	4.0	.79	.63	.08	.50		.6	4	0	430P	436P	"
1190	4-16	Wittman				.12	.55		.6	7	0			
1191	4-17	Brewster	4.0	.88	.59	.12	.50		.6	4	0	900A	905A	FC24
1192	4-22	Wittman				.12	.52		.6	7	0			
1193	4-24	Brewster	4.5	.93	.66	.12	.60		.6	5	0	1025A	1032A	FC24
1194	4-30	Wittman				.15	.64		.6	6	0			
1195	5-1	Brewster	2.5	.82	.79	.15	.65		.6	5	0	850A	857A	FC24
1196	5-8	"	2.0	.58	.83	.12	.48		.6	4	0	125P	130P	"
1197	5-8	Wittman and Colby				.12	.40		.6	6	0			
1198	5-15	Brewster	5.0	2.93	1.13	.42	3.3		.6	5	0	920A	928A	FC24
1199	5-17	Lind	7.5	4.08	.98	.49	4.0		.6	12	0	333P	348P	FC19
1200	5-21	Wittman				.48	4.2		.6	10	0			
1201	5-22	Brewster	6.5	3.74	.96	.48	3.6		.6	7	0	930A	940A	FC24
1202	5-24	Lind	7.0	3.31	1.06	.48	3.5		.6	8	0	445P	455P	FC19
1203	5-27	Wittman				.47	4.1		.6	9	0			
1204	5-28	Brewster	7.0	3.38	1.12	.47	3.8		.6	7	0	1130A	1142A	FC24
1205	6-4	Wittman				.46	4.2		.6	11	0			
1206	6-5	Brewster	6.5	4.31	1.05	.46	4.5		.6	7	0	1000A	1010A	FC24
1207	6-10	Wittman				.45	4.1		.6	12	0			
1208	6-12	Brewster	6.5	3.59	1.04	.46	3.8		.6	7	0	1108A	1120A	FC24
1209	6-18	Wittman				.49	4.0		.6	8	0			
1210	6-19	Brewster	6.5	3.35	1.07	.49	3.6		.6	7	0	1037A	1048A	FC24
1211	6-26	"	6.4	3.46	1.05	.46	3.6		.6	7	0	1125A	1135A	"
1212	7-1	Wittman				.49	3.6		.6	11	0			
1213	7-3	Brewster	5.0	2.78	1.23	.48	3.4		.6	5	0	1140A	1150A	
1214	7-9	Wittman				.46	3.3		.6	11	0			
1215	7-10	Brewster	6.0	2.94	1.06	.45	3.1		.6	6	0	355P	405P	FC24
1216	7-17	Wittman				.46	3.5		.6	12	0			
1217	7-17	Brewster	6.5	3.59	1.08	.46	3.9		.6	7	0	1025A	1035A	FC24
1218	7-24	"	6.0	3.08	1.01	.45	3.1		.6	6	0	450P	500P	"
1219	7-26	Wittman				.46	3.4		.6	11	0			
1220	7-31	Brewster	6.5	3.06	1.02	.45	3.1		.6	7	0	1050A	1100A	FC24
1221	8-5	Wittman				.44	2.8		.6	11	0			
1222	8-6	Brewster	6.5	3.14	1.00	.44	3.2		.6	7	0	250P	300P	FC24
1223	8-13	Wittman				.44	2.7		.6	11	0			
1224	8-14	Lindsay	5.4	2.70	.96	.44	2.6		.6	7	0	300P	310P	FC43
1225	8-21	Brewster	6.0	2.84	1.04	.42	2.9		.6	6	0	1212P	1220P	FC24
1226	8-26	Wittman				.42	2.7		.6	10	0			
1227	8-28	Brewster	6.0	2.58	1.01	.39	2.6		.6	6	0	455P	505P	FC24
1228	9-5	"	6.0	2.50	.97	.38	2.4		.6	6	0	400P	410P	"
1229	9-9	Wittman				.38	2.1		.6	10	0			
1230	9-11	Brewster	6.0	2.56	.95	.37	2.4		.6	6	0	350P	400P	FC24
1231	9-18	"	6.0	2.38	1.00	.37	2.4		.6	6	0	1150A	1158A	"
1232	9-24	"	5.5	2.05	.94	.33	1.9		.6	6	0	158P	205P	"
1233	9-25	Wittman				.33	1.9		.6	11	0			

F.C. Dist. Form 52 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

Sta. No. U10R

Daily discharge, in second-feet of SAN DIMAS CREEK near San Dimas, for the year ending September 30, 1940

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.2	2.6	2.6	0.1	2.8	2.8	1.0	0.6	4.0	3.6	3.1	2.4
2	0.2	2.4	2.6	0.1	8	2.6	0.7	0.6	4.0	3.5	3.1	2.4
3	0.2	2.4	2.6	0.1	11	2.4	0.7	0.6	4.1	3.5	3.1	2.4
4	0.1	2.5	2.6	0.2	26	2.0	0.7	0.6	4.3	3.5	3.1	2.4
5	0.1	2.4	2.6	0.2	22	1.1	0.6	0.6	4.4	3.4	3.0	2.3
6	0.2	2.3	2.6	0.2	13	1.0	0.5	0.6	4.4	3.4	3.0	2.3
7	0.2	2.2	2.5	1.1	12	0.9	0.5	0.5	4.4	3.4	3.0	2.3
8	0.2	2.4	2.5	5	11	0.8	0.5	0.5	4.1	3.3	2.9	2.3
9	0.2	2.3	2.1	1.0	6.5	0.8	0.5	0.5	4.1	3.3	2.9	2.3
10	0.4	2.3	1.5	0.5	3.9	0.7	0.5	0.5	4.1	3.1	2.9	2.3
11	0.4	2.4	1.4	0.6	3.7	0.8	0.5	0.5	4.0	3.1	2.9	2.2
12	0.6	2.5	1.3	0.8	3.6	0.7	0.5	0.5	3.9	3.3	2.8	2.2
13	0.6	2.4	1.3	0.5	3.3	0.8	0.5	1.2	3.9	3.3	2.7	2.2
14	0.7	2.5	1.2	0.5	3.3	0.9	0.5	2.7	3.9	3.4	2.7	2.2
15	0.7	2.5	1.2	0.4	3.1	0.4	0.7	3.7	3.9	3.4	2.7	2.2
16	0.7	2.5	1.1	1.3	3.0	0.4	0.6	4.1	3.9	3.6	2.7	2.2
17	0.8	2.5	1.1	2.8	2.8	0.4	0.5	4.1	3.9	3.6	2.7	2.2
18	1.0	2.5	2.4	2.7	2.7	0.4	0.5	4.1	3.9	3.6	2.7	2.2
19	1.2	2.5	4.9	2.7	2.6	0.4	0.5	4.1	3.7	3.5	2.7	2.2
20	1.1	2.5	8.5	2.7	2.6	0.4	0.5	4.1	3.7	3.5	2.8	2.2
21	1.1	2.5	13	2.7	2.6	0.4	0.5	4.0	3.7	3.5	2.8	2.1
22	1.0	2.5	7	2.7	2.7	0.4	0.5	4.0	3.7	3.4	2.8	2.1
23	1.3	2.5	3.5	2.8	2.7	0.4	0.5	4.0	3.7	3.3	2.8	2.0
24	1.2	2.5	3.7	2.3	2.7	0.4	0.6	4.0	3.7	3.3	2.8	2.0
25	1.1	2.6	2.6	2.3	4.1	0.4	0.6	4.0	3.7	3.4	2.8	2.0
26	1.2	2.6	1.9	2.4	4.0	0.5	2.2	4.0	3.7	3.4	2.7	2.0
27	1.1	2.6	1.2	2.4	2.9	0.5	1.0	4.0	3.6	3.4	2.5	1.9
28	1.6	2.6	1.0	2.5	2.8	0.5	0.8	4.0	3.6	3.5	2.5	1.9
29	2.0	2.6	0.7	2.5	3.4	0.4	0.7	4.0	3.6	3.3	2.5	1.9
30	2.5	2.6	0.2	2.5		0.4	0.7	4.0	3.6	3.3	2.5	1.8
31	2.8		0.2	2.6		1.4		4.0		3.1	2.5	
	26.7	74.2	83.6	51.2	174.8	26.4	19.6	78.7	117.2	105.2	86.7	65.1
MEAN	0.86	2.47	2.70	1.65	6.03	0.85	0.65	2.54	3.91	3.26	2.80	2.17
ACRE-FEET	53	147	166	102	347	52	39	156	232	209	172	129

Remarks:

YEAR OR PERIOD MEAN 2.48
ACRE-FEET 1,800

STATION UBR

SAN GABRIEL RIVER BASIN San Gabriel River near Azusa

LOCATION:

Water-stage recorder, lat. 34°10'10", long. 117°53'16", in SW 1/4 sec. 13, T. 1 N., R. 10 W., 1 mile below Morris dam and 3 miles northeast of Azusa. Prior to Feb. 8 station was located about 1/4 mile upstream.

DRAINAGE AREA:

211 square miles.

RECORDS AVAILABLE:

1894 to September 1940.

AVERAGE DISCHARGE:

44 years (1896-1940), 111 second-feet. Average combined discharge of river and diversions, adjusted for storage and evaporation in Morris Reservoir and San Gabriel River flood-control reservoirs Nos. 1 and 2, 45 years (1895-1940), 158 second-feet.

EXTREMES:

Maximum daily discharge during year, 506 second-feet June 24; no flow Aug. 28 to Sept. 30.
1894-1940:
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, and 1940.

REMARKS:

Records good. Discharge figures for period of missing gage heights, Mar. 30 to Apr. 2, July 31 to Aug. 2, computed by comparison with records of release furnished by City of Pasadena. 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 Co.) diverts above high-water line of Morris Reservoir at point about 3 miles above station.

COOPERATION:

Results of some discharge measurements furnished by Los Angeles County Flood Control District.

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. This runoff 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	3509
November	2520
December	2455
January	7648
February	13337
March	9375
April	7105
May	4785
June	2717
July	2079
August	1573
September	1513
Water year 1939-1940	58616

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 measurements at various times.

F. C. D. FORM 104 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. UBR

DISCHARGE MEASUREMENTS OF SAN GABRIEL RIVER

NEAR Azusa DURING THE YEAR ENDING SEPTEMBER 30, 19 40

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Points Adj.	METH OD	MEAS SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
												730A	
1337	10-6	Lindsay	19.5	13.5	1.98	3.72	26.7		.6	10	0	745A	FC28
1338	10-11	Wittman				3.96	59.		.6	29	0		
												355P	
1339	10-11	Lindsay	20.5	20.4	2.60	3.95	53		.6	11	0	410P	FC28
1340	10-18	Wittman				3.96	63		.6	30	0		
												235P	
1341	10-19	Lindsay	20.5	19.8	2.68	3.96	53		.6	11	0	250P	FC28
1342	10-26	Wittman				3.97	61		.6	30	0		
1343	10-31	"				3.98	55		.6	29	0		
												750A	
1344	11-2	Lindsay	21.5	20.8	2.55	3.98	53		.6	11	0	805A	FC28
1345	11-9	"	21.0	20.4	2.55	3.98	52		.6	11	0	250P	"
												305P	
1346	11-16	"	21.5	21.2	2.50	3.97	53		.6	11	0	235P	"
												250P	
1347	11-22	"	2 Channels			4.01	58		.6	11	0	247P 300P	"

F. C. D. FORM 104 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. U8R

DISCHARGE MEASUREMENTS OF SAN GABRIEL RIVER

XX NEAR Azusa DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
1348	11-24	Wittman				4.02	61		.6	21	0		
1349	11-30	Lindsay	2 Channels			4.02	59		.6	15	0	912A 930A	FC28
1350	12-7	"	"	"		4.01	52		.6	11	0	255P 310P	"
1351	12-11	Wittman	Lost										
1352	12-14	Lindsay	2 Channels			3.96	53		.6	11	0	315P 330P	FC28
1353	12-21	"	"	"		3.96	49.7		.6	11	0	420P 435P	"
1354	12-21	Wittman	Lost										
1355	12-27	"				3.97	58		.6	30	0		
1356	12-29	Lindsay	2 Channels			3.97	49.8		.6	11	0	852A 905A	FC28
1357	1-4	Lindsay	"	"		3.97	50		.6	11	0	332P 347P	"
1358	1-10	Edgecomb				4.36	169		.6	11	0		
1359	1-11	Lindsay	31.0	41.0	3.10	4.36	127		.6	12	0	835A 850A	FC28
1360	1-12	Edgecomb				4.36	108		.6	12	0		
1361	1-12	"				4.36	121		.6	12	0		
1362	1-16	Wittman				4.12	80		.6	20	0		
1363	1-18	Lindsay	30.0	31.0	2.39	4.12	75		.6	15	0	340P 400P	FC28
1364	1-23	Wittman				4.13	74		.6	16	0		
1365	1-25	Lindsay	30.0	30.8	2.27	4.13	70		.6	11	0	830A 845A	FC28
1366	1-30	Wittman				4.14	80		.6	16	0		
1367	2-2	Middleton & Lindsay	30.5	31.6	2.31	4.15	73		.6	11	0	952A 1007A	FC28
1368	2-6	Wittman & Dalton				4.14	61		.6	16	0		
1369	2-8	Lindsay	31.0	31.4	2.23	4.13	70		.6	11	0	310P 325P	FC28
1370	2-13	Wittman				4.15	83		.6	16	0		
1371	2-15	Lindsay, R & J	30.5	31.3	2.36	4.15	74		.6	11	0	125P 140P	FC28
1372	2-21	Wittman				4.16	86		.6	16	0		
1373	2-23	Lindsay	30.5	30.6	2.36	4.16	72		.6	11	0	910A 925A	FC28
1374	3-1	"	31.0	32.0	2.31	4.16	74		.6	12	0	725A 740A	"
1375	3-1	Wittman				4.17	82		.6	16	0		
1376	3-7	Lindsay	29.0	29.9	2.37	4.17	71		.6	12	0	140P 155P	FC28
1377	3-12	Wittman				4.18	82		.6	16	0		
1378	3-14	Lindsay	30.5	31.8	2.36	4.18	75		.6	12	0	930A 945A	FC28
1379	3-19	Wittman				4.19	82		.6	16	0		
1380	3-20	Lindsay	30.5	32.0	2.31	4.20	74		.6	11	0	143P 157P	FC28
1381	3-25	Wittman				4.20	80		.6	21	0		
1382	3-28	Lindsay	30.0	31.0	2.35	4.19	73		.6	11	0	315P 330P	FC28
1383	4-3	Wittman				3.13	2.6		.6	13	0		
1384	4-4	Lindsay	11.5	4.81	.29	3.10	1.4		.6	6	0	232P 240P	FC28
1385	4-22	Wittman				3.17	1.1		.6	9	0		
1386	5-8	Wittman and Colby				3.26	.65		.6	7	0		
1387	5-15	Wittman				3.27	.47		.6	7	0		
1388	6-3	"				3.28	.53		.6	7	0		
1389	6-17	Lindsay	30.5	43.1	3.03	4.43	131		.6	15	0	1210P 1230P	FC43
1390	6-17	Wittman				4.43	148		.6	16	0		
1391	6-17	"				4.43	154		.6	16	0		
1392	6-18	Lindsay-Wittman	30.5	44.6	3.09	4.44	138		.6	16	0	912A 932A	FC43
1393	6-18	Wittman				4.44	158		.6	16	0		
1394	6-18	Lindsay-Wittman	30.5	45.4	3.35	4.44	152		.6	16	0	1013A 1033A	1277
1395	6-18	Wittman-Lindsay				4.44	149		.6	16	0		
1396	6-18	Lindsay	30.5	44.3	3.10	4.44	138		.6	16	0	1150A 1215P	FC43
1397	6-20	Lindsay-Ingram	42.0	92.2	3.76	4.90	347		.6	12	0	744A 802A	"
1398	6-20	Wittman				4.90	341		.2 .8	26	0		
1399	6-21	Lindsay, R & J	42.5	93.3	3.44	4.89	321		.6	13	0	740A 800A	FC43
1400	6-24	Wittman				5.13	520		.2 .8	27	0		
1401	6-24	Colby				5.13	495		.2 .8	27	0		
1402	6-24	"	134	205	2.45	5.13	502		.2 .8	27	0		
1403	6-27	Lindsay	13.5	5.92	.69	3.15	4.1		.6	8	0	815A 823A	FC43
1404	6-29	Wittman				4.82	323		.2 .8	28	+.13		
1405	7-1	"				4.85	336		.2 .8	28	0		
1406	7-9	"				2.96	.74		.6	10	0		
1407	7-11	Lindsay	31.0	30.4	1.60	3.91	48.7		.6	15	0	230P 250P	FC43
1408	7-17	Wittman				3.93	51		.6	22	0		
1409	7-18	Lindsay	31.0	31.4	1.48	3.89	46.5		.6	16	0	145P 210P	FC43
1410	8-1	Lindsay	30.5	31.9	1.45	3.92	46.3		.6	15	0	200P 222P	FC43
1411	8-3	Wittman and Colby				3.95	48.8		.6	18	0		
1412	8-8	Lindsay	32.0	34.7	1.50	3.95	52		.6	16	0	350P 410P	FC43
1413	8-13	Wittman				3.94	52		.6	18	0		
1414	8-15	Lindsay	15.5	8.95	.89	3.32	8.0		.6	8	0	320P 330P	FC43
1415	8-21	"	6.7	1.92	.65	3.04	1.2		.6	7	0	1012A 1020A	"
1416	8-26	Wittman				2.89	.16		.6	8	0		

F.C. Dist. Form 92 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

Sta. No. U8R

Daily discharge, in second-feet of SAN GABRIEL RIVER near Azusa, for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	30	56	61	52	82	78	6	0.6	0.4	344	49	
2	30	56	60	52	80	78	4.0	0.6	0.4	406	50	
3	30	56	60	52	80	80	2.6	0.5	0.5	248	50	
4	30	56	60	53	78	77	1.6	0.5	0.6	4.0	50	
5	30	56	60	52	77	75	1.1	0.5	0.5	2.2	51	
6	30	56	60	52	77	77	1.0	0.4	0.4	1.6	51	
7	30	56	60	57	77	77	0.8	0.4	0.4	1.2	52	
8	30	57	56	64	77	77	0.7	0.4	0.4	0.9	52	
9	30	57	53	110	77	77	0.6	0.5	0.4	0.7	52	
10	41	56	53	129	77	77	0.6	0.5	0.3	24	52	
11	57	56	53	129	77	77	0.5	0.5	0.3	43	52	
12	56	54	53	129	78	77	0.5	0.5	0.3	48	52	
13	56	54	53	129	78	77	0.4	0.5	0.3	51	52	
14	56	54	53	129	78	77	0.5	0.5	0.8	53	51	
15	56	54	53	100	78	78	0.5	0.4	1.1	53	26	No flow
16	56	54	53	77	78	78	0.5	0.4	1.4	52	3.7	
17	57	54	53	77	78	78	0.5	0.4	113	51	2.6	
18	57	54	53	77	78	78	0.5	0.3	190	48	2.0	
19	57	56	52	77	78	78	0.6	0.4	316	46	1.7	
20	57	58	51	75	80	78	0.6	0.4	344	46	1.4	
21	57	60	51	75	80	78	0.7	0.4	339	46	1.3	
22	57	60	51	75	78	78	1.2	0.4	355	25	1.0	
23	57	60	52	75	78	78	3.1	0.4	432	4.0	0.7	
24	57	61	52	75	78	78	1.1	0.4	506	2.6	0.4	
25	57	61	52	75	82	78	0.6	0.4	497	2.0	0.3	
26	57	61	52	75	80	78	0.8	0.4	159	1.4	0.2	
27	57	61	52	75	80	78	0.8	0.4	4.0	4.0	0.1	
28	57	61	52	77	82	77	0.8	0.4	2.6	48	0	
29	57	61	52	77	80	77	0.8	0.4	219	48	0	
30	56	61	52	77		77	0.7	0.4	333	47	0	
31	56		52	77		40		0.4		48	0	
	1501	1680		2281		349		3818.1		757.4		
	1717	2505		2366		136		1799.6		0		
MEAN	48.4	57.2	54.2	80.8	78.7	76.3	1.16	0.44	127	58.1	24.4	0
ACRE-FEET	2980	3410	3330	4970	4520	4690	69	27	7570	3570	1500	0

Remarks:

YEAR OR WATER: MEAN 50.5; ACRE-FEET 36,640

STATION U4R

LOS ANGELES RIVER BASIN Santa Anita Creek near Sierra Madre

LOCATION:

Water-stage recorder, lat. 34°11'30", long. 118°01'00", in SW 1/4 NE 1/4 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 1940.

AVERAGE DISCHARGE:

24 years 5.43 second-feet.

EXTREMES:

Maximum discharge during year, 349 second-feet Jan. 8 (gage height 4.10 feet); minimum, 0.3 second-foot at times in August and September.

1916-1940:
Maximum discharge, about 5,200 second-feet Mar. 2, 1938 based on inflow to flood-control reservoir; minimum, practically dry Aug. 18 to Sept. 14, 1929.

REMARKS:

Records good. No diversions above station.

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. U4R

DISCHARGE MEASUREMENTS OF SANTA ANITA CREEK

NEAR Sierra Madre DURING THE YEAR ENDING SEPTEMBER 30, 19 40

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Period Dif.	METH OD	MEAS SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
765	10-6	Wittman				.57	3.1		.6	16	0		
766	10-17	"				.49	2.1		.6	8	0		
767	10-30	"				.47	2.1		.6	10	0		
768	11-29	"				.46	2.4		.6	7	0		
769		Lost											
770	1-10	Wittman-Edgecomb				.98	10.3		.6	12	+.01		
771	1-12	Edgecomb				.98	10.0		.6	12	0		
772	1-22	Wittman				.69	3.5		.6	12	0		
773	2-3	"				1.47	29.4		.6	13	0		
774	2-14	Haig-Waddicor	13.0	10.1	.64	.91	6.5		.6	9	-.01	115P 127P	FC33
775	2-14	"	12.0	9.8	.74	.92	7.3		.6	9	0	213P 226P	"
776	2-14	"	12.0	10.0	.85	.93	8.5		.6	9	0	312P 321P	"
777	2-14	"	13.4	9.6	.81	.89	7.8		.6	8	-.01	459P 507P	"
778	2-14	"	11.9	9.3	.84	.88	7.8		.6	11	+.01	531P 548P	"
779	2-15	Haig	12.8	9.2	.70	.84	6.4		.6	10	0	1019A 1033A	"
780	2-21	Wittman				.78	4.5		.6	13	0		
781	2-26	"				1.30	22.8		.6	12	+.04		
782	3-18	"				.85	5.4		.6	12	0		
783	4-1	"				.94	8.6		.6	14	-.01		
784	4-16	"				.79	4.3		.6	15	0		
785	4-30	"				.80	4.1		.6	10	0		
786	5-21	Wittman				.74	3.2		.6	12	0		
787	6-4	"				.72	2.5		.6	15	0		
788	6-24	"				.68	1.2		.6	7	0		
789	7-2	"				.45	1.3		.6	7	0		
790	7-18	"				.42	.78		.6	6	0		
791	7-20	"				.41	.64		.6	6	0		
792	8-6	"				.38	.43		.6	6	0		
793	8-27	"				.37	.54		.6	10	0		
794	9-17	"				.36	.47		.6	11	0		

F.C. Dist. Form 52 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

Sta. No. U4R

Daily discharge, in second-feet of SANTA ANITA CREEK near Sierra Madre, for the year ending September 30, 1940

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.6	2.2	2.4	2.5	18	12	9.5	3.9	2.6	1.3	0.4	0.4
2	3.5	2.2	2.2	2.5	35	11	6.5	3.8	2.6	1.3	0.4	0.4
3	3.4	2.2	2.2	2.5	44	10	6	3.8	2.5	1.3	0.4	0.4
4	3.0	2.4	2.2	4.5	30	9	6	3.6	2.5	1.1	0.4	0.5
5	2.9	2.5	2.2	3.6	18	8.5	5.5	3.6	2.5	1.1	0.4	0.5
6	3.8	2.5	2.2	3.4	12	8	5	3.6	2.4	1.0	0.4	0.4
7	4.1	2.4	2.4	11	10	7.5	5	3.5	2.4	1.0	0.4	0.4
8	3.1	2.9	2.4	55	8.5	7	4.8	3.5	2.2	0.9	0.4	0.4
9	2.9	3.0	2.4	14	7.5	7	4.6	3.2	2.1	0.9	0.4	0.4
10	2.6	2.6	2.4	11	6.5	6.5	4.2	3.2	1.9	0.8	0.4	0.4
11	2.5	2.5	2.7	10	6.5	6	4.2	3.2	1.9	0.8	0.4	0.4
12	2.2	2.5	2.5	9.5	6	6	4.1	3.2	1.8	0.7	0.4	0.4
13	2.1	2.5	2.5	7.5	6	6	3.9	3.2	1.7	0.6	0.4	0.4
14	2.0	2.5	2.4	6.5	7	5.5	3.9	3.1	1.7	0.6	0.4	0.5
15	1.9	2.5	2.4	5.5	6	5.5	4.2	3.1	1.7	0.7	0.4	0.5
16	1.9	2.4	2.4	4.8	6	5.5	4.2	3.1	1.7	0.6	0.4	0.5
17	1.9	2.4	2.4	4.6	5.5	5.5	4.1	3.2	1.6	0.7	0.4	0.4
18	1.9	2.2	2.2	4.2	5.5	5.5	3.9	3.2	1.6	0.8	0.4	0.4
19	1.9	2.2	2.2	3.9	4.9	5.5	3.8	3.2	1.4	0.7	0.4	0.5
20	1.9	2.2	2.2	3.9	4.8	5.5	3.8	3.2	1.4	0.6	0.4	0.4
21	1.9	2.2	2.2	3.6	4.6	5.5	3.8	3.2	1.3	0.6	0.4	0.4
22	1.9	2.2	2.2	3.5	4.8	5	3.9	3.2	1.3	0.5	0.4	0.4
23	1.9	2.2	3.2	4.1	4.6	5	3.9	3.1	1.2	0.5	0.4	0.4
24	2.0	2.4	3.2	4.1	4.4	4.9	3.9	2.9	1.2	0.5	0.4	0.4
25	2.1	2.4	2.7	3.8	3.2	4.9	3.9	2.9	1.3	0.5	0.5	0.4
26	2.1	2.4	2.6	3.6	29	5	9	3.0	1.3	0.5	0.5	0.4
27	2.1	2.4	2.6	3.6	14	4.9	5.5	3.0	1.3	0.6	0.5	0.4
28	2.1	2.4	2.6	3.5	12	4.9	4.8	2.9	1.3	0.6	0.4	0.4
29	2.0	2.4	2.5	3.4	19	4.8	4.2	2.9	1.3	0.6	0.4	0.4
30	2.0	2.4	2.5	3.4		4.8	4.1	2.7	1.3	0.5	0.4	0.4
31	2.1		2.5	3.5		12		2.6		0.4	0.4	
	75.3	72.2	75.7	210.5	372.1	204.7	144.2	99.8	53.0	23.3	12.7	12.6
MEAN	2.43	2.41	2.44	6.79	12.8	6.60	4.81	3.22	1.77	0.75	0.41	0.42
ACRE-FEET	149	143	150	418	738	406	286	198	105	46	25	25

Remarks:

YEAR OR PERIOD MEAN 3.71
ACRE-FEET 2690

STATION U5R

SAN GABRIEL RIVER BASIN Sawpit Creek near Monrovia

LOCATION:

Water-stage recorder and broad-crested weir control, lat. 34°10'25", long. 117°59'20" in NE 1/4 SW 1/4 sec. 13, T. 1 N., R. 11 W., 0.1 mile downstream from confluence of two main branches and 2 miles north of Monrovia. Altitude, about 1,100 feet.

DRAINAGE AREA:

5.3 square miles.

RECORDS AVAILABLE:

November 1916 to September 1940.

AVERAGE DISCHARGE:

23 years (1917-1940), 1.20 second-feet. Average combined discharge of creek and diversion, 23 years, 2.51 second-feet.

EXTREMES:

Maximum discharge during year not determined; minimum, less than 0.1 second-foot for several periods.

1916-1940:
Maximum discharge, about 2,000 second-feet Apr. 7, 1926, estimated from flow of Rogers Creek; no flow during parts of most years.

REMARKS:

Records fair. Discharge is sum of flow over control plus unpublished discharge of Monrovia Creek. Regulation at flood-control dam above gage and diversions by City of Monrovia. Records do not include water diverted above station by City of Monrovia; record of this diversion furnished by city. Results of several discharge measurements furnished by Los Angeles County Flood Control District.

Monthly diversion, in acre-feet, from Sawpit Creek by City of Monrovia, water year 1939-1940.

October	117	May	97
November	92	June	103
December	87	July	116
January	53	August	87
February	60	September	83
March	70		
April	79		
		The year	1,040

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO U5R

DISCHARGE MEASUREMENTS OF SAWPIT CREEK

XX NEAR Monrovia DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
491	10-5	Lindsay	3.2	.68	.24	.07	.16		.6	5	0	926A 938A	FC28
492	10-6	Wittman				.07	.22		.6	7	0		
493	10-11	Lindsay	3.1	.69	.23	.06	.16		.6	5	0	200P 205P	FC28
494	10-18	Wittman				.04	.03		.6	2	0		
495	10-19	Lindsay	0.8	.04	.50	.02	.02		.6	2	0	917A 920A	FC28
496	10-25	Wittman				.01	.01		.6	3	0		
497	1-8	Lindsay-Keim	2 Channels			.93	16.7		.6	10	0	640A 651A	FC28
498	1-8	"	6.6	2.45	2.12	.66	5.2		.6	6	0	1131A 1137A	"
499	1-8	Ebert				.59	3.7		.6	12	0		
500	1-9	Edgecomb				.50	2.8		.6	10	0		
501	1-9	Lindsay	2 Channels			.50	3.1		.6	10	0	1035A 1045A	FC28
502	1-11	Edgecomb				.34	1.6		.6	12	0		
503	1-11	Lindsay	2 Channels			.36	1.7		.6	8	0	455P 505P	FC28
504	1-16	Wittman				.20	.67		.6	7	0		
505	1-18	Lindsay	4.4	.70	.49	.12	.34		.6	7	0	910A 918A	FC28
506	1-22	Wittman				.07	.26		.6	5	0		
507	1-23	Middleton & Lindsay	4.5	1.05	.52	.20	.55		.6	5	0	745P 751P	FC28
508	1-24	Lindsay	2.6	.69	1.02	.21	.68		.6	5	0	1009A 1014A	"
509	1-30	Wittman				.06	.26		.6	5	0		
510	1-31	Lindsay	2.8	.76	.82	.18	.62		.6	5	0	940A 946A	FC28
511	2-1	Lindsay & Middleton	7.5	3.17	1.80	.68	5.7		.6	8	0	1222P 1227P	"
512	2-2	Lindsay & Middleton	2 Channels			0.82	9.9		.6	10	-.01	505A 516A	FC28
513	2-2	Wittman				.62	4.5		.6	11	0		
514	2-2	Lindsay & Middleton	7.0	2.83	1.41	.60	4.0		.6	7	0	440P 446P	FC28
515	2-3	" "	2 Channels			.70	6.2		.6	11	+.01	254P 302P	"
516	2-4	" "	8.6	3.20	1.50	.65	4.8		.6	8	0	1100A 1105A	"
517	2-5	Wittman				.55	3.4		.6	9	0		
518	2-7	Lindsay & Ingram	6.7	1.85	1.14	.38	2.1		.6	7	0	145P 152P	FC28
519	2-14	Lindsay	3.8	.72	.67	.13	.48		.6	7	0	326P 334P	"
520	2-20	Wittman					.34		.6	7	0		
521	2-21	Lindsay	2.9	.42	.32	.09	.26		.6	5	0	940A 945A	FC28
522	2-25	Lindsay & Middleton	2 Channels			.88	11.0		.6	10	+.01	538P 545P	"
523	2-25	" "	"	"		.93	17.2		.6	10	0	910P 918P	"
524	2-26	" "	7.0	2.98	1.31	.61	3.9		.6	7	0	1045A 1050A	"
525	2-26	Wittman				.58	4.1		.6	9	0		
526	2-29	Middleton	7.2	2.62	1.62	.60	4.2		.6	7	0	851A 858A	FC28
527	3-6	Lindsay	6.8	1.41	.78	.26	1.1		.6	9	0	952A 1004A	"
528	3-13	"	2.5	.68	.38	.13	.36		.6	5	0	925A 930A	"
529	3-13	Wittman				.10	.41		.6	5	0		
530	3-18	"				.07	.23		.6	6	0		
531	3-20	Lindsay	2.2	.47	.47	.07	.22		.6	4	0	933A 937A	FC28
532	3-25	Wittman				.05	.08		.6	4	0		
533	3-28	Lindsay	1.7	.36	.31	.04	.11		.6	3	0	925A 928A	FC28
534	4-1	"	4.5	1.09	.90	.27	.98		.6	6	0	957A 1005A	"
535	4-1	Wittman				0.23	0.97		.6	7	0		
536	4-4	Lindsay	2.0	.59	.49	.11	.29		.6	4	0	844A 849A	FC28
537	4-11	"	1.8	.46	.35	.08	.16		.6	4	0	902A 906A	"
538	4-15	Wittman				.05	.07		.6	4	0		
539	4-19	Lindsay	0.5	.07	1.14	.04	.08		.6	1	0	900A 901A	FC28
540	4-25	"	1.6	.22	.50	.06	.11		.6	4	0	934A 938A	"
541	4-26	"	7.0	1.06	1.29	.38	1.4		.6	7	0	431P 440P	"
542	4-27	Wittman				.20	.81		.6	6	0		
543	4-29	"				.11	.29		.6	5	0		
544	8-15	Lindsay	4.4	.87	1.07	.27	.93		.6	9	0	944A 953A	FC43
545	8-21	"	1.5	.16	.44	.03	.07		.6	3	0	133P 137P	"
546	8-26	Wittman				.01	.06		.6	5	0		

F.C. Dist. Form St 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

Sta. No U5R

Daily discharge, in second-feet of SAWPIT CREEK near Monrovia, for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.3			0.1	6	2.8	1.7	0.1				
2	0.3			0.1	8.5	2.4	0.9	0.1				
3	0.3			0.1	8	2.1	0.6	0.1				
4	0.3			0.3	6.5	1.7	0.4	0.1				
5	0.3		0.1	0.2	5	1.4	0.3	0.1				
6	0.4		0.1	0.2	3.4	1.3	0.3	0.1				
7	0.6			3.5	2.6	1.1	0.3	0.1				
8	0.5			2.0	1.8	0.9	0.3	0.1			1.0	
9	0.4			3.4	1.5	0.7	0.3	0.1			1.4	
10	0.3	0.2		2.6	0.8	0.8	0.3	0.1			1.0	
11	0.2		0.1	2.6	0.6	0.7	0.3	0.1			1.0	
12	0.2			3.6	0.5	0.4	0.3	0.1			0.6	
13	0.2			2.8	0.4	0.4	0.3	0.1			0.2	
14	0.2			2.2	0.6	0.4	0.2	0.1			0.6	
15	0.3			1.4	0.9	0.3	0.2	0.1			1.0	
16	0.3		0.1	0.9	0.8	0.3	0.2	0.1			1.0	
17	0.3		0.1	0.6	0.5	0.3	0.2	0.1			1.0	
18	0.3		0.1	0.5	0.4	0.3	0.2	0.1			1.0	
19	0.1		0.1	0.5	0.4	0.3	0.2	0.1			0.9	
20	0.1		0.1	0.4	0.4	0.3	0.2	0.1			0.8	
21	0.1		0.1	0.4	0.3	0.3	0.2		0.1		0.1	
22	0.1		0.1	0.4	0.4	0.3	0.2		0.1		0.1	
23	0.1		0.2	0.7	0.6	0.3	0.2		0.1		0.1	
24	0.1		0.2	0.9	0.6	0.2	0.3		0.1		0.1	
25	0.1		0.1	0.8	9	0.2	0.3		0.1		0.1	
26	0.1		0.1	0.6	7.5	0.2	3.0		0.1		0.1	
27	0.1		0.1	0.4	4.0	0.2	1.3					
28	0.1		0.1	0.3	3.1	0.2	0.6					
29	0.1		0.1	0.2	5	0.2	0.4					
30	0.1		0.1	0.2		0.2	0.3					
31	0.1		0.1	0.6		1.3						
	7.0	1.65	2.7	51.5	80.1	22.5	14.5	2.77	1.80	1.41	12.7	1.20
Mean	0.23	0.055	0.087	1.66	2.76	0.73	0.48	0.089	0.060	0.045	0.410	0.040
Acre-Feet	14	3.3	5.4	102	159	45	29	5.5	3.6	2.8	25	2.4

Remarks: Note- Flow less than 0.1 second-foot on days for which no discharge is given. Totals include all flows.

Year [illegible] Mean 0.546
Acre-Feet 397

STAFF GAGE STATIONS

F. C. D. FORM 104 1M 6-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 199-S

DISCHARGE MEASUREMENTS OF ARRASTRE CREEK

At Above Soledad Canyon Road DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
2	1/5	Luce	3.5	.64	.55	0.35			.6	5		1100A 1105A	FC 35

F. C. D. FORM 104 1M 6-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 116-S

DISCHARGE MEASUREMENTS OF ARROYO DITCH

At Below Headgate DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
163	10/5	Brewster					0					1125A	
164	10/11	"					0					1120A	
165	10/19	"					0					1120A	
166	10/26	"	7.5	3.92	1.79	0.62	7.0		.6	4	0	1204P 1212P	FC 8
167	11/2	"	7.5	4.77	2.15	0.68	10.		.6	4	0	1115A 1122A	"
168	11/9	"					0					1130A	
169	11/16	"	7.5	6.03	2.27	0.93	14.		.6	4	0	1110A 1117A	"
170	11/22	"	7.5	8.51	1.90	1.12	16.		.6	4	0	1036A 1043A	"
171	11/30	"	7.5	11.14	2.06	1.51	23.		.6	4	0	1230P 1240P	"
172	12/7	"	7.5	8.97	2.62	1.23	24.		.6	4	0	1230P 1240P	"
173	12/14	"	7.5	10.92	1.80	1.49	20.		.6	4	0	1110A 1118A	"
174	12/21	"	7.5	7.51	2.35	1.06	18.		.6	4	0	1230P 1237P	"
175	12/28	"	7.5	5.49	2.48	0.72	14.		.6	4	0	1215P 1223P	"
176	1/5	"					0					445P	
177	1/12	"					0					1235P	
178	1/18	"					0					1240P	
179	1/25	"					0					1240P	
180	2/3	"					0					1155A	
181	2/8	"					0					1145A	
182	2/15	"					0					1130A	
183	2/21	"					0					1110A	
184	3/1	"					0					200P	
185	3/7	"					0					1140A	
186	3/14	"					0					1105A	
187	3/21	Brewster					0					1125A	
188	3/28	"	7.5	4.24	0.90	0.58	3.8		.6	4	0	1110A 1120A	FC 24
189	4/4	"	7.5	4.36	0.93	0.58	4.0		.6	4	0	1135A 1142A	"
190	4/11	"	7.5	4.40	0.95	0.58	4.2		.6	4	0	1120A 1130A	"
191	4/18	"	7.5	7.65	1.93	1.03	15.		.6	4	0	1110A 1118A	"
192	4/25	"	7.5	6.70	1.47	0.89	9.9		.6	4	0	1140A 1146A	"
193	5/2	"	7.5	7.91	0.84	0.82	6.7		.6	4	0	1206P 1214P	"
194	5/9	"	7.5	6.66	1.45	0.87	9.7		.6	4	0	1125A 1132A	"
195	5/16	"	7.5	7.05	1.77	0.95	12.		.6	4	0	1240P 1248P	"
196	5/23	"	7.5	7.46	1.75	0.99	13.		.6	4	0	1135A 1143A	"
197	5/29	"	7.5	7.30	2.19	1.01	16.		.6	4	0	1142A 1150A	"
198	6/6	"	7.5	9.72	2.06	1.28	20.		.6	4	0	1120A 1128A	"
199	6/13	"	7.5	9.66	2.25	1.34	22.		.6	4	0	1220P 1228P	"
200	6/20	"	7.5	11.69	1.97	1.58	23.		.6	4	0	1156A 1204P	"
201	6/20	Lindsay	6.8	12.52	1.68		21.		.6	8	0	246P 255P	FC 43
202	6/21	"	6.7	9.79	1.93		19.		.6	8	-	302P 312P	"
203	6/23	Lindsay-Lindsay	6.7	10.23	1.96		20.		.6	8	-	305P 315P	FC 43
204	6/24	" "	6.7	10.59	1.84		19.		.6	8	-	412P 420P	"
205	6/27	Brewster	7.5	14.27	1.66	1.88	24.		.6	4	0	1130A 1136A	FC 24
206	6/30	Lindsay	6.7	9.98	1.86	-	19.		.6	8	-	152P 200P	FC 43
207	7/1	"					0					145P	
208	7/2	"	6.7	10.31	1.93		20.		.6	8	-	313P 323P	"
209	7/3	"	6.7	10.88	1.82		20.		.6	8	-	240P 250P	"
210	7/5	Brewster	7.5	10.46	2.03	1.40	21.		.6	4	0	1240P 1250P	FC 24
211	7/11	Brewster	7.5	8.74	2.08	1.17	18.		.6	4	0	1135A 1142A	FC 24
212	7/18	"	7.5	10.65	1.86	1.42	20.		.6	4	0	1235P 1243P	"
213	7/25	"	7.5	8.14	2.00	1.07	16.		.6	4	0	1220P 1228P	"
214	8/1	"	7.5	7.59	2.50	1.03	19.		.6	4	0	1202P 1209P	"
215	8/7	"	7.5	7.36	1.91	1.00	14.		.6	4	0	1210P 1220P	"
216	8/14	Lindsay	7.2	7.90	1.64		13.		.6	9	-	1128A 1137A	FC 43
217	8/22	Brewster	7.5	8.76	1.45	1.16	13.		.6	4	0	1245P 1255P	FC 24
218	8/29	"	7.5	9.56	1.40	1.22	13.		.6	4	0	1230P 1240P	"
219	9/5	"	7.5	9.31	1.30	1.22	12.		.6	4	0	115P 124P	"
220	9/12	"	7.5	8.02	1.26	1.00	10.		.6	4	0	1250P 100P	"
221	9/19	"	7.5	8.87	1.37	1.15	12.		.6	4	0	1238P 1246P	"
222	9/26	"	7.5	7.23	2.03	0.98	15.		.6	4	0	930A 938A	"

F. C. D. FORM 104 1M 6-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 58-S

DISCHARGE MEASUREMENTS OF ARROYO SECO

At Avenue 26 DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
4	9/6	Haig-Miller	6.4	1.26	1.03		1.3		.6 Sur.	&		1005A 1014A	FC 33

F. C. D. FORM 104 1M 6-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 87-S

DISCHARGE MEASUREMENTS OF BANTA DITCH

At Head of Pipe Line DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
148	10/5	Brewster					0					1135A	
149	10/11	"					0					1130A	
150	10/19	"					0					1130A	
151	10/26	"					0					1230P	
152	11/2	"	10.0	12.68	1.08	0.92	14.		.6	5	0	1145A 1155A	FC 8
153	11/9	"	9.0	10.50	1.00	0.84	10.		.6	5	0	1145A 1157A	"
154	11/16	"	10.0	12.68	1.11	0.98	14.		.6	5	0	1148A 1151A	"
155	11/22	"	10.0	11.00	1.02	0.84	11.		.6	5	0	1050A 1100A	"
156	11/30	"	10.0	13.36	1.24	1.02	17.		.6	5	0	120P 130P	"
157	12/7	"	9.0	11.31	0.93	0.89	11.		.6	5	0	1155A 1205P	"
158	12/14	"	10.0	11.72	1.15	1.01	13.		.6	5	0	1130A 1140A	"
159	12/21	"	9.0	8.34	0.76	0.62	6.3		.6	5	0	1250P 100P	"
160	12/28	"	4.5	3.55	2.05	0.82	7.3		.6	4	0	1230P 1236P	"
161	1/5	"	4.5	2.68	2.15	0.52	5.8		.6	4	0	505P 511P	"
162	1/12	"					0					1245P	
163	1/18	"					0					1250P	

F. C. D. FORM 104 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 87-S

DISCHARGE MEASUREMENTS OF BANTA DITCH

AT Head of Pipe Line DURING THE YEAR ENDING SEPTEMBER 30, 1940

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Dill.	METH OD	MEAS SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
164	1/25	Brewster					0					1250P	
165	2/3	"					0					1205P	
166	2/8	"					0					1220P	
167	2/15	"					0					1150A	
168	2/21	"					0					1120A	
169	3/1	"					0					230P	
170	3/7	"					0					1150A	
171	3/14	"					0					1115A	
172	3/21	Brewster					0					1135A	
173	3/28	"					0					1135A	
174	4/4	"					0					1210P	
175	4/11	"					0					1155A	
176	4/18	"	4.5	3.08	3.32	0.73	10.		.6	4	0	1130A 1136A	FC 24
177	4/25	"	4.5	8.11	2.55	1.82	21.		.6	4	0	1201P 1207P	"
178	5/2	"	4.5	1.11	1.57	0.24	1.7		.6	4	0	1225P 1230P	"
179	5/9	"	10.0	15.20	1.29	0.92	20.		.6	5	0	1150A 1158A	"
180	5/16	"	4.5	4.33	3.24	0.98	14.		.6	4	0	110P 120P	"
181	5/23	"	4.5	5.25	2.39	1.20	13.		.6	4	0	1155A 1204P	"
182	5/29	"	4.5	8.46	.51	1.91	13.		.6	4	0	1120A 1128A	"
183	6/6	"	10.0	12.92	1.09	1.02	14.		.6	5	0	1140A 1150A	"
184	6/13	"	4.5	6.34	2.25	1.41	14.		.6	4	0	1148A 1156A	"
185	6/20	"	10.0	12.92	1.25	1.02	16.		.6	5	0	1140A 1146A	"
186	6/27	"	10.0	13.20	1.39	1.01	18.		.6	5	0	1110A 1120A	"
187	7/5	"	10.0	12.48	1.24	1.03	15.		.6	5	0	1220P 1230P	"
188	7/11	"	11.0	13.36	1.24	0.96	17.		.6	5	0	1110A 1118A	"
189	7/18	"	10.0	11.48	0.96	0.94	11.		.6	5	0	1210P 1220P	"
190	7/25	"	11.0	10.88	1.01	0.82	11.		.6	6	0	1156A 1204P	"
191	8/1	"	8.0	9.59	1.24	0.92	12.		.6	5	0	1140A 1150A	"
192	8/7	"	10.0	10.84	1.11	0.90	12.		.6	5	0	1149A 1155A	"
193	8/14	Lindsay	9.0	10.37	0.93		9.6		.6	8		1205P 1215P	FC 43
194	8/22	Brewster	10.0	9.32	1.00	0.82	9.3		.6	5	0	1212P 1220P	FC 24
195	8/29	"	10.0	10.32	1.03	0.79	11.		.6	5	0	1206P 1214P	"
196	9/5	Brewster	10.0	10.72	0.94	0.94	10.		.6	5	0	1250P 1258P	FC 24
197	9/12	"	10.0	10.08	1.12	0.83	11.		.6	5	0	1220P 1228P	"
198	9/19	"	10.0	9.44	0.98	0.84	9.2		.6	5	0	1217P 1224P	"
199	9/26	"	4.5	1.14	0.74	0.26	0.85		.6	4	0	110P 115P	"

F. C. D. FORM 104 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 143-S

DISCHARGE MEASUREMENTS OF BIG ROCK CREEK

AT Above Pallette Creek DURING THE YEAR ENDING SEPTEMBER 30, 1940

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Dill.	METH OD	MEAS SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
32	10/20	Luce-Luce	23.5	7.69	1.29		10.		.6	14		400P 420P	FC 39
33	11/24	" "	11.6	5.10	1.79		9.1		.6	11		240P 250P	"
34	11/24	" "	16.5	7.61	1.45		11.		.6	12		535P 550P	"
35	1/5	Luce	16.0	7.43	1.41		10.		.6	15		250P 305P	"
36	2/17	Luce-Wood	Two	Channels			15.		.6	16		215P 230P	"
37	3/20	Luce-Luce	"	"			15.		.6	14		505P 511P	"
38	4/20	" "	"	"			12.		.6	14		1110A 1120A	"
39	5/18	"	"	"			7.8		.6	13		115P 135P	"
40	6/29	"	"	"			5.2		.6	11		910A 925A	"
41	7/26	"	"	"			4.9		.6	11		330P 345P	"
42	8/23	"	"	"			3.6		.6	10		220P 230P	"
43	9/20	Luce-Koch	"	"			4.2		.6	11		1127A 1138A	"

F. C. D. FORM 104 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 183-S

DISCHARGE MEASUREMENTS OF BIG ROCK CREEK

AT Palmdale-Victorville Road DURING THE YEAR ENDING SEPTEMBER 30, 1940

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Dill.	METH OD	MEAS SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
12	1/5	Luce	5.0	1.70	2.78		4.7		.6	5		430P 435P	FC 39
13	2/17	Luce-Wood					0					300P	
14	3/22	Luce-Luce	6.0	2.75	1.08		3.7		.6	6		635P 640P	FC 39

F. C. D. FORM 104 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 108-S

DISCHARGE MEASUREMENTS OF CASTAIC CREEK

AT 1½ Miles West of Castaic Junction DURING THE YEAR ENDING SEPTEMBER 30, 1940

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Dill.	METH OD	MEAS SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
1	2/26	Luce	20.5	9.79	3.09		30.		.6	10		959A 1006A	FC 39

F. C. D. FORM 104 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 140-S

DISCHARGE MEASUREMENTS OF CASTAIC CREEK

AT Elizabeth Lake Canyon Highway DURING THE YEAR ENDING SEPTEMBER 30, 1940

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Dill.	METH OD	MEAS SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
4	2/26	Luce-Pardieck	22.	10.04	3.00	2.55	30.		.6	12	0	915A 923A	FC 39
5	2/26	" "	22.	9.36	3.18	2.55	30.		.6	12	-.01	923A 932A	"

F. C. D. FORM 104 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 84-S

DISCHARGE MEASUREMENTS OF CATE DITCH

AT Below Sluice Gate DURING THE YEAR ENDING SEPTEMBER 30, 1940

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Dill.	METH OD	MEAS SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
148	10/5	Brewster	9.0	3.60	0.61	1.86	2.2		.6	5	0	1025A 1032A	FC 8
149	10/11	"	10.0	7.04	0.67	2.28	4.7		.6	5	0	1025A 1035A	"
150	10/19	"	1.5	0.24	0.54	1.48	0.13		.6	3	0	1020A 1024A	"
151	10/26	"	4.0	0.74	0.76	1.63	0.56		.6	4	0	1020A 1025A	"
152	11/2	"	8.0	2.00	0.40	1.66	0.80		.6	4	0	1010A 1016A	"
153	11/9	"	7.0	1.88	0.46	1.70	0.85		.6	4	0	1025A 1030A	"
154	11/16	"	3.0	0.54	0.61	1.58	0.33		.6	3	0	1005A 1010A	"
155	11/22	"	8.0	2.76	0.42	1.79	1.2		.6	4	0	945A 950A	"
156	11/30	"	7.0	2.64	0.44	1.81	1.2		.6	4	0	1010A 1015A	"
157	12/7	"	8.0	6.59	0.62	2.44	4.1		.6	5	0	1014A 1020A	"
158	12/14	"	9.0	13.58	0.99	3.18	13.		.6	5	0	1010A 1020A	"
159	12/21	"	9.0	7.14	0.76	2.44	5.4		.6	5	0	1050A 1100A	"
160	12/28	"	9.0	3.07	0.91	2.04	2.8		.6	5	0	1105A 1115A	"
161	1/5	"					0					405P	
162	1/12	"					0					1155A	
163	1/18	"					0					1115A	
164	1/25	"					0					1102A	
165	2/3	"					0					1030A	
166	2/8	"					0					1100A	
167	2/15	"					0					1020A	
168	2/21	"					0					955A	
169	3/1	"					0					1150A	
170	3/7	"					0					1020A	
171	3/14	"					0					1015A	
172	3/21	"					0					1012A	
173	3/28	"					0					950A	

F. C. D. FORM 104 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 84-S

DISCHARGE MEASUREMENTS OF CATE DITCH

~~At~~ Below Sluice Gate DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
174	4/4	Brewster					0					1005A	
175	4/11	"	8.0	4.46	1.15	1.35	5.1		.6	4	0	945A 953A	FC 24
176	4/18	"	8.0	3.86	1.03	1.28	4.0		.6	5	0	1025A 1035A	"
177	4/25	"	8.0	7.01	1.15	1.82	8.1		.6	5	0	950A 958A	"
178	5/2	"	8.0	2.16	0.87	1.04	1.9		.6	4	0	1020A 1026A	"
179	5/9	"	9.0	5.11	1.29	1.49	6.6		.6	5	0	955A 1005A	"
180	5/16	"	11.0	7.31	1.10	1.68	8.0		.6	6	0	1050A 1100A	"
181	5/23	"	9.0	8.05	1.12	1.86	9.0		.6	6	0	915A 925A	"
182	5/29	"	9.0	8.08	1.12	1.88	9.0		.6	5	0	945A 955A	"
183	6/6	"	9.0	11.50	0.91	2.20	10.		.6	5	0	950A 1000A	"
184	6/13	"	8.0	8.61	0.75	1.98	6.5		.6	5	0	1040A 1048A	"
185	6/20	"	9.0	8.56	0.88	1.52	7.5		.6	5	0	1030A 1038A	"
186	6/27	"	1.0	0.12	0.83	0.70	0.10		.6	2	0	954A 957A	"
187	7/5	"	9.0	9.06	0.81	1.72	7.4		.6	5	0	1035A 1045A	"
188	7/11	"	9.0	7.45	0.78	1.52	5.8		.6	5	0	955A 1003A	"
189	7/18	"	10.0	7.15	1.25		9.0		.6	6		1025A 1033A	"
190	7/25	"	10.0	5.40	1.12		6.0		.6	6		1031A 1042A	"
191	8/1	"	10.0	5.59	1.18		6.6		.6	6		1000A 1010A	"
192	8/7	"	10.0	5.59	1.20		6.7		.6	6		1000A 1010A	"
193	8/14	Lindsay	9.5	5.28	1.05		5.5		.6	7		1010A 1020A	FC 43
194	8/22	Brewster	11.0	6.04	1.14		6.9		.6	6		1030A 1040A	FC 24
195	8/29	"	11.0	5.52	1.00		5.5		.6	6		1025A 1035A	"
196	9/5	Brewster	10.0	4.94	0.91		4.5		.6	5		1120A 1128A	FC 24
197	9/12	"	10.0	5.63	1.02		5.8		.6	5		1040A 1050A	"
198	9/19	"	11.0	5.33	0.91		4.8		.6	5		1040A 1048A	"
199	9/26	"	11.0	8.59	1.16		9.9		.6	6		1125A 1135A	"

F. C. D. FORM 104 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 162-S

DISCHARGE MEASUREMENTS OF MESCAL CREEK

~~At~~ Above Mouth of Canyon DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
3	1/5	Luce	2.5	.41	1.07		0.44		.6	3		505P 510P	FC 39

F. C. D. FORM 104 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 196-S

DISCHARGE MEASUREMENTS OF PACOIMA CREEK

~~At~~ NEAR Maclay Avenue DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
22	2/8	Luce	6.2	2.22	.79		1.8		.6	6		410P 413P	FC 39

F. C. D. FORM 104 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 197-S

DISCHARGE MEASUREMENTS OF PACOIMA WASH

~~At~~ NEAR Arleta Street Above Spdg. Grd. Headworks DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
23	2/4	Luce-Pardieck	42.5	28.49	4.13		118.		.6	12		410P 422P	FC 39
24	3/2	Luce	27.0	25.26	3.74		94.		.6	11		1225P 1245P	"
25	3/2	"	25.5	25.10	3.69		93.		.6	13		445P 500P	"
26	3/4	"	25.0	25.34	3.26		83.		.6	12		750A 805A	FC 11

F. C. D. FORM 104 1M, 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 121-S

DISCHARGE MEASUREMENTS OF PALLETTE CREEK

~~At~~ Above Big Rock Creek DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
25	10/20	Luce	5.0	.73	1.49		1.0		.6	7		320P 325P	FC 39
26	11/24	Luce-Luce	5.8	.98	1.79		1.8		.6	7		240P 250P	"
27	1/5	Luce	5.2	.91	1.30		1.2		.6	8		205P 210P	"
28	2/17	Luce-Wood	3.0	.64	1.51		1.0		.6	4		240P 245P	"
29	3/22	Luce-Luce	4.5	.95	1.61		1.5		.6	4		555P 600P	"
30	4/20	Luce-Luce	3.0	.72	2.17		1.6		.6	4		1130A 1135A	"
31	5/18	Luce	4.0	.80	1.49		1.2		.6	5		155P 200P	"
32	6/28	"	3.6	.82	1.23		1.0		.6	6		630P 640P	"
33	7/26	"	3.5	.91	1.80		1.6		.6	5		210P 215P	"
34	8/23	Luce-M. Luce	3.6	.73	1.19		.85		.6	4		240P 245P	"
35	9/20	Luce-Koch	4.0	.84	1.30		1.1		.6	6		1018A 1022A	"

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 122-S

DISCHARGE MEASUREMENTS OF PALLETTE CREEK

~~At~~ AT Big Rock Creek DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
27	10/20	Luce-Luce	3.9	.68	1.44		1.0		.6	4		340P 345P	FC 39
28	11/24	Luce	3.0	.72	2.02		1.5		.6	6		225P 235P	"
29	12/8	Luce-Luce	3.0	.62	1.55		1.0		.6	5		520P 525P	"
30	1/5	Luce	3.5	.66	1.42		0.95		.6	5		240P 245P	"
31	1/9	Luce-Pardieck	2.5	.42	1.57		0.65		.6	5		515P 520P	"
32	2/17	Luce-Wood	3.6	.58	1.33		0.75		.6	6		203P 209P	"
33	3/22	Luce-Luce	2.8	.59	1.24		0.75		.6	6		455P 459P	"
34	4/20	" "	3.3	.81	1.00		0.80		.6	5		1055A 1100A	"
35	5/18	Luce	3.5	.61	1.40		0.85		.6	4		140P 145P	"

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 178-S

DISCHARGE MEASUREMENTS OF DEVIL'S PUNCH BOWL CREEK

~~At~~ Above Big Rock Creek DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
5	1/5	Luce	2.0	.12	.50		0.06		.6	2		335P 340P	FC 39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 141-S

DISCHARGE MEASUREMENTS OF ELIZABETH LAKE CREEK

~~At~~ Above Dry Gulch DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
16	2/8	Luce	10.5	2.95	1.98	2.84	5.9		.6	8	0	1220P 1230P	FC 39
17	2/26	"	16.0	8.26	3.88	3.07	32.		.6	8	0	846A 851A	"
18	2/26	"	16.0	8.22	3.71	3.07	31.		.6	8	0	851A 857A	"
19	3/21	Luce-Lundwall	6.0	1.83	1.90	2.63	3.5		.6	6	0	117P 120P	"
20	4/11	Luce	8.0	1.82	1.37	2.67	2.5		.6	6	0	105P 110P	"
21	5/2	"	6.2	1.28	1.27	2.65	1.6		.6	6	0	1125A 1130A	"
22	5/30	"	1.7	0.13	0.62	2.53	0.08		.6	3	0	635P 638P	"
23	6/6	"	1.5	0.12	0.67	2.54	0.08		.6	3	0	1245P 1248P	"

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F132-S

DISCHARGE MEASUREMENTS OF GAVIN CANYON CREEK

~~At~~ AT Weldon Canyon Highway below Towsley Cn. DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
3	2-26	Luce-Pardieck	11.8	4.69	2.89	1.10	14		.6	8	.01	1024A 1032A	FC39
4	2-26	" "	12.0	4.75	2.93	1.11	14		.6	8	0	1032A 1037A	"

F. C. D. FORM 104 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 122-S

DISCHARGE MEASUREMENTS OF PALLETTE CREEK

AT Big Rock Creek DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
36	6/29	Luce	3.5	.67	1.00		0.65		.6	4		850A 855A	FC #39
37	7/26	"	3.2	.41	1.29		0.55		.6	4		145P 155P	"
38	8/23	"	2.8	.37	.76		0.28		.6	4		200P 205P	"
39	9/20	Luce-Kooh	3.7	.53	.83		0.44		.6	5		1118A 1123A	"

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 238-S

DISCHARGE MEASUREMENTS OF RUSTIC CANYON STORM DRAIN

AT Above Channel Road DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
56	1/11	Moon-Mitchell	4.5	.58	1.72		1.0		.6	5		422P 427P	FC 22
57	2/29	Moon-Foote	6.4	1.32	2.65		3.5		.6	6		310P 317P	"
58	4/1	" "	5.5	.74	1.81		1.3		.6	5		200P 207P	"
59	5/9	Moon	3.0	.34	1.18		0.40		.6	3		400P 405P	"
60	5/16	"	3.0	.41	1.00		0.41		.6	4		350P 356P	"

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 86-S

DISCHARGE MEASUREMENTS OF SAN GABRIEL RIVER

At Below Standifer Ditch DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
147	10/5	Brewster	76.0	28.96	1.50		43.		.6	10		1055A 1113A	FC 8
148	10/11	"	74.0	32.54	1.32		43.		.6	9		1050A 1110A	"
149	10/19	"	58.0	21.84	1.72		38.		.6	7		1050A 1105A	"
150	10/26	"	55.0	24.02	1.57		38.		.6	9		1100A 1120A	"
151	11/2	"	57.0	26.05	1.62		42.		.6	7		1045A 1100A	"
152	11/9	"	58.0	28.10	1.45		41.		.6	7		1055A 1107A	"
153	11/16	"	76.0	28.52	1.36		39.		.6	8		1035A 1055A	"
154	11/22	"	67.0	26.64	1.27		34.		.6	9		1015A 1027A	"
155	11/30	"	85.0	26.64	1.12		30.		.6	10		1045A 1100A	"
156	12/7	"	78.0	27.50	1.10		30.		.6	8		1045A 1100A	"
157	12/14	"	Two Channels				24.		.6	9		1045A 1100A	"
158	12/21	"	"	"			38.		.6	12		1130A 1142A	"
159	12/28	"	"	"			37.		.6	12		1140A 1158A	"
160	1/5	"	"	"			45.		.6	12		430P 445P	"
161	1/12	"	66.0	59.80	1.50		90.		.6	8		1210P 1225P	"
162	1/18	"	58.0	31.80	1.66		53.		.6	7		1130A 1145A	"
163	1/25	"	61.0	32.42	1.74		56.		.6	8		1125A 1140A	"
164	2/3	"	60.0	48.15	2.14		103.		.6	7		1120A 1135A	"
165	2/8	"	92.0	38.40	1.51		58.		.6	10		1117A 1133A	"
166	2/15	"	92.0	34.86	1.58		55.		.6	10		1035A 1050A	"
167	2/21	"	Two Channels				56.		.6	10		1010A 1030A	"
168	3/1	"	86.0	37.76	1.57		59.		.6	9		100P 120P	"
169	3/7	"	80.0	35.46	1.57		56.		.6	10		1040A 1055A	"
170	3/14	"	82.0	36.04	1.54		55.	.6	9			1040A 1055A	"
171	3/21	Brewster	82.0	33.42	1.62		54.		.6	10		1030A 1045A	FC 8
172	3/28	"	91.0	30.31	1.45		44.		.6	10		1010A 1025A	FC 24
173	4/4	"	72.0	30.34	1.60		48.		.6	8		1030A 1045A	"
174	4/11	"	62.0	27.40	1.38		38.		.6	7		1010A 1025A	"
175	4/18	"	21.0	15.52	2.58		40.		.6	6		1045A 1055A	"
176	4/25	"	Two Channels				28.		.6	9		1045A 1100A	"
177	5/2	"	"	"			42.		.6	10		1055A 1115A	"
178	5/9	"	"	"			33.		.6	10		1030A 1048A	"
179	5/16	"	"	"			32.		.6	10		1140A 1158A	"
180	5/23	"	"	"			27.		.6	12		1035A 1055A	"
181	5/29	Brewster	"	"			17.		.6	10		1036A 1052A	FC #24
182	6/6	"	"	"			16.		.6	11		1025A 1040A	"
183	6/13	"	"	"			16.		.6	10		1115A 1135A	"
184	6/20	"	"	"			19.		.6	11		1105A 1120A	"
185	6/27	"	"	"			23.		.6	11		1024A 1044A	"
186	7/5	"	"	"			17.		.6	10		1130A 1150A	"
187	7/11	"	"	"			19.		.6	11		1030A 1050A	"
188	7/18	"	"	"			14.		.6	11		1107A 1125A	"
189	7/25	"	"	"			15.		.6	11		1115A 1135A	"
190	8/1	"	"	"			13.		.6	10		1040A 1058A	"
191	8/7	"	18.0	9.68	1.38		13.		.6	6		1050A 1105A	"
192	8/14	Lindsay	46.5	12.78	0.93		12.		.6	14		1050A 1108A	FC 43
193	8/22	Brewster	20.0	9.56	1.23		12.		.6	6		1120A 1135A	FC 24
194	8/29	"	20.0	9.50	1.37		13.		.6	7		1110A 1125A	"
195	9/5	Brewster	23.0	10.25	1.22		13.		.6	6		1210P 1225P	FC 24
196	9/12	"	20.0	10.59	1.27		13.		.6	6		1130A 1142A	"
197	9/19	"	21.0	10.44	1.18		12.		.6	6		1125A 1135A	"
198	9/26	"	19.0	9.50	1.30		12.		.6	6		1215P 1230P	"

F. C. D. FORM 104 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 93-S

DISCHARGE MEASUREMENTS OF SANTA CLARA RIVER

At Above Lang Railroad Station DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
3	1/5	Luce	3.9	0.96	1.06		1.0		.6	5		1020A 1025A	FC 39
4	5/2	"	4.2	0.80	1.51		1.2		.6	6		1000A 1007A	"

F. C. D. FORM 104 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 137B-S

DISCHARGE MEASUREMENTS OF SANTA CLARA RIVER

At 8 Miles West of Castaic Junction DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
11	2/8	Luce	31.	11.97	2.41		29.		.6	12		145P 155P	FC 39
12	5/2	"	29.5	11.06	1.62		18.		.6	12		1242P 100P	"
13	5/30	"	18.3	6.70	1.36		9.0		.6	10		500P 600P	"
14	6/6	"	18.0	6.25	1.30		8.6		.6	10		125P 135P	"

F. C. D. FORM 104 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F55S

DISCHARGE MEASUREMENTS OF SANTA MONICA CREEK

At below Rustic Canyon DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
63	1-11	Moon-Mitchell	2.5	0.30	1.36		0.41		.6	3		412P 416P	FC22
64	2-29	Moon-Foote	1.4	0.03	0.67		0.02		F1	2		325P 328P	"

F. C. D. FORM 104 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 272-S

DISCHARGE MEASUREMENTS OF SANTA MONICA CREEK

At Above Rustic Canyon DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
1	4/1	Moon-Foote	2.0	0.12	0.58		0.07		.6	3		213P 217P	FC 22
2	5/16	Moon	1.8	0.09	0.44		0.04		.6	2		400P 402P	"

F. C. D. FORM 104 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 125-S

DISCHARGE MEASUREMENTS OF SANTIAGO CREEK

~~At~~ Above Little Rock Creek DURING THE YEAR ENDING SEPTEMBER 30, 19 40

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Dif.	METH OD	MEAS SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
4	1/9	Luce-Pardieck	4.0	.56	2.54		1.5		.6	5		325P 330P	FC 39
5	2/2	" "	5.0	.78	2.32		1.8		.6	5		827A 830A	FC 41
6	2/17	Luce-Wood	2.6	.31	.81		0.25		.6	4		1134A 1138A	FC 39
7	2/29	Luce	4.0	.78	2.39		1.8		.6	4		445P 450P	"
8	3/22	Luce-Luce	2.0	.20	.75		0.15		.6	3		230P 232P	"
9	4/1	Luce-Pardieck	5.0	.85	2.02		1.7		.6	4		1207P 1211P	"
10	4/20	Luce	1.0	.05	.66		0.03		.6	2		510P 512P	"

F. C. D. FORM 104 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 85-S

DISCHARGE MEASUREMENTS OF STANDIFER DITCH

~~At~~ Below Headgate DURING THE YEAR ENDING SEPTEMBER 30 19 40

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Dif.	METH OD	MEAS SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
148	10/5	Brewster					0					1045A	
149	10/11	"					0					1045A 1035A	
150	10/19	"	7.5	4.44	1.70	3.56	7.6		.6	5	0	1045A	FC 8
151	10/26	"	6.0	4.63	1.63	3.56	7.6		.6	4	0	1045A 1053A	"
152	11/2	"	6.0	4.20	1.74	3.54	7.3		.6	6	0	1030A 1038A	"
153	11/9	"	6.0	4.89	1.83	3.65	9.0		.6	4	0	1040A 1050A	"
154	11/16	"	8.0	5.96	1.86		11.		.6	5		1020A 1030A	"
155	11/22	"	9.0	6.88	1.53		11.		.6	6		1000A 1010A	"
156	11/30	"	9.5	7.03	1.78		12.		.6	6		1030A 1040A	"
157	12/7	"	10.0	5.74	1.75		10.		.6	5		1030A 1040A	"
158	12/14	"	9.0	5.18	1.76		9.1		.6	6		1030A 1040A	"
159	12/21	"	9.0	2.78	1.15		3.2		.6	5		1115A 1125A	"
160	12/28	"	11.0	5.22	1.38		7.2		.6	5		1125A 1135A	"
161	1/5	"	9.0	3.31	1.61		5.3		.6	5		415P 422P	"
162	1/12						0					1205P	
163	1/18						0					1125A	
164	1/25						0					1115A	
165	2/3						0					1115A	
166	2/8						0					1110A	
167	2/15						0					1030A	
168	2/21						0					1005A	
169	3/1						0					1230P	
170	3/7						0					1030A	
171	3/14						0					1030A	
172	3/21	Brewster					0					1025A	
173	3/28	"					0					1005A	
174	4/4	"					0					1020A	
175	4/11	"					0					1005A	
176	4/18	"					0					1100A	
177	4/25	"	7.0	5.79	1.37		8.0		.6	5		1025A 1035A	FC 24
178	5/2	"	1.5	0.24	0.46		0.11		.6	3		1035A 1038A	"
179	5/9	"	7.0	4.01	1.16		4.7		.6	4		1018A 1024A	"

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Dif.	METH OD	MEAS SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
180	5/16	Brewster	8.0	5.12	1.02		5.2		.6	4		1125A 1132A	FC 24
181	5/23	"	7.0	5.69	1.19		6.8		.6	5		1015A 1025A	"
182	5/29	"	6.5	11.07	1.67		18.		.6	3		1022A 1031A	"
183	6/6	"	8.0	10.81	1.67		18.		.6	6		1010A 1020A	"
184	6/13	"	8.0	10.23	1.66		17.		.6	6		1100A 1110A	"
185	6/20	"	8.5	9.86	1.24		12.		.6	6		1050A 1100A	"
186	6/27	"	8.5	11.75	1.38		16.		.6	4		1010A 1018A	"
187	7/5	"	6.5	10.64	1.20		13.		.6	3		1110A 1120A	"
188	7/11	"	6.5	9.60	1.09		10.		.6	3		1015A 1022A	"
189	7/18	"	6.5	10.80	1.27		14.		.6	3		1050A 1100A	"
190	7/25	"	6.5	10.62	1.24		13.		.6	3		1100A 1108A	"
191	8/1	"	6.5	10.52	1.27		13.		.6	3		1022A 1030A	"
192	8/7	"	6.5	10.14	1.16		12.		.6	3		1030A 1036A	"
193	8/14	Lindsay	9.3	10.08	1.05		11.		.6	9		1035A 1045A	FC 43
194	9/22	Brewster	6.5	11.11	1.30		14.		.6	3		1100A 1110A	FC 24
195	8/29	"	6.5	10.95	1.32		14.		.6	3		1058A 1104A	"
196	9/5	Brewster	6.5	10.68	1.31		14.		.6	3		1150A 1156A	FC 24
197	9/12	"	6.5	11.14	1.33		15.		.6	3		1110A 1117A	"
198	9/19	"	6.5	10.90	1.19		13.		.6	3		1110A 1116A	"
199	9/26	"	6.5	11.27	1.21		14.		.6	3		1202P 1208P	"

F. C. D. FORM 104 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 66B-S

DISCHARGE MEASUREMENTS OF TRI-CITY OUTFALL SEWER

~~At~~ Above Rio Hondo DURING THE YEAR ENDING SEPTEMBER 30, 19 40

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Dif.	METH OD	MEAS SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
53	10/5	Brewster	7.0	7.30	1.19		8.7		.6	4		806A 812A	FC 8
54	10/11	"	7.0	6.33	1.07		6.8		.6	4		815A 821A	"
55	10/19	"	7.0	6.95	1.08		7.5		.6	4		812A 818A	"
56	10/26	"	5.0	5.18	1.27		6.6		.6	5		805A 815A	"
57	11/2	"	10.0	4.52	1.12		5.0		.6	5		750A 758A	"
58	11/9	"	6.0	6.96	0.97		6.7		.6	4		802A 808A	"
59	11/16	"	12.0	6.10	0.94		5.8		.6	6		805A 815A	"
60	11/22	"	8.0	7.40	0.80		5.9		.6	4		800A 810A	"
61	11/30	"	7.0	6.76	0.93		6.3		.6	4		814A 820A	"
62	12/7	"	7.0	6.06	1.08		6.6		.6	4		820A 826A	"
63	12/14	"	7.0	6.67	0.92		6.1		.6	4		816A 822A	"
64	12/21	"	8.0	6.40	1.17		7.5		.6	4		814A 820A	"
65	12/28	"	8.0	6.43	1.14		7.3		.6	5		820A 830A	"
66	1/5	"	11.0	13.35	1.82		24.		.6	6		210P 220P	"
67	1/12	"	11.0	13.96	1.80		25.		.6	6		1000A 1010A	"
68	1/18	"	9.0	9.74	1.18		12.		.6	5		850A 900A	"
69	1/25	"	9.0	9.56	1.44		14.		.6	5		925A 935A	"
70	2/3	"	9.0	10.90	1.38		15.		.6	5		812A 821A	"
71	2/8	"	9.0	10.04	0.91		9.2		.6	5		832A 840A	"
72	2/15	"	11.0	9.67	1.25		12.		.6	6		820A 830A	"
73	2/21	"	10.0	8.00	0.89		7.1		.6	5		810A 820A	"
74	3/1	"	12.0	12.40	1.58		20.		.6	6		925A 935A	"
75	3/7	"	10.0	8.72	1.18		10.		.6	5		830A 840A	"
76	3/14	"	12.0	8.90	0.99		8.8		.6	5		820A 827A	"

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. F 66B-S

DISCHARGE MEASUREMENTS OF TRI-CITY OUTFALL SEWER

at Above Rio Hondo DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
77	3/21	Brewster	9.0	7.13	0.79		5.6		.6	5		825A 835A	FC 8
78	3/28	"	11.0	7.77	1.09		8.5		.6	6		816A 824A	FC 24
79	4/4	"	9.0	8.08	0.96		7.8		.6	5		812A 820A	"
80	4/11	"	11.0	9.30	0.96		8.9		.6	5		816A 824A	"
81	4/18	"	8.0	6.92	0.68		4.7		.6	5		824A 830A	"
82	4/25	"	7.0	5.21	0.88		4.6		.6	4		817A 823A	"
83	5/2	"	9.0	7.36	0.95		7.0		.6	5		824A 833A	"
84	5/9	"	8.0	5.72	0.82		4.7		.6	4		816A 822A	"
85	5/16	"	9.0	6.30	0.94		6.0		.6	5		800A 810A	"
86	5/23	"	9.0	6.10	0.86		5.2		.6	5		750A 756A	"
87	5/29	"	9.0	6.24	0.86		5.4		.6	5		758A 807A	"
88	6/6	"	10.0	6.64	0.77		5.1		.6	5		750A 800A	"
89	6/13	"	10.0	6.92	0.90		6.2		.6	5		803A 809A	"
90	6/19	Lindsay	11.0	10.27	1.27		13.		.6	7		234P 242P	FC 43
91	6/20	Brewster	9.0	6.52	0.87		5.7		.6	5		745A 755A	FC 24
92	6/20	Lindsay	11.5	11.43	1.34		15.		.6	7		125P 137P	FC 43
93	6/21	"	11.0	10.62	1.27		14.		.6	7		137P 147P	FC 43
94	6/23	Lindsay-Lindsay	10.5	10.42	1.45		15.		.6	6		152P 202P	"
95	6/24	" "	11.0	10.48	1.35		14.		.6	7		303P 313P	"
96	6/27	Brewster	10.0	6.56	0.78		5.1		.6	5		747A 754A	FC 24
97	6/30	Lindsay	11.5	12.62	1.57		20.		.6	7		1227P 1236P	FC 43
98	7/1	"	11.5	12.65	1.54		19.		.6	7		1202P 1212P	"
99	7/2	"	11.	10.74	1.44		15.		.6	7		200P 210P	"
100	7/3	"					15.	Est.				1230P	
101	7/5	Brewster	9.0	6.23	0.77		4.8		.6	5		804A 812A	FC 24
102	7/11	"	10.0	6.32	0.84		5.3		.6	5		802A 810A	"
103	7/18	"	9.0	6.32	0.90		5.7		.6	5		803A 812A	"
104	7/25	"	9.0	6.63	0.92		6.1		.6	5		801A 807A	"
105	8/1	"	10.0	6.88	0.86		6.0		.6	5		750A 758A	"
106	8/7	"	10.0	6.48	0.87		5.6		.6	5		748A 756A	"
107	8/14	Lindsay	12.5	7.33	1.14		8.4		.6	7		815A 825A	FC 43
108	8/22	Brewster	8.0	5.92	0.90		5.3		.6	4		800A 810A	FC 24
109	8/29	"	8.0	6.63	0.93		6.2		.6	4		756A 804A	"
110	9/5	"	10.0	6.50	0.85		5.5		.6	5		800A 808A	"
111	9/12	"	8.0	5.96	0.96		5.7		.6	4		802A 808A	"
112	9/19	"	8.0	5.68	1.02		5.8		.6	4		812A 818A	"
113	9/26	"	8.0	5.88	1.07		6.3		.6	4		808A 815A	"

RISING WATER

F.C. Dist. Form M 3-41

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

Sta. No _____

Daily discharge, in second-feet of RISING WATER at Whittier Narrows, for the year ending September 30, 19 40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	76	83	77	87	97	95	89	88	80	72	59	59
2	77	84	77	87	97	95	89	88	79	72	59	59
3	78	85	77	88	97	95	89	88	79	72	59	58
4	79	85	78	89	97	95	88	88	79	72	59	58
5	80	85	78	90	97	94	88	87	78	72	59	57
6	81	85	78	90	97	94	88	87	78	71	58	57
7	81	86	79	90	97	94	88	87	78	70	58	57
8	81	86	79	90	97	94	88	86	78	69	58	58
9	80	86	79	90	97	94	89	86	77	68	58	58
10	80	86	80	91	97	94	89	86	77	68	57	58
11	79	86	80	91	96	94	89	86	77	67	56	59
12	79	86	80	91	96	94	89	86	76	67	55	59
13	79	86	81	91	95	94	89	86	76	67	54	59
14	79	86	81	91	95	94	89	85	76	66	53	58
15	79	86	81	92	94	94	89	85	76	66	52	58
16	79	86	81	92	94	94	88	85	75	65	51	57
17	79	86	81	92	94	93	88	85	75	65	52	56
18	79	86	81	92	94	93	88	85	74	64	54	56
19	79	85	82	92	94	93	88	84	74	64	55	55
20	79	84	82	92	94	92	88	84	73	64	56	55
21	79	83	82	93	94	92	88	84	72	63	57	55
22	79	82	82	94	94	92	88	83	72	63	58	56
23	79	81	82	95	94	92	89	83	72	63	59	56
24	79	81	83	96	94	91	89	83	72	62	59	57
25	79	80	83	97	94	91	89	83	72	62	59	57
26	79	79	84	97	94	91	89	82	72	62	60	58
27	79	79	84	97	95	90	89	82	72	62	60	58
28	79	78	85	97	95	90	89	81	72	61	60	58
29	80	78	85	97	95	90	89	81	72	61	61	58
30	81	77	85	97		90	88	80	72	60	61	58
31	82		86	97		90		80		60	60	
	2458	2506	2513	2865	2765	2878	2657	2624	2255	2040	1776	1722
MEAN	79.3	83.5	81.1	92.4	95.3	92.8	88.6	84.6	75.2	65.8	57.3	57.4
ACRE-FEET	4880	4970	4980	5680	5480	5710	5270	5200	4470	4050	3520	3420

Remarks:

YEAR OR PERIOD MEAN ACRE-FEET 57630

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, Gate Ditch below sluice gate.

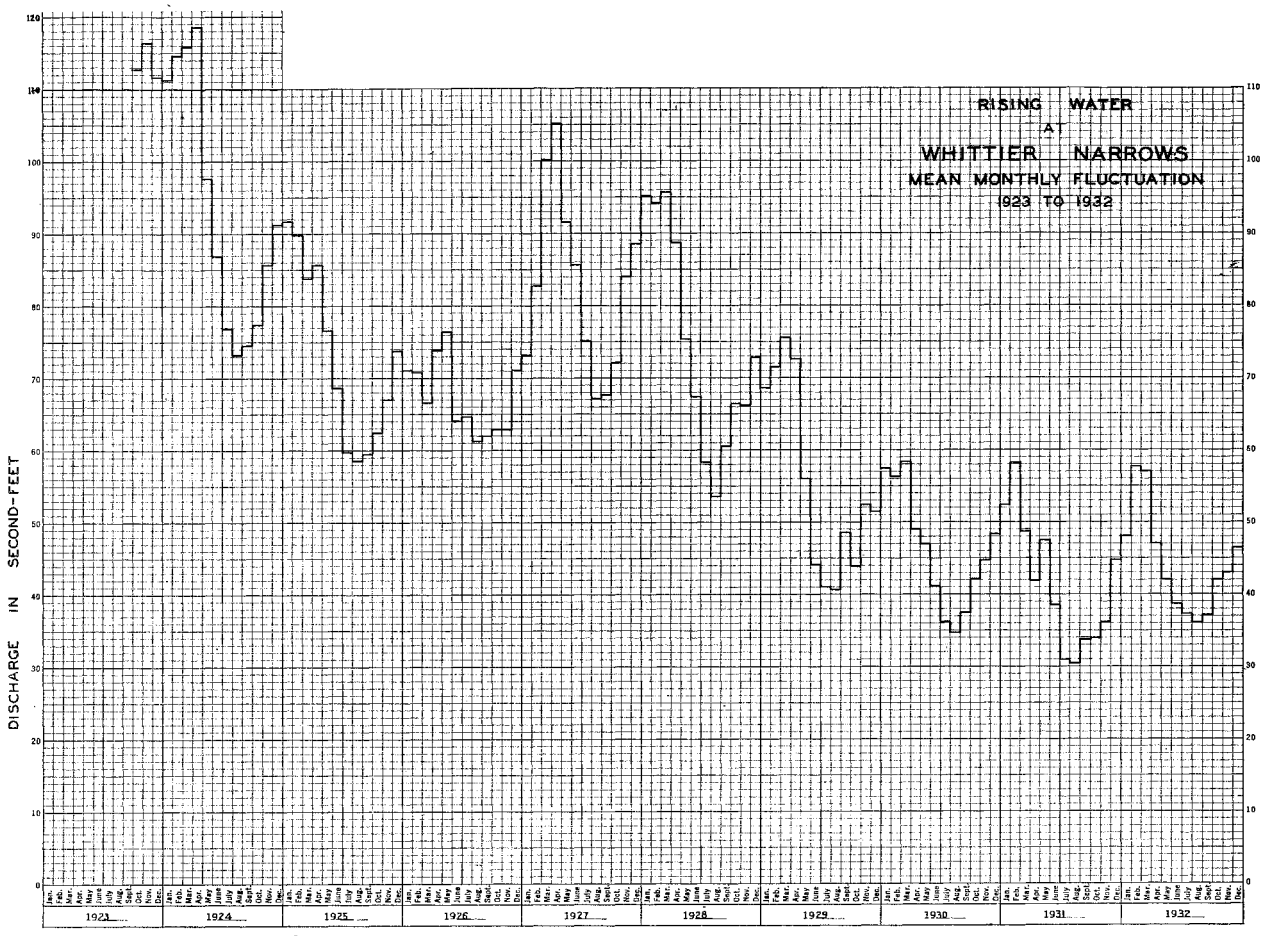
M = the measured, or estimated, discharge from the Gate Ditch Well.

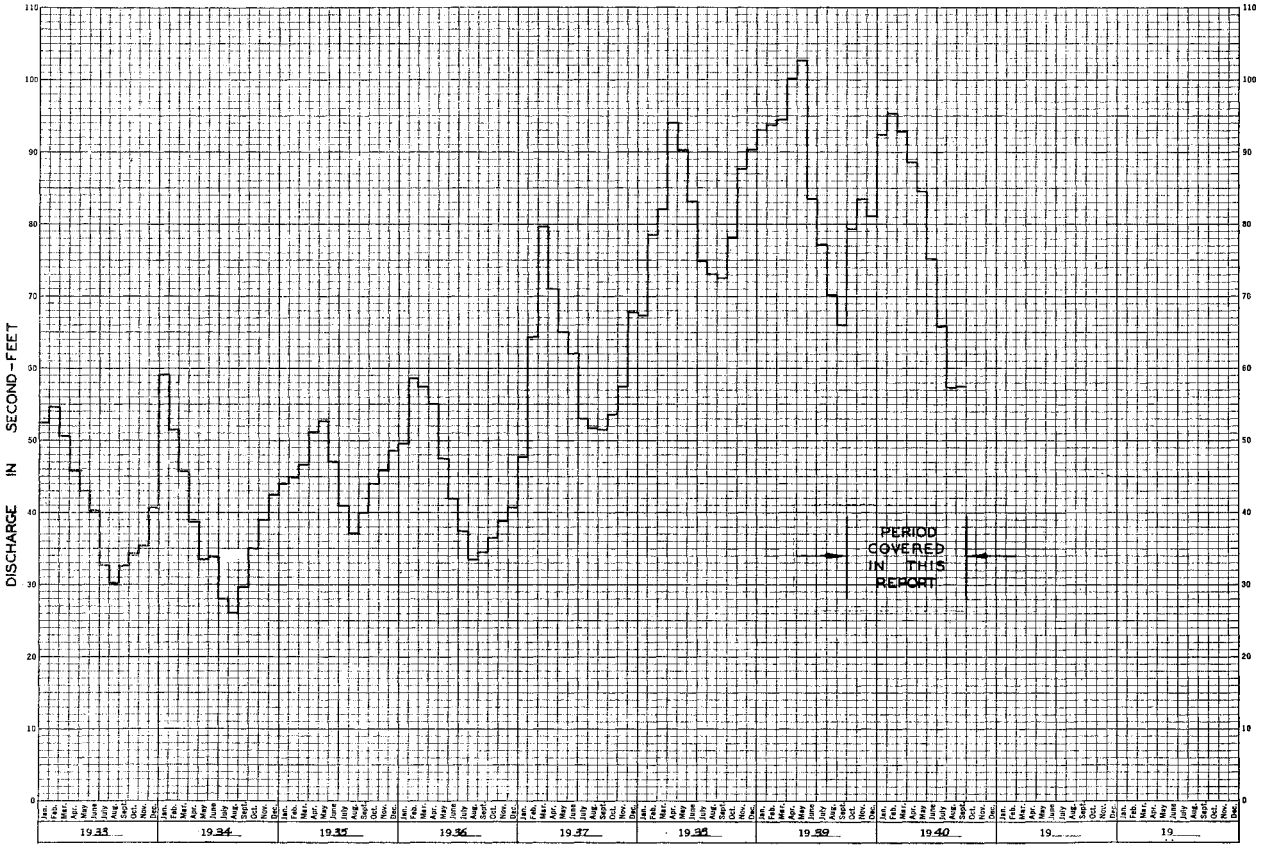
O = the measured discharge at Station F85S, Standifer Ditch below headgate.

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.


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


DISCHARGE IN SECOND-FEET
PERIOD COVERED IN THIS REPORT
1933
1934
1935
1936
1937
1938
1939
1940

MISCELLANEOUS STATIONS

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. Misc.

DISCHARGE MEASUREMENTS OF in ANTELOPE VALLEY DRAINAGE AREA

AT ~~XXXXX~~ miscellaneous points DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
		PALLETTE DIVERSION - 1/2 mile above Valyermo P. O.											
1	5/18	Luce	5.0	2.30	2.01		4.6		.6	6		850A 900A	FC 39
2	7/26	"	3.5	1.22	2.40		2.9		.6	6		545P 554P	"
		WILSON DIVERSION - below Valyermo P. O.											
1	5/18	Luce	1.5	.29	1.10		.32		.6	2		910A 912A	FC 39
2	7/26	"	2.6	.67	1.04		.70		.6	4		533P 540P	"
		VALYERMO RANCH DIVERSION - below Valyermo P. O.											
1	5/18	Luce	3.2	5.07	1.10		5.6		.6	5		915A 925A	FC 39
2	6/29	"	3.2	3.18	1.40		4.4		.6	5		825A 930A	"
3	7/26	"	3.3	2.47	1.24		3.1		.6	6		520P 530P	"
		BIG ROCK CREEK - below Valyermo Diversion											
1	5/18	Luce	11.0	5.23	1.61		8.4		.6	6		920A 930A	FC 39
2	6/29	"	2.0	.16	.37		0.06		.6	2		832A 834A	"
3	7/26	"					Dry						
		PALLETTE CREEK - below Weimers Diversion											
4	1/5	Luce	3.5	0.66	1.28		0.85		.6	6		220P 225P	FC 39
		PALMDALE DITCH below dam											
1	5-31	Luce	12.0	8.92	1.75		16.		.6	7		645P 700P	FC39

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. misc.

DISCHARGE MEASUREMENTS OF BALLONA CREEK DRAINAGE AREA

AT ~~XXXX~~ miscellaneous points DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
		BALLONA CREEK - above Jackson Ave., Culver City											
1	4/25	Moon	10.2	8.00	.92		7.3		.6	6		1225P 1233P	FC 22
2	5/2	"	11.0	6.42	.91		5.9		.6	7		952A 1002A	"
3	5/9	"	12.2	8.73	.89		7.8		.6	8		1110A 1121A	"
4	5/16	"	11.0	8.73	.72		6.1		.6	7		856A 906A	"
5	5/23	"	17.0	16.42	.65		11.0		.6	9		856A 908A	"
6	5/29	"	11.3	9.74	.88		8.5	Sur. &	.6	7		823A 834A	"
7	6/6	"	10.7	7.94	.81		6.4		.6	7		719A 727A	"
8	6/13	"	10.5	7.90	.79		6.3		.6	8		847A 859A	"
9	6/20	"	10.0	6.61	.83		5.5		.6	6		837A 846A	"
10	7/3	"	16.8	15.54	.89		14.		.6	9		1054A 1107A	"
11	7/11	"	15.0	15.50	.65		10.		.6	8		235P 247P	"
12	7/18	"	13.0	8.70	.62		5.4		.6	7		957A 1007A	"
13	7/31	Bonadiman	12.0	10.62	.87		9.2		.6	4		1050A 1100A	FC 40
14	8/14	"	10.0	8.74	1.00		8.7		.6	5		1035A 1043A	"
15	8/21	"	11.5	9.20	.77		7.1		.6	5		1033A 1045A	"
16	8/28	"	10.0	7.68	.62		4.8		.6	5		920A 928A	"
17	9/5	Moon	9.5	7.04	.78		5.5		.6	5		1046A 1056A	FC 22
18	9/12	"	10.3	7.64	.76		5.8		.6	6		904A 912A	"
19	9/19	"	10.6	7.69	.81		6.2		.6	7		949A 957A	"
20	9/26	"	10.2	7.26	.73		5.3		.6	6		835A 843A	"

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. misc.

DISCHARGE MEASUREMENTS OF LOS ANGELES RIVER DRAINAGE AREA

AT ~~XXXX~~ miscellaneous points DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
		PACOIMA WASH MAIN CHANNEL SPREADING GROUNDS - near headworks											
3	2-5	Luce-Miller	38.5	17.70	2.00		36.		.6	10		320P 330P	FC39
4	3-2	" "	12.0	4.44	2.45		11.		.6	10		535P 545P	"
		PACOIMA WASH MAIN CHANNEL near outlet gates											
3	2-5	Luce-Jordan	32.5	13.86	2.78		39.		.6	10		350P 400P	FC41
		PACOIMA WASH WEST CANAL - spreading grounds outlet											
1	2-5	Luce-Jordan	4.5	1.22	.84		1.0		.6	6		345P 350P	FC41
		BIG TUJUNGA CREEK, inflow to Dam No. 1 Reservoir											
71	10/5	Turner	10.0	3.72	1.51		5.6		.6	7		1040A 1050A	FC 5
72	11/8	"	8.0	4.51	1.89		8.5		.6	7		220P 230P	"
73	11/16	"	6.0	3.17	1.23		3.9		.6	6		155P 205P	"
74	11/22	"	5.5	2.97	1.28		3.8		.6	6		1230P 1240P	"
75	12/14	"	7.5	2.31	1.60		3.7		.6	7		1120A 1130A	"
76	1/4	"	11.0	3.85	2.57		9.9		.6	6		1050A 1100A	"
77	1/18	"	9.0	2.81	4.00		11.		.6	5		150P 155P	"
78	1/25	"	14.0	3.00	3.29		9.9		.6	7		115P 125P	"
79	2/18	"	16.0	3.96	3.63		14.		.6	8		200P 210P	"
80	2/20	"	12.0	4.13	3.02		12.		.6	7		1100A 1110A	"
81	3/1	"	23.0	7.35	4.15		31.		.6	7		950A 1000A	"
82	3/7	"	14.0	5.28	3.05		16.		.6	8		125P 135P	"
83	3/14	"	11.0	4.15	3.37		14.		.6	6		220P 230P	"
84	3/21	"	14.0	4.88	2.39		12.		.6	7		1020A 1030A	"
85	3/28	"	11.0	4.26	2.32		9.9		.6	6		125P 135P	"
86	4/1	"	16.0	9.32	3.52		33.		.6	8		1040A 1050A	"
87	4/4	"	15.0	5.79	2.53		15.		.6	8		1125A 1135A	"
88	4/18	"	12.0	5.44	1.91		10.		.6	6		155P 205P	"
89	4/25	"	13.0	4.89	1.73		8.5		.6	7		235P 245P	"
90	5/2	"	8.0	3.16	2.40		7.6		.6	7		220P 230P	"
91	5/9	"	9.0	4.22	1.79		7.6		.6	10		1130A 1140A	"
92	5/16	"	8.5	3.37	1.89		6.4		.6	9		905A 915A	"
93	5/22	Turner-Ealy	9.0	3.42	1.61		5.5		.6	9		840A 850A	FC 5
94	5/28	Turner	7.5	3.07	1.67		5.1		.6	8		920A 930A	"
95	6/5	"	6.5	2.87	1.54		4.4		.6	7		845A 855A	"
96	6/13	"	7.0	2.43	1.07		2.6		.6	8		1010A 1020A	"
97	6/19	"	7.0	2.22	.89		2.0		.6	8		910A 920A	"

F. C. D. FORM 104 1M 6-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. misc.

DISCHARGE MEASUREMENTS OF in LOS ANGELES RIVER DRAINAGE AREA

AT miscellaneous points DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
		BIG TUJUNGA CREEK - Inflow Dam #1 Reservoir											
98	6/26	Bollinger	7.5	1.70	.77		1.3		.6	7		1100A 1105A	FC 6
99	7/2	"	7.0	1.69	.82		1.4		.6	7		1020A 1030A	"
100	7/11	Turner	7.0	1.19	.61		.70		.6	7		1130A 1140A	FC 5
101	7/18	"	4.0	.93	1.08		1.0		.6	8		1120A 1130A	"
102	7/25	"	3.5	.66	.97		.65		.6	7		1120A 1130A	"
103	8/1	"	3.5	.66	.92		.60		.6	7		1125A 1132A	"
104	8/8	"	3.5	.68	.90		.60		.6	7		1100A 1105A	"
105	8/15	"	3.5	.69	.75		.50		.6	7		210P 215P	"
106	8/22	"	3.5	.69	.64		.44		.6	7		1025A 1035A	"
107	9/5	"	4.0	.89	.68		.60		.6	8		1125A 1130A	"
108	9/11	Bollinger	2.5	.41	.66		.27		.6	3		1043A 1047A	FC 6
109	9/18	"	2.5	.42	1.12		.47		.6	4		1025A 1028A	"
110	9/26	Turner	3.5	.70	.77		.55		.6	7		250P 300P	FC 5
		BIG TUJUNGA CREEK, at mouth of canyon											
2	2/2	Luce	31.0	18.09	5.11		92.		.6	9		1110A 1115A	FC 41
		BIG TUJUNGA CREEK, at Laurel Canyon Blvd.											
5	10/11	Luce	14.0	10.16	3.04		31.		.6	7		505P 515P	FC 39
		LOS ANGELES RIVER - below Buena Vista Street											
45	10/5	Bollinger	32.5	28.37	0.68		19.		.6	16		156P 212P	FC 6
46	10/11	"	32.7	29.46	0.69		20.		.6	13		123P 136P	"
47	10/19	"	33.2	30.90	0.63		20.		.6	16		126P 141P	"
48	10/26	"	5.0	10.82	1.68		18.		.6	6		122AP 1239P	"
49	11/2	"	5.0	11.19	1.41		16.		.6	6		258P 309P	"
50	11/9	"	5.0	7.70	1.86		14.		.6	6		130P 140P	"
51	11/16	"	5.0	8.04	1.77		14.		.6	6		233P 243P	"
52	11/22	"	Three Channels				11.		.6	14		216P 240P	"
53	11/30	"	"		"		10.		.6	12		305P 323P	"
54	12/7	"	"		"		12.		.6	15		127P 146P	"
55	4/25	"	Two Channels				29.		.6	12		1220P 1236P	"
56	5/2	"	"		"		28.		.6	12		120P 142P	"
57	5/9	"	"		"		22.		.6	12		158P 213P	"
58	5/16	"	"		"		32.		.6	12		1220P 1235P	"
59	5/23	"	"		"		26.		.6	12		126P 142P	"
60	5/29	"	"		"		26.		.6	12		950A 1005A	"
61	6/6	"	Three Channels				29.		.6	17		250P 313P	"
62	6/13	"	"		"		27.		.6	18		255P 317P	"
63	6/20	"	"		"		26.		.6	18		1250P 115P	"
64	6/27	"	"		"		26.		.6	18		235P 300P	"
65	7/3	"	"		"		28.		.6	18		1055A 1115A	"
66	7/11	"	"		"		26.		.6	18		240P 255P	"
67	7/18	Bollinger-Odekirk	Three Channels				27.		.6	18		1250P 108P	FC 6
68	7/25	" "	"		"		30.		.6	18		200P 220P	"
69	8/1	Bollinger	"		"		27.		.6	18		1110A 1130A	"
70	8/8	"	"		"		27.		.6	18		1055A 1115A	"
71	8/14	Luce	"		"		29.		.6	18		1015A 1030A	FC 39
72	8/22	"	"		"		31.		.6	18		1140A 1200N	"
73	8/29	Bollinger	"		"		27.		.6	18		950A 1010A	FC 6
74	9/5	"	"		"		26.		.6	18		120P 140P	"
75	9/12	"	"		"		21.		.6	18		255P 315P	"
76	9/19	"	"		"		25.		.6	18		1130A 1150A	"
77	9/26	"	"		"		24.		.6	18		1117A 1139A	"

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.
		ARROYO SECO - above Millard Creek											
46	1/10	Lindsay	Two Channels				16.		.6	10		210P 220P	FC 28
47	1/18	"	9.0	1.88	2.93		5.5		.6	9		1012A 1024A	"
48	1/25	"	9.5	1.74	3.37		5.9		.6	7		235P 242P	"
49	1/31	"	7.5	1.45	3.26		4.7		.6	7		217P 225P	"
50	2/2	Lindsay & Middleton	29.	10.96	5.03		55.		.6	11		1230P 1243P	"
51	2/8	Lindsay	14.5	3.57	4.57		16.		.6	7		1203P 1213P	"
52	2/15	"	11.5	2.54	3.32		8.4		.6	8		1012A 1022A	"
53	2/21	"	12.	1.69	3.22		5.4		.6	7		1240P 1250P	"
54	2/29	Middleton & Lindsay	14.5	4.78	4.68		22.		.6	9		100P 111P	"
55	3/6	Lindsay	9.8	2.78	3.45		9.6		.6	9		145P 157P	"
56	3/13	"	9.2	3.26	2.25		7.4		.6	8		1145P 1155P	"
57	3/20	"	9.0	2.98	2.13		6.4		.6	9		1205P 1215P	"
58	3/28	"	6.7	2.40	1.96		4.7		.6	7		1203P 1212P	"
59	4/4	"	6.7	2.36	2.84		6.7		.6	10		1115A 1125A	"
		ARROYO SECO - below Millard Creek											
6	10/5	Lindsay	9.0	1.02	2.53		2.6		.6	5		1100A 1107A	FC 28
		ARROYO SECO - below Devil's Gate Dam											
38	2/3	Haig-Schmittel	14.1	5.14	5.90		30.		.6	8		1145A 1204P	FC 33
39	2/3	Haig	14.1	7.09	6.64		47.		.6	8		1251P 111P	"
40	2/3	"	14.1	7.06	6.91		49.		.6	8		112P 125P	"
41	2/3	Haig-Mellen	21.7	8.34	8.25		69.		.6	11		834P 848P	"
42	2/3	" "	14.1	10.06	7.17		72.		.6	6		855P 904P	"
43	2/21	Lindsay	21.	7.23	10.20		74.		.6	11		200P 210P	FC 28
44	7/15	"	13.	1.97	6.38		13.		.6	10		308P 320P	FC 43
45	7/15	"	14.	2.70	3.23		9.		.6	10		345P 400P	"
46	8/5	"	13.5	5.17	1.23		6.4		.6	12		1020A 1030A	"
47	8/5	"	13.5	5.42	1.32		7.2		.6	12		1120A 1132A	"
48	8/5	"	13.5	5.59	1.40		7.8		.6	12		1255P 105P	"
49	8/7	"	19.5	9.21	1.51		14.		.6	18		155P 215P	"
50	8/8	"	21.5	10.37	1.68		17.		.6	18		928A 945A	"

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. misc.

DISCHARGE MEASUREMENTS OF RIO HONDO DRAINAGE AREA

AT miscellaneous points DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
		RIO HONDO - near Arrow Highway (East Culvert)											
1	6/18	Lindsay	24.	30.72	2.30		71.		.6	12		745A 755A	FC 43
2	6/18	Lindsay-Jordan	29.	33.94	4.09		139.		.6	11		1115P 1135P	"
3	6/19	Lindsay	27.	34.35	4.13		142.		.6	10		1210P 1225P	"
4	6/20	"	30.	44.97	3.73		168.		.6	11		1020A 1037A	"
5	6/21	"	30.5	43.24	3.88		168.		.6	11		1052A 1111A	"
6	6/23	Lindsay-Lindsay	33.5	56.70	3.46		196.		.6	11		1105A 1123A	"
7	6/24	" "	35.	61.55	3.76		232.		.6	11		1205P 1223P	"
8	6/30	" "	34.	45.59	3.61		164.		.6	11		920A 937A	"
9	7/2	Lindsay	36.	67.18	3.14		211.		.6	13		1100A 1120A	"
10	7/3	"	40.	75.62	2.62		198.		.6	12		1000A 1016A	"
		RIO HONDO - near Arrow Highway (West Culvert)											
1	6/18	Lindsay	10.	3.83	2.52		9.6		.6	7		725A 735A	FC 43
2	6/18	Lindsay-Jordan	13.	13.98	4.00		56.		.6	7		1140P 1150P	"

F. C. D. FORM 104 1M 6-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. misc.

DISCHARGE MEASUREMENTS OF RIO HONDO DRAINAGE AREA

AT NEAR Miscellaneous points DURING THE YEAR ENDING SEPTEMBER 30, 19 40

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Period Bil.	METHOD	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN	END	METER NO.
		RIO HONDO - near Arrow Highway (West Culvert)												
3	6/19	Lindsay	14.5	18.88	3.29		62.		.6	8		1232P	1242P	"
4	6/20	"	15.4	22.29	3.52		79.		.6	9		1047A	1057A	"
5	6/21	"	15.	22.15	3.61		80.		.6	10		1116A	1130A	"
6	6/23	Lindsay-Lindsay	16.5	27.38	4.01		110.		.6	8		1128A	1140A	"
7	6/24	" "	40.	38.51	3.42		132.		.6	12		1233P	1247P	"
8	6/30	Lindsay	37.	32.75	2.88		94.		.6	12		948A	1000A	"
9	7/2	"	38.	35.46	3.02		107.		.6	12		1130A	1145A	"
10	7/3	Lindsay	38.	36.88	2.96		109.		.6	12		1026A	1041A	FC 43
		RIO HONDO - above Peck Road												
1	6/19	Lindsay	56.	59.04	1.69		100.		.6	13		115P	135P	FC 43
2	6/20	"	61.	75.10	2.00		150.		.6	14		1122A	1145A	"
3	6/21	"	61.	76.91	2.08		160.		.6	15		1145A	1214P	"
4	6/23	Lindsay-Lindsay	65.	88.23	2.32		204.		.6	14		1201P	1225P	"
5	6/24	" "	70.	99.52	2.67		266.		.6	17		125P	150P	"
6	6/30	Lindsay	67.	83.04	2.31		192.		.6	15		1017A	1045A	"
7	7/2	"	67.	92.51	2.49		230.		.6	15		1201P	1230P	"
8	7/3	"	73.	95.82	2.32		222.		.6	15		1056A	1123A	"
		SAWPIT CREEK - above junction with Monrovia Creek												
30	1/8	Lindsay-Keim	13.5	4.64	3.60		17.		.6	8		1252A	100A	FC 28
31	8/15	Lindsay	Two Channels				1.1		.6	9		915A	925A	FC 43
32	8/21	"	3.2	0.59	0.14		0.08		.6	5		117P	123P	"
		SANTA ANITA CREEK - above Santa Anita Dam												
2	10/18	Lind	3.7	1.36	1.04		1.4		.6	7		250P	258P	FC 19
3	11/1	"	4.0	1.43	0.99		1.5		.6	6		145P	157P	"
4	3/20	"	8.0	4.70	1.09		5.1		.6	8		1030A	1045A	"
5	4/3	"	7.0	3.49	1.59		5.6		.6	8		1100A	1112A	"
6	4/17	"	6.3	2.68	1.14		3.0		.6	11		330P		"
7	5/1	"	6.0	2.33	1.34		3.1		.6	9		1240P	1255P	"
8	5/15	"	5.7	1.95	1.11		2.2		.6	10		945A	955A	"
		SANTA ANITA CREEK - below Santa Anita Dam												
25	10/4	Lind	3.3	1.05	3.47		3.6		.6	7		1015A	1030A	FC 19
26	10/11	Lindsay	8.5	3.97	1.07		4.2		.6	8		1225P	1235P	FC 28
27	10/18	Lind	2.3	1.20	2.32		2.8		.6	5		930A	940A	FC 19
28	10/25	Lindsay	6.9	2.50	0.74		1.9		.6	7		810A	820A	FC 28
29	10/27	"	8.7	3.64	0.99		3.6		.6	8		1120A	1130A	"
30	11/1	Lind	2.4	1.39	1.85		2.6		.6	5		1015A	1022A	FC 19
31	11/2	Lindsay	8.5	3.63	0.98		3.6		.6	8		1145A	1155A	FC 28
32	11/9	"	8.5	3.75	1.01		3.8		.6	8		1005A	1015A	"
33	11/15	Lind	3.3	1.12	2.02		2.3		.6	7		930A	940A	FC 19
34	11/15	"	7.0	3.68	0.65		2.4		.6	7		1255P	1245P	"
35	11/15	"	8.5	3.41	0.75		2.6		.6	8		100P	112P	"
36	11/16	Lindsay	5.6	1.94	1.55		3.0		.6	11		1000A	1015A	FC 28
		SANTA ANITA CREEK - below Santa Anita Dam												
37	11/22	Lindsay	5.7	2.00	1.45		2.9		.6	11		955A	1007A	FC 28
38	11/29	Lind	5.7	1.64	1.12		1.8		.6	11		130P	145P	FC 19
39	11/30	Lindsay	5.5	1.57	1.27		2.0		.6	11		1135A	1150A	FC 28
40	12/7	"	5.4	1.39	1.20		1.7		.6	11		957A	1010A	"
41	12/13	Lind	5.6	1.42	1.06		1.5		.6	6		1030A	1044A	FC 19
42	12/14	Lindsay	5.5	1.37	1.14		1.6		.6	11		1022A	1035A	FC 28
43	12/21	"	5.4	1.36	1.15		1.6		.6	11		956A	1010A	"
44	12/27	Lind	5.5	1.38	0.97		1.4		.6	10		200P	215P	FC 19
45	12/28	Lindsay	5.4	1.30	1.05		1.4		.6	11		200P	215P	FC 28
46	1/5	"	1.1	0.15	0.80		0.12		.6	3		930A	933A	"
47	1/9	"	7.0	1.42	2.35		3.3		.6	7		1217P	1225P	"
48	1/13	Brown	10.4	4.20	1.19		5.0		Fl.	6		1130A	1140A	"
49	1/17	Lindsay	11.0	3.93	0.84		3.3		.6	11		230P	245P	FC 28
50	1/24	Lind	7.5	2.68	1.08		2.9		.6	11		920A	935A	FC 19
51	2/21	Lindsay	8.5	1.56	1.00		1.6		.6	9		1102A	1115A	FC 28
52	3/13	"	8.3	2.88	1.40		4.0		.6	7		1040A	1048A	"
53	3/20	"	7.3	2.19	1.24		2.7		.6	7		1046A	1055A	"
54	3/28	"	10.0	2.46	1.06		2.6		.6	10		1040A	1050A	"
55	4/3	Lind	6.5	1.81	0.84		1.5		.6	6		525P	531P	FC 19
56	4/4	Lindsay	5.5	1.49	0.80		1.2		.6	7		940A	948A	FC 28
57	4/11	"	4.5	1.30	0.82		1.1		.6	8		945A	955A	"
58	4/17	Lind	3.2	1.33	1.00		1.3		.6	7		1030A	1040A	FC 19
59	4/17	Lind	6.5	1.61	0.83		1.3		.6	11		200P	212P	FC 19
60	4/18	Lindsay	5.9	1.68	0.98		1.6		.6	10		1000A	1012A	FC 28
61	4/25	"	6.1	1.74	1.01		1.8		.6	10		1038A	1050A	"
62	5/1	Lind	3.2	1.45	1.24		1.8		.6	7		1000A	1012A	FC 19
63	5/2	Lindsay	5.6	1.67	1.02		1.7		.6	9		1005A	1015A	FC 28
64	5/9	"	5.4	1.69	1.02		1.7		.6	10		907A	917A	"
65	5/15	Lind	3.2	1.34	1.21		1.6		.6	7		1110A	1120A	FC 19
66	5/16	Lindsay	5.5	1.69	1.05		1.8		.6	9		1020A	1030A	FC 28
67	5/23	"	5.5	1.78	1.12		2.0		.6	10		940A	952A	"
68	5/29	Lind	3.2	1.47	1.30		1.9		.6	7		935A	945A	FC 19
69	6/4	Lindsay	4.7	2.57	0.79		2.0		.6	10		935A	955A	FC 28
70	6/6	"	5.6	1.90	1.12		2.1		.6	10		948A	1000A	"
		SANTA ANITA CREEK - at mouth of Canyon												
29	1/10	Lindsay	Two Channels				19.		.6	13		310P	335P	FC 28
30	1/12	"	"		"		17.		.6	16		140P	155P	"
31	1/24	"	12.5	3.37	0.67		2.9		.6	12		235P	250P	"
32	1/31	"	13.	3.68	0.99		3.6		.6	9		1125A	1135A	"
33	2/2	"	18.	10.08	2.13		21.		.6	9		745A	757A	"
34	2/2	Lind	15.	9.25	2.51		23.		.6	9		115P	——	FC 19
35	2/3	Middleton & Lindsay	19.8	10.53	2.67		28.		.6	10		920A	933A	FC 28
36	2/3	Lindsay & Middleton	21.5	16.30	3.21		52.		.6	10		130P	140P	FC 28
37	2/4	Middleton & Lindsay	22.	19.72	2.85		56.		.6	12		942A	956A	"
38	2/5	Lindsay & Middleton	22.	22.55	3.22		73.		.6	13		810A	825A	"
39	2/5	"	21.5	20.49	2.95		60.		.6	11		315P	327P	"
40	2/7	Lindsay	21.5	18.02	2.37		43.		.6	11		745A	800A	"
41	2/8	"	15.	7.13	1.28		9.2		.6	8		128P	138P	"
42	2/15	"	15.5	2.89	2.46		7.1		.6	9		830A	840A	"
43	2/26	Lindsay & Middleton	13.5	6.43	3.31		21.		.6	10		820A	827A	"
44	2/27	Lindsay	14.8	3.95	2.56		10.		.6	9		825A	835A	"
45	3/1	"	15.5	6.93	2.12		15.		.6	11		1005A	1020A	"
46	3/6	"	14.3	5.38	2.05		11.		.6	10		1115A	1130A	"
47	4/4	"	3.3	0.76	0.95		0.7		.6	6		1005A	1013A	"

F. C. D. FORM 104 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. misc.

DISCHARGE MEASUREMENTS OF in RIO HONDO DRAINAGE AREA

AT miscellaneous points DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
		EL MONTE SEWER - near junction with Rio Hondo											
31	10/5	Brewster	2.0	0.40	1.28		0.50		.6	4		820A 825A	FC 8
32	10/11	"	1.5	0.45	1.09		0.49		.6	3		830A 834A	"
33	10/19	"	2.0	0.57	0.95		0.55		.6	3		830A 834A	"
34	10/26	"	3.0	0.68	0.79		0.55		.6	3		832A 836A	"
35	11/2	"	3.0	0.68	0.99		0.65		.6	3		815A 820A	"
36	11/9	"	2.0	0.55	0.95		0.50		.6	4		816A 821A	"
37	11/16	"	3.0	0.68	0.82		0.55		.6	3		830A 835A	"
38	11/22	"	3.0	0.60	0.72		0.43		.6	3		825A 830A	"
39	11/30	"	4.0	0.86	0.60		0.50		.6	4		825A 830A	"
40	12/7	"	4.0	0.70	0.74		0.50		.6	4		832A 837A	"
41	12/14	"	2.0	0.52	1.06		0.55		.6	4		830A 834A	"
42	12/21	"	3.0	0.60	0.80		0.48		.6	3		830A 836A	"
43	12/28	"	2.0	0.43	1.00		0.43		.6	4		835A 841A	"
44	1/5	"	3.0	0.66	0.80		0.55		.6	3		230P 235P	"
45	1/12	"	3.0	0.68	0.96		0.65		.6	3		1016A 1020A	"
46	1/18	"	1.5	0.63	1.00		0.65		.6	3		920A 924A	"
47	1/25	"	3.0	0.56	1.00		0.55		.6	3		940A 945A	"
48	2/3	"	4.0	0.96	1.08		1.0		.6	4		830A 834A	"
49	2/8	"	3.0	0.76	1.17		0.90		.6	3		850A 855A	"
50	2/15	"	3.0	0.56	1.14		0.65		.6	3		840A 845A	"
51	2/21	"	2.0	0.55	0.89		0.49		.6	4		830A 835A	"
52	3/1	"	3.0	0.62	1.23		0.75		.6	3		942A 947A	"
53	3/7	Brewster	3.0	0.56	1.18		0.65		.6	3		850A 855A	FC 8
54	3/14	"	4.0	1.12	0.71		0.80		.6	4		845A 850A	"
55	3/21	"	4.0	0.80	0.91		0.75		.6	4		840A 845A	"
56	3/28	"	3.0	0.74	0.97		0.70		.6	3		832A 836A	FC 24
57	4/4	"	3.0	0.70	1.17		0.80		.6	3		826A 830A	"
58	4/11	"	3.0	0.56	1.07		0.60		.6	3		830A 835A	"
59	4/18	"	3.0	1.02	0.53		0.55		.6	3		840A 845A	"
60	4/25	"	3.0	0.54	1.17		0.65		.6	3		832A 837A	"
61	5/2	"	3.0	0.56	1.00		0.55		.6	3		846A 850A	"
62	5/9	"	3.0	0.58	1.14		0.65		.6	3		836A 840A	"
63	5/16	"	2.0	0.47	0.77		0.36		.6	4		820A 825A	"
64	5/23	"	3.0	0.46	0.98		0.45		.6	3		805A 809A	"
65	5/29	"	3.0	0.52	0.83		0.43		.6	3		820A 825A	"
66	6/6	"	1.5	0.51	1.02		0.50		.6	3		810A 815A	"
67	6/13	"	3.0	0.50	0.84		0.42		.6	3		818A 823A	"
68	6/20	"	1.5	0.47	0.98		0.46		.6	3		805A 810A	"
69	6/27	"	3.0	0.64	0.80		0.50		.6	3		804A 808A	"
70	7/5	"	3.0	0.52	0.87		0.45		.6	3		820A 824A	"
71	7/11	"	2.0	0.55	0.87		0.48		.6	4		820A 825A	"
72	7/18	"	3.0	0.62	0.77		0.48		.6	3		820A 825A	"
73	7/25	"	3.0	0.86	0.80		0.70		.6	3		819A 823A	"
74	8/1	"	3.0	0.94	0.52		0.49		.6	3		815A 821A	"
75	8/7	Brewster	2.0	0.42	0.48		0.20		.6	3		810A 814A	FC 24
76	8/14	Lindsay					0.20	Est.				840A	
77	8/22	Brewster	2.0	0.67	0.55		0.37		.6	3		820A 824A	FC 24
78	8/29	"	3.0	0.54	0.80		0.43		.6	3		822A 826A	"
79	9/5	"	3.0	0.60	0.70		0.42		.6	3		820A 825A	"
80	9/12	"	3.0	0.64	0.59		0.38		.6	3		817A 821A	"
81	9/19	"	2.0	0.78	0.67		0.50		.6	3		840A 845A	"
82	9/26	"	3.0	0.48	0.81		0.39		.6	3		825A 829A	"

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.
		RUBIO WASH - at Rose Avenue											
2	1/7	Baustian-Fricker	25.6	15.11	11.53		174.			15		640P 653P	Pitot
3	1/7	" "	26.	23.63	14.84		351.			15		716P 734P	"
		RIO HONDO - near Garvey Avenue											
118	2/3	Brewster	9.0	4.12	1.53		6.3		.6	5		755A 802A	FC 8
119	6/20	"	28.5	38.08	2.88		110.		.6	8		820A 832A	FC 24
120	8/14	Lindsay					0					800A	
		ALHAMBRA WASH - Broadway Storm Drain											
1	1/4	Baustian-Fricker	8.1	3.29	12.52		41.			10		1038A 1045A	Pitot
2	1/4	" "	8.3	4.88	14.19		69.			10		1103A 1112A	"
3	1/7	" "	8.6	8.44	17.35		146.			10		927P 949P	"
		ALHAMBRA WASH - at junction with Rio Hondo											
2	1/12	Brewster	15.	7.41	1.32		9.8		.6	5		1030A 1036A	FC 8
3	2/3	"	13.	21.26	0.77		16.		.6	5		846A 853A	"
		RIO HONDO - below U. P. R. R. (Below Whittier Blvd.)											
1	6/20	Bonadiman	Two Channels				56.		.6	17		801A 836A	FC 40
2	6/20	"	" "				64.		.6	17		855A 930A	"
3	6/20	Bonadiman-Jordan	105.	40.57	1.27		51.		.6	18		1000A 1025A	"
4	6/20	Bonadiman	105.	44.59	1.29		58.		.6	16		1041A 1103A	"
5	6/20	"	107.	48.31	1.20		58.		.6	18		1128A 1155A	"
6	6/20	"	107.	55.62	1.38		77.		.6	17		300P 330P	"
7	6/21	Bonadiman & Brewster	Two Channels				100.		.6	23		910A 946A	"
8	6/22	" "	Three "				113.		.6	22		820A 850A	"
9	6/23	" "	Two "				168.		.6	26		330P 405P	"
10	6/24	" "	" "				222.		.6	30		200P 240P	"
11	6/25	Brewster-Ingram	" "				235.		.6	26		1055A 1125A	FC 24
12	6/26	Bonadiman & Turner	Two Channels				223.		.6	33		917A 952A	FC 40
13	6/30	" "	" "				157.		.6	23		420P 445P	"
14	7/1	" "	" "				151.		.6	26		1115A 1143A	"
15	7/2	Brewster-Koch	" "				194.		.6	23		230P 300P	FC 24
16	7/3	Bonadiman & Turner	" "				203.		.6	29		930A 1000A	FC 40

F. C. D. FORM 104 1M 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. misc.

DISCHARGE MEASUREMENTS OF in SAN GABRIEL RIVER DRAINAGE AREA

AT miscellaneous points DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
		SAN GABRIEL RIVER - W. FORK below S. G. Dam #2											
37	1/8	De Vore	2.75	0.24	1.08		0.26	Float				712A 719A	
38	1/9	" "	2.5	0.24	0.92		0.22	"				1024A 1030A	
39	1/11	" "	2.4	0.24	0.92		0.22	"				1024A 1029A	
40	1/12	" "	2.4	0.25	0.92		0.23	"				1039A 1048A	
41	1/24	" "	2.15	0.20	0.65		0.13	"				1050A 1057A	
42	1/29	" "	2.2	0.19	0.74		0.14	"				954A 1000A	
43	2/1	De Vore-Godfrey	2.2	0.69	0.84		0.6		.6			253P 302P	FC 32
44	2/1	" " "	2.1	0.19	0.74		0.14	Float				315P 320P	

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LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. misc.

DISCHARGE MEASUREMENTS on in SAN GABRIEL RIVER DRAINAGE AREA

AT misc. miscellaneous points DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
		SAN GABRIEL RIVER - W. FORK below S. G. Dam #2											
45	2/16	Godfrey	2.4	0.23	1.00		0.23	"				925A 937A	
46	2/21	De Vore	3.4	0.66	4.02		2.6	"				1027A 1035A	
47	2/22	Godfrey	2.35	0.18	0.78		0.14	"				1022A 1026A	
48	2/26	De Vore-De Vore	2.2	0.21	0.71		0.15	"				808A 815A	
49	2/29	Godfrey	2.3	0.23	1.00		0.23	"				115P 120P	
50	3/5	De Vore	2.5	0.28	0.93		0.26	"				1024A 1031A	
51	3/8	Godfrey	2.6	0.26	0.85		0.22		.6			1115A 1125A	
52	3/13	De Vore-Godfrey	2.55	0.27	0.93		0.25	Float				947A 958A	
53	3/25	Brown	2.3	0.23	0.88		0.19	"				835A 840A	
54	3/29	Godfrey	2.2	0.17	0.70		0.12	"				1115A 1120A	
55	4/4	Brown	2.3	0.23	0.74		0.17	"				939A 944A	
56	4/11	Godfrey	2.5	0.22	0.86		0.19	"				355P 405P	
57	4/15	Brown	2.4	0.23	0.74		0.17	"				915A 922A	
58	4/18	"	2.4	0.24	0.71		0.17	"				910A 915A	
59	4/22	Brown	2.4	0.24	0.75		0.18		.6			910A 915A	FC 32
60	4/25	"	2.4	0.28	0.64		0.18		.6			930A 936A	"
61	4/28	"	2.5	0.24	0.62		0.15		.6			948A 955A	"
62	5/2	Brown-Godfrey	2.5	0.25	0.76		0.19	Float				1100A 1108A	
63	5/8	Godfrey	2.5	0.25	0.92		0.23	"				937A 953A	
64	5/11	"	2.5	0.24	0.83		0.20	"				925A 930A	
65	5/14	"	2.5	0.24	0.83		0.20	"				1033A 1041A	
66	5/17	"	2.5	0.24	0.83		0.20	"				1110A 1115A	
67	5/21	"	2.5	0.23	0.87		0.20	"				937A 945A	
68	5/24	"	2.5	0.24	0.87		0.21	"				1038A 1048A	
69	5/28	"	2.5	0.21	0.81		0.17	"				915A 925A	
70	5/31	"	2.5	0.21	0.81		0.17	"				1110A 1115A	
71	6/4	"	2.5	0.23	0.87		0.20	"				1018A 1027A	
72	6/7	"	2.5	0.23	0.83		0.19	"				1038A 1044A	
73	6/11	"	2.5	0.23	0.83		0.19	"				1052A 1058A	
74	6/14	"	2.5	0.25	0.88		0.22	"				1105A 1115A	
75	6/18	"	2.5	0.22	0.82		0.18	"				1128A 1134A	
76	6/21	"	2.5	0.21	0.90		0.19	"				1033A 1043A	
77	6/25	"	2.5	0.22	0.91		0.20	"				935A 940A	
78	6/28	"	2.5	0.23	0.87		0.20	"				1113A 1120A	
79	7/2	"	2.5	0.21	0.86		0.18	"				1115A 1120A	
80	7/5	"	2.5	0.22	0.91		0.20	"				1052A 1058A	
81	8/28	Brown	3.2	0.47	0.87		0.41		.6			954A 1000A	FC 32
82	8/30	"	2.6	0.27	1.33		0.36		.6			745A 750A	"
83	9/3	"	2.6	0.27	1.30		0.35		.6			925A 928A	"
84	9/5	"	2.9	0.32	1.03		0.33		.6	5		815A 820A	"
85	9/10	"	3.0	0.40	0.96		0.38		.6	6		843A 847A	"
86	9/12	"	3.0	0.43	0.84		0.36		.6	6		932A 940A	"
87	9/16	"	2.9	0.39	0.90		0.36		.6	6		820A 825A	"
88	9/19	"	3.0	0.42	0.93		0.39		.6	6		851A 857A	"
89	9/23	"	3.0	0.46	0.80		0.37		.6	6		904A 910A	"
90	9/26	"	2.8	0.34	1.0		0.34		.6	5		850A 858A	"
		SAN GABRIEL DAM #1 - Inflow											
113	10/5	De Vore	46.0	29.84	4.10		123.		.6	15		1146A 1205P	FC 32
114	10/5	" "	38.5	19.87	3.53		70.		.6	11		326P 339P	"
115	10/12	" "	22.6	17.21	3.16		54.		.6	12		917A 933A	"
116	10/19	Cooper	25.5	16.94	2.94		50.		.6	13		1140A 1158A	FC 11
117	10/26	"	25.1	16.28	2.86		47.		.6	13		130P 150P	"
118	11/2	"	25.0	15.79	2.78		44.		.6	13		955A 1015A	"
119	11/9	De Vore	21.6	16.02	2.94		47.		.6	12		908A 924A	FC 32
120	11/16	Cooper	24.5	14.94	2.65		40.		.6	13		102P 122P	FC 11
121	11/22	"	24.7	14.85	2.55		38.		.6	13		1210P 1230P	"
122	11/30	"	25.0	14.74	2.69		40.		.6	13		1245P 105P	"
123	12/7	"	24.5	14.10	2.70		38.		.6	13		1210P 1230P	"
124	12/14	"	24.5	14.71	2.57		38.		.6	13		1210P 1230P	"
125	12/21	"	24.2	14.20	2.63		37.		.6	13		1150A 1210P	"
126	12/28	"	24.5	14.95	2.65		40.		.6	13		1235P 1255P	"
127	1/4	"	25.0	15.58	2.64		41.		.6	13		910A 930A	"
		SAN GABRIEL DAM #1 - Outflow											
99	10/4	De Vore	50.0	70.48	2.52		178.		.6	13		1059A 1117A	FC 32
100	10/4	" "	46.3	57.71	1.72		99.		.6	13		317P 333P	"
101	10/6	" "	42.2	58.38	1.70		99.		.6	15		259P 322P	"
102	10/10	De Vore-Burke	42.3	59.26	1.72		102.		.6	15		221P 243P	"
103	10/12	De Vore	46.5	57.29	1.70		97.		.6	14		315P 334P	"
104	10/15	Wood-De Vore	42.0	59.50	1.69		101.		.6	16		1030A 1115A	FC 37
105	10/15	De Vore-Wood	42.0	59.4	1.58		94.		.6	16		1118A 1155A	FC 32
106	10/27	Cooper-De Vore	41.5	33.01	1.51		50.		.6	14		219P 233P	FC 11
107	11/3	Cooper	39.0	29.63	1.37		41.		.6	14		952A 1012A	"
108	11/8	"	39.5	29.84	1.36		41.		.6	14		340P 400P	"
109	11/17	"	39.5	30.32	1.36		41.		.6	14		1000A 1020A	"
110	11/24	"	39.5	29.71	1.38		41.		.6	14		1030A 1050A	"
111	12/8	"	39.6	29.27	1.31		38.		.6	14		1020A 1040A	"
112	12/15	"	39.0	28.80	1.34		39.		.6	14		940A 1000A	"
113	12/20	"	39.0	29.10	1.29		38.		.6	14		1040A 1100A	"
114	12/29	"	39.0	29.31	1.32		39.		.6	14		1030A 1052A	"
115	1/3	"	39.8	30.59	1.40		43.		.6	14		120P 142P	"
116	1/19	"	45.5	44.72	1.80		80.		.6	15		1105A 1125A	"
117	1/31	"	45.5	44.18	1.76		78.		.6	15		140P 200P	"
118	2/19	"	45.5	45.65	1.84		84.		.6	15		1045A 1105A	"
119	3/22	"	56.0	53.42	1.59		85.		.6	12		1000A 1020A	"
120	3/29	"	54.5	44.79	1.41		63.		.6	11		1022A 1038A	"
121	4/23	"	63.0	73.65	2.37		175.		.6	13		205A 225A	"
		BROWN'S GULCH - near S. G. Dam No. 1											
34	10/9	De Vore	1.75	0.34	0.53		0.18		.6	6		125P 133P	FC 32
35	10/16	" "	1.35	0.30	0.50		0.15		.6	5		1101A 1111A	"
36	10/23	Cooper	1.90	0.66	0.21		0.14		Fl.	4		315P 318P	
37	10/23	"	2.00	0.22	0.54		0.12		Fl.	4		340P 343P	
38	10/30	"	1.90	0.71	0.19		0.14		Fl.	4		237P 240P	
39	10/30	"	2.00	0.25	0.48		0.12		Fl.	4		300P 303P	
40	11/6	"	2.00	0.24	0.47		0.11		Fl.	4		315P 318P	
41	11/6	"	1.90	0.71	0.19		0.14		Fl.	4		338P 341P	
42	11/13	"	1.90	0.68	0.22		0.15		Fl.	4		242P 245P	
43	11/13	"	1.90	0.25	0.58		0.14		Fl.	4		315P 318P	
44	11/20	"	1.90	0.72	0.21		0.15		Fl.	4		315P 318P	
45	11/20	"	1.90	0.25	0.50		0.13		Fl.	4		337P 340P	
46	11/28	"	1.90	0.72	0.20		0.15		Fl.	4		801A 804A	
47	11/28	"	1.90	0.26	0.52		0.14		Fl.	4		830A 833A	
48	12/4	"	1.90	0.70	0.20		0.14		Fl.	4		120P 123P	
49	12/4	"	1.90	0.25	0.53		0.13		Fl.	4		147P 150P	
50	12/11	"	1.90	0.74	0.20		0.15		Fl.	4		340P 343P	
51	12/11	"	1.90	0.26	0.43		0.11		Fl.	4		400P 403P	
52	12/18	"	1.90	0.66	0.20		0.14		Fl.	4		110P 114P	
53	12/18	"	1.90	0.24	0.48		0.12		Fl.	4		200P 203P	
54	12/26	"	1.90	0.69	0.20		0.14		Fl.	4		154P 158P	
55	12/26	"	2.00	0.27	0.48		0.13		Fl.	4		230P 234P	

F. C. D. FORM 104 IM 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. misc.

DISCHARGE MEASUREMENTS of ~~X~~ in SAN GABRIEL RIVER DRAINAGE AREA

~~X~~ miscellaneous points DURING THE YEAR ENDING SEPTEMBER 30, 1940

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Dif.	METH OD	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
		BROWN'S GULCH - near S.G. Dam No. 1											
56	1-2	Cooper	1.90	0.67	0.19		0.12		Fl.	4		1102A 1106A	
57	1-2	"	2.00	0.21	0.71		0.15		Fl.	4		1142A 1146A	
58	3-22	"	2.10	0.82	0.41		0.34		.6	4		216P 220P	FC11
59	3-22	"	2.80	0.66	0.41		0.27		.6	5		245P 250P	"
		SAN GABRIEL RIVER at mouth of canyon											
20	6-18	Lindsay	26.0	36.8	3.23		119.		.6	13		145P 200P	FC43
21	6-19	Lindsay, R & J	39.0	83.4	3.30		275.		.6	11		925A 940A	"
22	6-23	Lindsay	73.5	145.	2.63		382.		.6	16		815A 853A	"
23	6-24	"	74.0	167.	2.84		474.		.6	16		753A 825A	"
24	6-30	"	72.0	125.	2.53		316.		.6	16		730A 800A	"
25	7-1	"	73.0	131.	2.55		334.		.6	16		800A 825A	"
26	7-2	"	73.5	146.	2.74		400.		.6	16		825A 850A	"
27	7-3	"	73.5	144.	2.72		391.		.6	16		725A 900A	"
		BIG DALTON CREEK - below spreading area											
4	2-26	Brewster-Pettis	3.0	0.89	0.65		0.50		.6	3		300P 305P	FC8
5	2-29	Brewster	4.0	1.12	0.62		0.70		.6	4		1215P 1220P	"
		SAN DIMAS CREEK - below San Dimas Dam											
21	12/18	Brewster	9.0	7.09	0.79		5.6		.6	8		453P 502P	FC 8
22	12/19	"	10.0	3.64	1.24		4.5		.6	5		830P 838P	"
23	12/19	"	9.0	3.61	1.25		4.5		.6	6		400P 410P	"
24	12/20	"	9.0	3.71	1.24		4.6		.6	6		805A 815A	"
25	2/5	Van der Goot & Rogers	15.7	7.43	1.52		11.		.6	8		905A 915A	FC 24
		SAN GABRIEL RIVER - near Elliot Ave. (Above Rising Water)											
32	1/12	Brewster	32.	17.42	1.70		30.		.6	6		400P 410P	FC 8
33	2/3	"	26.	16.56	1.75		29.		.6	7		1045A 1057A	"
34	2/8	"	7.0	1.56	.99		1.5		.6	4		245P 254P	"
35	3/1	"	8.0	1.88	1.37		2.6		.6	4		1110A 1120A	"
		SAN GABRIEL RIVER - below Arrow Highway (Diversion from Rio Hondo)											
1	6/18	Lindsay					2.0		Est.			800A	
2	6/19	"	23.	13.17	0.86		11.		.6	9		1145A 1155A	FC 43
3	6/20	"					0.50		Est.			1005A	
4	6/21	"					0.10		Est.			1035A	
5	6/23	Lindsay-Lindsay	21.	11.66	0.69		8.0		.6	10		1045A 1056A	FC 43
6	6/24	" "	22.	13.61	0.93		13.		.6	11		1143A 1155A	"
7	6/30	Lindsay					0					913A	
		SAN GABRIEL RIVER - below Arrow Highway (Diversion from Rio Hondo)											
8	7/1	Lindsay					0					1025A	
9	7/2	"	22.	12.38	0.82		10.		.6	10		1035A 1049A	FC 43
10	7/3	"	22.	13.99	1.13		6.		.6	8		935A 945A	"
		TEMPLE DITCH - above head of pipeline near Whittier Narrows											
29	10/5	Brewster	5.0	3.24	1.09		3.5		.6	4		100P 106P	FC 8
30	10/11	"	4.0	2.56	1.38		3.5		.6	4		1255P 102P	"
31	10/19	"	4.0	2.75	1.24		3.4		.6	4		110P 117P	"
32	10/26	"	5.0	2.15	1.53		3.3		.6	5		235P 242P	"
33	11/2	"	4.0	2.65	1.20		3.2		.6	4		240P 246P	"
34	11/9	"	4.0	2.80	1.15		3.2		.6	4		130P 136P	"
35	11/16	"	4.0	2.60	1.12		2.9		.6	4		115P 121P	"
36	11/22	"	4.0	3.35	0.97		3.2		.6	4		1235P 1241P	"
37	11/30	"	4.0	2.30	1.09		2.5		.6	4		300P 305P	"
38	12/7	"	4.0	2.51	1.04		2.6		.6	4		140P 146P	"
39	12/14	"	4.0	2.52	1.07		2.7		.6	4		120P 125P	"
40	12/21	"	4.0	3.25	0.64		2.1		.6	4		220P 226P	"
41	12/28	"	4.0	2.24	1.04		2.3		.6	4		220P 226P	"
42	1/5	"					0					530P	
43	1/12	"					0					215P	
44	1/18	"					0					135P	
45	1/25	Brewster					0					205P	
46	2/3	"					0					1240P	
47	2/8	"					0					225P	
48	2/15	"					0					110P	
49	2/21	"					0					1225P	
50	3/1	"					0					345P	
51	3/7	"					0					100P	
52	3/14	"					0					103P	
53	3/21	"					0					140P	
54	3/28	"	6.0	1.70	1.26		2.2		.6	4		1252P 1258P	FC 24
55	4/4	"	4.0	2.40	1.11		2.7		.6	4		200P 205P	"
56	4/11	"	4.0	2.68	1.37		3.7		.6	4		220P 226P	"
57	4/18	"	6.0	2.98	1.06		3.2		.6	4		130P 136P	"
58	4/25	"	5.0	3.12	1.06		3.3		.6	5		150P 156P	"
59	5/2	"	5.0	2.44	1.13		2.8		.6	5		200P 204P	"
60	5/9	"	6.0	2.48	1.22		3.0		.6	4		112P 118P	"
61	5/16	"	4.0	1.72	1.19		2.0		.6	4		245P 251P	"
62	5/23	"	7.0	3.39	0.91		3.1		.6	4		120P 126P	"
63	5/29	"	6.0	3.35	1.33		4.4		.6	4		105P 111P	"
64	6/6	"	4.0	2.55	1.06		2.7		.6	4		1220P 1226P	"
65	6/13	"	4.0	2.27	1.02		2.3		.6	4		130P 136P	"
66	6/20	"	4.0	2.81	0.91		2.6		.6	4		330P 336P	"
67	6/27	Brewster	5.0	1.93	1.27		2.4		.6	4		212P 220P	FC 24
68	7/5	"	4.0	2.14	0.89		1.9		.6	4		200P 206P	"
69	7/11	"	4.0	2.14	0.68		1.4		.6	4		110P 116P	"
70	7/18	"	4.0	2.12	0.80		1.7		.6	4		200P 207P	"
71	7/25	"	4.0	2.46	0.65		1.6		.6	4		215P 222P	"
72	8/1	"	4.0	2.12	0.70		1.5		.6	4		140P 146P	"

F. C. D. FORM 104 1M 9-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. misc.

DISCHARGE MEASUREMENTS of in SAN GABRIEL RIVER DRAINAGE AREA

AT miscellaneous points DURING THE YEAR ENDING SEPTEMBER 30, 1940

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Dif.	METH OD	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
		TEMPLE DITCH - above head of pipeline near Whittier Narrows											
												200P	
73	8/7	Brewster	4.0	2.84	0.36		1.0		.6	4		205P	FC 24
												120P	
74	8/14	Lindsay	3.2	1.07	0.76		0.80		.6	4		125P	FC 43
												300P	
75	8/22	Brewster	4.0	0.74	0.92		0.70		.6	4		306P	FC 24
												210P	
76	8/29	"	4.0	1.20	0.65		0.80		.6	4		216P	"
												255P	
77	9/5	"	3.0	0.82	0.65		0.65		.6	3		300P	"
												230P	
78	9/12	"	3.0	1.02	0.58		0.60		.6	4		235P	"
												210P	
79	9/19	"	3.0	1.04	0.72		0.75		.6	3		215P	"
												235P	
80	9/26	"	4.0	0.96	0.48		0.46		.6	4		241P	"
		RINCON DITCH - above head of pipe line near Whittier Narrows											
		Weekly Observations from 10/1/39 thru 3/21/40, No Flow Meas. No. 30-54											
												1215P	
55	3/28	Brewster	9.0	13.05	0.46		6.0		.6	5		1225P	FC 24
56	4/4	"					0					140P	
												150P	
57	4/11	"	8.0	7.00	0.76		5.3		.6	4		155P	FC 24
												105P	
58	4/18	"	7.0	5.03	0.94		4.8		.6	5		112P	"
												110P	
59	4/25	"	8.0	5.58	0.93		5.2		.6	5		120P	"
												130P	
60	5/2	Brewster	7.0	11.43	0.49		5.6		.6	5		140P	FC 24
												1240P	
61	5/9	"	8.0	9.32	0.54		5.0		.6	4		1246P	"
												225P	
62	5/16	"	8.0	5.40	0.92		5.0		.6	5		235P	"
												1240P	
63	5/23	"	8.0	6.83	0.63		4.3		.6	5		1250P	"
												1230P	
64	5/29	"	8.0	3.08	1.20		3.7		.6	4		1236P	"
												1240P	
65	6/6	"	8.0	4.92	0.81		4.0		.6	4		1248P	"
												100P	
66	6/13	"	8.0	3.32	1.08		3.6		.6	4		107P	"
												250P	
67	6/20	"	8.0	2.56	0.97		2.5		.6	4		257P	"
												150P	
68	6/27	"	7.0	2.88	0.49		1.4		.6	4		157P	"
												120P	
69	7/5	"	8.0	2.44	1.04		2.5		.6	5		130P	"
												1225P	
70	7/11	"	9.0	2.51	0.86		2.2		.6	5		1233P	"
71	7/18	"					0					120P	
												130P	
72	7/25	"	8.0	6.92	0.22		1.5		.6	4		135P	FC 24
												1250P	
73	8/1	"	8.0	7.08	0.26		1.8		.6	4		1258P	"
												100P	
74	8/7	"	8.0	7.17	0.21		1.5		.6	4		107P	"
												100P	
75	8/14	Lindsay	6.8	1.61	0.91		1.5		.6	7		108P	FC 43
												210P	
76	8/22	Brewster	8.0	1.48	0.78		1.2		.6	4		216P	FC 24
												130P	
77	8/29	"	8.0	1.88	0.86		1.6		.6	4		136P	"
												210P	
78	9/5	"	8.0	1.40	0.74		1.0		.6	4		216P	"
												145P	
79	9/12	"	4.0	1.16	0.66		0.75		.6	5		150P	"
												140P	
80	9/19	"	6.0	1.51	0.89		1.3		.6	4		146P	"
												200P	
81	9/26	"	8.0	1.52	0.61		0.95		.6	4		206P	"
		CATE DITCH PUMP at Cate Ditch near Whittier Narrows											
												1000A	
7	10-11	Brewster	4.0	2.34	1.64		3.8		.6	4		1007A	FC 8
												1003A	
8	6-29	"	4.0	3.54	1.06		3.7		.6	4		1009A	FC24
9	6-6	"					Est. 3.7					935A	
												1048A	
10	9-26	"	4.0	2.20	1.70		3.7		.6	4		1055A	FC24
		LIVE OAK CREEK - below Live Oak Dam											
												425P	
25	5/31	Lind	3.2	0.64	1.06		0.68		.6	7		432P	FC 19
												450P	
26	5/31	"	3.7	0.93	1.26		1.17		.6	7		458P	"

F. C. D. FORM 104 1M 9-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. misc.

DISCHARGE MEASUREMENTS of SAN ANTONIO CANYON DRAINAGE AREA

AT miscellaneous points DURING THE YEAR ENDING SEPTEMBER 30, 1940

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Dif.	METH OD	MEAS. SEC. NO.	G. HT. CHANGE TOTAL	BEGIN END	METER NO.
		SAN ANTONIO CREEK - WEST CANAL #1 Spreading Grounds											
												900A	
1	2/5	Brewster	10.0	2.44	2.24	0.79	5.5		.6	5	0	910A	FC 8
		SAN ANTONIO CREEK - EAST CANAL #1 Spreading Grounds											
												240P	
1	1/8	Brewster	20.0	9.52	4.48	1.32	43.		.6	5	-.01	250P	FC 8
												320P	
2	2/1	"	13.0	4.72	5.92	1.06	28.		.6	5	-.01	330P	"
												130P	
3	2/2	"	6.0	1.68	3.74	0.94	6.3		.6	3	0	136P	"
												350P	
4	2/3	"	16.0	6.68	6.06	1.15	40.		.6	5	+.02	400P	"
												240P	
5	2/29	"	4.0	1.20	1.06	0.70	1.3		.6	4	0	244P	"
		SAN ANTONIO CREEK - 600' below Sta. No. 151											
												935A	
1	2/26	Brewster-Pettis	8.0	3.08	1.50		4.6		.6	4		940A	FC 8
												1110A	
2	2/28	Brewster	8.0	1.40	2.26		3.2		.6	4		1115A	"
												250P	
3	2/29	"	6.0	1.59	2.46		3.9		.6	4		255P	"
												240P	
4	3/6	"	8.0	2.22	2.28		5.1		.6	4		250P	"
												250P	
5	3/13	"	7.0	2.04	2.12		4.3		.6	4		256P	"
												100P	
6	3/20	"	7.0	2.53	2.57		6.5		.6	4		110P	"
												120P	
7	3/27	"	6.0	1.78	2.30		4.1		.6	6		130P	FC 24
												915A	
8	4/1	"	6.0	1.48	2.01		3.0		.6	4		920A	"
												1150A	
9	4/3	"	5.0	1.40	2.33		3.3		.6	5		1156A	"
												940A	
10	4/10	"	8.0	2.52	1.47		3.7		.6	4		950A	"
												1040A	
11	4/17	Brewster	6.0	1.76	1.78		3.1		.6	4		1045A	"
		SAN ANTONIO CREEK - at Base Line Road											
												900A	
1	1/8	Brewster-Pettis	12.0	3.06	5.28		16.		.6	4		910A	FC 8
												100P	
2	2/14	Brewster	4.0	.86	1.41		1.2		.6	4		105P	"
												810A	
3	2/26	Brewster-Pettis	4.0	1.10	2.04		2.2		.6	4		815A	"
												200P	
4	3/6	Brewster	1.5	.32	1.09		.35		.6	3		205P	"
												220P	
5	3/13	"	4.0	.76	1.24		.95		.6	4		225P	"
												1150A	
6	3/20	"	4.0	.90	1.46		1.3		.6	4		1156A	"
												1140A	
7	3/27	"	4.0	1.04	1.65		1.7		.6	4		1146A	FC 24
												200P	
8	4/3	"	4.0	.82	1.13		.95		.6	4		205P	"
												1130A	
9	4/10	"	4.0	.76	1.08		.80		.6	4		1135A	"
												1000A	
10	4/17	"	4.0	.80	1.01		.80		.6	4		1005A	"
		SAN ANTONIO CREEK - at Foothill Blvd.											
												930A	
1	1/8	Brewster	3.0	.50	.78		.39		.6	3		935A	FC 8

PERCOLATION MEASUREMENTS

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. _____

Percolation
~~DISCHARGE~~ MEASUREMENTS OF BIG TUJUNGA WASH

AT ~~WORK~~ miscellaneous points DURING THE YEAR ENDING SEPTEMBER 30, 1940

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 CO	MEAS SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
		At Approx. 0.25 mile upstream from N. end of Oro Vista St. Produced											
1	9/18	Bollinger	14.5	7.23	1.99		14.4		.6	9		312P / 322P	FC 6
		At Point Opposite S. End of Oroas Avenue											
2	9/18	Bollinger	3.0	1.33	4.76		6.3		.6	5		400P / 405P	FC 6
		At Point Opposite Montague Street											
3	9/18	Bollinger	14.0	4.64	1.11		5.2		.6	9		455P / 510P	FC 6

PERCOLATION MEASUREMENTS

SET NO. 1

BIG TUJUNGA WASH — September 18, 1940

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
3:15P	Mouth of canyon N.E. of E. end of Oro Vista St.				14.4						
										8.1	
4:00P	Point opposite S. end of Oroas Ave. Pops Willow Lake				6.3						
										1.1	
5:00P	Opposite Montague St. mouth of Little Tujunga				5.2						

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO. _____

Percolation
~~DISCHARGE~~ MEASUREMENTS OF TUJUNGA WASH

AT ~~WORK~~ miscellaneous points DURING THE YEAR ENDING SEPTEMBER 30, 1940

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 CO	MEAS SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
		At Station 213 above Gold Canyon											
1	9-26	Turner	22.	10.73	1.62	7.64	17.4		.6	13	0	1110A / 1120A	FC5
		Near End of Christy Street											
2	9-26	Turner	Two Channels				10.8		.6	10		950A / 1000A	FC5
		At Hansen Dam											
3	9-26	Turner	10.	2.02	2.14		4.3		.6	8		750A / 800A	FC5
		At Laurel Canyon Blvd. (Central Branch)											
4	9-26	Turner	5.0	1.04	1.69		1.8		.6	5		835A / 845A	FC5
		At Saticoy Street (Central Branch)											
5	9-26	Turner					0.0						

PERCOLATION MEASUREMENTS

SET NO. 2

TUJUNGA WASH — September 26, 1940

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
11:15A	F213R above Gold Canyon				17.4						
9:55A	At Christy Street				10.8				6.6		
7:55A	At Hansen Dam				4.3				6.5		
8:40A	At Laurel Canyon Blvd. (Central Branch)				1.8				2.5		
9:00A	At Saticoy Street (Central Branch)				0.00				1.8		

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO.

Percolation
~~DISCHARGE~~ MEASUREMENTS OF TUJUNGA WASH

AT ~~MOUTH~~ miscellaneous points DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
		Sta. F 20B-R 400' above Remsen Avenue											
1	2-6	Luce-Bollinger	63.4	59.28	4.67	4.84	276.5		.6	16		925A / 950A	FC39
		300' above Laurel Canyon Blvd.											
2	2-6	Luce-Bollinger	Three Channels				267.1		.6	22		1020A / 1040A	FC39
		300' below Sherman Way (Central Branch)											
3	2-6	Luce-Bollinger	Two Channels				126.1		.6	16		1120A / 1140A	FC39
		At Laurel Canyon Blvd. (Central Branch)											
4	2-6	Bollinger	Two Channels				89.6		.6	18		1205P / 1223P	FC39
		At Sta. F 106B-R at Chandler Blvd. (Central Branch)											
5	2-6	Luce-Bollinger	Four Channels				77.2		.6	29		1248P / 115P	FC39
		At Vineland Avenue (Central Branch)											
6	2-6	Luce-Bollinger	48.0	20.07	3.18		63.9		.6	11		150P / 158P	FC39

PERCOLATION MEASUREMENTS

SET NO. 3

TUJUNGA WASH — February 6, 19 40

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
9:35A	400' above Remsen Street				*276.5						* Amount leaving Hansen Dam
10:20A	300' above Laurel Canyon Blvd.				267.1				9.4		
11:20A	300' below Sherman Way (Central Branch)				126.1				141.0		
12:05P	100' above Laurel Canyon Blvd. (Central Branch)				89.6				36.5		
12:48P	At Chandler Blvd. (Central Branch)				77.2				12.4		
1:50P	Vineland Avenue (Central Branch)				**63.9				13.3		** Amount getting into L.A.River

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO.

Percolation
~~DISCHARGE~~ MEASUREMENTS OF ARROYO SECO

AT ~~MOUTH~~ miscellaneous points DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
		Above Colorado Street											
1	8/7	Lindsay	20.0	10.20	1.63	0.53	16.7		.6	10		330P / 342P	FC 43
		San Rafael Street											
2	8/7	Lindsay	11.0	12.37	1.28		15.8		.6	8		400P / 413P	FC 43

PERCOLATION MEASUREMENTS

SET NO. 1

ARROYO SECO — August 7, 19 40

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	Above Colorado St.				16.7						
										0.9	
4:00P	San Rafael St.				15.8						

F. C. D. FORM 104 1M 6-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO.

Percolation
~~DISCHARGE~~ MEASUREMENTS OF ARROYO SECO

AT ~~NEAR~~ miscellaneous points DURING THE YEAR ENDING SEPTEMBER 30, 19 40

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Dif.	METHOD	MEAS SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
		Above Colorado Street											
1	8/8	Lindsay	27.5	22.62	1.00	.62	22.6		.6	13		1035A / 1050A	FC 43
		San Rafael Street											
2	8/8	Lindsay	10.5	14.25	1.40		20.0		.6	7		1147A / 1159A	FC 43

PERCOLATION MEASUREMENTS

SET NO. 2

ARROYO SECO — August 8, 1940

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
10:40A	Above Colorado St.				22.6						
										2.6	
11:50A	San Rafael St.				20.0						

F. C. D. FORM 104 1M 6-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO.

Percolation
~~DISCHARGE~~ MEASUREMENTS OF EATON WASH

AT ~~NEAR~~ miscellaneous points DURING THE YEAR ENDING SEPTEMBER 30, 19 40

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Percent Dif.	METHOD	MEAS SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
		Below Spillway Eaton Dam											
1	10/7	Lindsay	10.	3.26	2.76		9.00		.6	6		900A / 910A	FC 28
		Above Foothill Blvd. 100 Ft.											
2	10/7	Lindsay	13.	5.26	1.15		6.04		.6	7		1000A / 1010A	FC 28
		San Pasqual St. at Pasadena Recorder Station											
3	10/7	Lindsay	Two Channels				3.48		.6	8		1100A / 1110A	FC 28
		At P. E. R. R. Huntington Drive											
4	10/7	Lindsay	6.	1.12	3.39		3.80		.6	6		1130A / 1136A	FC 28
		Below Duarte Road 50 Ft.											
5	10/7	Lindsay End of Percolation					0			.		1155A	

PERCOLATION MEASUREMENTS

SET NO. 1

EATON WASH — October 7, 1940

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
9:00A	Below spillway of F.C. Dam		0+00		9.00	6400	20.5	3.01	2.96	.98	
10:00A	100' above Foothill Blvd.		64+00		6.04	5100	15.8	1.85	2.56	1.38	Measuring conditions not very good. Would say probably within 5% of being accurate.
11:00A	San Pasqual Street		115+00		3.48	3600	13.7	1.13	+0.32	+	
11:30A	Huntington Drive		151+00		3.80	3500	12.9	1.04	3.80	3.65	Flow gradually extending its reach but so slowly rate of percolation in last reach will not be greatly reduced. Extending reach at rate 140' per hour.
11:55A	Duarte Road, 50' below		186+00		0.00						

No loss in flow between San Pasqual and Huntington Drive. This checks measurements made at other times but the slight increase in flow is probably due to both measuring sections being none too good, probably within 5% of being accurate.

F. C. D. FORM 104 IN 8-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO.

Percolation
DISCHARGE MEASUREMENTS OF SANTA ANITA WASH

AT miscellaneous points DURING THE YEAR ENDING SEPTEMBER 30, 19 40

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.
		Mouth of Santa Anita Canyon 150 Ft. above Forestry Bridge											
1	2/5	Lindsay-Middleton	22.	22.55	3.22		72.57		.6	13		810A / 825A	FC 28
		Foothill Blvd.											
2	2/5	Lindsay	Two Channels			5.63	63.26		.6		0	910A / 930A	FC 28
		Above Huntington Drive 100 Ft.											
3	2/5	Lindsay	Two Channels				53.91		.6	17		955A / 1015A	FC 28
		Above Duarte Road 100 Ft.											
4	2/5	Lindsay-Sproul	Two Channels				47.27		.6	14		1030A / 1045A	FC 28
		Below Camino Real 50 Ft.											
5	2/5	Lindsay	Two Channels				12.65		.6	10		1100A / 1110A	FC 28
		Below Del Rio Ave. 150 Ft.											
6	2/5	Lindsay	27.	4.02	2.26		9.07		.6	10		1118A / 1130A	FC 28

PERCOLATION MEASUREMENTS

SET NO. 1

SANTA ANITA WASH

February 5, 1940

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
8:20A	Mouth of Canyon		0+00		72.57						
						10440	26.6	6.38	9.31	1.46	
9:20A	Foothill Blvd.		104+40		63.26						
						4485	26.51	2.73	9.35	3.42	
10:05A	Huntington Drive		149+25		53.91						
						3675	38.14	3.22	6.64	2.06	
10:38A	100' above Duarte Road		186+00		47.27						
						3670	106.16	8.94	34.62	* 3.87	(Flow outside of channel)
11:05A	Camino Real		222+70		12.65						
						6200	44.47	6.33	3.58	* 0.56	
11:30A	150' below Del Rio Avenue		284+70		9.07						

* The reason for such a big difference in rate may be due to break in levee had been getting larger all morning.

At Station 193+00 Flow broke through east levee practically all of flow was outside of channel.

The reach between Duarte Road and Camino Real could be considered as off channel percolation.

F. C. D. FORM 104 IM 6-40

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

STATION NO.

Percolation
~~DISCHARGE~~ MEASUREMENTS OF SANTA ANITA WASH

AT miscellaneous points DURING THE YEAR ENDING SEPTEMBER 30, 1940

NO.	DATE	MADE BY	WIDTH FEET	AREA OF SECTION SQ. FT.	MEAN VELOCITY FT. PER SEC.	GAGE HEIGHT FEET	DISCHARGE SEC. FT.	Rating Points Diff.	METH OD	MEAS SEC. NO.	G. HT. CHANGE TOTAL	BEGIN / END	METER NO.
		Mouth of Santa Anita Canyon 200 Ft. Above Forestry Bridge											
1	2/7	Lindsay-Ingram	21.5	18.02	2.37		42.74		.6	11		745A / 800A	FC 28
		Foothill Boulevard											
2	2/7	Lindsay	Two	Channels		5.47	36.50		.6	13	-.01	843A / 858A	FC 28
		Above Huntington Drive 100 Feet											
3	2/7	Lindsay	15.0	9.45	3.69		34.93		.6	9		920A / 930A	FC 28
		Above Duarte Road 100 Feet											
4	2/7	Lindsay	26.5	8.62	3.62		31.22		.6	11		945A / 957A	FC 28
		Camino Real											
5	2/7	Lindsay	Two	Channels			17.25		.6	13		1010A / 1020A	FC 28
		Below Del Rio Avenue 300 Feet											
6	2/7	Lindsay	10.0	2.99	4.02		12.04		.6	6		1030A / 1040A	FC 28

PERCOLATION MEASUREMENTS

SET NO. 2

SANTA ANITA WASH — February 7, 1940

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
7:52A	Mouth of Canyon 200' above Forestry Bridge.		0+00		42.74	11000	23.04	5.82	6.24	1.07	
8:50A	Foothill Blvd.		110+00		36.50	4800	19.03	2.10	1.57	.75	
9:25A	150' above Huntington Drive		158+00		34.93	4090	28.48	2.67	3.71	1.39	
9:50A	100' above Duarte Road		198+90		31.22	3600	62.38	5.16	13.97	2.71	
10:15A	80' below Camino Real		234+90		17.25	6100	39.70	5.56	5.21	.94	
10:35A	300' below Del Rio Avenue		295+90		12.04						

Flow remained constant during period of test.
Distances between stations paced, widths measured with metallic tape.

YEARLY DISCHARGE SUMMARY

YEARLY-DISCHARGE SUMMARY

Year	Page No.	Water year ending Sept. 30 Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows Mo.	Day	Flow C.F.S.	Mo.	Day	Flow C.F.S.
ALHAMBRA EAST WASH at S.P.R.R. Main Line (Drainage Area 6.85 square miles) F102R											
1930-31	7	134	0	1.20	871	4	26	930			
1931-32	17	101	0	1.39	1010	11	27	625			
ALHAMBRA WEST WASH at S.P.R.R. Main Line (Drainage Area 3.5 square miles) F103R											
1930-31	12	89	0	.93	675	4	26	648			
1931-32	19	80	0	1.04	756	11	27	455			
ALHAMBRA WASH near Short Street (Drainage Area 14.5 square miles) F81D-R											
1929-30	1		0		*635	3	14	1870			
1930-31	1	226	0	2.08	1480	2	3	1530			
1931-32	15	220	0	2.78	1940	1	31	1120			
1932-33	41	417	0	2.32	1680	1	19	1850			
1933-34	41	1770	0	8.04	5820	1	1	4890			
1934-35	52	219	0	3.29	2380	1	5	2280			
1935-36	52	144	0	1.96	*1420	2	12	1700			
1936-37	82	309	0	5.36	3880	3	15	2470			
1937-38	82	997	0	7.62	5520	3	2	3670	2	28	3090
1938-39	62	288	0	4.14	2990	1	5	1760	9	25	750
1939-40	58	130	0	2.39	1730	2	1	912			

Note: Station at various locations - see station description.

Year	Page No.	Water year ending Sept. 30 Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows Mo.	Day	Flow C.F.S.	Mo.	Day	Flow C.F.S.
ALISO WASH at Nordhoff Street (Drainage Area 7.15 square miles) F152R											
1939-40	59	21	0	0.23	167	1	8	285			
BALLONA CREEK at Sawtelle Blvd. (Drainage Area 111 square miles) F38B-R											
1927-28	60		0		*3930	5	8	*1100			
1928-29	204	1150	0	20.6	14900	3	10	4990			
1929-30	7	1130	0	18.6	13480	1	11	4460			
1930-31	17	1500	0	25.6	18520	4	26	6280			
1931-32	21	1540	0	30.0	21790	12	28	6130			
1932-33	44	1660	0	21.8	15810	1	19	7000			
1933-34	44	4310	0	28.5	20630	1	1	11300			
1934-35	57	2190	0	34.4	24870	4	8	11200			
1935-36	57	929	0	18.6	13460	2	12	8070			
1936-37	84	2160	0	56.2	40680	12	30	8940			
1937-38	84	7330	3.6	72.5	52500	3	2	19000	2	28	15280
1938-39	64	3080	1.8	39.4	28490	12	17	9900	9	25	9200
1939-40	61	1270	1.3	29.1	21110	2	3	9730			

Note: Station at various locations - see station description.

Year	Page No.	Water year ending Sept. 30 Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows Mo.	Day	Flow C.F.S.	Mo.	Day	Flow C.F.S.
BIG TUJUNGA CREEK above Edison Road (Drainage Area 67 square miles) F111B-R											
1930-31	39	65	0	1.99	1440	2	5	216			
1931-32	31	964	0	14.1	10250	2	8	3910			
1932-33	55	108	0	3.59	2600	1	19	324			
1933-34	55	707	0	4.26	3090	1	1	1520			
1934-35	69	296	0	13.3	9600	4	8	640			
1935-36	69	60	0	3.20	2330	2	12	159			
1936-37	88	707	+	26.9	19440	2	6	1030			
1937-38	88	E 8200	0.8	63.0	45600	3	2	N.D.	3	1	2480
1938-39	66	345	0.9	10.9	7920	12	19	543	9	25	400
1939-40	64	276	0.2	7.62	5530	1	8	N.D.			

Note: Station at various locations - see station description.

Year	Page No.	Water year ending Sept. 30 Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows Mo.	Day	Flow C.F.S.	Mo.	Day	Flow C.F.S.
BIG TUJUNGA - MILL CREEK above mouth (Drainage Area 21.1 square miles) F112R											
1930-31	145	1.3	0	0.19	139	4	26	1.7			
1931-32	70	291	0	3.02	2190	2	9	512			
1932-33	126	7	0	0.40	294	1	19	20			
1933-34	126	58	0	0.43	308	1	1	179			
BIG TUJUNGA - FOX CREEK above mouth (Drainage Area 9.4 square miles) F110R											
1930-31	75	3.9	0.04	0.32	235	2	4	7			
1931-32	43	285	0.02	3.46	2510	2	8	400			
1932-33	88	21	0.01	0.78	565	1	19	115			
1933-34	88	89	0.01	0.98	710	1	1	215			
1934-35	80	29	+	1.63	1180	10	18	314			
1935-36	80	32	+	1.06	775	2	2	410			
1936-37	92	117	+	5.27	3810	12	27	270			

Station abandoned 1938

Year	Page No.	Water year ending Sept. 30 Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows Mo.	Day	Flow C.F.S.	Mo.	Day	Flow C.F.S.
BIG TUJUNGA CREEK below Big Tujunga Dam No. 1 (Drainage Area 81.7 square miles) F168R											
1932-33	59	38	0.5	6.19	4480	1	19	58			
1933-34	59	15	0.2	5.93	4290	1	1	44			
1934-35	66	339	1.0	14.9	10760	4	8	547			
1935-36	66	30	0.2	7.53	5470	11	18	101			
1936-37	94	385	0.1	35.7	25860	2	16	385			
1937-38	94				*	3	2	E33000			N.D.
1938-39	66	E 263	0.7	12.6	9110	12	23	424	9	25	2.6
1939-40	66	285	0.2	9.92	7200	1	8	747			
BIG TUJUNGA CREEK above Gold Canyon (Drainage Area 106 square miles) F213R											
1932-33	62	488	1.1	10.5	7590	1	19	1390			
1933-34	62	634	0.9	10.6	7700	1	1	1450			
1934-35	72	354	2.6	20.5	14840	4	8	671			
1935-36	72	150	2.4	10.5	7640	2	2	494			
1936-37	98	423	1.0	50.1	36260	12	27	495			
1937-38	98	13000	2.7	116.	83960	3	2	E50000	3	1	1180
1938-39	70	316	3.5	18.8	13640	12	20	380	9	25	117
1939-40	67	E 350	1.6	15.1	10990			N.D.			

YEARLY-DISCHARGE SUMMARY

Year	Page No.	Water year ending Sept. 30 Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows Mo.	Day	Flow C.F.S.	Mo.	Day	Flow C.F.S.
TUJUNGA WASH at Remsen Avenue (Drainage Area 148 square miles) F20B-R											
1931-32	26				* 741			N.D.			
1932-33	66	561	0	6.22	4500	1	19	2260			
1933-34	66	909	0	5.20	3760	1	1	3750			
1934-35	83	328	0	14.0	10110	4	8	615			
1935-36	83	213	0	5.83	4220	2	12	628			
1936-37	101	496	0	49.8	35580			N.D.			
1937-38	101				*	3	2	E 54000			N.D.
1938-39					No record						
1939-40	69	*	0	*	*			*			

Note: Station at various locations - see station description.

Year	Page No.	Water year ending Sept. 30 Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows Mo.	Day	Flow C.F.S.	Mo.	Day	Flow C.F.S.
TUJUNGA WASH at Magnolia Blvd. (Drainage Area, split) F105R											
1930-31					Negligible			Negligible			
1931-32	28	12	0	0.11	78	12	28	46			
1932-33	70	0	0	0	0			0			
1933-34	70	12	0	0.34	25	1	1	145			
1934-35	86	0	0	0	0			0			
1935-36	86	3.3	0	0.01	8.9	2	12	15			
1936-37	104	14	0	0.07	51	2	6	53			
1937-38	104				*			N.D.			N.D.
1938-39	72	0.1	0	+	0.4	1	21	1.1	9	25	0.5
1939-40	71			E 0.12	E 96						

Year	Page No.	Water year ending Sept. 30 Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows Mo.	Day	Flow C.F.S.	Mo.	Day	Flow C.F.S.
TUJUNGA WASH-CENTRAL BRANCH at Chandler Blvd. (Drainage Area, split) F106B-R											
1930-31	34	24.	0	0.13	91	2	3	56			
1931-32	29	591	0	5.75	4170	2	9	1380			
1932-33	71	127	0	0.57	413	1	19	429			
1933-34	71	641	0	1.99	1440	1	1	3110			
1934-35	76	81	0	0.73	528	1	5	352			
1935-36	76	86	0	1.19	497	2	12	400			
1936-37	106	190	0	3.75	2720	2	6	681			
1937-38	106		0		*	3	2	N.D.	3	1	1880
1938-39	73				*			N.D.			N.D.
1939-40	70			E 2.14	E 1560						

Note: Station at various locations - see station description.

Year	Page No.	Water year ending Sept. 30 Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows Mo.	Day	Flow C.F.S.	Mo.	Day	Flow C.F.S.
BROWNS CANYON CREEK at Devonshire Street, Chatsworth (Drainage Area 14.3 square miles) F2R											
1928-29	259	0	0	0	* 0			0			
1929-30	23	0	0	0	0			0			
1930-31	46	5	0	0.77	554	4	26	8			
1931-32	33	80	0	0.96	693	2	9	152			
1932-33					No record						
1933-34					No record						
1934-35					No record						
1935-36					**			N.D.			
1936-37	109	85	0	0.61	439	2	14	140			
1937-38	109	595	0	2.92	2120	3	2	E 1100	3	1	94
1938-39	74	8.5	0	0.10	75	12	18	E 63	9	25	0
1939-40					**						

Year	Page No.	Water year ending Sept. 30 Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows Mo.	Day	Flow C.F.S.	Mo.	Day	Flow C.F.S.
CALABASAS CREEK at Ventura Blvd. (Drainage Area 2.4 square miles) F27OR											
1939-40	72				*0.3						
CENTINELA CREEK at Centinela Blvd. (Drainage Area 5.17 square miles) F186R											
1932-33	74	70	0	0.74	534	1	19	297			
1933-34	74	212	0	1.24	895	1	1	570			
1934-35	88	259	0	2.23	1620	3	2	1590			
1935-36	88	91	0	0.70	509	2	14	1170			

Year	Page No.	Water year ending Sept. 30 Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows Mo.	Day	Flow C.F.S.	Mo.	Day	Flow C.F.S.
COMPTON CREEK near Greenleaf Street (Drainage Area 30.3 square miles) F37B-R											
1927-28	80				*1230	3	5	* 240			
1928-29	188	197	0	3.13	2270	3	10	924			
1929-30	29	144	0	3.48	2520	3	14	580			
1930-31	50	137	0.04	3.31	2400	4	26	678			
1931-32	35	226	0	4.45	3220	1	31	757			
1932-33	77	166	0	2.45	1780	1	19	740			
1933-34	77	372	0	3.53	2560	1	1	960			
1934-35	90	301	0	5.73	4170	4	8	850			
1935-36	90	143	0	4.02	2920	2	12	824			
1936-37	112				*	2	6	1220			
1937-38	112	E 986	0	*	*6850	3	2	N.D.	3	1	1540
1938-39	75	837	0	7.12	5150	9	25	2150			
1939-40	73	256	0.1	7.35	5340	2	3	1630			

Note: Station at various locations - see station description.

Year	Page No.	Water year ending Sept. 30 Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows Mo.	Day	Flow C.F.S.	Mo.	Day	Flow C.F.S.
COYOTE CREEK at Del Amo Street (Drainage Area 110 square miles) F41C-R											
1929-30	24	69	0	0.96	699	1	15	91			
1930-31	58	132	0	0.78	568	2	5	218			
1931-32	37	496	0	3.70	2690	2	9	799			
1932-33	80	130	0	0.63	457	1	30	283			
1933-34	80	1350	0	5.38	3890	1	1	2020			
1934-35	96	569	0	5.33	3850	12	13	3190			
1935-36	96	172	0	1.60	1150	2	12	486			
1936-37	115	2760	0	18.9	13680	2	6	4190			
1937-38	115	2770	0	20.8	15070	3	2	3610	3	1	1940
1938-39	77	E 582	0	5.86	4250	9	25	E 1660			
1939-40	75	276	0	4.40	3190	2	3	827			

Note: Station at various locations - see station description.

YEARLY-DISCHARGE SUMMARY

DUME CREEK at Roosevelt Highway (Drainage Area 8.8 square miles) F53R

Year	Page No.	Water year ending Sept. 30: Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows: Mo.	Day	Flow C.F.S.
1929-30	40	100	0	0.30	218	1	15	426
1930-31	64	40	0	0.18	127	2	4	205
1931-32	39	94	0	1.00	726	12	28	425
1932-33	83	15	0	0.11	81	1	19	110
1933-34	83	839	0	3.13	2270	12	31	2750
1934-35	99	47	0	0.24	176	1	5	409
1935-36	99	26	0	0.28	202	2	14	206
1936-37	117	230	0	2.62	1900	2	6	624
1937-38	117			**		3	2	N.D.
1938-39	79	13	0	0.04	31	9	25	115
1939-40	77	39	0	0.32	229	2	2	183

EATON WASH at Ellis Lane (Drainage Area 18.4 square miles) F104B-R

1930-31	69	58	0	0.43	314	4	26	359			
1931-32	41	129	0	1.30	946	2	8	184			
1932-33	85	187	0	0.78	564	1	19	399			
1933-34	85	523	0	2.75	1990	1	1	2180			
1934-35	101	72	0	0.75	543	1	5	609			
1935-36	101	63	0	1.19	866	2	12	414			
1936-37	119	101	0	1.79	1300	12	27	400			
1937-38	119	724	0	5.76	4170	3	2	E 1900	2	28	670
1938-39	80	77	0	0.99	718	1	5	738	9	25	240
1939-40	78	45	0	0.55	402	2	2	341			

Note: Station at various locations - see station description.

LIMEKILN WASH at Devonshire Avenue (Drainage Area 3.8 square miles) F149R

1939-40	80	1.9	0	0.02	13	1	8	12			

LITTLE DALTON CREEK above mouth of canyon (Drainage Area 2.7 square miles) F65B-R

1928-29	44		0		* 58	3	10	* 5.8			
1929-30	52	4.5	0	0.12	85	5	3	28			
1930-31	80	1.8	0	0.04	30	4	26	6			
1931-32	46	25	0	0.62	449	1	31	72			
1932-33	91	7.5	0	0.10	75	1	19	25			
1933-34	91	97	0	0.67	482	1	1	201			
1934-35	104	26	0	0.68	495	4	8	69			
1935-36	104	19	0	0.64	465	2	11	118			
1936-37	121	41	0	1.97	1430	12	31	140			
1937-38	121	381	0	3.68	2660	3	2	E 960	3	1	391
1938-39	82	7	0	0.28	207	1	5	36	9	25	3
1939-40	81	13	0	0.32	231	1	7	63			

Note: Station at various locations - see station description.

LITTLE ROCK CREEK above Little Rock Dam (Drainage Area 49.0 square miles) L1R

1930-31	94	195	0	4.99	3610	4	26	430			
1931-32	51	830	0		*16730	2	8	2200			
1932-33	99	56	0	5.77	4180	3	9	66			
1933-34	99	455	0	5.20	3770			N.D.			
1934-35	107	716	0	24.4	17640	2	5	925			
1935-36	107	127	0	4.57	3320	2	23	261			
1936-37	124	679	0	30.3	21950	2	6	1550			
1937-38	124		0		*	3	2	E 17000			
1938-39	84				*			N.D.	9	25	1100
1939-40	83	183	0	9.64	7000	1	8	555			

LITTLE SANTA ANITA CREEK below Sierra Madre Dam (Drainage Area 2.4 square miles) F67B-R

1928-29	121		0		* 40	4	5	* 6			
1929-30	45	1.7	0	0.01	8.5	3	15	2.4			
1930-31	85	2.1	0	0.01	7.8	4	26	9			
1931-32	48	21	0	0.29	211	2	9	38			
1932-33	94	32	0	0.13	93	1	19	90			
1933-34	94	8	0	0.11	83	12	31	39			
1934-35	110	12	0	0.38	276	4	8	32			
1935-36	110	6.5	0	0.20	141	2	11	16			
1936-37	126	26	0	1.16	835	12	27	109			
1937-38	126	192	0	3.24	2350	3	2	E 620	3	1	135
1938-39	85	8	0	0.09	65	12	18	132			
1939-40	84	10	0	0.26	190	1	8	84			

Note: Station at various locations - see station description.

LITTLE SANTA ANITA CREEK at Woodland Avenue (Drainage Area 3.8 square miles) F267R

1938-39	86				*						
1939-40	86				**						

LITTLE TUJUNGA WASH at Foothill Blvd. (Drainage Area 21.0 square miles) F19R

1928-29	255				Negligible			N.D.			
1929-30	51				Negligible			N.D.			
1930-31	90	23	0	0.08	57	2	4	30			
1931-32	50	274	0	2.56	1870	2	9	660			
1932-33	96	118	0	0.71	514	1	19	450			
1933-34	96	258	0	1.12	819	1	1	1360			
1934-35	113	63	0	0.63	455	12	13	89			
1935-36	113	83	0	1.28	929	2	2	653			
1936-37	129	175	0	6.58	4760	2	14	964			
1937-38	129	1300	0	12.4	8960	3	2	E 8500	3	1	1140
1938-39	87	40	0	0.70	504	3	9	175	9	25	8
1939-40	86	148	0	1.24	899	1	8	2090			

YEARLY-DISCHARGE SUMMARY

LIVE OAK CREEK near mouth of canyon (Drainage Area 2.6 square miles) F31R

Year	Page No.	Water year ending Sept. 30: Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows: Mo.	Day	Flow C.F.S.
1927-28	50		0		* 0.2	2	4	0.1
1928-29	60	0	0	0	0			0
1929-30	59	0	0	0	0			0
1930-31	98	0	0	0	0			0
1931-32	53	7	0	0.28	207	2	8	22
1932-33	101	0.06	0	+	0.16	1	20	0.2
1933-34	101	19	0	0.32	228	12	29	35
1934-35	116	0	0	0	0			0
1935-36	116	0.1	0	+	0.20	2	12	0.6
1936-37	132	22	0	0.59	429	2	14	29
1937-38	132	96	0	1.10	794	3	2	257
1938-39	88	0.1	0	+	0.60	9	16	0.9
1939-40	88	0.7	0	0.01	9.5	1	7	3.8

LOS ANGELES RIVER at Van Nuys Blvd. (Drainage Area 157 square miles) F5R

1928-29	216				* 720	4	4	* 127			
1929-30	80	143	0	1.72	1230	3	15	389			
1930-31	99	651	0.06	5.09	3680	2	4	1300			
1931-32	55	825	0.08	8.70	6330	2	8	2000			
1932-33	103	1010	0.05	6.14	4440	1	19	1720			
1933-34	103	1910	0.03	7.65	5540	1	1	7380			
1934-35	131	203	+	4.35	3150	1	5	886			
1935-36	131	79	0.2	2.17	1570	2	12	286			
1936-37	134	1200	0.2	15.1	10920	2	14	2630			
1937-38	134	5870	0.8		*	3	2	E 12000	3	1	3220
1938-39	89	1180	1.8	17.9	12970	12	15	2980	9	25	1330
1939-40	89	637	1.8	10.2	7430	1	8	2690			

LOS ANGELES RIVER at Vineland Avenue (Drainage Area 400 square miles) F124R

1928-29	224	127	4.1	18.0	13040	11	14	427			
1929-30	60	158	3.9	23.0	16660	3	15	231			
1930-31	130				*8370	2	4	1240			
1931-32	58	998	0.6	17.6	12830	2	8	1630			
1932-33	107	1230	1.7	11.6	8370	1	19	2080			
1933-34	107	2450	1.3	16.0	11560	1	1	9140			
1934-35	134	288	2.2	8.65	6260	1	5	1020			
1935-36	134	91	2.1	5.59	4060	2	12	261			
1936-37	137				**	2	14	2770			
1937-38	137	Station abandoned.			**	3	2	E 37700			

Note: Station at various locations - see station description.

LOS ANGELES RIVER at Mariposa Street (Drainage Area 430 square miles) F266R

1938-39	91				*20390			N.D.	9	25	620
1939-40	92	986	8	38.7	28050	1	8	3950			

LOS ANGELES RIVER above Arroyo Seco (near Dayton Avenue) F57C-R (Drainage Area 510 square miles)

1929-30	67	312	0	2.29	1660	3	15	500			
1930-31	123	927	0	5.46	3950	2	4	4540			
1931-32	60	2520	0	21.0	15240	2	8	3020			
1932-33	111	2330	0	14.7	10640	1	19	5780			
1933-34	111	5990	0	41.2	29810	1	1	22000			
1934-35	117	568	0.1	17.3	12550	4	8	E 2400			
1935-36	117	322	0.5	7.94	5770	3	30	2540			
1936-37	139	1670	0.4	33.8	24470	2	6	2410	2	14	2410
1937-38	139	27900	0.6	183.	132600	3	2	E 68000	3	1	9920
1938-39	93	1950	3.8	58.5	42360	1	5	3710	9	25	620
1939-40	94	2070	6.	54.5	39590	1	8	8900			

Note: Station at various locations - see station description.

LOS ANGELES RIVER at Firestone Blvd. (Drainage Area 614 square miles) F34B-R

1927-28	67				* 6690	2	4	* 1120			
1928-29	161	775	0	13.6	9830	11	14	2010			
1929-30	72	813	0	13.4	9730	3	15	2210			
1930-31	106	1560	1.4	18.6	13450	2	4	4360			
1931-32	62	2650	0.4	35.4	25620	2	8	4780			
1932-33	115	2900	0	23.5	17020	1	19	7070			
1933-34	115	8550	0	52.9	38330	1	1	29400			
1934-35	126	1430	0	40.3	29170	1	5	10400			
1935-36	126	1040	0	20.5	14920	2	12	5730			
1936-37	144	3460	0	67.2	48630	12	30	E 10000			
1937-38	144	40000	0	278	201300	3	2	E 79000	3	1	18500
1938-39	96	5090	0	108	78440	9	25	10800			
1939-40	97	2300	14.	80.5	58420	1	8	7610			

Note: Station at various locations - see station description.

LOS ANGELES RIVER at State Street Long Beach (Drainage Area, split) F18OR

1928-29	171				* 9340	3	10	* 2870			
1929-30	87	1270	0.9	17.0	12310	3	15	1670			
1930-31	114	1390	0	19.9	14310	2	3	3790			
1931-32	65	7130	0.8	70.2	50960	2	9	8390			
1932-33	119	3310	0.3	31.6	22890	1	19	8710			
1933-34	119	19900	0	93.7	67860	1	1	37500			
1934-35	121	2930	2.0	55.9	40470	4	8	11000			
1935-36	121	1630	2.5	28.3	20470	2	12	10400			
1936-37	149	6800	3.3	126	91110	2	14	20500			
1937-38	149	50000	4.2	564	408000	3	2	E 99000	3	1	23300
1938-39	98	6220	3.5	114	82750	9	25	17300			
1939-40	100	2830	15	90.8	65930	2	2	8440			

Note: Station at various locations - see station description.

YEARLY-DISCHARGE SUMMARY

MALIBU CREEK at Crater Camp
(Drainage Area 103 square miles) F130R

Year	Page No.	Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows Mo.	Day	Flow C.F.S.	Mo.	Day	Flow C.F.S.
1930-31	139				* 1920	2	4	743			
1931-32	68	1769	0.01	20.2	14670	2	9	3100			
1932-33	123	1100	0.1	12.7	9190	1	19	4460			
1933-34	123	3160	0.05	17.1	12370	1	1	9650			
1934-35	139	511	+	8.59	6220			N.D.			
1935-36	139	92	0	3.19	2310	2	23	147			
1936-37	154	1680	0	33.1	23940	2	14	2760			
1937-38	154	E 5090	0.2	47.1	34100	3	2	E 10000	3	1	5960
1938-39	101	139	0	6.40	4630	12	20	331	9	25	330
1939-40	103	335	+	8.40	6100	2	2	690			

MONROVIA CREEK above Sawpit Creek
(Drainage Area 1.9 square miles) F22R

Year	Page No.	Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows Mo.	Day	Flow C.F.S.	Mo.	Day	Flow C.F.S.
1927-28	44	0.8	0.05	0.11	* 70	2	4	N.D.			
1928-29	105	2.8	0.02	0.08	57	3	10	7			
1929-30	94	2.6	0	0.08	55	1	15	6			
1930-31	149	3.0	0	0.06	43	4	26	13			
1931-32	73	14.5	0.01	0.25	184	2	9	24			
1932-33	129	17	0	0.12	86	1	19	58			
1933-34	129	40	0	0.26	187	1	1	108			
1934-35	142	18	+	0.24	173	4	8	109			
1935-36	142	11	+	0.29	208	2	2	78			
1936-37	157	18	0	0.63	456	12	27	81			
1937-38	157	E 150	+	1.98	1430	3	2	N.D.	3	1	97
1938-39	103	8.5	+	0.21	155	9	25	23			
1939-40	105	8.5	+	0.19	138	1	8	68			

MONROVIA STORM DRAIN at Peck Road
(Drainage Area 4.5 square miles) F195R

Year	Page No.	Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows Mo.	Day	Flow C.F.S.	Mo.	Day	Flow C.F.S.
1932-33	132				**			N.D.			
1933-34	132	108	0	0.60	433	1	1	554			
1934-35	145	56	0	0.54	392	1	5	429			
1935-36	145	48	0	0.42	307	2	2	369			
1936-37	161	44	0	0.75	539	10	18	383			
1937-38	161	306	0	1.56	1130	3	2	E 1200	3	1	436
1938-39	105	55	0	0.80	579	1	5	667	9	25	200
1939-40	107	52	0	0.68	494	1	7	422			

MONTEBELLO STORM DRAIN at outlet into Rio Hondo
(Drainage Area 9.6 square miles) F181R

Year	Page No.	Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows Mo.	Day	Flow C.F.S.	Mo.	Day	Flow C.F.S.
1931-32	75		0		*1120	1	31	531			
1932-33	133	125	0	0.82	592	1	19	713			
1933-34	133	391	0	2.64	1910	1	1	1360			
1934-35	148	114	0	2.28	1650	1	5	1140			
1935-36	148	55	0	1.22	889	2	14	374			
1936-37	163				**			N.D.			
1937-38	163				**	3	2	E 1400			
1938-39	107	147	0	1.35	981	9	25	690			
1939-40	109	77	0.1	1.22	885	2	1	729			

PACOIMA CREEK FLUME below Pacoima Dam
(Drainage Area 28.2 square miles) F118B-R

Year	Page No.	Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows Mo.	Day	Flow C.F.S.	Mo.	Day	Flow C.F.S.
1928-29					* 876			N.D.			
1929-30					865	9	29	9.6			
1930-31					886	2	14-18	4.0			
1931-32	81	75	0	10.6	8400	2	16-27	75			
1932-33	139	10	0	2.47	1790	4	13	81			
1933-34	139	40	0	3.50	2540	1	26	54			
1934-35	151	97	0	7.10	5140	8	21	174			
1935-36	151	57	0	4.17	3030	5	13	153			
1936-37	164	216	0	20.1	14540	2	18	233			
1937-38	164	339	0	31.4	22740	3	2	685	3	1	166
1938-39	109	49	+	4.25	3080	1	20	51	9	25	1.7
1939-40	110	136	+	4.38	3180	2	4	169			

Note: Station at various locations - see station description.

PACOIMA WASH at Parthenia Street
(Drainage Area 50.6 square miles) F16R

Year	Page No.	Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows Mo.	Day	Flow C.F.S.	Mo.	Day	Flow C.F.S.
1928-29	257		0	Negligible				N.D.			
1929-30	107	11	0	0.08	57	1	11	70			
1930-31	159	24	0	0.15	105	2	4	270			
1931-32	78	51	0	0.67	485	2	8	477			
1932-33	141	10	0	0.04	28	1	16	60			
1933-34	141	48	0	0.22	157	1	1	305			
1934-35	154	10	0	0.14	106	1	5	70			
1935-36	154	26	0	0.37	271	2	23	98			
1936-37	166	23	0	0.49	356	2	6	159			
1937-38	166		0		*	3	3	E 2400	3	1	319
1938-39	110	53	0	0.52	377	12	15	258	9	25	34
1939-40	111	50	0	0.33	250	1	8	584			

PUDDINGSTONE CREEK below Puddingstone Dam
(Drainage Area 32.3 square miles) F40R

Year	Page No.	Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows Mo.	Day	Flow C.F.S.	Mo.	Day	Flow C.F.S.
1927-28	55		0		* 32	2	4	* 0.6			
1928-29	55	0.4	0	0.04	30	12	13	2			
1929-30	112	0.6	0	0.04	30	5	3	1.4			
1930-31	165	0.3	0.01	0.03	23	4	26	0.9			
1931-32	82	3.0	0.01	0.11	81	2	9	15			
1932-33	144	1.3	0	0.05	38	1	29	5			
1933-34	144				*			N.D.			
1934-35	156	1.2	0.01	0.06	44	10	17	4.3			
1935-36	156	2.0	0.01	0.05	36	2	12	13			
1936-37	168	6.1	+	0.27	198	2	6	18			
1937-38	168	99	0.1	6.66	4810	3	7	104			
1938-39	112	23	0.1	1.85	1330	10	30	25	9	25	3.0
1939-40	113	1.0	+	0.20	145	1	7	7			

YEARLY-DISCHARGE SUMMARY

RIO HONDO at Lower Azusa Road
(Drainage Area, split) F192R

Year	Page No.	Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows Mo.	Day	Flow C.F.S.	Mo.	Day	Flow C.F.S.
1931-32	84		0		*12710			N.D.			
1932-33	147	937	0	5.25	3800	1	20	5160			
1933-34	147	2700	0	11.2	8110	1	1	5860			
1934-35	158	161	0	11.3	8160	4	8	604			
1935-36	158	114	0	4.68	3400	2	11	391			
1936-37	170	904	0	38.6	27960	2	20	E 1030			
1937-38	170	10500	0	241	174300	3	2	E 31000	3	1	4000
1938-39	113	191	0	2.17	1570	1	5	680	9	25	130
1939-40	114	224	0	5.01	3640	1	7	288			

RIO HONDO above Mission Bridge
(Drainage Area, split) F64R

Year	Page No.	Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows Mo.	Day	Flow C.F.S.	Mo.	Day	Flow C.F.S.
1928-29	83	586	6.5	22.0	15980	11	14	2400			
1929-30	123	252	8.5	18.6	13430	3	15	1260			
1930-31	176	662	4.8	22.7	16410	2	3	4040			
1931-32	85	5092	3.3	65.6	47560	2	9	6320			
1932-33	150	1670	7.5	27.1	19650	1	19	4410			
1933-34	150	4690	3.3	40.0	28970	1	1	E 11800			
1934-35	162	885	8.5	40.4	29230	4	8	3560			
1935-36	162	446	10	28.6	20700	2	12	2890			
1936-37	174	989	9.5	70.3	50900	3	15	4600			
1937-38	174	E 12600	13	289	209300	3	2	E 28000	3	1	5670
1938-39	115	1280	14	42.4	30650	12	18	5220	9	25	2550
1939-40	116	505	13	38.1	27660	1	7	2380			

Note: Station at various locations - see station description.

RIO HONDO at Stewart and Gray Road
(Drainage Area, split) F45R

Year	Page No.	Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows Mo.	Day	Flow C.F.S.	Mo.	Day	Flow C.F.S.
1927-28	74		0		* 269	3	6	* 4.0			
1928-29	179	248	0	3.41	2460	4	4	912			
1929-30	132	285	0	2.76	2000	3	15	743			
1930-31	170	335	0	2.64	1900	2	4	841			
1931-32	88	3440	0	27.4	19920	2	9	4610			
1932-33	154	971	0	6.15	4450	1	19	2730			
1933-34	154	5810	0	23.5	17030	1	1	E 16000			
1934-35	167	667	0	8.28	6000	4	8	3450			
1935-36	167	472	0	5.82	4220	2	12	3160			
1936-37	179	1460	0	37.1	26870	2	14	4800			
1937-38	179	12700	0	238	172100	3	3	E 24400	3	1	7600
1938-39	113	910	0	13.2	9540	12	18	5260	9	25	3230
1939-40	119	442	0	6.67	4850	1	8	1930			

RIO HONDO SLOUGH at San Gabriel Blvd. F83R

Year	Page No.	Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows Mo.	Day	Flow C.F.S.	Mo.	Day	Flow C.F.S.
1929-30	117	20	14	17.0	12290	2	3	20			
1930-31	187	37	12	16.4	11820	2	4	49			
1931-32	90	37	13	16.7	12120	2	8	44			
1932-33	158	32	11	16.2	11720	1	29	51			
1933-34	158	84	7.5	12.5	9030	1	1	166			
1934-35	171	17	9.5	12.6	9140	4	8	32			
1935-36	171	26	9.5	13.5	9810	2	12	38			
1936-37	182	51	10	15.0	10840	2	14	84			
1937-38	182		15		*14220			N.D.	3	1	91
1938-39	120	77	19	22.5	16320	9	25	118			
1939-40	121	52	15	22.3	16210	1	8	74			

RUBIO WASH at Glendon Way
(Drainage Area, 13.4 square miles) F82C-R

Year	Page No.	Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows Mo.	Day	Flow C.F.S.	Mo.	Day	Flow C.F.S.
1929-30	143	81	0	1.46	1060	3	14	661			
1930-31	194	107	0	1.54	1110	2	3	1690			
1931-32	92	124	0	2.05	1490	11	27	798			
1932-33	161	234	0	1.53	1110	1	16	1510			
1933-34	161	684	0	3.57	2580	12	31	2070			
1934-35	173	134	0	2.44	1770	10	17	1680			
1935-36	173	81	0	1.75	1280	2	22	1370			
1936-37	185	186	0		2800	12	27	1180			
1937-38	185	802	0	5.77	4180	3	2	E 2400	2	28	1480
1938-39	122	250	0	3.29	2370	1	5	1720	9	25	580
1939-40	123	122	0	2.37	1720	1	7	1000			

Note: Station at various locations - see station description.

SAN ANTONIO CREEK at mouth of canyon
(Drainage Area, 28 square miles) F151R

Year	Page No.	Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows Mo.	Day	Flow C.F.S.	Mo.	Day	Flow C.F.S.
1930-31	199		0		* 201	4	26	98			
1931-32	94	263	0	10.7	7800	2	8-9	405			
1932-33	164	33	0	0.15	111	1	19	167			
1933-34	164	123	0	0.87	630	1	1	200			
1934-35	175	87	0	9.43	6840	4	8	212			
1935-36	175	50	0	9.27	1640	2	11	208			
1936-37	187	211	0	31.2	22570	2	14	238			
1937-38	187	6620	0	58.4	42300	3	2	E 23400	3	1	1220
1938-39	124	148	0	1.98	1430	9	25	280			
1939-40	124	78	0	3.89	2820	1	8	286			

SAN ANTONIO SPREADING GROUNDS at mouth of canyon
Regulated Flow F33R

Year	Page No.	Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows Mo.	Day	Flow C.F.S.	Mo.	Day	Flow C.F.S.
1928-29	50	9.2	0	0.05	34	3	10	* 17			
1929-30	149	11.	0	0.57	410	5	3	19			

SAN GABRIEL RIVER-W. Fork above S.G. Dam No. 2
(Drainage Area, 14.4 square miles) F228R

Year	Page No.	Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows Mo.	Day	Flow C.F.S.	Mo.	Day	Flow C.F.S.
1933-34	174		0		*	1	1	1850			
1934-35	237	403	0	15.1	10900	4	8	755			
1935-36	237	121	0	5.78	4200	2	12	570			
1936-37	191	470	+	26.3	19050	12	27	1220			
1937-38	191			Station abandoned				N.D.			

SAN GABRIEL-DEVIL'S CANYON CREEK above S. G. Dam No. 2
(Drainage Area, 15.4 square miles) F227R

Year	Page No.	Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows Mo.	Day	Flow C.F.S.	Mo.	Day	Flow C.F.S.
1933-34	176		0		*	1	1	1560			
1934-35	188	177	0	8.18	5930	4	8	288			
1935-36	188	75	0	2.49	1810	2	12	204			
1936-37	194	232	0	12.4	8980	2	6	367			
1937-38	194			Station abandoned				N.D.			

YEARLY-DISCHARGE SUMMARY

Year	Water year ending Sept. 30 Page No.	Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows Mo.	Day	Flow C.F.S.	Mo.	Day	Flow C.F.S.
SAN GABRIEL RIVER-W. FORK below S.G. Dam No. 2 (Drainage Area, 41 square miles)											F209R
1933-34	178				*	1	1	4400			
1934-35	240	594	+	27.2	19700	12	13	1260			
1935-36	240	43	0.2	9.76	7090	2	17	45			
1936-37	196	577	+	46.4	33580	2	14	752			
1937-38	196	6620	0.7	81.4	58920	3	2	E 25000			
1938-39	126	683	0.4	15.7	11360	9	25	1190			
1939-40	126	141	0.6	12.9	9370	1	15	1240			
SAN GABRIEL RIVER-W.FORK above North Fork (Drainage Area, 49 square miles)											F97R
1929-30	197	129	0.2	10.8	7790	3	14	206			
1930-31	231	366	0.05	9.31	6740	4	26	751			
1931-32	100	2090	0.1	36.4	26420	2	8	2700			
1932-33	182	996	0.1	14.1	10190	1	19	2890			
1933-34	182	1600	0.1	16.6	12050	1	1	4840			
SAN GABRIEL-BEAR CREEK above W. Fork (Drainage Area, 27.9 square miles)											F99B-R
1929-30	166	76	0.1	10.6	7660	5	3	108			
1930-31	245	279	0.1	6.22	4500	4	26	527			
1931-32	102	1090	0.8	22.8	16620	2	9	1510			
1932-33	186	182	0.02	9.12	6600	1	19	566			
1933-34	186	732	0	9.24	5470	1	1	1600			
1934-35	185				*			N.D.			
1935-36	185	156	0.2	8.89	6400	2	12	410			
1936-37	202	614	0.2	37.9	27440	2	14	736			
1937-38	202			Station abandoned		3	2	E 12500			

Note: Station at various locations - see station description.

SAN GABRIEL RIVER-N. FORK above Narrows (Drainage Area, 18.8 square miles)											F98R
1929-30	178	16	1.5	4.10	2970	5	3	18			
1930-31	239	11	1.8	3.45	2500	4	26	16			
1931-32	105	186	1.8	11.9	8600	2	8	223			
1932-33	190	49	1.4	4.97	3600	1	19	126			
1933-34	190	186	0.8	4.50	3260	1	1	276			
1934-35	209	76	1.0	11.2	8140	4	8	111			
1935-36	209	36	1.6	5.94	4310	2	2	85			
1936-37	205	140	1.7	23.1	16750	3	13	198			
1937-38	205			Station abandoned				N.D.	3	1	1020
SAN GABRIEL RIVER-W. FORK above Forks (Drainage Area, 102 square miles)											F3R
1927-28	18	704	1.6	17.9	15180	2	4	1620			
1928-29	15	422	0	20.7	14960	4	4	775			
1929-30	192	225	1.9	25.5	18470	3	15	301			
1930-31	264	676	1.2	20.2	14630	4	26	1530			
1931-32	107	598	1.4	76.1	55360	2	9	3790			
1932-33	193	1360	2.5	33.1	23990	1	19	3460			
1933-34	193	3340	1.5	34.5	24990	1	1	5320			
1934-35	225	1180	1.9	77.5	56110	4	8	1840			
1935-36	225	312	2.5	31.8	23070	2	12	752			
1936-37	208	1640	2.7	133	96590	2	14	2000			
1937-38	208		13.	237	171900	3	2	E 34000	3	1	3460
1938-39	128	1140	7.5	46.5	33660	9	25	2530			
1939-40	129	369	6.5	38.2	27720	1	8	1220			

Note: Station at various locations - see station description.

SAN GABRIEL RIVER-E. FORK above Cattle Canyon (Drainage Area, 58.2 square miles)											P2R
1927-28	27	168	5.5	18.5	15680	2	4	267			
1928-29	22	242	4.7	24.4	17670	3	10	448			
1929-30	186	101	7.	29.8	21540	5	3	122			
1930-31	255	168	8.5	21.0	15200	4	26	267			
1931-32	96	2520	8.5	73.5	53410	2	8	3340			
SAN GABRIEL RIVER-E. FORK below Cattle Canyon (Drainage Area, 78.4 square miles)											F96R
1929-30	72	114	6	34.3	24850	5	16	108			
1930-31	222	422	6	26.3	19020	4	26	777			
1931-32	97	3650	10	93.5	67910	2	8	4700			
1932-33	166	148	6	29.4	21260	1	19	310			
1933-34	166	2640	4.2	32.4	23480	1	1	4200			
SAN GABRIEL RIVER-E. FORK above forks (Drainage Area, 88.2 square miles)											P4B-R
1932-33	170	163			*18990	1	19	335			
1933-34	170	6210	4.5	47.3	34230	1	1	8500			
1934-35	198	638	4.5	85.4	61840	4	8	1080			
1935-36	198	428	8	40.7	29590	2	11	1290			
1936-37	214	1440	9	148	107400	2	14	2180			
1937-38	214	10000	20	208	150800	3	2	E 46000	3	1	4660
1938-39	133	303	14	43.6	31590	12	18	716			
1939-40	132	430	14	42.0	30500	1	8	1360			

Note: Station at various locations - see station description.

SAN GABRIEL RIVER near Roberts Relay Station (Drainage Area, 201 square miles)											F233R
1934-35	212	2580	7.5	176	127100	4	8	4850			
1935-36	212	706	12	73.6	53410	2	12	1530			
1936-37	222				*26350			N.D.			

YEARLY-DISCHARGE SUMMARY

Year	Water year ending Sept. 30 Page No.	Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows Mo.	Day	Flow C.F.S.	Mo.	Day	Flow C.F.S.
SAN GABRIEL RIVER at Edison Intake (Drainage Area, 202 square miles)											F28R
1927-28	4	916	5.	47.6	34430	2	4	1830			
1928-29	1	600	3.5	49.9	36160	3	10	990			
1929-30	204	455	10	64.8	46830	5	3	799			
1930-31	204	1250	11	49.3	35690	4	26	2900			
1931-32	110	7530	11	182	132600	2	9	9110			
1932-33	199	2420	7.5	67.3	48710	1	19	7550			
1933-34	199	10700	5.5	86.9	62910	1	1	18000			
1934-35	192	2580	7.5	176	127400	4	8	4770			
1935-36	192	663	12	73.2	53180	2	12	E 1330			
1936-37	224				*182600	2	14	4240			
SAN GABRIEL-AZUSA CONDUIT at sand box weir (Regulated flow)											F250R
1934-35	183				* 36610						
1935-36	183	109	0	42.1	30540						
1936-37	227	94	0	27.3	19740						
1937-38	227	104	0	15.4	11160						
1938-39	138	103	0	5.91	4280						
1939-40	135	94	0	47.4	34440						
SAN GABRIEL-AZUSA CONDUIT at N. Portal No. 4B Tunnel (Regulated flow)											F220R
1932-33	208				*						
1933-34	208	86	0	27.3	19770						
1934-35	178	94	6	64.3	46570						
1935-36	178	86	9	40.7	29500						
1936-37	228	94	+	29.0	21030						
1937-38	228	94	+	16.4	11910						
1938-39	138	0	0	0	0						
1939-40	136	90	+	32.7	23760						
SAN GABRIEL RIVER at Foothill Blvd. (Drainage Area, 230 square miles)											F190R
1931-32	114		0		*76220			N.D.			
1932-33	215	2530	0	15.7	11400	1	19	10000			
1933-34	215	3150	0	20.3	14690	1	1	5550			
1934-35	204	400	0	81.7	59220	4	8	1080			
1935-36	204	169	0	21.1	15300	2	2	572			
1936-37	231	1610	0	162.	117400	2	19	2050			
1937-38	231		0		*	3	2	E 62000	3	1	2530
1938-39	139	220	0	15.0	10850	1	5	267	9	25	82
1939-40	137	388	0	13.7	9980	6	25	400			
SAN GABRIEL RIVER at Beverly Blvd. (Drainage Area, split)											F263R
1928-29	71	93	0	3.94	2850	3	10	397			
1929-30	161	152	0	4.83	3490	1	11	726			
1930-31	217	106	0	3.44	2490	2	4	404			
1931-32	116	1620	0	18.0	13060	2	9	3830			
1932-33	221	286	0	4.20	3040	1	29	1450			
1933-34	221	5580	0	23.4	16950	1	1	22000			
1934-35	246	746	0	16.8	12190	10	17	5400			
1935-36	246	355	0	6.32	4590	2	12	3400			
1936-37	236	2440	0		*34240	2	14	6970			
1937-38	236	11400	0	131	94810	3	2	E 22700	3	1	7920
1938-39	142	672	0	34.1	24620	9	25	2100			
1939-40	139	544	0	27.8	20180	2	1	2110			

Note: Station at various locations - see station description.

SAN GABRIEL RIVER at Florence Ave. (Drainage Area, split)											P262R
1933-34	225		0		*			N.D.			
1934-35	222	718	0	6.50	4700	10	17	5850			
1935-36	222	414	0	2.42	1750	2	12	3400			
1936-37	240				*			N.D.			
1937-38	240				**			N.D.			
1938-39	144	325	0		*2540	9	25	1380			
1939-40	141	271	0	2.61	1900	1	8	1150			

Note: Station at various locations - see station description.

SAN GABRIEL RIVER at Spring Street, Long Beach (Drainage Area, split)											F42R
1927-28	86	0	0	0	0			0			
1928-29	198	0	0	0	0			0			
1929-30	160	0	0	0	0			0			
1930-31	216	0	0	0	0			0			
1931-32	118	1270	0	9.04	6560	2	9	4490			
1932-33	225	170	0	1.12	809	1	20	2250			
1933-34	225	4860	0	17.1	12370	1	1	15000			
1934-35	220	463	0	3.29	2380	10	17	3390			
1935-36	220	222	0	1.64	1190	2	12	1910			
1936-37	241	1850	0	18.7	13510	2	14	4560			
1937-38	241	14500	0	122	88020	3	2	E 27000	3	1	7370
1938-39	146	265	0	1.50	1080	12	19	956	9	25	620
1939-40	143	E 192	0	2.02	1460	2	3	1400			
SAN JOSE CREEK at Workman-Mill Road (Drainage Area, 85 square miles)											F48R
1928-29	77	* 35	0		* 310	3	10	* 77			
1929-30	212	100	0	1.13	821	1	15	264			
1930-31	282	92	0.08	0.73	531	2	4	323			
1931-32	120	547	0.06	5.55	4030	2	9	1540			
1932-33	228	192	0.01	1.47	1070	1	29	825			
1933-34	228	2950	0	10.5	7610	1	1	13100			
1934-35	249	441	+	5.33	3860	10	17	2450			
1935-36	249	225	0	1.92	1390	2	12	1010			
1936-37	244	1470	+	13.3	9600	2	14	4070			
1937-38	244	4380	0.4	21.3	15450	3	2	9350	3	1	2900
1938-39	148	499	0.3	4.76	3440	9	25	1950			
1939-40	145	246	0.2	4.15	3020	2	1	1570			

YEARLY-DISCHARGE SUMMARY

SANTA ANITA CREEK below Big Santa Anita Dam (Drainage Area, 10.8 square miles) F119R

Year	Page No.	Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows Mo.	Day	Flow C.F.S.	Mo.	Day	Flow C.F.S.
1927-28	34	9.5	0.02	1.61	1160	2	5	16			
1928-29	111	9.	0.2	1.73	1260	9	11	10			
1929-30	17	3.6	0.2	1.33	964	4	12	3.6			
1930-31	28	8.5	0.2	1.60	1160	2	20	9			
1931-32	24	94	0.3	5.34	3880	12	28	112			
1932-33	52				°2020			N.D.			
1933-34	52	373	0.1	3.87	2800	1	1	431			
1934-35	253	90	0.1	5.51	3990	2	16	53	2	20	53
1935-36	253	52	+	3.48	2530			N.D.			
1936-37	247	140	0.1	10.9	7920	2	15	141			
1937-38	247	Station abandoned						N.D.			

Note: Station at various locations - see station description.
° Indicates runoff from Santa Anita Dam outflow records.

SANTA ANITA CREEK above Little Santa Anita Creek (Drainage Area, 12.9 square miles) F260R

Year	Page No.	Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows Mo.	Day	Flow C.F.S.	Mo.	Day	Flow C.F.S.
1936-37	249	140	0	8.91	6450	2	15	174			
1937-38	249	Station abandoned						N.D.	3	1	800

SANTA ANITA WASH at Foothill Blvd. (Drainage Area, 17.2 square miles) F260B-R

Year	Page No.	Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows Mo.	Day	Flow C.F.S.	Mo.	Day	Flow C.F.S.
1938-39	150	46	0	2.32	1680	1	5	128	9	25	47
1939-40	147	58	0	1.46	10620	1	8	248			

SANTA ANITA WASH below Arrow Highway (Drainage Area, 18.3 square miles) F193R

Year	Page No.	Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows Mo.	Day	Flow C.F.S.	Mo.	Day	Flow C.F.S.
1932-33	232		0		*			N.D.			
1933-34	232	232	0	1.20	870	1	1	399			
1934-35	256	70	0	0.27	193	4	8	197			
1935-36	256	18	0	0.22	156	2	16	31			
1936-37	252	98	0	2.90	2090	12	27	117			
1937-38	252	Station abandoned						N.D.			

SAWPIT WASH above Arrow Highway (Drainage Area, 6.7+ square miles) F194R

Year	Page No.	Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows Mo.	Day	Flow C.F.S.	Mo.	Day	Flow C.F.S.
1932-33	237	7.5	0	0.04	26	1	19	22			
1933-34	237				**			N.D.			
1934-35	261	11	0	0.07	51	4	8	45			

SANTA CLARA RIVER at Highway 99 (Drainage Area, 355 square miles) F92B-R

Year	Page No.	Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows Mo.	Day	Flow C.F.S.	Mo.	Day	Flow C.F.S.
1929-30	219	83	0.2	1.10	793	3	15	193			
1930-31	290	291	0.1	2.61	1890	2	7	2310			
1931-32	122	739	0.1	5.89	4280	2	9	2090			
1932-33	233	90	0	0.67	488	1	19	618			
1933-34	233	448	0.01	2.21	1600	1	1	3870			
1934-35	259	82	+	1.51	1090	1	5	608			
1935-36	259	113	0	2.19	1590	2	23	833			
1936-37	254	471	0	6.69	4850	12	27	3410			
1937-38	254	6370	+	37.2	26900	3	2	E 24000	3	1	1570
1938-39	151	E 435	+	14.4	10410	12	15	4620	9	25	550
1939-40	148	79	0.3	2.16	1570	2	1	676			

Note: Station at various locations - see station description.

SEPULVEDA CREEK at Charnock Road (Drainage Area, 25.7 square miles) F185R

Year	Page No.	Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows Mo.	Day	Flow C.F.S.	Mo.	Day	Flow C.F.S.
1932-33	238	255	0	3.01	2180	1	29	834			
1933-34	238	426	0	3.51	2540	12	31	1150			
1934-35	262	226	0.1	4.08	2950	4	8	1560			
1935-36	262	202	0	4.03	2920	2	12	1810			
1936-37	257		0		*	2	14	1980			
1937-38	257		0		*	3	2	E 3100			
1938-39	153	256	0	2.99	2170	9	25	1080			
1939-40	150	291	0	3.83	2780	2	2	1890			

SYCAMORE UPPER STORM DRAIN above Solway Street (Drainage Area, 2.7 square miles) F43R

Year	Page No.	Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows Mo.	Day	Flow C.F.S.	Mo.	Day	Flow C.F.S.
1927-28	88		0		* 63	2	3	* 25	5	8	* 25
1928-29	238	13	0	1.07	77	3	10	62			
1929-30	226	24	0	0.22	160	3	14	24			
1930-31	299	6.5	0	0.06	40	2	4	20			
1931-32	125	12	0	0.57	415	2	9	58			
1932-33								N.D.			
1933-34								N.D.			
1934-35	268							N.D.			
1935-36	268		0		*	3	30	252			
1936-37					**			N.D.			
1937-38					**			N.D.			
1938-39	155	5.5	0	0.19	139	1	5	74	9	25	6.3
1939-40	154	3.3	0	0.14	100	2	1	55			

SYCAMORE LOWER STORM DRAIN at Adams Square (Drainage Area, 6.2 square miles) F44R

Year	Page No.	Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows Mo.	Day	Flow C.F.S.	Mo.	Day	Flow C.F.S.
1927-28	34		0		* 103	2	3	* 34			
1928-29	244	* 73	0		* 253	11	14	904			
1929-30	231	51	0	0.49	353	5	3	51			
1930-31	304	14	0	0.26	190	2	3	212			
1931-32	127	35	0	0.84	611	11	27	191			
1932-33	242	46	0	0.39	283	1	19	401			
1933-34	242	366	0	2.46	1780	1	1	1150			
1934-35	266	65	0	1.53	1110	1	5	591			
1935-36	266	31	0		*	3	30	607			
1936-37	259	56	0		*1760	12	27	365			
1937-38	259				**	3	2	E 2800	2	28	547
1938-39	156	68	0	1.37	992	1	5	314	9	25	314
1939-40	152	33	0	0.81	585	1	7	492			

YEARLY-DISCHARGE SUMMARY

TOPANGA CREEK above mouth of canyon (Drainage Area, 18 square miles) F54B-R

Year	Page No.	Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows Mo.	Day	Flow C.F.S.	Mo.	Day	Flow C.F.S.
1929-30	237				* 647	3	14	340			
1930-31	310	186	0.01	0.97	705	2	4	386			
1931-32	129	127	0.02	4.94	3590	2	8	1250			
1932-33	245	542	0.01	3.09	2240	1	19	1430			
1933-34	245	1590	0	8.87	6420	12	31	4510			
1934-35	270	130	+	1.88	1360	1	5	1200			
1935-36	270	77	+	2.05	1490	2	22	528			
1936-37	261	413	+	9.13	6620	3	15	1130			
1937-38	261	3270	+	21.2	15310	3	2	E 9300	2	28	6630
1938-39	158				**			N.D.			
1939-40	155	183	+	2.86	2080	2	1	1280			

VERDUGO CHANNEL at Estelle Avenue (Drainage Area, 22.4 square miles) F252R

Year	Page No.	Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows Mo.	Day	Flow C.F.S.	Mo.	Day	Flow C.F.S.
1928-29	232	* 15	0		* 140	4	4	* 56			
1929-30	242	14	0	0.04	274	5	3	80			
1930-31	317	8.5	0.01	0.20	145	4	26	46			
1931-32	131	39	0.1	0.98	713	2	9	145			
1932-33	249	42	0.1	0.41	295	1	19	391			
1933-34	249				**			N.D.			
1934-35	273	85	0		* 620	1	5	*1020			
1935-36	273	33	0	0.64	463	3	30	*1100			
1936-37	264		0		*1560	12	27	768			
1937-38	264	1500	0	7.52	5450	3	2	E 4400	2	28	1390
1938-39	159	78	0	1.96	1420	1	5	520	9	25	320
1939-40	157	60	+	1.97	1430	1	8	533			

Note: Station at various locations - see station description.

WALNUT CREEK at Covina Blvd. (Drainage Area, 99 square miles) F47R

Year	Page No.	Max. Day-CFS	Min. Day-CFS	Mean C.F.S.	Runoff A.F.	Peak Flows Mo.	Day	Flow C.F.S.	Mo.	Day	Flow C.F.S.
1928-29	38	* 55	0		* 112	3	10	* 302			
1929-30	247	87	0	0.72	526	1	11	900			
1930-31	322	25	0	0.29	210	2	4	123			
1931-32	133	365	0	3.88	2820	2	9	1780			
1932-33	252	129	0	0.73	530	1	19	748			
1933-34	252	1770	0	8.71	6310	1	1	8060			
1934-35	277	321	0	2.66	1920	10	17	2340			
1935-36	277	291	0	2.29	1670	2	12	2450			
1936-37	266	611	0	5.94	4300	2	6	1980			
1937-38	266	2580	0	17.4	12610	3	2	4290	3	1	3450
1938-39	161	146	0	1.40	1010	12	18	751	9	25	284
1939-40	158	173	0	1.27	923	1	7	1870			

* indicates record incomplete.
** indicates record not computed.
E indicates estimated.
N.D. indicates not determined.

GROUND WATER

&

CONSERVATION

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

Hydraulic Division

CONSERVATION AND GROUND WATER

Season 1939-40

Foreword:

Conservation implies not only the saving of flood waters by introducing them into the ground instead of permitting them to waste in the ocean, but also the preservation of their integrity after entering the ground by preventing contamination from sewage, industrial waste, sea water or other sources.

Principles and Practices of Conservation:

In theory, the conservation of flood and storm waters of the county is comparatively simple. The theory contemplates that such waters as originate in the mountains shall be impounded in surface reservoirs behind dams, to amounts consistent with the flood regulating capacities of the dams, until such times as storm waters of valley and plain origin shall have passed out of the stream channels. The conservation of uncontrolled runoff from valley and plain or from urban districts, beyond that which may be effected by natural channel percolation, is not generally feasible, except for minor storm flows.

The theory then further contemplates that the impounded mountain runoff shall be released at such rates as will permit its absorption in the channels, or in off-channel spreading grounds if the channel capacity is too low to permit absorption in a reasonable time.

To put this theory into practice, however, requires (1) close coordination of flood control and conservation measures; (2) intensive geologic and hydrologic studies of streams and ground water basins; and (3) the application of sound technical and economic principles to the selection of percolating sites, and to the construction of suitable works and the means of introducing the water into the ground.

Moreover, conservation practice is complicated by the nature of certain ground water basins, which causes water introduced into their higher topographic areas to later reappear in their lower areas as surface flow or rising water; by confining parts of the courses of certain streams in paved channels, thereby reducing the absorptive areas; by the continued expansion of urban and industrial districts upon what were formerly natural absorptive areas; and by drafts upon the confined aquifers of the coastal plain basins in excess of the capacity of the "feeder" areas to supply them, thus lowering the pressure heads and thereby threatening sea water intrusion.

Purpose of Conservation:

The immediate objectives of conservation are (1) the re-

plenishment of the ground water basins of the county by amounts of water at least equal to the amounts extracted by pumping; and if possible, to make replenishment exceed depletion until the water tables rise to such elevations that further rises would interfere with adequate soil drainage; and (2) to watch carefully for any indications of contamination in order that preventive measures may be early adopted if possible.

As heretofore, during the 1939-40 season the Conservation and Ground Water Section directed the major part of its efforts to a study of the means and places of replenishment of the ground water basins.

Nature and Characteristics of Ground Water Basins:

There are 26 ground water basins in the county. In general they are bed rock depressions, filled with alluvium, and separated one from another by natural barriers or dikes. The barriers are bed rock ridges or faults. Some are visible surface features, others are buried.

The water in the basins is contained in the pore spaces of the alluvium. In most of the basins the water is free and its surface (the water table) is found at the same elevation in wells as in the ground. In some basins, however, the water is confined beneath impervious strata in the alluvium; and the elevation at which it is found in wells (pressure surface) is generally much higher than the stratum containing the water - the elevation to which it rises depending on the pressure or "head" upon it.

Determining Replenishment or Depletion of the Ground Water Basins:

In order to determine to what extent the basins are replenished or depleted numerous measurements are made of water table elevations and pressure surfaces. During the season of 1939-40 about 1175 wells were measured in October, 1939 and again in April, 1940. Seventy-five of those (designated as Key Wells, see Map III) were also measured at monthly intervals. A smaller number were measured more frequently, and a few were equipped with automatic recorders to provide a continuous record of water table or pressure surface fluctuations.

Ground Water Maps:

From the well measurements made during the 1939-40 period ground water maps were prepared which show by contours the seasonal low and high positions of the water tables in the basins having free (unconfined) aquifers, and the positions of the pressure surfaces in the basins having confined aquifers. These maps are included herein as Maps IV to IX inclusive.

Key Well Hydrographs:

Key wells are those which are so located that their fluctuations are representative of the general fluctuations of the water tables or pressure surfaces of their basins.

All Key Well measurements are reduced to hydrographs, ten of which are included herein to show the fluctuations of the more

important basins (see Pages 210 to 215).

Ground Water Fluctuations:

A summary of water table or pressure surface changes in the several basins is given on Page 204. The figures in column "A" are indices of replenishment or depletion of the unconfined ground water aquifers and of pressure changes of the confined aquifers during the preceeding water year (Oct. - Oct.). The figures in column "B" represent storage or pressure changes during the rainy season. They are not indices of the replenishment or depletion which will occur during the entire water year. This statement is particularly applicable to those basins which are replenished or depleted in large part by underflow from or to adjacent basins.

Ground Water Replenishment:

Replenishment of unconfined aquifers results from: (1) rainfall penetration, (2) influent seepage from channel flows, (3) underflow from adjacent basins, and (4) percolation of water spread on suitable off-channel lands.

Confined aquifers are not subject to storage change because they are always kept full by percolation from their intake areas to replace the water extracted from them. However, raising the water tables in the intake or feeder areas has the effect of exerting a greater head on the confined aquifers and thus raises their pressure surfaces.

Rainfall penetration and underflow cannot be increased or modified in any practical manner by human effort. Influent seepage from channels, however, may be increased by occasionally scarifying the channel bottoms; and percolation in spreading grounds may be made an important means of replenishment up to the economic limit established for any given stream.

The quantity of water conserved by influent seepage in channels and by percolation in spreading grounds during the 1939-40 season is shown on Pages 205 to 207.

Ground Water Pollution:

During the 1939-40 season the Section continued its study of ground water pollution. Samples of water for chemical analysis were taken from streams, sewage disposal plant effluents, and from wells in industrial districts, oil fields, and coastal area. In general, only partial analyses of these samples were made; that is, only the carbonate, bicarbonate and chloride content were determined. About 635 such analyses were made in the District's laboratory.

The Section also continued to cooperate with the U.S. Geological Survey in the latter's study of the Dominguez-Newport barrier with respect to ground water movements and the effectiveness of the barrier against salt water intrusion from the ocean.

Reports:

During the season the Section issued a formal report entitled:

"Report Upon the San Gabriel Coastal Plain Spreading Test of 1939."

Responsibility:

All the work of the Section was done under the direction of L. W. Jordan.

Appendix:

Summary of Water Table or Pressure Surface Changes

Basin	"A" Fall '38 to Fall '39	"B" Fall '39 to Spring '40
San Fernando Valley		
1. Main part	+ 0.5	+ 1.5
2. Sylmar	- 1.5	+ 6.5
3. Pacoima	- 5.5	+ 1.5
4. Tujunga	+ 0.5	+ 1.
5. Verdugo	- 6.	+ 4.
San Gabriel Valley		
1. Main Basin	- 9.5	+ 6.
2. Monk Hill	-12.	+18.
3. Pasadena	+ 6.	+ 5.
4. Santa Anita	-11.	+16.5
5. Canyon	(a)	(a)
6. Glendora	- 6.	+ 1.
7. Way Hill	-12.	-10.
8. San Dimas	- 3.5	+ 8.
9. Foothill	- 4.5	+26.
10. Puente	+ 2.5	+ 8.
Pomona Valley (b)		
1. Upper Claremont	-10.	+ 5.5
2. Lower Claremont	-37.5	+18.5
3. Live Oak	+ 7.	+78.
4. Pomona	+12.	+12.
5. Chino	-27.5 (c)	+ 5. (c)
Coastal Plain		
1. Western Area		
(a) Northern part	(d)	(d)
(b) Southern part	+ 1.	+ 1.
2. Hollywood Area	+ 9.	0
3. Central Area		
(a) Forebay Area	+ 1.	+ 8.
(b) Pressure Area	0 to +6. (e)	+ 1. to + 26. (e)

APPENDIX: (Continued)

Notes:

(a) This basin is replenished in part each year by spreading.

(b) Water from San Antonio Creek is spread during the rainy season in the Upper Claremont Basin. Each basin downstream is replenished in turn by underflow from 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 storage change as generally indicated by the Fall water levels, and neither do they represent seasonal changes as generally represented by the Spring water levels.

(c) This change was local and does not represent the general fluctuation of the water table in the large Chino basin. During the previous year there had been an abnormal rise of the water table at the location of this index well due to underflow from Upper Claremont Heights basin.

(d) Seasonal changes are very small 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. There are not complete data for the Fall of 1939, but indications are that the water levels were somewhat higher than in the Fall of 1938.

(e) These figures represent pressure changes as measured in feet.

Conservation from Influent Seepage in Channels, or by Diversions for Use.*

Releases from reservoirs regulated to percolating capacity of channels and spreading grounds. Percolating capacity of channels maintained by scarifying.

1. Pacoima Wash from the dam to the spreading grounds headworks at Arleta Street.

   Absorptive Capacity approximately 50 c.f.s. with 125 c.f.s. release.

   Amount Conserved.

Year	Release A. F.	Excess of Release over Channel and Sprdg. Grds. Capacity-A.F.	Conserved in Sprdg. Grds. A.F.	Conserved in Channel or *Used-A.F.
1939-40	3,133	22	907	2,204

* In some instances part of the water was diverted for irrigation use.

APPENDIX: (Continued)

2. Big Tujunga Wash from dam to Magnolia Boulevard.

Absorptive Capacity, 300 c.f.s.

Amount Conserved.

Year	Release A.F.	Excess of Release over Channel Capacity-A.F.	Conserved or Used-A.F.
1939-40	7,197	0	7,197

3. Eaton Wash from dam to Rio Hondo.

Absorptive Capacity, 15 to 20 c.f.s.

Amount Conserved.

Year	Release A.F.	Excess of Release over Channel Capacity-A.F.	Conserved or Used-A.F.
1939-40	96	0	96

4. Santa Anita Wash from dam to Arrow Highway.

Absorptive Capacity, 40 c.f.s.

Amount Conserved.

Year	Release A.F.	Excess of Release over Channel Capacity-A.F.	Conserved or Used-A.F.
1939-40	2,743	169	2,574

5. Sawpit Wash from dam to Rio Hondo.

Absorptive Capacity, 10 c.f.s.

Amount Conserved.

Year	Release A.F.	Excess of Release over Channel Capacity-A.F.	Conserved or Used-A.F.
1939-40	308	2	306

APPENDIX: (Continued)

6. San Gabriel River from Morris dam to Telegraph Road (excluding tributaries).

Absorptive Capacity varies with water table elevation and magnitude of releases.

Amount Conserved.

Year	Release A. F.	Excess of Release over Channel and Sprdg. Grds. Capacity-A.F.	San Gabriel Cn. Water Conserved in Coastal Basin Sprdg.Grds.A.F.	Conserved in Channels
1939-40	9,797	0	1,520	8,277

Distribution of Channel Percolation

Year	Canyon Basin A. F.	Main Basin A. F.	Coastal Basin A.F.	Total A.F.
1939-40	2,532	4,047	1,698	8,277

7. San Dimas Wash from Puddingstone Diversion dam to Glendora Boulevard.

Absorptive Capacity, 7 c.f.s.

Amount Conserved.

Year	Release A.F.	Excess of Release over Channel Capacity-A.F.	Conserved or *Used-A.F.
1939-40	1,600	0	1,600 *

* 155 A.F. diverted to Puddingstone dam for storage.

8. Live Oak Wash from dam to Foothill Boulevard.

Absorptive Capacity, 4 c.f.s.

Amount Conserved.

Year	Release A.F.	Excess of Release over Channel Capacity-A.F.	Conserved or *Used-A.F.
1939-40	16	0	16

* In some instances part of the water was diverted for irrigation use.

APPENDIX: (Continued)

9. Thompson Creek

Total flow percolated in reservoir of Thompson Creek Dam

1939-40 49 acre feet

Conservation in off-channel Spreading Grounds.

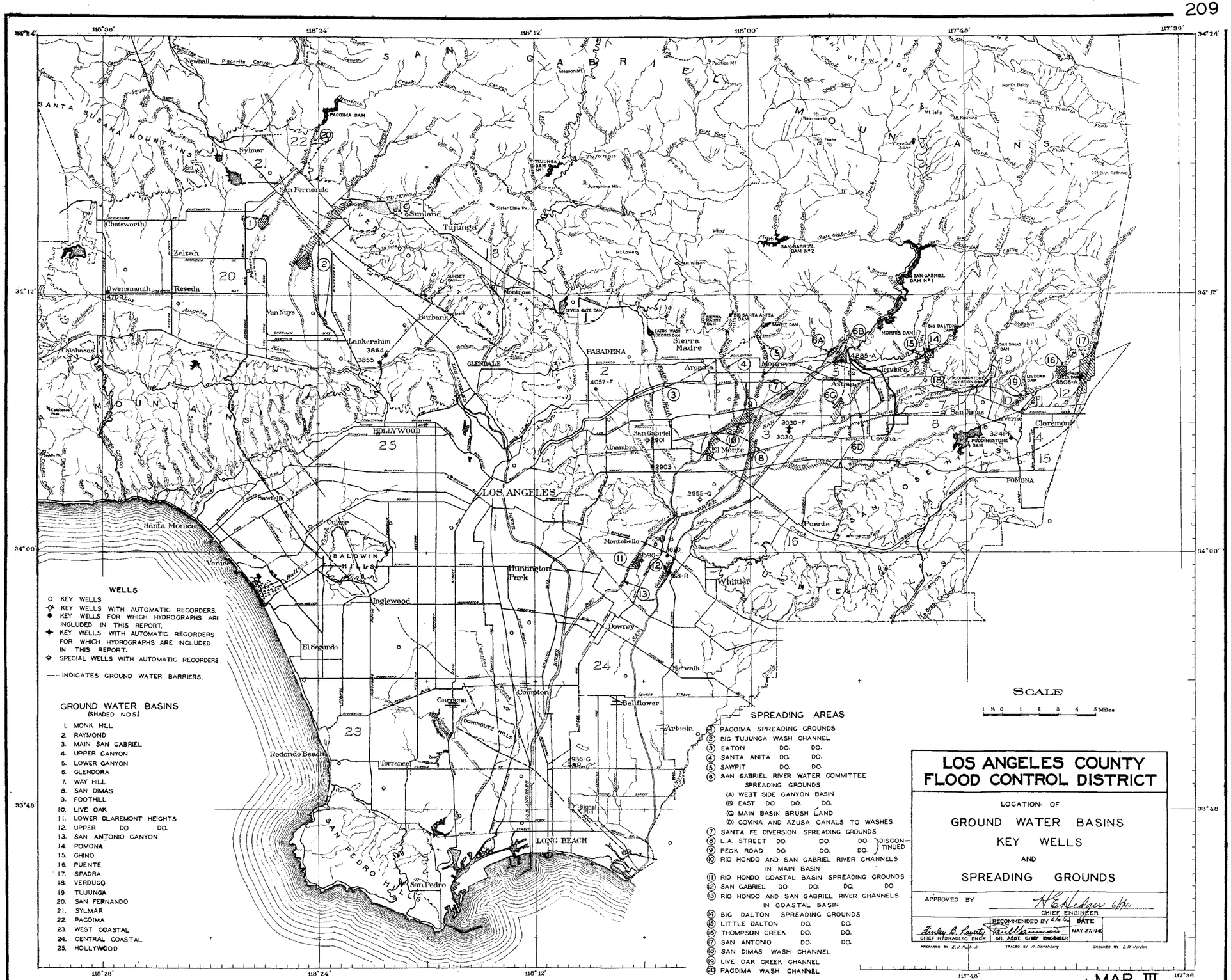
The descriptions of the various spreading grounds are given in the District's Report on Hydrologic Data for the seasons 1936-37 and 1937-38.

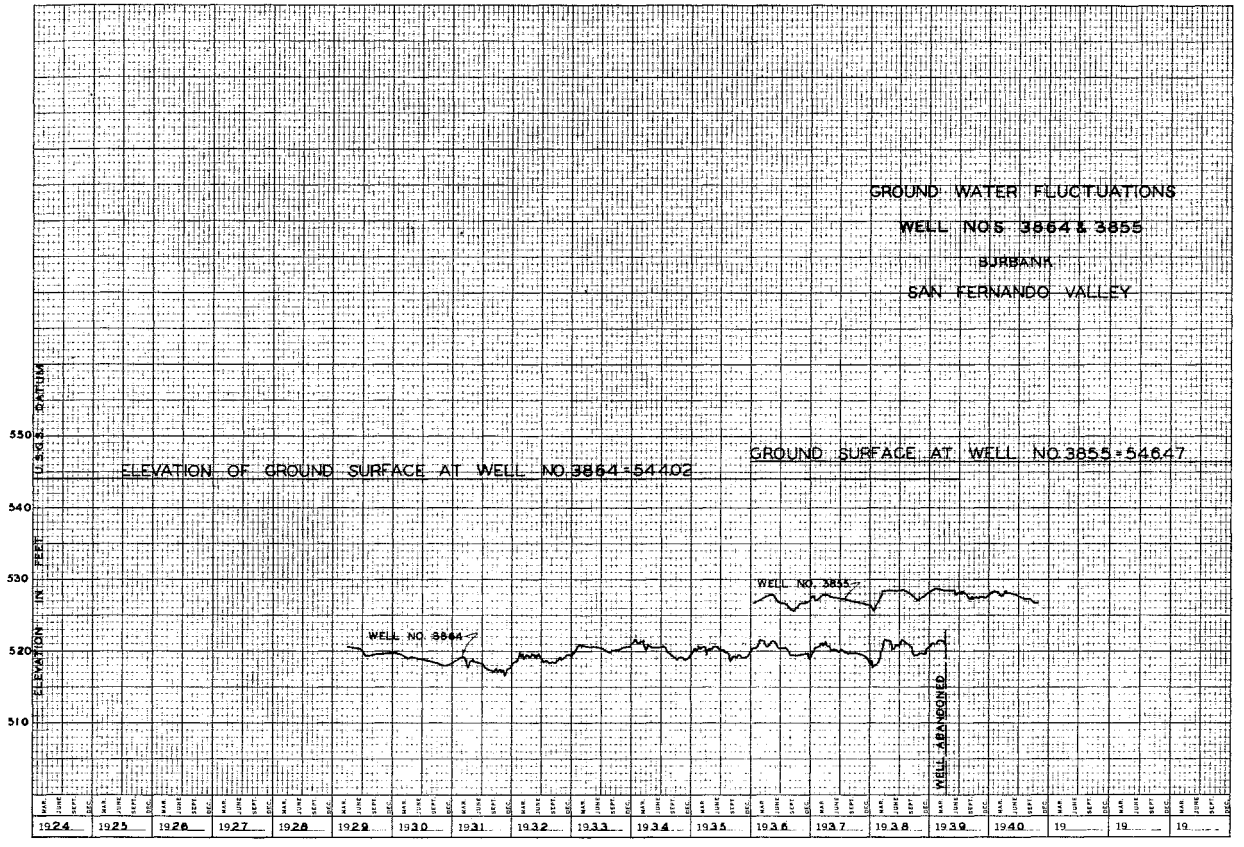
The following tabulation gives the quantities spread in the District, for the 1939-40 season.

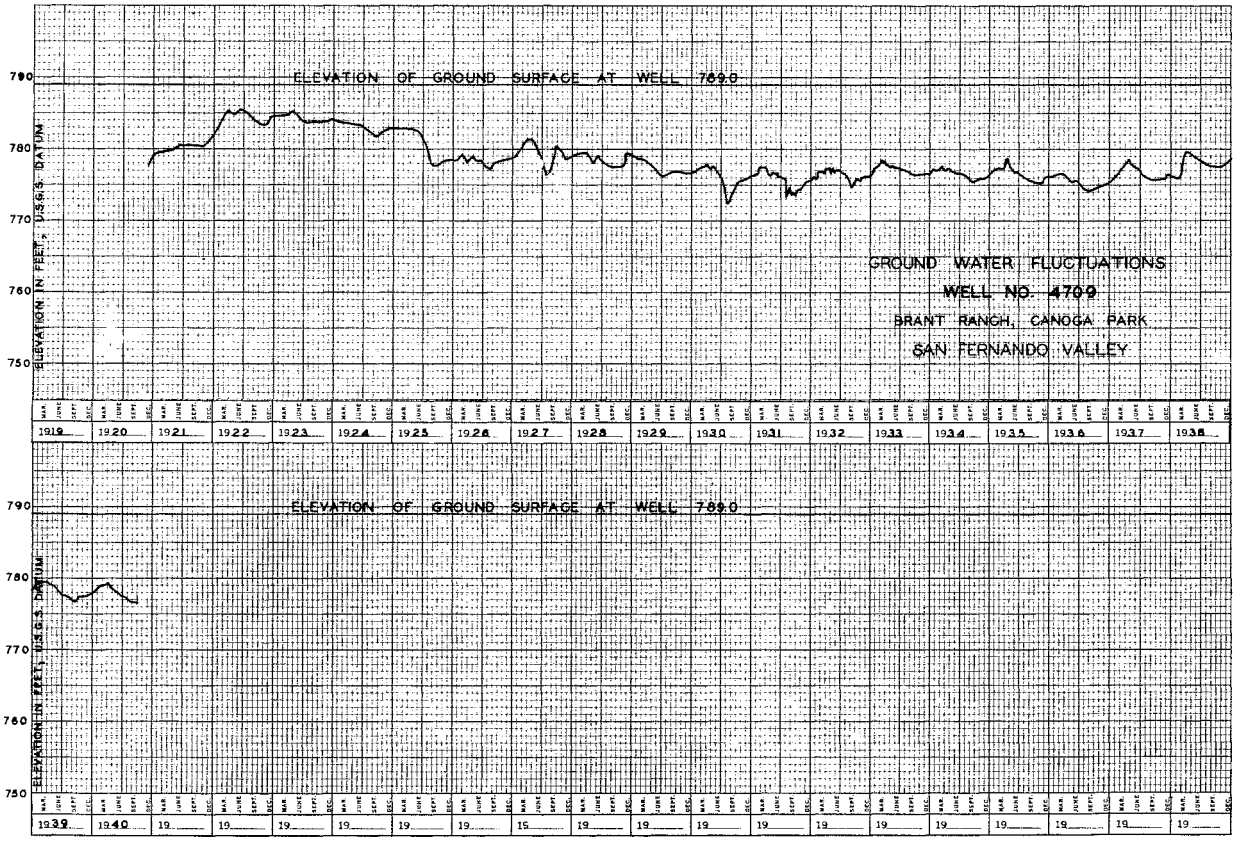
	Spreading Grounds		Acre Feet
1.	Pacoima		907
2.	Rio Hondo Coastal Basin		1,702**
3.	San Gabriel River Coastal Basin (not used)		0
4.	San Gabriel River Water Committee		
	In Canyon Basin		
	(a) West side	5,613)	
	(b) East side	13,691)	19,304
	In Main Basin		
	(a) Covina Canal	3,475)	
	(b) Azusa Canal	5,069)	8,544
5.	Little Dalton (not used)		0
6.	Big Dalton (not used)		0
7.	Thompson Creek		49*
8.	San Antonio		2,715

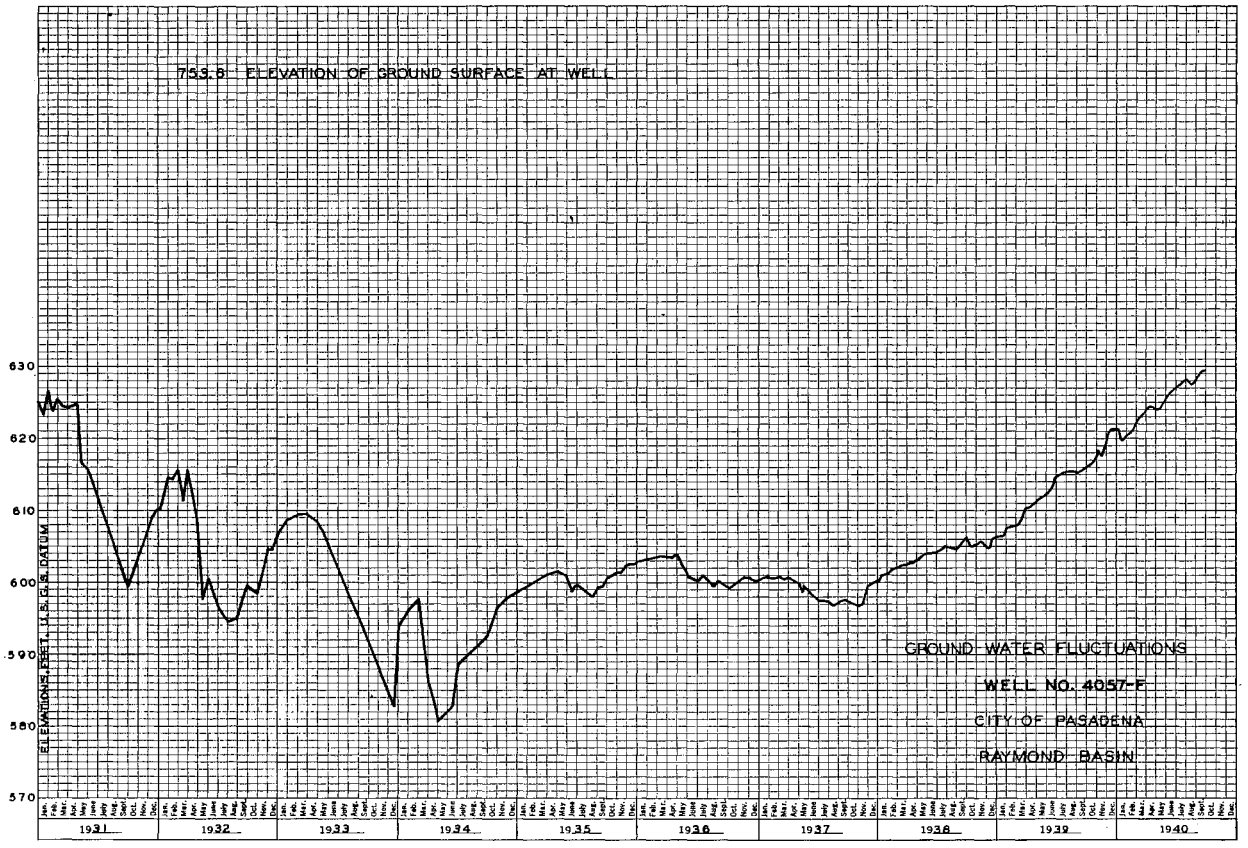
* Entire yearly flow percolated in reservoir.

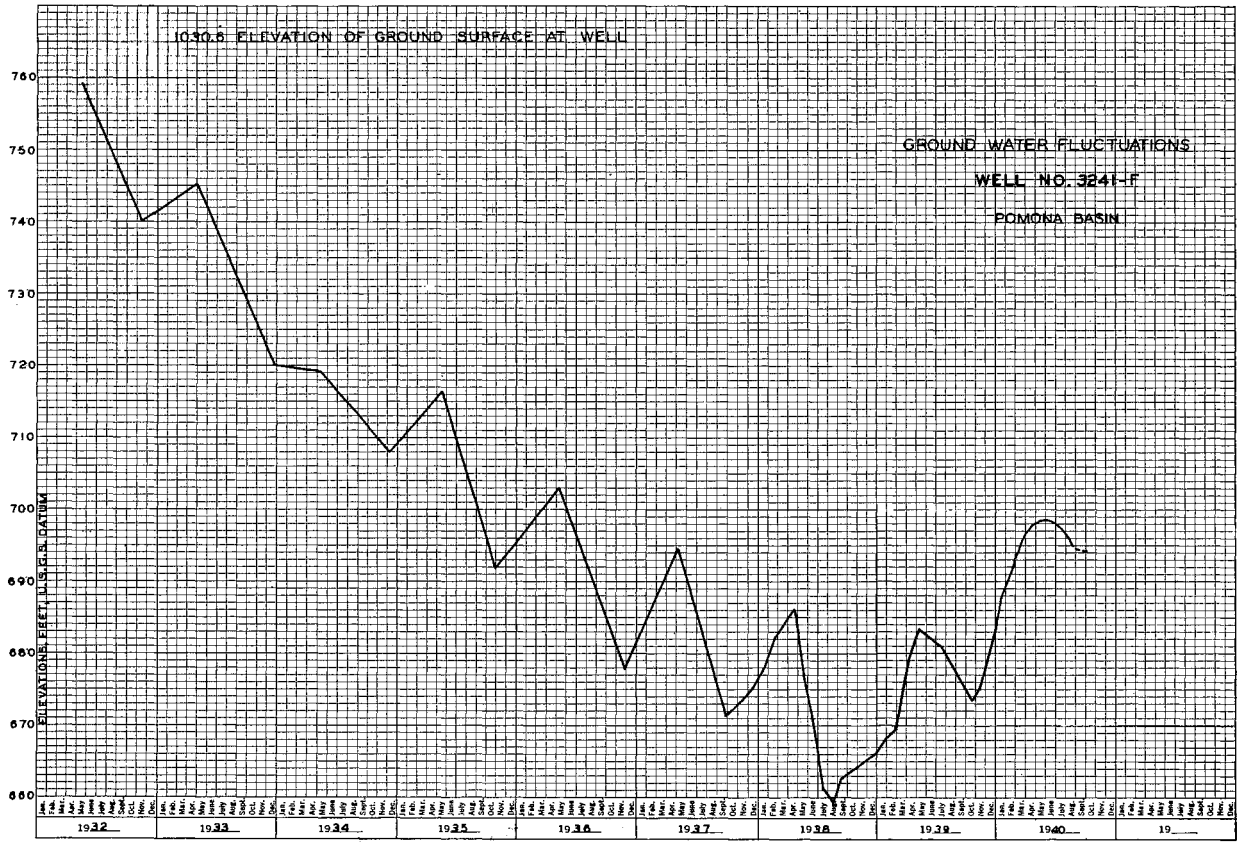
** Additional development of these spreading grounds during the season increased their gross area from 49 to 87.8 acres. Of the quantity spread, 1520 acre feet is San Gabriel Canyon water and 182 acre feet is rising water and Tri-City sewer water.

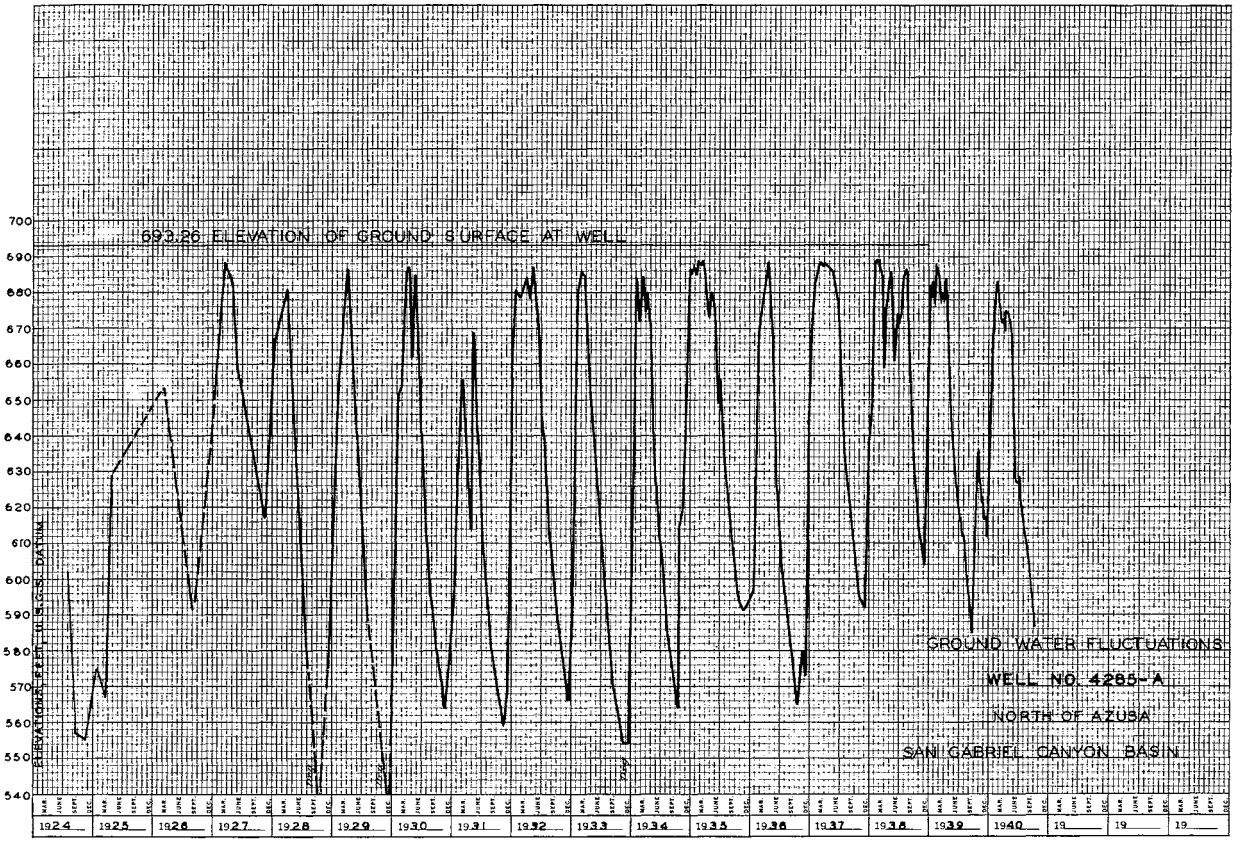

118°36'
118°24'
118°12'
117°48'
117°36'
34°24'
34°12'
34°00'
33°48'
SANTA SUSANA MOUNTAINS
SAN GABRIEL MOUNTAINS
SANTA MONICA MOUNTAINS
PUENTE HILLS
BALDWIN HILLS
SAN PEDRO HILLS
DOMINGUEZ HILLS
Newhall
Pacoima Canyon
PACOIMA DAM
Sylmar
San Fernando
Sunland
Tujunga
Chatsworth
Zelzah
Owensmouth
Reseda
Van Nuys
Burbank
Lankershim
Calabasas
GLENDALE
PASADENA
HOLLYWOOD
LOS ANGELES
Sawtelle
Culver
Santa Monica
Venice
Inglewood
El Segundo
Hawthorne
Gardena
Compton
Redondo Beach
Torrance
San Pedro
LONG BEACH
Bellflower
Norwalk
Downey
Artesia
Huntington Park
Montebello
Whittier
Puente
Covina
Azusa
Glendora
San Dimas
Claremont
POMONA
Arcadia
Monrovia
Alhambra
San Gabriel
El Monte
Sierra Madre
Tujunga Dam No 1
Tujunga Dam No 2
Devils Gate Dam
Eaton Wash Debris Dam
Sierra Madre Dam
Big Santa Anita Dam
Sawpit Dam
San Gabriel Dam No 2
San Gabriel Dam No 1
Morris Dam
Big Dalton Dam
San Dimas Dam
Puddingstone Diversion Dam
Puddingstone Dam
Live Oak Dam
Sierra Madre Reservoir
Raymond Basin
Main San Gabriel Basin
Upper Canyon
Lower Canyon
Glendora Basin
Way Hill Basin
San Dimas Basin
Foothill Basin
Live Oak Basin
Lower Claremont Heights Basin
Upper Claremont Heights Basin
San Antonio Canyon Basin
Pomona Basin
Chino Basin
Puente Basin
Spadra Basin
Verdugo Basin
Tujunga Basin
San Fernando Basin
Sylmar Basin
Pacoima Basin
West Coastal Basin
Central Coastal Basin
Hollywood Basin
4709
3864
3855
4057-F
2901
2903
2955-Q
2990-S
1620
1621-R
3030-F
3030
3241-F
2285-A
2506-A
936-G
WELLS
KEY WELLS
KEY WELLS WITH AUTOMATIC RECORDERS.
KEY WELLS FOR WHICH HYDROGRAPHS ARE INCLUDED IN THIS REPORT.
KEY WELLS WITH AUTOMATIC REGORDERS FOR WHICH HYDROGRAPHS ARE INCLUDED IN THIS REPORT.
SPECIAL WELLS WITH AUTOMATIC REGORDERS
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. DISCONTINUED
(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
SCALE
1 ½ 0 1 2 3 4 5 Miles
LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
LOCATION OF
GROUND WATER BASINS
KEY WELLS
AND
SPREADING GROUNDS
APPROVED BY H.E. Hedger 6/Pc
CHIEF ENGINEER
RECOMMENDED BY
CHIEF HYDRAULIC ENGR.
SR. ASST. CHIEF ENGINEER
DATE MAY 27,1940
PREPARED BY L.V. Hoyle Jr.
TRACED BY H. Hershberg
CHECKED BY L.W. Gordon
MAP III

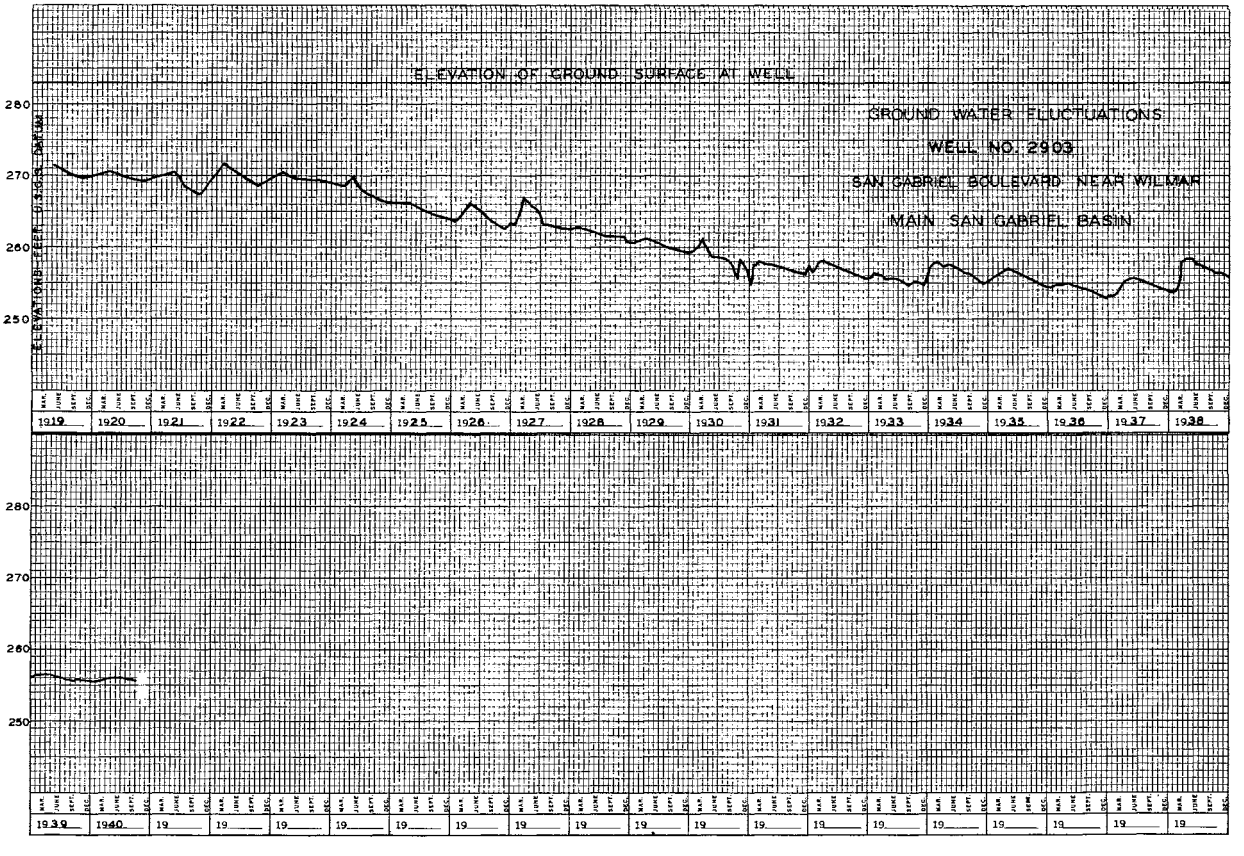

GROUND WATER FLUCTUATIONS
WELL NOS 3864 & 3855
BURBANK
SAN FERNANDO VALLEY
ELEVATION IN FEET, U.S.G.S. DATUM
550
540
530
520
510
ELEVATION OF GROUND SURFACE AT WELL NO.3864=544.02
GROUND SURFACE AT WELL NO.3855=546.47
WELL NO. 3855
WELL NO. 3864
WELL ABANDONED
1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940 19

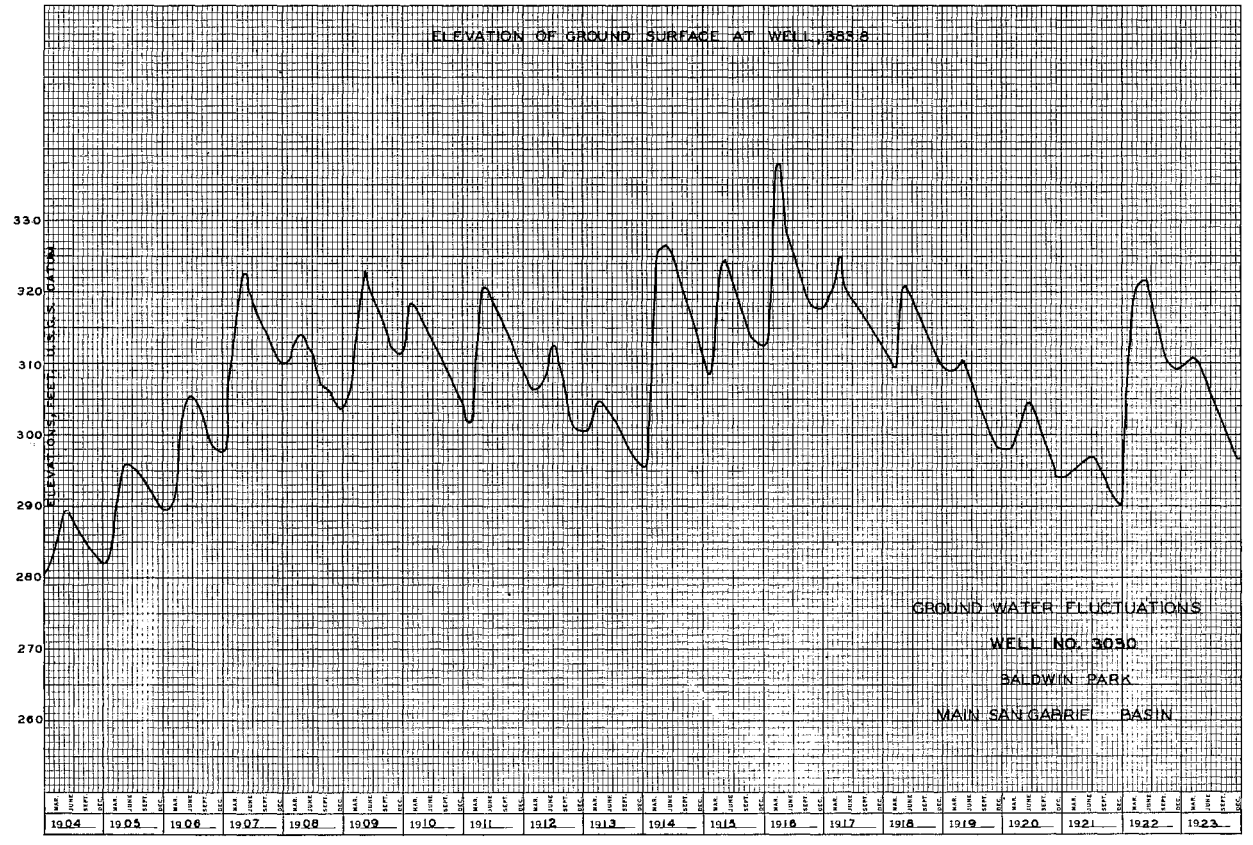

ELEVATION IN FEET, U.S.G.S. DATUM
790
780
770
760
750
ELEVATION OF GROUND SURFACE AT WELL 789.0
GROUND WATER FLUCTUATIONS
WELL NO. 4709
BRANT RANCH, CANOGA PARK
SAN FERNANDO VALLEY
1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938
ELEVATION IN FEET, U.S.G.S. DATUM
790
780
770
760
750
ELEVATION OF GROUND SURFACE AT WELL 789.0
1939 1940 19

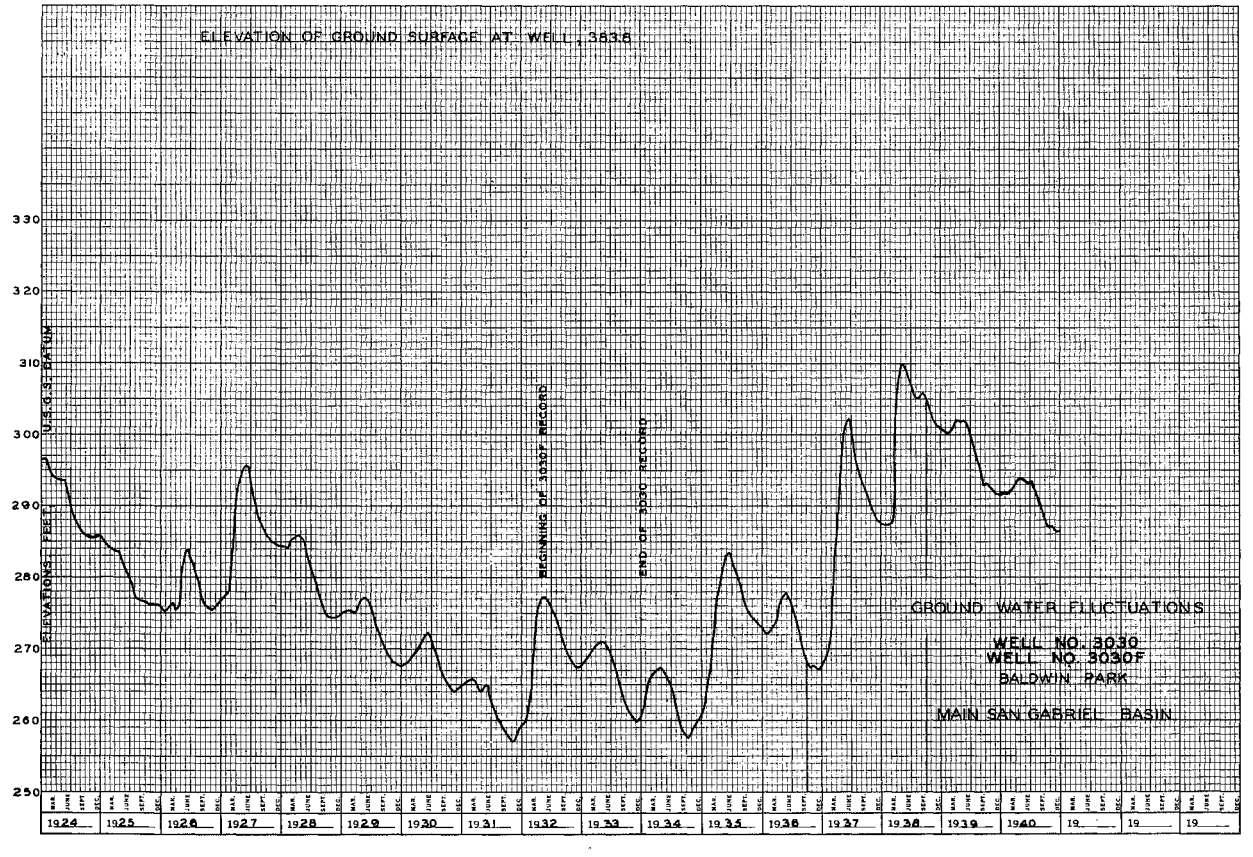

753.6 ELEVATION OF GROUND SURFACE AT WELL
ELEVATIONS, FEET, U.S.C.G.S. DATUM
630
620
610
600
590
580
570
1931
1932
1933
1934
1935
1936
1937
1938
1939
1940
GROUND WATER FLUCTUATIONS
WELL NO. 4057-F
CITY OF PASADENA
RAYMOND BASIN

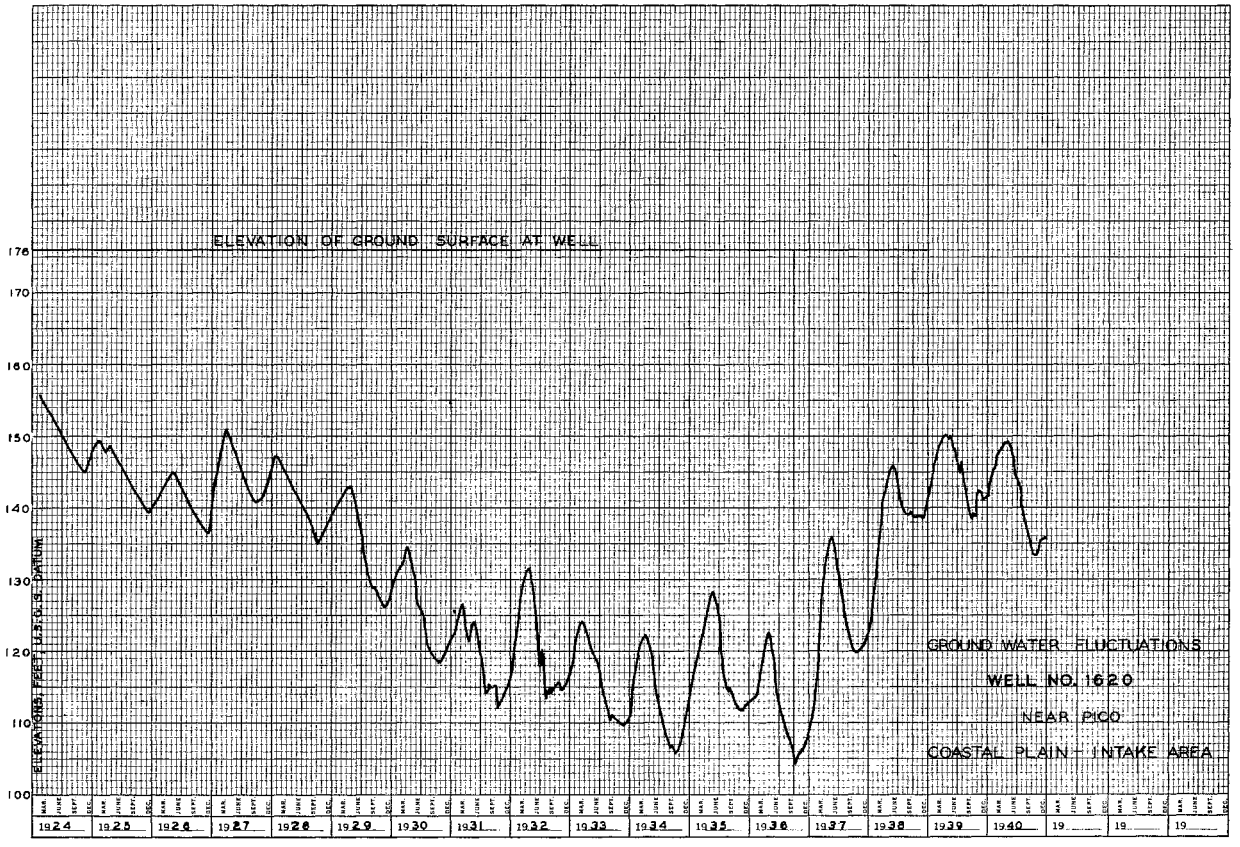

1090.6 ELEVATION OF GROUND SURFACE AT WELL
ELEVATIONS, FEET, U.S.C.G.S. DATUM
760
750
740
730
720
710
700
690
680
670
660
1932
1933
1934
1935
1936
1937
1938
1939
1940
GROUND WATER FLUCTUATIONS
WELL NO. 3241-F
POMONA BASIN

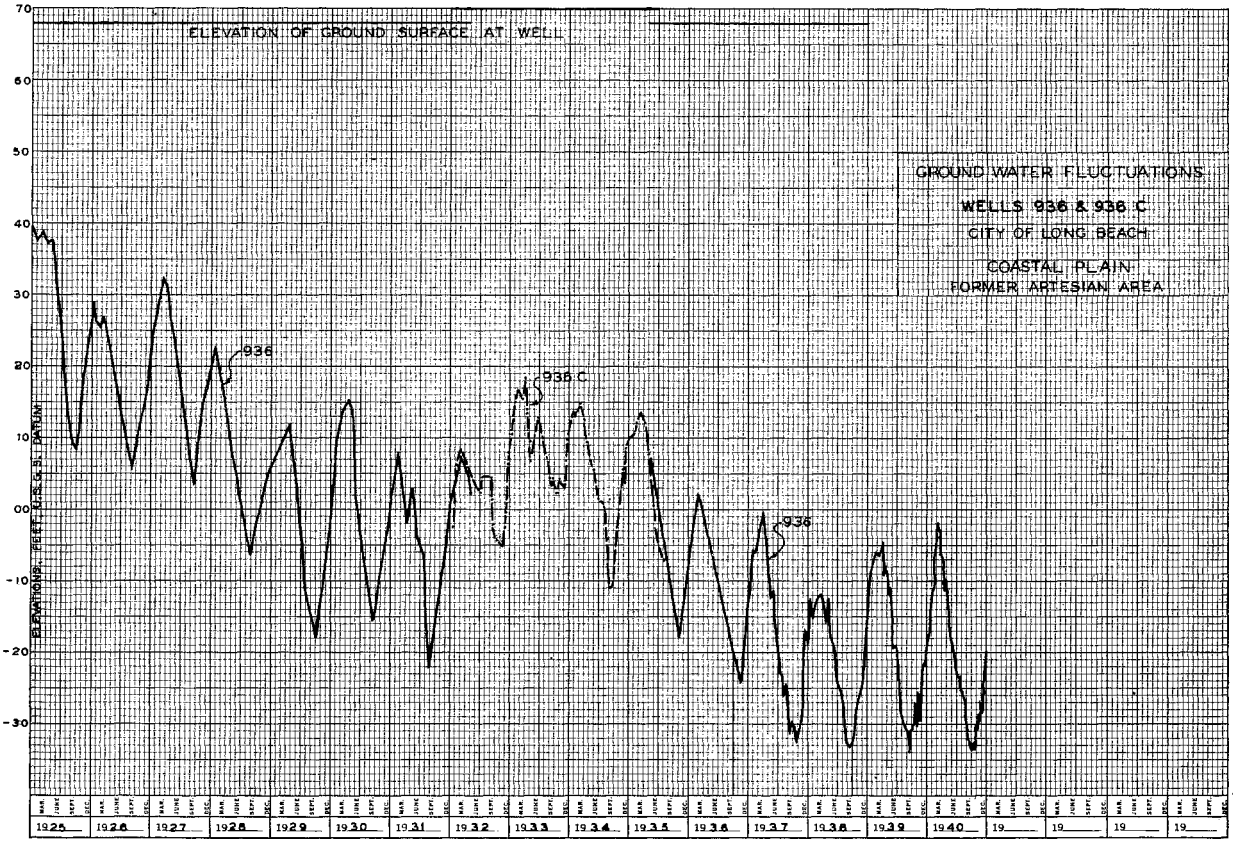

693.26 ELEVATION OF GROUND SURFACE AT WELL
ELEVATIONS - FEET ABOVE U.S.G.S. DATUM
700
690
680
670
660
650
640
630
620
610
600
590
580
570
560
550
540
GROUND WATER FLUCTUATIONS
WELL NO. 4285-A
NORTH OF AZUSA
SAN GABRIEL CANYON BASIN
1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940

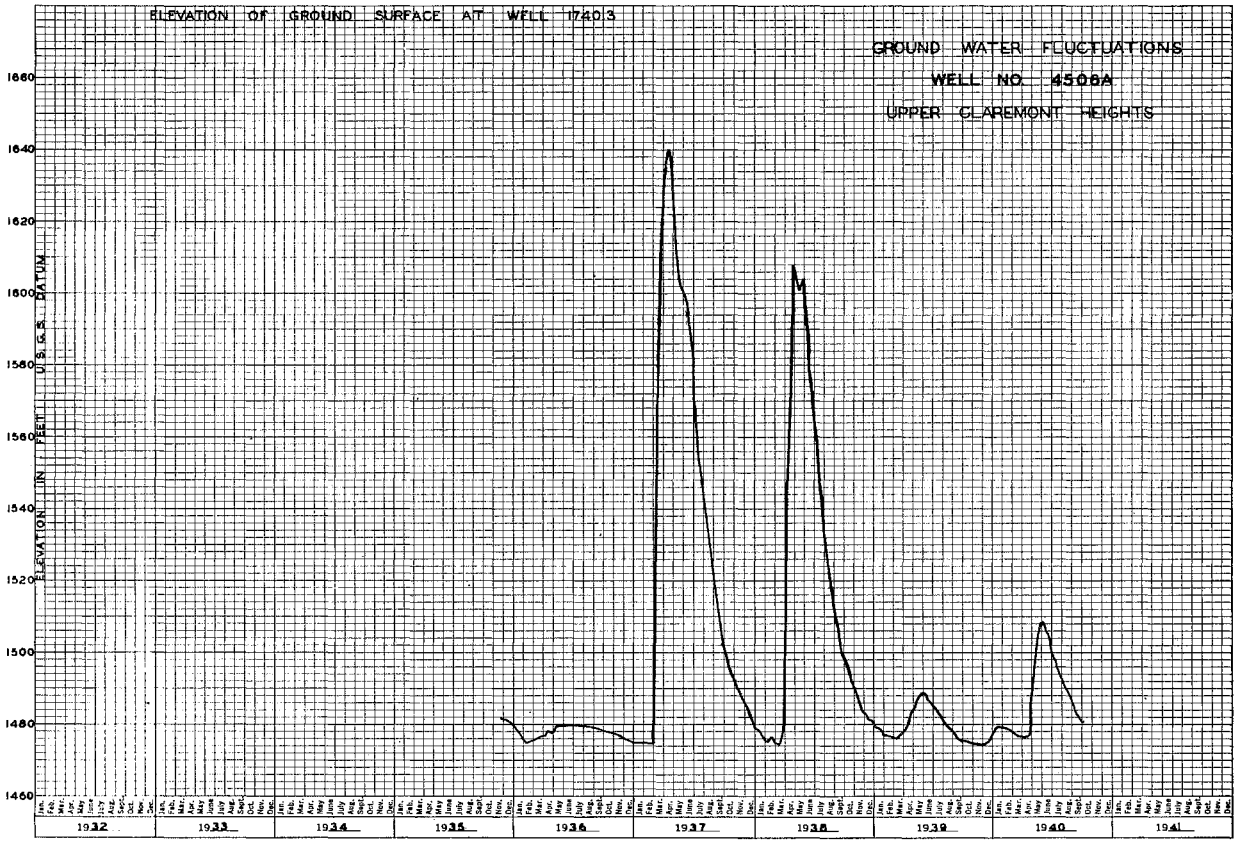

ELEVATION OF GROUND SURFACE AT WELL
ELEVATIONS - FEET ABOVE U.S.G.S. DATUM
280
270
260
250
GROUND WATER FLUCTUATIONS
WELL NO. 2903
SAN GABRIEL BOULEVARD NEAR WILMAR
MAIN SAN GABRIEL BASIN
1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938
1939 1940


ELEVATION OF GROUND SURFACE AT WELL, 385.8
ELEVATIONS, FEET, U.S.G.S. DATUM
330
320
310
300
290
280
270
260
1904 1905 1906 1907 1908 1909 1910 1911 1912 1913 1914 1915 1916 1917 1918 1919 1920 1921 1922 1923
GROUND WATER FLUCTUATIONS
WELL NO. 3030
BALDWIN PARK
MAIN SAN GABRIEL BASIN


ELEVATION OF GROUND SURFACE AT WELL, 383.8
ELEVATIONS, FEET, U.S.G.S. DATUM
330
320
310
300
290
280
270
260
250
BEGINNING OF 3030F RECORD
END OF 3030 RECORD
1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940 19 19 19
GROUND WATER FLUCTUATIONS
WELL NO. 3030
WELL NO. 3030F
BALDWIN PARK
MAIN SAN GABRIEL BASIN


ELEVATION OF GROUND SURFACE AT WELL
ELEVATIONS, FEET, U.S.C.G.S. DATUM
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


ELEVATION OF GROUND SURFACE AT WELL
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


ELEVATION OF GROUND SURFACE AT WELL 1740J3
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

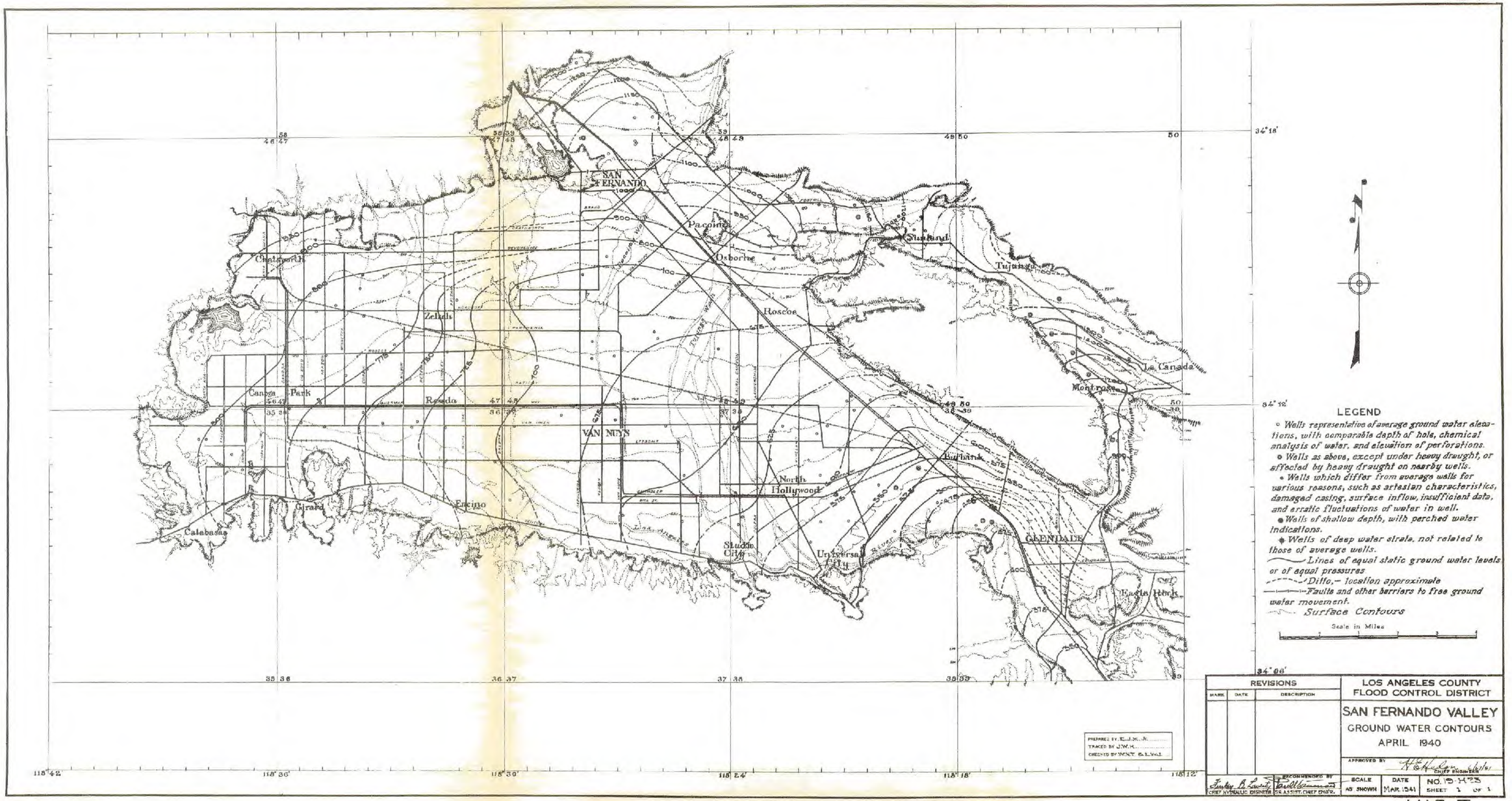
- ○ Wells representative of average ground water elevations, with comparable depth of hole, chemical analysis of water, and elevation of perforations.
- ⊖ Wells as above, except under heavy draught, or affected by heavy draught on nearby wells.
- • Wells which differ from average wells for various reasons, 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.M.T.
TRACED BY J.N.M.
CHECKED BY L.W.J.

REVISIONS			LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
MARK	DATE	DESCRIPTION	SAN FERNANDO VALLEY GROUND WATER CONTOURS OCTOBER 1939
			APPROVED BY H. W. Hedger CHIEF ENGINEER
RECOMMENDED BY Emile B. Lewis CHIEF HYDRAULIC ENGINEER; Paul Hansen ASS'T. CHIEF ENG'R			SCALE AS SHOWN; DATE MAR 1941; NO. 15-H-72 SHEET 1 OF 1

MAP IV



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 drought, 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 E.J.K., JR.
TRACED BY J.W.H.
CHECKED BY W.N.T. & E.J.K.

REVISIONS		
MARK	DATE	DESCRIPTION

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

SAN FERNANDO VALLEY
GROUND WATER CONTOURS
APRIL 1940

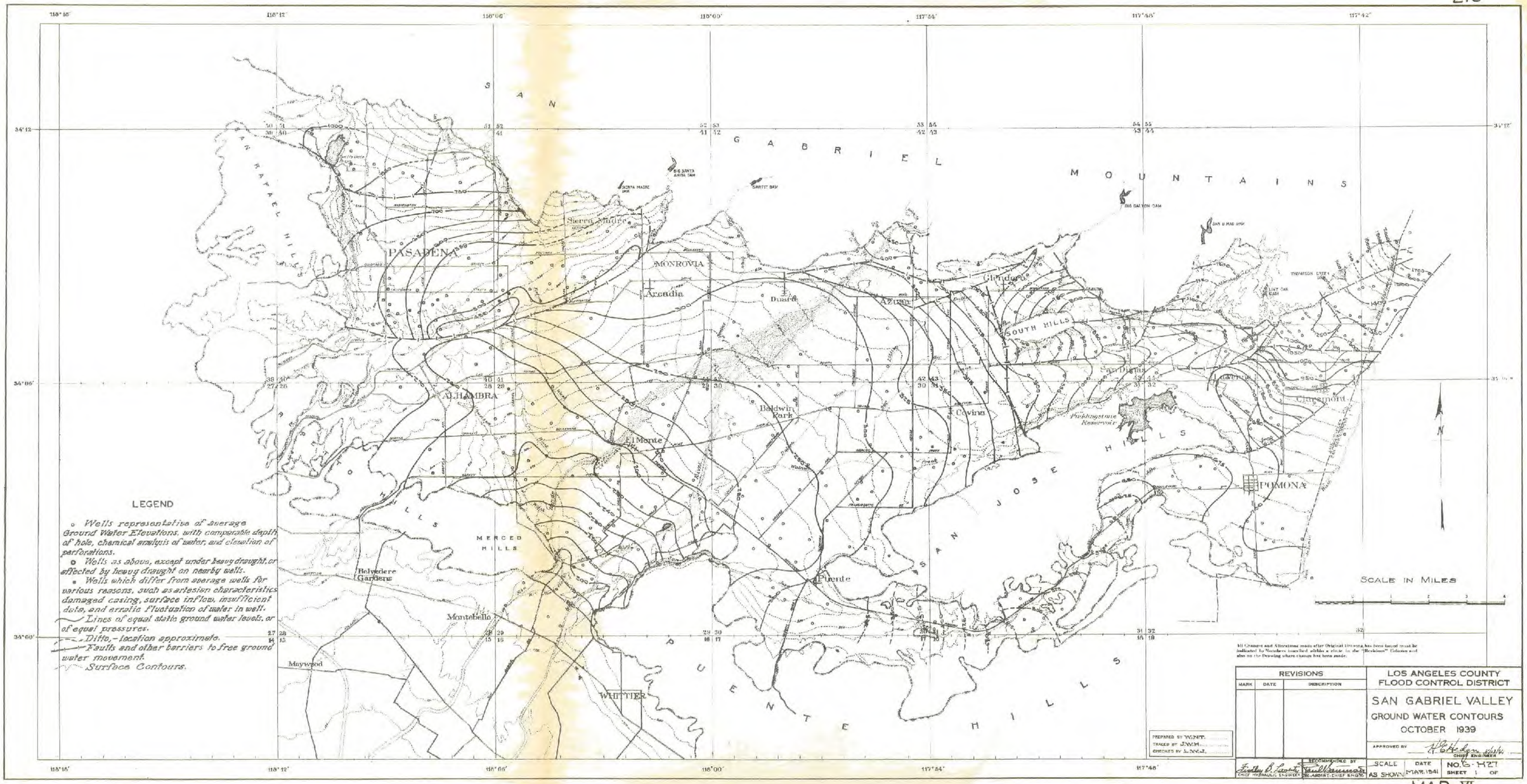
APPROVED BY H.E. Eaton CHIEF ENGINEER

RECOMMENDED BY Harold Conkling ASS'T. CHIEF ENG'R.

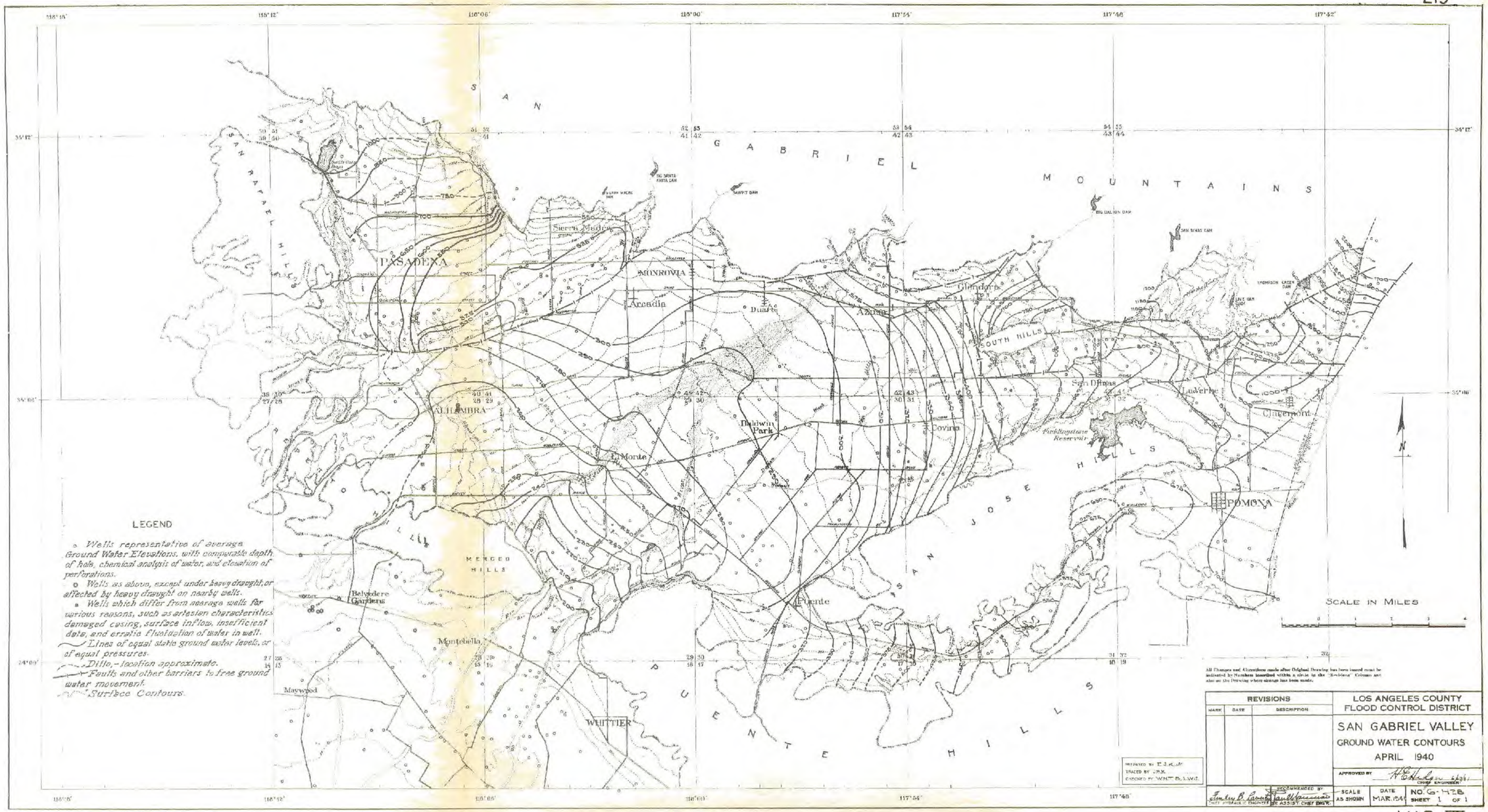
Finley B. Laird CHIEF HYDRAULIC ENGINEER

SCALE	DATE	NO. D-H-23
AS SHOWN	MAR. 1941	SHEET 1 OF 1

MAP V


SAN GABRIEL MOUNTAINS
SAN RAFAEL HILLS
PASADENA
MONROVIA
Arcadia
Duarte
Azusa
Glendora
SOUTH HILLS
San Dimas
Claremont
Sierra Madre
ALHAMBRA
Baldwin Park
Covina
El Monte
POMONA
Puddingstone Reservoir
SAN JOSE HILLS
MERCED HILLS
Belvedere Gardens
Montebello
Maywood
Puente
WHITTIER
PUENTE HILLS
SCALE IN MILES
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 effected 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.N.T.
TRACED BY J.W.M.
CHECKED BY L.N.S.
RECOMMENDED BY
Bailey B. Lacey
CHIEF HYDRAULIC ENGINEER
Paul Baumann
ASS'T. CHIEF ENGR.
LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
SAN GABRIEL VALLEY
GROUND WATER CONTOURS
OCTOBER 1939
APPROVED BY
H. B. Hedger
CHIEF ENGINEER
SCALE AS SHOWN
DATE MAR. 1941
NO. 6-H27
SHEET 1 OF

MAP VI



All Changes and Alterations made after Original Drawing has been issued must be indicated by Numbers inscribed within a circle in the "Revision" 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 1940

PREPARED BY E.J.K.
TRACED BY J.M.K.
CHECKED BY W.H.T. & S.W.C.

APPROVED BY _____ CHIEF ENGINEER

RECOMMENDED BY Finley B. Laverty CHIEF HYDRAULIC ENGINEER Paul Kaufman ASSIST. CHIEF ENGR.

SCALE AS SHOWN | DATE MAR. 1941 | NO. G-428 SHEET 1 OF 1

MAP VII

SANTA MONICA MOUNTAINS

LOS ANGELES

PUENTE HILLS

ORANGE COUNTY

BALDWIN HILLS

DOMINGUEZ HILLS

SAN PEDRO HILLS

LONG BEACH

SAN PEDRO BAY

Beverly Hills
Sawtelle
Palms
Culver City
SANTA MONICA
Venice
Manhattan Beach
Hermosa Beach
Redondo Beach
Torrance
Harbor City
San Pedro
Wilmington
INGLEWOOD
Hawthorne
El Segundo
Gardena
Athens
WATTS
COMPTON
Vernon
Maywood
HUNTINGTON PARK
South Gate
Lynwood
Clearwater
Hynes
Bellflower
Artesia
Norwalk
Downey
Santa Fe Springs
Montebello
Belvedere Gardens
WHITTIER
El Monte
ALHAMBRA
Virginia City

LIMIT OF STORAGE CHANGE RELATIN 1933-45 SHOWN IN BUL 45, STATE DEPT. OF WATER RESOURCES

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
OCTOBER 1939

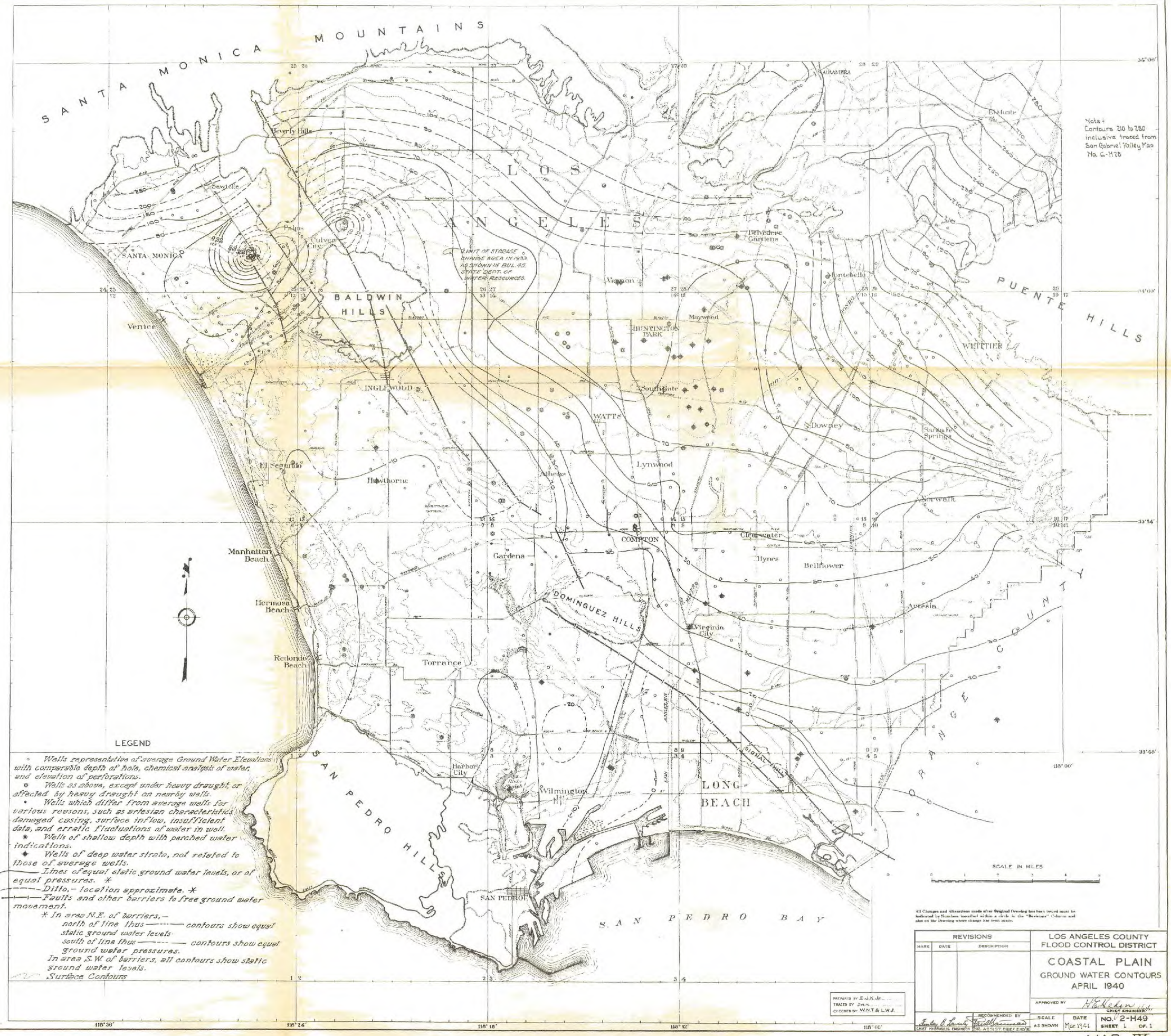
APPROVED BY W. H. Hoover 6/15/41 CHIEF ENGINEER

RECOMMENDED BY Harley O. Hoover Paul Thurmond CHIEF HYDRAULIC ENGINEER SR. ASSIST. CHIEF ENGR.

SCALE AS SHOWN | DATE Mar 1941 | NO. 2-H48 SHEET 1 OF 1

PREPARED BY W.A.J.T.
TRACED BY J.N.H.
CHECKED BY L.W.J.

MAP VIII



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

PREPARED BY E.J.K. Jr.
TRACED BY J.H.N.
CHECKED BY W.N.T. & L.W.J.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

COASTAL PLAIN
GROUND WATER CONTOURS
APRIL 1940

APPROVED BY H. A. Hockin CHIEF ENGINEER

RECOMMENDED BY Fowler B. Lewis CHIEF HYDRAULIC ENGINEER; Ford Bonner SR. ASSIST. CHIEF ENG'R

SCALE AS SHOWN | DATE Mar. 1941 | NO. 2-H49 | SHEET 1 OF 1

MAP IX