

LOS ANGELES FLOOD CONTROL DISTRICT
RAINFALL AND RUNOFF REPORT

SEASONS-1932-1933 AND 1933-1934

JUNE 1, 1935

Los Angeles County Flood Control District

HYDRAULIC DEPARTMENT

REPORT TO C. H. HOWELL, CHIEF ENGINEER

ON

RAINFALL AND RUNOFF

IN LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

SEASONS 1932-33 and 1933-34

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

June 15, 1935

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

LOS ANGELES, CALIFORNIA

June 15, 1935

C. H. HOWELL
CHIEF ENGINEER

603 CIVIC CENTER BUILDING
205 SOUTH BROADWAY

Subject: Rainfall and Runoff Report
Seasons 1932-33 and 1933-34.

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

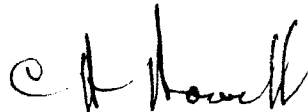
Gentlemen:

There is transmitted herewith for your file the Los Angeles County Flood Control District's Rainfall and Runoff Report for the seasons 1932-33 and 1933-34.

This report contains rainfall, evaporation, dam operation and runoff records collected by the District's Hydraulic Department, which is basic information for the design of flood control structures. The value of continued collection and compilation of the type of data presented can not be overestimated, due to its universal use for hydraulic investigations in this area.

The District wishes to record its appreciation of the cooperation rendered by public and private organizations and individuals in gathering portions of the material presented.

Very truly yours,



C. H. Howell, Chief Engineer
Los Angeles County
Flood Control District

Los Angeles County Flood Control District
Hydraulic Department

June 15, 1935

Mr. C. H. Howell
Chief Engineer
L. A. County Flood Control District
Los Angeles, California

Dear Sir:

Herewith is transmitted a report on Rainfall and Runoff for the seasons 1932-33 and 1933-34, as prepared by the Hydraulic Department of the District from records taken during these seasons.

This report has been divided into three sections, as follows:

1. Rainfall and Evaporation records.
2. Dam operation records.
3. Runoff records.

Rainfall records are presented by months from 311 stations for 1932-33 and from 314 stations for 1933-34. Evaporation records are also given for 26 stations maintained by the District through cooperative observers.

The rainfall for the seasons included was below normal and is comparatively shown as follows for mountain and valley areas in percentages of 60 year normal rainfall.

	1932-33	1933-34
(1) San Gabriel Mt. area	66 %	82 % of normal
(2) Valley and Coastal Plain	73 %	92 %
(3) Santa Monica Mountains	79 %	93 %
(4) North of San Gabriel Mountains	71 %	63 %

Mr. C. H. Howell
Page 2

The season 1933-34 included the storm of December 30 - January 1, 1934 which badly damaged certain sections due to the heavy sustained rainfall. In the La Crescenta area, 52% of the entire season's rainfall fell during this storm, which produced storm totals in excess of 14 inches.

The Section on Dam Operation records includes tabulations which show daily records of gage height, storage, inflow and outflow for 10 dams.


The principal dams are equipped with automatic water stage recorders which give a reliable continuous record of gage height.

The Runoff Section of the Report includes descriptions of 70 automatic recorder stations, together with mean daily flows, maximum and minimum flows and hydrographs of the major storms. It contains stream flow measurements at automatic and staff gage stations. This section also includes measurements at miscellaneous points for percolation and other studies. During 1932-33, 5140 stream measurements were made and 4910 measurements were made during 1933-34.

Actual measurements are much more valuable than purely theoretical computations and the greater the number of authentic actual records collected the more accurately and efficiently can flood control and conservation works be designed. The continuation of the collection of data without break in continuity is strongly recommended.

The Hydraulic Department wishes to express its appreciation to the many agencies and individuals whose cooperation has provided data for the District's use and for this report.

Very truly yours,



Finley B. Lavery

Chief Hydraulic Engineer

C O N T E N T S

RAINFALL, RUNOFF, AND DAM REPORT FOR SEASONS 1932-1933 and 1933-1934

<u>RAINFALL AND EVAPORATION</u>	<u>PAGES</u>
Rainfall Foreword	1
Snow Measurements	1-2
Statistics	2-4
Monthly Rainfall Summary 1932-33	5-7
1933-34	8-10
Raingage Station Location	11-13
Automatic Raingages	14
Evaporation Records	15
Map Showing Location of Rain Gages & Evaporation Tanks	16
Isohyetal Map Showing 60 year Normal (1872-1932)	17
Seasonal Precipitation	17
Isohyete Map For Storm of Dec. 30, 1933 - Jan. 1, 1934	18

DAMS

Dam Foreword	19
Big Dalton Dam	20-21
Big Santa Anita Dam	22-23
Big Tujunga Dam	24-25
Devils Gate Dam	26-27
Live Oak Dam	28
Pacoima Dam	29-30
Puddingstone Dam	31-32
San Dimas Dam	33-34
Sawpit Dam	35-36
Thompson Creek Dam	37-38

RUNOFF

Map Showing Location of Stream Gaging Stations	39
Runoff Foreword	40
Season Runoff in Acre Feet at Recorder Stations	40

RECORDER STATION DATA ARRANGED ALPHABETICALLY

<u>F.C.No.</u>	<u>Station</u>	<u>Located At</u>	<u>Pages</u>
81	Alhambra Wash	Garvey Ave. Bridge	41-43
38	Ballona Creek	Centinela Blvd. near Culver City	44-48
150	Benedict Canyon Ck.	Near Oakhurst St., Palms	48-52
235	Benedict Canyon S.D.	Wesley St., 400' S. P.E. Track	48
21	Big Santa Anita Creek	1/4 mi. below F.C. Dam	52-55

RECORDER STATION DATA ARRANGED ALPHABETICALLY

<u>F.C.No.</u>	<u>Station</u>	<u>Located At</u>	<u>Pages</u>
111	Big Tujunga Creek	Edison Road	55-58
168	Big Tujunga Creek	Below F. C. Dam No. 1	59-61
213	Big Tujunga Creek	Below Present USGS Station	62-66
20	Big Tujunga Wash	Stonehurst Ave. Bridge	66-69
105	Big Tujunga West Wash	Magnolia Blvd. Bridge	70
106	Big Tujunga East Wash	Magnolia Blvd. Bridge	71-73
186	Centinela Creek	1.2 mi. S. Jefferson Blvd. on Centinela Blvd.	74-76
37	Compton Creek	Rosecrans Avenue	77-80
41	Coyote Creek	Below P. E. Bridge Near Artesia	80-82
53	Dume Creek	Roosevelt Highway Bridge	83-85
104	Eaton Wash	Sunset Ave. Bridge	85-88
110	Fox Creek	Above Junction with Big Tujunga Creek	88-91
65	Little Dalton Creek	Mouth of Canyon	91-93
67	Little Santa Anita Ck.	1/4 mi. below Sierra Madre Dam	94-96
19	Little Tujunga Creek	Foothill Blvd. Bridge	96-99
L1	Little Rock Creek	2 miles above Little Rock Dam	99-100
31	Live Oak Creek	Near Mouth of Canyon	101-102
5	Los Angeles River	Van Nuys Blvd. Bridge	103-106
124	Los Angeles River	Vineland Avenue Bridge	107-110
57	Los Angeles River	Figueroa St. (Dayton Ave. Bridge)	111-114
34	Los Angeles River	Stewart & Gray Rd. Bridge	115-118
180	Los Angeles River	State Street, Long Beach	119-122
130	Malibu Creek	Crater Camp	123-126
112	Mill Creek	Above Junction with Big Tujunga Creek	126-128
22	Monrovia Creek	200' above Junction with Sawpit Creek	129-131
195	Monrovia Storm Drain	Near Peck Road	132-133
181	Montebello Storm Drain	Outlet into Rio Hondo at Mines Ave.	133-136
46	Nigger Slough	Wilmington Avenue	137-139
118	Pacoima Creek	Below F. C. Dam	139-141
16	Pacoima Wash	Parthenia Street Bridge	141-144
40	Puddingstone Creek	Below F. C. Dam	144-146
192	Rio Hondo	Lower Azusa Road Bridge	147-149
64	Rio Hondo	1000' Above Mission Bridge	150-154
45	Rio Hondo	Steward & Gray Rd. Bridge	154-157
83	Rio Hondo Slough	San Gabriel Blvd. Bridge	158-160
82	Rubio Wash	Broadway Bridge	161-163
151	San Antonio Creek	Mouth of Canyon	164-166
96	San Gabriel River-E.Fork	1/2 mile below Cattle Canyon	166-169
P4	San Gabriel River-E.Fork	2 1/2 miles above Forks	170-173
228	San Gabriel River-W.Fork	1/2 mile above F. C. Dam #2	174-175
227	San Gabriel River- Devil's Canyon	3 miles above F. C. Dam #2	176-177
209	San Gabriel River-W.Fork	1/2 mile below F. C. Dam #2	178-182
97	San Gabriel River-W.Fork	3 1/2 miles above North Forks	182-186
99	San Gabriel River- Bear Creek	Boy Scouts' Camp	186-189

RECORDER STATION DATA ARRANGED ALPHABETICALLY

<u>F.C.No.</u>	<u>Station</u>	<u>Located At</u>	<u>Pages</u>
98	San Gabriel River-N.Fork	2000' above Narrows	190-193
P3	San Gabriel River-W.Fork	2 miles above Forks	193-197
233	San Gabriel River	Near Roberts' Relay Sta.	198-
28	San Gabriel River	Edison Intake	199-205
230	San Gabriel-Edison Conduit	100' below Sand Box	205-207
220	San Gabriel-Edison Conduit	North Portal #4-B Tunnel	208-211
100	San Gabriel Spreading Ditch	Mouth of Canyon	212-214
190	San Gabriel River	Foothill Blvd. Bridge	215-218
191	San Gabriel River	El Monte Blvd. Bridge	218-221
63	San Gabriel River	Whittier Blvd. Bridge	221-224
237	San Gabriel River	Telegraph Rd. Bridge	225
42	San Gabriel River	Spring St. Bridge, Long Beach	225-227
48	San Jose Creek	Workman Mill Road Bridge	228-231
193	Santa Anita Wash	Below Arrow Highway	232-233
92	Santa Clara River	Old Hwy. Bridge, 4 mi. W. of Saugus	233-236
194	Sawpit Wash	Above Arrow Highway	237
185	Sepulveda Creek	Charnock Road	238-241
44	Sycamore Lower Storm Drain	Adams Square, Glendale	242-244
54	Topanga Creek	Highway Bridge 2 mi. above Mouth	245-249
9	Verdugo Storm Drain	Glen Oaks Blvd. Bridge Glendale	249-
236	Verdugo Storm Drain	Opechee Way, Glendale	-251
47	Walnut Creek	Covina Blvd. Bridge	252-254
	Rising Water	Whittier Narrows	255

U.S.G.S. STATIONS

<u>F.C.No.</u>	<u>Station</u>	<u>Located At</u>	
U 1	Arroyo Seco Creek	3 Miles Above F.C.Dam	256-258
U 9	Big Dalton Creek	Below Flood Control Dam	258-260
U14	Big Rock Creek	1 mile above Valyermo P.O.	260-262
U 4	Big Santa Anita Creek	Above Flood Control Dam	262-264
U 2	Eaton Creek	Mt. Wilson Toll Road	265-266
U 7	Fish Creek	4000' above Mouth of Cn.	266-269
U12	Haines Canyon Creek	Near Tujunga Post Office	269-270
U 3	Little Santa Anita Ck.	Above Flood Control Dam	271-272
U 6	Rogers Creek	Above Mouth of Canyon	273-274
U15	San Antonio Creek	Near Claremont Post Office	275-278
U10	San Dimas Creek	Below Flood Control Dam	279-281
U 8	San Gabriel River	Mouth of Canyon	281-285
U 5	Sawpit Creek	1/2 mile below F.C.Dam	286-289

STAFF GAGE STATION DATA ARRANGED ALPHABETICALLY

<u>F.C.No.</u>	<u>Station</u>	<u>Located At</u>	<u>Pages</u>
199	Arrastre Creek	1/2 mi. above Soledad Canyon Road	290
116	Arroyo Ditch	1/2 mi. North of Whittier Blvd.	290-291
221	Arroyo Seco Creek	On Bridge at Mouth of Cn.	291
58	Arroyo Seco Creek	Avenue 26 Bridge	291
157	Arroyo Sequis Creek	Roosevelt Highway Bridge	291
87	Banta Ditch	Head of Pipe Line	292
166	Ballona Creek	Jacob Street	293
156	Ballona Creek-E.Branch	Below Adams Street	294
198	Bear Canyon Creek	1000' above Soledad Canyon	294
182	Big Rock Creek	Mouth of Canyon	295
143	Big Rock Creek	200' above Palette Creek	295
171	Big Rock Creek	Submerged Dam 1 mile below Monte's Sta.	295
127	Big Rock Creek-S. Fork	500' above Big Rock Creek	295
177	Big Tujunga Creek	Below Damsite No. 2	295
10V	Big Tujunga Creek	800' below F. C. Dam No. 1	296
155	Big Tujunga Wash	Foothill Blvd. Bridge	296
11	Big Tujunga-E. Wash	S.P.R.R. Bridge (Coast Line)	297
175	Breakneck Creek	Near Mouth	297
167	Bull Creek	San Fernando-Mission Bridge	297
108	Castaic Creek	1 1/2 mi. W. of Castaic Junct.	297
140	Castaic Creek	Hwy. Bridge near Elizabeth Lake Cn.	297
84	Cate Ditch	Below Headgate	298
173	Clear Creek	Near Junction with Big Tujunga	299
61	Cold Creek	Crater Camp	299
184	Devils Canyon Creek	Above Junction with San Gabriel	299
178	Devil's Punch Bowl Ck.	100' above Big Rock Creek	300
74	Eaton Wash	Foothill Boulevard Bridge	300
141	Elizabeth Lake Creek	Bridge at Center Cabin Site	300
131	Gavin Canyon Creek	Weldon Cn. Hwy. 100' above Towsley Cn.	301
132	Gavin Canyon Creek	Weldon Cn. Hwy. 1000' below Towsley Cn.	301
170	Gold Canyon Creek	Above Big Tujunga Creek	301
174	Hansen Creek	Near Junction with Big Tujunga	301
179	Holcomb Creek	1000' above Big Rock Creek	301
201	Kagel Canyon Creek	Little Tujunga Road	302
6	Los Angeles River	Whitsett Avenue Bridge	302
LAL	Los Angeles River	California Street	302
232	Los Angeles River	1/4 mile below Buena Vista St.	303
56	Mandeville Canyon Ck.	Above Administration Bldg.	303
176	Maple Canyon Creek	Near Junction with Big Tujunga	303
153	Millard Creek	1/2 mi. above Devils Gate Dam	303

STAFF GAGE STATION DATA ARRANGED ALPHABETICALLY

<u>F.C.No.</u>	<u>Station</u>	<u>Located At</u>	<u>Pages</u>
158	Nicholas Canyon Creek	Roosevelt Highway Bridge	303
196	Pacoima Creek	Maclay Avenue Bridge	303
17	Pacoima Wash	San Fernando Rd. San Fernando	304
18	Pacoima Wash	Foothill Blvd. Bridge	304
197	Pacoima Wash	Arletta Street	304
204V	Pacoima Spreading Ground	East Diversion Canal	304
205V	Pacoima Spreading Ground	West Diversion Canal	304
121	Palette Creek	1 mi. above Big Rock Creek	304
122	Palette Creek	Big Rock Creek	304
133	Pico Canyon Creek	Weldon Canyon Highway	305
115	Puddingstone Div. Canal	Near Outlet into Pudding- stone Dam.	305
129	Rice Canyon Creek	Weldon Canyon Highway	305
238	Rustic Canyon Storm Drain	100' above Channel Road	305
91	San Dimas Creek	Above Flood Control Dam	305-306
101V	San Dimas Creek	Below Flood Control Dam	306
218	San Dimas Wash	100' below Puddingstone Div. Dam	306
1	San Fernando Creek-W.	Devonshire Avenue	306
109	San Fernando Creek	Devonshire Avenue	306
206	San Gabriel River	W.Fork above Devils Canyon	306
76	San Gabriel River	W.Fork above Bear Creek	307
25	San Gabriel River	Bear Creek at Mouth	307
29	San Gabriel River	Cattle Canyon Ck. above E. Fork	307
223	San Gabriel River	400' below Edison Intake	307
222	San Gabriel River	300' below F.C.Dam No. 1	308
79	San Gabriel River	Brown's Gulch at Mouth	308
224	San Gabriel River	On R. R. Bridge	309
P 5	San Gabriel River	1/2 mi. above Pasadena Damsite	308
208	San Gabriel River	1500' below Pasadena Dam	309
0	San Gabriel River	Hoag Ranch	309
86	San Gabriel River	Below Standifer Ditch	310
119V	Santa Anita Creek	Below Flood Control Dam	311
71	Santa Anita Wash	Foothill Blvd. Bridge	311
93	Santa Clara River	Lang	311-312
137	Santa Clara River	1 mi. W. of Castaic Junct.	312
55	Santa Monica Canyon S.D.	North Channel Road	313
125	Santiago Creek	500' above Little Rock Ck.	313
85	Standifer Ditch	Below Headgate	314
43	Sycamore Upper S.D.	Solway Street, Glendale	315
169	Trail Canyon Creek	Above Big Tujunga Creek	315
66	Tri City Sewer Outfall	Outlet into Rio Hondo	316
160	Triunfo Creek	Above Lobe Canyon	315
148	Weldon Canyon Creek	R.R.Bridge 1/2 mi. above Aqueduct	315
50	Wilson Canyon Creek	Near County Hospital	315

MISCELLANEOUS MEASUREMENTS OF STREAMS IN LOS ANGELES COUNTY

Arroyo Seco Creek, Vicinity Devil's Gate Dam	317
Ballona Lagoon, at 57th Street Bridge	317
Big Rock Creek, Tributaries and Diversions	318-320
Big Santa Anita Creek, Tributaries and Diversions	320
Big Tujunga Creek, Tributaries, Diversions, and Inflow to Dam No. 1	321-325
Fish Canyon Spreading Grounds Inflow	325
Live Oak Creek Below F. C. Dam	325
Los Angeles River	325-326
Pacoima Creek, Tributaries and Diversions	326
Rio Hondo	327
San Gabriel River, Tributaries and Diversions	328
San Gabriel River - Vicinity Dam No. 1	331
- Vicinity Dam No. 2	328
- Inflow and Outflow of Dam No. 2	329-331
- Inflow to Morris Dam	331
Santa Clara River, Tributaries and Diversions	332
Sawpit Dam, Inflow and Outflow	333
Sierra Madre Dam, Inflow and Outflow	333
Tri City Sewer	333
Miscellaneous Single Measurements	333
Big Dalton Spreading Grounds	
Elizabeth Lake Creek	
Parthenia Street Storm Drain	
Little Dalton at Sierra Madre Ave.	
Eaton Canyon at Pasadena Intake	
Gate Ditch Opposite Temple School	

PERGOLATION DATA ARRANGED ALPHABETICALLY BY STREAMS

BALLONA CREEK

1-31-33 Sentency Street to Inglewood Ave. 334
1-16-34 Jacob Street to Centinela Blvd. Bridge 334

BIG DALTON CREEK

3-7-34 Ben Lomond Ave. to 1/4 mile below
Cerritos Ave. 334

BIG ROCK CREEK

7-29-33 1000' above South Fork to Mouth of Canyon 334
8-12-33 1000' above South Fork to Palette Creek 335
9-22-33 1000' above South Fork to Mouth of Canyon 335
11-24-33 1000' above South Fork to Mouth of Canyon 335

BIG SANTA ANITA CREEK

1-27-33 F.C.Recorder Station #21 to Arrow Highway 336
1-31-33 F.C.Recorder Station #21 to 1000' below
Arrow Highway 336
1-10-34 Below Oakwood Syndicate Diversion to
end of flow 336

BIG TUJUNGA CREEK

1-4-33 F.C.Recorder Station #213 to .7 mile above
Foothill Blvd. 336-337
1-12-33 F.C.Recorder Station #213 to .7 mile above
Foothill Blvd. 337
2-1-33 Foothill Blvd. to Mouth of Canyon 337
2-7-33 F.C.Recorder Station #213 to Foothill Blvd. 337
2-15-33 Below Dam #1 to Above Trail Canyon 338
2-20-33 F.C.Recorder Station #213 to Foothill Blvd. 338
2-21-33 Foothill Blvd. to Stonehurst Avenue 338
2-22-33 Stonehurst Ave. to San Fernando Road 338
2-23-33 Below Dam #1 to F.C.Recorder Station #213 339
2-27-33 F.C.Recorder Station #213 to Foothill Blvd. 339
2-28-33 Foothill Blvd. to San Fernando Road 339
3-6-33 F.C.Recorder Station #213 to Foothill Blvd. 339
3-7-33 Foothill Blvd. to 700' below 12" Pipe Line 340
3-8-33 Below Dam #1 to F.C.Recorder Station #213 340
3-10-33 Below Submerged Dam to 1000' above
Foothill Blvd. 340
3-13-33 F.C.Recorder Station to 600' below W. End
of Rock Mat 340
3-15-33 Below Dam #1 to F. C. Recorder Station #213 341

PERCOLATION DATA ARRANGED ALPHABETICALLY BY STREAMS

BIG TUJUNGA CREEK

3-17-33	Below Submerged Dam to 1000' above Foothill Blvd.	341
3-20-33	F.C.Recorder Station #213 to Opposite W. End of Rock Mat	341
3-28-33	F.C.Recorder Station #213 to 2500' above Foothill Blvd.	341
4-4-33	Below Submerged Dam to 1100' below Foothill Blvd.	342
4-27-33	F.C.Recorder Station #213 to San Fernando Road	342
5-3-33	Below Submerged Dam to San Fernando Rd.	342
1-1-34	Stonehurst Ave. to Magnolia Ave.	342
1-9-34	F.C.Recorder Station #213 to below Stone- hurst Ave.	343
2-5-34	F.C.Recorder Station #213 to Stonehurst Av.	343
3-12-34	F.C.Recorder Station #213 to Stonehurst Av.	343
3-19-34	F.C.Recorder Station #213 to 3400' below Foothill Blvd.	343

FISH CREEK

1-23-33	Mouth of Canyon to 760' N. of P.E.Bridge	344
1-28-33	Mouth of Canyon to Below Spreading Grounds	344

LOS ANGELES RIVER

12-20-32	1200' below Buena Vista St. to Mariposa St.	344
12-29-32	Beachwood Drive to Station 59+25	344
1-5-33	California Street to Riverside Drive Bridge	345
8-24-33	Niagra Street to Mountain View Street	345
9-21-33	Niagra Street to Mariposa Street	345
1-15-34	N. Figueroa St. to Stewart & Gray Road	345

RIO HONDO

1-17-33	Mission Bridge to Stewart & Gray Road	346
1-24-33	Santa Fe R.R.Br. to Station 185+00	346
1-26-33	Santa Fe R.R.Br. to Station 78+00	346
1-27-33	Santa Fe R.R.Br. to Station 20+00	346
1-28-33	Santa Fe R.R.Br. to Station 75+00	347
1-30-33	Santa Fe R.R.Br. to Station 235+00	347
2-1-33	Beverly Blvd. to below Montebello Storm Drain	347
2-20-33	Santa Fe R.R.Br. to Station 28+50	347
2-22-33	Santa Fe R.R.Br. to Station 150+37	348
1-3-34	Beverly Blvd. to 3000' below Telegraph Rd.	348

PERCOLATION DATA ARRANGED ALPHABETICALLY BY STREAMS

RIO HONDO

1-4-34	Rio Hondo Slough to Stewart & Gray Road	348
1-5-34	Beverly Blvd. to Mines Ave.	348
1-10-34	Beverly Blvd. to Station 172+00	349
1-16-34	Santa Fe R.R.Br. to Station 165+60	349
1-19-34	Station 165+60 to Station 302+00	349
1-27-34	Santa Fe R.R.Br. to Station 372+00	350
1-30-34	Santa Fe R.R.Br. to Station 170+00	350

SAN GABRIEL RIVER AND RIO HONDO

1-4-34	Mouth of Canyon to Rio Hondo-Lower Azusa Rd. San Gabriel-Elmonte Ave	350
1-5-34	Foothill Blvd. to Rio Hondo-Mission Bridge San Gabriel -Valley Blvd.	350
1-12-34	Foothill Blvd. to Rio Hondo-Lower Azusa Rd. San Gabriel-El Monte Av.	351

SAN GABRIEL RIVER

1-23-33	Roger Creek to Station 106+00	351
1-24-33	Foothill Blvd. to below El Monte Ave.	351
1-26-33	Foothill Blvd. to Station 193+00	351
1-27-33	Foothill Blvd. to Station 148+00	352
1-28-33	Foothill Blvd. to Station 150+00	352
2-1-33	Beverly Blvd. to Station 112+00	352
2-2-33	Mouth of Canyon to Foothill Blvd.	352
2-3-33	Mouth of Canyon to Foothill Blvd.	353
2-21-33	Foothill Blvd. to Station 164+00	353
2-23-33	Foothill Blvd. to Station 243+00	353
2-24-33	Mouth of Canyon to Foothill Blvd.	353
1-2-34	Beverly Blvd. to Easy Street	354
1-3-34	Beverly Blvd. to Telegraph Rd.	354
1-4-34	Banta Heading to Telegraph Rd.	354
1-8-34	Mouth of Canyon to Foothill Blvd.	354
1-10-34	Mouth of Canyon to Station 20+00	355
1-16-34	Foothill Blvd. to Arrow Highway	355
1-17-34	Arrow Highway to El Monte Blvd.	355
1-27-34	Foothill Blvd. to El Monte Blvd.	355
1-30-34	Foothill Blvd. to El Monte Blvd.	356
3-22-34	Mouth of Canyon to Foothill Blvd.	356

SAN DIMAS WASH

3-7-34	1/4 mi. above Grand Av. to 1/4 mi. below Mouth of Canyon	356
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Los Angeles County Flood Control District
Hydraulic Department

RAINFALL AND EVAPORATION REPORT

Seasons 1932-33 and 1933-34

When the Board of Engineers, Flood Control, made their report in 1915, they found among other things that Los Angeles County had very few rainfall stations, particularly in the mountain areas. In line with their findings and recommendations, the District has followed the policy of a gradual increase in the number of rainfall stations from year to year. An especial attempt has been made to secure more locations for stations in the mountain areas, but we have been limited by the number of observers available. Each new station has been located only after a full consideration as to its probable value for engineering studies; its relation to other nearby stations; its relation to topographical features; and its location with reference to drainage areas.

Since 1925, the District has installed 39 automatic recording raingages. These are invaluable in that they furnish not only a continuous record of all precipitation occurring, but also enable us to obtain intensities of rainfall for use in many types of studies. In order to better coordinate rainfall and runoff it would be advisable to have more of this type of gage - in fact one for each watershed where stream flow recorders are installed.

Without the cooperation of many agencies and individuals it would be economically impossible for the District to obtain so many valuable records. The District owns quite a number of gages but there are many that are owned by outside agencies. The following table serves to give an idea of the extent of cooperation afforded us:

1. Gage Ownership and Type

	<u>Gage Ownership</u>	<u>Type</u>	<u>Number of Gages</u>	
			<u>1932-33</u>	<u>1933-34</u>
(a) Flood Control		Std. 8"	153	152
		CGG	32	32
		Auto-Ferg. 9" cap	31	31
		Auto-Ferg. 12" cap	7	7
		Special Auto.	1	1
(b) Los Angeles Water Dept.		Std. 8"	17	17
		Auto.		1
(c) U.S. Weather Bureau		Std. Type 3"	1	1
		Std. 8"	15	16
(d) City of Long Beach		Std. 8"	5	5
		Auto.	1	1

<u>Gage Ownership</u>	<u>Type</u>	<u>Number of Gages</u>	
		<u>1932-33</u>	<u>1933-34</u>
(e) City of Beverly Hills	Std. Type 5"	1	1
	Auto-Ferg. 9" cap	1	1
(f) Calif. Botanical Gardens	Std. 8"	3	3
(g) So. Pacific R. R.	Std. Type 3"	5	5
(h) So. Calif. Edison Co.	Std. 8"	2	2
	Std. Type 3"	1	1
(i) L. A. Rec. Dept. County	Std. 8"	6	6
(j) L. A. Co. Survey Storm Drain Division	Auto-Ferg. 9" cap	3	3
(k) Standard Oil Co.	Std. 8"	1	1
(l) Palos Verdes Estate	Std. 8"	1	1
(m) Pomona Valley Prot. Ass'n.	Std. 8"	2	2
(n) L. A. Co. Forestry Dept.	Std. 8"	1	1
(o) State of Calif.	Std. 8"	6	6
(p) U. S. Dept. of Commerce	Std. Type 3"	1	1
(q) Miscellaneous - Individuals towns, cities, etc.	Std. 8"	35	37
	Std. Type 5"	4	4
	Std. Type 3"	12	12
	Dial type	2	2
	Std. Type 4-3/4	1	1

During the Seasons 1932-33 and 1933-34 the Hydraulic Department received records from 311 and 314 stations, respectively. It is not anticipated that these figures will vary appreciably in the years to come, because, with the exception of the mountain areas, the County South of the San Gabriel divide has been quite satisfactorily covered with stations.

The District owned stations which were active in the seasons included in this report were distributed as follows according to gage types:

	1932-33	1933-34
2. F. C. Stations active during Season:		
Standard	153	147
Can & Glass Graduate	32	20
Automatic (Fergusson) gages	38	38
Special Automatic Gage	1	1

There is some slight variation in the number of active gages from year to year due to discontinuance of stations, neglect of observers, stolen gages, etc. An attempt is always made to secure complete records from all stations as these are obviously of more value than partial records. This is not always possible to attain and occasionally we are forced to find new locations for some of the gages to gain this end. The following table shows the number of stations which furnished complete reports. Of the incomplete reports, many may be completed by estimating records of daily rainfall from nearby stations.

	1932-33	1933-34
3. Complete Seasonal Reports:		
F. C. Standard Stations	138	135
F. C. Auto. Stations	3	2
F. C. Auto. Private Standard	11	11
Private Auto. Stations	4	4
Private Co-operative Stations	101	90
F. C. Can & Glass Graduate Stations	23	19
	<hr/>	<hr/>
Total	280	261

SUMMARY OF SEASONAL PRECIPITATION CONDITIONS.

The rainfall for the seasons 1932-33 and 1933-34 was below normal. The U. S. Weather Bureau Station at Los Angeles recorded 11.75 inches in 1932-33 and 14.68 inches in 1933-34 or 77% and 96% respectively of the 60 year normal rainfall.

For a comparison with the Los Angeles station, which reflects typically the valley type of rainfall, the Colby's Ranch and Mt. Wilson Station totals which are both in the mountains, and have fairly long records, are as follows:

	Years of Record	1932-33 %	of 60 yr. normal	1933-34 %	of 60 yr. normal
Colby's Ranch	35	16.72	51	20.71	64
Mt. Wilson	28	24.18	78	28.63	92

Taking station averages for different areas, we find that the general cross section of conditions for the two seasons is:

- (1) San Gabriel Mountain rainfall average of 18 representative stations 66% and 82% of 60 year normal respectively, for 1932-33 and 1933-34.
- (2) Valley (and Coastal Plain) rainfall average of 24 representative stations 73% and 92% of 60 year normal respectively.
- (3) Santa Monica Mountains rainfall average of 6 representative stations, 79% and 93% of 60 year normal respectively.
- (4) Rainfall north of San Gabriel Mountain range average of 8 representative stations, 71% and 63% of 60 year normal respectively.

It may also be of interest to note a comparison of snowfall conditions at two high mountain points for each season:

The total snowfall at Big Pines Recreation Camp for the season 1932-33 was 116" and for the season 1933-34 was 36", at an elevation of 6860 feet. This station is on the North slope of the San Gabriel Mountains.

The total snowfall at Kelly's Kamp for the Season 1932-33 was 199" and for the season 1933-34, 51". This station is located in the San Antonio Watershed at an elevation of 8300 feet.

The highest known recorded depth of seasonal snowfall in the vicinity of Los Angeles was 396 inches or 33 feet at Kelly's Kamp during the season of 1931-32.

The most noteworthy event during the period embraced by this report, from the standpoint of rainfall and subsequently of flood control, was the storm of December 30, 1933 - January 1, 1934. The greatest damage resulted in the La Crescenta area where over 52% of the entire season rainfall fell during this storm. Stations in this area recorded storm totals which averaged 12.17 inches. The greatest in the area was 14.92" at the Flintridge Fire Station. The storm was particularly damaging because it fell on a burned watershed.

The heavy rainfall was not confined to this area, although the greatest damage occurred there. In the San Gabriel Mountain area, 50% of the entire seasonal rain fell during the storm, with a maximum storm rainfall of 19.91 inches being recorded at Hoegge s Camp in the Big Santa Anita Canyon. Other sections of the County also received similarly heavy rainfall.

EVAPORATION

The District maintains 26 evaporation stations through the cooperation of raingage observers. The principal station is the Baldwin Park Experimental Station which is cooperatively maintained by several agencies. This station is fully equipped and includes four of the leading types of evaporation pans. The pan in use by the District is 24 inches in diameter and 36 inches in depth and is sunk in the ground.

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.

This report on rainfall and evaporation records has been compiled by Mr. C. G. Carlson under the direct supervision of Mr. Walter J. Wood.

TABLE III

RAINGAGE STATION LOCATION

Sta. No.	Elev. U.S.G.S.	Dist. No.	Quad. Index	Observer	Location
2	1025	5 B	22-25	Mack Gouchois	Upper Escondido Canyon.
3	875	5 B	34-09	F. L. Porter	La Sierra Canyon at Cornell.
4	600	5 B	22-70	F. H. Case	Malibu Greek S. W. of Calabasas.
5	950	6 (6A-Jul '34)	35-54	Tom Farmer	In Calabasas, So. Side Blvd.
6	747	5 B	24-01	B. C. Butler	0.4 mile S. of Topanga Bridge.
7 C	90	5 B	24-55	Henry Jenks	Bel Air Bay Club - Coast Highway.
8	480	5 B	25-03	Dudley Corlett	Rear of Admin. Bldg. Mandeville Cn.
9	815	7	48-37	Robt. Larson	Sepulveda 2nd. House N. of Chase.
10	540	5 A	25-51	O. F. Bell	Bel Air Admin. Bldg.
11	867	5 A	37-88	W. H. Wood	Upper Franklin Cn. Res.
12	1175	5A-6(6A-Jul '34)	37-86	G. H. Tleman	Mulholland Highway at Franklin Cn.
13	592	6 (6A-Jul '34)	38-34	Katie Blix	10834 E. Blix St.
14	1000	7	49-46	E. B. Merrill	Near Mouth La Tuna Canyon
15	695	6 (6A-Jul. '34)	37-41	Frank Carr	Aetna and Vesper Sts., Van Nuys
16 B	825	6 (6A-Jul. '34)	37-25	R. C. Gibson	Sepulveda Canyon at old Ranch house.
17	1400	6 (6A-Jul. '34)	37-07	Earl M. Nave	Sepulveda Canyon at Mulholland.
18	827	6 (6A-Jul. '34)	36-73	L. F. Martin	Adohr Dairy - Ventura Blvd.
19	1520	5 B	35-96	R. L. Scott	Summit Topanga Canyon Rd.
20	902	6 (6A-Jul. '34)	35-93	A. F. Kunkee	S. E. Cor. Ventura Blvd. & Topanga Cn. Rd.
21	891	6 (6A-Jul. '34)	36-02	Thos. Franklin	Canoga Rd. No. of Ventura Blvd.
22	930	7	46-58	Arthur Hoffer	S. W. of Stagg and Chassett Sts., San Fernando Valley.
23 E	865	7	46-87	R. R. Melrose	E. end of Chatsworth Res.
24 B	975	7	46-94	E. L. Johnson	E. of Vassar St., So. of Devonshire St. Chatsworth.
25	797	7	47-47	Jack Andrews	N. E. Cor. Parthenia & Van Alden No. L.A.
27	944	7	48-64	W. D. Miller	14163 Van Nuys Blvd.
28	960	7	48-32	B. Hanneman	San Fernando Leson Assn. Packing House
29	1130	7	47-82	(H. T. Morris) R.E. Moore	Sunshine Ranch, Rinaldi St.

* #18 is 12 ft above ground. #20 10' above. #21 15' above.
#24 is 10' above. #28 is 10' above.

Sta. No.	Elev. U.S.G.S.	Dist. No.	Quad. Index	Observer	Location
69	2000	3	42-31	M. L. Packer	Sawpit Canyon, Upper.
70 E	800	3	42-93	Roger Dalton	Mouth of San Gabriel River.
73	1200	2	43-54	Mrs. J. P. Englehart	Mouth Engle Wild Canyon.
74	1950	2	44-01	A. M. Trout	Juno, Volpe & Bell Can. Big Malton.
75 B E	1275	1 A	54-48	G. Patterson	Roberts Relay Sta., San Gabriel Canyon
76	1600	1 A	54-57	Albert E. Marshall	W. Side San Gabriel Forks U.S. Ranger Sta.
78	3300	1 A	54-80	R. F. Hill	No. Fork San Gabriel
80	5680	1 A	67-05	Gus Wissendroft	2 mi. E. of Vincent Gulch - Juno.
82	7500	1 A	67-11	A. F. Moore	Top of Table Mt.
83 E	6850	1 A	67-02	Leslie E. McDonald	Big Pines Co. Park.
85 E	4300	2	56-46	T. E. Adams	Camp Baldy, San Antonio near Bear
87	1500	2	44-33	O. L. Trout	San Dimas Cn. at West Fork
88	2400	2	44-52	Albert Golautti	Wolfskill Canyon.
89 E	1350	2	44-24	G. W. Rodgers	San Dimas Canyon below Dam.
90	1680	2	44-44	R. B. Brydon	No. end Wheeler La Verne Rd.
91	1405	2	44-57	W. White	Indian Hill Rd. No. of Baselines.
92	1190	2	32-90	F. P. Brackett	Pomona College Observatory
93	1165	2	32-30	Geo. M. Williams	No. side 2nd st. bet. Harvard & Yale.
94	805	2	31-60	Will G. Fielde	Covina Blvd. at P.E.R.R. crossing.
95	960	2	43-99	Sam L. Trout	114 E. 1st St. San Dimas.
96 E	1030	2	31-90	F. A. Pollard	Knoll above caretakers house Puddingstone
97	1000	2	44-08	Geo. Ferguson	N. Side Juanita E. of Walnut. Dam.
98	602	2	42-96	John Hibsch	325 Foothill Blvd., Azusa.
99	615	2	43-06	Chas. Stewart	Foothill Blvd. S. side 2 mi. W. Citrus.
100	1050	3	42-73	August Bohm	Above U.S.G.S. gaging Sta. Fish Canyon.
101	358	2	30-53	Hurst Bros.	S. Cor. Orange & Merced Ave., Covina
102	475	2	31-29	Mr. Carr	1 mi. West Walnut P.O. So. of tracks.
104	600	2	30-09	E. B. Linn	S. end 7th Ave. No. Whittier Heights.
105	215	4	16-64	Peter E. Sharples	1/4 mi. E. Whittier Blvd. on Laurel Ave.
106	365	4	16-61	E. W. Honeyman	City Hall N.W. Cor. Greenleaf and Bailey, Whittier.
107	132	4	15-65	Arthur I. Darby	N.E. Cor. Crawford & Firestone.

* #106 is 15 ± ft. above ground.
#107 is 15 ± ft. above ground.

Sta. No.	Elev. U.S.G.S.	Dist. No.	Quad. Index	Observer	Location
30	1250	7	59-28	W. C. Simonds	Sylmar Olive Pkg. Plt.
32 E	1245	9	58-61	Milan A. Priest	Inland Highway 1/4 mi. N. of Newhall.
33 C E	1900	7	60-05	R. E. Waddicor	300 ft. above streambed at Picoima Dam.
34	2050	7	60-45	John McQuillan	2.5 mi. above Picoima Dam.
36	2180	7	60-28	E. H. Keith	On Flat-head of Kagel Canyon.
38	1060	7	49-34	Sam Chapwell	10100 Helan St., Roscoe
39	1650	6(6A-Jul. '34)	50-19	W. C. Smith & F.C.	Rear of house at turn around tree Sunset Canyon.
41	1765	8(6B-Jul. '34)	50-87	Mildred Eokerle	S. Side Earlmont at Hillard, Alta Canyon.
42	80	5 A	7-15	M. B. Fisher	Roof of Redondo City Hall.
43 A	320	5 A	2-10	G. B. Shelgrove	75 Malaga Cove Plaza, Pelos Verdes Estate
44	125	5 A	1-35	A. Trittinger	Near Pt. Vicente Lighthouse.
45	1800	8	50-51	T. E. Justice	Big Tujunga Canyon
46 B E	2050	8	51-01	Sam Browne	Big Tujunga Canyon below Dam.
47 B	3300	8	51-42	R. H. Rogers	2.2 mi. up Clear Creek from Big Tujunga.
48	2000	3	51-15	J. R. Phillips	Oak Wild Resort - Arroyo Seco.
49	1345	3	40-50	Geo. S. Chiesa	165 E. Foothill Blvd. Altadena.
50 B	1173	3	40-10	H. J. Durand	352 Michigan Ave., Flintridge
51 E	4650	1 A	65-69	Frank M. Headlee	1 mi. No. of Coldbrook Camp.
52	3000	3	51-44	Bertha B. Austin	Switzer's Camp, Long Canyon
53 B	2950	3	62-89	Joe Argey	Goldwater Canyon near Big Tujunga
54	4050	8	63-55	L. G. Loomis	Near Junot. N. & Middle Forks-Alder Creek.
56	3400	1 A	52-24	Cherie De Vore	West Fork San Gabriel River
57 E	4480	1 A	52-04	Mrs. John Opid	West Fork San Gabriel River
58	3375	3	52-67	V. B. Hoopes	Upper Big Santa Anita Canyon
59	5650	3 - 1 A	52-47	Kenneth Pitt	Bet. 60" & 100" telescopes
60	2750	3	52-69	Wm. Murphy	West Fork Santa Anita Canyon
61	2000	3	52-89	C. L. Roberts	Santa Anita Can. at Junct. West Fork
62	1950	3	41-80	Geo. Armstrong	Santa Anita Canyon
63 B E	1400	3	41-81	Joseph Propst	Caretakers House, Santa Anita Dam
64	1600	3	41-71	J. E. Clark	On Sturtevant Trail, Big Santa Anita.
65	1160	3	41-42	Col. H. B. Hersey	575 N. Hermosa Ave., Sierra Madre.
66	665	3	41-54	C. J. Pegler	415 Live Oak (East) - Sierra Madre.
68	1400	3	42-12	M. L. Packer	Caretaker's House, Sawpit Dam.

* #42 is 30 ft. ± above ground
#43 A is 20 ft. ± above ground.

Sta. No.	Elev. U.S.G.S.	Dist. No.	Quad. Index	Observer	Location
108	300	3	29-62	C. S. Ranger	El Monte C. of C. Bldg.
109	490	3	41-37	Maxie L. Picard	2307 Naomi Drive
110	500	3	28-70	J. W. Clay	N.W. Cor. 2nd & Main, City Hall, Alhambra.
111	660	3	40-48	Frank H. Clough	City Hall, N.W. Cor. Mission & Mound, So. Pasadena.
112	667	6 (6A-Jul. '34)	32-74	Oscar Bergman	1710 Orchard Ave., Glendale.
114	64	5 A	14-09	Rosecrans Bros.	S. E. Cor. Vermont & Rosecrans.
116	117	5 A	13-43	Geo. Green	Inglewood High School
117 C	67	4	8-90	Chas. H. Morrill Jr.	401 So. Poinsettia, Compton.
118 B	40	4	3-41	E. A. Bishop	1251 Banning Blvd., Wilmington
119	335	5 A	25-44	W. E. Wheeler	National Military Home, Bartelle.
120	3250	9	74-70	Jack Albright	Miat Cn. Rd., 1 mi. west of Vincent.
121	2350	10	112-79	R. E. Lofinok	N. W. Cor. Union High School grounds.
122	3200	9	98-29	Geo. Rouff	Boquet Cn. Rd. 1/2 mi. S. Elizabeth St.
123	3250	9	96-73	Eli Munn	(Lake Road, Elizabeth and Hughes Lakes.
124 B	3000	9	84-31	R. W. Mathews	Boquet Cn. near Double Eagle Mine. L.A.W.D. Camp.
125	2100	9	83-40	Sta. Operator	Power Plt. #1 Upper San Francisco to City Hall, Venice
126	17	5 A	12-41	A. S. Ede	Dry Canyon Reservoir
127	1507	9	70-71	Jim Ray	Elizabeth Lake Can. at Warm Springs.
128 E	2041	9	95-49	Louis G. Klein	Ridge Route at Sandbergs
130	4200	9	106-85	A. R. Grant	1/2 mi. N. of Foothill Blvd. San Dimas
134	1110	2	44-07	A. L. Stevens	1/4 mi. W. of Bloom St. 1/5 mi. W. of Centerfield.
135	83	4	10-30	G. S. Hargitt	6225 Santa Monica Blvd. E. side Dunson Canyon.
136 B	325	5 A	26-70	E. L. Phillips	F. C. Employee
137 B	1125	5	38-48	D. A. Lane	Just S. of S. E. Cor. 2nd St. & Hill on Roof.
139	375	4	27-54	W. B. Scott	1620 S. Purdus, Bartelle City Hall
140	232	5 A	25-55	Paul E. Smith	Rear of City Hall 250' N. of Foothill Blvd., Azusa
143	607	2	42-96	Al Freeland.	Foot of Sierra Madre Dam.
144	1400	3	41-52		

* #108 is 15 ± ft. above ground
#110
#126 = 10 ± " " "

#136 is 20 ft. ± above ground
#139 is 90 ft. above ground

Sta. No.	Elev. U.S.G.S.	Dist. No.	Quad. Index	Observer	Location
145	600	5 B	25-02	M. L. Bryan	Mandeville Canyon S.W. of glass houses.
148	575	5 B	25-02	M. L. Bryan	Mandeville Canyon 1/2 mi. from south of canyon.
149 B	1050	5 B	36-09	M. L. Bryan	Mandeville Canyon 1/2 mi. below Mulholland Highway.
150	1450	3	42-11	M. L. Paoker	Monrovia Canyon Falls.
154	5600	3	52-47	Kenneth Pitt	Mt. Wilson Bet. 60' & 100' observatories
155	2900	10	87-79	Gene Breslin	Little Rock Cr. 1.5 mi. below Dam.
156	90	4	10-81	Std. Oil Employee	Center St., La Mirada near S.P.R.R.
157	135	5 A	12-88	T. H. W. Waite	Std. Oil Co. Refinery, El Segundo
158	2790	2	55-49	U. S. Forest Service Employees	W. Fork, San Dimas Canyon.
159	2850	3	41-40	M. A. De Temple	Mt. Wilson Trail, Little Santa Anita.
164	675	3	41-94	Charles J. O'Connor	432 No. Primrose, Monrovia.
166	615	3	41-94	C. A. Gierlich	Roof Citizens Bank Bldg., Monrovia.
167	611	3	41-64	Scott M. Lee	Aradisa Pumping Plant, E. Live Oak.
168	439	3	41-09	Richard Watts	309 E. Live Oak Ave., San Gabriel
169	700	3	41-63	Joe P. Hogan	Sierra Madre Pumping Plant, 621 E. Central Ave.
170	320	3	29-15	J. A. Reifer, Jr.	3623 Delta St., San Gabriel.
171	635	3	41-35	W. E. Gomerford	1000 Ft. E. of E. and Colorado St. East Pasadena.
173	1965	5 B	36-87	C. J. Trump	San Vicente Point near Mandeville Canyon and Mulholland.
174	965	2	43-86	C. G. Warren	Foothill Blvd., 2-3/4 mi. E. Glendora.
175	1915	8 (6B-Jul.'34)	50-87	T. M. Hall	5268 Linda Vista Drive, Alta Canyon.
176	1125	3	40-61	F. H. Parsons	575 Sacramento St., Alhambra.
177	1275	3	51-09	E. A. Brigham	36 No. Commonwealth, La Granda.
178	545	3	43-09	E. B. Griffith	Boatita St., just West of Cerritos, Azusa.
179	1110	3	41-42	Annette K. Carter	N. of Upper end Baldwin Av. Sierra Madre
181	296	3	30-04	R. S. Gipple	S.P.R.R. Station, Bassett.
182	378	2	30-41	E. Howard Leach	334 N. Main St., Baldwin Park
183	440	2	42-48	W. B. Starr	1.75 mi. N. of Baldwin Park Depot on Main St.

* #158 is 4 ft. above ground
 #168 is 40 ft. above ground
 #169 is 6 ft. above ground

Sta. No.	Elev. U.S.G.S.	Dist. No.	Quad. Index	Observer	Location
221	1425	7	59-99	H. O. Davis	On side Hill E. of end of New Pasadena Rd.
222	732	6 (6A-Jul.'34)	38-10	F. L. Hoffmeister	0.1 mi. W. Lankershim Blvd. S.P.R.R.
223 E	1500	2	43-83	H. A. Vander Goot	Garretaker's house Big Dalton Dam.
224	80	4	4-03	W. N. Beach	22 Pacific Ave., Long Beach.
225	47	4	9-85	J. F. Anthony	Montana Rch. 3 mi. S.W. Artesia.
226	665	6 (6A-Jul.'34)	38-91	F. Olovary	125 E. 3rd St. Burbank Fire Station.
227	465	3	40-99	Geo. E. Gleason	147 Bradbury Dr. San Gabriel.
228	285	5 A	26-02	C. Valle Riestra	Roof of City Hall, Beverly Hills.
230 B	1435	2	44-57	C. S. Elder	E. side of Canyon S. of Live Oak Dam.
231	4500	3	52-08	W. Hostetler	Ridge N.W. of proposed Eaton Canyon Dam Site.
232	527	2	31-24	J. L. Matthews	151 Nevada Place, Covina.
234	630	2	31-23	Ben F. Thorpe	N. Side Cameron Ave. 0.2 mi. E. of Barranca
235	2650	3	41-10	G. M. Whitchurch	Henninger Flat, Forestry Nursery, Mt. Wilson Rd.
236	1455	7	59-88	V. H. Craig	Craig Ranch, San Fernando.
237	725	5 A	37-49	H. L. Murrietta	Stone Canyon Dam.
238	750	5 A	30-68	C. J. Chewings	Hollywood Dam.
240	1700	7	60-67	F. M. McBride	4.3 mi. up Little Tujunga Cr. from Foothill Blvd.
241	60	4	4-03	C. Bower	City Hall Pacific Ave. 1/4 mi. from ocean.
242	1036	2	32-20	L. M. Jones	P.E.R.R. Station La Verne.
244	1925	1 A	54-13	G. Patterson	F.O. Gaging Sta. Bear Cr. W. Fork San Gabriel
246	111	5 A	26-07	Fire Dept.	City Hall, Culver City.
247	151	4	15-93	J. B. Robinson	233 Maple St., Rivera.
248 E	890	5 B	25-12	Ralph Zeilke	W. slope of Saddle Peak, above Grater Camp.
249	2400	9	84-48	W. A. Dodrill	Mint Cr. Rd. at Oaks Garage.
250	2575	9	73-85	R. M. Willday	Solead Cr. 2 mi. W. of Azusa 1 mi. N.E. of Havana.
251	1565	6 (6B-Jul.'34)	50-67	H. A. Schoener	2908 Michigan Ave. La Granda.
252	1166	6	69-80	W. H. Callis	Castale, W. side of Ridge Rd.
253	235	5 A	13-95	W. G. Frayer	Western Ave. Tank, L.A.W.D.
254	466	2	17-50	R. R. Steele	Extension Graside Rd. & S. of Rowlands Rch. Hse

* #224 is 50 ft. ± above ground
 #226 is 15 ft. above ground
 #228 is 30 ft. above ground

* #241 is 30 ft. ± above ground
 #246 is 20 ft. ± above ground
 #252 is 10 ft. above ground

Sta. No.	Elev. U.S.G.S.	Dist. No.	Quad. Index	Observer	Location
184	600	2	43-46	L. M. West	460 E. Bennett, Glendora
187	967	2	45-99	W. E. Mount	167 N. San Dimas Ave.
188	1075	2	44-07	H. E. Howard	Foothill Blvd. near Puddingstone Diversion Channel.
189	1090	2	43-98	J. R. Morris	112 W. 6th St., San Dimas.
190	168	4	15-02	J. P. Salvail	Bell Fire Sta. Fishburn at Baker.
193	575	2	31-21	W. B. Temple	.8 mi. E. of High School S. Side Puente St.
194	560	2	31-11	A. R. Evans	450 E. Badillo St., Covina.
195	1130	2	44-87	Asaph Bernard	Indian Hill and Baseline Rd.
196	1084	2	44-39	Ulrich Knoch	2146 Third St., La Verne.
198	815	6 (6A-Jul.'34)	39-21	F. W. Pusey	Near Brand Residence, Ext. Grandview Ave.
199	175	4	14-81	W. E. Ford	City Yard, Slauson at Miles St.
200	1023	9	70-27	W. H. Roberts	2.5 mi. W. of Saugus Ridge Route.
201	860	2	17-00	John G. Hart	Elliott Rch. Turnbull Canyon Rd. S.P.R.R. Sta., Whittier.
202	245	4	15-51	G. A. Kirby	N. side Lemon Rd. 1st House E. of Home.
204	538	2	31-49	A. Griffin	S.O.E. Co. Sub Sta. 1.5 mi. E. Puente.
205	574	2	30-79	Sta. Operator	Azusa Ave. Ret. Merced and Vine Sts.
206	467	2	30-94	P. R. Jackson	Griffin Lbr. Yd. S. Pac. Elev. Artesia.
208	49	4	10-14	Co. Employee	Big Tujunga at Lucas Cr.
209	2600	3	32-49	J. R. Hochm	On S.W. Slope 30 ft. N. of Firecracker
210 B	1250	6 (6A-Jul.'34)	39-21	F. C. Employees.	200' above Water Tank, Brand Pl.
213	177	5	26-43	F. C. Employees	La Brea Fossil Beds, South Whittier Blvd.
214 B	192	4	28-33	Elsie Smith	1209 Whittier Blvd. Montebello.
215	68	4	4-77	R. W. Bashore	900 E. Park at Somersset, Bellflower.
216	620	3 (6A-Jul.'34)	33-43	J. E. Jones	318 E. Randolph St., Glendale.
217	100	4	14-76	M. E. Tower	103rd St., 2nd Block W. of Alameda.
218	10	5 A	4-84	Marion E. Dice	2 mi. N.W. Torrance Gen'l. Patrol Corp.
219	659	1	48-94	V. Taylor	12605 Osborne Ave., 0.1 mi. N.E. San Fernando Rd.
220	195	3	29-28	D. M. Gate	San Gab. Blvd. 1 mi. N. Paco.

* #192 is 15 ft. above ground
 #195 is 10 ft. above ground

Sta. No.	Elev. U.S.G.S.	Dist. No.	Quad. Index	Observer	Location
255	70	2	31-55	M. W. Gibbs	State Narcotic Hospital near Spadra.
256	62	2	32-44	Various	S.P.R.R. Station Pomona.
257	750	5 A	39-17	J. Kradler	Griffith Park Nursery, Ext. No. Commonwealth Ave.
258 A	1000	5 A	38-97	Louis Strauss	West of Tunnel on pt. of ridge (Griffith Park)
258 B	1400	5 A	39-07	Louis Strauss	So. Slope Mt. Hollywood (Griffith Park)
258 C	1450	6 (6A-Jul.'34)	39-06	Louis Strauss	N. Slope Mt. Hollywood (Griffith Park)
259	1225	7	46-91	C. Shanks	Bottom Devil's Creek above Upper Lake (Twin Lakes Pk.)
260	4500	8	63-14	F. W. Carlisle	E. Pk. Hill Cr. Fuller Canyon.
261 E	3075	9	73-30	H. F. Mellen	Escondido Cr. N. Branch.
263	778	2	32-56	Milton Frater	2211 S. Lorne Ave., Pomona.
264	1900	9	59-92	H. Riley	Sand Canyon - Coyote Canyon Branch.
265 B E	725	4	17-74	R. H. Marsh	Anchelm Rd. about 1 mi. No. Whittier Blvd., Puente Hills.
266	253	4	17-06	J. M. Stevenson	Leffingwell Rch. 1/2 mi. S. Whittier Blvd.
266 E	57	4	7-34	B. Bunje	190th and Western Av. at Sub-Station.
269	720	2	18-53	P. E. Lewis	Diamond Bar Rch., Brea Cr. Road.
270	104	4	15-46	Clyde Morrow	741 Old River School Rd. County Farm.
271	195	4	8-63	James L. Nash	Domiguez Hill, S. side of Reservoir.
272	473	6 (6A-Jul.'34)	38-94	W. A. Herring	W. of N. Entrance Griffith Pk. at L.A. River.
273	1235	5 A	2-12	W. W. McCarrell	Top San Pedro Hills near Wend.
274	3250	9	65-68	Mrs. A. S. Hubbard	Mint Canyon Rd. just E. of Summit.
275	670	3	40-87	Wm. Hertrich-Brown	Huntington Estate San Marino.
276	1000	1 A	43-30	Geo. Moran	Dam and Dam #1. Sharpa Flat, San Gab. Can. bet. Morris Dam and Dam #1.
277	3700	10	108-17	W. W. Buettner	Sawmill Mt. Ranch 8.9 mi. N.W. of Lake Hughes.
278	213	5 A	26-86	M. C. McRae	2205 W. Adams, L. A.
279	1400	3	41-11	Frank Hannon	E. side of Eaton Wash near Mouth of Canyon
280	1325	3	40-01	Station Employees	200 ft. W. Summit Chevy Chase Dr. Cor. Inverness & Glencagle.

* #269 is 10 ft. ± above ground
 #278 is 10 ft. ± above ground

Sta. No.	Elev. U.S.G.S.	Dist. No.	Quad. Index	Observer	Location
281	3220	9	94-31	Elbert Perry	Glenea Cr. E. of Ridge Rt. & State Hy.
283 a	5740	1 A	65-57	Roy M. Tuttle	Crystal Lake Co. Park, East Pine Flat.
283 b	5370	1 A	65-58	Roy M. Tuttle	Crystal Lake Co. Park, West Pine Flat.
284	1480	9	59-22	John Wood	Dulin Rd., Placerita Cr.
285 B	1015	5 A	25-11	Sister Gertrude Joseph	Mt. St. Mary's College, Ridge
286	1090	7	49-22	John Hermann	Bet. Boehme Cr. & Cr. West.
287	797	3	43-36	H. C. Warren	10700 Foothill Blvd. San Fernando.
288	1750	5 B	22-01	G. C. Carter	234 N. Michigan Ave., Glendora.
289	140	4	15-52	L.A.Co.Surveyors	150 ft. W. of Latigo Rd. in Newton Cr.
290	375	4	28-75	L.A.Co.Surveyors	5 mi. N. of Escondido Patrol Station.
291	121	4	14-45	L.A.Co.Surveyors	.10 mi. W. of Compton & Abneria Rd.
292-E	1000	6 (6A-Jul'34)	36-85	L.A.Co.Surveyors	.20 mi. N. of Baker Ave.
293	1150	7	48-11	F. Ortiz	La Merced Hills - Garfield Ave. at S.C.E.Sta.
294	985	3	41-53	Al Freeland	96th & Central Ave. L. A.
295 D	526	6 (6A-Jul'34)	39-34	H. E. Bartlett	Great of Encino Dam. 1 mi. S.W. of Encino
297	900	5 B	21-01	W. H. Walker	Santa Monica Mts.
298	3830	--	105-40	J. L. Ralphs	800 ft. N. of W. end of Dam. Lower
299 B	2835	10	88-26	C. W. Leding	San Fernando.
300	990	5 B	36-18	R. L. Peeler	Mira Monte Ave. at pump plt. 50' W. of
301	1050	6 (6A-Jul'34)	39-21	S. E. Hutton	foot of Mt. Wilson Trail.
302	1790	1 A	53-85	G. Patterson	437 Pioneer Drive, Glendale.
303-E	763	3	40-76	Students	E. Fork Arroyo Sequis - 1/4 mi. So. of Rd.

* #287 is 15 ft. above ground

Sta. No.	Elev. U.S.G.S.	Dist. No.	Quad. Index	Observer	Location
335	488	2	17-21	C. L. Jordan	Los Altos Dr., 0.1 mi. W. Hacienda Blvd.
336	455	5 A	39-39	L.A.W.D.	Happy Valley.
337	6500	8	62-22	Various Rangers	Silver Lake Reservoir L. A.
338	5850	1 A - 3	52-47	K. Pitt	Top of Mt. Gleason.
339	533	2	31-49	Operator	50' so. 60' Telescope Mt. Wilson.
340	125	5 A	26-89	G. F. Benjamin	1/2 mi. S.W. of Walnut So. side U.P.R.R.
341	2900	9	74-43	Geo. J. Blum	4160 2nd Ave. L. A. / tracks
342	1550	2	45-17	B. U. Brookham	Aliso Canyon - So. of Aston.
343	141	4	16-04	F. C. Collins	7/8 mi. No. of Foothill Blvd. on Benson Ave.
344	93	5 A	26-37	F. M. Morrill	Telegraph Rd. 0.2 mi. W. of San Gabriel Riv
345	92	5 A	25-97	M. R. Pollard	5408 Homeside Ave., L. A.
346	154	4	15-65	Mrs. K. C. Welles	3671 Motor Ave., Palms.
347 E	387	2	30-30	Various	241 Downey Ave., Downey.
348 B	2518 = B	1 A	55-44 B	G. H. McKelvey	Scott Place, 1 Blk. W. of Main St.
349	1500	1 A	55-35 A	Otto Mason	Baldwin Park.
350	1125	9	82-42	E. G. Richey	No. Fork of E. Fk. San Gabriel River.
351 D-E	2648	10	86-82	H. P. Schoeller	W. Fk. San Gabriel - 1.3 mi. W. of Forks
352	1530	5 B	21-21	J. L. Ozanne	(Camp Rincon)
353	458	1 B	42-26	R. T. Chew	6.6 mi. up Elizabeth Lake Cr. from
354	3100	2	55-29	M. M. Smith	State Hwy. near Gastaio.
355	340	5 A	27-01	Frank S. Trueblood	Palmdale - 1 Blk. East of Main Hwy.
356	675	2	31-86	Employees	4 mi. from Roosevelt Hwy. on Decker Rd.
357	1243	7	59-08	Operator	Duarte Rd. at Buena Vista St. (Duarte)
358	3950	10	77-15	J. D. Bonn	Divide bet. San Dimas & Big Dalton Canyons
359	220	5 A	27-76	L.A.City Engineers	855 No. Vermont Ave. L. A.

* #346 is 35 ft. above ground.
#348 B May 15 '34. At A previously

#355 is 30 ft. ± above ground

Sta. No.	Elev. U.S.G.S.	Dist. No.	Quad. Index	Observer	Location
304	2500	3	42-30	Ben Overturff	1 1/2 mi. up Canyon from Sawpit Dam.
305 E	1155	5 B	21-01	R. L. Mason	East Fork of Arroyo Sequis S. of Road.
306	15 ±	5 B	21-56	Wm. Steeb	State Hwy. (Roosevelt) at Trancas Canyon
307	6500	2	56-73	A. R. Collins	Upper San Antonio Canyon, 1 mi. bel. Divide
308	8300	2	56-96	Larry Fine	1 1/2 mi. N.E. of Ontario Pk. - Just N. of Divide
309	1768	2	45-05	K. B. Forbes	1 1/2 mi. N. of Base Line Rd. & 300 ft. E. of
310	527	3	40-79	D. Donaldson	Monte Vista Ave. N. of Claremont.
311	930	3	40-43	F.C. & H. Stewart	800 N. Monterey St., Alhambra.
312	675	2	42-85	Plant Operator	100' N.W. of Mountain Ave. & 50' N.E.
313	865	2	43-45	Plant Operator	of Manzanita St.
314	1064	2	44-07	Plant Operator	1 mi. N.W. of Azusa & 0.4 mi. W. of
315	865	2	43-15	Plant Operator	W. end Sierra Madre Ave.
316	680	1 A	67-02	L. McDonald	Live Oak Ave. 1/2 mi. N. of Foothill Blvd.
317	6750	1 A	67-12	L. McDonald	N.E. Cor. Foothill and Artesia Ave. 1.3 mi.
318	6075	1 A	66-70	Ralph Price	W. of Puddingstone River. Channel.
319	5900	1 A	66-81	Ralph Price	300' W. intersection Ben Lomond Ave. on
320	900	6 (6A-Jul.'34)	39-93	F. H. Hay	Sierra Madre Ave.
321 E	3400	9	96472	C. R. O'Rourke	100' S.E. of F.C. gages at E. edge Flat
322	2600	9-10	110-48	Eric Manz	E. of Main Bldgs. Big Pines Co. Park.
324	1820	6 (6B-Jul.'34)	50-15	H. B. Lynch	0.6 mi. S.E. Main Bldgs. near Swartout
325	1600	1 A	54-35	H. S. McDaniel	Valley Park Entrance.
326	500	5 B	24-43	W. W. Culp	So. edge of Jackson Lake.
334 E	2335	1 A	53-35	J. G. Stanchfield	Big Pines Park-Apple Tree Flat. 2 1/2 mi.

Sta. No.	Elev. U.S.G.S.	Dist. No.	Quad. Index	Observer	Location
360	2250	8 (6B-Jul.'34)	50-23	M. R. Larson	Haines Canyon at Rock Crusher Plant.
361	3000	3	51-14	Forest Rangers	6 mi. from Foothill Blvd. at C.C.C. Camp.
362	1025	6 (6A-Jul.'34)	40-23	J. D. Hoffman	W. end of El Mirador Drive, Pasadena.
363	2900	7	59-54	F. C. Employees	3 mi. N. of Olive View Sanitarium
364	2250	8 (6B-Jul.'34)	50-23	F. C. Employees	Wilson Canyon.
365	5040	8 (6B-Jul.'34)	50-52	USPS Rangers F.C.	50' E. U.S.G.S. Gaging Sta. Haines Creek
366	3740	10	77-45	L. F. Noble	Sister Elsie Peak
367	3450	8 (6B-Jul.'34)	50-42	F. C. Employees	1/2 mi. N.W. Valeremo 1/2 mi. So. Big
368	2500 ±	8 (6B-Jul.'34)	50-34	F. C. Employees	Rock Cr. & Rd. to Big Pines Co. Park.
369	2250 ±	8 (6B-Jul.'34)	50-33	F. C. Employees	At upper forks near head of Haines Canyon.
370	2960 ±	8 (6B-Jul.'34)	50-44	F. C. Employees	Blanchard Canyon.
371	1790	1 A	54-44	G. Patterson	Haines Canyon at F. C. Flume.
372	1580	9	82-76	Operator	Cook Canyon
373	2310	8 (6B-Jul.'34)	50-76	L. R. Bleitz	North Fork Gaging Sta. San Gabriel River.
374	292	4	27-46	Mr. Woolard	San Francisco Cr. 11 mi. N.E. of Saugus
375	575	6 (6A-Jul.'34)	39-16	B. C. Gibson	Briggs Terrace, Piokens Canyon.
376	3150	10	76-50	E. E. Booth	L. A. Examiner 11th & Broadway L. A.
377	900	5 B	35-55	Archie Lawrence	Griffith Park Zoo L. A.
378	1500	8 (6B-Jul.'34)	51-09	Tom Hall	E. E. Booth
379	1500	1 A	54-86	G. Patterson	0.1 mi. N. of Potrero Rd. 1.6 mi. from
508	1750	3	51-27	U.S. Forest Rangers	State Hwy by Road at Triunfo.
594	1270	9	58-72	A. B. Thatcher	4874 Commonwealth Ave. La Canada.

* #374 is 50 ft. ± above ground.

TABLE IV

AUTOMATIC RAINGAGES

F C #	NAME OF STATION	SIZE	WATERSHED	REMARKS
4	Crags Co. Club	9"	Triunfo & Malibu	Gage removed
6	Topanga Ranger Sta.	9	Topanga Cn.	
10	Bel Air	9	Stone Canyon	
15	Van Nuys Whse.	9	L. A. River	
21	Brant Rancho	9	L. A. River	
29	Granada	9	L. A. River	
33 E	Pacoima Dam	9	Pacoima	
41	Alta Canyon	9	Verdugo	Gage removed
47	Clear Creek	12	Big Tujunga	
51 E	La Cienega	12	San Gabriel No. Fk.	
53	Colby Ranch	9	Big Tujunga	
54	Loomis Ranch	12	Big Tujunga	
57 E	Opid's Camp	12	San Gabriel W. Fk.	
60	Hoegge's Camp	9	Big Santa Anita	
65	Sierra Madre	9	Rio Hondo	
70 E	Dalton #1	9	San Gabriel	
75 B E	Robert's Relay Sta.	9	San Gabriel	Previously at Edison Intake. Gage removed
80	Prairie Forks	9	San Gabriel	Gage removed
83 E	Big Pines Co. Park	9	Desert	
85 E	Camp Baldy	12	San Antonio	
92	Pomona College	9	San Antonio	
130	Sandbergs	9	Piru Creek	Gage removed
150	Monrovia Falls	9	Sawpit	
158	Tanbark Flats	12	San Dimas	
159	Orchard Camp	9	Sierra Madre	
178	Azusa	9	San Gabriel	
210 B	Brand Park	9	L.A. River	
213	Hancock Park	9	Ballona	
228	Beverly Hills	9	Ballona	Private
235	Henninger Flats	9	Eaton Canyon	
257	Griffith Park Nursery	9	Ballona	
261 E	Acton	9	Santa Clara	
280	Flintridge Fire Sta.	9	Arroyo Seco	
289	Laguna Bell	12	Rio Hondo	Private
290	Newmark	12	L. A. River	Private
291	96th and Central	12	L. A. River	Private
303	Cal. Tech.	9	Alhambra Wash	
311	Sunset Reservoir	9	Arroyo Seco	
334	San Gabriel Dam #2	9	San Gabriel W. Fk.	
338	Mt. Wilson	12	Various	
352	Lechuza Patrol Sta.	9	Arroyo Sequis and Trancas	
359	Poly High School	9	Ballona	Gage removed
363	Wilson Canyon	9	Pacoima	Gage removed
365	Sister Elsie Peak	9	Big Tujunga, etc.	
367	Upper Haines Cn.	9	Big Tujunga	
373	Briggs Terrace	9	Verdugo	
376	Little Rock	Spcl.	Juniper Hills	
380	El Sereno	9	L. A. River	
508	Arroyo Seco Rngr. Sta.	9	Arroyo Seco.	
577	U.S.W.B.	12	L. A. River	Private
205	Puente S.C.E.Co.	Marvin	San Jose Cr.	USWB Gage Removed
137	Curson	"	Ballona	USWB Gage Removed
347	Baldwin Park Exp. Sta.	"	San Gabriel	USWB Gage Removed

EVAPORATION RECORDS

Seasons 1932-33 and 1933-34

The Seasons 1932-33 and 1933-34 furnished complete records from 21 out of 26 stations which were in operation at the beginning of each season. The incomplete records were principally due to freezing of the water in the pans; snow and rain, causing the pans to overflow.

Twenty-four F. C. pans were painted with Aluminum paint in the season 1932-33.

The Encino Reservoir and Baldwin Park Stations furnish comparative data for various types of pans and at the end of another season should furnish valuable comparative data.

The evaporation records for the Seasons 1932-33 and 1933-34 appear in the following tables:

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
Hydraulic Department

TABLE V

EVAPORATION RECORDS
IN INCHES
Season 1932-33

Station	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Total
23 Chatsworth	7.655	7.600	4.310	4.688	5.425	6.605	5.705	8.085	8.300	10.025	9.525	6.925	84.818
32 Newhall	7.165	6.315	3.835	1.970*	3.485	4.120	5.400	7.455	8.145	10.385	10.380	7.270	75.065*
33 Pacoima Dam	7.290	7.810	3.355	3.415	4.320	5.640	4.940	5.725	6.210	9.120	8.105	6.735	72.565
46 Big Tujunga	7.075	6.400	2.675	2.125	3.900	5.378	4.945	5.850	8.475	10.850	9.325	7.875	74.873
51 La Cienega	4.045	3.435	1.045	1.150	1.691	3.200	3.640	4.720	5.410	7.550	7.715	6.885	50.486
57 Opid's	3.060	2.025	(0.255	Frozen & Inc.	0.010	2.460	3.460	4.955	6.925	6.715	5.100	34.965*	
63 Santa Anita	5.930	6.595	3.490	3.535	3.410	4.810	4.420	4.370	5.505	5.990	5.365	4.150	57.570
70 Dalton	7.385	8.165	3.596	3.983	4.650	6.075	5.585	6.310	8.038	8.845*	6.315*	NR	Inc.
75 Edison Intake	6.640	4.940	1.955	1.585	2.930	4.460	5.135	5.705	7.645	8.167	8.713	6.770	64.645
83 Big Pines Pk.	6.565	5.295	1.025'	Inc.'	Inc.'	4.470	5.842	10.215	9.790	7.770	9.065	60.037*	
85 Camp Baldy	5.860	5.000	1.175*	1.640*	NR	4.040	4.385	4.360	7.405	9.090	7.950	6.655	Inc.
89 San Dimas Dam	11.835	10.505	2.805	2.690	NR	10.125	-	Records unreliable and incomplete					
96 Puddingstone	6.530	6.755	3.380	3.295	3.885	5.325	5.175	6.165	7.250	10.065	9.375	6.585	73.785
128 Radium Ht. Spg.	NR	5.310	3.820	Inc.	4.100	5.225	5.705	8.005	10.605	13.580	13.460	11.500	Inc.
157 El Segundo	5.005	4.395	3.529	2.875	3.895	5.145	6.085	7.585	6.350	6.660	7.195	4.990	63.709
223 Big Dalton	6.785	7.875	3.100	4.250	4.350	6.470	5.510	6.605	9.390	10.925	10.225	7.775	83.260
248 W.Saddle Pk.	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
261 Acton near	7.890	6.490	3.130	3.045	4.815	6.260	6.860	7.100	10.189	12.775	12.290	10.075	90.519
265 Puente Hills	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
268 Torrance	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
292 Encino - F.C.	7.580	7.495	3.845	4.930	5.300	7.190	7.072	9.386	9.135	11.388	10.793	8.058	92.172
" USWB	6.564	7.152	3.32	4.26 + 5.00	6.85	6.35	8.39	9.68	11.065	9.996	6.840	85.467	
" Lake	6.252	5.412	3.394	3.66 + 3.696	4.788	5.476	7.260	7.212	9.276	9.384	7.164	72.974*	
303 Cal. Tech.	4.605	3.785	1.965	1.505	1.990	2.945	3.407	4.565	5.600	7.325	7.988	5.732	51.412
305 Arroyo Sequia	6.850	7.510	3.765	5.150	4.980	4.330	3.975	6.035	5.635	7.495	7.775	5.480	67.605
321 Pine Cr. Pat.	8.670	6.510	2.960	1.725	3.475	5.670	6.342	7.760	9.825	12.790	12.250	10.325	88.306
347 Bald. Pk. F.C.	5.630	4.805	2.44*	2.213	3.145	4.840	5.825	7.750	9.085	10.100	9.410	6.593	71.878
" USWB	5.00	4.23	2.07	2.47	2.38	4.79	5.28	6.89	8.15	9.49	8.53	5.64	64.92
" 6 ft.	4.43	4.06	2.22	1.89	3.49	3.61	4.12	6.43	6.89	7.75	6.87	4.95	56.75
351 Palmdale	8.145	4.690	2.870	1.975	3.555	5.700	7.355	8.955	11.520	17.000	13.890	11.600	97.255

o Incomplete
! Frozen
+ Partly Estimated

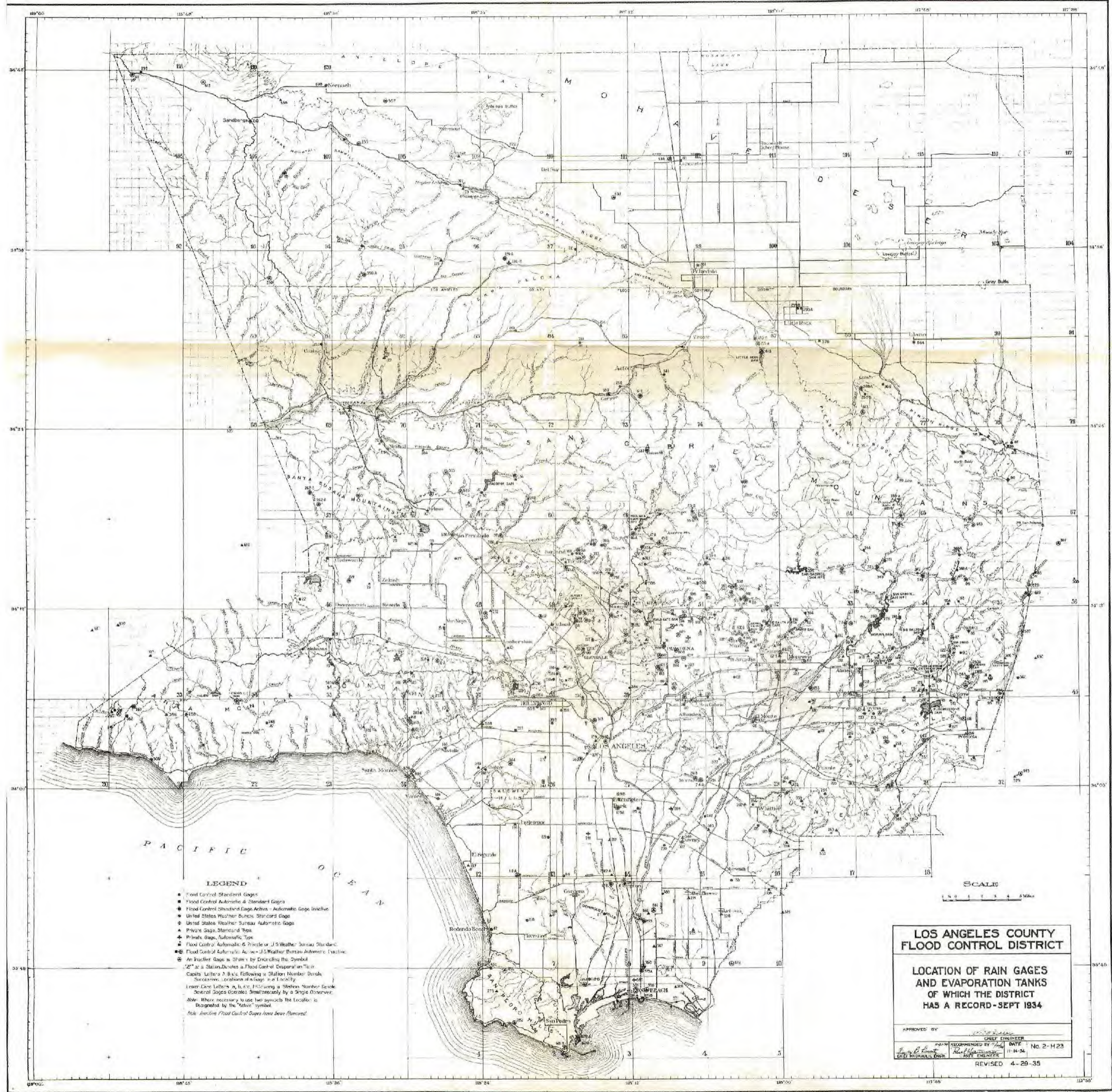
LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
Hydraulic Department

TABLE VI

EVAPORATION RECORDS
IN INCHES
Season 1933-34

Station	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Total
23 Chatsworth	6.690	8.125	2.500	5.460	2.565	5.325	7.925	9.400	6.685	10.425	9.550	6.680	83.330
32 Newhall	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
33 Pacoima Dam	6.895	7.280	3.460	4.620	2.790	4.990	6.015	6.270	3.675	7.695	7.265	7.900	68.645
46 Big Tujunga	6.775	5.225	1.800	3.125	2.400	5.200	6.450	7.575	6.075	9.275	8.725	6.935	69.560
51 La Cienega	4.390	3.269	1.045	2.530	0.975	3.290	3.765	5.535	4.290	7.665	7.220	6.250	50.204
57 Opid's Camp	2.985	8.55	0.100	2.050	2.700	0.925	3.815	5.265	5.220	6.845	6.500	2.225	47.190
63 Santa Anita D.	4.125	4.910	2.675	3.375	2.010	3.720	3.695	4.165	2.840	4.460	4.445	4.625	44.945
70 Dalton	7.060	6.110	3.813	4.735	3.096	6.115	7.145	8.540	6.422	9.661	9.589	9.340	83.606
75 Edison Intake	6.350	4.905	2.140	2.310	2.105	4.810	5.610	5.930	7.590	9.810	8.360	7.055	66.975
83 Big Pines Pk.	5.998	4.080	-	Frozen -	-	-	8.160	7.295	9.505	8.885	7.450	Inc.	
85 Camp Baldy	5.360	5.315	-	Frozen -	-	-	6.605	5.765	8.260	7.930	6.550	Inc.	
89 San Dimas Dam	Inc.	Inc.	Inc.	Inc.	4.900	5.840	6.120	4.750	9.470	10.940	9.415	53.215*	
96 Puddingstone	6.990	7.325	4.175	4.100	2.675	4.440	4.745	8.315	6.390	9.990	9.670	8.553	77.868
128 Radium Hot - Springs	9.845	9.570	3.930	3.695	2.460	5.995	8.575	9.865	7.840	12.865	11.605	8.935	95.180
157 El Segundo	4.050	4.390	2.515	2.895	2.770	4.365	5.845	7.825	7.195	7.140	7.260	6.110	62.370
223 Big Dalton	8.030	7.990	3.220	4.515	2.845	6.425	7.075	9.425	6.755	12.150	11.355	11.015	90.800
248 W.Saddle Pk.	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
261 Acton	8.105	7.455	3.950	4.625	3.545	7.175	9.000	10.895	9.230	13.795	13.430	10.350	101.555
265 Puente Hills	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
268 Torrance	4.335	2.715	0.985	1.105	1.161	3.775	5.580	8.010	5.930	7.890	7.810	6.635	55.931
292 Encino - F.C.	7.797	7.568	3.460	4.965	3.060	7.305	9.030	11.335	7.720	12.145	10.755	10.930	96.070
" USWB	6.792	6.560	2.940	3.564	2.412	6.324	7.428	9.504	6.360	10.752	9.408	8.832	80.976
" Lake	6.024	5.703	2.856	4.704	1.788	4.824	6.888	8.460	6.120	9.204	8.868	8.208	73.644
303 Cal. Tech.	4.463	3.807	Inc.	Inc.	1.742	2.389	4.493	6.996	5.115	7.926	Inc.	NR	Inc.
305 Arroyo Sequia	5.540	7.345	Inc.	Inc.	No records kept								
321 Pine Cr. Pat.	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
347 Bald. Pk. F.C.	4.287	4.050	1.735	1.715	1.625	4.330	6.355	9.060	6.805	9.785	8.925	7.975	67.347
" USWB	4.40	4.14	1.86*	2.40*	2.36	4.56	5.97	8.39	6.38	9.44	8.32	7.320	65.940*
" 6 ft.	4.01	3.11	1.36*	1.58*	1.55	3.57	5.03	7.23	5.43	7.78	7.11	6.040	53.80*
" 2 ft.	4.62	3.91	1.73	1.85	1.81	4.13	6.05	8.52	6.51	9.32	8.30	7.270	64.00
351 Palmdale	8.725	4.950	2.690	2.793	3.685	6.290	9.300	12.700	12.345	16.160	15.640	10.950	106.228

o Incomplete
NOTE: - All Evaporation Pans are F.C. 24" dia. pans sunk in ground to water level except where noted otherwise.



LEGEND

- Flood Control Standard Gages
- Flood Control Automatic & Standard Gages
- ◆ Flood Control Standard Gage, Active - Automatic Gage Inactive
- ◆ United States Weather Bureau Standard Gage
- ◆ United States Weather Bureau Automatic Gage
- ▲ Private Gage, Standard Type
- ▲ Private Gage, Automatic Type
- ◆ Flood Control Automatic & Private or U.S. Weather Bureau Standard
- ◆ Flood Control Automatic, Active - U.S. Weather Bureau Automatic, Inactive
- An Inactive Gage is shown by enclosing the symbol
- at a Station, Denotes a Flood Control Evaporation Tank
- Capital Letters A, B, C, Following a Station Number, Denote Successive Locations of a Tank in a Locality
- Lower Case Letters A, B, C, Following a Station Number, Denote Several Gages Operating Simultaneously by a Single Observer
- Note: Where necessary to use two symbols for the location is designated by the "sector" symbol
- Note: Inactive Flood Control Gages have been Plotted

SCALE
 1" = 1 MILE

**LOS ANGELES COUNTY
 FLOOD CONTROL DISTRICT**

**LOCATION OF RAIN GAGES
 AND EVAPORATION TANKS
 OF WHICH THE DISTRICT
 HAS A RECORD - SEPT 1934**

APPROVED BY: _____
 CHIEF ENGINEER

RECOMMENDED BY: _____
 DATE: 11-14-34
 No. 2-H-23

REVISOR: _____
 DATE: 4-29-35



LEGEND

- Interpolated isohyets
- - - Isohyets approximated due to lack of data
- Station location
- 577 is Flood Control number
- 15.24 is 60 year normal precipitation
- Season Oct 1 through Sept 30

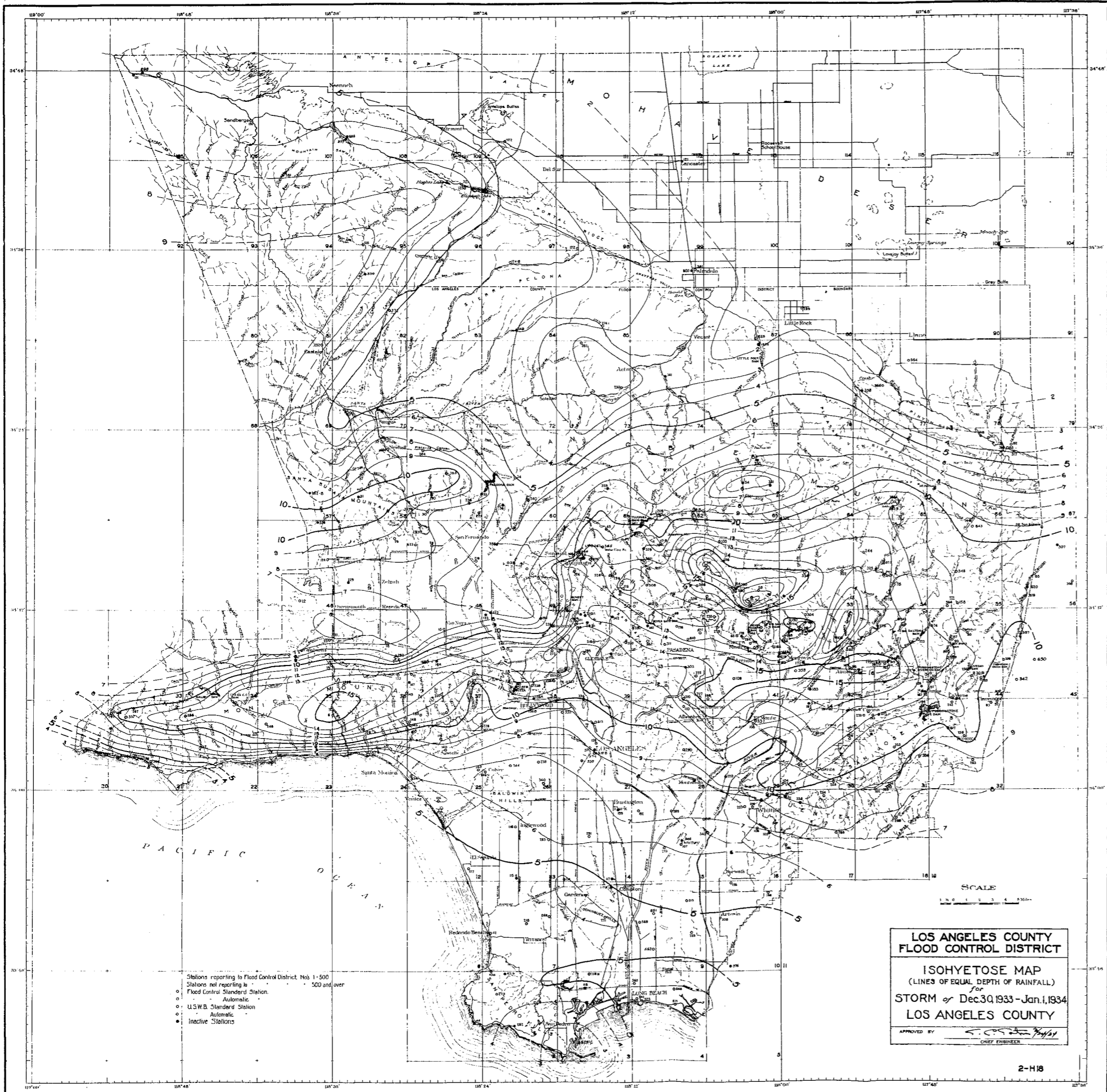
SCALE
0 1 2 3 4 Miles

**LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT**

ISOHYETAL MAP
SHOWING
60 YEAR NORMAL (1872-1932)
SEASONAL PRECIPITATION
FOR
LOS ANGELES COUNTY

APPROVED BY: *[Signature]*
CHIEF ENGINEER

RECORDED BY: *[Signature]*
DATE: 9-18-34 2-H 22



Stations reporting to Flood Control District, Nos. 1-500
 Stations not reporting to Flood Control District, Nos. 500 and over

- Flood Control Standard Station
- Automatic
- U.S.W.B. Standard Station
- Automatic
- Inactive Stations

**LOS ANGELES COUNTY
 FLOOD CONTROL DISTRICT**

ISOHYETOSE MAP
 (LINES OF EQUAL DEPTH OF RAINFALL)
 For
STORM of Dec.30,1933-Jan.1,1934
LOS ANGELES COUNTY

APPROVED BY *[Signature]*
 CHIEF ENGINEER

Los Angeles County Flood Control District
Hydraulic Department

DAM OPERATION RECORDS

Dam operation, maintenance and compilation of operation records is performed by the Hydraulic Department, Mr. F. B. Laverty, Chief Hydraulic Engineer. Maintenance and Operation is under the direct supervision of Mr. F. H. Hay; Compilation of Operation Records is under the direct supervision of Mr. W. J. Wood.

Since the completion of Devils Gate Dam in 1920, the Flood Control District has constructed and is operating ten dams. These function primarily as flood control projects and secondarily as conservation projects. A total maximum storage of 38,842 acre feet is the combined capacity of these reservoirs with individual capacities ranging from 250 to 17,398 acre feet. The completion of San Gabriel Dam No. 2, with a capacity of 12,900 acre feet, will increase the total available storage to 51,742 acre feet.

In conjunction with the Dams, the District operates five spreading grounds as conservation projects. Additional flood and debris control projects are Sunset Canyon and Sierra Madre Dams; Upper and Lower Hall Beckley Canyon, Pickens Canyon, Dunsmuir Canyon and Verdugo Canyon Debris Basins.

During the seasons of 1932-33 and 1933-34, the District conserved 11,070.9 acre feet and 18,634.5 acre feet respectively, most of which would otherwise have wasted to the Ocean. At the conservative figure of \$20.00 per acre foot this represents a return of \$594,108 on the original investment.

On January 1, 1934 the District experienced one of the largest storms since the establishment of the Hydraulic Department. During this occasion, the Dams proved their efficiency as flood control projects.

The following is noteworthy.

Dam	Peak Hourly Inflow for Jan. 1, 1934	Peak Outflow for Jan. 1, 1934
Big Dalton	226.8 c.f.s.	0
Big Santa Anita	564.0 " USGS	402.0 e.f.s.
Big Tujunga	2432.0 "	0
Devils Gate	3305.0 "	0
Pacoima	914.0 "	0
Puddingstone	595.0 "	0
San Dimas	421.5 "	120.0 e.f.s.
Sawpit	402.0 "	287.0

Daily Gage Height, in Feet and Operation Record, of BIG TUJUNGA Dam

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

File No.

Continuous Water Stage Recorder: AU.
Gage Read Daily: 8:00 A.M.

Year: Tujunga for the Year Ending September 30, 19 33
Drainage Area: 81.35 Square Miles Sam Browne Dam Under

Table with columns for months (OCTOBER, NOVEMBER, DECEMBER, JANUARY, FEBRUARY, MARCH) and rows for daily measurements (DAY 1-31). Each row contains multiple columns for gage height, storage, and inflow/outflow in acre feet. Includes a 'TOTAL' row at the bottom of the monthly data.

Gage heights and Storage reduced to Mid-night of same day as shown. *Computed due to larger loss than outflow at flume.

Table with columns for months (APRIL, MAY, JUNE, JULY, AUGUST, SEPTEMBER) and rows for daily measurements (DAY 1-31). Each row contains multiple columns for gage height, storage, and inflow/outflow in acre feet. Includes a 'TOTAL' row at the bottom of the monthly data.

Gage heights and Storage reduced to Mid-night of same day as shown.

OK. M.W.R. 5-16-35

OK. M.W.R. 5-16-35

Daily Gage Height, in Feet and Operation Record of

PACIFICA

Dam

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No.

San Fernando

for the Year Ending September 30, 1933

Continuous Water Stage Recorder A.U. Gage Read Daily 8:00 A.M.

Main data table for 1933, covering months from October to March. Columns include date, gage height, storage, and various flow measurements. Includes a 'TOTAL' row and summary statistics for inflow and outflow.

Gage heights and Storage reduced to Mid-night of same day as shown. For all small flows - only monthly totals are computed.

Main data table for 1934, covering months from April to September. Columns include date, gage height, storage, and various flow measurements. Includes a 'TOTAL' row and summary statistics for inflow and outflow.

Note: Investigation by John Luoc shows a loss (through percolation) at recorder. * Outflows computed from loss in storage. Inflow is computed, except for small flows.

San Dimas

SAN DIMAS

Dam

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

HYDROGRAPHIC DEPARTMENT

Continuous Water Stage Recorder A U

File No.

Drainage Area 15.92 Square Miles

for the Year Ending September 30, 1934

Geo. Rodgers

Dam Number

Main data table for San Dimas Dam, covering months from October to March. Columns include Date, Gage Height, A.P. Storage, C.F.S. Inflow/Outflow, and various totals.

Gage heights and Storage reduced to Mid-night of same day as shown. Note: Beginning Mar. 27th outflows are interpolated from U.S.G.S. Records. #Rogers daily report shows valve out closed on this day.

Main data table for San Dimas Dam, covering months from April to September. Columns include Date, Gage Height, A.P. Storage, C.F.S. Inflow/Outflow, and various totals.

Daily Gauge Height, In Feet and Operation Record, of SAWYER Dam

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No.

Monrovia for the Year Ending September 30, 1934

Certificates Water Stage Recorder - AU
Gauge Read Daily 8:00 A.M.

Discharge Area 3.27 Square Miles
Name M. L. FACKER Dam Tender

Table with columns for months (OCTOBER to MARCH) and rows for days (1-31). Includes sub-columns for Gauge Height, A.P. Storage, C.F.S. Inflow, and C.F.S. Outflow. Includes summary rows for Inflow/Outflow Acres and Change Storage.

Gauge heights and Storage reduced to mid-night of same day as shown. *Small pool but negligible. Note: Est 10.7 ac.ft. debris.

Table with columns for months (APRIL to SEPTEMBER) and rows for days (1-31). Includes sub-columns for Gauge Height, A.P. Storage, C.F.S. Inflow, and C.F.S. Outflow. Includes summary rows for Inflow/Outflow Acres and Change Storage.

Daily Gage Height, in Feet and Operation Record of **TROMPSON CREEK** Dam
 for the Year Ending September 30, 1933

LOS ANGELES COUNTY
 FLOOD CONTROL DISTRICT
 HYDROGRAPHIC DEPARTMENT

File No.

Drainage Area **3.91** Square Miles
 Reservoir **R. P. Dalton** Dam Number

Continuously Water Stage Recorder
 Gage Read Daily **YES/NO**

DAY	OCTOBER				NOVEMBER				DECEMBER				JANUARY				FEBRUARY				MARCH				DAY	Peak	Flood	Check	Remarks
	Gage height	A.P. Storage	C.F.S. Inflow	C.F.S. Outflow	Gage height	A.P. Storage	C.F.S. Inflow	C.F.S. Outflow	Gage height	A.P. Storage	C.F.S. Inflow	C.F.S. Outflow	Gage height	A.P. Storage	C.F.S. Inflow	C.F.S. Outflow	Gage height	A.P. Storage	C.F.S. Inflow	C.F.S. Outflow	Gage height	A.P. Storage	C.F.S. Inflow	C.F.S. Outflow					
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31																													
TOTAL,																													
Inflow Acres feet																													
Outflow Acres feet																													
Inflow from Dam																													
Inflow from Spreading Grounds																													
Inflow from Other Sources																													
Change Storage Acres feet																													

Gage heights and Storage reduced to Mid-night of same day as shown.

DAY	APRIL				MAY				JUNE				JULY				AUGUST				SEPTEMBER				DAY	Peak	Flood	Check	Remarks
	Gage height	A.P. Storage	C.F.S. Inflow	C.F.S. Outflow	Gage height	A.P. Storage	C.F.S. Inflow	C.F.S. Outflow	Gage height	A.P. Storage	C.F.S. Inflow	C.F.S. Outflow	Gage height	A.P. Storage	C.F.S. Inflow	C.F.S. Outflow	Gage height	A.P. Storage	C.F.S. Inflow	C.F.S. Outflow	Gage height	A.P. Storage	C.F.S. Inflow	C.F.S. Outflow					
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31																													
TOTAL,																													
Inflow Acres feet																													
Outflow Acres feet																													
Inflow from Dam																													
Inflow from Spreading Grounds																													
Inflow from Other Sources																													
Change Storage Acres feet																													

Gage heights and Storage reduced to Mid-night of same day as shown.

Daily Gage Height, in Feet and Operation Record of THOMPSON CREEK Dam

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No.

LA 74824 for the Year Ending September 30, 1934

Continuous Water Stage Recorder NONE

Drainage Area 7.91 Square Miles

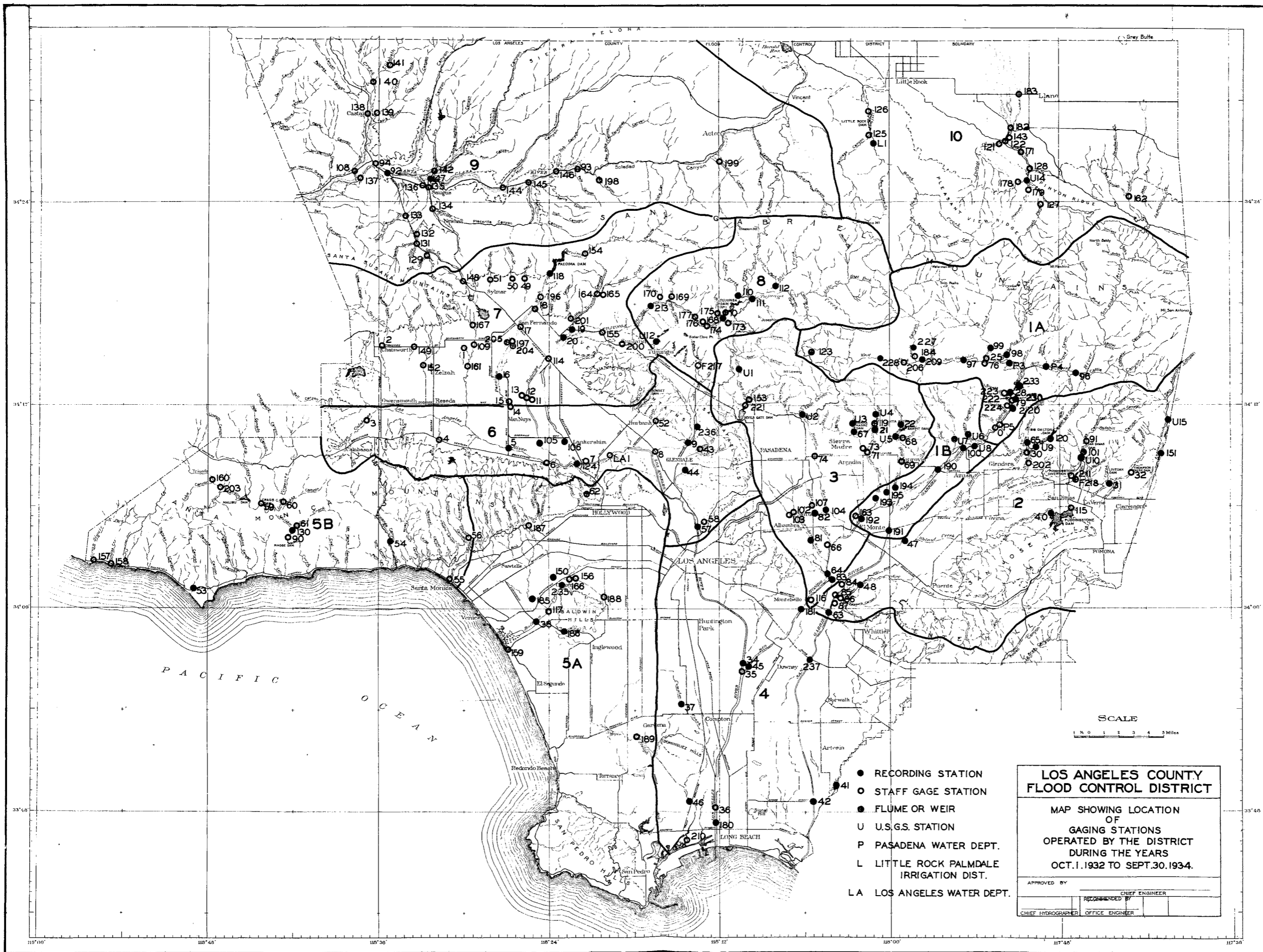
Roger Dalton Dam Builder

Gage Read Daily Various

Main table for Thompson Creek showing monthly data for October, November, December, January, February, and March. Includes columns for Gage Height, A.P. Storage, C.F.S. Inflow, and C.F.S. Outflow.

Gage heights and Storage reduced to Mid-night of same day as shown.

Main table for Thompson Creek showing monthly data for April, May, June, July, August, and September. Includes columns for Gage Height, A.P. Storage, C.F.S. Inflow, and C.F.S. Outflow.



- RECORDING STATION
- STAFF GAGE STATION
- FLUME OR WEIR
- U U.S.G.S. STATION
- P PASADENA WATER DEPT.
- L LITTLE ROCK PALMDALE IRRIGATION DIST.
- LA LOS ANGELES WATER DEPT.

**LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT**

MAP SHOWING LOCATION
OF
GAGING STATIONS
OPERATED BY THE DISTRICT
DURING THE YEARS
OCT. 1, 1932 TO SEPT. 30, 1934.

APPROVED BY _____	CHIEF ENGINEER
RECOMMENDED BY _____	OFFICE ENGINEER
CHIEF HYDROGRAPHER _____	OFFICE ENGINEER _____

SCALE
1 2 3 4 5 Miles

Los Angeles County Flood Control District
Hydraulic Department

RUNOFF REPORT

Seasons of 1932-33 and 1933-34

This volume is one of a series of 6 reports presenting results of measurements of stream flow made on rivers, creeks, washes and storm drains in Los Angeles County, California.

The data in this report were collected by the Hydraulic Department of the Los Angeles County Flood Control District during the period from October 1932 to September 30, 1934.

This work was started in 1927 with the installation of 27 automatic recorder stations. Other stations have been added so that at the end of the period covered by this report, 70 automatic recorder stations are being operated.

83 staff gages have also been installed where measurements are taken.

During the year 1932-33 a total of 5140 stream measurements were taken and in 1933-34, 4910 stream measurements were made, at stations, miscellaneous points and for percolation studies.

The storm of December 31, 1933 and January 1, 1934, produced the highest runoff since this work was started. On some streams the flow during this storm was the highest on record.

The data presented for each automatic recording station comprises a description of the station, a table showing the adjusted gage heights and mean daily flow, maximum and minimum flows, stream measurements, and hydrographs of one or more major storms.

The measurements taken at staff gages and miscellaneous points are tabulated. Percolation measurements are compiled and the loss in reach or per wetted acre is shown.

In the collection of the data in this report, the Flood Control District received the active co-operation of the United States Geological Survey Water Resources Branch, Pasadena Water Department and the Little Rock Palmdale Irrigation District.

The collection and compilation of this data was under the direct supervision of W. T. Keifer.

SEASON RUNOFF IN ACRE FEET AT RECORDER STATIONS

F.G.No.	Station	Location	Drainage Area in Square Miles	Runoff in Acre Feet 1932-33	Runoff in Acre Feet 1933-34	
81	Alhambra Wash	Garvey Avenue Bridge	12.85	1677.72	5818.16	
38	Ballona Creek	Centinelita Blvd near Culver City	112.0	15813.70	20633.81	
150	Benedict Canyon Creek	Near Oakhurst St., Palms	---	581.62	1217.65	
235	Benedict Canyon S. D.	Wesley St., 400' S. P.E. Track	6.96	Not est.	Inc.	
21	Big Santa Anita Creek	1/4 mile below F.C.Dam	11.0	Inc.	2804.31	
111	Big Tujunga Creek	Edison Road	67.0	2596.98	3087.36	
168	Big Tujunga Creek	Below F.C.Dam No. 1	---	4482.19	4292.58	
213	Big Tujunga Creek	Below Present USGS Station	106.0	7590.42	7695.19	
20	Big Tujunga Wash	Stonehurst Avenue Bridge	148.0	4503.72	3761.55	
105	Big Tujunga West Wash	Magnolia Blvd. Bridge	166.25	0.00	24.52	
106	Big Tujunga East Wash	Magnolia Blvd. Bridge	166.25	413.08	1439.13	
186	Centinelita Creek	1.2 mi. S. Jefferson Blvd. on Centinelita Blvd.	5.17	534.12	895.15	
37	Compton Creek	Rosecrans Avenue	21.7	1776.48	2557.39	
41	Coyote Creek	Below P.E. Bridge near Artesia	110.0	456.94	3894.86	
53	Dume Creek	Roosevelt Highway Bridge	8.76	81.44	2269.54	
104	Eaton Wash	Sunset Avenue Bridge	18.4	564.17	1992.84	
110	Fox Creek	Above Junction with Big Tujunga Ck.	9.35	564.78	710.26	
65	Little Dalton Creek	Mouth of Canyon	3.3	74.80	482.07	
67	Little Santa Anita Ck.	1/4 mi. below Sierra Madre Dam	2.5	92.91	82.55	
19	Little Tujunga Creek	Foothill Blvd. Bridge	21.0	513.54	819.38	
11	Little Rock Creek	2 mi. above Little Rock Dam	49.0	4175.31	3768.19	
31	Live Oak Creek	Near Mouth of Canyon	2.57	0.16	228.28	
5	Los Angeles River	Van Nuys Blvd. Bridge	157.0	4442.62	5536.40	
124	Los Angeles River	Vineland Avenue Bridge	400.0	8366.27	11558.85	
57	Los Angeles River	Figueroa St. (Dayton Ave. Bridge)	510.0	10639.46	29814.70	
34	Los Angeles River	Stewart & Gray Rd. Bridge	614.0	17021.93	38328.51	
180	Los Angeles River	State Street, Long Beach	1063.	22891.18	67858.75	
130	Malibu Creek	Grater Camp	103.0	9192.98	12371.69	
112	Mill Creek	Above Junction with Big Tujunga	21.1	294.00	308.14	
22	Monrovia Creek	200' Above Junction with Sawpit Creek	1.9	86.44	187.22	
195	Monrovia Storm Drain	Near Peck Road	4.47	Inc.	433.14	
181	Montebello Storm Drain	Outlet into Rio Hondo at Milnes Ave.	9.6	592.10	1910.43	
46	Nigger Slough	Wilmington Avenue	66.0	1780.52	2297.54	
118	Pacoima Creek	Below F. C. Dam	27.8	1790.13	2535.15	
16	Pacoima Wash	Parthenia Street Bridge	50.6	27.91	156.86	
40	Puddingstone Creek	Below F. C. Dam	32.7	37.55	Inc.	
192	Rio Hondo	Lower Azusa Road Bridge	---	3803.16	8107.16	
64	Rio Hondo	1000' Above Mission Bridge	350.	19646.57	28969.22	
45	Rio Hondo	Stewart & Gray Rd. Bridge	373.	4449.60	17025.09	
83	Rio Hondo Slough	San Gabriel Blvd. Bridge	---	11719.41	9029.41	
82	Rubio Wash	Broadway Bridge	13.0	1106.25	2581.17	
151	San Antonio Creek	Mouth of Canyon	28.0	110.68	629.82	
96	San Gabriel River E.Fork	1/2 mi. below Gattle Canyon	78.35	21261.53	23481.53	
P4	San Gabriel River E.Fork	2 1/2 mi. above Forks	91.40	Inc.	34228.66	
228	San Gabriel River W.Fork	1/2 mi. above F.C.Dam No. 2	14.45	Not est.	Inc.	
227	San Gabriel River	Devils Cn.	3 mi. above F.C. Dam No. 2	15.43	Inc.	
209	San Gabriel River W.Fork	1/2 mi. below F.C.Dam No. 2	40.82	Inc.	Inc.	
97	San Gabriel River W.Fork	3/4 mi. above North Forks	49.0	10189.62	12054.13	
99	San Gabriel River	Bear Creek	Boy Scouts' Camp	26.0	6604.42	5470.89
98	San Gabriel River N.Fork	2000' above Narrows	18.8	3596.34	3255.95	
P3	San Gabriel River W.Fork	2 mi. above Forks	102.0	23985.51	24989.32	
233	San Gabriel River	Near Roberts' Relay Sta.	201.0	Not Est.	Inc.	
28	San Gabriel River	Edison Intake	202.0	48711.40	62906.19	
230	San Gabriel-Edison Conduit	100' below Sand Box	---	Not est.	Inc.	
220	San Gabriel-Edison Conduit	North Portal #A-B Tunnel	---	Inc.	19771.53	
100	San Gabriel Spreading Ditch	Mouth of Canyon	---	7676.96	8761.54	
190	San Gabriel River	Foothill Blvd. Bridge	229.6	11396.59	14690.46	
191	San Gabriel River	El Monte Blvd. Bridge	---	998.83	Inc.	
63	San Gabriel River	Whittier Blvd. Bridge	410.0	3040.31	16951.57	
237	San Gabriel River	Telegraph Road Bridge	---	Not est.	Inc.	
42	San Gabriel River	Spring St. Bridge, Long Beach	---	809.07	12368.90	
48	San Jose Creek	Workman Mill Rd. Bridge	85.0	1066.01	7609.60	
193	Santa Anita Wash	Below Arrow Highway	19.79	Inc.	870.00	
92	Santa Clara River	Old Hwy. Bridge, 4 mi. W. of Saugus	355.0	488.10	1601.72	
194	Sawpit Wash	Above Arrow Highway	---	25.79	Inc.	
185	Sepulveda Creek	Charnock Road	25.68	2178.34	2542.27	
44	Syoamore Lower Storm Drain	Adams Square, Glendale	6.2	283.36	1778.19	
54	Topanga Creek	Highway Bridge 2 mi. above Mouth	18.0	2236.32	6420.11	
9	Verdugo Storm Drain	Glen Oaks Blvd. Bridge Glendale	22.5	294.79	Inc.	
236	Verdugo Storm Drain	Opechee Way, Glendale	---	Not est.	Inc.	
47	Walnut Creek	Covina Blvd. Bridge	99.0	530.19	6305.74	
	Rising Water	Whittier Narrows	---	30935.0	27395.51	
<u>U.S.G.S. STATIONS</u>						
U 1	Arroyo Seco Creek	3 miles above F. C. Dam	16.4	2740.	2950.	
U 9	Big Dalton Creek	Below Flood Control Dam	7.5	87.7	485.	
U14	Big Rock Creek	1 mile above Valyermo P.O.	23.25	2950.	4760.	
U 4	Big Santa Anita Creek	Above Flood Control Dam	10.5	1770.	2520.	
U 2	Eaton Creek	Mt. Wilson Toll Road	6.5	501.	929.	
U 7	Fish Creek	4000' above mouth of Canyon	6.5	1340.	2440.	
U12	Haines Canyon Creek	Near Tujunga Post Office	1.2	17.2	104.	
U 3	Little Santa Anita Ck.	Above Flood Control Dam	1.9	227.	421.	
U 6	Rogers Creek	Above Mouth of Canyon	6.4	653	1890.	
U15	San Antonio Creek	Near Claremont Post Office	16.9	656.	784.	
U10	San Dimas Creek	Below Flood Control Dam	18.4	817.	1510.	
U 8	San Gabriel River	Mouth of Canyon	214.	15900.	22080.	
U 5	Sawpit Creek	1/2 mile below F.C.Dam	5.3	197.	474.	

NOTE: Not est. - Not established yet.
Inc. - Record incomplete due to record being
destroyed or station not established yet.

ALHAMBRA WASH AT GARVEY AVENUE BRIDGE

Location On the east end, north side of Garvey Avenue bridge, 150 feet west of San Gabriel Blvd. at Wilmar, Los Angeles, California.

Discharge measurements of Alhambra Wash

at near Garvey Ave. Bridge during the year ending September 30, 1933

Drainage Area 12.85 square miles.

Installed by Los Angeles County Flood Control District, January, 1929.

Records Available Stream measurements November 14, 1928 to January, 1929. Recorder Records, January 1929 to September 30, 1934 at offices of the Los Angeles County Flood Control District, Los Angeles, California.

Gage Stevens, Type L, 8 day recorder installed in shelter house on ouregated iron stilling well attached to upstream east end of highway bridge. Vertical staff gage installed near stilling well.

Discharge Measurements High water flows are measured from bridge. Low water measurements made by wading near gage.

Channel and Control Channel - sand and gravel. Control - concrete section under bridge.

Extremes of Discharge 1929-1930 Maximum- 1865.20 c.f.s. March 14, 1930. Minimum- Dry most of the year.

1930-1931 Maximum- 1530 c.f.s. February 3, 1931. Minimum- Dry most of year.

1931-1932 Maximum- 1120.0 c.f.s. January 31, 1932. Minimum- Dry most of the year.

1932-1933 Maximum- 1853.0 c.f.s. January 19, 1933. Minimum- Dry most of the year.

1933-1934 Maximum- 4886.0 c.f.s. January 1, 1934. Minimum- Dry most of the year.

Diversions None above gage.

Regulation None

Accuracy Good.

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

Table with columns: No., Date, Made by, Width, Area, Mean velocity, Gage height, Discharge, Rating, Method, Mean No., G. H., Time, Meter No. Includes data for dates 1/12/1933, 1/16/1933, 1/19/1933, 1/23/1933, 1/29/1933.

Discharge measurements of Alhambra Wash at near Garvey Avenue Bridge during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width, Area, Mean velocity, Gage height, Discharge, Rating, Method, Mean No., G. H., Time, Meter No. Includes data for dates 1/12/1934, 1/23/1934, 2/2/1934, 2/23/1934.

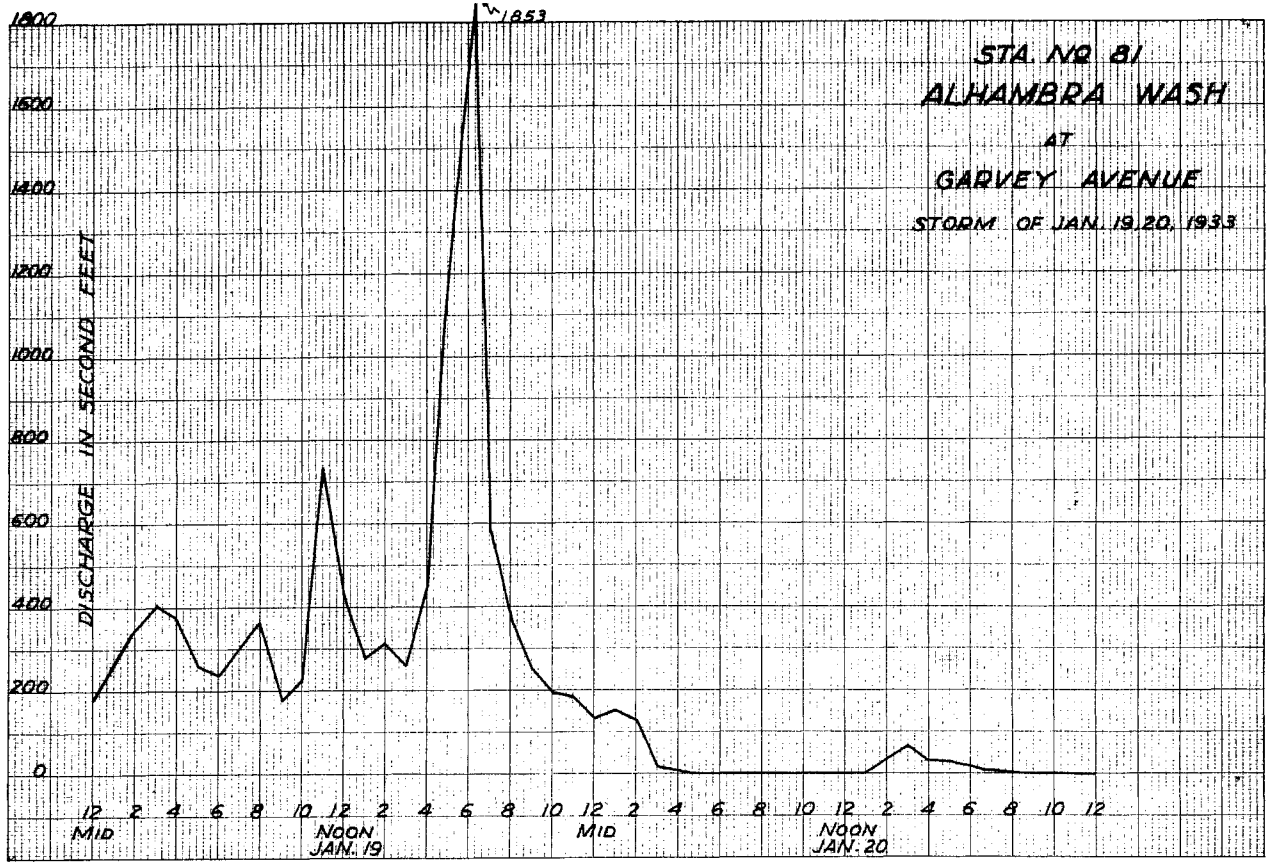
F.C. Dist. Form 105-1000-9-31

Daily Gage Height, in Feet, and Discharge, in Second-Feet, of ALHAMBRA WASH

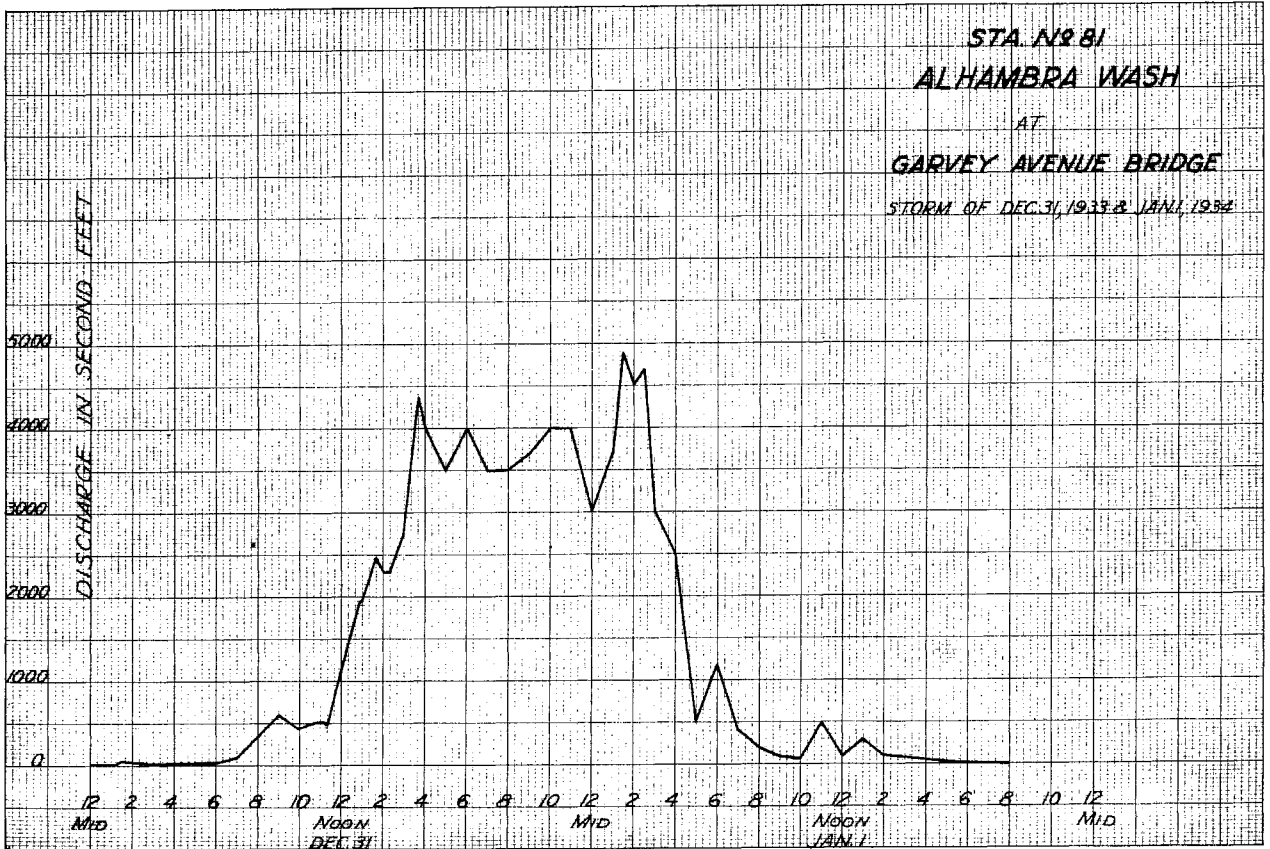
At near Garvey Ave. Bridge for the Year Ending September 30, 1933

Main data table with columns for months (OCTOBER to SEPTEMBER) and days (1-31). Rows include Gage height, Discharge, and various summary statistics like TOTAL, Mean Daily Discharge, etc. Includes handwritten notes and signatures.

KEUFFEL & ESSER CO. N. Y. NO. 38111
17 21/2" x 31 1/2"



KEUFFEL & ESSER CO. N. Y. NO. 38111
17 21 1/2" x 31 1/2"



LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 38

BALLONA CREEK AT CANTINELA BLVD. NEAR CULVER CITY

Location On Highway Bridge over Ballona Creek at Cantinela Boulevard about 2 1/2 miles southwest of Culver City.

Discharge measurements of Ballona Creek at Cantinela Blvd., near Culver City during the year ending September 30, 1933

Drainage Area 112 square miles.

Installed By Los Angeles County Flood Control District, February 27, 1928.

Records Available February 27, 1928 to September 30, 1934 at Los Angeles County Flood Control District, Los Angeles, California.

Gage An continuous water stage recorder variable speed, installed in wooden shelter house on corrugated iron pipe stilling well, attached to downstream side of bridge pier on southeast bank of stream.

Discharge Measurements Low flows measured by wading near gage. High flows measured from cable car 200 feet above recorder gage.

Channel Fine sand, silt and adobe.

Control No control.

Extremes of Discharge 1927-1928 Maximum- 1100 c.f.s. May 8, 1928. Minimum- Dry at various times during year. 1928-1929 Maximum- 4990 c.f.s. March 10, 1929. Minimum- Dry at various times during year. 1929-1930 Maximum- 4463 c.f.s. January 11, 1930. Minimum- Dry at various times during year. 1930-1931 Maximum- 6280 c.f.s. April 26, 1931. Minimum- Dry at various times during year. 1931-1932 Maximum- 6310 c.f.s. December 28, 1931. Minimum- Dry at various times during year. 1932-1933 Maximum- 7002 c.f.s. January 19, 1933. Minimum- Dry at various times during year. 1933-1934 Maximum- 11,310 c.f.s. January 1, 1934. Minimum- Dry various times during year.

Diversions Gravel plant at Duquesne Street, and ranches divert small amounts of water.

Regulation None.

Accuracy Fair.

Operation Located and constructed by Los Angeles County Flood Control District and operated with the assistance of the Los Angeles City Storm Drain Department and the U.S.G.B. Water Resources Branch.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 38

Discharge measurements of Ballona Creek

at Cantinela Blvd., near Culver City during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec.-ft., Rating, Method, Mean gage No., G. H. above Total, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 38

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 38

Discharge measurements of Ballona Creek

Discharge measurements of Ballona Creek

at Centinela Blvd. near Culver City during the year ending September 30, 1934

at Centinela Blvd. near Culver City during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width, Area of Section, Mean velocity, Gage height, Discharge, Rating, Mean No., Time, Mean No. Contains 24 rows of data.

Table with columns: No., Date, Made by, Width, Area of Section, Mean velocity, Gage height, Discharge, Rating, Mean No., Time, Mean No. Contains 24 rows of data.

F.C. Dist. Form 105-1000-9-31

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of BALLONA CREEK

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. 38

At Centinela Blvd. Bridge for the Year Ending September 30, 1933.

Drainage Area 112 Square Miles.

W. S. Hardgrove, Observer.

Gage Road Continuous

Used rating table dated

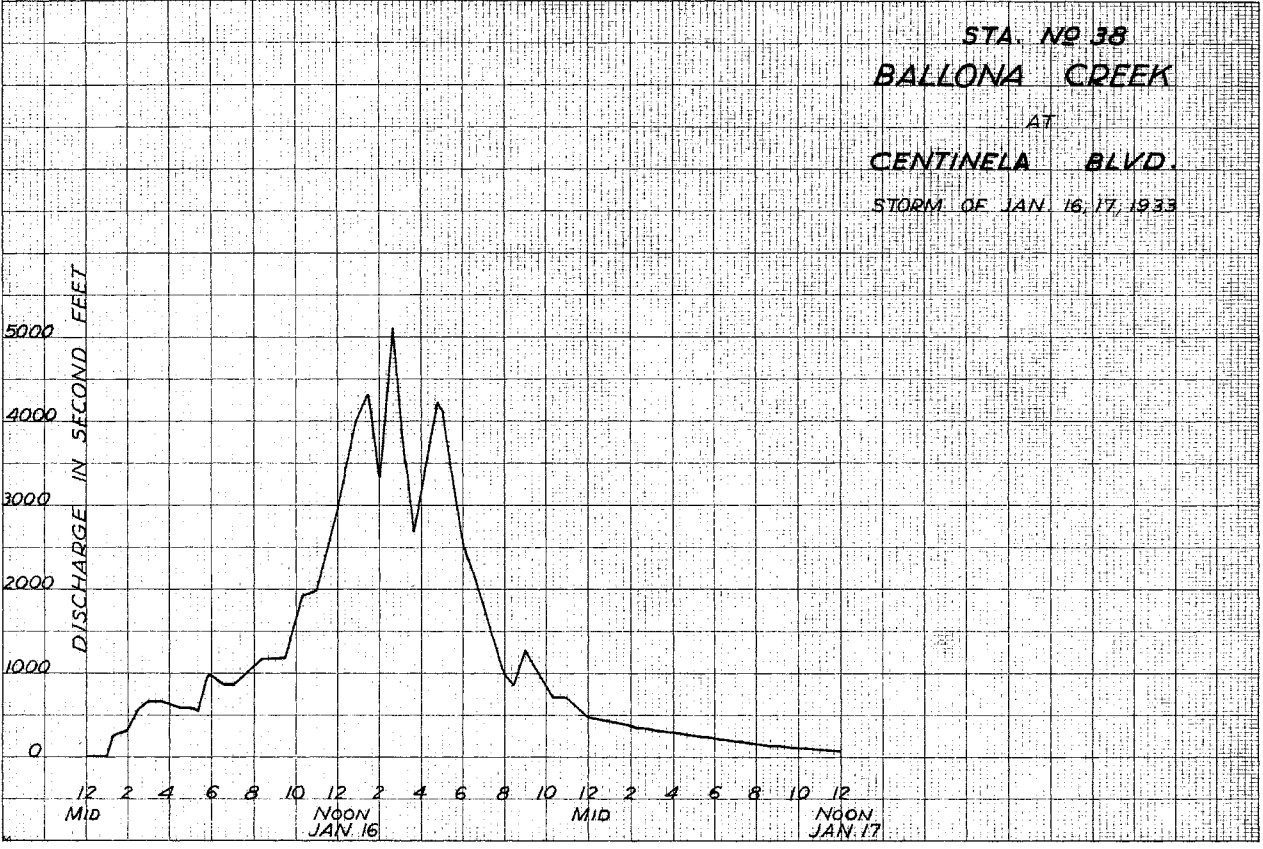
Large table with columns for months (OCTOBER to SEPTEMBER) and days (1-31). Includes sub-columns for Gage height and Discharge. Includes a summary section at the bottom with 'TOTAL' and 'Maximum stage'.

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of **BALLONA CREEK**
 At **CENTINELA BLVD. NEAR CULVER CITY** for the Year Ending September 30, 1934

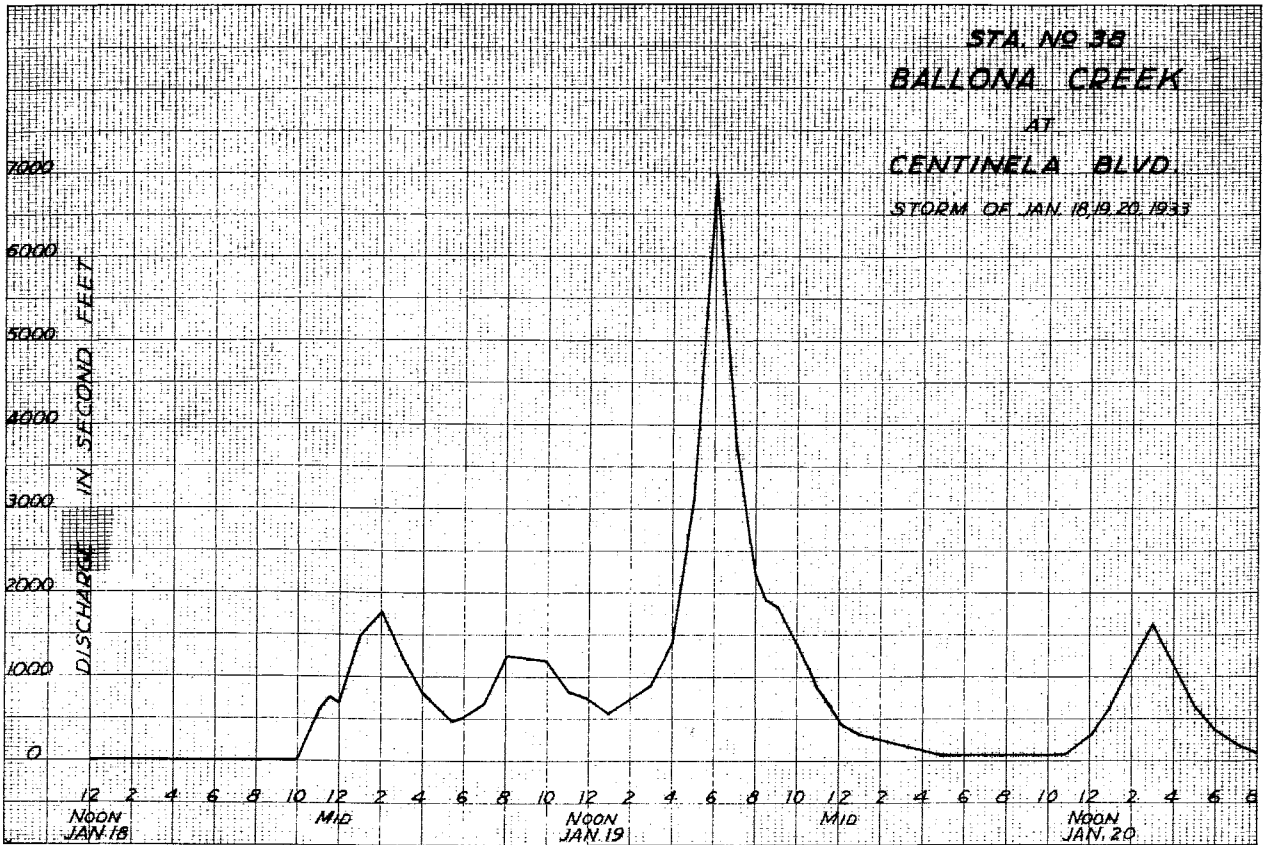
LOS ANGELES COUNTY
 FLOOD CONTROL DISTRICT
 HYDROGRAPHIC DEPARTMENT

Drainage Area		Square Miles		Gage Road		Observer		Used rating table dated																	
112.0		Hardgrove - Prickett		Continuous		MAY 28, 1934																			
DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		DAY
	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	
1			4.49	4.55	4.31	0.45	H	3064.87	4.29	0.43	4.49	4.55	1												1
2			4.39	0.49	4.20	0.38	H	100.76	4.33	0.46	4.50	5.00	2	4.39	0.49	4.70	15.00								2
3			4.39	0.49	4.25	0.41	4.83	23.10	4.38	0.49	4.44	2.30	3	4.46	3.20	4.59	9.50								3
4			4.29	0.43	4.25	0.41	4.71	15.60	4.37	0.48	4.43	1.85	4	4.40	0.50	4.50	5.00								4
5			4.12	0.33	4.36	0.47	4.82	22.40	4.46	3.20	4.50	5.00	5			4.45	2.75	H	105.48						5
6					3.78	0.14	4.34	0.46	4.97	33.60	4.50	5.00	4.47	3.65	6			4.43	1.85	H	3.95				6
7					3.97	0.24	4.35	0.47	4.67	13.50	4.48	4.10	4.43	1.85	7			4.43	1.85						7
8					4.14	0.34	4.46	3.20	4.66	13.00	4.54	7.00	4.47	3.65	8			4.37	0.48						8
9					3.82	0.16	4.46	3.20	4.67	13.50	4.56	8.00	4.44	2.30	9										9
10							4.42	1.40	4.64	12.00	4.60	10.00	4.41	0.95	10										10
11							4.37	0.48	4.66	13.00	4.62	11.00	4.45	2.75	11										11
12							H	211.01	5.11	46.00	4.60	10.00			12										12
13							H	771.44	5.13	48.00	4.74	17.40			13										13
14							H	125.81	5.11	46.00	4.72	16.20			14										14
15							H	30.74	5.08	43.20	H	73.88			15										15
16							4.69	14.50	5.04	39.60	5.05	40.50			16										16
17							4.56	8.00	4.69	14.50	4.86	25.20			17										17
18							4.52	6.00	4.44	2.30	4.75	18.00			18										18
19							4.52	6.00	4.38	0.49	H	54.83			19										19
20							4.49	4.55	4.39	0.49	H	39.50			20										20
21							4.04	0.28	4.46	3.20	4.36	0.47	4.51	5.50	21			4.57	8.50						21
22							3.86	0.18	4.10	0.32	4.43	1.85	4.44	2.30	22			4.55	7.50						22
23							4.35	0.47	4.35	0.47	4.41	0.95	H	230.31	23			4.42	1.40						23
24							4.35	0.47	4.29	0.43	4.39	0.49	H	282.84	24										24
25							4.37	0.48	4.33	0.45	4.33	0.45	4.22	0.39	25										25
26							4.34	0.46	4.33	0.45	4.39	0.49	4.32	0.45	26										26
27							4.39	0.49	4.44	2.30	4.32	0.45	4.42	1.40	27										27
28							4.49	4.55	4.51	5.50	4.35	0.47	4.45	2.75	28										28
29							4.48	4.10	4.58	9.00	4.35	0.47	-	-	29										29
30							4.32	0.45	H	90.26	4.29	0.43	-	-	30										30
31							H	100.88	-	-	H	4314.30	4.28	0.43	31										31
TOTAL		103.31	18.96	5617.59	3573.31	887.31	33.85	21.59	37.38	109.43													10402.73		
Mean Daily Discharge in Second-foot		3.33	0.63	181.29	115.27	31.69	1.09	0.72	1.21	3.65													28.50		
Second-foot per square mile		0.030	0.006	1.618	1.029	0.283	0.010	0.006	0.011	0.033													0.254		
Run-off, depth in inches		0.034	0.006	1.861	1.184	0.294	0.011	0.007	0.012	0.036													3.454		
Run-off in acre-foot		204.92	37.61	11142.49	7087.66	1759.98	67.14	42.82	74.14	217.05													20633.81		
Maximum Mean Daily Discharge in Second-foot		100.88	4.55	4314.30	3064.87	282.84	5.00	8.50	15.00	105.48													4314.30		
Minimum Mean Daily Discharge in Second-foot		0	0	0	0.38	0.43	0.39	0	0	0													0		

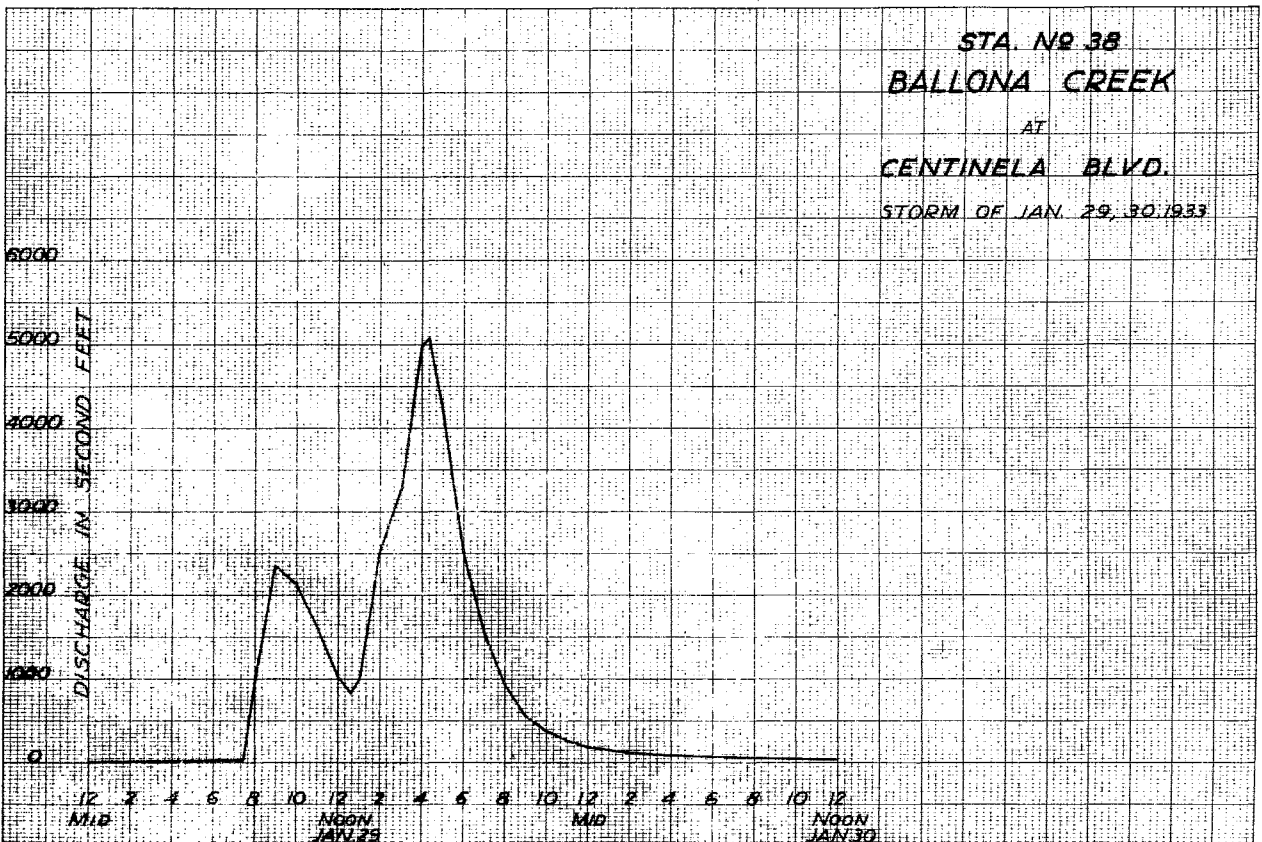
W. E. O. J. O. D. R.
 Checked
 Date
 Period
 V. E. A. S.



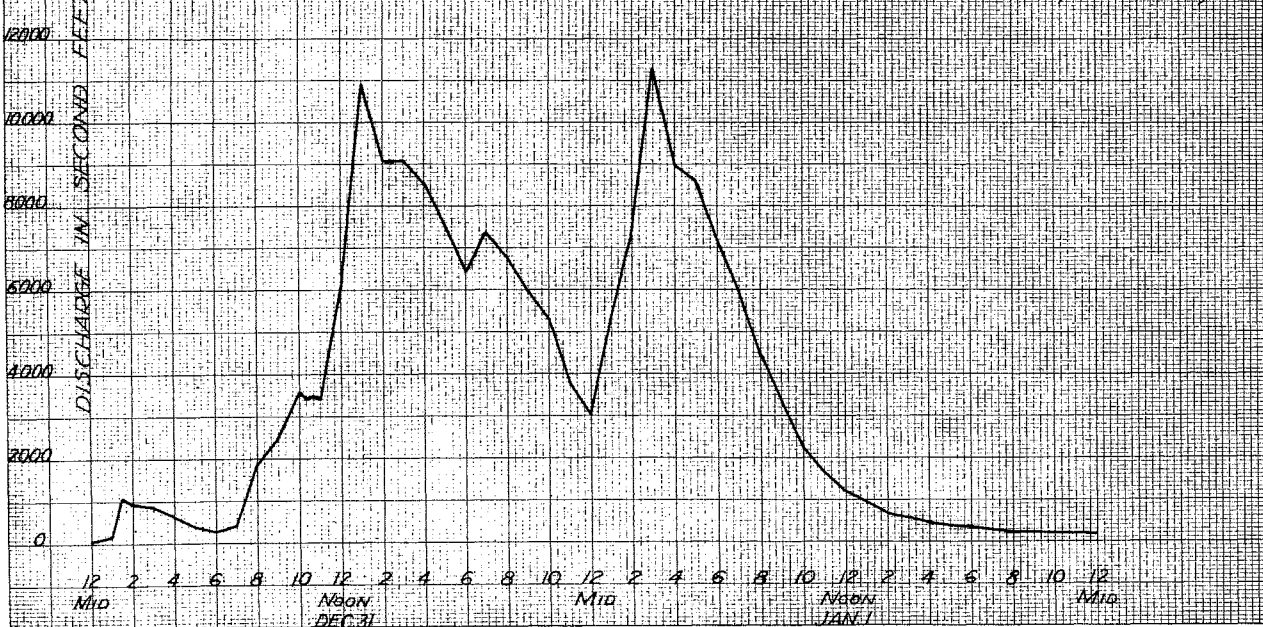
SCOTT & BIRDSONG CO. P. O. BOX 111
ST. LOUIS, MO.



SCOTT & BIRDSONG CO. P. O. BOX 111
ST. LOUIS, MO.



STA. NR 38
BALLONA CREEK
AT CENTINELA BLVD.
NEAR CULVER CITY
STORM OF DEC. 31, 1933 & JAN. 1, 1934



F-235 R
BENEDICT CANYON STORM DRAIN, WESLEY STREET, CULVER CITY.

Location
 In a concrete box at side of storm drain on Wesley Street, Culver City, 400 feet south of Pacific Electric Air Line.

Drainage Area
 6.96 square miles.

Installed by
 The Los Angeles County Flood Control District January 12, 1934.

Records Available
 January 12, 1934, to September 30, 1934. Records from May 21, 1932 to January 12, 1934 taken at Oakhurst Street.

Gage
 Stevens Type L 8-day automatic water stage recorder installed in concrete stilling well. Staff gage in stilling well.

Discharge Measurements
 Low flow measurements made in conduit by wading. High flows computed from gage heights.

Channel and Control
 90" circular concrete pipe, no control.

Extremes of Discharge
 1933-1934
 Maximum - Not determined.
 Minimum - Dry most of year.

Diversions
 None.

Regulations
 None.

Accuracy
 Poor.

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

F-150 R
BENEDICT CANYON CREEK AT OAKHURST STREET

Location
 On the west bank of Benedict Canyon, 80 feet north of Oakhurst Street, Palms, Los Angeles County, California.

Drainage Area
 Not determined.

Installed by
 The Los Angeles County Flood Control District May 21, 1932.

Records Available
 Recorder records from May 21, 1932 to January 12, 1934 available at the offices of the Los Angeles County Flood Control District, Los Angeles, California.

Gage
 Stevens 8 day water stage recorder installed in wood shelter house on top of corrugated iron pipe stilling well which is attached to concrete wall. Staff gage attached to stilling well.

Discharge Measurements
 High flows measured from bridge at station.
 Low flows measured by wading near station.

Channel and Control
 Channel- Bottom sand and gravel. On one side at the recorder there is a concrete wall 50 feet long. Rest of the bank adobe. No control.

Extremes of Discharge
 1932-1933
 Maximum- 316.8 c.f.s. January 29, 1933.
 Minimum- Dry most of the year.
 1933-1934
 Maximum- 813.0 c.f.s. January 1, 1934
 Minimum- Dry most of year.

Diversion
 None

Regulation
 None

Accuracy
 Poor due to culverts below and above stations being clogged by drift.

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

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 150

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 150

Discharge measurements of Benedict Canyon Creek

Discharge measurements of Benedict Canyon Creek

near Oakhurst St., Palms during the year ending September 30, 1933

near Oakhurst St., Palms during the year ending September 30, 1933

Table with columns: 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, Mean No., G. H. change Total, Time Hours, Meter No.

Table with columns: 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, Mean No., G. H. change Total, Time Hours, Meter No.

Discharge measurements of Benedict Canyon Creek at near Oakhurst Street, Palms during the year ending September 30, 1933

Table with columns: 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, Mean No., G. H. change Total, Time Hours, Meter No.

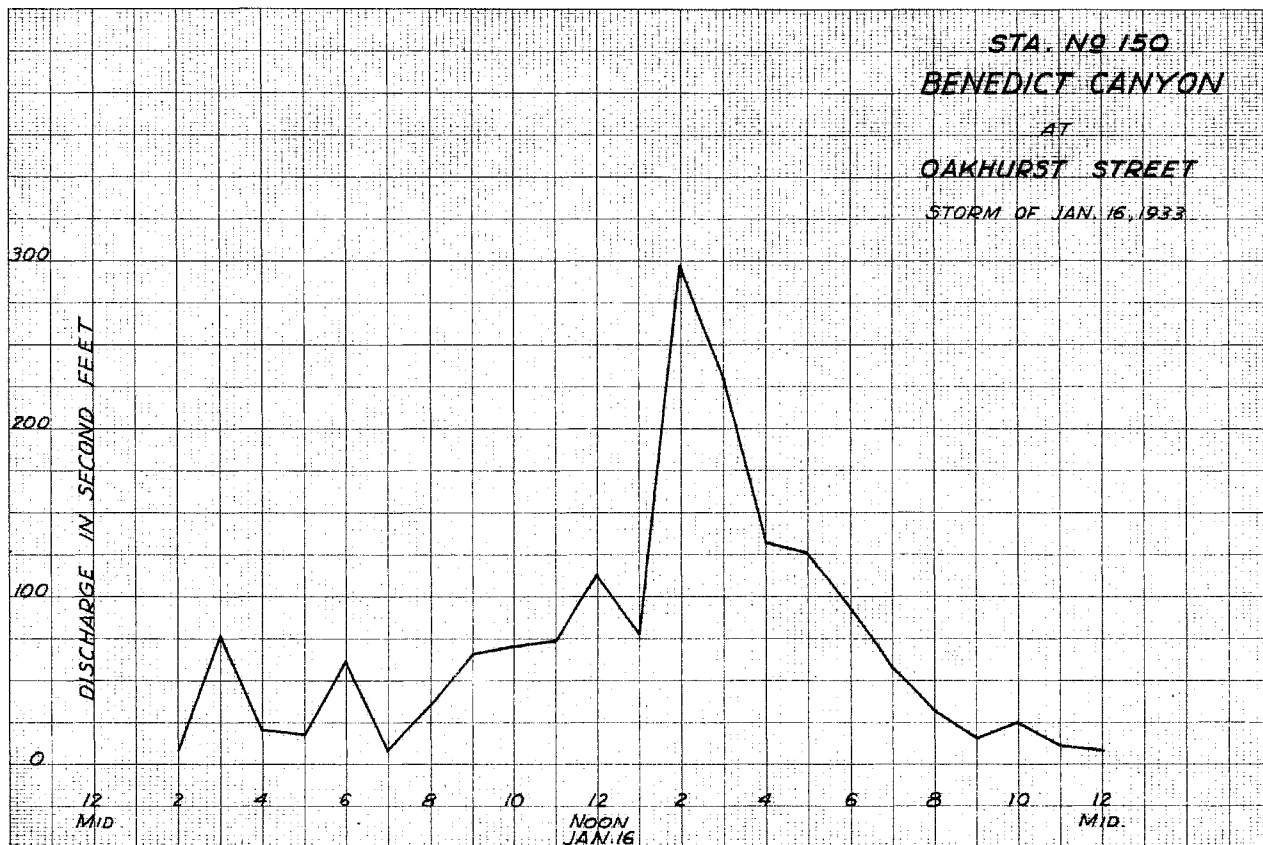
Daily Gage Height, in Feet, and Discharge, in Second-Feet, of BENELECT CANYON CREEK At near Oakhurst Street for the Year Ending September 30, 1933.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

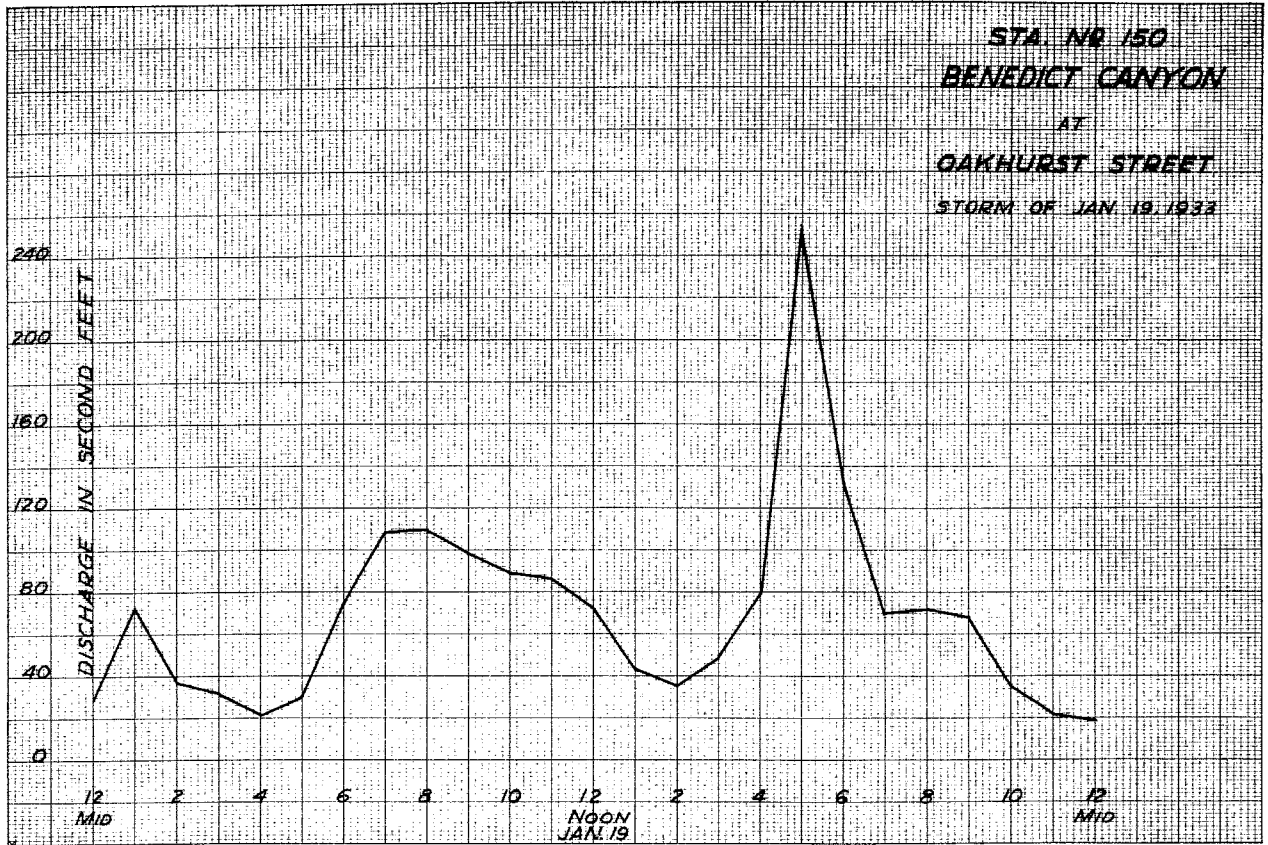
File No. 150

Large table with columns for months (OCTOBER to SEPTEMBER) and days (1-31), including sub-columns for Gage height and Discharge. Includes summary statistics at the bottom.

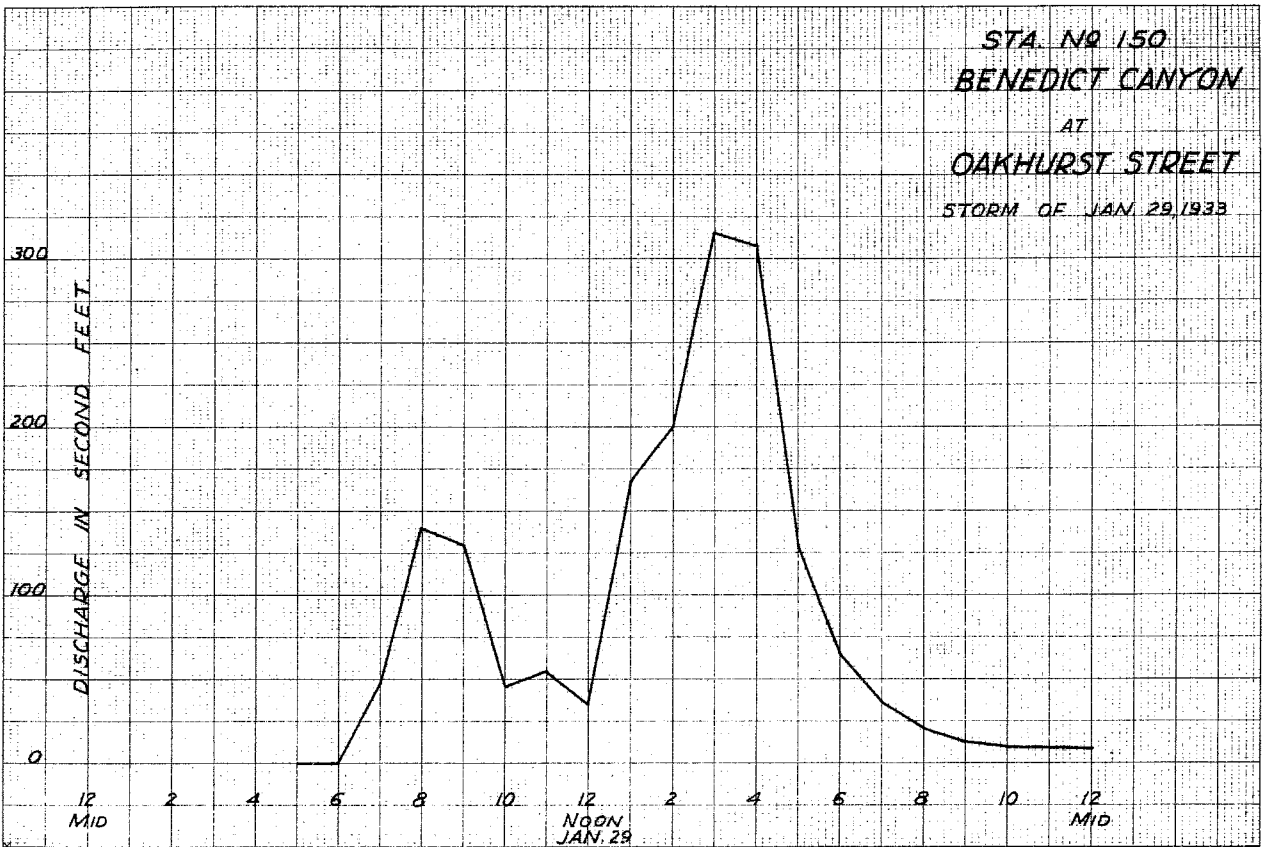
Drainage Area		Square Miles		[Hardgrove-Prickett]		Observer		Gage Road		CONTINUOUS		Used rating table dated														
DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		DAY	
	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge		
1							H	217.24																	1	
2																									2	
3																									3	
4																									4	
5																									5	
6																									6	
7																									7	
8																									8	
9																									9	
10																									10	
11																									11	
12							H	15.20																	12	
13							H	57.47																	13	
14		LEV																							14	
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25																									25	
26																									26	
27																									27	
28																									28	
29																									29	
30																									30	
31							H	298.19																	31	
TOTAL						380.85		217.24		15.79																
Mean Daily Discharge in Second-foot						12.29		7.01		.56																613.89
Second-foot per square mile						3.80		2.17		.15																1.68
Run-off, depth in inches		DRY		DRY								DRY		DRY		DRY		DRY		DRY		DRY		DRY		
Run-off in acre-foot						755.45		430.90		31.32																1217.65
Minimum Mean Daily Discharge in Second-foot						298.19		217.24		11.25																298.19
Minimum Mean Daily Discharge in Second-foot						0		0		0																0



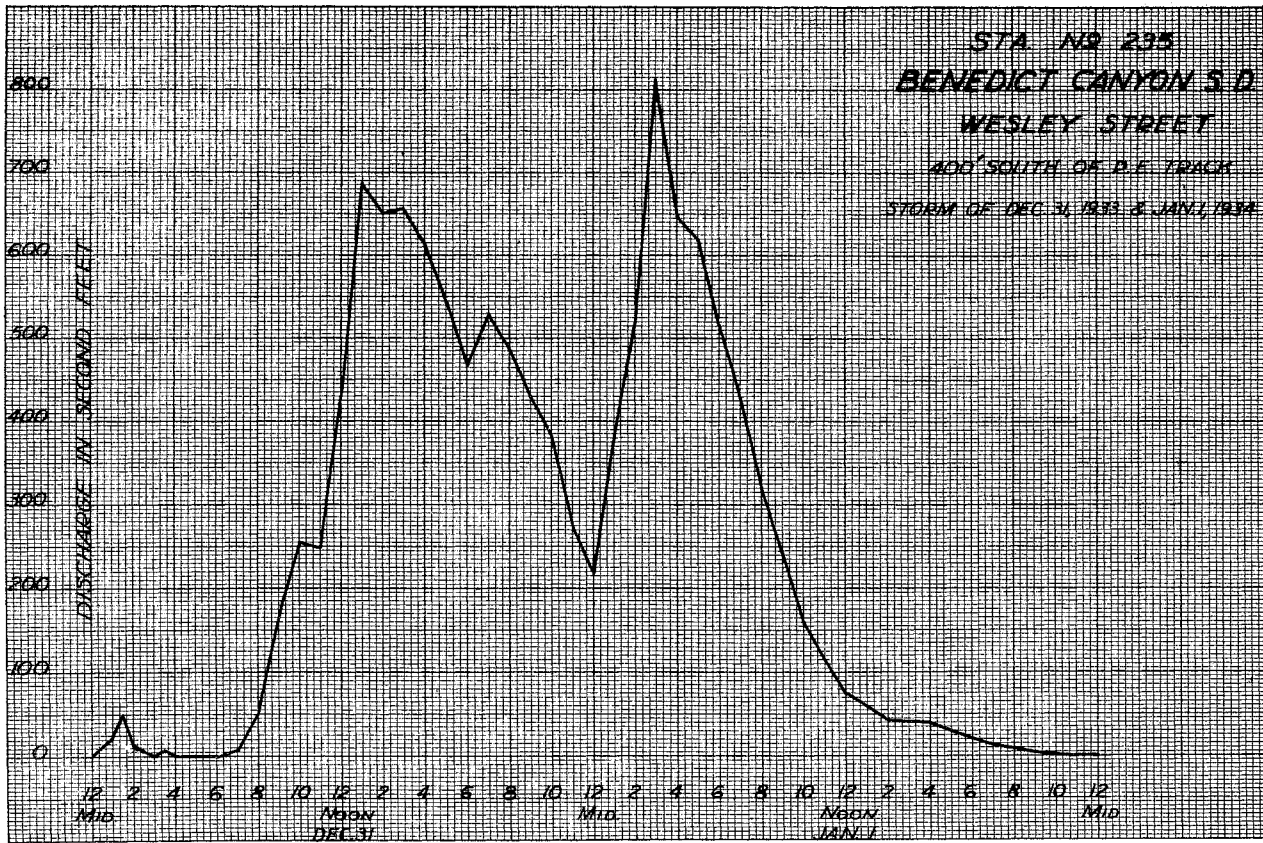
BEVEL & LARSEN CO. N.Y. NO. 348213
117 STAMFORD



BEVEL & LARSEN CO. N.Y. NO. 348213
117 STAMFORD



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STA NR 235
 BENEDICT CANYON S.D.
 WESLEY STREET
 400' SOUTH OF D.F. TRACK
 STORM OF DEC. 31, 1933 & JAN. 1, 1934

F-21 R

BIG SANTA ANITA CREEK 1/4 MILE BELOW FLOOD CONTROL DAM

Location
 In Big Santa Anita Canyon about 1/4 mile below Los Angeles County Flood Control Dam. About 4 miles north of Arcadia, Los Angeles County, California.

Drainage Area
 11 square miles.

Installed by
 Los Angeles County Flood Control District, August, 1927.

Records Available.
 August 19, 1927 to September 30, 1934 at offices of Los Angeles County Flood Control District, Los Angeles, California.

Gage
 A continuous water stage recorder located in rubble concrete house on east bank of stream between gaging bridge and weir. Staff gage on stilling well.

Discharge Measurements
 Low water flows made by wading near gage.
 High water measurements made from gaging bridge 15 feet above gage.

Channel and Control
 Channel- Sand, rock and gravel.
 Control- 35' rubble-concrete control with 24" Cippoletti weir 12' deep, located 18' below recorder house.

Extremes of Discharge

1927-1928
 Maximum- 16 c.f.s. February 5, 1928.
 Minimum- .02 c.f.s. January 26-30, 1928.

1928-1929
 Maximum- 10. c.f.s. September 11, 1928.
 Minimum- .19 c.f.s. January 26, 1929.

1929-1930
 Maximum- 3.62 c.f.s. April 12, 1930.
 Minimum- .20 c.f.s. at various times during year.

1930-1931
 Maximum- 8.90 c.f.s. February 20, 1931.
 Minimum- .16 c.f.s. April 5, 1931.

1931-1932
 Maximum- 111.80 c.f.s. December 28, 1931.
 Minimum- 0.34 c.f.s. February 2, 1932.

1932-1933
 Maximum- Not determined.
 Minimum- Not determined.

1933-1934
 Maximum- 431.00 c.f.s. January 1, 1934.
 Minimum- 0.10 c.f.s. (Est.) September 10 & 11, 1934.

F-21 R

Diversion
 None above gage. Irrigation canal diverts 300' below gage.

Regulation
 Flow regulated by discharge through Los Angeles County Flood Control Dam.

Accuracy
 Good.

Operation
 Located and constructed by the Los Angeles County Flood Control District and operated by the Los Angeles County Flood Control District in conjunction with the U.S.G.S. Water Resources Branch.

F. C. Dist. Form 194A

**LOS ANGELES COUNTY
 FLOOD CONTROL DISTRICT
 HYDROGRAPHIC DEPARTMENT**

Station No. 21

Discharge measurements of BIG SANTA ANITA CREEK

1/4 mi. below F. C. Dam, during the year ending September 30, 1933

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	Mean gage No.	C. M. Change Total	Time Hours	Meter No.
1	10/7	Lindsay	4.8	2.72	1.00	.84	2.72	.6	5	0	1/6	28283	
2	10/14	"	4.8	2.77	1.02	.84	2.83	.6	5	0	1/12	"	
3	10/21	"	4.8	1.60	.37	.54	.52	.6	5	0	1/12	"	
4	10/27	"	4.8	1.50	.30	.53	.45	.6	5	0	1/12	"	
5	11/4	"	4.8	1.54	.34	.54	.52	.6	5	0	1/12	"	
6	11/9	"	6.1	4.26	1.17	.99	5.00	.6	6	0	1/6	"	
7	11/18	"	5.5	1.59	.31	.53	.49	.6	6	0	1/12	"	
8	11/25	"	5.4	1.43	.31	.52	.44	.6	6	0	1/12	"	
9	12/2	" & Dockweiler	5.4	1.51	.34	.54	.51	.6	6	0	1/10	"	
10	12/9	"	5.7	1.98	.50	.62	.99	.6	6	-.02	1/6	"	
11	12/15	"	5.8	2.12	.55	.64	1.16	.6	6	0	1/6	"	
12	12/22	"	5.5	1.51	.27	.53	.41	.6	6	0	1/10	"	
13	12/30	"	5.5	1.77	.37	.58	.66	.6	6	0	1/6	"	

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 21

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 21

Discharge measurements of Big Santa Anita Creek

Discharge measurements of Big Santa Anita Creek

at 1/4 mile below F. C. Dam during the year ending September 30, 1933

at 1/4 Mi. Below Flood Control Dam during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gauge height Feet, Discharge Sec. Ft., Rating Percent, Method, Meas. No., G. H. Change Total, Time Hours, Meas. No. (1933)

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 21

Discharge measurements of Big Santa Anita Creek

at 1/4 Mi. Below Flood Control Dam during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gauge height Feet, Discharge Sec. Ft., Rating Percent, Method, Meas. No., G. H. Change Total, Time Hours, Meas. No. (1934)

Below Flood Control Dam

for the Year Ending September 30, 1933.

Drainage Area 11 Square Miles. R. Lindsay (Observer.) Gage Read Continuous Used rating table dated March 23, 1934

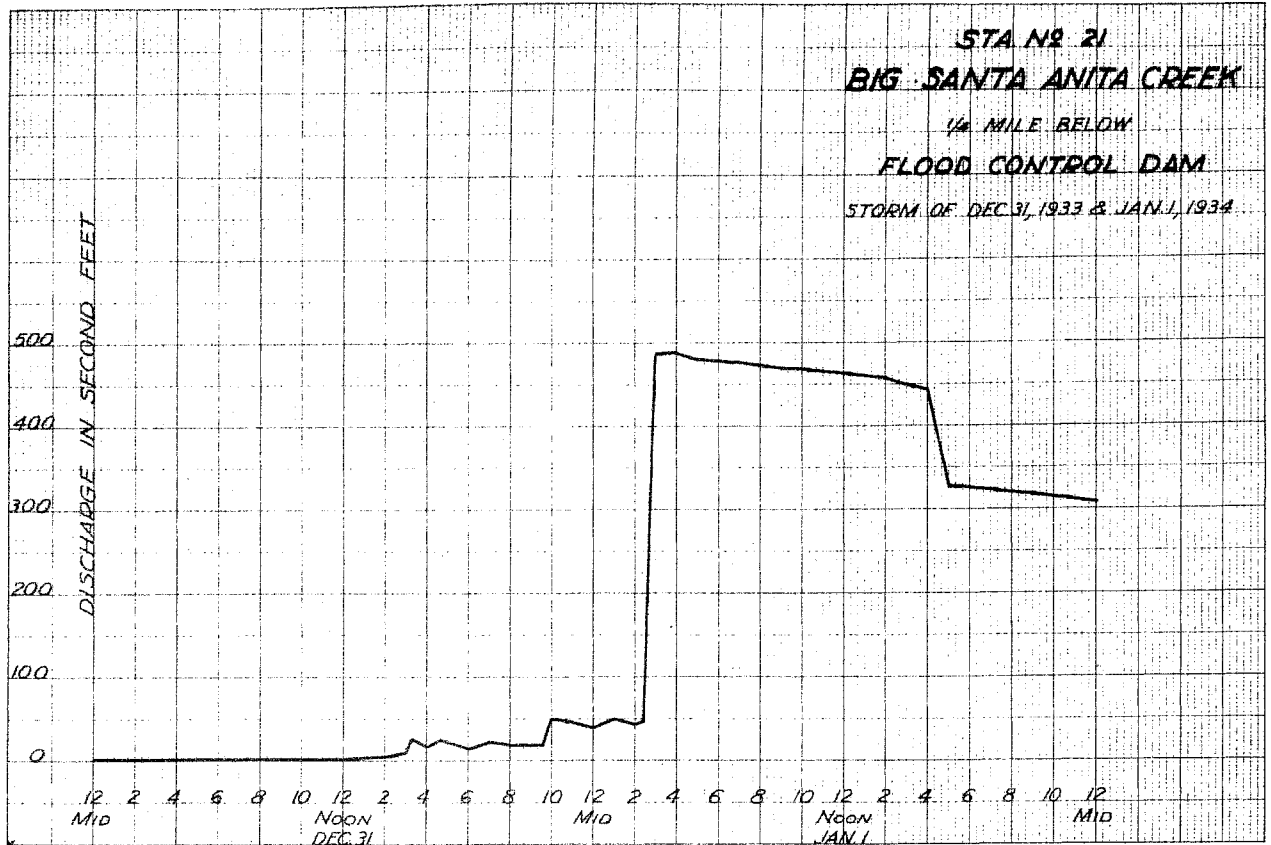
Table with columns for months (October to September), days, gage height, discharge, and various summary statistics. Includes notes on recording methods and channel conditions.

At 1/4 MI. BELOW F. C. DAM

for the Year Ending September 30, 1934

Drainage Area 11 Square Miles. R. E. Lindsay (Observer.) Gage Read Continuous Used rating table dated 1933-34

Table with columns for months (October to September), days, gage height, discharge, and various summary statistics. Includes notes on recording methods and channel conditions.



F-111 R

BIG TUJUNGA CREEK AT EDISON ROAD CROSSING

Location
On Big Tujunga Creek about 25' above where the Edison Road crosses the creek and 4 miles above Big Tujunga Dam No. 1.

Drainage Area
67 square miles.

Installed by
Los Angeles County Flood Control District, November 11, 1930.

Records Available
November 11, 1930 to September 30, 1934 at offices of the Los Angeles County Flood Control District, Los Angeles, California.

Gage
A continuous water stage recorder installed in galvanized iron shelter house on north side of stream. Stilling well is of corrugated iron pipe.

Discharge Measurements
Low water measurements made by wading near station.
High water measurements made from cable car at station.

Channel and Control
Channel is gravel and boulders.
No control.

Extremes of Discharge
1930-1931
Maximum- 216.2 c.f.s. on February 5, 1931.
Minimum- Dry at various times during year.
1931-1932
Maximum- 391.0 c.f.s. on February 8, 1932.
Minimum- Dry at various times during year.
1932-1933
Maximum- 324.0 c.f.s. January 19, 1933.
Minimum- Dry from July 29 to Sept. 31, 1933.
1933-1934
Maximum- 1520 c.f.s. on January 1, 1934.
Minimum- Dry various times of year.

Diversions
None

Regulation
None.

Accuracy
Fair.

Operation
Located and constructed by the Los Angeles County Flood Control District and operated in conjunction with the U.S.G.S. Water Resources Branch.

F. C. Dist. Form 34A

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. 111

Discharge measurements of **Big Tujunga Creek**
at **Edison Road** during the year ending September 30, 1933

No.	Date	Made by	Width Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec. ft.	Rating Form	Method	Mean gage No.	G. H. Control	Time Hours	Meter No.
1	10/13	Irwin				5.54	.027		Feir				
2	10/27	Irwin				5.56	.027		Feir				
3	11/3	Irwin-Case	3.0	.58	.45	5.70	.26	.6	6	0	1/6	FC 2	
4	11/17	Irwin	3.0	1.02	.33	5.86	.34	.6	6	0	1/4	"	
5	12/1	"	3.0	.62	.24	5.72	.52	.6	6	0	5/12	"	
6	12/3	"	3.5	.83	.22	5.74	.68	.6	7	0	1/4	"	
7	12/12	"	3.5	1.15	1.0	5.94	1.15	.6	7	0	3/12	"	
8	12/12	"	4.0	1.32	.90	5.90	1.20	.6	8	0	1/4	"	
9	12/13	"	4.0	1.07	.82	5.24	.88	.6	8	0	1/6	"	
10	12/13	"	4.0	1.13	.82	5.26	.93	.6	8	0	1/4	"	
11	12/22	Delaney-Irwin	4.0	1.22	.83	5.26	1.05	.6	8	0	1/3	"	
12	12/25	Delaney	4.0	1.22	.77	5.28	.94	.6	7	0	1/6	"	
13	1/5	Delaney	4.0	1.23	.74	5.28	.91	.6	7	0	1/6	FC 2	
14	1/6	"	4.0	1.24	.74	5.28	.92	.6	7	0	1/6	"	
15	1/9	"	4.0	1.25	.79	5.27	.99	.6	7	0	1/6	"	
16	1/12	"	4.0	1.21	.73	5.26	.88	.6	7	0	1/6	"	
17	1/17	"	10.0	9.43	1.00	5.90	9.41	.6	7	0	1/6	FC 11	
18	1/17	Irwin	10.0	9.17	.80	5.28	7.35	.6	10	0	1/4	FC 30	
19	1/18	Delaney	9.8	7.52	.65	5.76	4.94	.6	7	0	1/6	FC 11	
20	1/19	"	26.5	27.97	2.60	7.12	72.24	.6	10	0	1/3	"	
21	1/19	"	26.5	28.7	2.61	7.18	74.95	.6	10	0	1/3	"	
22	1/19	"	32.5	47.1	2.52	7.43	118.7	.6	10	+05	1/2	"	
23	1/19	"	36.	55.5	2.83	7.50	157.3	.6	11	0	1/3	"	

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 111

Discharge measurements of Big Tujunga Creek at near Edison Road during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Gage height, Discharge, Rating, Method, Max. rise, G. Ht. change, Time, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 111

Discharge measurements of Big Tujunga Creek at near Edison Road during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Gage height, Discharge, Rating, Method, Max. rise, G. Ht. change, Time, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 111

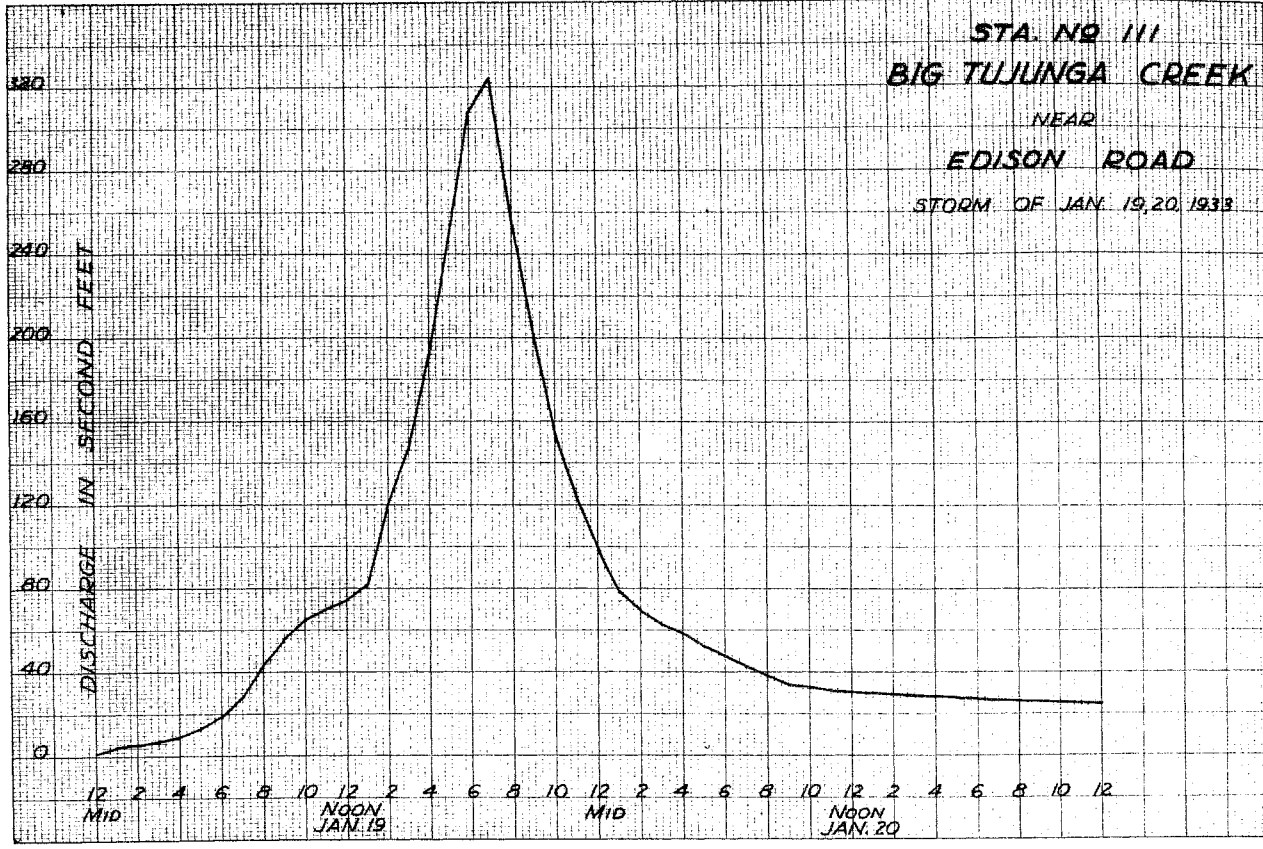
Discharge measurements of Big Tujunga Creek at near Edison Road during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Gage height, Discharge, Rating, Method, Max. rise, G. Ht. change, Time, Meter No.

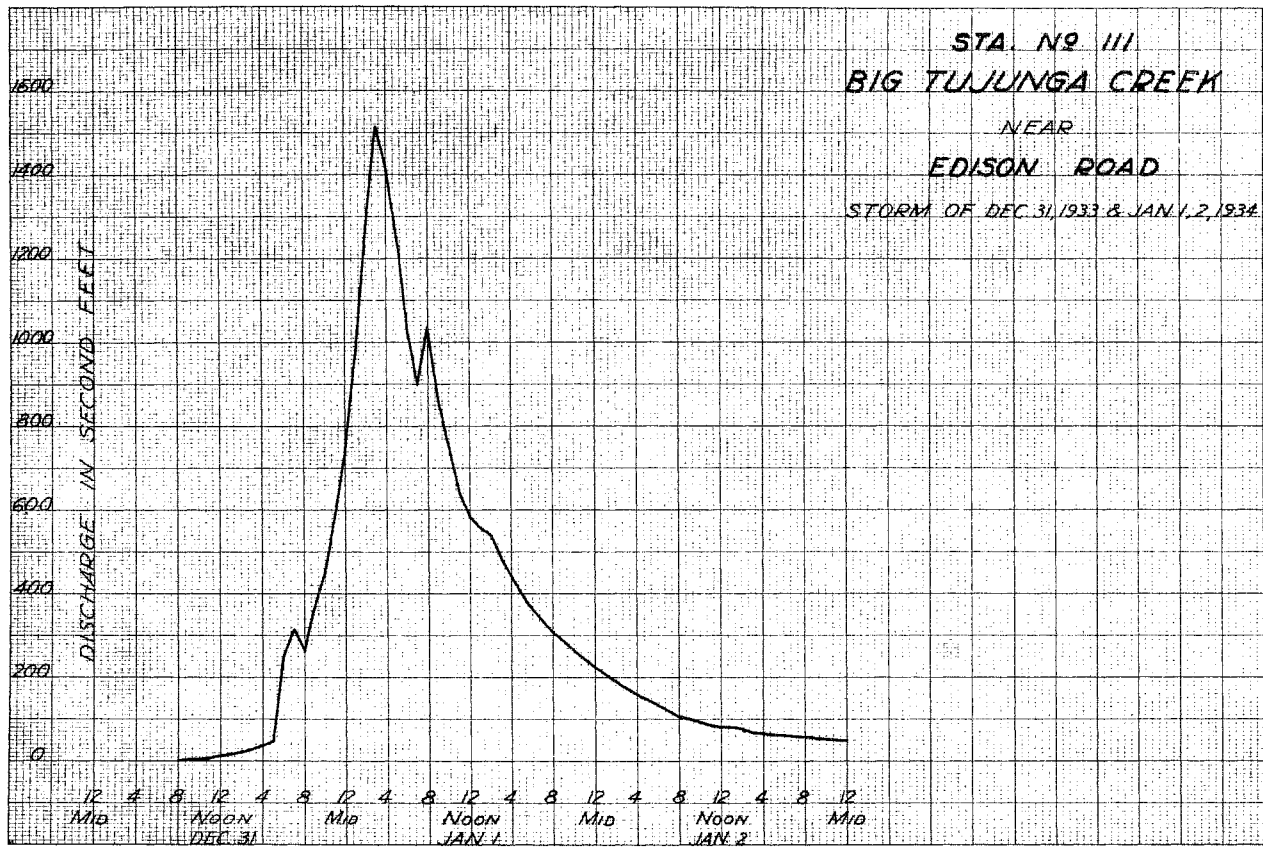
Table with columns for months (October to September) and days (1-31), including gage height and discharge data. Includes a 'Totals' section at the bottom and a note on the left regarding gage height adjustments.

Table with columns for months (October to September) and days (1-31), including gage height and discharge data for the year 1934. Includes a 'Totals' section at the bottom and a note on the left regarding gage height adjustments.

HOWELL & CHASE CO. N.Y. NO. 37811
17/21 No. 100



HOWELL & CHASE CO. N.Y. NO. 37811
17/21 No. 100



BIG TUJUNGA CREEK BELOW BIG TUJUNGA DAM NO. 1

Location
On the north side of Big Tujunga Creek 1200 feet below Big Tujunga Dam No. 1 about 12 miles northeast of Sunland, Los Angeles, California.

Drainage Area
Not determined.

Installed by
Los Angeles County Flood Control District, December 8, 1931

Records Available
Weekly measurements from December 8, 1931 to November 7, 1932, and recorder records from November 8, 1932 to September 30, 1934 at the office of the Los Angeles County Flood Control District, Los Angeles, California.

Gage
Rational 5 day automatic water stage recorder installed in galvanized iron shelter house on top of a corrugated iron pipe stiling well attached to the rock wall.

Discharge Measurements
Low water measurements made by wading and by a 2' Venturi Flume 600 feet above gage. High water measurements made from cable car 40' above gage.

Channel and Control
Channel is gravel and boulders. No control.

Extremes of Discharge
1932-1933
Maximum - 58 c.f.s. January 19, 1933.
Minimum - 0.54 c.f.s. March 7, 1933.
1933-1934
Maximum - 43.8 c.f.s. January 1, 1934.
Minimum - 0.21 c.f.s. several days in December, 1933.

Diversion
None.

Regulation
Flow above station regulated by the Los Angeles County Flood Control District's Big Tujunga Dam No. 1.

Accuracy
Fair

Operation
Located, installed and operated by Los Angeles County Flood Control District.

**LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT**

Discharge measurements of **BIG TUJUNGA CREEK**

at **near** **Outflow of Dam No. 1** during the year ending September 30, 1933

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	Mean gage No.	G. H. of gage Total	Time Hours	Meter No.
24	3/17	Delaney	6.5	3.6	.25	6.20	.93	.6	5	0	1/6	FC 11	
25	3/24	"	6.0	3.5	.23	6.24	.80	.6	5	0	1/12	FC 30	
26	3/31	"	5.	3.1	.25	6.23	.78	.6	5	0	1/12	"	
27	4/14	"	4.0	3.0	.49	6.34	1.50	.6	5	0	1/6	"	
28	4/20	Irwin	14.0	3.0	.68	6.40	5.45	.6	7	0	1/3	"	
29	4/26	"	16.0	12.9	.74	6.50	9.53	.6	8	0	1/6	"	
30	4/27	"	16.0	11.2	.83	6.48	9.37	.6	9	0	1/4	"	
31	5/3	"	12.5	9.3	.81	6.51	8.64	.6	11	0	1/4	FC 10	
32	5/18	"	14.0	10.7	.86	6.52	9.23	.6	7	0	1/6	FC 30	
33	5/15	"				6.54	9.54					Venturi Flume	
34	6/22	"				6.52	9.67					"	
35	6/30	"				6.50	9.67					"	
36	7/7	"				6.52	9.54					"	
37	7/13	"				6.52	9.54					"	
38	7/21	"				6.50	9.54					"	
39	7/27	"				6.50	8.88					"	
40	8/4	"				6.43	7.82					"	
41	8/9	"				6.51	10.2					"	
42	8/11	"				6.52	10.0					"	
43	8/15	"				6.50	9.80					"	
43A	8/15	"				6.50	9.94					"	
44	8/13	"	16.0	11.9	.77	6.48	9.22	.6	7	0	1/12	FC 31	
45	8/18	"				6.48	9.80					Venturi Flume	
46	8/22	"				6.48	9.54					"	
47	8/22	"	15.0	13.6	.86	6.48	9.15	.6	8	0	1/6	FC 31	

**LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT**

Discharge measurements of **Big Tujunga Creek**
at **near** **Outflow of Dam No. 1** during the year ending September 30, 1933

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	Mean gage No.	G. H. of gage Total	Time Hours	Meter No.
1932													
1	11/8	Irwin				6.31	3.62		Venturi	Flume			
2	11/9	"				6.31	3.62		"				
3	11/10	"				6.34	4.20		"				
4	11/18	"				6.25	1.64		"				
5	11/25	"				6.26	1.64		"				
6	12/2	"				6.26	1.64		"				
7	12/29	"				6.28	1.57		"				
1933													
8	1/6	Irwin				6.26	1.57		Venturi	Flume			
9	1/16	"				6.26	1.57		"				
10	1/17	"				6.25	1.44		"				
11	1/18	"				6.26	1.57		"				
12	1/20	"	31.0	24.5	1.46	6.76	38.05	.6	10	0	1/3	FC 30	
13	1/24	"	13.5	7.68	.80	6.39	6.13	.6	13	0	1/3	"	
14	1/27	"	13.5	7.50	.62	6.38	5.92	.6	7	0	1/6	"	
15	2/3	"	13.0	6.22	.81	6.38	5.04	.6	6	0	1/2	"	
16	2/8	Delaney	6.5	3.57	.25	6.20	.90	.6	5	0	1/6	FC 11	
17	2/10	Irwin	14.0	6.56	.70	6.38	4.60	.6	8	0	1/4	FC 30	
18	2/16	Delaney	13.5	6.96	.72	6.36	5.06	.6	7	0	1/4	FC 11	
19	2/23	"	6.5	3.52	.33	6.16	.93	.6	5	0	1/12	"	
20	3/3	"	6.5	3.51	.25	6.15	.87	.6	5	0	1/6	"	
21	3/7	"	4.0	2.59	.27	6.20	.73	.6	5	0	1/12	FC 30	
22	3/10	"	6.5	3.64	.25	6.20	0.91	.6	5	0	1/6	FC 11	
23	3/15	"	6.5	3.67	.25	6.20	.93	.6	5	0	1/6	"	

**LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT**

Discharge measurements of **Big Tujunga Creek**
at **near** **Outflow of Dam No. 1** during the year ending September 30, 1933

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	Mean gage No.	G. H. of gage Total	Time Hours	Meter No.
1933													
48	8/25	Irwin				6.50	9.40		Venturi	Flume			
49	8/31	"	14.0	9.34	.83	6.50	8.13	.6	6	0	1/6	FC 31	
50	8/31	"				6.50	9.40		Venturi	Flume			
51	9/7	"	17.5	9.83	1.00	6.50	9.24	.6	8	0	1/6	FC 31	
52	9/7	"				6.50	9.80		Venturi	Flume			
53	9/14	"	14.0	9.00	.95	6.50	8.60	.6	7	0	1/6	FC 31	
54	9/14	"				6.50	10.48		Venturi	Flume			
55	9/21	"				6.52	11.87		"				
56	9/21	"	13.5	8.97	.93	6.52	8.34	.6	7	0	1/4	FC 31	
57	9/28	"				6.46	7.83		Venturi	Flume			

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 168

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 168

Discharge measurements of Big Tujunga Creek

Discharge measurements of Big Tujunga Creek

at Below Dam No. 1 during the year ending September 30, 1934

at Below Dam No. 1 during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Gage height, Discharge, Rating, Method, Mean No., G. H. Stage Feet, Time, Mean No.

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Gage height, Discharge, Rating, Method, Mean No., G. H. Stage Feet, Time, Mean No.

F. C. D. Form 105-100-9-31

Daily Gage Height, in Feet, and Discharge, in Second-Feet, of BIG TUJUNGA CREEK at 1200' below Big Tujunga Dam No. 1 for the Year Ending September 30, 1933

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. 168

Large table with columns: Drainage Area, Square Miles, J. L. Irwin, Gage No., CONTINUOUS, Date, Gage height, Discharge for months OCTOBER through SEPTEMBER, and various summary statistics.

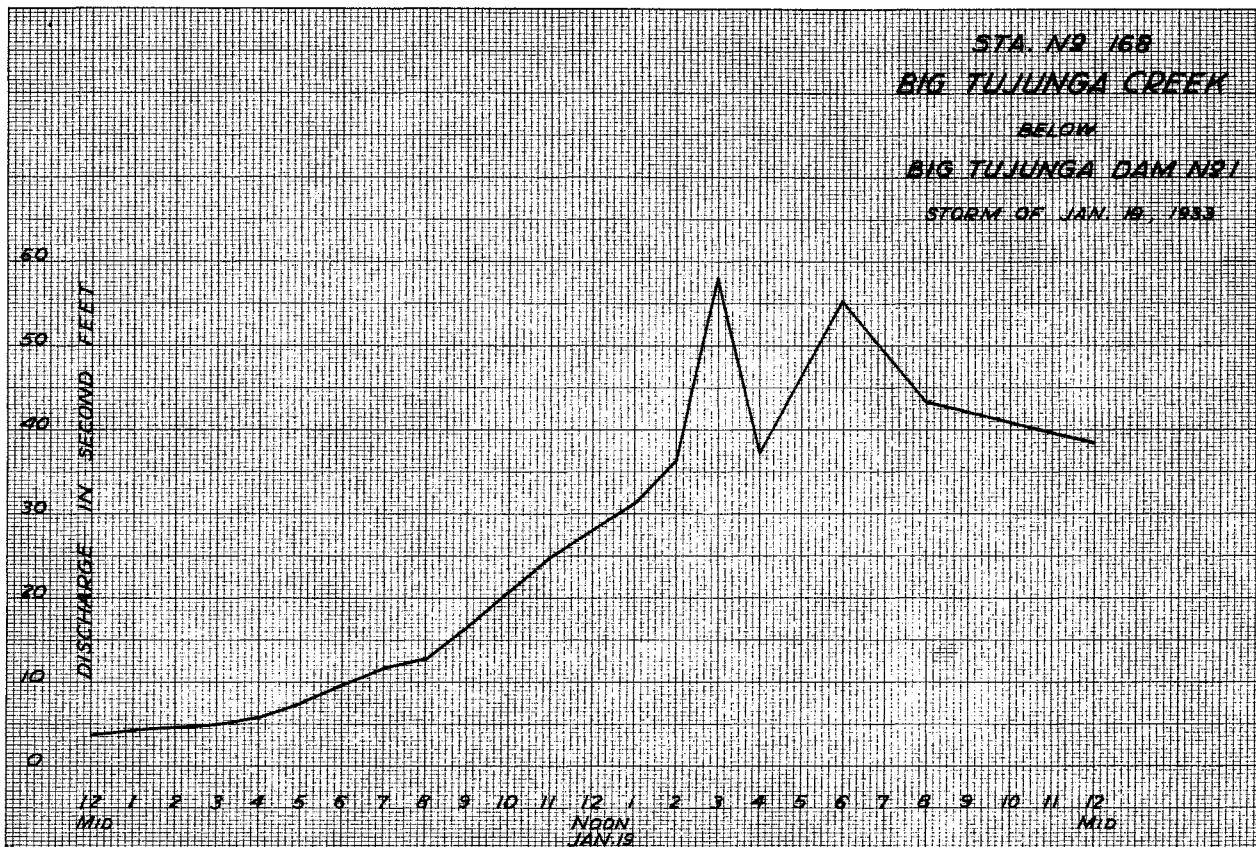
Daily Gage Height, in Feet, and Discharge, in Second-Foot, of **BIG TUJUNGA CREEK**

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

BELOW DAM NO. 1 for the Year Ending September 30, 1934

Discharge Area: Square Miles. **E. S. Donadiman & J. L. Irwin** Gage Read: **Continuous** Used rating table dated: **1933-1934**

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER			
	Gage Height	Discharge	Gage Height	Discharge	Gage Height	Discharge	Gage Height	Discharge	Gage Height	Discharge	Gage Height	Discharge	Gage Height	Discharge	Gage Height	Discharge	Gage Height	Discharge	Gage Height	Discharge	Gage Height	Discharge	Gage Height	Discharge		
1	6.43	7.01	5.27	1.37	5.26	1.18	5.50	11.14	5.21	0.58	5.19	0.45	6.21	0.58	6.45	8.10	6.53	13.19	6.50	11.14	6.50	11.14	6.50	11.14	6.50	11.14
2	6.42	6.48	5.27	1.37	5.26	1.18	5.27	1.27	6.19	0.45	5.20	0.50	6.21	0.58	6.45	8.10	6.53	13.19	6.50	11.14	6.50	11.14	6.50	11.14	6.50	11.14
3	6.46	8.56	5.27	1.37	5.26	1.18	6.21	0.58	6.19	0.45	5.20	0.50	6.22	0.66	6.45	8.10	6.53	13.19	6.50	11.14	6.49	10.50	6.50	11.14	6.50	11.14
4	6.49	10.50	5.27	1.37	5.26	1.18	6.20	0.50	6.19	0.45	5.19	0.45	6.22	0.66	6.53	14.64	6.53	13.19	6.51	11.81	6.49	10.50	6.50	11.14	6.50	11.14
5	6.49	10.50	5.27	1.37	5.26	1.18	6.19	0.45	6.21	0.58	5.19	0.45	6.22	0.66	6.53	14.64	6.53	13.19	6.52	12.48	6.50	11.14	6.49	10.50	6.50	11.14
6	6.47	9.26	5.27	1.37	5.26	1.18	6.17	0.36	6.21	0.58	5.19	0.45	6.21	0.58	6.53	14.64	6.53	13.19	6.52	12.48	6.50	11.14	6.49	10.50	6.50	11.14
7	6.46	8.66	5.27	1.37	5.26	1.18	6.16	0.32	6.21	0.58	5.18	0.40	6.21	0.58	6.53	14.64	6.53	13.19	6.52	12.48	6.50	11.14	6.49	10.50	6.50	11.14
8	6.44	7.54	5.27	1.37	5.26	1.18	6.15	0.28	6.21	0.58	5.19	0.45	6.22	0.66	6.53	14.64	6.53	13.19	6.52	12.48	6.50	11.14	6.48	9.26	6.50	11.14
9	6.43	7.01	5.27	1.37	5.24	0.88	6.15	0.28	6.21	0.58	5.20	0.50	6.22	0.66	6.53	14.64	6.53	13.19	6.54	13.90	6.52	12.48	6.47	9.26	6.50	11.14
10	6.53	13.19	5.27	1.37	5.24	0.88	6.14	0.24	6.21	0.58	5.20	0.50	6.23	0.77	6.53	14.64	6.52	12.48	6.54	13.90	6.52	12.48	6.47	9.26	6.50	11.14
11	6.53	13.19	5.27	1.37	5.23	0.77	6.15	0.28	6.21	0.58	5.20	0.50	6.23	0.77	6.53	14.64	6.52	12.48	6.54	13.90	6.52	12.48	6.47	9.26	6.50	11.14
12	6.41	5.99	5.27	1.37	5.23	0.77	6.16	0.32	6.21	0.58	5.21	0.58	6.23	0.77	6.53	14.64	6.52	12.48	6.54	13.90	6.51	11.81	6.45	8.10	6.50	11.14
13	6.39	5.06	5.53	13.19	5.37	4.23	6.17	0.36	6.20	0.50	5.21	0.58	6.22	0.66	6.53	14.64	6.52	12.48	6.54	13.90	6.51	11.81	6.47	9.26	6.50	11.14
14	6.39	5.06	5.51	13.81	5.18	0.40	6.17	0.36	6.20	0.50	5.21	0.58	6.23	0.77	6.53	14.64	6.52	12.48	6.54	13.90	6.47	9.26	6.47	9.26	6.50	11.14
15	6.24	3.16	5.28	1.56	5.16	0.32	6.18	0.40	6.20	0.50	5.22	0.66	6.23	0.77	6.53	14.64	6.52	12.48	6.54	13.90	6.48	9.26	6.46	8.66	6.50	11.14
16	6.22	0.66	5.28	1.56	5.15	0.28	6.19	0.45	6.19	0.45	5.22	0.66	6.23	0.77	6.53	14.64	6.52	12.48	6.54	13.90	6.50	11.14	6.45	8.10	6.50	11.14
17	6.22	2.56	5.43	7.01	5.14	0.24	6.19	0.45	6.19	0.45	5.24	0.88	6.23	0.77	6.53	14.64	6.51	11.81	6.56	15.38	6.50	11.14	6.45	8.10	6.50	11.14
18	6.28	1.56	5.55	14.64	5.13	0.21	6.20	0.50	6.18	0.40	5.24	0.88	6.23	0.77	6.53	14.64	6.51	11.81	6.52	12.48	6.50	11.14	6.44	7.54	6.50	11.14
19	6.27	1.37	5.43	7.01	5.13	0.21	6.21	0.58	6.18	0.40	5.24	0.88	6.23	0.77	6.53	14.64	6.50	11.14	6.52	12.48	6.50	11.14	6.47	9.26	6.50	11.14
20	6.27	1.37	5.35	3.50	5.13	0.21	6.21	0.58	6.17	0.36	5.24	0.88	6.24	0.88	6.54	13.90	6.50	11.14	6.50	11.14	6.50	11.14	6.47	9.26	6.50	11.14
21	6.27	1.37	5.27	1.37	5.14	0.24	6.20	0.50	6.17	0.36	5.23	0.77	6.24	0.88	6.53	13.19	6.50	11.14	6.50	11.14	6.50	11.14	6.47	9.26	6.50	11.14
22	6.27	1.37	5.26	1.18	5.13	0.21	6.20	0.50	6.22	0.66	5.23	0.77	6.24	0.88	6.53	13.19	6.50	11.14	6.50	11.14	6.50	11.14	6.47	9.26	6.50	11.14
23	6.27	1.37	5.26	1.18	5.13	0.21	6.20	0.50	6.25	1.03	5.24	0.88	6.24	0.88	6.53	13.19	6.50	11.14	6.50	11.14	6.50	11.14	6.47	9.26	6.50	11.14
24	6.27	1.37	5.26	1.18	5.14	0.24	6.20	0.50	6.19	0.45	5.22	0.66	6.24	0.88	6.53	13.19	6.50	11.14	6.50	11.14	6.50	11.14	6.48	9.26	6.50	11.14
25	6.27	1.37	5.31	2.29	5.14	0.24	6.19	0.45	6.20	0.50	5.22	0.66	6.25	2.86	6.53	13.19	6.51	11.81	6.50	11.14	6.50	11.14	6.47	9.26	6.50	11.14
26	6.27	1.37	5.35	3.50	5.14	0.24	6.19	0.45	6.18	0.40	5.23	0.77	6.25	2.86	6.53	13.19	6.50	11.14	6.49	10.50	6.49	10.50	6.47	9.26	6.50	11.14
27	6.27	1.37	5.31	2.29	5.14	0.24	6.20	0.50	6.18	0.40	5.22	0.66	6.25	2.86	6.53	13.19	6.50	11.14	6.49	10.50	6.50	11.14	6.46	8.66	6.50	11.14
28	6.27	1.37	5.27	1.37	5.15	0.28	6.20	0.50	6.18	0.40	5.22	0.66	6.25	2.86	6.53	13.19	6.50	11.14	6.49	10.50	6.50	11.14	6.46	8.66	6.50	11.14
29	6.27	1.37	5.26	1.18	5.13	0.21	6.20	0.50	-	-	5.21	0.58	6.25	2.86	6.53	13.19	6.50	11.14	6.49	10.50	6.50	11.14	6.46	8.66	6.50	11.14
30	6.27	1.37	5.26	1.18	5.18	0.40	6.21	0.58	-	-	5.21	0.58	6.25	2.86	6.53	13.19	6.50	11.14	6.50	11.14	6.50	11.14	6.45	8.10	6.50	11.14
31	6.27	1.37	-	-	5.40	5.50	6.20	0.50	-	-	5.21	0.58	-	-	6.53	13.19	-	-	6.50	11.14	6.50	11.14	-	-	-	-
TOTAL		143.86		95.44		26.85		25.28		14.33		19.30		58.20		413.96		364.04		377.81		245.62		281.48		2164.17
Mean Daily Discharge by Formula		4.79		3.11		0.87		0.82		0.51		0.62		1.94		13.35		12.13		12.19		11.15		9.38		5.93
Peak-ft. High by formula																										
Peak-ft. High by gage																										
Discharge in cfs. by formula		285.35		185.34		53.26		50.14		28.42		38.28		115.44		821.07		722.06		749.37		685.54		558.31		4292.58
Discharge in cfs. by gage		13.19		14.64		5.50		11.14		1.02		0.88		8.10		14.64		13.19		15.38		12.48		11.14		15.38
Discharge in cfs. by gage		0.66		1.18		0.21		0.24		0.36		0.40		0.58		8.10		11.14		10.50		9.26		7.54		0.21



LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 213

BIG TUJUNGA CREEK BELOW SUBMERGED DAM

Location

Near center of Sec 32 T. 3 N., R. 13 W., (unsurveyed) 1000' below a partly constructed and abandoned dam, 2 miles above mouth of canyon, and 4 miles northeast of Sunland and 7 miles below Big Tujunga Dam #1, Los Angeles County, California.

Discharge measurements of Big Tujunga Creek

at near Below Present U.S.G.S. during the year ending September 30, 1933.

Drainage Area

106.0 square miles.

Records Available

October 1916 to Sept. 30, 1932 at offices of U.S.G.S. Water Resources Branch and from Oct. 1, 1932 to Sept. 30, 1934 at office of Los Angeles County Flood Control District, L.A. Calif.

Gage

Au Continuous Water Stage Recorder installed in shelter house on top of corrugated iron stilling well fastened to rock cliff at east bank of stream.

Discharge Measurements

Low water measurements made by wading. High water measurements made from cable car 50' below gage.

Channel and Control

Bed consists of gravel and boulders. Control is a rubble wall from east bank 65' west across stream 40' from east to west is constructed on bed rock. Low stage discharges affected by deposits of sand and gravel above control. Control is 70' below gage.

Extremes of Discharge

1932-1933

Maximum - 1368.5 c.f.s. January 19, 1933. Minimum - 1.07 c.f.s. several times during year.

1933-1934

Maximum - 1463.5 c.f.s. January 1, 1934. Minimum - 0.89 c.f.s. Nov. 25, 1933.

Regulation

Flow regulated by the Los Angeles County Flood Control District's Big Tujunga Dam #1

Accuracy

Fair

Operation

Originally constructed by U.S.G.S. Water Resources Branch at a point 1000' upstream. Rebuilt by Los Angeles County Flood Control District Oct. 1932 at present site, operated by U.S.G.S. Water Resources Branch in co-operation with Los Angeles County Flood Control District.

Table with columns: No., Date, Made by, Width Feet, Area of Section Sq. Ft., Mean Velocity Ft. per sec, Gage Height Feet, Discharge Sec-ft, Rating Percent, Method, Mean gage No., G. Ht. Change Feet, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 213

Discharge measurements of Big Tujunga Creek

at near Below Present U.S.G.S. during the year ending September 30, 1933.

Main data table with columns: No., Date, Made by, Width Feet, Area of Section Sq. Ft., Mean Velocity Ft. per sec, Gage Height Feet, Discharge Sec-ft, Rating Percent, Method, Mean gage No., G. Ht. Change Feet, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 213

Discharge measurements of Big Tujunga Creek at Below Submerged Dam during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec. ft., Rating Factor, Method, Meter No., G. Ft. (Gage Total), Time Hours, Meter No. (repeated). Rows 1-24.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 213

Discharge measurements of Big Tujunga Creek at Below Submerged Dam during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec. ft., Rating Factor, Method, Meter No., G. Ft. (Gage Total), Time Hours, Meter No. (repeated). Rows 49-72.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 213

Discharge measurements of Big Tujunga Creek at Below Submerged Dam during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec. ft., Rating Factor, Method, Meter No., G. Ft. (Gage Total), Time Hours, Meter No. (repeated). Rows 25-48.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 213

Discharge measurements of Big Tujunga Creek at Below Submerged Dam during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec. ft., Rating Factor, Method, Meter No., G. Ft. (Gage Total), Time Hours, Meter No. (repeated). Rows 73-96.

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of BIG TUJUNGA CREEK
Near Below Present U.S.G.S. Station for the Year Ending September 30, 1933

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

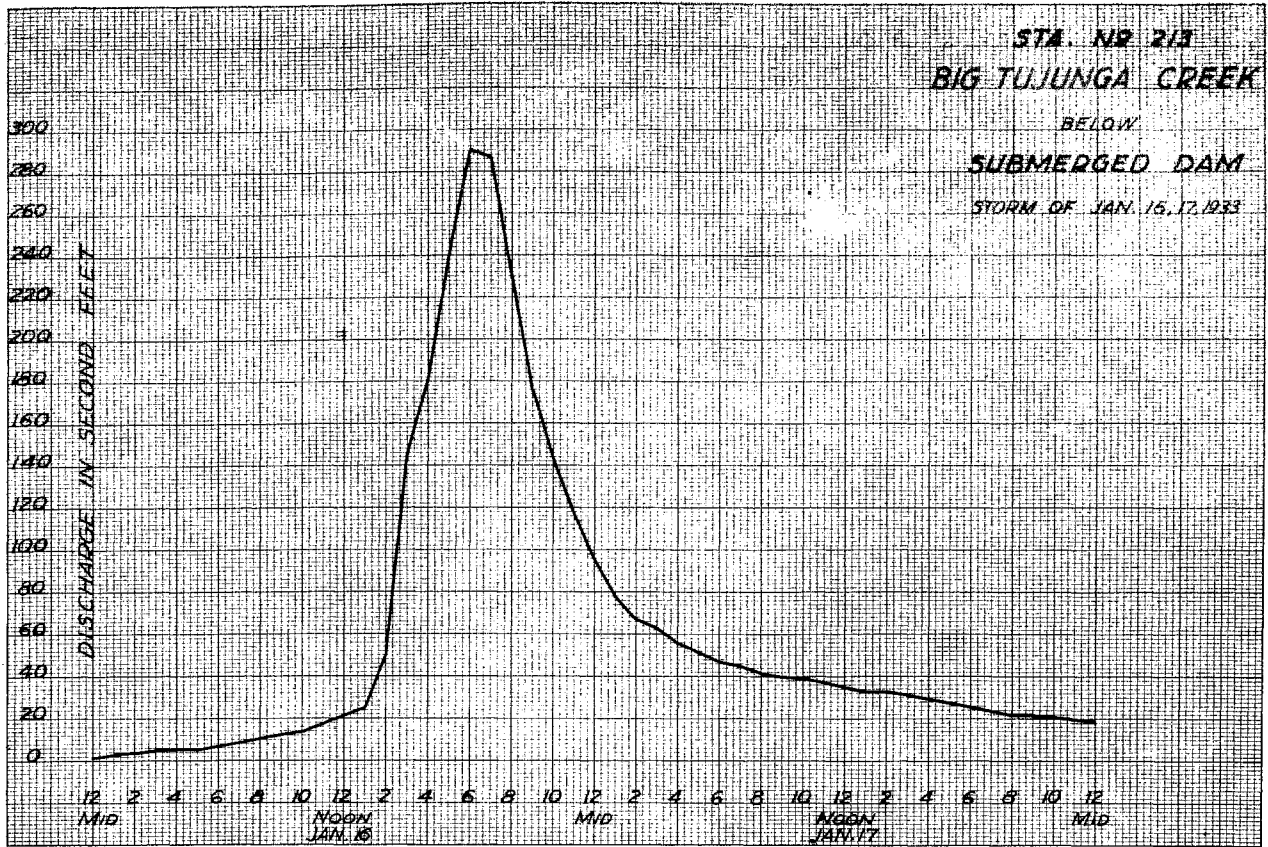
Table with columns for months (October to September), gage height, discharge, and summary statistics. Includes drainage area of 106.0 square miles and observer J.L. Irwin & H.J. Tolpkins.

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of BIG TUJUNGA CREEK
Near BELOW PRESENT U.S.G.S. STATION for the Year Ending September 30, 1934

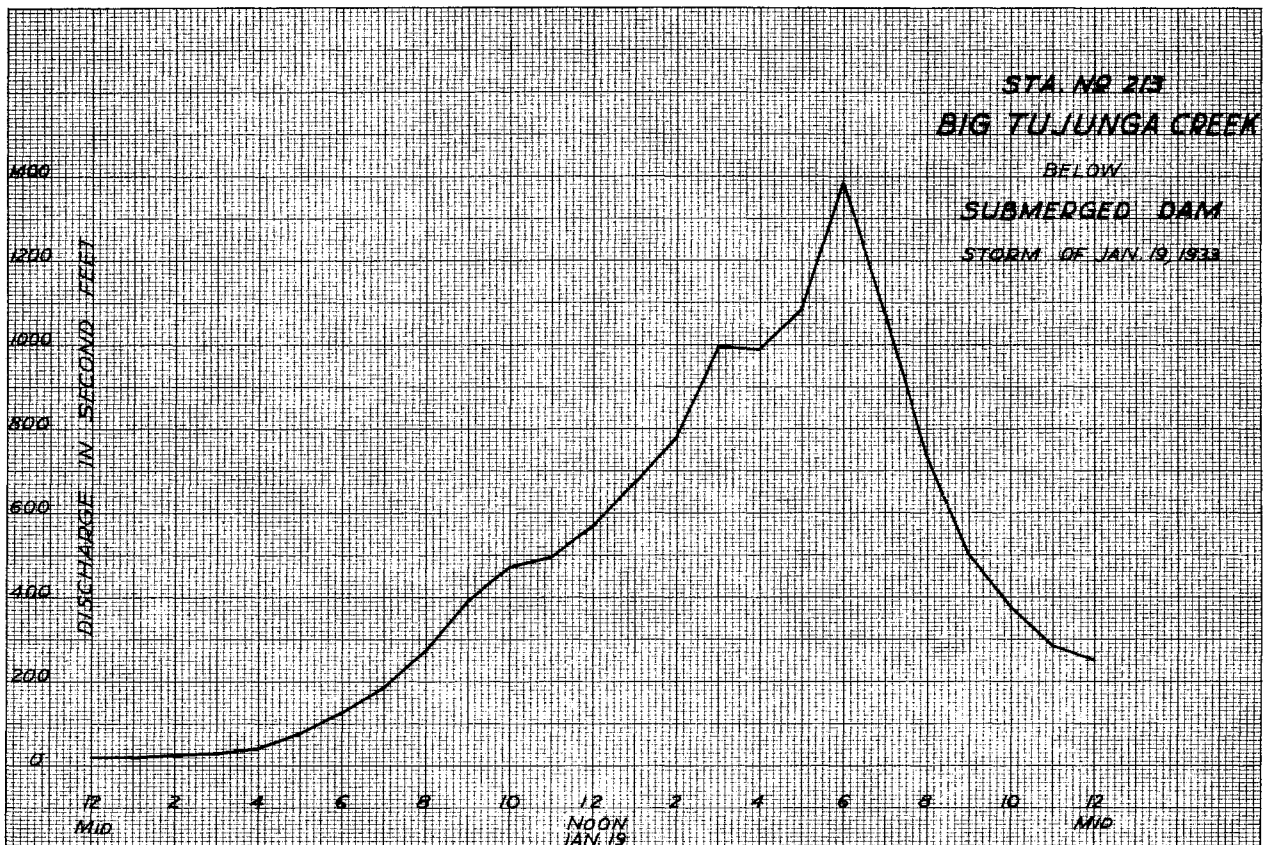
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

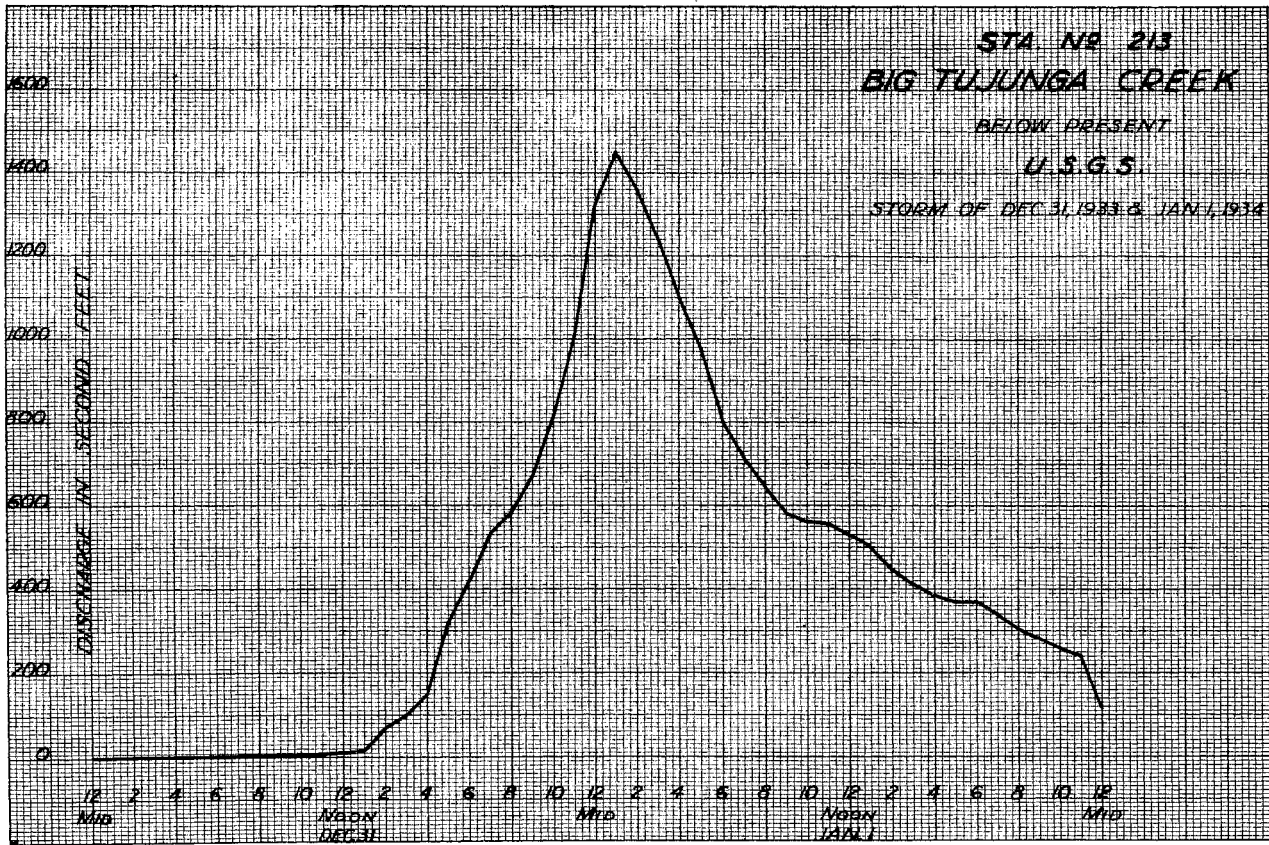
Table with columns for months (October to September), gage height, discharge, and summary statistics. Includes drainage area of 106.0 square miles and observer E.S. Bonediman and J.L. Irwin.

SCOTT & LAMAR CO., N.Y. NO. 348211
15 x 18 1/2 IN. (10)



SCOTT & LAMAR CO., N.Y. NO. 348211
15 x 18 1/2 IN. (10)





F. C. Dist. Form 104A

F-20 R

**LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT**

Station No. 20

BIG TUJUNGA WASH AT STONEHURST AVENUE (MULHOLLAND STREET)

Location
Where Stonehurst Avenue (Formerly Mulholland Street) crosses Big Tujunga Wash about 3 miles southeast of San Fernando, Los Angeles County, California.

Discharge measurements of BIG TUJUNGA WASH

at Stonehurst Ave. Bridge, Mulholland, during the year ending September 30, 1933

Drainage Area
148 square miles.

Installed by
Los Angeles County Flood Control District Station established January, 1931. Recorder placed April 29, 1932.

Records Available
Intermittent stream measurements January 1931 to April 1932. Recorder records April 29, 1932 to September 30, 1934 at the offices of the Los Angeles County Flood Control District, Los Angeles, California.

Gage
Rational vertical water stage recorder installed in shelter house on top of corrugated iron pipe stilling well fastened to downstream end of pier near center of bridge.

Discharge Measurements
High flows measured from bridge.
Low flows measured by wading.

Channel and Control
Channel is wide and composed of sand and gravel with a training channel dug down the center.
No control.

Extremes of Discharge

1931-1932
Maximum- Not determined.
Minimum- Dry first part of year.

1932-1933
Maximum- 2260 c.f.s. January 19, 1933.
Minimum- Dry various times of the year.

1933-1934
Maximum- 3751.5 c.f.s. January 1, 1934.
Minimum- Dry various times during year.

Regulation
The Los Angeles County Flood Control District's Big Tujunga Dam No. 1 situated about 14 miles above the station controls part of the mountain runoff.

Diversions
Several irrigation companies divert low flows above the gage.

Accuracy
Fair.

Operation
Station located and constructed by the Los Angeles County Flood Control District and operated by the Los Angeles County Flood Control District in conjunction with the U.S.G.S. Water Resources Branch.

No.	Date	Made by	Wind Year	Area of section sq. ft.	Mean velocity ft. per sec.	Depth height feet	Discharge Sec.-ft.	Rating point feet	Method	Mean. No.	Q. No. change	Time Hours	Meas. No.
2	12/16	Luce	3.5	.77	.34	1.58	.26	.6	4	0	1/6	FC 13	
3	1/17	Luce & Lindsay	28.0	12.8	2.6	1.90	36.05	.6	17	0	1/2	FC 13	
4	1/19	Luce, Lindsay, Hedge	63.0	154.5	9.0	5.32	1401.3	.6	10	0	1/3	FC 25	
5	1/19	Luce & Hedge	63.	157.8	10.1	5.37	1596.8	.6	9	+0.6	1/3	"	
6	1/19	Luce, Turner, Hedge	60.	91.75	8.2	4.40	753.15	.6	11	0	1/3	"	
7	1/19	"	60.	91.35	8.0	4.30	758.45	.6	13	-1.0	1/3	"	
8	1/25	Hedge & Beatty	21.	9.50	2.0	3.20	25.21	.6	9	0	1/2	FC 23	
9	1/25	"	21.	9.60	2.4	3.18	23.20	.6	11	0	1/4	"	
10	1/25	"	21.	10.49	2.1	3.18	22.05	.6	10	0	1/2	"	
11	1/26	Luce & Luce	23.	8.16	2.8	3.14	18.39	.6	15	0	1/4	FC 13	
12	1/29	Luce, Lindsey	38.5	39.38	4.3	3.55	153.0	.6	15	0	1/3	"	
13	1/29	Luce, Lindsey	38.5	30.74	4.0	3.54	124.86	.6	11	-0.1	1/3	"	
14	1/29	Luce & Lindsey	27.7	11.29	5.1	3.125	58.56	.6	11	-0.05	1/4	"	
15	1/30	Luce & Marchand	31.0	16.35	3.7	3.31	60.52	.6	15	0	1/6	"	
16	2/10	Luce	18.7	6.64	1.5	3.08	10.27	.6	12	0	1/6	"	
17	2/18	Marchand	20.7	5.35	1.1	3.05	5.98	.6	13	0	1/4	FC 25	
18	2/25	Luce	12.4	4.22	.83	2.95	3.51	.6	9	0	1/6	"	
19	2/28	Delaney	12.	4.11	.79	2.96	3.27	.6	5	0	1/6	FC 11	
20	3/10	Luce	16.0	3.39	.94	2.94	3.19	.6	13	0	1/6	FC 13	
21	3/23	Luce	6.0	1.47	1.1	2.81	1.58	.6	10	0	1/6	"	
22	3/30	Luce	6.0	1.18	.87	2.78	1.03	.6	9	0	1/6	"	
23	4/10	Luce	5.1	.77	.79	2.75	.61	.6	10	0	1/6	"	

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 20

Discharge measurements of Big Tujunga Wash at Stonehurst Ave. Bridge, Mulholland during the year ending September 30, 1933

Table with columns: No., Date, Made by, Water Feet, Area of catchment, Mean velocity, Gage height, Discharge, Rating, Method, Mean time, S. No., Time, Name. Contains 33 rows of data for the year 1933.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 20

Discharge measurements of Big Tujunga Wash at Stonehurst Avenue Bridge during the year ending September 30, 1933

Table with columns: No., Date, Made by, Water Feet, Area of catchment, Mean velocity, Gage height, Discharge, Rating, Method, Mean time, S. No., Time, Name. Contains 26 rows of data for the year 1933.

F.C. Dist. Form 104-100-9-31

Daily Gage Height, in Feet, and Discharge, in Second-Feet, of BIG TUJUNGA WASH

At Stonehurst Ave. for the Year Ending September 30, 1933.

Drainage Area: 145.0 Square Miles. John W. Luce (Observer). Gage Read: Continuous. Used rating table dated 12/11/33

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. 20

Large table showing daily gage height and discharge for Big Tujunga Wash from October 1932 to September 1933. Includes monthly totals and summary statistics.

*-Interpolated M-Measurement

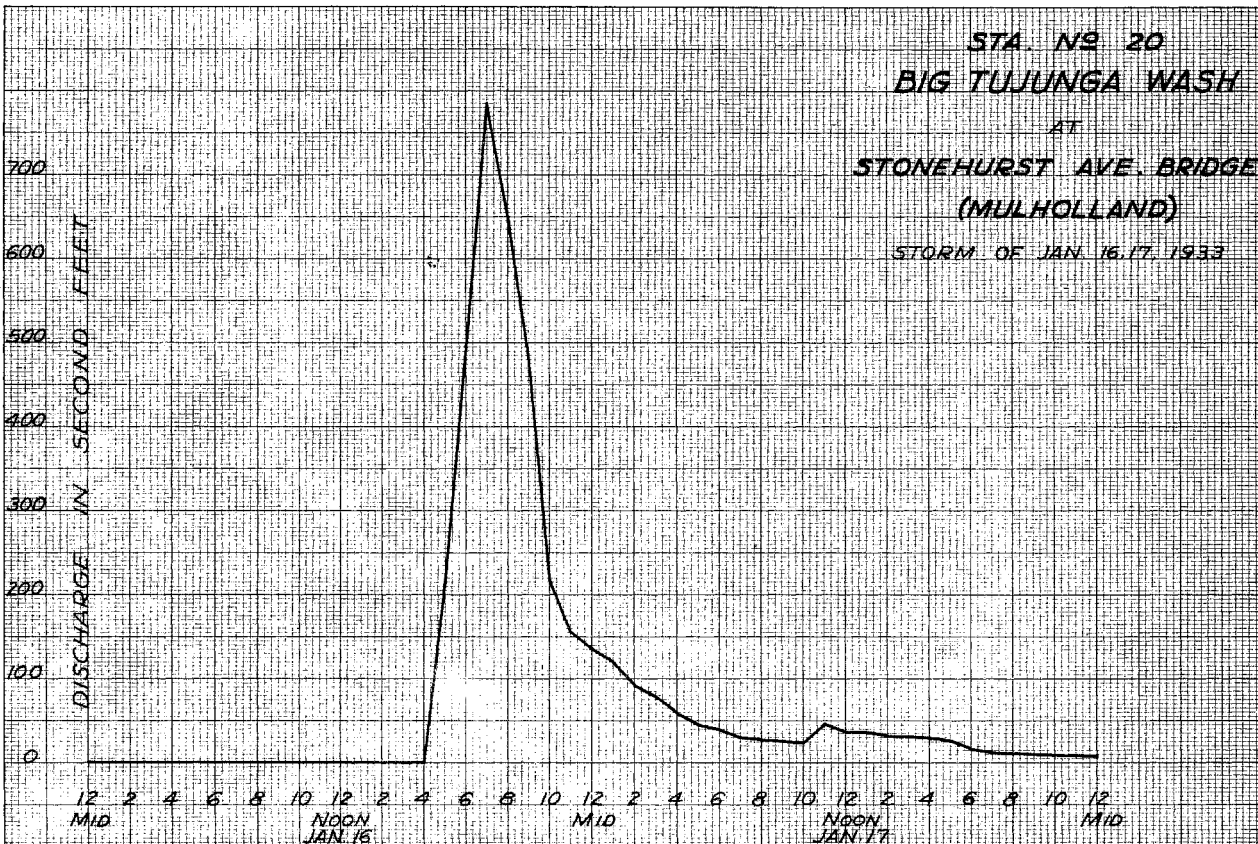
Station **STONEHURST AVENUE BRIDGE (MULHOLLAND)** for the Year Ending September 30, 1934

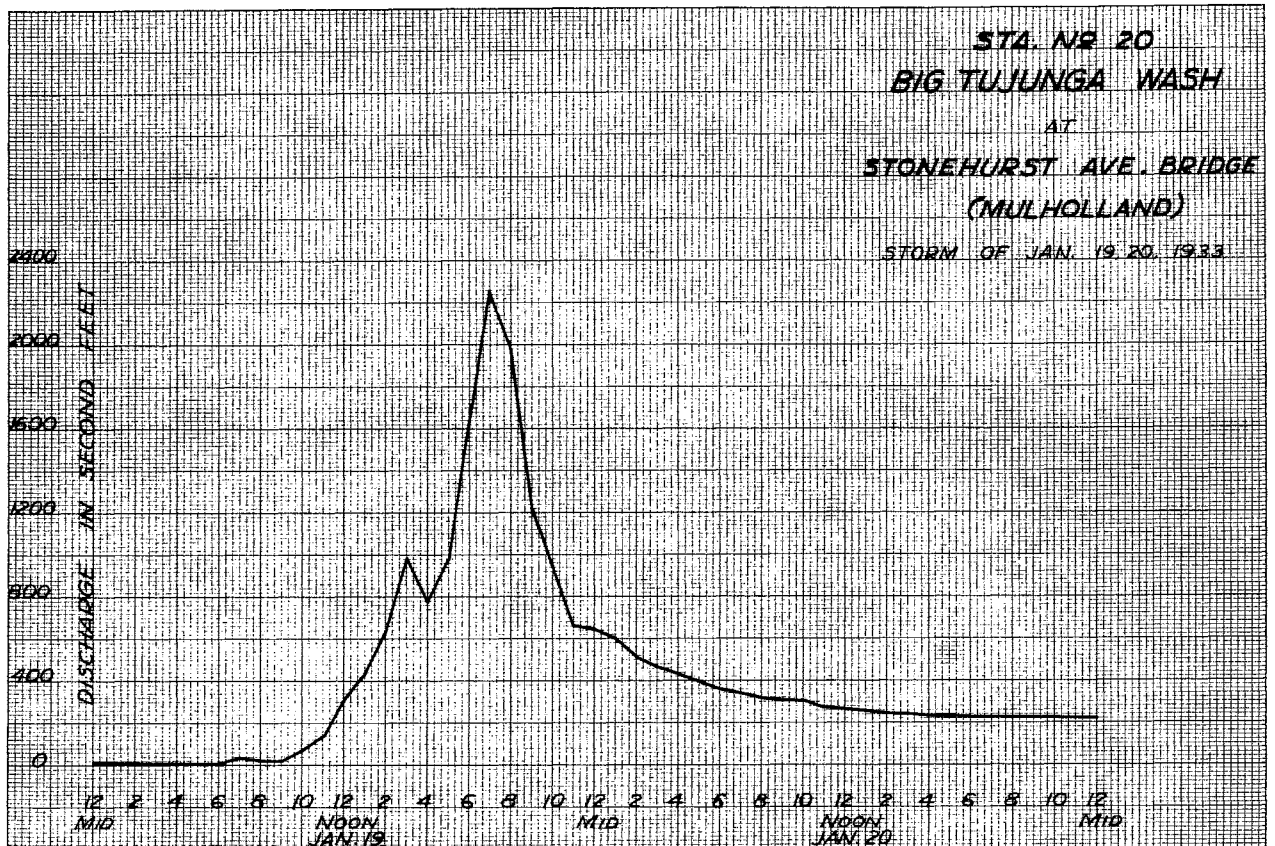
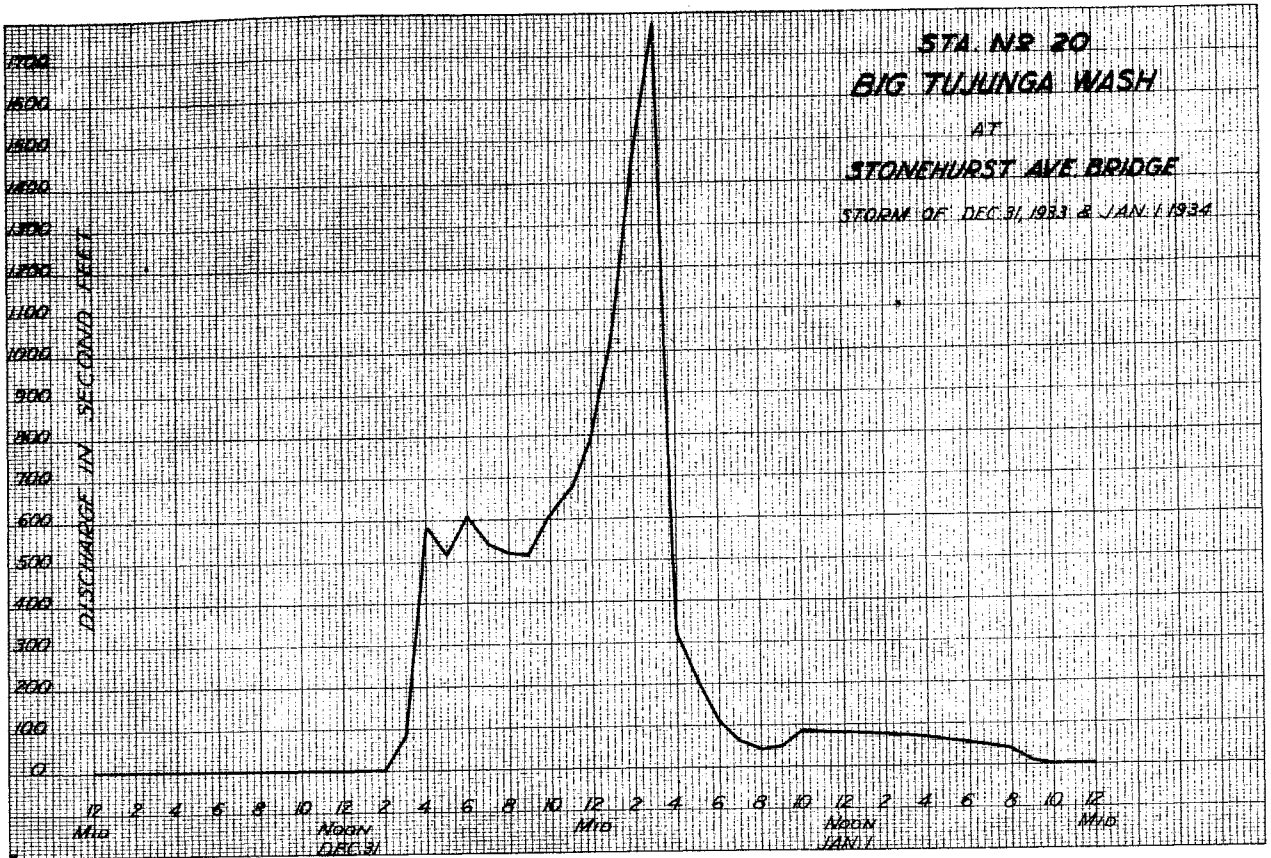
Drainage Area **146** Square Miles. (**John W. Luce** Observer.)

Gage Head **Continuous** Used rating table dated

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		DAY
	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	
1							H	909.48			4.69	2.40					4.93	5.83	4.57	1.23					1
2							H	90.78			4.62	1.70					4.94	6.14	4.58	1.32					2
3								5.28	67.60			4.55	1.05												3
4								5.13	36.00			4.46	0.48												4
5								4.98	9.96			4.38	0.24												5
6																									6
7								4.92	5.52			4.30	0												7
8								4.85	4.30																8
9								4.77	3.34																9
10								4.70	2.50																10
11								4.61	1.60																11
12								4.52	0.78																12
13								4.48	0.54																13
14								4.45	0.45																14
15								4.42	0.36																15
16								4.39	0.27																16
17								4.36	0.18																17
18								4.33	0.09																18
19								4.30	0																19
20								4.28	0.06																20
21																									21
22																									22
23																									23
24																									24
25																									25
26																									26
27																									27
28																									28
29																									29
30																									30
31																									31
TOTAL				69.66		269.31		1133.95		107.74		5.87				128.00		161.00		20.89				1896.42	
Mean Daily Discharge in Second-foot				2.36		8.69		36.58		3.85		0.195				4.12		5.37		0.67				5.20	
Second-foot per square mile		DRY		0.016		0.059		0.247		0.026		0.001		DRY		0.028		0.036		0.005		DRY		0.035	
Run-off, depth in inches		DRY		0.018		0.058		0.285		0.027		0.001		DRY		0.032		0.040		0.005		DRY		0.477	
Run-off in acre-foot				138.17		534.18		2249.19		213.70		11.64		DRY		253.89		319.54		41.44		DRY		3761.55	
Maximum Mean Daily Discharge in Second-foot				58.90		210.57		909.48		57.99		2.40		DRY		6.14		14.95		1.60		DRY		909.48	
Maximum Mean Daily Discharge in Second-foot				0		0		0		0		0		DRY		0		1.32		0		DRY		0	

I=Interpolated.





REPT. & CORR. OF S. Y. NO. 37471.
 U. S. G. S.

BIG TUJUNGA WEST WASH AT MAGNOLIA BOULEVARD BRIDGE

Location
On wooden highway bridge where Magnolia Boulevard crosses Big Tujunga West Wash, 2 miles west of North Hollywood, Los Angeles County, California.

Drainage Area
166.25 square miles.

Installed by
The Los Angeles County Flood Control District, August 1930.

Records Available
August 1930 to September 1934 at offices of the Los Angeles County Flood Control District, Los Angeles, California.

Gage
Stevens type L 3 day water stage recorder, installed in shelter house on top of a corrugated iron stilling well attached to bridge pier on upstream side.

Discharge Measurements
Low flows measured by wading.
High flows measured from bridge at Magnolia Boulevard or from bridge at Chandler Boulevard a short distance above.

Channel and Control
Channel is sandy and wide and shallow.
No control.

Extremes of Discharge
1930-1931
No appreciable flow during year 1930-1931.
1931-1932
Maximum- 46 c.f.s. December 26, 1931
Minimum- Dry most of year.
1932-1933
Maximum- No flow during this year.
Minimum- No flow during this year.
1933-1934
Maximum- 145.0 c.f.s. January 1, 1934.
Minimum- Dry most of year.

Diversions
None

Regulation
Water from the mountains flowing into this stream regulated by the Los Angeles County Flood Control District's Big Tujunga Dam #1. No regulation for valley water.

Accuracy
Poor

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

F.C. Dist. Form 70-1000-2-31

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of **BIG TUJUNGA (WEST WASH)**

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

File No. 105

At **MAGNOLIA BLVD. BRIDGE**

for the Year Ending September 30, 19**34**

Drainage Area **166.25** Square Miles.

(**C. E. Bollinger** Observer)

Gage Read **Continuous**

Used rating table dated **1931-32**

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		DAY	Quarter	Flood	Peak	Flood	Peak	Flood	Peak	Flood	Peak	
	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge		Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge											Quarter
1							H	12.26					1												1											
2													2												2											
3													3												3											
4													4												4											
5													5												5											
6													6												6											
7													7												7											
8													8												8											
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27													27												27											
28													28												28											
29													29												29											
30													30												30											
31													31												31											
TOTAL								12.36																												
Mean Daily Discharge in Second-foot								0.40																												12.36
Second-foot per square mile								0.002																												0.54
Run-off, depth in inches								0.003																												0.0002
Run-off in acre-feet								24.52																												0.003
Maximum Mean Daily Discharge in Second-foot								12.36																												24.52
Minimum Mean Daily Discharge in Second-foot								0																												12.36
Maximum Mean Daily Discharge in Second-foot								0																												0

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

BIG TUJUNGA EAST WASH AT MAGNOLIA BOULEVARD

Location On wooden highway bridge where Magnolia Blvd. crosses Big Tujunga East Wash, North Hollywood, Los Angeles County, Calif.

Discharge measurements of Big Tujunga - East Wash at Magnolia Blvd. Bridge during the year ending September 30, 1933

Drainage Area 166.25 square miles.

Installed by Los Angeles County Flood Control District, August 1930.

Records Available August, 1930 to September 30, 1934 at the office of the Los Angeles County Flood Control District, Los Angeles, California.

Gage Stevens Type L S day water stage recorder installed in small house on top of a corrugated iron pipe stilling well attached to center of bridge on downstream side.

Discharge measurements Low water measurements made by wading. High water measurements made from bridge.

Channel and Control Channel is shifting sand. No control.

Extremes of Discharge 1930-1931 Maximum- 56.1 c.f.s. February 3, 1931. Minimum- Dry most of year.

1931-1932 Maximum- 1375 c.f.s. February 9, 1932. Minimum- Dry most of the year.

1932-1933 Maximum- 429.0 c.f.s. January 19, 1933. Minimum- Dry most of the year.

1933-1934 Maximum- 3107.0 c.f.s. January 1, 1934. Minimum- Dry most of the year.

Diversions None

Regulation Water from the mountains flowing into this stream regulated by Los Angeles County Flood Control District's Big Tujunga Dam #1. No regulation for valley water.

Accuracy Poor

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

Table with columns: No., Date, Made by, Width Feet, Area of Section Sq. Ft., Mean Velocity Ft. per sec., Gage Height Feet, Discharge Sec.-ft., Rating, Method, Min. No., G. H. Above Flood, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Discharge measurements of Big Tujunga - East Wash at Magnolia Boulevard Bridge during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of Section Sq. Ft., Mean Velocity Ft. per sec., Gage Height Feet, Discharge Sec.-ft., Rating, Method, Min. No., G. H. Above Flood, Time Hours, Meter No.

Daily Gage Height, in Feet, and Discharge, in Second-Feet, of BIG TUJUNGA EAST WASH At Magnolia Boulevard Bridge for the Year Ending September 30, 1933.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

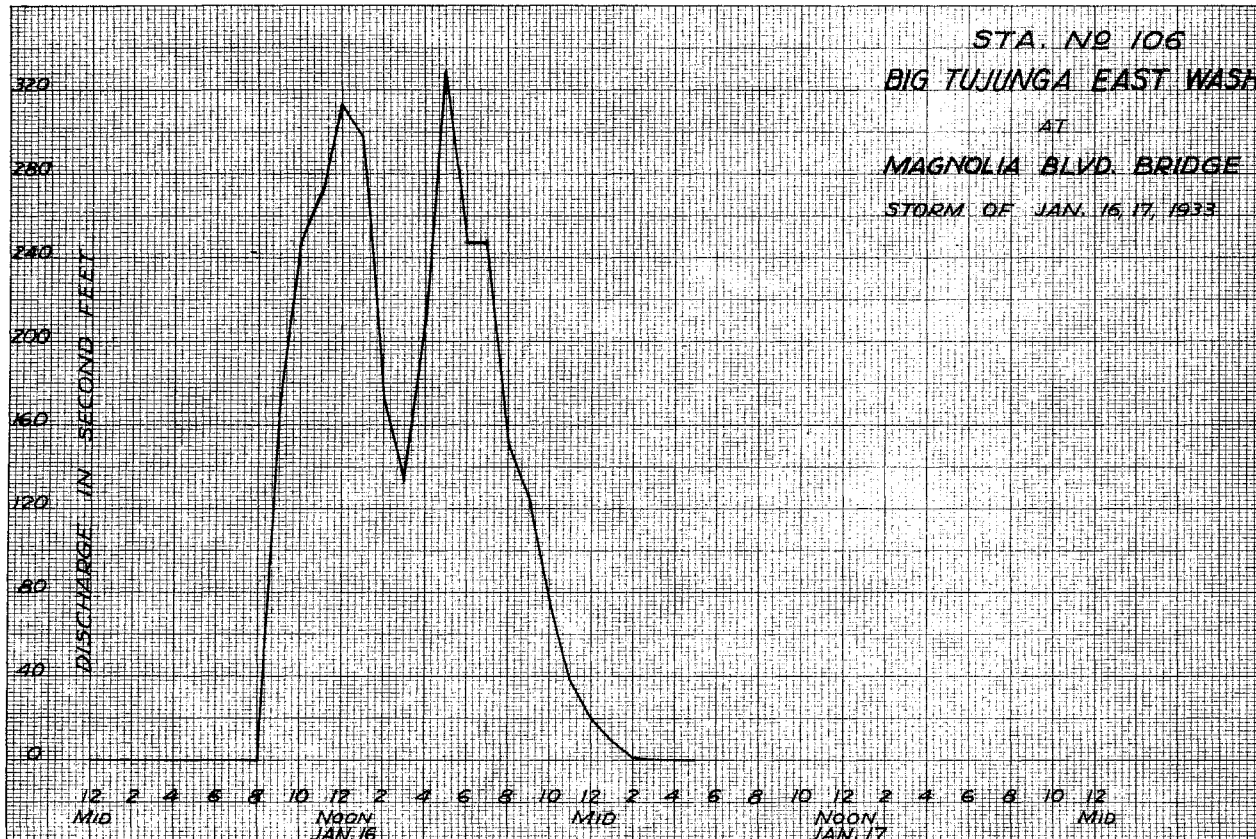
Main data table with columns for months (OCTOBER to SEPTEMBER) and days (1-31). Includes sub-headers for Gage Height and Discharge. Includes summary rows at the bottom for totals and extremes.

Discharge Area: 166.95 Square Miles. G. S. Bollinger (Observer.)

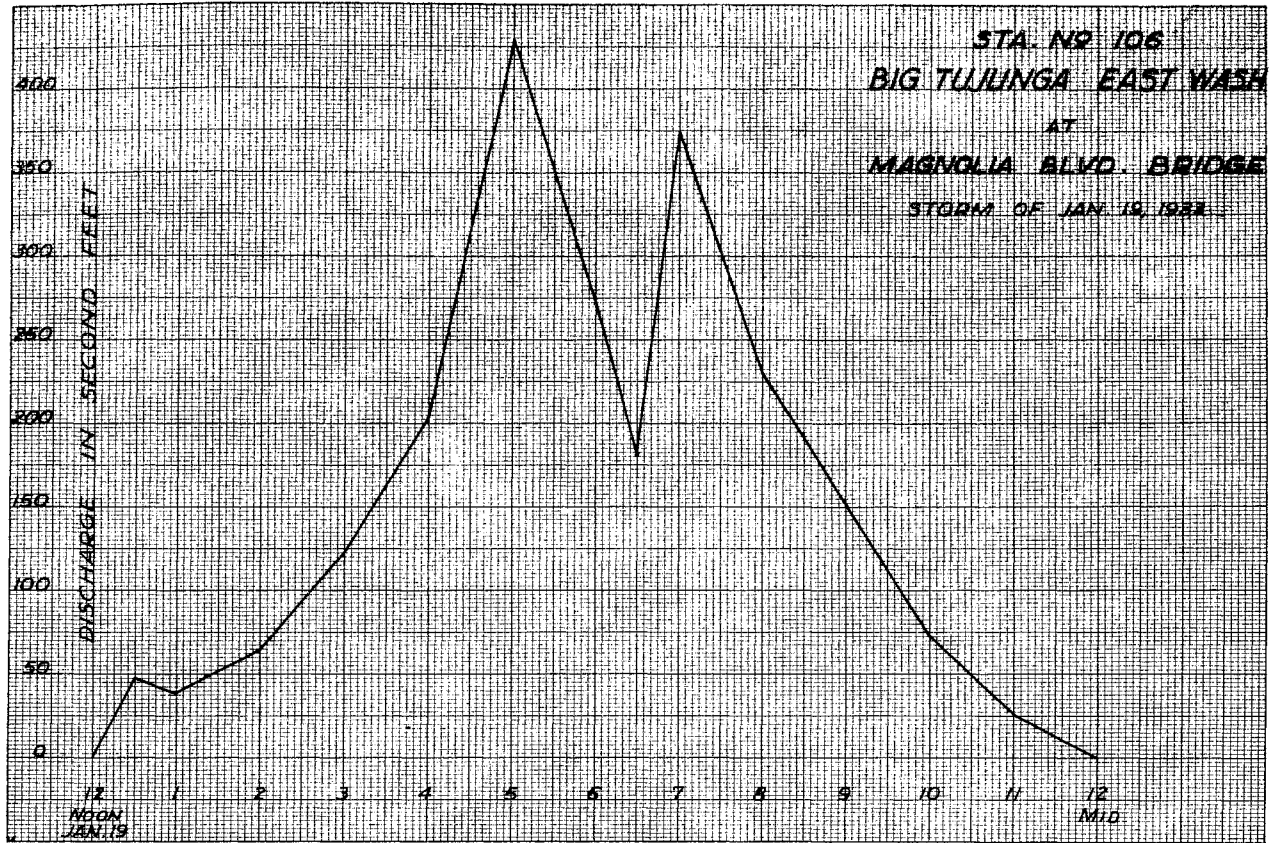
Gage No.: Continuous

Used rating table dated:

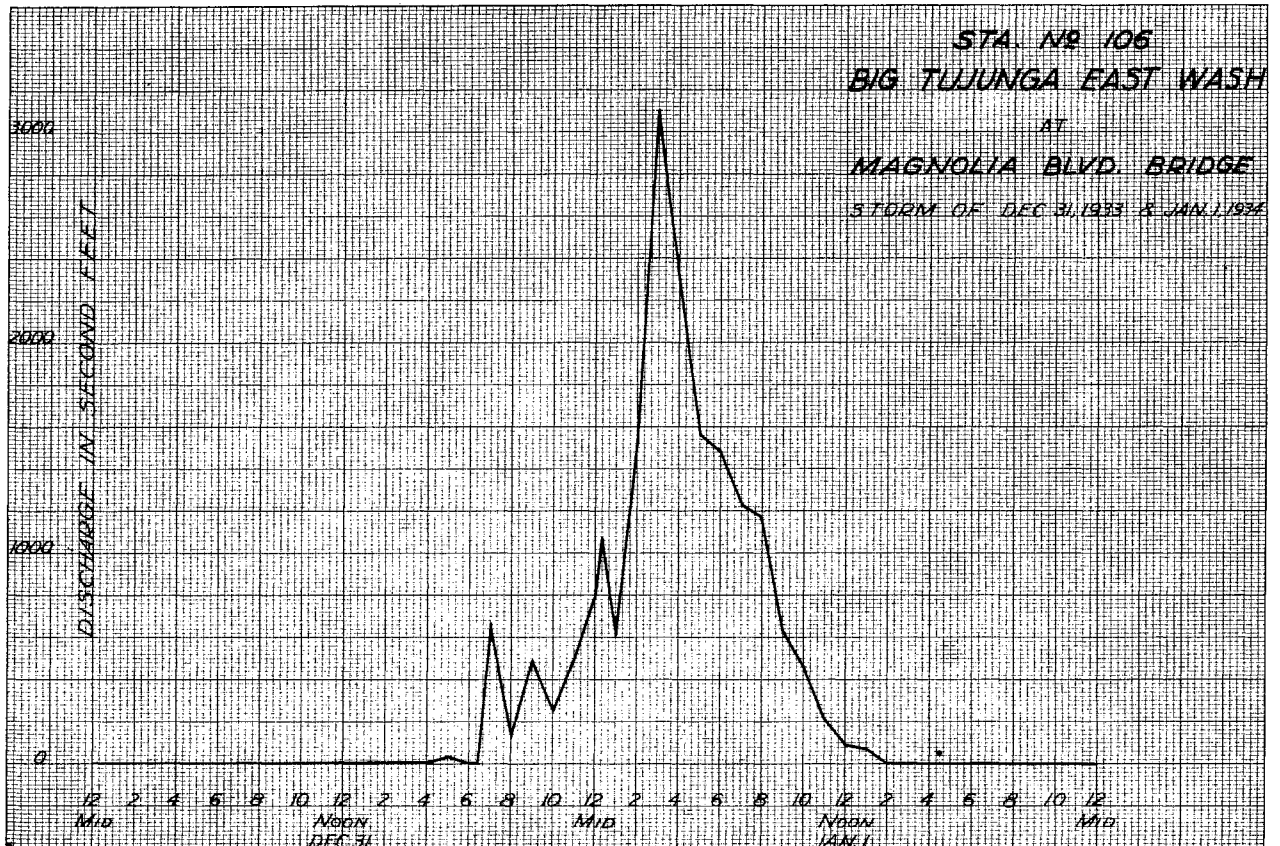
Date	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		DAY	
	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge		
1																									1	
2																										2
3																										3
4																										4
5																										5
6																										6
7																										7
8																										8
9																										9
10																										10
11																										11
12																										12
13																										13
14		DRY																								14
15																										15
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21																										21
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26																										26
27																										27
28																										28
29																										29
30																										30
31																										31
TOTAL																										
Mean Daily Discharge in Second-foot																										725.55
Second-foot per square mile																										1.99
Runoff, depth in inches																										.012
Runoff in acre-foot																										.161
Runoff in second-foot																										1439.13
Maximum Daily Discharge in Second-foot																										640.7
Discharge in Second-foot																										0



SCOTT & CORN CO., INC. 11 1/2 PINE ST. N.Y.C.



SCOTT & CORN CO., INC. 11 1/2 PINE ST. N.Y.C.



LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 186

CENTINELA CREEK AT CENTINELA BOULEVARD

Location

On the bank of Centinela Creek, 25 feet south of Centinela Boulevard, between Centinela Boulevard and Pacific Electric Railway, 1.2 miles south of Jefferson Boulevard, 3 miles southwest of Culver City, California.

Drainage Area

5.17 square miles.

Installed by

The Los Angeles County Flood Control September 15, 1932.

Records Available

Recorder records from September 15, 1932 to September 30, 1933 at offices of the Los Angeles County Flood Control District, Los Angeles, California.

Gage

Stevens L type 5 day water stage recorder on top of a corrugated iron pipe stilling well fastened to bank of stream. Staff gage fastened to stilling well.

Discharge Measurements

High flows measured from bridge 30 feet below recorder. Low flows measured by wading near recorder.

Channel and Control

Channel - sand. No control.

Extremes of Discharge

1932-1933

Maximum - 297 c.f.s. January 19, 1933.

Minimum - Dry most of year.

1933-1934

Maximum - 569.6 c.f.s. January 1, 1934

Minimum - Dry most of year.

Diversions

None

Regulation

None

Accuracy

Poor due to water overflowing banks and not passing recorder.

Operation

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

Discharge measurements of Centinela Creek at 1.2 mi. South of Jefferson Blvd. on Centinela Blvd. during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gage height Feet, Discharge Cfs., Rating Percent, Method, Mean No., G. H. Stage Feet, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 186

Discharge measurements of Centinela Creek at 1.2 mi. S. of Jefferson Blvd. on Centinela Blvd. during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gage height Feet, Discharge Cfs., Rating Percent, Method, Mean No., G. H. Stage Feet, Time Hours, Meter No.

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of CENTINELA CREEK at Centinela Boulevard for the Year Ending September 30, 1933.

Drainage Area Square Miles. Hardgrove (Observer.) Gage Road Continuous Used rating table dated

Large table with columns for months (OCTOBER to SEPTEMBER) and days (1-31), with sub-columns for Gage height and Discharge. Includes summary rows for TOTAL, Mean Daily Discharge, Second-foot per square mile, Run-off, Maximum Mean Daily Discharge, and Minimum Mean Daily Discharge.

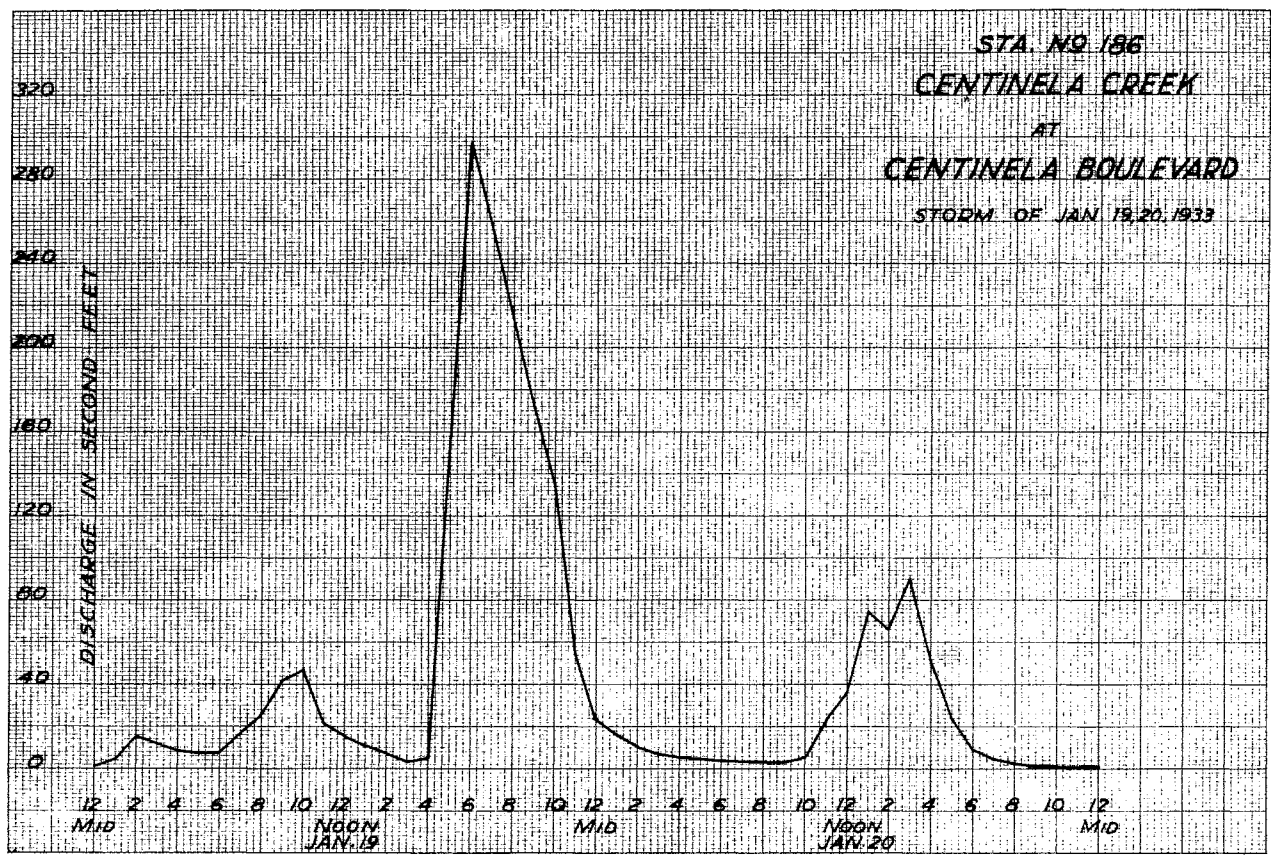
Daily Gage Height, in Feet, and Discharge, in Second-Foot, of CENTINELA CREEK
 Name 1.2 MILES SOUTH OF JEFFERSON BLVD. for the Year Ending September 30, 1934
 at ON CENTINELA BLVD.

LOS ANGELES COUNTY
 FLOOD CONTROL DISTRICT
 HYDROGRAPHIC DEPARTMENT

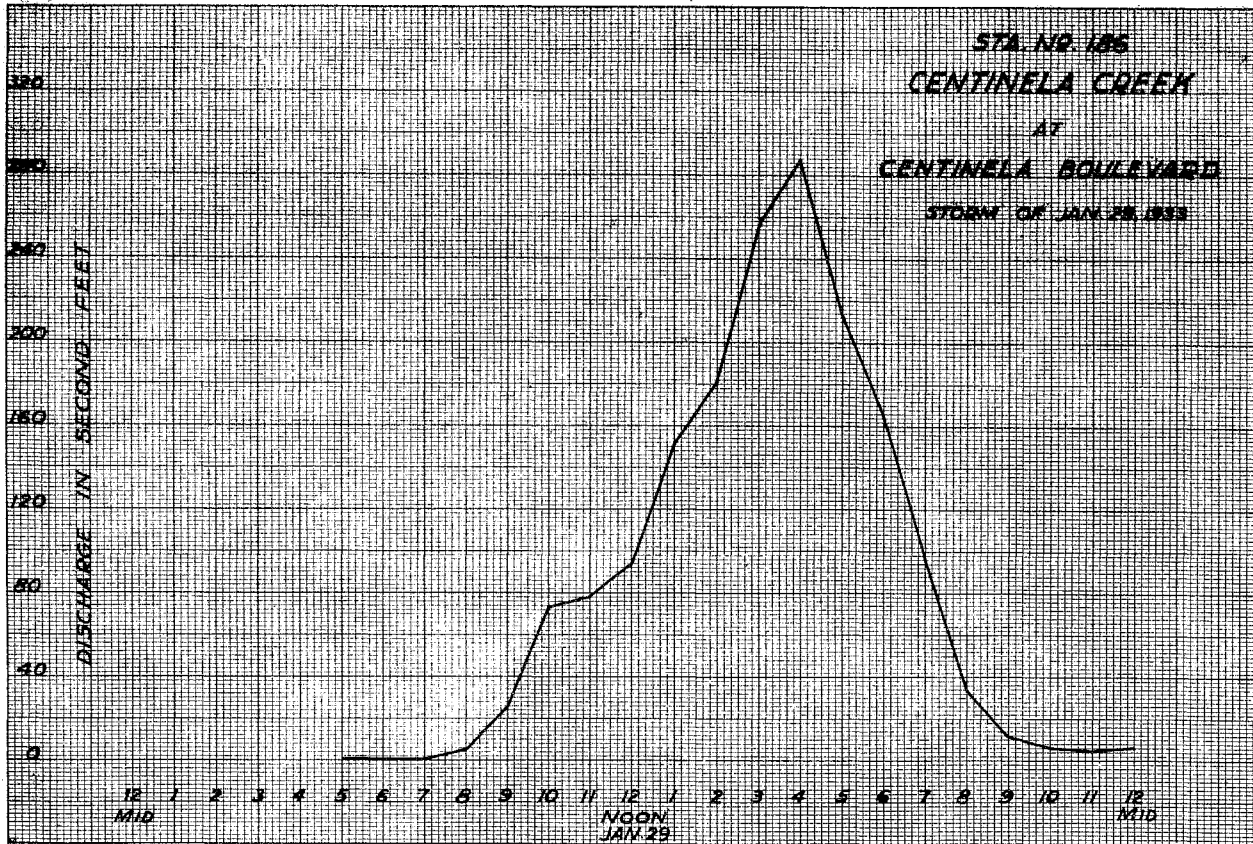
File No. 186

Drainage Area Square Miles [HARDGROVE - J.H. Prickett Observer] Gage No. CONTINUOUS Used rating table dated 1928-1933

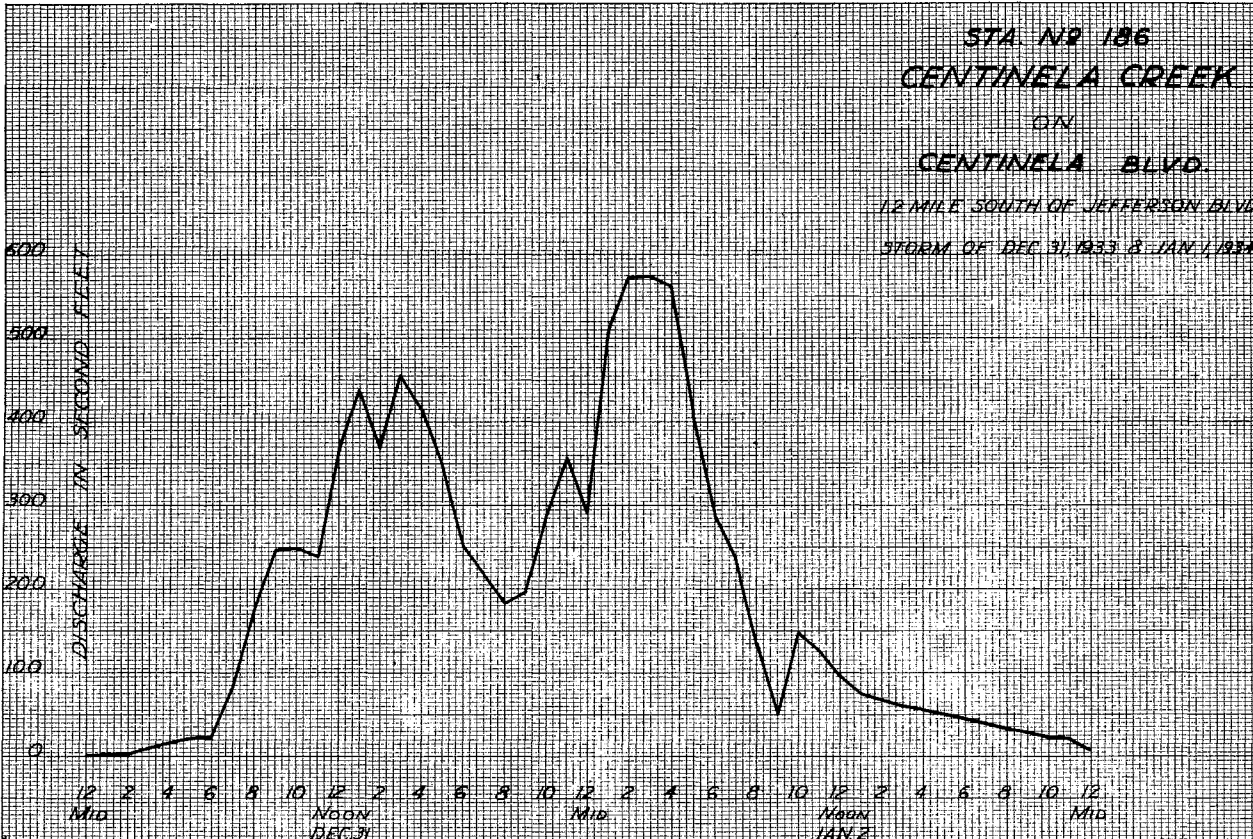
DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
1							H	179.95																
2							L	1.49																
3																								
4																								
5																								
6																								
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31																								
TOTAL																								
Mean Daily Discharge in Second-Foot																								
Second-Foot per square mile																								
Discharge in cubic feet																								
Maximum Mean Daily Discharge in Second-Foot																								
Minimum Mean Daily Discharge in Second-Foot																								
Discharge in Second-Foot																								



SCOTT & WHEELER CO., N. Y. 80-504511
12 x 18 IN. SHEET



SCOTT & WHEELER CO., N. Y. 80-504511
12 x 18 IN. SHEET



LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. FC 37

F-37 R

COMPTON CREEK AT ROSECRANS AVENUE, COMPTON

Location On Rosecrans Avenue bridge about 1 mile northwest of Compton, Los Angeles County, California.

Drainage Area 21.7 square miles.

Installed by Los Angeles County Flood Control District, January 22, 1928.

Records Available January 22, 1928 to September 30, 1934 at Los Angeles County Flood Control District, Los Angeles, California.

Gage An continuous water stage recorder in small house on top of corrugated iron pipe stilling well attached to east wing wall of bridge, downstream side. Staff gage is attached to stilling well.

Discharge Measurements High water measurements are made from bridge. Low water measurements are made by wading near gage.

Channel and Control Channel is hard clay, banked. Good control.

Extremes of Discharge 1928-1929 Maximum- 924 c.f.s. March 10, 1929. Minimum- Dry at various times during year. 1929-1930 Maximum- 580 c.f.s. March 14, 1930. Minimum- Dry at various times during year. 1930-1931 Maximum- 678.5 c.f.s. April 26, 1931. Minimum- Dry at 12 noon, September 21, 1931. 1931-1932 Maximum- 757 c.f.s. January 31, 1932. Minimum- Dry at various times during year. 1932-1933 Maximum- 740 c.f.s. January 19, 1933. Minimum- Dry at various times during year. 1933-1934 Maximum- 959.80 c.f.s. January 1, 1934. Minimum- Dry various times during year.

Diversions None.

Regulation None.

Accuracy Good.

Operation Located and constructed by the Los Angeles County Flood Control District and operated by the Los Angeles County Flood Control District in conjunction with the U.S.G.S. Water Resources Branch.

Discharge measurements of COMPTON CREEK

at Rosecrans Avenue, during the year ending September 30, 1933.

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec.-ft., Rating, Method, Mean gage No., G. H. change Feet, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. FC 37

Discharge measurements of COMPTON CREEK

at Rosecrans Avenue, during the year ending September 30, 1933.

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec.-ft., Rating, Method, Mean gage No., G. H. change Feet, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 37

Discharge measurements of Compton Creek

at Rosecrans Avenue, during the year ending September 30, 1934.

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec.-ft., Rating, Method, Mean gage No., G. H. change Feet, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 37

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 37

Discharge measurements of Compton Creek at Rosecrans Avenue during the year ending September 30, 1934

Discharge measurements of Compton Creek at Rosecrans Avenue during the year ending September 30, 1934

Table with columns for Date, Made by, Width, Area of Basin, Mean Velocity, Gage Height, Discharge, Rating, Method, Mean No., G. H., Time, Meter No., and corresponding values for each day from 1934/2/15 to 1934/8/2.

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of COMPTON CREEK at ROSECRANS AVE. for the Year Ending September 30, 1933

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Form No. 37

Drainage Area 21.7 Square Miles, Observed by C. E. Slaughter, Gage Read Continuous, Using rating table dated 6/21/33

Large monthly table showing Gage Height and Discharge from October to September. Includes summary statistics at the bottom such as 'TOTAL', 'Mean Daily Discharge', and 'Maximum Daily Discharge'.

* - Interpolated Discharge from Weekly Measurements.

Daily Gage Height, in Feet, and Discharge, in Second-Feet, of **COMPTON CREEK**

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

File No. 37

At **ROSECRANS AVENUE**

for the Year Ending September 30, 1934

Drainage Area: 21.7 Square Miles.

G. E. Slaughter
E. S. Bonshiman

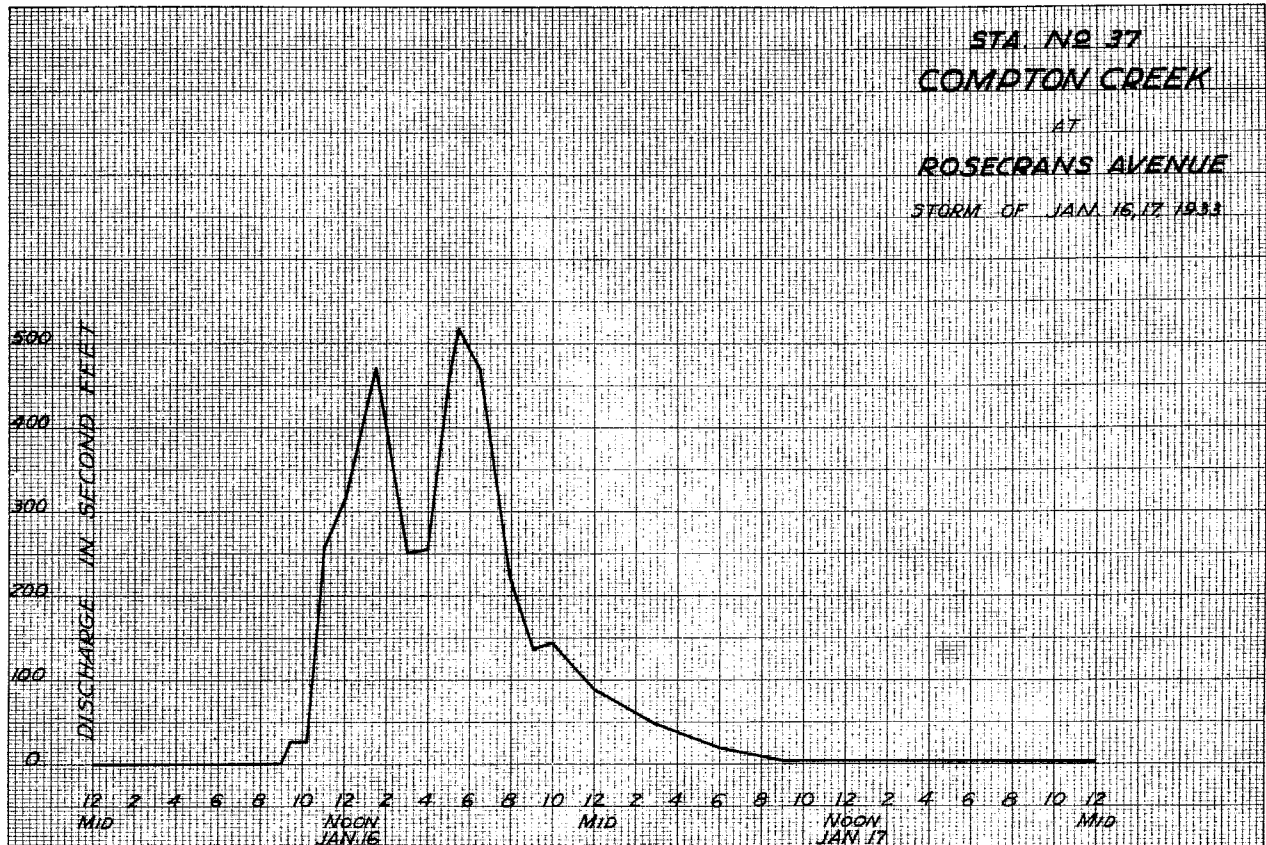
Observer.

Gage Head: CONTINUOUS

Used rating table dated 1933

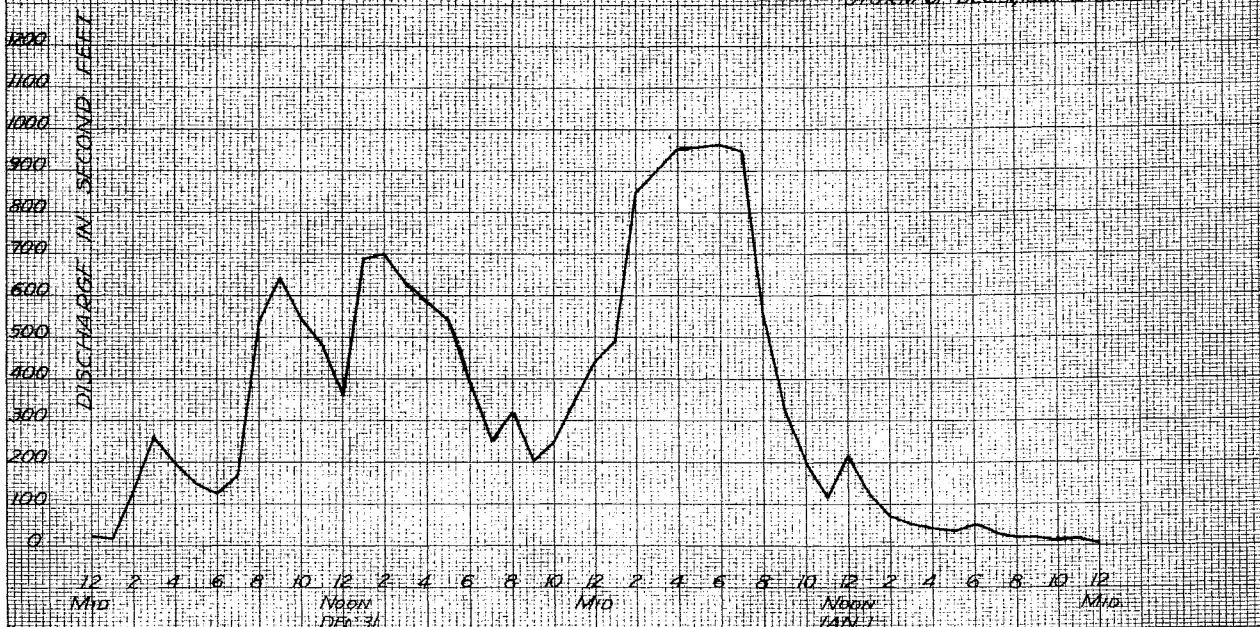
dated 6-18-34
8-28-34

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		DAY				
	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge		Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge		Gage height	Discharge		
1			0.21	0.44	0.06	0.04	H	544.38	0.29	0.87	0.45	2.19	1	0.25	0.64							2.54	3.64	2.20	0.55	1				
2		DRY	0.16	0.25			H	3.92	0.28	0.81	0.42	1.84	2	0.24	0.59							H	2.97			2				
3		DRY	0.13	0.16			0.38	1.50	0.27	0.76	0.40	1.66	3	0.24	0.59							2.58	4.54		DRY	3				
4		DRY	0.03	0.02			0.23	0.54	0.23	0.54	0.35	1.28	4	0.19	0.36							2.31	1.00			4				
5		0.22	0.49	0.01	0			0.23	0.54	0.13	0.16	0.28	0.81	5	0.25	0.64			H	26.36		1.98	0.24	2.01	0.27	5				
6		0.21	0.44					0.24	0.59	0.24	0.59	0.35	1.28	6	0.20	0.40						1.75	0.02	I	0.26	6				
7		0.02	0.01	0.04	0.02	0.18	0.32	0.11	0.12	0.26	0.70	0.38	1.50	7	0.23	0.54			0.17	0.28		H	0.66	I	0.25	7				
8			0.07	0.05	0.24	0.59	0.08	0.07	0.26	0.70	0.33	1.13	8	0.23	0.54	0.27	0.76					2.17	0.49	I	0.24	8				
9		DRY	0.10	0.10	0.31	0.92	0.21	0.44	0.26	0.70	0.33	1.13	9		0	0.15	0.22					H	0.50	I	0.23	9				
10			0.07	0.05	0.38	1.50	0.23	0.54	0.25	0.65	0.32	1.06	10	0.17	0.28	0.16	0.25					2.31	1.00	I	0.22	10				
11		0.13	0.16	0.06	0.04	I	2.06	0.23	0.54	0.25	0.65	0.26	0.70	11	0.17	0.28	0.11	0.12			H	0.60	1.98	0.24	I	0.21	11			
12		0.22	0.49			H	38.51	0.23	0.54	0.12	0.14	0.12	0.14	12	0.20	0.40	0.27	0.76			H	1.18	1.82	0.08	I	0.20	12			
13		0.20	0.40			H	194.00	0.10	0.10	0.16	0.25	0.18	0.32	13	0.20	0.40						2.38	1.50	0	I	0.19	13			
14		0.05	0.03	0.07	0.05	H	23.03	0.07	0.05	0.20	0.40	0.24	0.59	14	0.28	0.81						0	1.78	0.04	1.93	0.19	14			
15			0.08	0.07	0.58	4.54	0.09	0.09	0.36	1.35	0.27	0.76	15	0.34	1.20							0	1.96	0.22	2.12	0.39	15			
16		DRY	0.08	0.07	0.39	1.58	0.19	0.36	0.50	2.92	0.28	0.81	16		0						H	0	1.75	0.02	1.90	0.16	16			
17			0.13	0.16	0.13	0.16	0.22	0.49	0.31	1.00	0.25	0.65	17	0.24	0.59						H	0.41	2.13	0.41	1.56	0	17			
18		0.03	0.02	0.17	0.28	0.16	0.25	0.22	0.49	0.29	0.87	0.30	0.93	18	0.28	0.81						2.22	0.60	2.14	0.43	2.07	0.33	18		
19			0.07	0.05	0.19	0.36	I	0.54	0.33	1.13	0.19	0.36	19								H	1.54	1.97	0.23	2.20	0.55	19			
20		0.03	0.02	0.02	0.01	0.19	0.36	I	0.59	H	33.07	0.32	1.06	20								2.25	0.69	0	2.23	0.63	20			
21			0.09	0.08	0.12	0.36	I	0.64	0.32	1.06	0.30	0.93	21			0.25	0.65				2.05	0.31	2.18	0.51	2.31	1.00	21			
22		0.04	0.02	0.16	0.25	I	0.40	I	0.70	0.46	2.32	0.31	1.00	22			0.23	0.54				0	2.11	0.37	1.89	0.15	22			
23			0.21	0.44	I	0.49	I	0.76	H	23.94	0.31	1.00	23		DRY	0.20	0.40					0	2.16	0.47	1.99	0.25	23			
24		0.06	0.04	0.10	0.10	I	0.54	I	0.81	H	52.82	0.30	0.93	24			0.17	0.28				H	2.86	2.20	0.55	1.85	0.11	24		
25		0.13	0.16	0.11	0.12	I	0.65	I	0.87		DRY	0.29	0.87	25			0.24	0.59					2.31	1.00	2.04	0.30	2.08	0.34	25	
26		0.14	0.19	0.08	0.07	I	0.70	0.29	0.87			0.23	0.54	26								H	1.53	1.82	0.08	2.17	0.49	26		
27		0.09	0.08	0.04	0.02	0.28	0.81	0.20	0.40	0.25	0.65	0.30	0.93	27								2.27	0.77	0	2.14	0.43	27			
28		0.04	0.02	0.40	1.66	0.28	0.81	0.10	0.10	0.27	0.76	0.26	0.70	28								2.53	3.45	1.85	0.11	2.10	0.36	28		
29		DRY	0.30	0.93	0.22	0.49	0.11	0.12			0.25	0.64	29									2.10	0.36	2.00	0.26	2.09	0.35	29		
30			0.10	0.10	H	14.54	0.25	0.65			0.26	0.70	30									H	0.07	2.11	0.37	2.04	0.30	30		
31		H	7.72		H	371.76	0.28	0.81			0.26	0.70	31										2.55	3.85	2.30	0.93		31		
TOTAL		10.29	5.59	659.84	363.37	129.81	29.14	9.07	4.57	26.64	21.68	20.68	8.65	1289.33																
Mean Daily Discharge in Second-Feet		0.33	0.19	21.29	11.72	4.64	0.94	0.30	0.15	0.89	0.70	0.67	0.29	3.53																
Second-foot per square mile		0.015	0.009	0.981	0.540	0.214	0.043	0.014	0.007	0.041	0.032	0.031	0.013	0.163																
Lowest depth in inches		0.018	0.010	1.131	0.623	0.230	0.050	0.016	0.008	0.047	0.037	0.035	0.015	2.210																
Lowest in area-foot		20.41	11.09	1308.79	720.74	257.48	57.80	17.99	9.06	52.84	43.00	41.02	17.16	2557.39																
Maximum Mean Daily Discharge in Second-Feet		7.72	1.66	371.76	344.38	52.82	2.19	1.20	0.76	26.36	3.85	4.54	1.00	371.76																
Minimum Mean Daily Discharge in Second-Feet		0	0		0.05		0	0	0	0	0	0	0	0																



**STA NR 37
COMPTON CREEK
AT
ROSECRANS AVENUE**

STORM OF DEC 3, 1933 & JAN 1, 1934



Discharge measurements of Coyote Creek below P. E. Bridge
Artesia during the year ending September 30, 1933
near _____

F-41 R

COYOTE CREEK BELOW P. E. BRIDGE NEAR ARTESIA

Location
100 feet south of Pacific Electric Railroad Trestle on the east bank of the creek, 2.5 miles from Artesia, Los Angeles County, California.

Drainage Area
110 square miles.

Installed by
Los Angeles County Flood Control District, December 1, 1928

Records Available
December 1, 1928 to September 30, 1934 at Los Angeles County Flood Control District, Los Angeles, California.

Gage
Rational, 7 day recorder inclosed in shelter house on top of corrugated iron stilling well. Staff gage connected to stilling well.

Discharge Measurements
High measurements are made from P.E. R.R. Trestle.
Low measurements are made by wading.

Channel and Control
Channel is clay grown up with tules.
No control.

Extremes of Discharge
1929-1930
Maximum- 91 c.f.s. January 15, 1930.
Minimum- Dry at various times during year.
1930-1931
Maximum- 217.67 c.f.s. February 5, 1931.
Minimum- Dry at various times during year.
1931-1932
Maximum- 799 c.f.s. February 9, 1932
Minimum- Dry various times of year.
1932-1933
Maximum- 283.2 c.f.s. January 30, 1933.
Minimum- Dry part of year.
1934-1934
Maximum- 2023.4 c.f.s. January 1, 1934.
Minimum- Dry various times of year.

Diversion
None.

Regulation
None.

Accuracy
Poor.

Operation
Located and constructed by Los Angeles County Flood Control District and operated by Los Angeles County Flood Control District in conjunction with the U.S.G.S. Water Resources Branch.

No.	Date	Made by	Width Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec.-ft.	Rating Power diff.	Method	Mean sec. No.	G. H. Gauge Foot	Time Hours	Mean No.
1	1933 1/21	Slaughter	7.0	3.30	1.34	3.70	4.44	.6	4	0	1/6	FC 6	
2	1/26	"	6.0	.90	.08	2.55	.07		Float				
3	1/30	Slaughter-Purdy	39.0	87.6	0.76	4.31	66.86	.6	8	-0.01	"	"	
4	2/9	Slaughter	2.0	.80	.26	2.45	0.21		Float				
5	2/16	"	4.0	0.20	.07	2.45	0.01		"				
6	2/23	"	4.0	0.20	0.05	2.44	0.01		"				
7	3/2	"	6.0	1.80	0.08	2.44	0.15		"				
8	3/9	"	4.0	.20	0.05	2.36	0.01		"				
9	3/16	"	6.0	1.50	0.13	2.40	0.20		"				

Discharge measurements of COYOTE CREEK
at Below P. E. Bridge near Artesia during the year ending September 30, 1934
near _____

No.	Date	Made by	Width Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec.-ft.	Rating Power diff.	Method	Mean sec. No.	G. H. Gauge Foot	Time Hours	Mean No.
1	1934 1/1	Slaughter & Johnson Landis	56	322.95	3.34	7.95	1078.4	0.6	8			1/3	FC 6
2	1/2	McAulay-Delaney	43	125.0	1.07	4.55	127.40	0.6	9			5/12	
3	1/4	Slaughter-Johnson	13.0	4.30	0.73	2.39	3.05	0.6	9			1/4	"
4	1/11	"	8	1.0	.41	2.18	0.41		float	3		1/12	float
5	1/18	Johnson	8	2.50	.64	2.19	1.60		"	4		1/15	"
6	1/25	Slaughter	4.0	1.30	0.36	2.20	0.49		"	4		1/20	"
7	2/1	"	6	1.50	0.30	2.23	0.45		"	3		1/20	"
8	2/8	"	8.0	2.10	0.36	2.26	0.76		"	4		1/15	"
9	2/15	"	6.	1.20	0.40	2.24	0.48		"	3		1/20	"
10	2/22	"	3.0	0.35	0.51	2.19	0.18		"	3		1/20	"
11	3/1	"	6.0	1.80	0.28	2.26	0.50		"	2		1/20	"
12	3/8	"	6.	1.50	.71	2.28	1.07		"	3		1/20	"
13	3/15	"	6.0	1.10	0.28	2.22	0.31		"	3		1/20	"
14	3/22	"	6.0	0.90	0.16	2.18	0.14		"	3		1/20	"
15	3/29	"	4.0	0.70	0.14	2.18	0.10		"	2		1/20	"
16	4/5	"				2.16	trace						

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of

COYOTE CREEK

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. 41

At Artesia for the Year Ending September 30, 1933.

Table with columns for months (OCTOBER to SEPTEMBER) and days (1-31). Includes sub-columns for Gage height and Discharge. Includes summary statistics at the bottom such as 'TOTAL', 'Mean Daily Discharge in Second-foot', and 'Maximum Mean Daily Discharge in Second-foot'.

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of

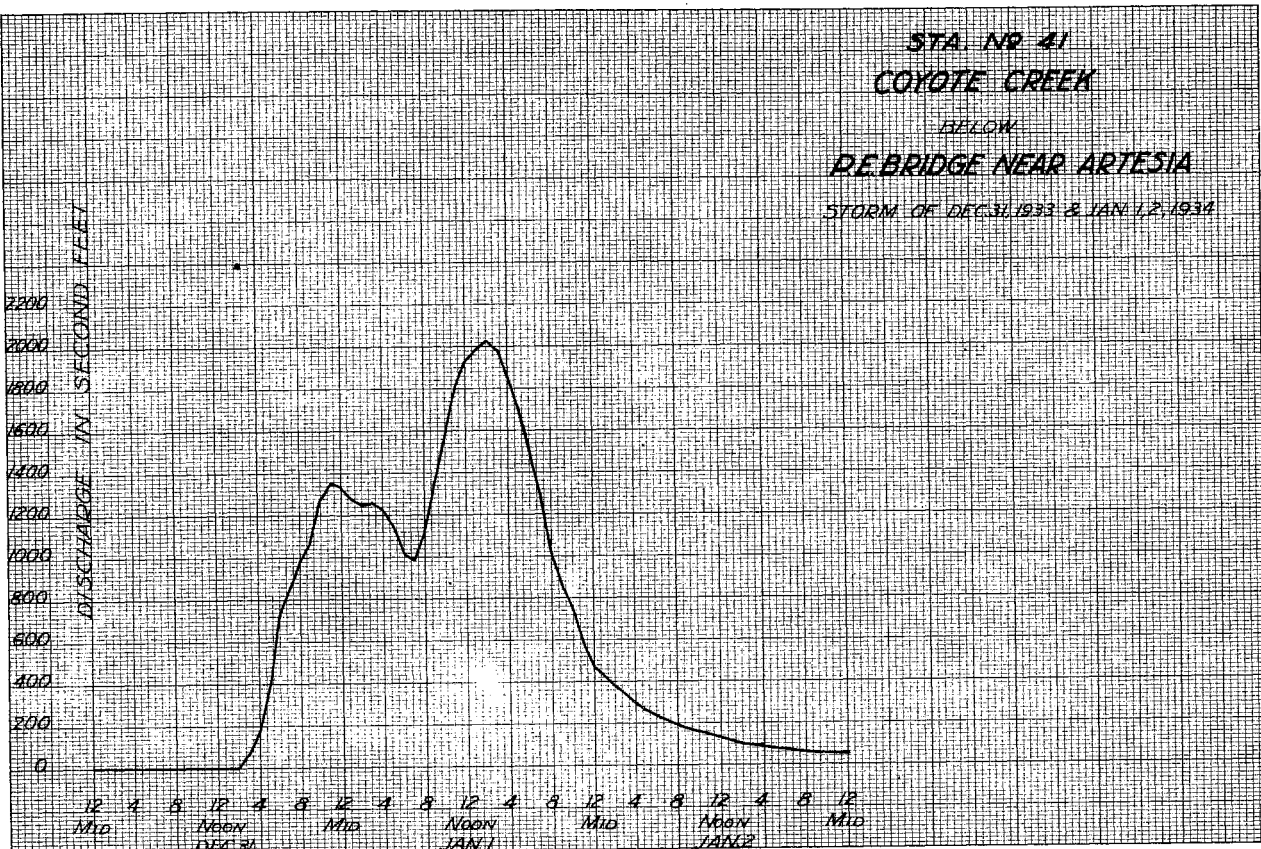
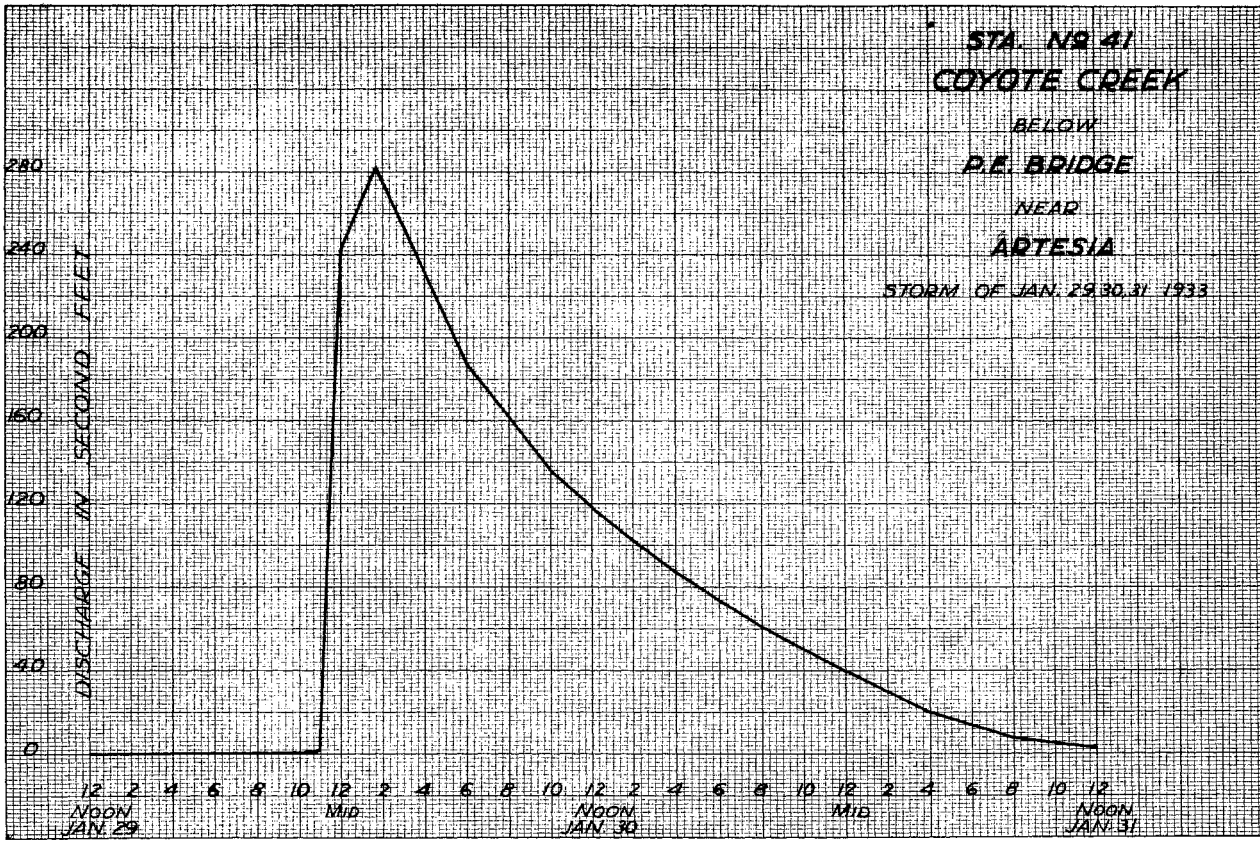
COYOTE CREEK

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. 41

At Below P. E. Bridge Near Artesia for the Year Ending September 30, 1934.

Table with columns for months (OCTOBER to SEPTEMBER) and days (1-31). Includes sub-columns for Gage height and Discharge. Includes summary statistics at the bottom such as 'TOTAL', 'Mean Daily Discharge in Second-foot', and 'Maximum Mean Daily Discharge in Second-foot'.



F-53 R

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. 53

DUME CREEK (ZUMA) AT ROOSEVELT HIGHWAY BRIDGE

Location
On Roosevelt Highway Bridge, near Dume Point about 1/4 mile from Pacific Ocean, 20 miles west of Santa Monica, Los Angeles County, California.

Discharge measurements of Dume Creek
at Roosevelt Highway Bridge during the year ending September 30, 1933

Drainage Area
5.76 square miles.

Installed by
Los Angeles County Flood Control District, January 15, 1930.

Records Available
January 15, 1930 to September 30, 1934 at offices of the Los Angeles County Flood Control District, Los Angeles, California.

Gage
A continuous water stage recorder installed in house on top of galvanized iron pipe stilling well on downstream side of bridge.

Discharge Measurements
High flows measured from bridge.
Low flows measured by wading.

Channel and Control
Sand and gravel. No control.

Extremes of Discharge
1929-1930
Maximum- 426.0 c.f.s. on January 15, 1930.
Minimum- Dry most of year.
1930-1931
Maximum- 205 c.f.s. February 4, 1931.
Minimum- Dry most of year.
1931-1932
Maximum- 425.0 c.f.s. December 28, 1931.
Minimum- Dry most of year.
1932-1933
Maximum- 110.0 c.f.s. January 19, 1933.
Minimum- Dry most of year.
1933-1934
Maximum- 2750.0 c.f.s. December 31, 1933.
Minimum- Dry most of year.

Diversions
None.

Regulation
None.

Accuracy
Fair

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

No.	Date	Made by	Width Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec.-ft.	Rating	Method	Mean base Sta.	C. St. class. Type	Time of rise	Water Sta.
1	1/22	Hardgrove-Kiefer	8.	5.52	1.68	.60	9.32	.6	5	-.01	1/12	FO 20	
2	1/22	"	8.0	5.44	1.76	.585	9.58	.6	4	-.01	1/12	"	
3	1/29	Hardgrove-McBride	9.5	8.45	2.88	.89	24.35	.6	5	-.02	1/12	222551	
4	1/29	"	8.	8.6	3.26	.88	28.1	.6	4	0	1/12	"	

F. C. Dist.—Form 103—1000—9-31

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of DUME CREEK
At Roosevelt Highway Bridge for the Year Ending September 30, 1933

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

File No. 53

Drainage Area 5.76 Square Miles. (Hardgrove Observer.) Gage Road Continuous Used rating table dated _____

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		DAY	Quarter	First	Second	Third	Fourth	Composite	Checked	Date
	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	DAY										
1																								1									
2																									2								
3																									3								
4																									4								
5																									5								
6																									6								
7																									7								
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29																									29								
30																									30								
31																									31								
TOTAL	0	0	0	0	0	0	0	41.06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31								41.06	
Mean Daily Discharge in Second-foot								1.32																									0.113
Second-foot per square mile								.151																									.013
Run-off, depth in inches								.174																									.174
Run-off in acre-feet	0	0	0	0	0	0	0	21.44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									21.44	
Maximum Mean Daily Discharge in Second-foot								15.20																									15.20
Minimum Mean Daily Discharge in Second-foot								0																									0

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of DUME CREEK

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

File No. 53

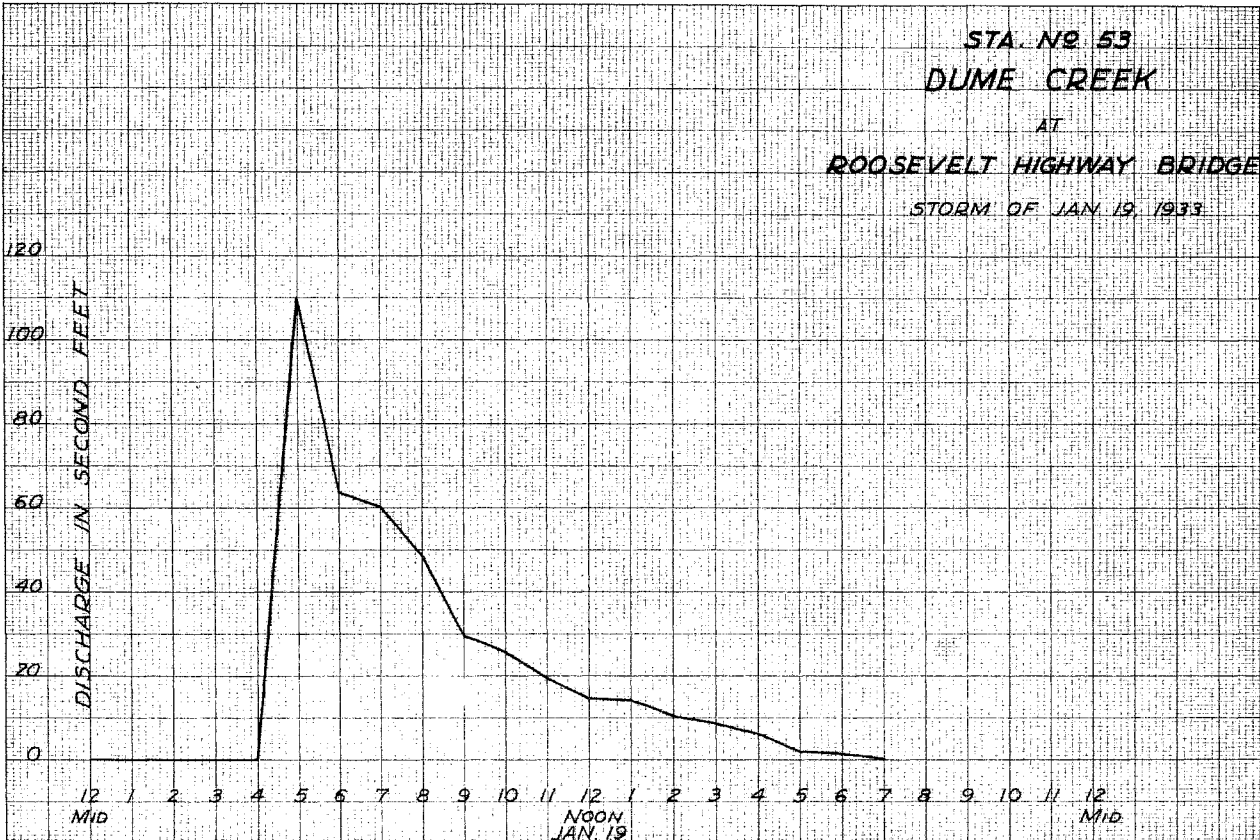
At ROOSEVELT HIGHWAY BRIDGE for the Year Ending September 30, 1934

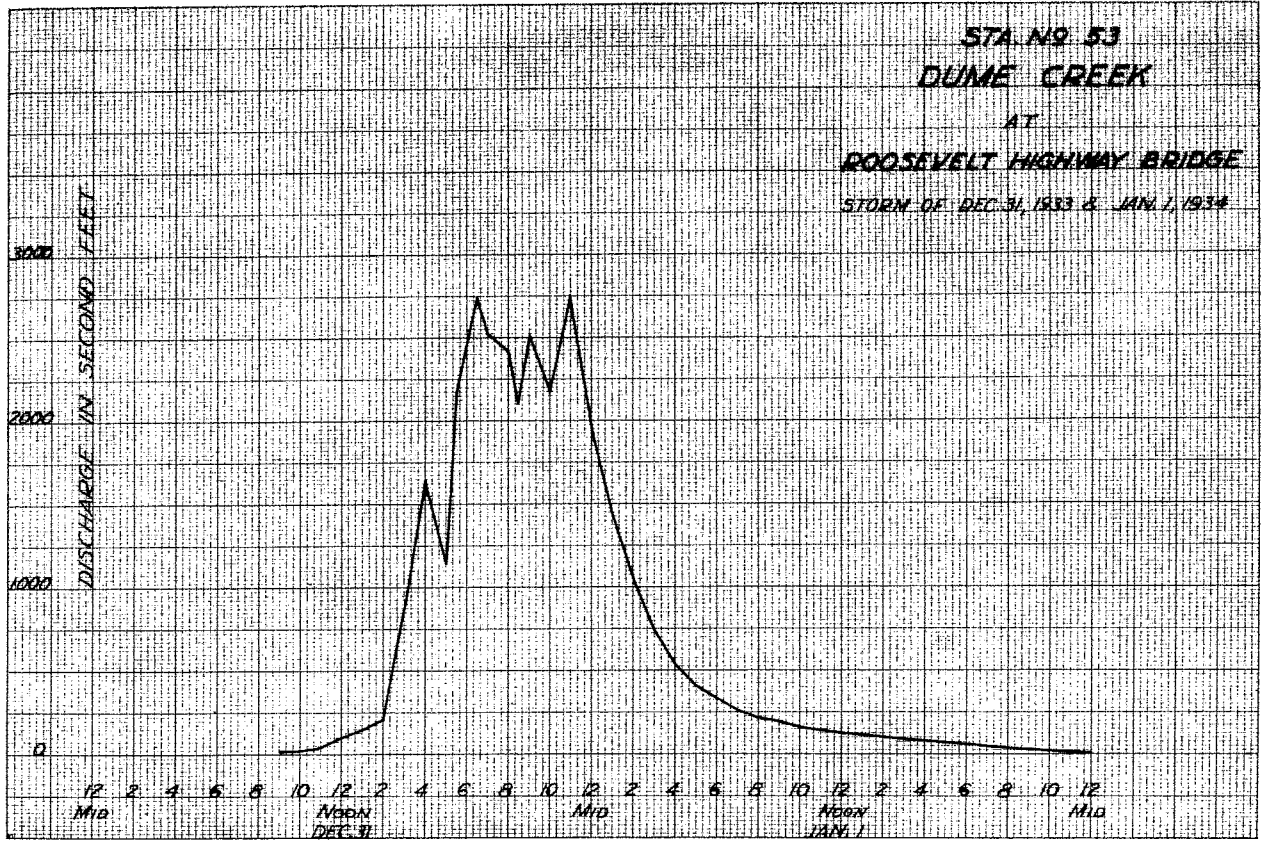
Drainage Area, 8.76 Square Miles. Hardgrove - Prickett (Observer.)

Gage Read Continuous

Used rating table dated Oct. 2, 1934

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		DAY
	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	
1							H	302.03																	1
2							H	282																	2
3																									3
4																									4
5																									5
6																									6
7																									7
8																									8
9																									9
10																									10
11																									11
12																									12
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26																									26
27																									27
28																									28
29																									29
30																									30
31																									31
TOTAL							H	839.36																	
Max Daily Discharge in Second-foot								27.08																	
Run-off, depth in inches																									
Run-off in acre-foot								1664.87																	
Minimum Mean Daily Discharge in Second-foot								839.36																	
Minimum Mean Daily Discharge in Second-foot								0																	





F-104 R

EATON WASH AT SUNSET AVENUE BRIDGE

Location
On the west end of the upstream side of bridge where Sunset Avenue (formerly known as Ellis Lane) crosses Eaton Wash near El Monte, Los Angeles County, California.

Drainage Area
18.4 square miles.

Installed by
The Los Angeles County Flood Control District December 28, 1930.

Records Available
From December 28, 1930 to September 30, 1934 at Los Angeles County Flood Control District's office, Los Angeles, California.

Gage
Stevens L type 8 day water stage recorder installed in small shelter house on top of corrugated iron pipe stilling well at downstream side of bridge.

Discharge Measurements
Low water measurements made by wading.
High water measurements made from bridge.

Channel and Control
Channel - shifting sand.
Control - None.

Extremes of Discharge
1930-1931
Maximum- 359 c.f.s. on April 26, 1931.
Minimum- Dry most of year.
1931-1932
Maximum- 183.5 c.f.s. on February 8, 1932.
Minimum- Dry most of year.
1932-1933
Maximum- 399.20 c.f.s. January 19, 1933.
Minimum- Dry most of year.
1933-1934
Maximum- 2180.0 c.f.s. January 1, 1934.
Minimum- Dry most of year.

Diversions
None

Regulation
None

Accuracy
Poor

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

F-104 R

NOTE: This station was established at Sunset Avenue (formerly Ellis Lane) September 1930; due to bridge construction was moved to Broadway bridge on December 28, 1930. On November 10, 1931 it was moved back to Sunset Avenue.

F. C. Dist. Form 104A

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. 104

Discharge measurements of Eaton Wash
at Sunset Ave. Bridge, during the year ending September 30, 1933

No.	Date	Made by	Width Feet	Area of section Sq. ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Cfs. ft.	Rising Percent	Method	Mean sea level No.	G. H. Change Feet	Time Hours	Mean No.
1	1/16	Lindsay-Burke	27.0	15.58	5.6	2.60	88.46	.6	7	+	.04	3/10	28283
2	1/19	"	45.0	48.49	7.6	3.53	370.15	.6	7	+	.25	1/4	"
3	1/19	"	46.0	49.59	5.7	4.00	287.02	.6	7	+	.20	1/5	"
4	1/20	"	11.5	2.43	2.6	2.33	6.29	.6	9	+	.02	13/60	"
5	1/23	"	17.5	3.72	2.0	2.18	7.60	.6	7	+	.03	2/15	"
6	1/29	Lindsay	20.7	11.91	4.5	2.34	54.64	.6	6	+	.06	1/6	"

Discharge measurements of Eaton Wash
at Sunset Avenue Bridge, during the year ending September 30, 1934

No.	Date	Made by	Width Feet	Area of section Sq. ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Cfs. ft.	Rising Percent	Method	Mean sea level No.	G. H. Change Feet	Time Hours	Mean No.
1	12/13	Lindsay-Richards	19.8	4.04	2.45	1.92	9.92	.6	8	-	1/6	28283	
2	12/30	"	4.6	1.14	1.03	1.60	1.18	.6	4	-	.03	1/5	"
3	12/31	"	21.	13.5	5.44	2.12	73.58	.6	7	+	.09	1/10	"
4	12/31	"	45.	90.7	7.34	1.80	664.	.6	6	-	1/3	"	
5	1/23	"	19.7	4.93	2.43	2.38	12.00	.6	8	-	2/15	"	
6	2/23	"	16.5	3.91	1.78	2.34	6.99	.6	6	+	1/10	"	
7	2/24	"				2.56	2.		Est				
8	2/24	"				2.45	.1		Est				

Daily Gage Height, in Feet, and Discharge, in Second-Feet, of EATON WASH
Near Sunset Avenue for the Year Ending September 30, 1933.

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

File No. 104

Table with columns for months (OCTOBER to SEPTEMBER) and days (1-31). Includes sub-columns for Gage height and Discharge. Includes summary rows for TOTAL, Mean Daily Discharge, and Run-off.

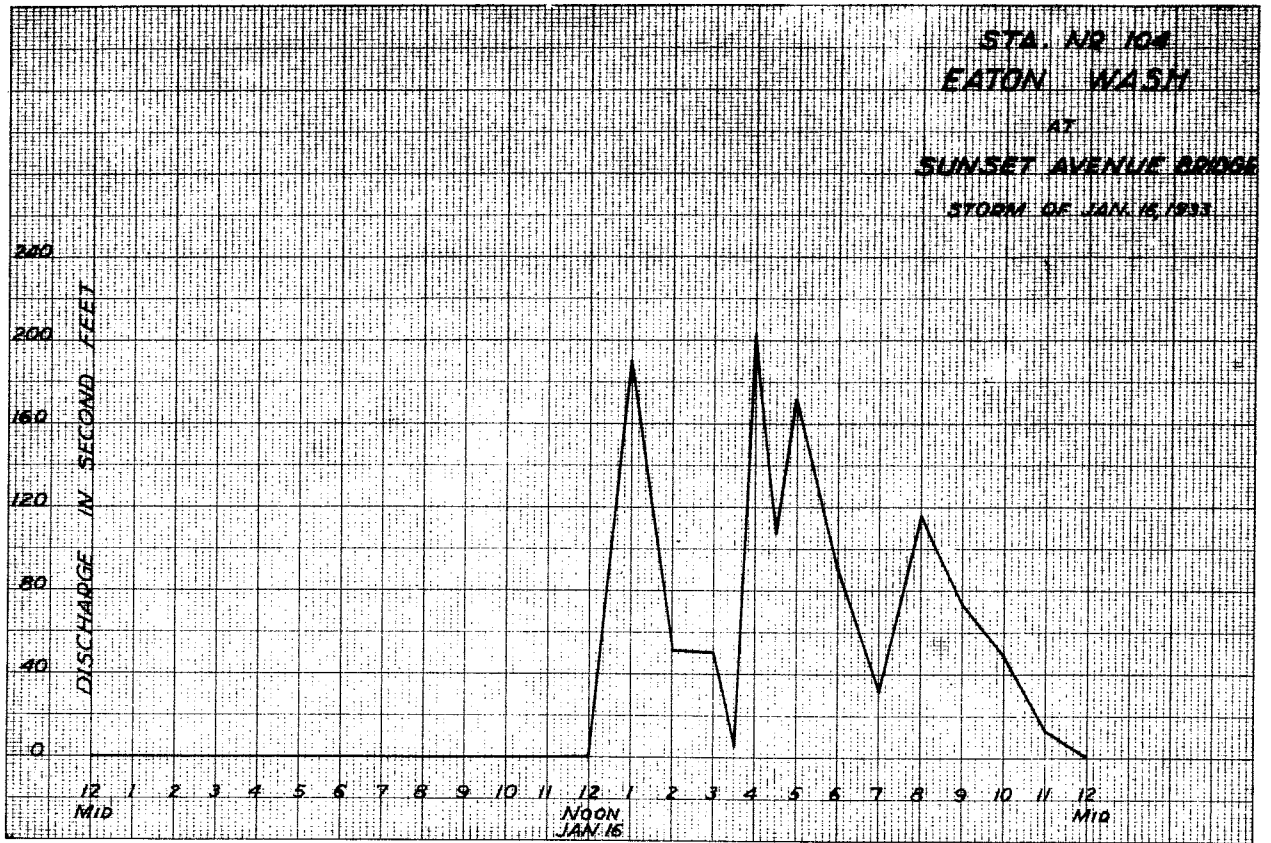
Daily Gage Height, in Feet, and Discharge, in Second-Feet, of EATON WASH
Near SUNSET AVENUE BRIDGE for the Year Ending September 30, 1934.

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

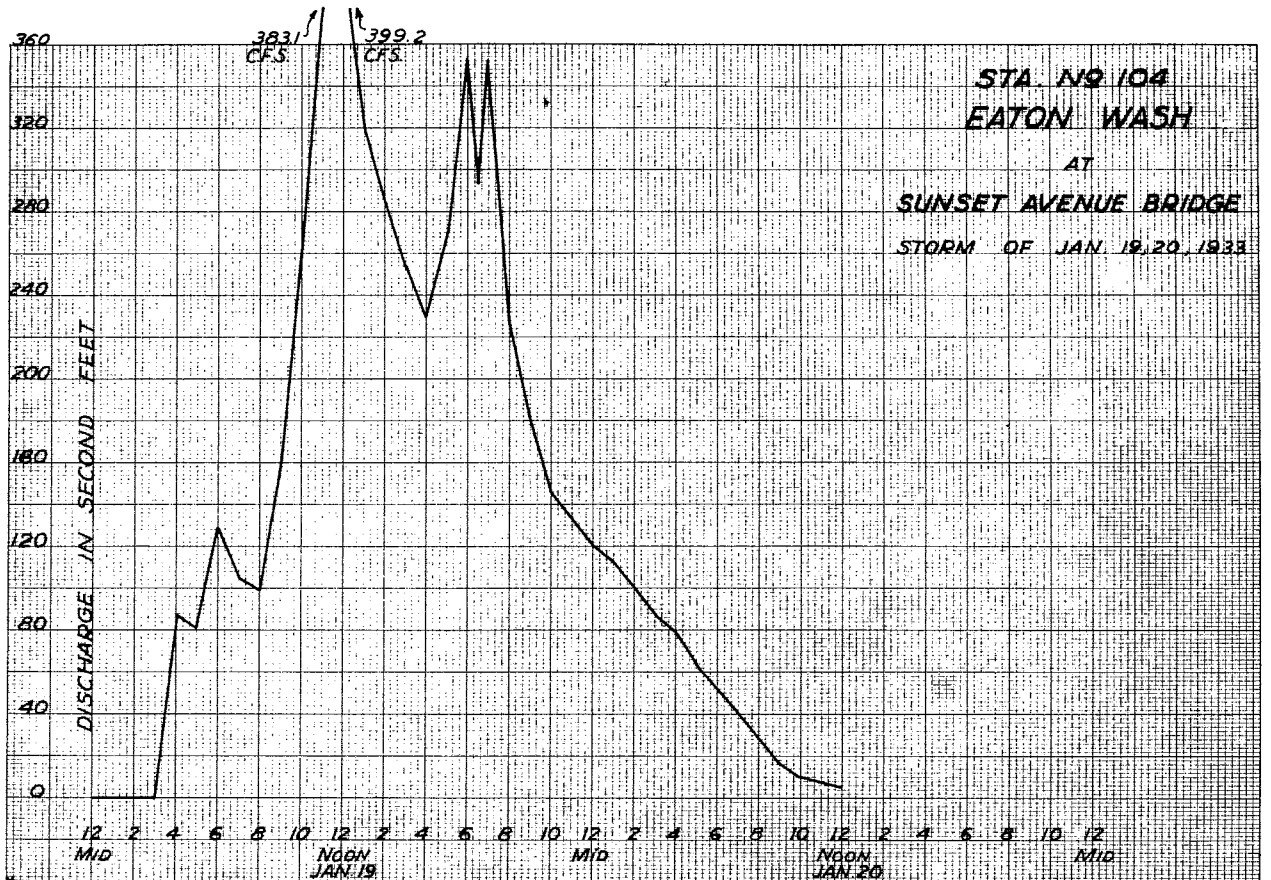
File No. 104

Table with columns for months (OCTOBER to SEPTEMBER) and days (1-31). Includes sub-columns for Gage height and Discharge. Includes summary rows for TOTAL, Mean Daily Discharge, and Run-off.

KEEFE & EBER CO., N. Y. NO. 38411
17 1/2" x 11" (10" x 14")



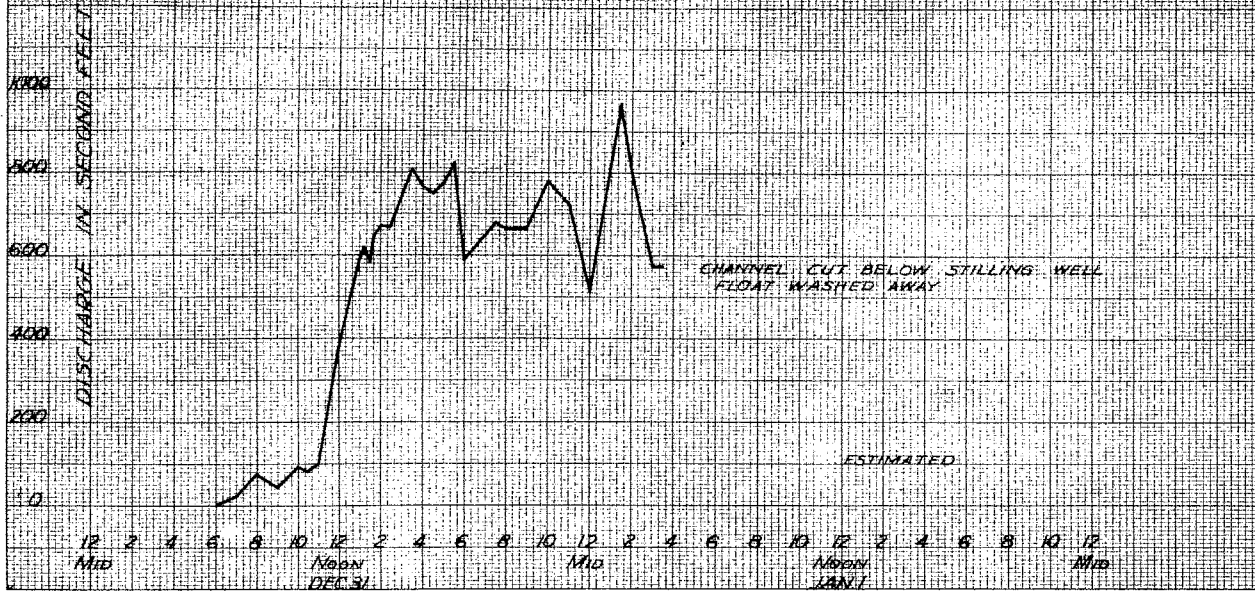
KEEFE & EBER CO., N. Y. NO. 38411
17 1/2" x 11" (10" x 14")



STA. NO 104
EATON WASH

SUNSET AVENUE BRIDGE

STORM OF DEC. 31, 1933 & JAN. 1, 1934



P. C. Dist. Form 104A

F-110 R

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. 110

FOX CREEK
ABOVE JUNCTION WITH BIG TUJUNGA CREEK

Location
On Fox Creek, a tributary to Big Tujunga Creek 1/2 mile above junction with Big Tujunga Creek, about 500 ft. above lower falls.

Drainage Area
9.35 square miles.

Installed by
Los Angeles County Flood Control District November 5, 1930.

Records Available
October 1, 1930 to September 30, 1934 at offices of the Los Angeles Flood Control District, Los Angeles, California.

Gage
A continuous water stage recorder installed in shelter house. Stilling well is corrugated iron pipe.

Discharge Measurements
Low water measurements made by wading near station, and V notch weir.
High water measurements made from cable car 50' below gage.

Channel and Control
Channel is gravel and boulders.
Bed rock control.

Extremes of Discharge
1930-1931
Maximum- 6.90 c.f.s. on February 4, 1931.
Minimum- 0.04 c.f.s. at various times during year.
1931-1932
Maximum- 400 c.f.s. on February 8, 1932.
Minimum- 0.02 c.f.s. October 1, 1931.
1932-1933
Maximum- 115 c.f.s. January 19, 1933.
Minimum- 0.01 c.f.s. various times during year.
1933-1934
Maximum- 214.6 c.f.s. January 1, 1934.
Minimum- Less than 0.01 various times in year.

Diversions
None

Regulation
None

Accuracy
Good

Operation
Located and installed by the Los Angeles County Flood Control District and operated by the Los Angeles County Flood Control District in conjunction with the U.S.G.S. Water Resources Branch.

Discharge measurements of Fox Creek
at Above Junction with Big Tujunga Creek, during the year ending September 30, 1933.
near

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	Mean sea level	G. H. above datum	Time Hours	Meter No.
1	1932 10/13	Irwin				0.64	.023		Weir				
2	10/27	"				.70	.14		"				
3	11/3	Irwin-Case	0.8	0.52	.16	0.69	.087	.6	4	-.06	3/12	FC 2	
4	11/17	Irwin	.8	.032	.65	.66	.021	.6	4	0	1/4	"	
5	12/1	"	3.0	.79	.20	.68	.16	.6	6	0	1/4	"	
6	12/13	"	3.0	.81	.21	.68	.17	.6	6	0	1/6	"	
7	12/22	Delaney-Irwin	3.0	.94	.17	.68	.16	.6	5	0	1/6	"	
8	12/29	Delaney	3.0	.88	.14	.74	.12	.6	4	0	1/6	"	
9	1/5	Delaney	3.0	.780	.17	.76	.13	.6	5	0	1/6	FC 2	
10	1/12	"	3.0	.85	.23	.75	.20	.6	5	0	1/6	"	
11	1/17	"	3.5	1.05	1.18	.86	1.24	.6	6	0	1/6	FO 11	
12	1/24	"	2.0	2.74	1.05	1.00	2.87	.6	5	0	1/6	"	
13	2/2	"	4.3	2.05	1.43	1.00	2.94	.6	5	0	1/6	"	
14	2/9	Irwin-Delaney	7.5	1.75	.95	0.95	1.66	.6	6	0	1/6	"	
15	2/17	Delaney	7.0	1.48	1.01	0.92	1.49	.6	6	0	1/6	"	
16	2/24	"	7.0	1.58	1.12	0.94	1.77	.6	6	0	1/6	"	
17	3/2	"	7.0	1.65	1.12	0.94	1.85	.6	6	0	1/6	"	
18	1933 3/9	Delaney	7.0	1.58	1.06	0.94	1.68	.6	6	0	1/12	FO 11	
19	3/16	"	7.0	1.68	1.01	0.94	1.87	.6	6	0	1/12	"	
20	3/23	"	7.0	1.60	1.09	0.92	1.75	.6	6	0	1/6	"	
21	3/27	"	7.0	1.54	1.05	0.91	1.61	.6	6	0	1/6	FO 30	
22	4/6	"	6.0	1.24	.92	0.88	1.15	.6	5	0	1/12	"	
23	4/13	"	6.0	1.14	.90	0.86	1.03	.6	5	0	1/12	"	
24	4/21	Irwin	6.0	1.04	.94	.86	.98	.6	4	0	1/6	"	
25	4/28	"	6.0	1.24	.95	.84	1.18	.6	6	0	1/6	"	

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 110

Discharge measurements of Fox Creek

at Above Junction with Big Tujunga Creek, during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section, Mean velocity, Gage height, Discharge, Rating, Method, Mean No., G. H. Change Feet, Time Hours, Meter No.

Discharge measurements of Fox Creek

at Above Junction with Big Tujunga, during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section, Mean velocity, Gage height, Discharge, Rating, Method, Mean No., G. H. Change Feet, Time Hours, Meter No.

Table with columns: No., Date, Made by, Width Feet, Area of section, Mean velocity, Gage height, Discharge, Rating, Method, Mean No., G. H. Change Feet, Time Hours, Meter No.

Daily Gage Height, in Feet, and Discharge, in Second-Feet, of Creek Above Junction with Big Tujunga for the Year Ending September 30, 1933.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

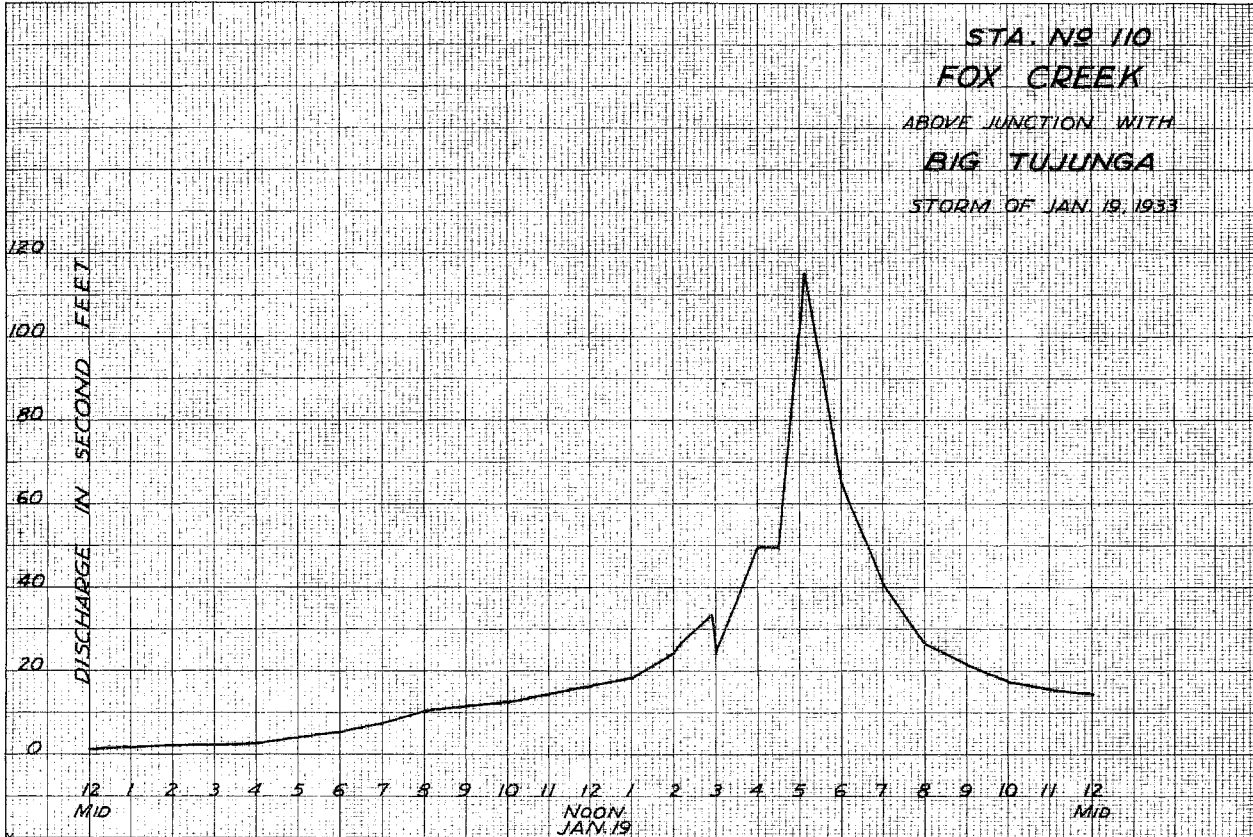
File No. 110

Large table with columns: DAY, OCTOBER, NOVEMBER, DECEMBER, JANUARY, FEBRUARY, MARCH, APRIL, MAY, JUNE, JULY, AUGUST, SEPTEMBER, DAY, Discharge, Gage height, etc.

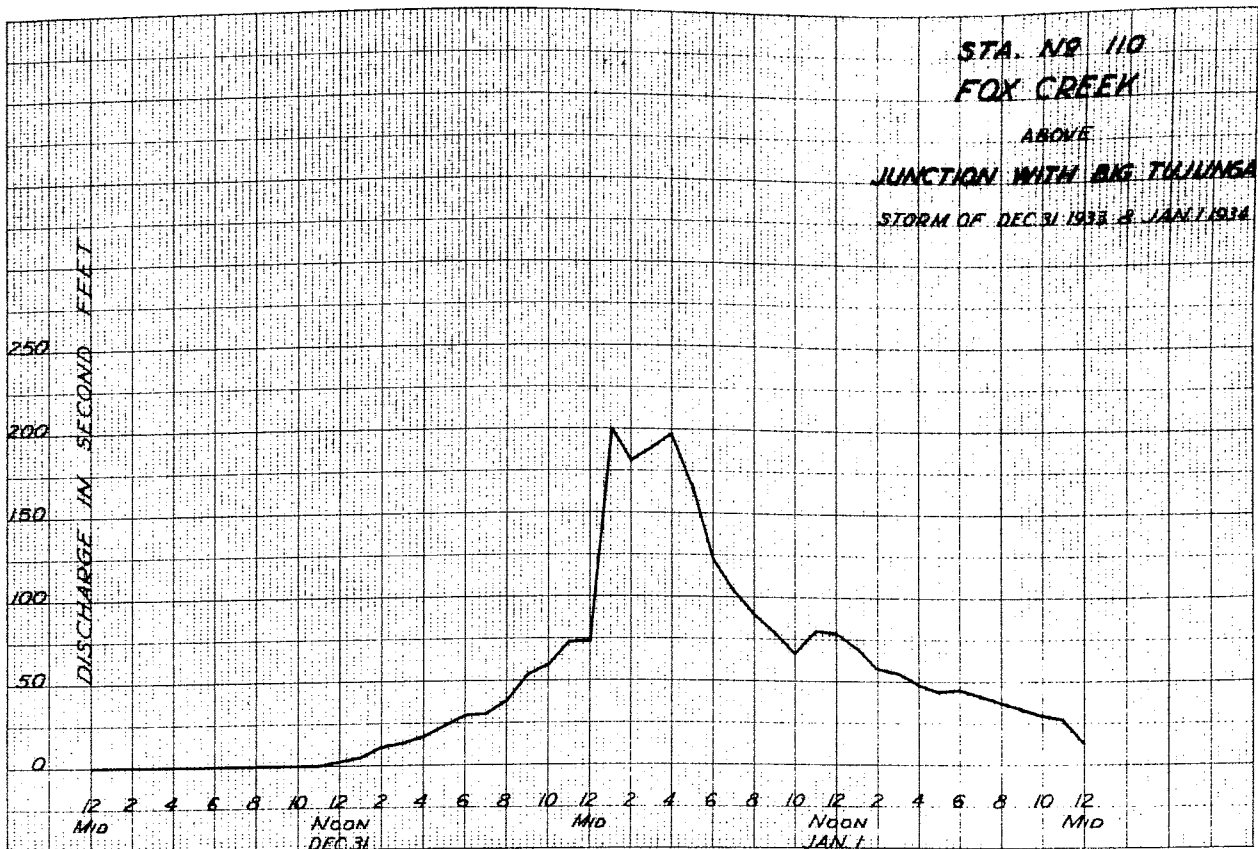
Drainage Area 9.35 Square Miles. Gage Read. Continuous. Used rating table dated 1933 & 1934

Table with columns for months (OCTOBER to SEPTEMBER) and days (1-31). Rows contain Gage height and Discharge data. Includes a summary row at the bottom for 'TOTAL' and 'Maximum Daily Discharge in Second-foot'.

Vertical text on the left side of the page, possibly a page number or reference.



STA. NO 110 FOX CREEK ABOVE JUNCTION WITH BIG TUJUNGA STORM OF JAN. 19, 1933



F-65 R

LITTLE DALTON CREEK AT MOUTH OF CANYON

Location
 About 500' above mouth of Little Dalton Canyon approximately 2 miles northeast of Glendora, Los Angeles County, California.

Drainage Area
 3.3 square miles.

Installed by
 Los Angeles County Flood Control District January 28, 1929.

Records Available
 January 28, 1929 to September 30, 1934 at Los Angeles County Flood Control District offices, Los Angeles California.

Gage
 Rational 7 day water stage recorder installed in wooden shelter house on corrugated iron pipe, 10' upstream from weir, west side of channel. Vertical staff gage at stilling well.

Discharge Measurements
 High water measurements made from foot bridge at recorder house. Low water measurements made by wading near gage.

Channel and Control
 Channel - rocky bottom and sides. Flow controlled by 10' Cippoletti weir. Crest of 10' Cippoletti weir = 0.00 on staff gage.

Extremes of Discharge

1929-1930	Maximum- 28.0 c.f.s. on May 3, 1930.
	Minimum- dry at various times during year.
1930-1931	Maximum- 6.34 c.f.s. April 26, 1931.
	Minimum- Dry at various times during year.
1931-1932	Maximum- 72.23 c.f.s. on January 31, 1932.
	Minimum- Dry most of year.
1932-1933	Maximum- 25.25 c.f.s. January 19, 1933.
	Minimum- Dry various times of the year.
1933-1934	Maximum- 200.74 c.f.s. January 1, 1934.
	Minimum- Dry most of the year.

Diversions
 Small pipe line diversion above station.

Regulation
 None

Accuracy
 Good

Operation
 Located and constructed by the Los Angeles County Flood Control District and operated by the Los Angeles County Flood Control District in conjunction with the U.S.G.S. Water Resources Branch.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 55

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 65

Discharge measurements of Little Dalton Creek

Discharge measurements of Little Dalton Creek

at Mouth of Canyon during the year ending September 30, 19 33

at Mouth of Canyon during the year ending September 30, 19 34

Table with columns: No., Date, Made by, Weir, Area of section, Mean velocity, Stage height, Discharge, Rating, Weir, Mean stage, G. H. change, Time, Meter No.

Table with columns: No., Date, Made by, Weir, Area of section, Mean velocity, Stage height, Discharge, Rating, Weir, Mean stage, G. H. change, Time, Meter No.

Daily Gage Height, in Feet, and Discharge, in Second-Feet, of LITTLE DALTON CREEK

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. 65

at Mouth of Canyon for the Year Ending September 30, 19 33

Drainage Area 3.3 Square Miles, C. L. Brewster (Observer)

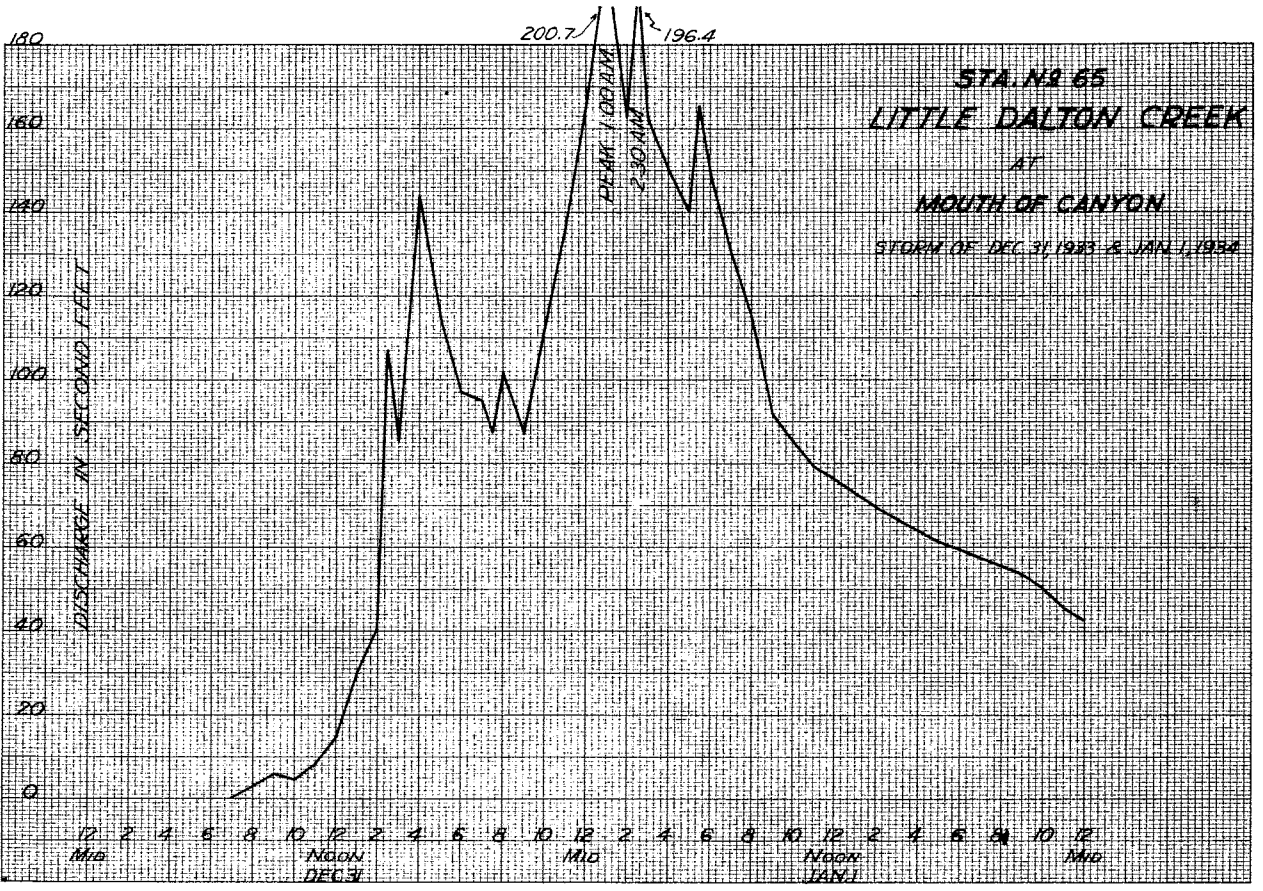
Gage Read CONTINUOUS

Used rating table dated

Large table with columns for months (OCTOBER to SEPTEMBER) and days (1-31), including sub-columns for Gage height and Discharge. Includes summary rows at the bottom for totals and various discharge metrics.

At **MOUTH OF CANYON** for the Year Ending September 30, 1934

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		DAY
	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	
1							H	97.02	#	0.41	0.11	0.58	1	0.05	0.12										1
2							H	21.06	0.08	0.33	0.11	0.58	2	0.05	0.12										2
3							H	0.30	5.20	0.08	0.33	0.11	0.58	3	0.05	0.12									3
4							H	0.25	3.65	0.08	0.33	0.11	0.58	4	0.05	0.12									4
5								0.24	3.34	0.08	0.33	0.11	0.58	5	0.05	0.12									5
6								0.24	3.34	0.08	0.33	0.11	0.58	6	0.04	0.07									6
7								0.24	3.34	0.08	0.33	0.11	0.58	7	0.04	0.07									7
8								0.23	3.03	0.08	0.33	0.10	0.49	8		Dry									8
9								#	2.72	0.08	0.33	0.09	0.41	9	0.03	0.04									9
10								#	2.41	0.08	0.33	0.09	0.41	10	0.01	0.01									10
11								#	1.86	0.08	0.33	0.09	0.41	11	0.01	0.01									11
12								M	1.26	0.08	0.33	0.08	0.33	12		Dry									12
13		DRY					H	1.26	0.08	0.33	0.08	0.33	13		DRY										13
14							H	1.10	0.08	0.33	0.08	0.33	14	0.03	0.04										14
15								#	1.10	0.08	0.33	0.07	0.26	15	0.04	0.07									15
16								#	0.96	0.08	0.33	0.06	0.19	16	0.04	0.07									16
17								#	0.96	0.08	0.33	0.06	0.19	17	0.02	0.02									17
18								#	0.82	0.08	0.33	0.05	0.12	18	0.01	0.01									18
19								M	0.82	0.11	0.58	0.05	0.12	19	0.01	0.01									19
20								#	0.82	0.13	0.82	0.05	0.12	20	0.01	0.01									20
21								#	0.82	0.11	0.58	0.05	0.12	21	0.01	0.01									21
22							DRY	#	0.82	0.15	1.10	0.06	0.19	22	0.01	0.01									22
23								#	0.69	0.19	1.86	0.06	0.19	23											23
24								#	0.69	0.19	1.86	0.06	0.19	24											24
25								#	0.69	0.17	1.44	0.06	0.19	25											25
26								M	0.69	0.16	1.26	0.06	0.19	26											26
27								#	0.69	0.13	0.82	0.05	0.12	27											27
28								#	0.69	0.12	0.69	0.05	0.12	28											28
29								#	0.58	-	-	0.05	0.12	29											29
30								#	0.58	-	-	0.05	0.12	30											30
31							H	49.27	#	0.58	-	-	0.05	0.12	31										31
TOTAL								51.92		163.59		17.03		9.44		1.06								243.04	
Base Daily Discharge in Second-foot								1.67		5.28		0.61		0.30		0.04								0.57	
Second-foot per square mile		DRY		DRY				0.506		1.600		0.185		0.091		0.012								0.200	
Run-off, depth in inches		DRY		DRY				0.585		1.843		0.192		0.106		0.012								2.738	
Run-off in acre-feet								102.98		324.48		33.78		18.72		2.10								482.07	
Maximum Mean Daily Discharge in Second-foot								49.27		97.02		1.86		0.58		0.12								97.02	
Minimum Mean Daily Discharge in Second-foot								0		0.58		0.33		0.12		0								0	



LITTLE SANTA ANITA CREEK 1/4 MILE BELOW FLOOD CONTROL DAM

Location Near mouth of Little Santa Anita Canyon, otherwise known as Sierra Madre, approximately 1 mile northeast of Sierra Madre Los Angeles County, California.

Drainage Area 2.5 square miles.

Installed by Los Angeles County Flood Control District, January 28, 1929.

Records Available January 28, 1929 to September 30, 1934 at offices of Los Angeles County Flood Control District, Los Angeles, California. U.S.G.S. records of flow at U.S.G.S. Station above dam, from July 31, 1916 to date, at offices of U.S.G.S. Water Resources Branch, Los Angeles, California.

Gage Stevens L type 8 day water stage recorder installed in shelter house on stilling well at upper end of swimming pool, on east side of creek. 2' Cippoletti weir, 6" deep, control built on old wall, length 22' at crest, 2 1/2' wide and 50" deep, vertical staff gage attached to stilling well of recorder house.

Discharge Measurements High water flows measured from bridge near gage. Low water flows measured by wading in channel above gage.

Channel and Control Channel - concrete at gage. Check dams have been constructed about every 50 feet above the swimming pool. Control 2' Cippoletti weir, 6" deep in a concrete control 22' long at crest, 2 1/2' wide and 50" deep.

Extremes of Discharge 1929-1930 Maximum- 2.45 c.f.s. March 15, 1930. Minimum- Dry at various times during year. 1930-1931 Maximum- 8.90 c.f.s. April 26, 1931. Minimum- Dry at various times during year. 1931-1932 Maximum- 38.10 c.f.s. February 9, 1932. Minimum- Dry most of year. 1932-1933 Maximum- 89.63 c.f.s. January 19, 1933. Minimum- Dry most of year. 1933-1934 Maximum- 39.10 c.f.s. December 31, 1933. Minimum- Dry most of year.

Diversions Water diverted above Flood Control Dam by Sierra Madre Water Department.

Regulation Flow regulated by Los Angeles County Flood Control Dam 1/4 mile above recorder.

Accuracy Good.

Operation Located and constructed by the Los Angeles County Flood Control District and operated by Los Angeles County Flood Control District in conjunction with U.S.G.S. Water Resources Branch.

F. C. Dist. Form 102A

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 67

Discharge measurements of Little Santa Anita Creek at near 1/4 Mile below Sierra Madre Dam during the year ending September 30, 1933.

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec.-ft., Rating Project diff., Method, Max. No., G. H. Change Total, Time Hours, Meter No.

Discharge measurements of Little Santa Anita Creek at near 1/4 Mile below Sierra Madre Dam during the year ending September 30, 1934.

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec.-ft., Rating Project diff., Method, Max. No., G. H. Change Total, Time Hours, Meter No.

F. C. Dist. Form 105-1000-9-31

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of LITTLE SANTA ANITA CREEK Below Flood Control Dam for the Year Ending September 30, 19 33.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. 67

Drainage Area 2.5 Square Miles. Gage Road CONTINUOUS. Used rating table dated

Main data table with columns for months (OCTOBER to SEPTEMBER) and days (1-31). Rows include Gage height, Discharge, and various summary statistics like TOTAL, Mean Daily Discharge, etc.

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of **LITTLE SANTA ANITA CREEK**

**LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT**

File No. 67

At **1/4 MI. BELOW SIERRA MADRE DAM** for the Year Ending September 30, 1934

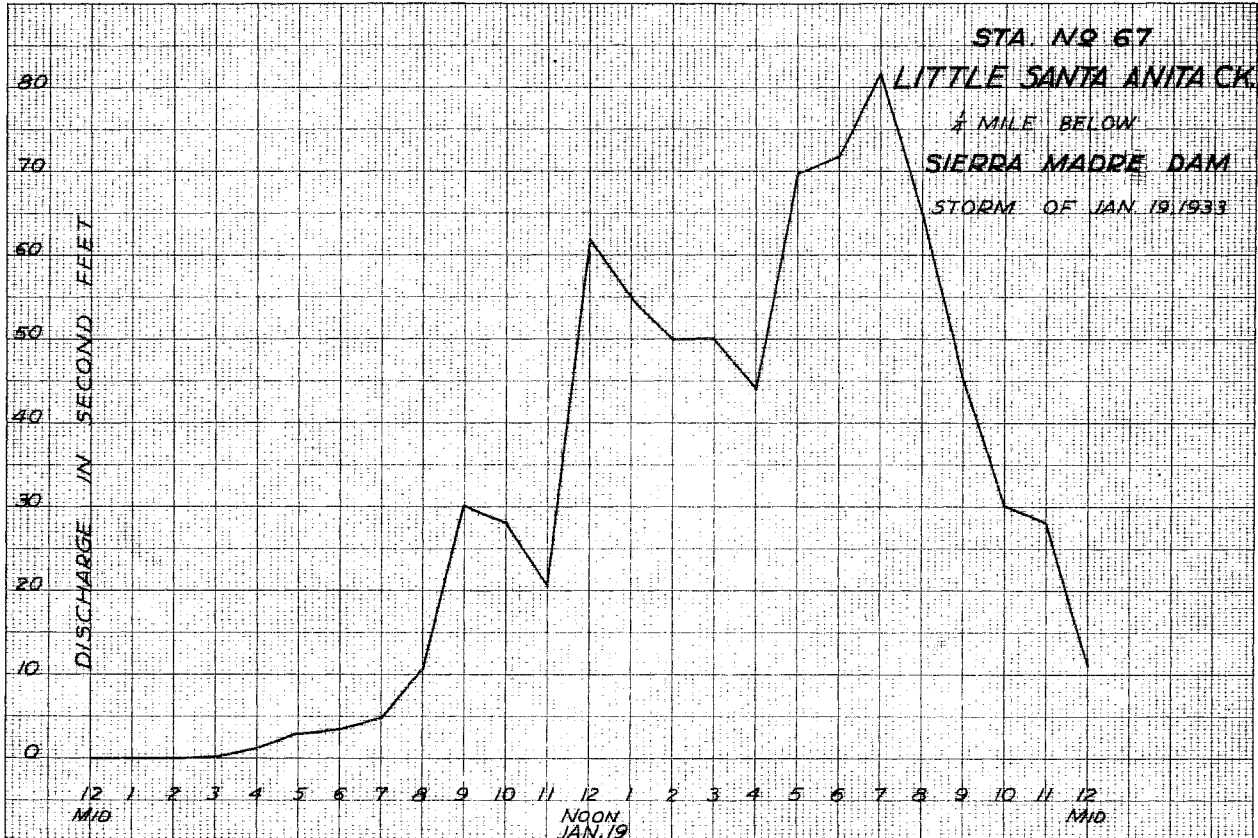
Drainage Area **2.5** Square Miles.

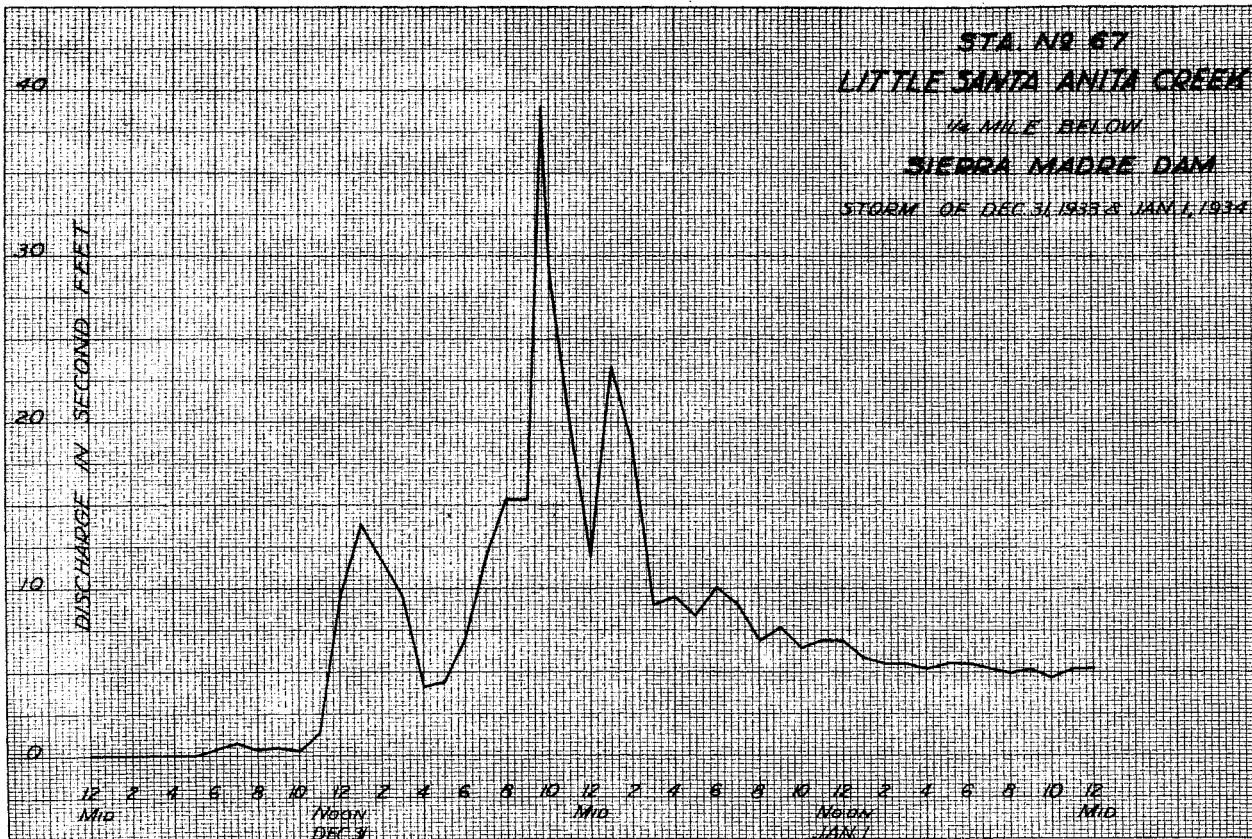
Observer **R. E. LINDSAY**

Gage Road **Continuous**

Used rating table dated **1931-1932**

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		DAY	RL	RL	RL	RL	RL	RL
	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge		Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge							
1							H	7.87			Trace		1																			
2							0.67	7.24					2																			
3							0.64	6.13					3																			
4							0.49	2.58					4																			
5							0.36	1.01					5																			
6							0.27	0.54					6																			
7						DRY	0.10	0					7																			
8													8																			
9													9																			
10													10																			
11													11																			
12													12																			
13							H	0.68					13																			
14		DRY		DRY		0.11	0.03					DRY				DRY																
15													15																			
16													16																			
17							Trace				Trace		17																			
18													18																			
19													19																			
20													20																			
21													21																			
22											0.11	0.03	22																			
23											H	1.15	23																			
24							Trace	0.53	3.28				24																			
25								0.37	1.09				25																			
26								0.27	0.54				26																			
27								0.19	0.27				27																			
28								0.15	0.15				28																			
29													29																			
30							0.11	0.03					30																			
31	H	Trace				H	7.00						31																			
TOTAL		0					9.74	25.37	6.51	0																						41.62
Mean Daily Discharge in Second-foot							0.31	0.82	0.23																							0.114
Second-foot per square mile																																
Run-off, depth in inches		0		DRY			19.32	50.32	12.92			0		DRY		DRY		DRY		DRY		DRY		DRY							82.55	
Run-off in acre-feet																																
Maximum Mean Daily Discharge in Second-foot							7.00	7.87	3.28																							7.87
Minimum Mean Daily Discharge in Second-foot							0	0	0																							0





F-19 R

LITTLE TUJUNGA CREEK FOOTHILL BOULEVARD BRIDGE

Location
On bridge across Little Tujunga Creek at Foothill Boulevard, 4 miles east of San Fernando, Los Angeles County, California.

Drainage Area
21.0 square miles.

Installed by
Los Angeles County Flood Control District, December 26, 1926.

Records Available
December 26, 1926 to September 30, 1932 at Los Angeles County Flood Control District office, Los Angeles, California.

Gage
Staff gage at downstream end of south face of third concrete pier from east end of bridge. Rational 7 day water stage recorder installed in shelter house on top of corrugated iron pipe stilling well at downstream end of bridge.

Discharge Measurements
High water measurements taken at the bridge.
Low water measurements by wading near bridge.

Channel and Control
Channel - Sand and silt. No control.

Extremes of Discharge
1929-1930
No appreciable flow.
1930-1931
Maximum- 30 c.f.s. February 4, 1931.
Minimum - Dry most of year.
1931-1932
Maximum- 659.5 c.f.s. on February 9, 1932
Minimum- Dry most of year.
1932-1933
Maximum- 450 c.f.s. January 19, 1933.
Minimum- Dry most of year.
1933-1934
Maximum- 1360.58 c.f.s. January 1, 1934.
Minimum- Dry most of year.

Diversions
None.

Regulation
None.

Accuracy
Only fair due to scouring during high flows.

Operation
Located and constructed by the Los Angeles County Flood Control District and operated by Los Angeles County Flood Control District in conjunction with U.S.G.S. Water Resources Branch.

F. C. Dist. Form 104A

**LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT**

Station No. 19

Discharge measurements of Little Tujunga Creek
at Foothill Blvd. Bridge during the year ending September 30, 1933

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	Mean sea level No.	G. H. Change Feet	Time Hours	Mean No.
1	1/16	Luce	52.5	18.42	6.11	4.30	113.7	.6	15	+2.0	1/4	FO 13	
2	1/19	Luce-Lindsey	51.5	26.69	8.78	4.45	223.8	.6	11	+1.0	1/3	"	
3	1/19	"	51.5	27.37	7.83	4.09	214.3	.6	11	-.02	1/2	"	
4	1/19	"	50.5	23.42	6.08	3.30	142.4	.6	10	0	1/4	"	
5	1/20	"	38.0	4.09	2.78	2.75	11.36	.6	7	0	1/4	"	
6	1/29	"	27.5	14.20	5.22	3.275	32.70	.6	11	-.05	1/4	"	
7	1/30	Luce-Marchand	15.5	3.82	4.43	3.05	16.91	.6	8	0	1/2	"	

F. C. D. Form 104A 1M 1-34

**LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT**

Station No. 19

Discharge measurements of Little Tujunga Creek
at Foothill Blvd. Bridge during the year ending September 30, 1934

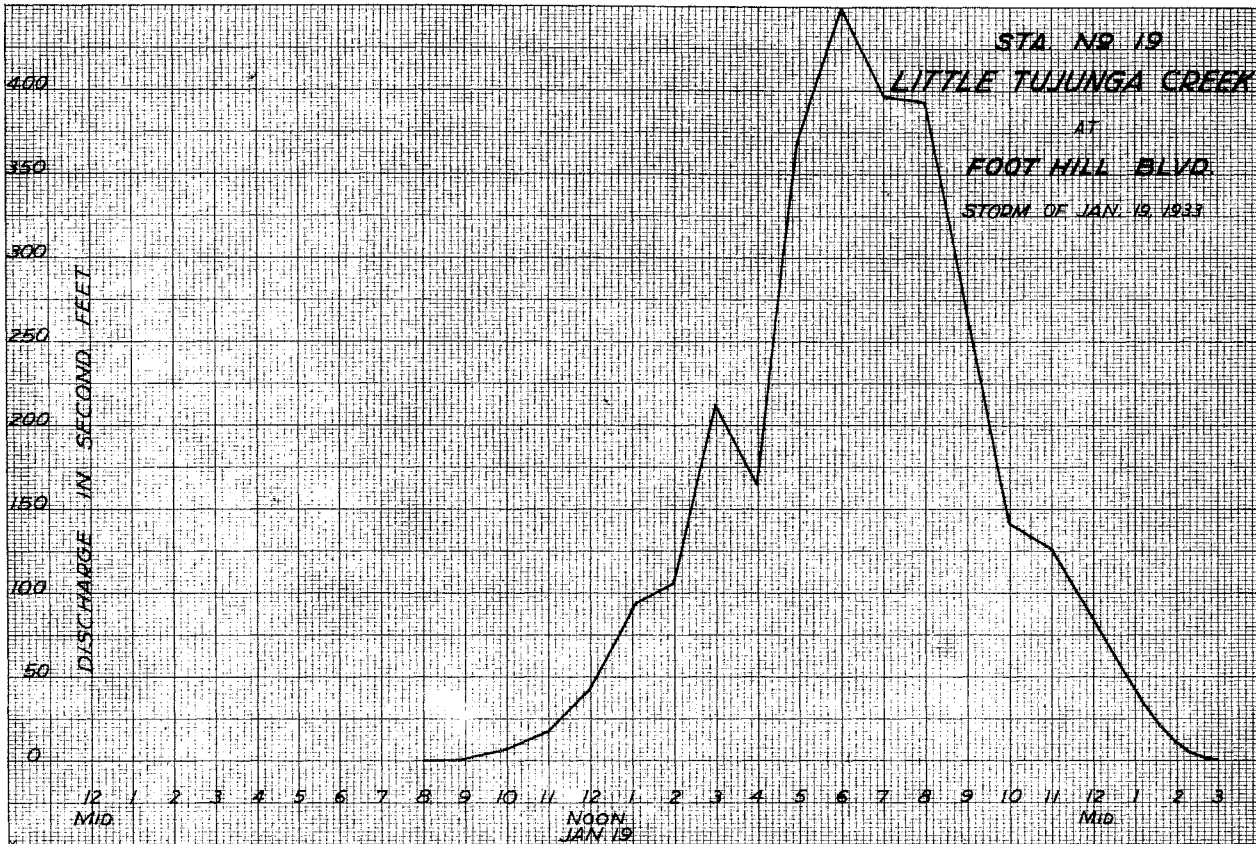
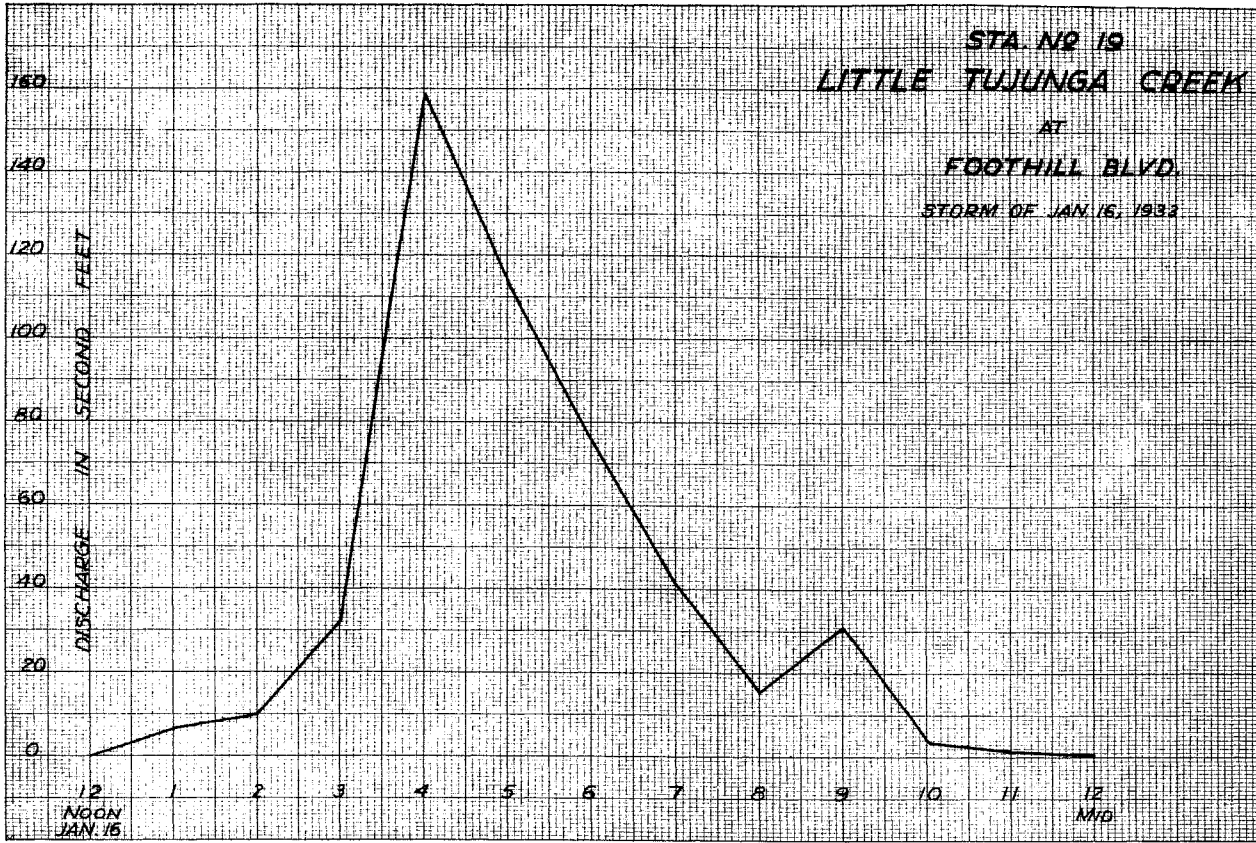
No.	Date	Made by	Width Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec.-ft.	Rating Percent diff.	Method	Mean sea level No.	G. H. Change Feet	Time Hours	Mean No.
1	12/13	Luce - Turner	10.5	2.14	3.10	2.97	6.86	.6	7	-	1/6	FO 13	
2	12/13	do.	7.3	1.30	2.07	3.13	2.69	.6	7	-.02	1/12	FO 13	
3	12/31	"	42.5	33.31	9.24	3.70	3.08	.6	8	+1.1	1/6	FO 13	
4	1/1	"	80.2	140.58	7.54	5.65	1060.36	.6	17	+1.4	1/2	FO 25	
5	1/1	"	42.3	26.53	5.89	2.34	157.37	.6	10	-.03	1/4	FO 13	
6	1/2	Luce	10.4	4.83	5.61	2.19	27.08	.6	10	-.01	1/6	FO 13	
7	1/4	"	5.5	.58	1.02	1.99	.59	.6	6	-	1/12	FO 25	
8	1/5	Turner	6.0	.64	1.64	2.30	1.05	.6	6	-	1/6	FO 25	
9	2/23	Luce	2.4	.52	1.38	2.02	0.72	.6	5	-	1/12	FO 13	
10	2/24	Luce and Turner	8.5	2.24	3.97	2.63	8.91	.6	9	-	1/12	"	

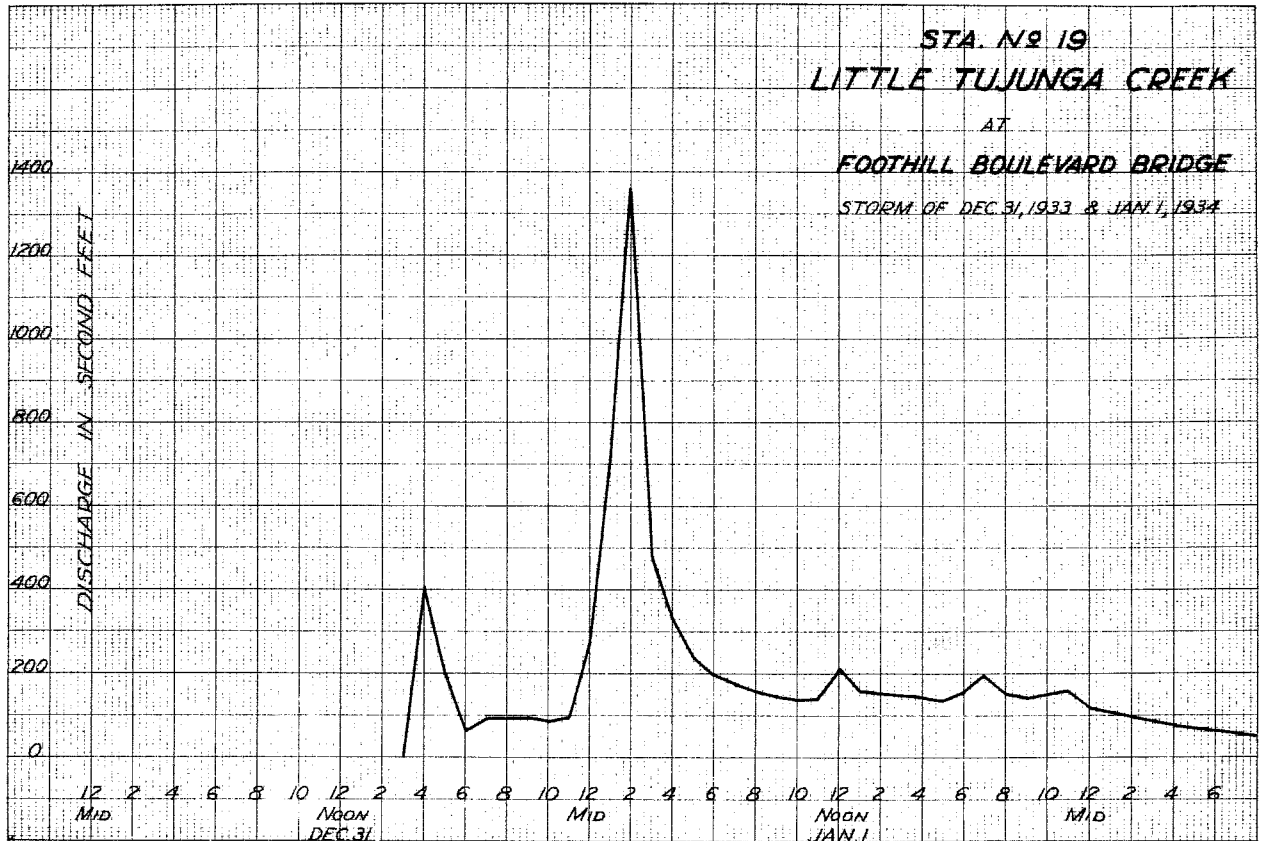
At **Foothill Blvd. Bridge** for the Year Ending September 30, 19 **33**

Table with columns for months (OCTOBER-SEPTEMBER), gauge height, discharge, and summary statistics. Includes notes on maximum/minimum stage and recorder edge heights.

At **FOOTHILL BLVD. BRIDGE** for the Year Ending September 30, 19 **34**

Table with columns for months (OCTOBER-SEPTEMBER), gauge height, discharge, and summary statistics. Includes notes on maximum/minimum stage and recorder edge heights.





L- R

F. C. D. Form 104A IM 5-34

LITTLE ROCK CREEK 2 MILES ABOVE DAM

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. L 1

Location
2 miles above Little Rock Palmdale Irrigation District's Dam about 1000' above junction of Little Rock and Santiago Creeks.

Discharge measurements of Little Rock Creek

at near 2 1/2 mi. Above Little Rock Dam, during the year ending September 30, 19 33

Drainage Area
49.0 square miles.

Installed by
Little Rock Palmdale Irrigation District, September, 1930.

Records Available
October 1, 1930 to September 30, 1934 at offices of Los Angeles County Flood Control District, Los Angeles, Calif.

Gage
Stevens type A-30 continuous water stage recorder installed in large shelter house. Iron Pipe stilling well.

Discharge Measurements
Low water measurements by wading. High water measurements from suspension bridge, 10 feet below gage.

Channel and Control
Channel - gravel and boulders. Rubble concrete control with notch for low flows.

Extremes of Discharge
1930-1931
Maximum-430 c.f.s. April 26, 1931.
Minimum-Dry at various times of year.
1931-1932
Maximum-2200 c.f.s. February 8, 1932.
Minimum-Dry at various times of year.
1932-1933
Maximum-66.45 c.f.s. March 9, 1933.
Minimum-Dry at various times of year.
1933-1934
Maximum-Not determined.
Minimum-Dry at various times of year.

Diversions

None

Regulation

None

Accuracy

Good

Operation

Located and installed by Little Rock Palmdale Irrigation District. Operated by Little Rock Palmdale Irrigation District in conjunction with the Los Angeles County Flood Control District and the U.S.C.S. Water Resources Branch.

No.	Date	Made by	Width Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec. Ft.	Rating	Method	Mean gage No.	G. H. Gauge Total	Time Hours	Meas. No.
1	1933 1/14	Luce	3.50	0.85	1.96	3.74	1.67			.6	5	1/12	FO 13
2	1/25	Luce-Lindsey	9.7	6.30	0.53	3.80	3.32			.6	11	1/6	"
3	2/11	Luce	6.5	5.51	1.12	3.84	6.18			.6	7	1/12	"
4	3/5	"	20.0	16.9	1.75	4.06	29.77			.6	11	1/6	"
5	4/4	"	17.0	22.4	1.44	3.74	32.40			.6	10	1/6	"
6	4/23	"	11.5	7.17	2.71	3.38	19.57			.6	9	1/6	"
7	5/18	"	12.3	5.75	1.46	3.32	8.42			.6	14	1/4	"
8	6/24	"	3.5	.92	.63	3.01	.58			.6	5	1/12	"
9	7/11	Luce-Irwin	2.3	.22	.54	2.96	.12			.6	3	1/3	"

F. C. D. Form 104A IM 5-34

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. L1

Discharge measurements of Little Rock Creek

at near 2 miles above Little Rock Dam, during the year ending September 30, 19 34

No.	Date	Made by	Width Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec. Ft.	Rating	Method	Mean gage No.	G. H. Gauge Total	Time Hours	Meas. No.
1	1933 12/18	Luce - Turner	5.0	2.30	2.03	3.04	4.68			.6	6	1/6	FO13
2	1934 1/15	"	8.0	3.57	2.20	0.52	7.85			.6	9	1/12	FO25
3	2/17	Luce	8.0	2.78	1.25	0.36	3.47			.6	6	1/6	FO13
4	3/22	"	8.0	3.28	1.89	0.44	6.22			.6	8	1/6	"
5	4/18	"	8.0	1.89	0.91	0.25	1.72			.6	9	1/6	"
6	6/8	"	2.2	0.25	0.60	0.04	0.15			.6	4	1/12	"

LIVE OAK CREEK NEAR MOUTH OF CANYON

Location Near mouth of canyon about 1/2 mile below Los Angeles County Flood Control District's Dam, about 3 miles northeast of La Verne, Los Angeles County, California.

Drainage Area 2.57 square miles.

Installed by Los Angeles County Flood Control District, January 4, 1928.

Records Available January 4, 1928 to September 30, 1934 at offices of the Los Angeles County Flood Control District, Los Angeles, California.

Gage Rational 7 day recorder installed in concrete house on west bank of stream. Staff gage on concrete stilling well of shelter house.

Discharge Measurements Low water flows made by wading at gage. High water flows made from bridge across stream 200' below gage.

Channel and Control Channel - Sand and gravel, bedrock near gage. Small concrete control, with 24" crest Cipolletti weir, 12" deep.

Extremes of Discharge No flow 1928-1929, 1929-1930 or 1930-1931.

1931-1932 Maximum- 21.86 c.f.s. February 8, 1932. Minimum- Dry most of year.

1932-1933 Maximum- 0.15 c.f.s. January 20, 1933. Minimum- Dry most of year.

1933-1934 Maximum- 34.65 c.f.s. December 29, 1933. Minimum- Dry most of year.

Diversions None above gage.

Regulation Flow regulated by Los Angeles County Flood Control District's Dam.

Accuracy Good.

Operation Located and constructed by Los Angeles County Flood Control District and operated by the Los Angeles County Flood Control District in conjunction with the U.S.G.S. Water Resources Branch.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Discharge measurements of Live Oak Creek

*k Mouth of Canyon during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec.-ft., Rating, Method, Mean gage No., G. H. change Feet, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Discharge measurements of Live Oak Creek

*k Mouth of Canyon during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec.-ft., Rating, Method, Mean gage No., G. H. change Feet, Time Hours, Meter No.

Daily Gage Height, in Feet, and Discharge, in Second-Feet, of LIVE OAK CREEK

*k Mouth of Canyon for the Year Ending September 30, 19 33.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Large table with columns for months (OCTOBER to SEPTEMBER) and days (1 to 31). Includes sub-headers for Gage height and Discharge. Includes summary statistics at the bottom.

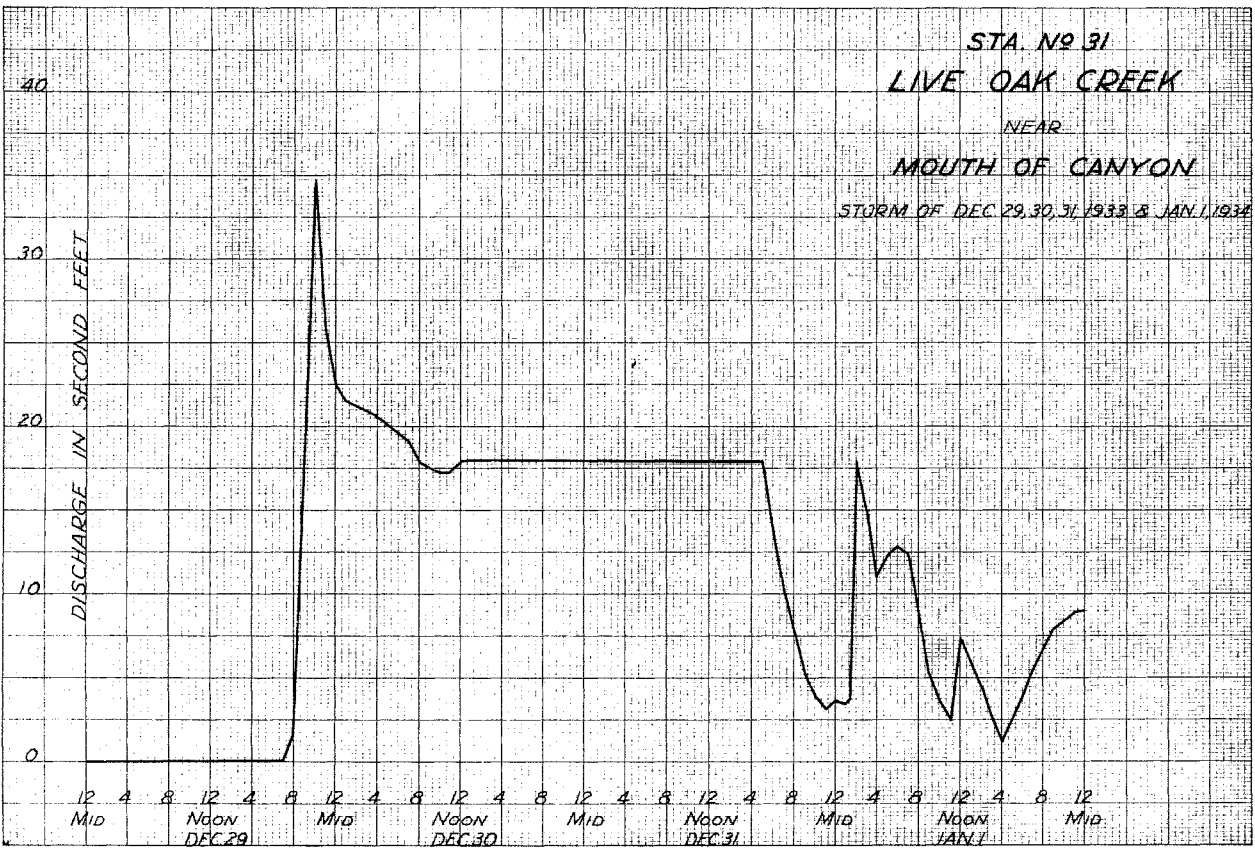
Daily Gage Height, in Feet, and Discharge, in Second-Foot, of **LIVE OAK CREEK**

**LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT**

MOUTH OF CANYON for the Year Ending September 30, 1934

Drainage Area **2.57** Square Miles. [**Brewster**] Observer: [] Gage Read **Continuous** Live rating table dated **1931-1932**

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		DAY
	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	
1							H 7.39	.31	.52	.07	.07	1												1	
2							1.09	8.99	.31	.52	.07	.07	2												2
3							.94	6.14	.32	.56	.01	.01	3												3
4							.59	2.12	.32	.56			4												4
5							.06	.06	.33	.60			5												5
6							.14	.14	.33	.60			6												6
7							.18	.18	.33	.60			7												7
8							.31	.52	.33	.60			8												8
9							.83	4.59	.24	.30			9												9
10							.86	4.98	.20	.20			10												10
11							.89	5.38	.20	.20			11												11
12							.83	4.59	.20	.20			12												12
13							.80	4.20	.20	.20			13												13
14							.64	2.54	.20	.20			14												14
15							.36	.72	.20	.20			15												15
16							.36	.72	.20	.20			16												16
17		DRY		DRY		DRY	.36	.72	.19	.19		DRY	17				DRY		DRY		DRY		DRY		17
18		DRY		DRY		DRY	.36	.72	.18	.18		DRY	18				DRY		DRY		DRY		DRY		18
19		DRY		DRY		DRY	.36	.72	.17	.17		DRY	19				DRY		DRY		DRY		DRY		19
20		DRY		DRY		DRY	.36	.72	.16	.16		DRY	20				DRY		DRY		DRY		DRY		20
21							.35	.68	.15	.15			21												21
22							.35	.68	.15	.15			22												22
23							.35	.68	.17	.17			23												23
24							.34	.64	.16	.16			24												24
25							.34	.64	.14	.14			25												25
26							.34	.64	.13	.13			26												26
27							.34	.64	.11	.11			27												27
28							.33	.60	.09	.09			28												28
29							H 3.92	.33	.60	-	-		29												29
30							H 18.75	.32	.56	-	-		30												30
31							H 14.90	.31	.52	-	-		31												31
TOTAL							37.57	63.02	8.06	.15	6.28														115.08
Mean Daily Discharge in Second-foot							1.21	2.04	.29	.005	.20														.315
Second-foot per square mile							.471	.792	.113	.002	.078														.123
Run-off, depth in inches							.544	.913	.117	.002	.091														.167
Run-off in acre-foot							74.54	125.00	15.99	.30	12.46														228.28
Maximum Mean Daily Discharge in Second-foot							18.75	8.99	.60	.07	.90														18.75
Minimum Mean Daily Discharge in Second-foot							0	.06	.09	0	0														0



LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. F.C.5

F-5 R

LOS ANGELES RIVER AT VAN NUYS BOULEVARD BRIDGE

Discharge measurements of Los Angeles River

Location
On downstream side of highway bridge crossing Los Angeles River at Van Nuys Boulevard about 2 miles south of Van Nuys, Los Angeles County, California.

at Van Nuys Blvd. Bridge during the year ending September 30, 1933

Drainage Area
157. square miles.

Installed by
Los Angeles County Flood Control District December 19, 1928.

Records Available
December 19, 1928 to September 30, 1934 at Los Angeles County Flood Control District offices, Los Angeles, California.

Gage
Staff gage installed on south side at downstream end of pier of bridge. Rational recorder installed in small house on top of corrugated iron stilling well at downstream end of pier.

Discharge measurements:
Low water measurements made by wading near gage.
High water measurements made from bridge.

Channel and Control
Channel bed and banks are of silt and adobe.
No artificial control. Bridge is in two spans.

Extremes of Discharge

- 1928-1929
Maximum - 127 c.f.s. April 4, 1929.
Minimum - 0.13 c.f.s. September 30, 1929.
- 1929-1930
Maximum - 389 c.f.s. March 15, 1930.
Minimum - Dry September 19 and 20, 1930.
- 1930-1931
Maximum - 1295 c.f.s. February 4, 1931
Minimum - 0.06 c.f.s. August 27, 1931.
- 1931-1932
Maximum - 2000 c.f.s. February 8, 1932.
Minimum - 0.16 c.f.s. Noon August 6, 1932.
- 1932-1933
Maximum - 1720 c.f.s. January 19, 1933.
Minimum - 0.04 c.f.s. December 14, 1932.
- 1933-1934
Maximum - 7381.6 c.f.s. January 1, 1934.
Minimum - 0.03 c.f.s. September 17, 1934.

Diversions
None above gage.

Regulation
None.

Operation
Located and constructed by the Los Angeles County Flood Control District and operated by the Los Angeles County Flood Control District in conjunction with the U.S.G.S. Water Resources Branch.

F. C. D. Form 104A

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. F.C.5

Discharge measurements of Los Angeles River

at Van Nuys Blvd. Bridge during the year ending September 30, 1933

No.	Date	Made by	Wading Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Obs. height Feet	Discharge Sec.-ft.	Rating	Method	Mean sec. No.	G. H. Change Total	Time Hours	Mean No.
1	1932 10/7	Bollinger	1.7	.25	0.96	1.43	.24	Float				1/12	
2	10/14	"	1.8	.21	1.28	1.43	.27	"				"	
3	10/21	"	2.1	.28	.82	1.44	.23	"				"	
4	10/28	"	2.0	.26	1.11	1.48	.29	"				"	
5	11/4	"	1.7	.24	1.17	1.45	.28	"				"	
6	11/10	"	2.0	.26	1.19	1.43	.31	"				"	
7	11/18	"	1.9	.33	.88	1.43	.29	"				"	
8	11/25	"	1.8	.33	1.09	1.43	.36	"				"	
9	12/2	"	2.3	.47	1.00	1.52	.47	.6	4		1/6	FC 10	
10	12/9	"	2.5	.63	1.36	1.56	.86	.6	5		"	"	
11	12/12	"	4.0	1.04	0.86	1.58	.89	.6	6		"	"	
12	12/15	Keifer & Cornick	2.7	.56	.19	1.46	.11	.6	3		"	271619	
13	12/22	Bollinger	2.0	.46	1.19	1.47	.53	Float			1/12		
14	12/30	Bollinger & Mayer	3.4	.59	1.03	1.49	.61	"			"		
15	1933 1/6	Bollinger	2.3	.62	.73	1.49	.45	.6	4		1/6	FC 10	
16	1/13	"	2.2	.63	.73	1.49	.46	Float			"		
17	1/16	Bollinger & Case	12.0	16.62	1.32	2.84	21.94	.6	9 + .08		1/4	FC 10	
18	1/17	"	5.0	4.25	1.78	2.07	7.55	.6	7 + .01		1/6	FC 10	
19	1/19	"	52.7	222.8	4.07	7.93	906.29	.6	10 + .05		1/2	FC 10	
20	1/22	"	27.2	47.5	4.68	4.45	222.47	.6	7		1/4	FC 10	
21	1/23	"	42.5	104.0	4.08	5.65	426.29	.6	12		2/3	FC 10	
22	1/27	Bollinger	3.8	1.86	1.21	1.80	2.26	.6	6		1/6	FC 10	
23	1/29	Bollinger & Case	5.5	15.98	1.51	2.97	24.40	.6	4 + .02		"	FC 10	
24	1/31	Bollinger	6.0	3.03	1.28	1.96	3.84	.6	7		"	FC 10	

No.	Date	Made by	Wading Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Obs. height Feet	Discharge Sec.-ft.	Rating	Method	Mean sec. No.	G. H. Change Total	Time Hours	Mean No.
25	1933 2/3	Bollinger	4.0	.85	.96	1.73	.82	.6	7		1/6	FC 10	
26	2/10	"	4.2	1.46	.62	1.70	.91	.6	5		"	"	
27	2/17	"	4.4	.90	1.04	1.74	.94	.6	5		"	"	
28	3/3	"	2.9	2.08	0.61	1.74	1.27	.6	5		1/12	"	
29	3/10	"	4.5	2.10	0.60	1.74	1.86	.6	5		1/6	"	
30	3/16	"	3.7	1.47	.83	1.67	1.22	.6	4		"	"	
31	3/30	"	3.3	1.18	.80	1.66	.95	.6	4		"	"	
32	4/6	"	3.8	.83	1.00	1.68	.83	.6	5		"	"	
33	4/13	"	2.8	.72	0.78	1.68	0.56	.6	4		"	"	
34	4/20	"	3.0	.58	.64	1.63	.37	.6	4		"	"	
35	4/26	"	2.1	.50	.96	1.64	.48	.6	3		1/12	"	
36	4/26	"	3.0	.81	0.51	1.64	.41	.6	3		"	"	
37	4/28	"	2.2	.74	1.31	1.66	.97	.6	4		1/6	"	
38	5/5	"	2.8	1.13	0.81	1.63	.92	.6	4		1/12	"	
39	5/11	"	2.7	.71	.89	1.64	.63	.6	4		1/6	"	
40	5/18	"	3.5	.68	.75	1.64	.51	.6	5		"	"	
41	5/25	"	3.5	.71	.60	1.63	.42	.6	5		1/12	"	
42	6/1	"	2.8	.85	.66	1.62	.56	.6	3		"	"	
43	6/5	"	4.7	1.02	.81	1.69	.83	.6	6		1/6	"	
44	6/8	"	3.4	.56	.64	1.64	.36	.6	5		"	"	
45	6/15	"	2.6	.50	.66	1.60	.33	.6	3		"	"	
46	6/22	"	3.0	.79	.99	1.57	.74	.6	5		"	"	
47	6/29	"	1.6	.30	.93	1.59	.24	.6	3		1/12	"	
48	7/6	"	1.7	.39	.77	1.56	.30	.6	3		1/6	"	
49	1933 7/12	Bollinger & Irwin	1.2	.32	.78	1.55	.25	.6	2		1/12	FC 10	
50	7/19	Irwin	2.0	.31	.60	1.64	.19	"	3		1/12	"	
51	7/26	"	4.0	1.16	.40	1.70	.45	"	8		1/6	"	
52	8/3	Bollinger	2.1	.45	.44	1.60	.20	"	4		1/12	"	
53	8/3	" & Prickett	2.1	.45	.44	1.60	.20	"	4		1/6	"	
54	8/10	"	1.3	.23	.92	1.55	.21	"	2		1/12	"	
55	8/17	"	1.7	.35	.71	1.56	.25	"	3		1/12	"	
56	8/24	"	2.2	.40	.87	1.50	.35	"	2		1/12	"	
57	8/24	"	1.5	.40	.97	1.50	.39	"	2		"	"	
58	8/31	Bollinger	1.8	.42	.83	1.58	.35	"	3		"	"	
59	8/31	Bollinger-Prickett	1.3	.34	.88	1.58	.30	"	3		1/12	"	
60	9/7	"	1.7	.31	.65	1.53	.20	"	3		"	"	
61	9/12	"	2.8	.50	.90	1.57	.45	"	4		"	"	
62	9/12	"	2.8	.42	.79	1.57	.33	"	4		"	"	
63	9/21	"	2.1	.28	.57	1.47	.16	"	3		"	"	
64	9/21	Bollinger	2.1	.28	.57	1.47	.16	"	3		"	"	
65	9/28	Bollinger-Prickett	1.5	.23	.44	1.50	.10	"	3		"	"	
66	9/28	"	1.6	.28	.55	1.50	.15	"	3		"	"	

F. C. D. Form 104A IM 134

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. 5

Discharge measurements of Los Angeles River

at Van Nuys Blvd. Bridge during the year ending September 30, 1934

No.	Date	Made by	Wading Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Obs. height Feet	Discharge Sec.-ft.	Rating	Method	Mean sec. No.	G. H. Change Total	Time Hours	Mean No.
1	1934 10/5	O. E. Bollinger	2.0	.17	.47	1.48	.10	.6	3		1/12	271650	
2	10/11	"	2.1	.34	.68	1.50	.23	.6	4		1/12	"	
3	10/19	"	2.8	.41	.54	1.48	.22	.6	4		1/12	"	
4	10/26	"	1.6	.32	1.13	1.47	.26	.6	3		1/12	"	

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 5

Discharge measurements of Los Angeles River

at Van Nuys Blvd. Bridge

during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of water, Mean velocity, Gage height, Discharge, Rating, etc. Contains data for various dates from 11/2 to 3/1.

Table with columns: No., Date, Made by, Width Feet, Area of water, Mean velocity, Gage height, Discharge, Rating, etc. Contains data for various dates from 28 to 57.

Daily Gage Height, in Feet, and Discharge, in Second-Feet, of LOS ANGELES RIVER

At VAN NUYS BLVD. BRIDGE for the Year Ending September 30, 1934

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. 5

Drainage Area 157.00 Square Miles

C. E. Bollinger

(Observer)

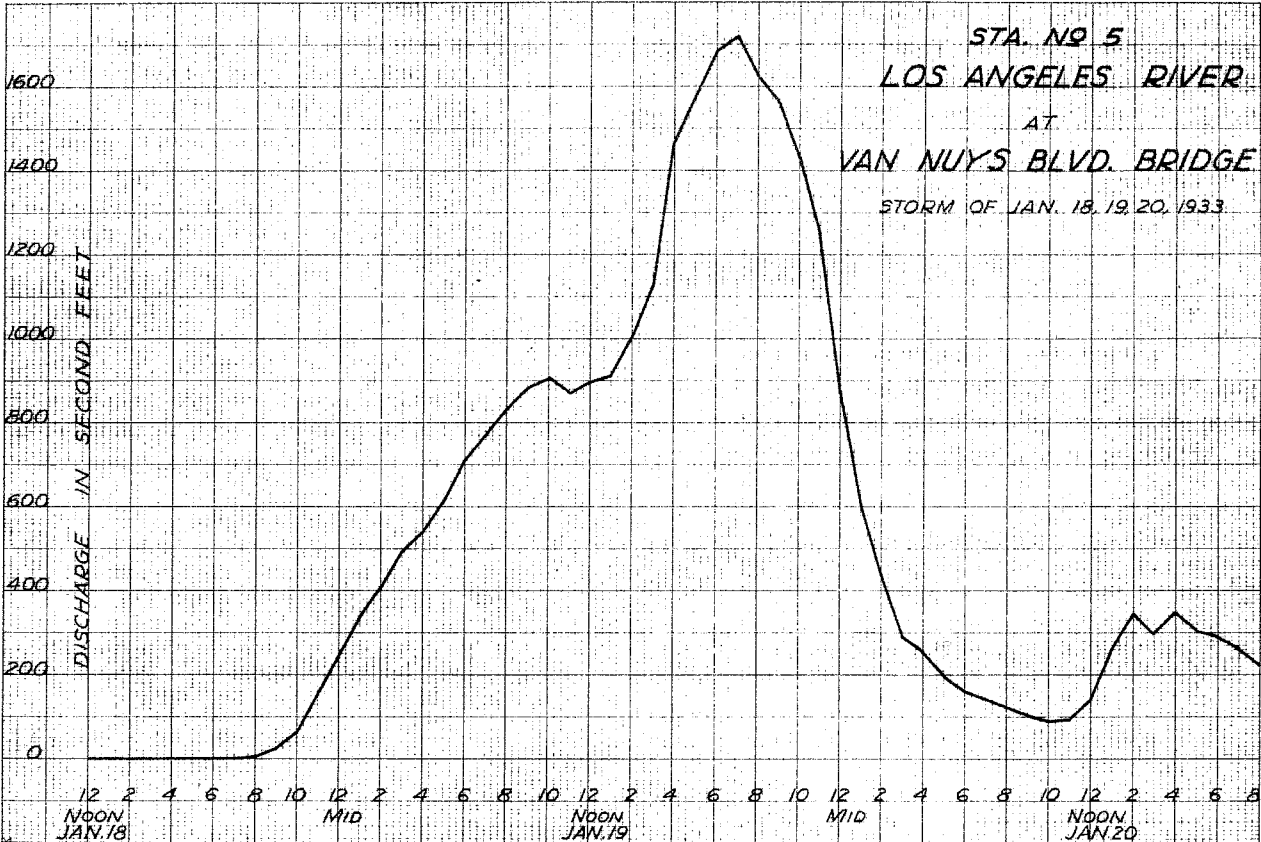
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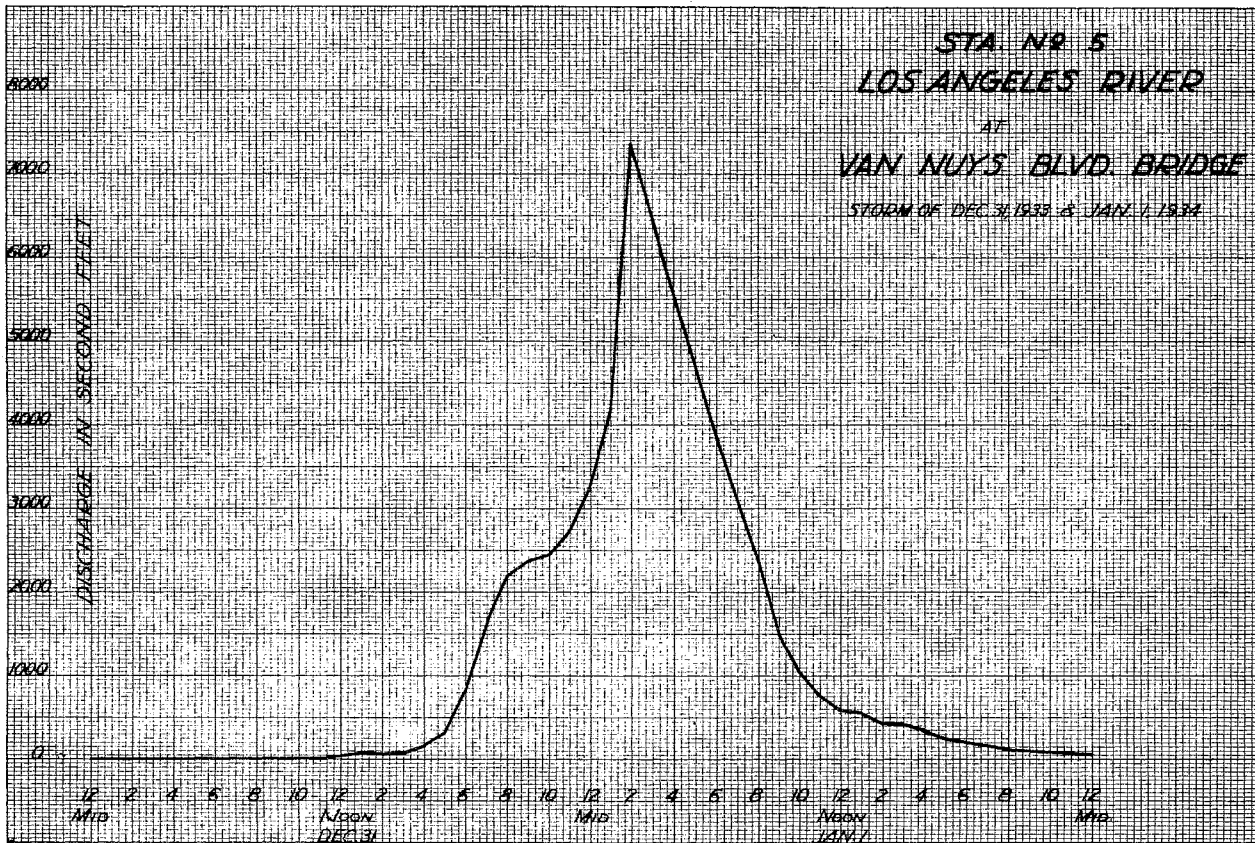
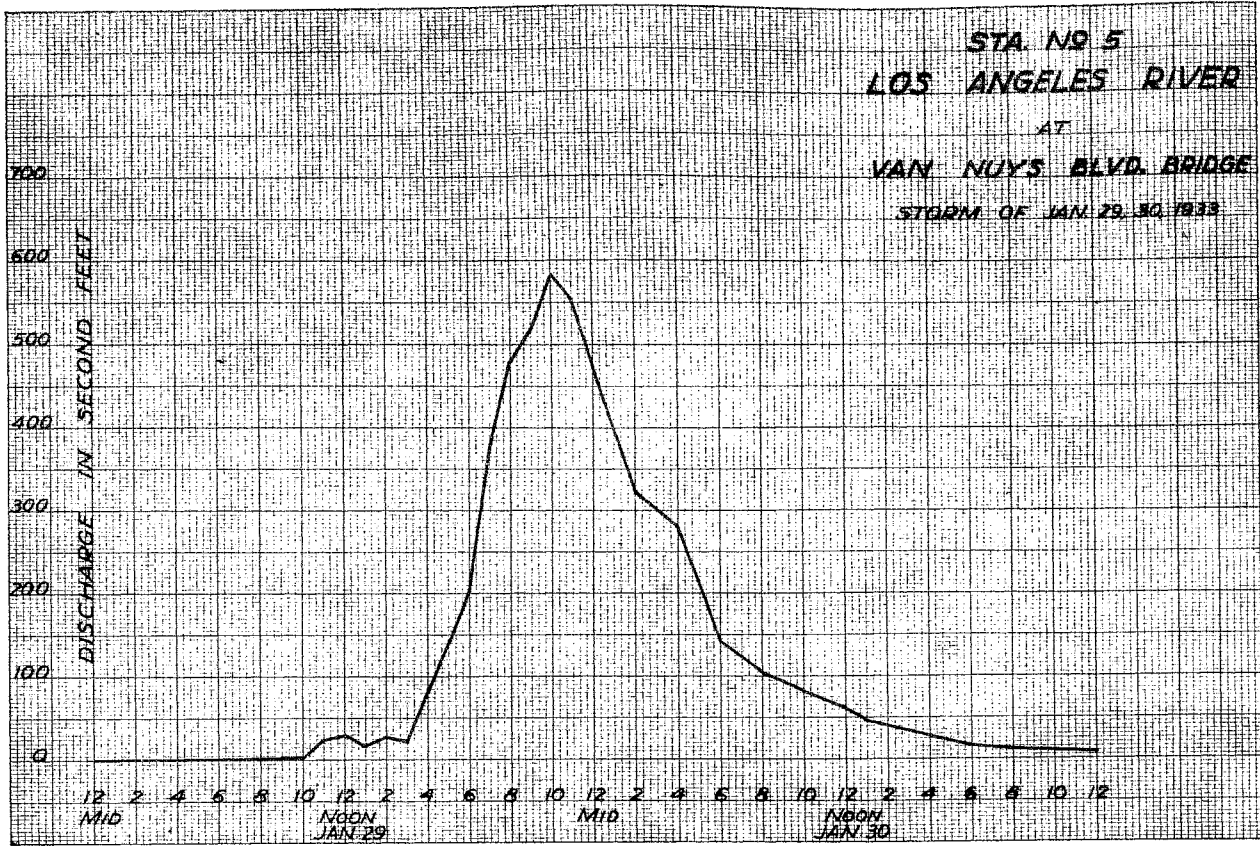
Used rating table dated

Large monthly table with columns for months (OCTOBER to SEPTEMBER) and rows for days (1 to 31). Includes sub-columns for Gage height and Discharge. Includes summary statistics at the bottom.

At Name VAN NUYS BLVD. BRIDGE for the Year Ending September 30, 1934

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
1	1.50	0.12	1.61	0.44	1.59	0.36	H	1910.0	1.68	0.80	1.70	0.92	1.64	0.58	1.66	0.60	1.64	0.58	1.60	0.40	1.58	0.32	1.61	0.44
2	1.50	0.12	1.58	0.32	1.59	0.32	H	17.84	1.68	0.80	1.70	0.92	1.64	0.58	1.64	0.58	1.65	0.63	1.65	0.63	1.68	0.86	1.60	0.40
3	1.49	0.11	1.54	0.20	1.59	0.36	1.88	2.48	1.68	0.80	1.71	0.98	1.63	0.53	1.65	0.63	1.66	0.68	1.59	0.36	1.66	0.68	1.59	0.36
4	1.48	0.10	1.53	0.18	1.58	0.32	1.76	1.26	1.68	0.80	1.73	1.04	1.63	0.53	1.68	0.80	1.65	0.63	1.56	0.26	1.61	0.44	1.51	0.14
5	1.48	0.10	1.51	0.14	1.58	0.32	1.77	1.44	1.68	0.80	1.73	1.04	1.63	0.53	1.66	0.68	1.66	0.68	1.54	0.20	1.58	0.32	1.54	0.20
6	1.51	0.14	1.50	0.12	1.58	0.32	1.77	1.44	1.68	0.80	1.73	1.04	1.64	0.58	1.65	0.63	1.64	0.58	1.53	0.18	1.57	0.29	1.56	0.26
7	1.52	0.16	1.49	0.11	1.60	0.40	1.75	1.28	1.68	0.80	1.73	1.12	1.64	0.58	1.64	0.58	1.62	0.48	1.54	0.20	1.51	0.14	1.55	0.23
8	1.51	0.14	1.49	0.11	1.60	0.40	1.74	1.20	1.69	0.86	1.73	1.04	1.63	0.53	1.63	0.53	1.62	0.48	1.56	0.26	1.51	0.14	1.52	0.16
9	1.55	0.23	1.49	0.11	1.60	0.40	1.75	1.28	1.69	0.86	1.71	0.98	1.62	0.48	1.63	0.53	1.62	0.48	1.59	0.36	1.50	0.12	1.55	0.23
10	1.55	0.23	1.50	0.12	1.60	0.40	1.74	1.20	1.70	0.92	1.70	0.92	1.63	0.53	1.64	0.58	1.63	0.53	1.55	0.23	1.51	0.14	1.55	0.23
11	1.58	0.32	1.51	0.14	1.59	0.36	1.74	1.20	1.69	0.86	1.70	0.92	1.63	0.53	1.64	0.58	1.61	0.44	1.53	0.18	1.53	0.18	1.47	0.09
12	1.55	0.23	1.51	0.14	1.61	0.44	1.74	1.20	1.70	0.92	1.69	0.86	1.62	0.74	1.64	0.58	1.61	0.44	1.54	0.20	1.52	0.16	1.45	0.07
13	1.53	0.18	1.52	0.16	1.92	2.92	1.73	1.12	1.70	0.92	1.68	0.80	1.63	0.80	1.67	0.74	1.57	0.29	1.56	0.26	1.53	0.18	1.43	0.05
14	1.54	0.20	1.52	0.16	1.61	0.44	1.73	1.12	1.71	0.98	1.67	0.74	1.68	0.80	1.68	0.80	1.57	0.29	1.57	0.29	1.53	0.18	1.43	0.05
15	1.55	0.23	1.52	0.16	1.63	0.53	1.73	1.12	1.74	1.20	1.66	0.68	1.67	0.74	1.64	0.58	1.57	0.29	1.56	0.26	1.53	0.18	1.43	0.05
16	1.56	0.26	1.53	0.18	1.62	0.48	1.77	1.44	1.70	0.92	1.66	0.68	1.67	0.74	1.65	0.68	1.58	0.32	1.56	0.26	1.54	0.20	1.42	0.04
17	1.56	0.26	1.54	0.20	1.63	0.53	1.71	0.98	1.68	0.80	1.66	0.68	1.67	0.68	1.69	0.86	1.60	0.40	1.56	0.26	1.54	0.20	1.41	0.03
18	1.55	0.23	1.54	0.20	1.66	0.68	1.71	0.98	1.68	0.68	1.66	0.68	1.67	0.74	1.69	0.86	1.61	0.44	1.56	0.26	1.54	0.20	1.42	0.04
19	1.55	0.23	1.57	0.29	1.67	0.74	1.70	0.92	1.66	0.68	1.66	0.68	1.69	1.66	1.65	0.63	1.60	0.40	1.55	0.23	1.54	0.20	1.45	0.07
20	1.55	0.23	1.56	0.26	1.68	0.80	1.70	0.92	1.65	0.63	1.64	0.58	1.69	0.86	1.65	0.63	1.61	0.44	1.55	0.23	1.54	0.20	1.42	0.04
21	1.58	0.32	1.59	0.36	1.70	0.92	1.70	0.92	1.66	0.68	1.65	0.63	1.69	0.86	1.64	0.58	1.60	0.40	1.56	0.26	1.54	0.20	1.43	0.05
22	1.68	0.80	1.57	0.29	1.66	0.68	1.71	0.98	1.79	1.61	1.63	0.53	1.69	0.86	1.64	0.58	1.59	0.36	1.58	0.32	1.52	0.16	1.47	0.09
23	1.58	0.32	1.55	0.23	1.65	0.63	1.70	0.92	2.09	5.01	1.63	0.53	1.69	0.86	1.64	0.58	1.66	0.68	1.59	0.36	1.50	0.12	1.45	0.07
24	1.54	0.20	1.55	0.23	1.64	0.58	1.70	0.92	H	51.81	1.63	0.53	1.70	0.92	1.65	0.63	1.64	0.58	1.59	0.36	1.50	0.12	1.45	0.07
25	1.56	0.26	1.57	0.29	1.64	0.58	1.69	0.86	2.06	4.59	1.63	0.53	1.69	0.86	1.65	0.63	1.61	0.44	1.59	0.36	1.50	0.12	1.46	0.08
26	1.61	0.44	1.60	0.40	1.63	0.53	1.71	0.98	1.92	2.92	1.64	0.58	1.69	0.86	1.65	0.63	1.61	0.44	1.59	0.36	1.50	0.12	1.46	0.08
27	1.63	0.53	1.59	0.36	1.62	0.48	1.71	0.98	1.86	2.26	1.64	0.58	1.69	0.86	1.64	0.58	1.65	0.63	1.59	0.36	1.49	0.11	1.46	0.08
28	1.62	0.48	1.58	0.32	1.62	0.48	1.70	0.92	1.73	1.12	1.64	0.58	1.66	0.68	1.64	0.58	1.60	0.40	1.66	0.68	1.48	0.10	1.46	0.08
29	1.61	0.44	1.59	0.36	1.62	0.48	1.69	0.86	-	-	1.64	0.58	1.69	1.70	0.92	1.66	0.68	1.55	0.23	1.64	0.58	1.47	0.09	
30	1.61	0.44	1.59	0.36	H	0.90	1.69	0.86	-	-	1.65	0.53	1.69	1.65	0.63	1.64	0.58	1.56	0.26	1.65	0.63	1.48	0.10	
31	1.63	0.53	-	-	H	611.4	1.69	0.86	-	-	1.63	0.53	1.69	1.66	0.68	1.66	-	1.65	0.63	1.55	0.23	-	-	





LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 124

F-124 R

LOS ANGELES RIVER AT VINELAND AVENUE BRIDGE

Location On highway bridge across Los Angeles River at Vineland Avenue, near Universal City, California.

Discharge measurements of Los Angeles River at Vineland Ave. Bridge during the year ending September 30, 1933

Drainage Area 400 square miles.

Records Available December 29, 1930 to September 30, 1934 and Records from January 22, 1928 to September 30, 1930 taken at Universal City near Lankershim Boulevard. Records are available at Los Angeles County Flood Control District's office.

Gage National, 7 day water stage recorder in small house on top of corrugated iron stilling well fastened to bridge pier downstream side of bridge.

Discharge Measurements Low water measurements made by wading near bridge. High water measurements made from bridge.

Channel and Control Channel - Sand and gravel. No control.

Extremes of Discharge 1930-1931 Maximum- 1236.60 c.f.s. on February 4, 1931. Minimum- 0.06 c.f.s. on July 1, 1931.

1931-1932 Maximum- 1633 c.f.s. February 8, 1932. Minimum- 0.06 c.f.s. December 1, 1931.

1932-1933 Maximum- 2083 c.f.s. January 19, 1933. Minimum- 1.71 c.f.s. December 15, 1932.

1933-1934 Maximum- 9142.5 c.f.s. January 1, 1934. Minimum- 1.20 c.f.s. November 11, 1933.

Diversions None

Regulation Low flow regulated by outflow from Los Angeles City Power House at Diaz Avenue. High flows regulated by Los Angeles County Flood Control Dams in mountains.

Operation Located and constructed by the Los Angeles County Flood Control District and operated by the Los Angeles County Flood Control District in conjunction with the U.S.G.S. Water Resources Branch.

Table with columns: No., Date, Made by, Water Feet, Area of section Sq-ft, Mean velocity ft. per sec., Gage height Feet, Discharge Sec-ft, Rating Percent diff, Method, Mean Temp. No., G. H. County Total, Time Hours, Meter No. Data rows from 1933 1/25 to 1933 9/28.

F. C. Dist. Form 1044

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 124

Discharge measurements of Los Angeles River at Vineland Ave. Bridge during the year ending September 30, 1933

Table with columns: No., Date, Made by, Water Feet, Area of section Sq-ft, Mean velocity ft. per sec., Gage height Feet, Discharge Sec-ft, Rating Percent diff, Method, Mean Temp. No., G. H. County Total, Time Hours, Meter No. Data rows from 1932 10/7 to 1933 1/23.

F. C. Dist. Form 1044 IM 534

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 124

Discharge measurements of Los Angeles River at Vineland Avenue Bridge during the year ending September 30, 1934

Table with columns: No., Date, Made by, Water Feet, Area of section Sq-ft, Mean velocity ft. per sec., Gage height Feet, Discharge Sec-ft, Rating Percent diff, Method, Mean Temp. No., G. H. County Total, Time Hours, Meter No. Data rows from 1933 10/5 to 1934 11/9.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 124

Discharge measurements of Los Angeles River at Vineland Avenue Bridge during the year ending September 30, 1934

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 124

Discharge measurements of Los Angeles River at Vineland Avenue Bridge during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec. ft., Rating, Method, Max. No. of G. H. Total, Time Hours, Meter No.

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec. ft., Rating, Method, Max. No. of G. H. Total, Time Hours, Meter No.

Daily Gage Height, in Feet, and Discharge, in Second-Feet, of LOS ANGELES RIVER

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. 124

At Vineland Ave. Bridge for the Year Ending September 30, 1933

Drainage Area 4004 Square Miles, O. E. Bollinger (Observer), Gage Road Continuous, Last rating table dated 7/5/33

Large table with columns: DAY, OCTOBER, NOVEMBER, DECEMBER, JANUARY, FEBRUARY, MARCH, APRIL, MAY, JUNE, JULY, AUGUST, SEPTEMBER, DAY. Includes sub-headers for Gage height and Discharge, and a summary section at the bottom.

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of LOS ANGELES RIVER

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

At VINELAND AVENUE BRIDGE for the Year Ending September 30, 1934

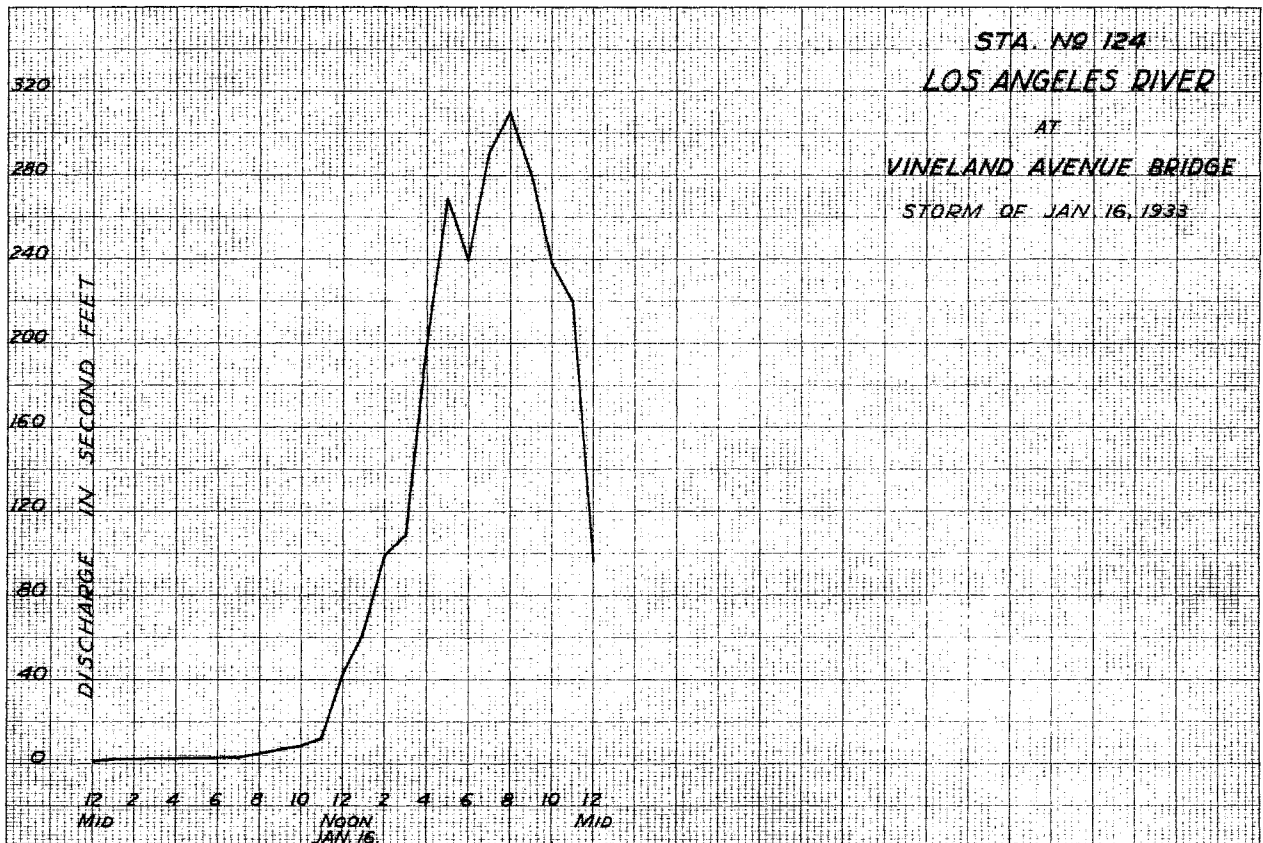
Drainage Area 400 Square Miles

C. E. Bollinger (Observer)

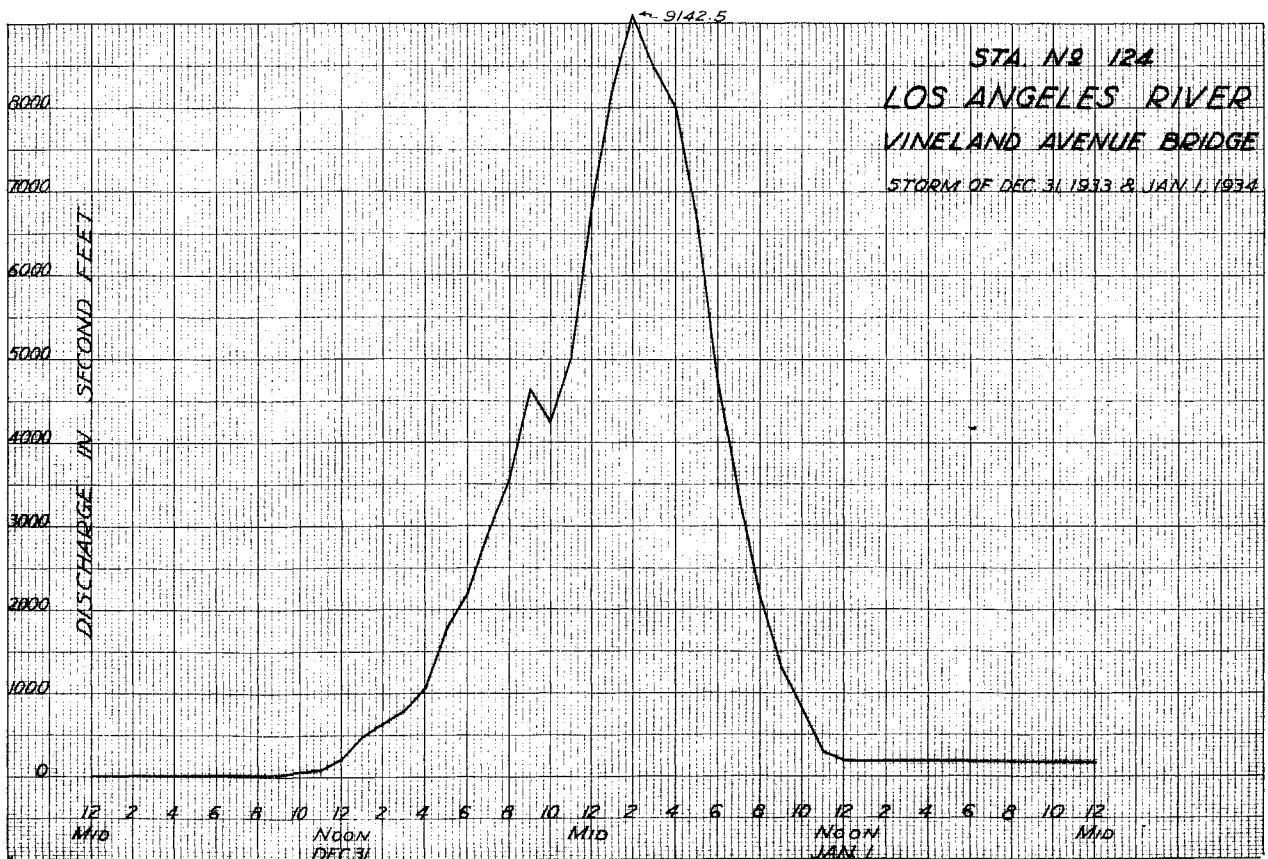
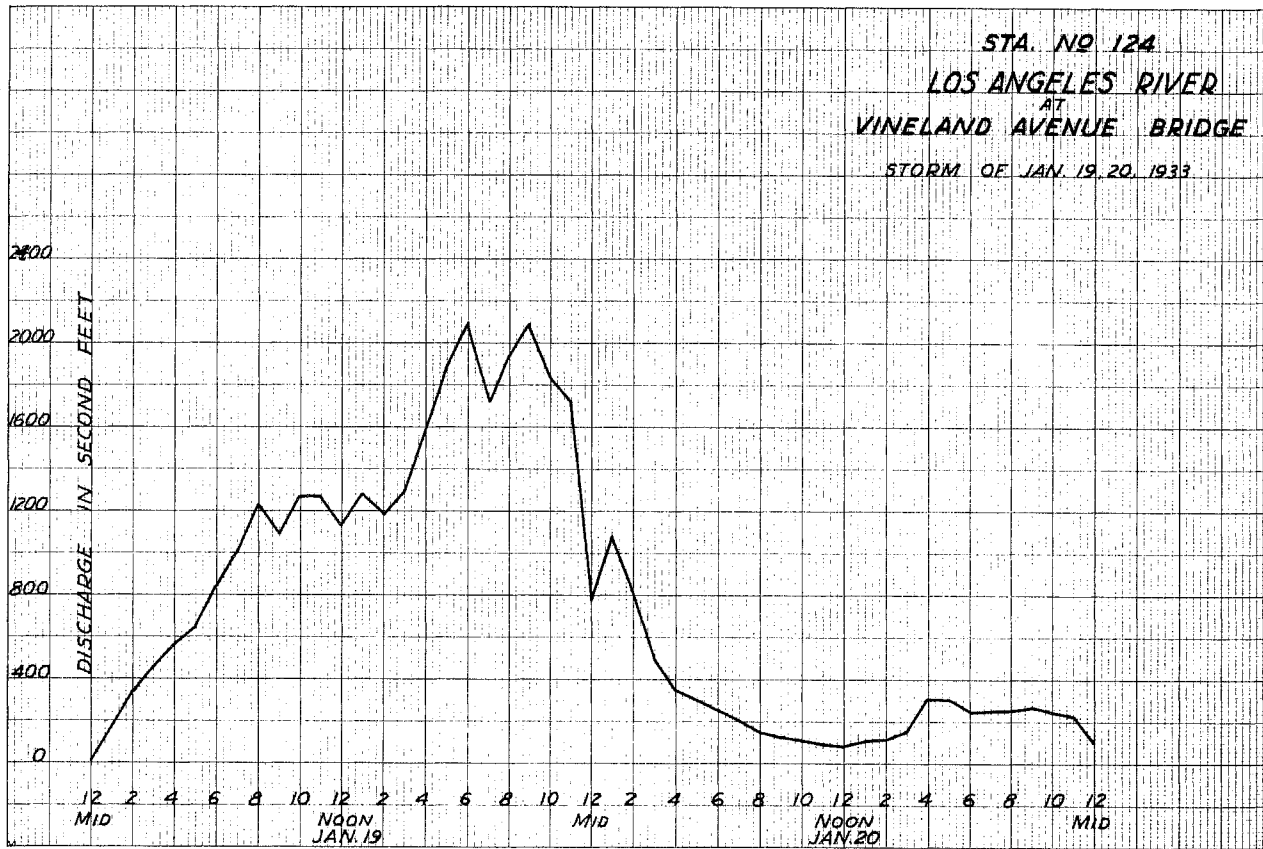
Gage Road CONTINUOUS

Used rating table dated 8/27/34 CURVES A & B

Table with columns for months (OCTOBER to SEPTEMBER) and days (1 to 31). Rows contain Gage height and Discharge data. Includes summary rows for TOTAL, Mean Daily Discharge, Second-foot per square mile, Rise-fall, and Maximum Mean Daily Discharge.



REDFIELD CROSS CO. & P. O. BOX 127



F-57 R

LOS ANGELES RIVER AT FIGUEROA STREET (DAYTON AVENUE) BRIDGE

Location On west abutment of Figueroa Street (Formerly Dayton Avenue) Bridge across Los Angeles River at Los Angeles, California.

Drainage Area 510 square miles.

Installed by Los Angeles County Flood Control District, December 1929.

Records Available December 1929 to September 30, 1932 at offices of Los Angeles County Flood Control District, Los Angeles, California.

Gage A continuous water stage recorder in shelter house on top of corrugated iron pipe stilling well fastened to west abutment of bridge. Staff gage on stilling well.

Discharge Measurements High water measurements made from cable suspended under bridge. Low water measurements made by wading.

Channel and Control. Sand and silt. No control.

Extremes of Discharge

1929-1930 Maximum- 500 c.f.s. on March 15, 1930. Minimum- Dry at various times of year. 1930-1931 Maximum- 4535 c.f.s. on February 4, 1931. Minimum- Dry at various times of year. 1931-1932 Maximum- 3023 c.f.s. on February 8, 1932. Minimum- Dry at various times during year. 1932-1933 Maximum- 5778 c.f.s. January 19, 1933. Minimum- Dry at various times of year. 1933-1934 Maximum- 22000 c.f.s. January 1, 1934. Minimum- Dry October 20, 1933.

Diversions Underflow diverted by L.A.W.D. near Griffith Park.

Regulation No regulation of valley runoff. Los Angeles County Flood Control Dams on tributaries regulate mountain runoff.

Accuracy Fair.

Operation Located and constructed by the Los Angeles County Flood Control District and operated by the Los Angeles County Flood Control District in conjunction with the U.S.G.S. Water Resources Branch and City of Los Angeles Water Department.

F.C.D. Form 104A IM 5-34

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. FG 57

Discharge measurements of Los Angeles River at Figueroa (Dayton Ave.) during the year ending September 30, 19 33.

Table with 14 columns: No., Date, Made by, Width Feet, Area of section, Mean velocity, Gage height, Discharge, Rating, Method, Mean stage, G.H. stage, Time, Meter No. Rows include measurements from 1932 to 1933.

Main table with 14 columns: No., Date, Made by, Width Feet, Area of section, Mean velocity, Gage height, Discharge, Rating, Method, Mean stage, G.H. stage, Time, Meter No. Rows include measurements from 1933 to 1934.

Discharge measurements of Los Angeles River at Figueroa Street (Dayton Avenue) during the year ending September 30, 19 34

Table with 14 columns: No., Date, Made by, Width Feet, Area of section, Mean velocity, Gage height, Discharge, Rating, Method, Mean stage, G.H. stage, Time, Meter No. Rows include measurements from 1933 to 1934.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 57

Discharge measurements of Los Angeles River at Figueroa Street (Dayton Avenue) during the year ending September 30, 1934

Main data table with columns for No., Date, Made by, Width Feet, Area of section, Mean velocity, Gate height, Discharge, Stage, Method, C.F. Discharge Coeff., Time Meas., Meter No.

F.C. Dist.—Form 105—1000—9-31

Daily Gage Height, in Feet, and Discharge, in Second-Feet, of LOS ANGELES RIVER At FIGUEROA STREET BRIDGE for the Year Ending September 30, 1933

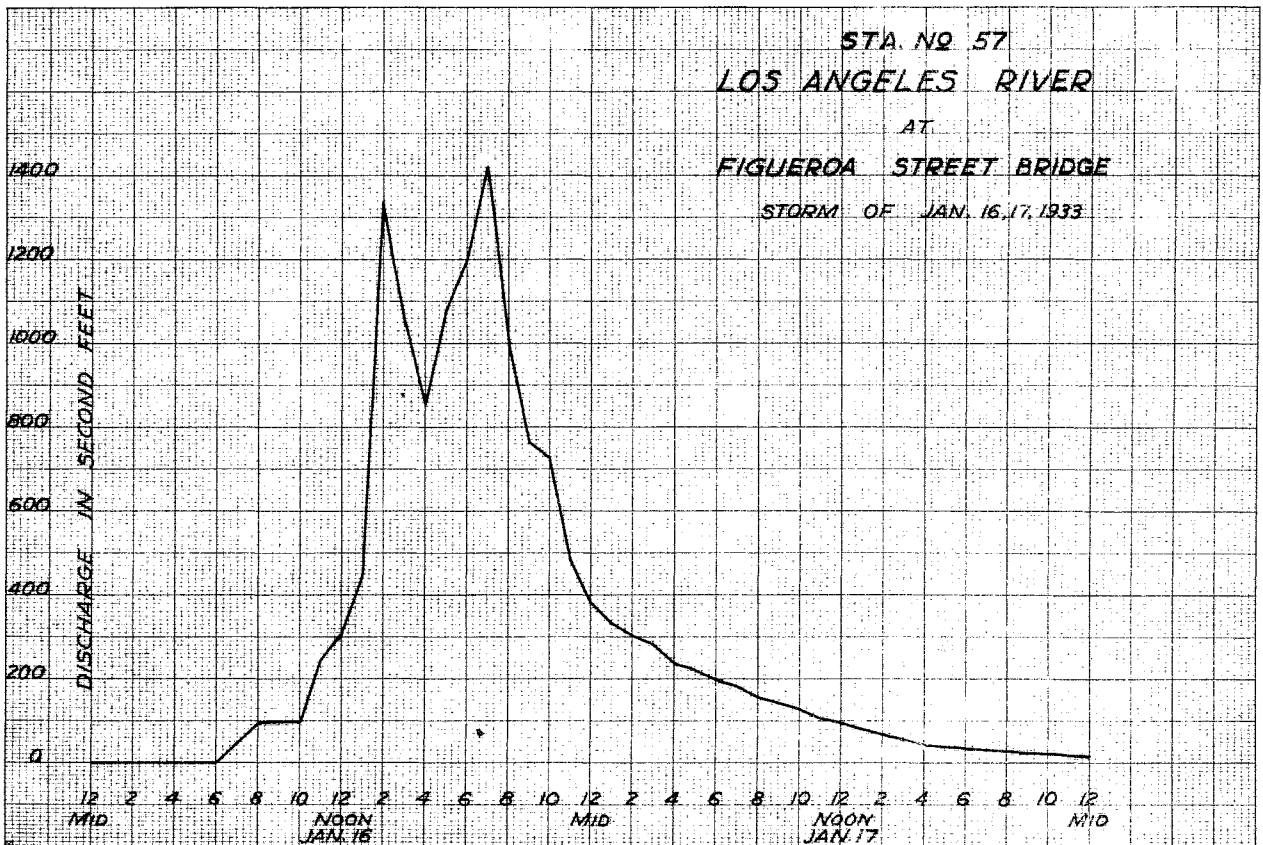
LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

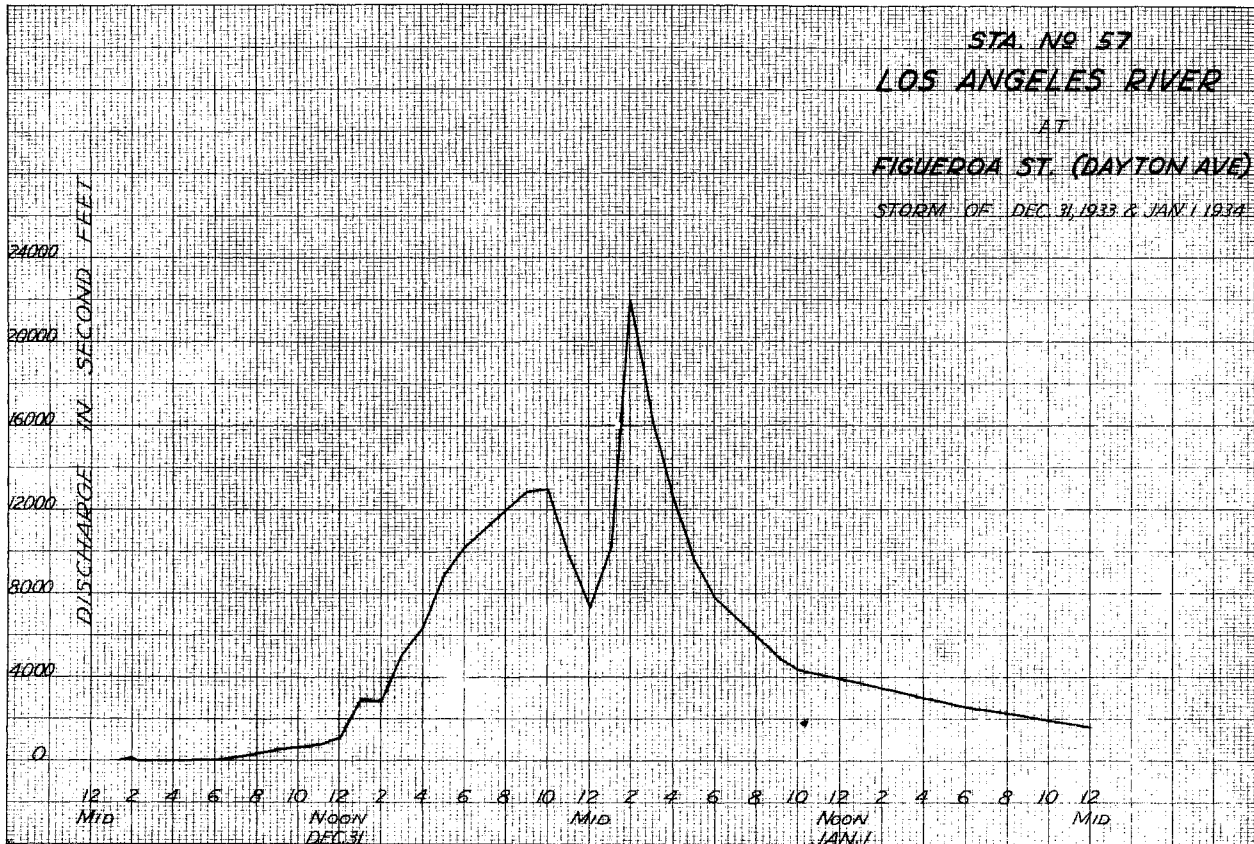
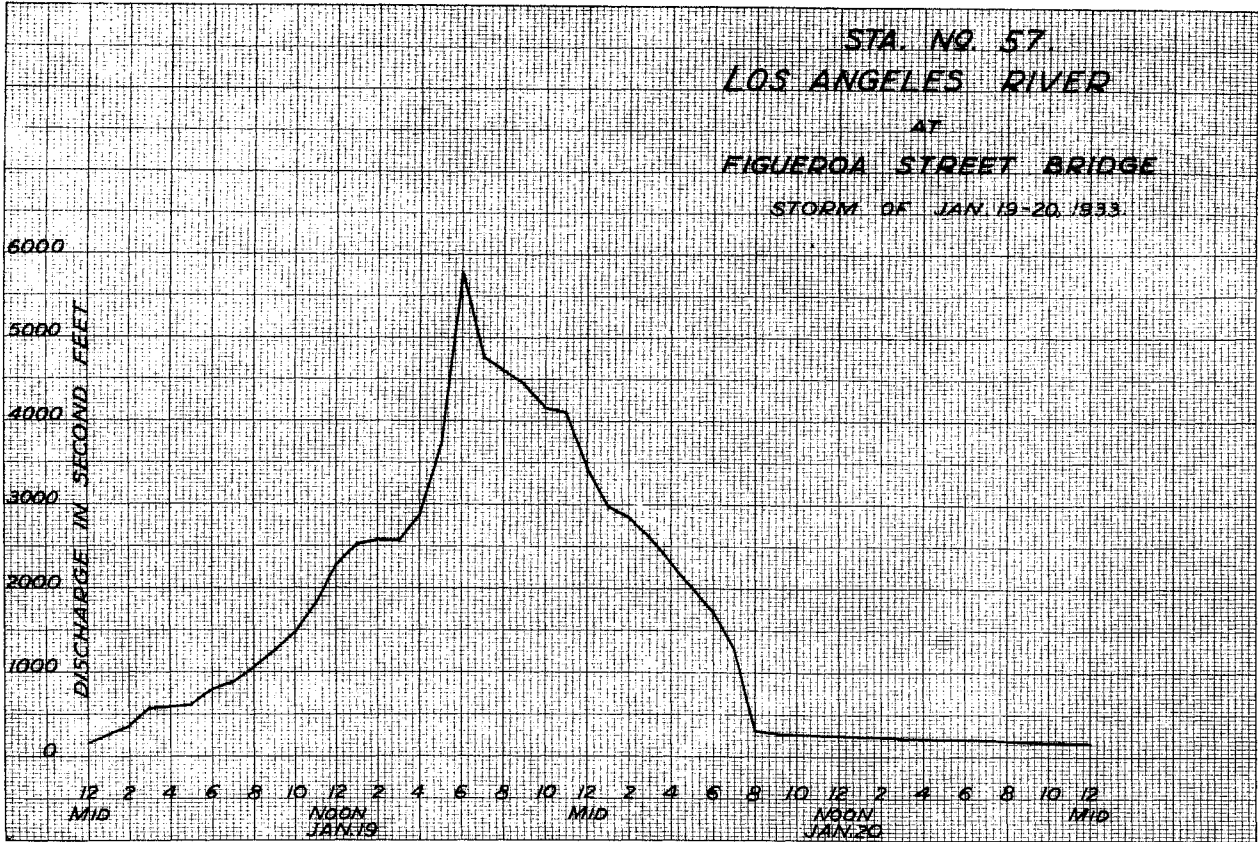
File No. 57

Large summary table with columns for months (OCTOBER to SEPTEMBER) and rows for Gage Height, Discharge, and various statistical totals.

Drainage Area: 51.0 Square Miles. G. E. Bollinger (Observer) Gage Read: Continuous Used rating table dated 2 Jan. 2 to Oct. 1

Table with columns for months (OCTOBER to SEPTEMBER) and rows for Gage Height and Discharge. Includes summary statistics at the bottom such as 'TOTAL', 'Max Daily Discharge in Second-foot', and 'Sum of all discharges in second-foot'.





LOS ANGELES RIVER AT STEWART AND GRAY ROAD BRIDGE

Location

On highway bridge over Los Angeles River at Stewart and Gray Road, about 3 miles west of Downey, Los Angeles County, California, about 1/2 mile above junction with the Rio Hondo.

Drainage Area

614 square miles.

Installed by

State Division of Water Rights of California in 1923.

Re-established by

Los Angeles County Flood Control District March 1, 1928.

Records Available

For records previous to March 1, 1928 see Bulletin #5, State of California, Division of Water Rights, San Gabriel Investigation. Recorder records from March 1, 1928 to September 30, 1934 at Los Angeles County Flood Control District office, Los Angeles, California.

Gage

Rational 7 day water stage recorder set in small house on top of corrugated iron pipe stilling well attached to downstream end of bridge pier.

Discharge Measurements

High water measurements made from upstream side of bridge. Low water measurements made by wading near gage.

Channel and Control

Channel - Sand and silt. No control.

Extremes of Discharge

1927-1928

Maximum- 1115 c.f.s. February 4, 1928.

Minimum- Dry at various times of year.

1928-1929

Maximum- 2007 c.f.s. November 14, 1928.

Minimum- Dry at various times during year.

1929-1930

Maximum- 2213 c.f.s. March 15, 1930.

Minimum- Dry at various times during year.

1930-1931

Maximum- 4361 c.f.s. February 4, 1931.

Minimum- 1.29 c.f.s. September 3 and 4, 1931.

1931-1932

Maximum- 4784 c.f.s. February 8, 1932.

Minimum- Dry at various times during year.

1932-1933

Maximum- 7067 c.f.s. January 19, 1933.

Minimum- Dry various times of year.

1933-1934

Maximum- 29,400 c.f.s. January 1, 1934.

Minimum- Dry various times during year.

Diversions

None.

Regulation

None.

Accuracy

Fair

Operation

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

F. C. Dist. Form 104A

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 34

Discharge measurements of Los Angeles River

at Stewart & Gray Road Bridge during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity Ft. per sec., Gage height Feet, Discharge Sec.-ft., Rating Percent, Method, Mean No., G. H. Change Total, Time Hours, Meter No.

Main data table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity Ft. per sec., Gage height Feet, Discharge Sec.-ft., Rating Percent, Method, Mean No., G. H. Change Total, Time Hours, Meter No.

F. C. Dist. Form 104A IM 3-34

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 34

Discharge measurements of Los Angeles River

at Stewart and Gray Road Bridge during the year ending September 30, 1934

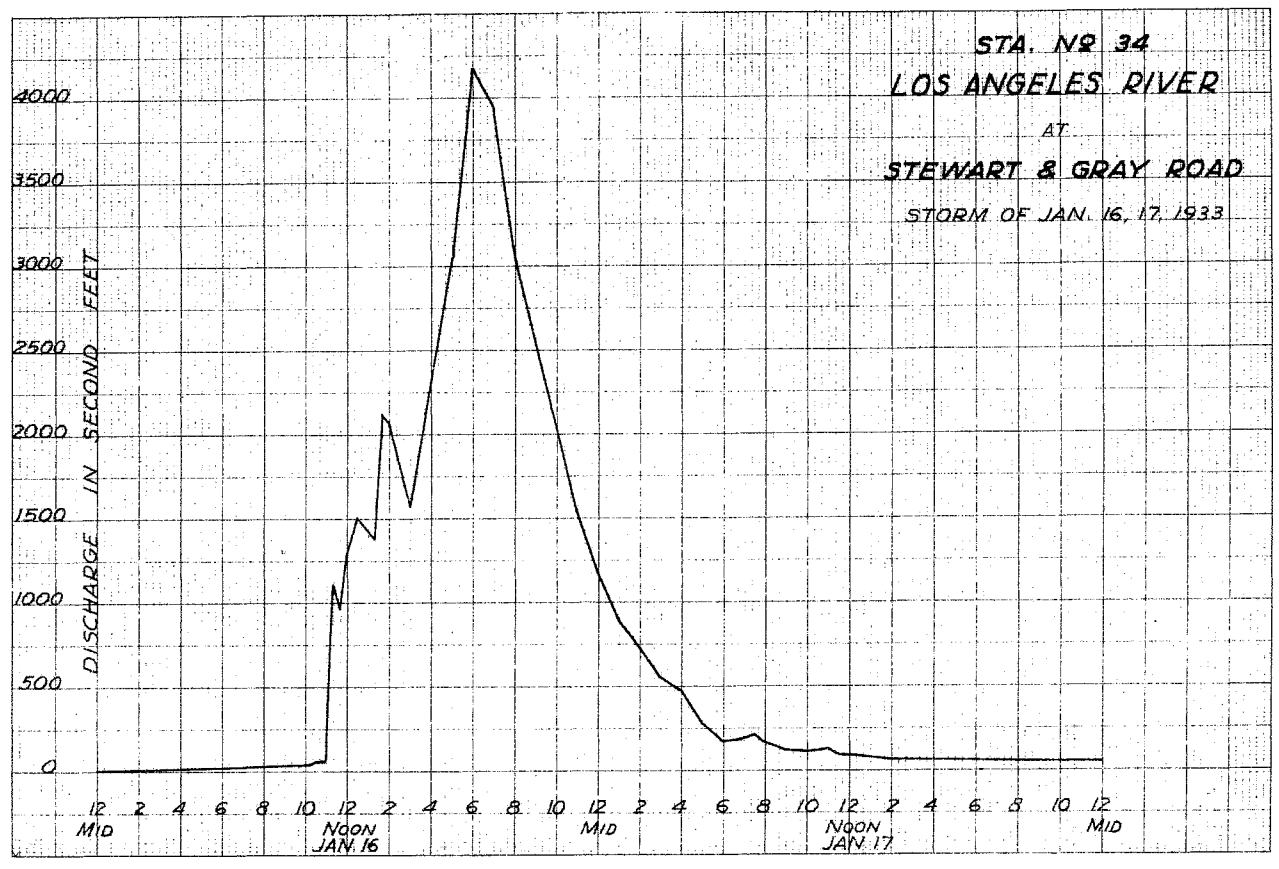
Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity Ft. per sec., Gage height Feet, Discharge Sec.-ft., Rating Percent, Method, Mean No., G. H. Change Total, Time Hours, Meter No.

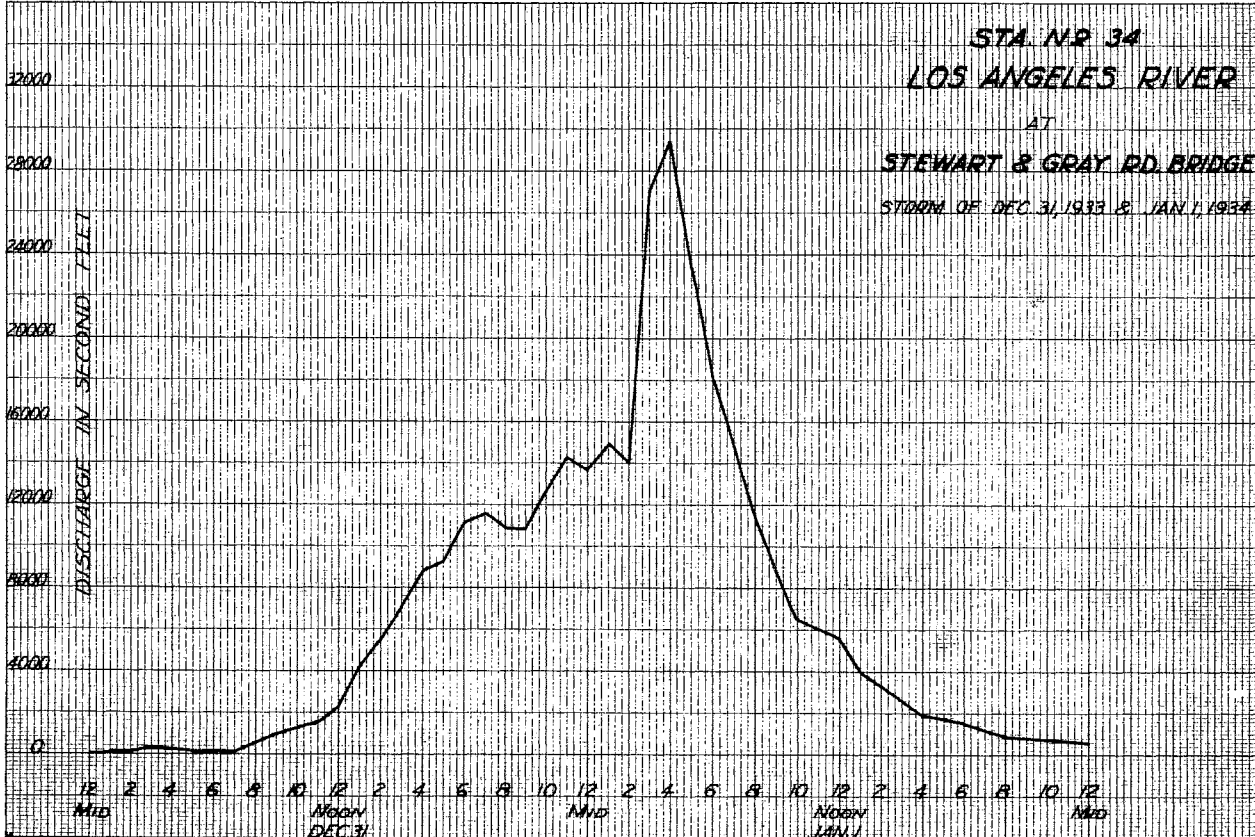
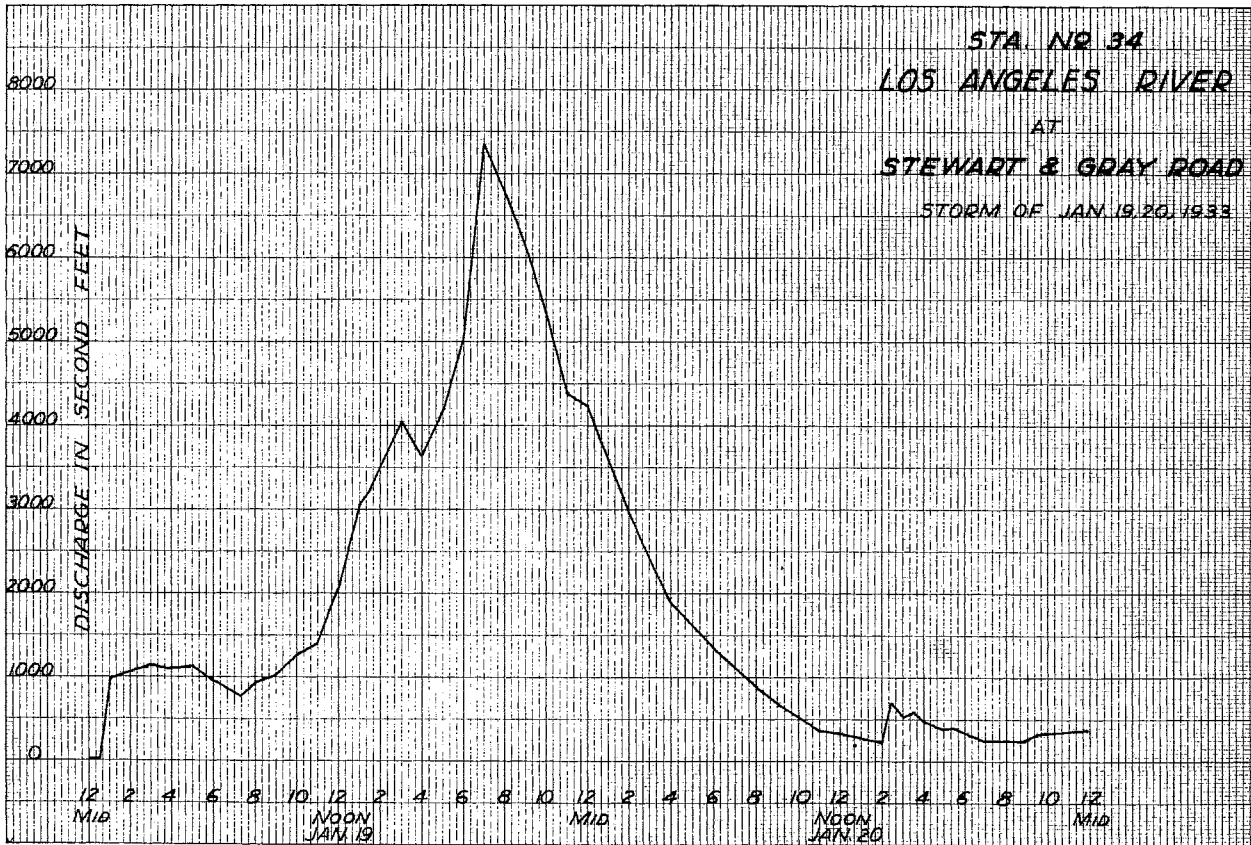
At **STEWART AND GRAY ROAD BRIDGE** for the Year Ending September 30, 1934

Drainage Area **614** Square Miles. (Observer) **Continuously** Gage Road **Continuous** Last rating table dated **A* and B* 5/2/34**

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		DAY
	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	
1	2.64	1.40	2.46	0.4	2.66	1.6	H	8545.2	4.35	6.8	4.54	34.4	14.25	1.5	4.30	2.5	4.26	1.7	H	0.12	4.22	0.90	4.28	2.10	1
2	2.70	2.00	2.49	0.45	2.61	1.1	5.19	411.3	4.31	3.4	4.55	36.5	4.25	1.5	4.30	2.5	4.22	0.9	H	0.15	4.24	1.30	4.23	1.10	2
3	2.71	2.70	2.51	0.65	2.67	1.7	4.98	238.2	4.24	1.3	4.44	17.0	4.27	1.9	4.32	4.2	4.23	0.9	4.16	0.30	4.23	1.10	4.21	0.70	3
4	2.66	1.60	2.39	0.45	2.71	2.7	4.89	173.3	4.21	0.7	4.42	14.0	4.26	1.7	4.31	3.4	4.25	1.5	H	0.11	4.24	1.30	4.16	0.30	4
5	2.55	0.75	2.44	0.20	2.70	2.0	4.72	86.8	4.24	1.3	4.43	12.5	4.26	1.7	4.30	2.5	H	27.56	H	0.11	4.22	0.90	4.27	1.90	5
6	2.70	2.0	2.46	0.30	2.70	2.0	4.77	108.8	4.25	1.5	4.45	10.5	4.26	2.1	4.23	1.1	4.27	1.9	4.16	0.30	4.24	1.30	4.26	1.70	6
7	2.68	1.8	2.59	0.95	2.70	2.0	4.77	108.8	4.25	1.5	4.39	10.2	4.26	2.1	4.26	1.7	4.27	1.9	4.17	0.35	4.24	1.30	4.28	2.10	7
8	2.66	1.6	2.60	1.00	2.82	18.0	4.76	104.4	4.39	10.2	4.41	12.5	4.26	1.7	4.28	2.1	4.29	2.3	H	0.20	4.24	1.30	4.27	1.90	8
9	2.66	1.6	2.59	0.95	3.03	39.7	4.67	68.7	4.38	9.3	4.41	12.5	4.27	1.9	4.24	1.3	4.28	2.1	H	0.27	4.28	2.10	4.26	1.70	9
10	2.65	1.5	2.56	0.80	3.15	64.5	4.76	104.4	4.26	1.7	4.39	10.2	4.30	2.5	4.24	1.3	4.26	1.7	4.22	0.90	4.28	2.10	4.25	1.50	10
11	2.64	1.4	2.45	0.25	3.29	100.3	4.77	108.8	4.23	1.1	4.36	7.6	4.30	2.5	4.27	1.9	4.26	1.7	4.24	1.30	4.27	1.90	4.25	1.50	11
12	2.62	1.2	2.39	0	H	222.46	4.69	74.9	4.27	1.9	4.32	4.2	4.30	2.5	4.28	2.1	4.26	1.7	4.28	2.10	4.16	0.30	4.26	1.70	12
13	2.62	1.2	2.57	0.85	H	1026.11	4.67	68.7	4.26	1.7	4.31	3.4	4.30	2.5	4.26	1.7	4.26	1.7	4.28	2.10	4.13	0.15	4.28	2.10	13
14	2.63	1.3	2.64	1.4	H	161.37	4.66	65.6	4.28	2.1	4.27	1.9	4.29	2.3	4.24	1.3	4.32	4.2	4.28	2.10	4.26	1.70	4.29	2.30	14
15	2.62	1.2	2.64	1.4	3.29	100.3	4.61	50.1	4.37	8.4	4.28	2.1	4.29	2.3	4.30	2.5	4.32	4.2	4.27	1.90	4.25	1.50	4.27	1.90	15
16	2.62	1.2	2.64	1.4	2.93	23.5	4.55	36.5	4.47	21.5	4.31	3.4	4.28	2.1	4.31	3.4	4.31	3.35	4.27	1.90	4.26	1.70	4.19	0.45	16
17	2.64	1.4	2.64	1.4	2.88	17.0	4.48	23.0	4.34	5.9	4.30	2.5	4.29	2.3	4.30	2.5	4.26	1.7	4.27	1.90	4.27	1.90	4.19	0.45	17
18	2.64	1.4	2.64	1.4	2.84	13.0	4.42	14.0	4.33	5.0	4.26	1.7	4.29	2.3	4.29	2.3	4.30	2.5	4.25	1.50	4.25	1.50	4.28	2.10	18
19	2.67	1.7	2.64	1.4	2.80	9.0	4.41	12.5	4.36	7.6	4.28	1.5	4.28	2.1	4.29	2.3	4.33	5.05	4.23	1.10	4.22	0.90	4.28	2.10	19
20	2.65	1.5	2.65	1.5	2.76	6.2	4.41	12.5	4.65	62.5	4.26	1.7	4.28	2.1	4.25	1.5	4.32	4.2	4.24	1.10	4.25	1.50	4.27	1.90	20
21	2.62	1.2	2.69	1.9	2.72	3.4	4.39	10.2	4.50	26.0	4.23	1.1	4.26	1.7	4.27	1.9	4.33	5.05	4.23	1.10	4.27	1.90	4.27	1.90	21
22	2.62	1.2	2.69	1.9	2.71	4.1	4.38	9.3	4.30	2.5	4.23	1.1	4.24	0.9	4.29	2.3	4.32	4.2	4.20	0.50	4.26	1.70	4.24	1.30	22
23	2.62	1.2	2.70	2.0	2.74	4.8	4.39	10.2	H	403.6	4.23	2.1	4.24	1.1	4.29	2.3	4.30	2.5	4.22	0.90	4.26	1.70	4.23	1.10	23
24	2.64	1.4	2.72	3.4	2.73	4.1	4.48	23.0	H	411.6	4.23	2.1	4.24	1.5	4.30	2.5	4.28	2.1	4.23	1.10	4.27	1.90	4.22	0.90	24
25	2.61	1.1	2.70	2.0	2.73	4.1	4.34	5.9	4.69	74.0	4.23	1.1	4.24	1.3	4.29	2.3	4.27	1.9	4.21	0.70	4.23	1.10	4.24	1.30	25
26	2.62	1.2	2.69	1.9	2.71	2.7	4.39	10.2	4.55	62.5	4.23	1.1	4.24	1.3	4.27	1.9	4.27	1.9	4.18	0.40	4.21	0.70	4.24	1.30	26
27	2.60	1.0	2.69	1.9	2.70	2.0	4.40	11.0	4.61	50.1	4.26	1.7	4.24	1.5	4.23	1.1	4.24	1.3	4.16	0.30	4.23	1.10	4.25	1.50	27
28	2.61	1.1	2.70	2.0	2.70	2.0	4.41	12.5	4.57	40.7	4.27	1.9	4.24	1.7	4.24	1.3	4.21	0.7	4.16	0.30	4.23	1.50	4.25	1.50	28
29	2.61	1.1	2.69	1.9	2.53	0.65	4.27	8.4	-	-	4.26	1.7	4.24	1.7	4.25	1.5	4.18	0.4	4.10	0.10	4.26	1.70	4.25	1.50	29
30	2.65	1.5	2.65	1.5	H	47.61	4.38	9.3	-	-	4.27	1.9	4.24	1.9	4.16	0.3	4.17	0.35	4.11	0.11	4.26	2.30	4.17	0.35	30
31	2.82	11.0	-	-	H	5035.6	4.24	1.3	-	-	4.23	1.7	4.31	-	4.16	0.3	-	-	4.20	0.80	4.23	2.30	-	-	31
TOTAL		53.45	37.55	6925.30	10527.8	1271.2	325.8	56.2	61.8	93.96	25.32	44.55	44.15	19323.68											
Mean Daily Discharge in Second-foot		1.72	1.25	223.40	339.61	43.83	7.28	1.87	1.99	3.13	0.85	1.44	1.47	52.94											
Second-foot per square mile		0.0028	0.0020	0.363	0.553	0.071	0.012	0.003	0.0032	0.051	0.001	0.002	0.002	0.086											
Run-off, depth in inches		0.0032	0.0023	0.439	0.638	0.074	0.014	0.0034	0.0032	0.057	0.002	0.002	0.002	1.170											
Run-off in acre-feet		106.02	74.48	13736.33	20881.89	2274.45	447.67	111.47	122.59	186.37	51.21	86.36	87.57	38328.51											
Maximum Mean Daily Discharge in Second-foot		11.0	3.40	5035.60	8545.2	411.60	36.5	2.5	4.2	27.56	2.10	2.30	2.30	8545.2											
Discharge in Second-foot		0.75	0	0.65	1.3	0.7	1.1	0.9	0.3	0.35	0.10	0.15	0.30	0											

REPT. LOS ANGELES CO. S. Y. NO. 10741





LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 180

Discharge measurements of Los Angeles River at State Street, Long Beach, during the year ending September 30, 1934

Table with columns: No., Date, Name, Stage, Area of catchment, Mean velocity, Stage height, Discharge, Rating, etc. Rows include measurements for stations like Johnson-Slaughter, McAulay-Londis, Slaughter-Johnson, etc.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 180

Discharge measurements of Los Angeles River at State Street, Long Beach, during the year ending September 30, 1934

Table with columns: No., Date, Name, Stage, Area of catchment, Mean velocity, Stage height, Discharge, Rating, etc. Rows include measurements for stations like Johnson-Slaughter, McAulay-Londis, Slaughter-Johnson, etc.

Daily Gage Height, in Feet, and Discharge, in Second-Feet, of LOS ANGELES RIVER at STATE STREET, LONG BEACH for the Year Ending September 30, 1934

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. 180

Drainage Area 1063.0 Square Miles. C. E. Slaughter (Observer.) Gage Read Continuous Used rating table dated Oct. 1, 1932

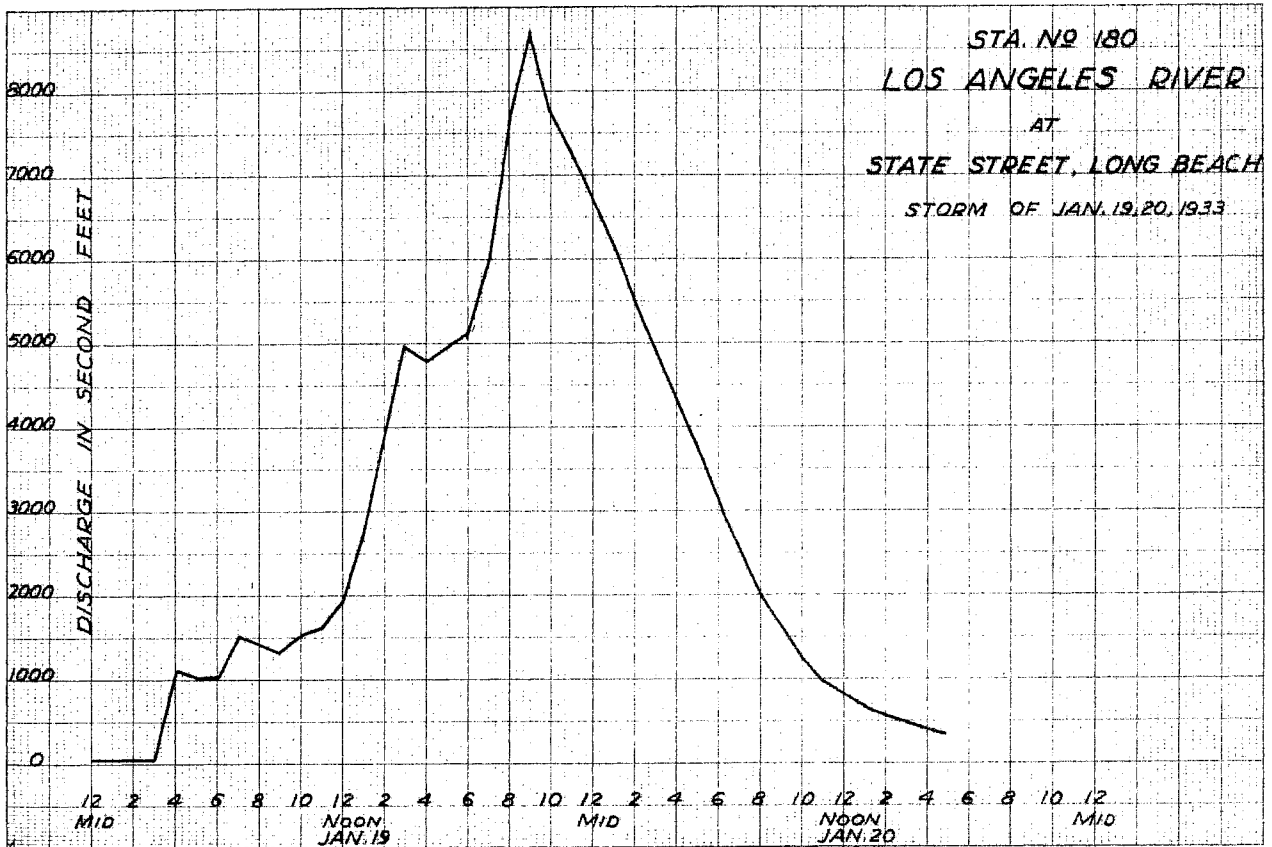
Large table showing daily gage height and discharge data for the year ending September 30, 1934. Includes columns for months from October to September, and summary statistics at the bottom.

STATE STREET, LONG BEACH

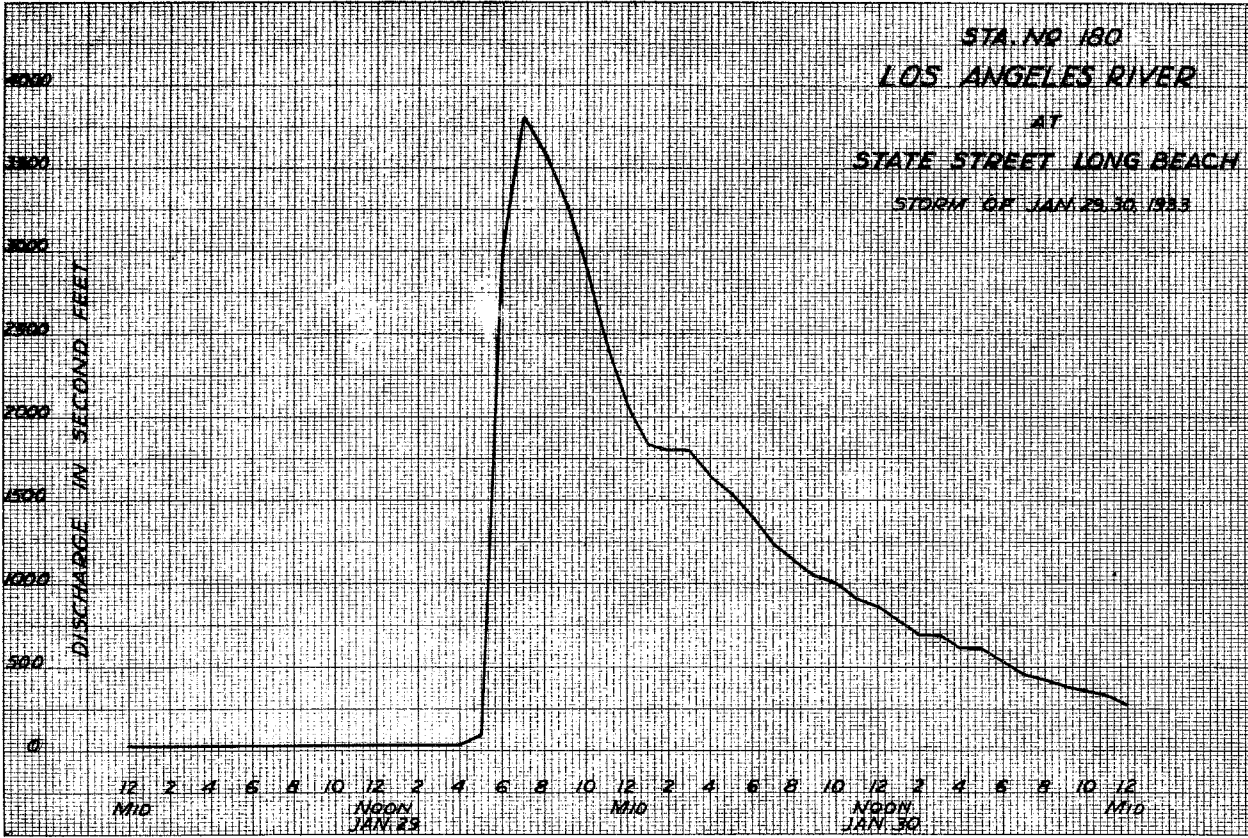
for the Year Ending September 30, 1934

Feb. 4, 1934 1933 & 1934

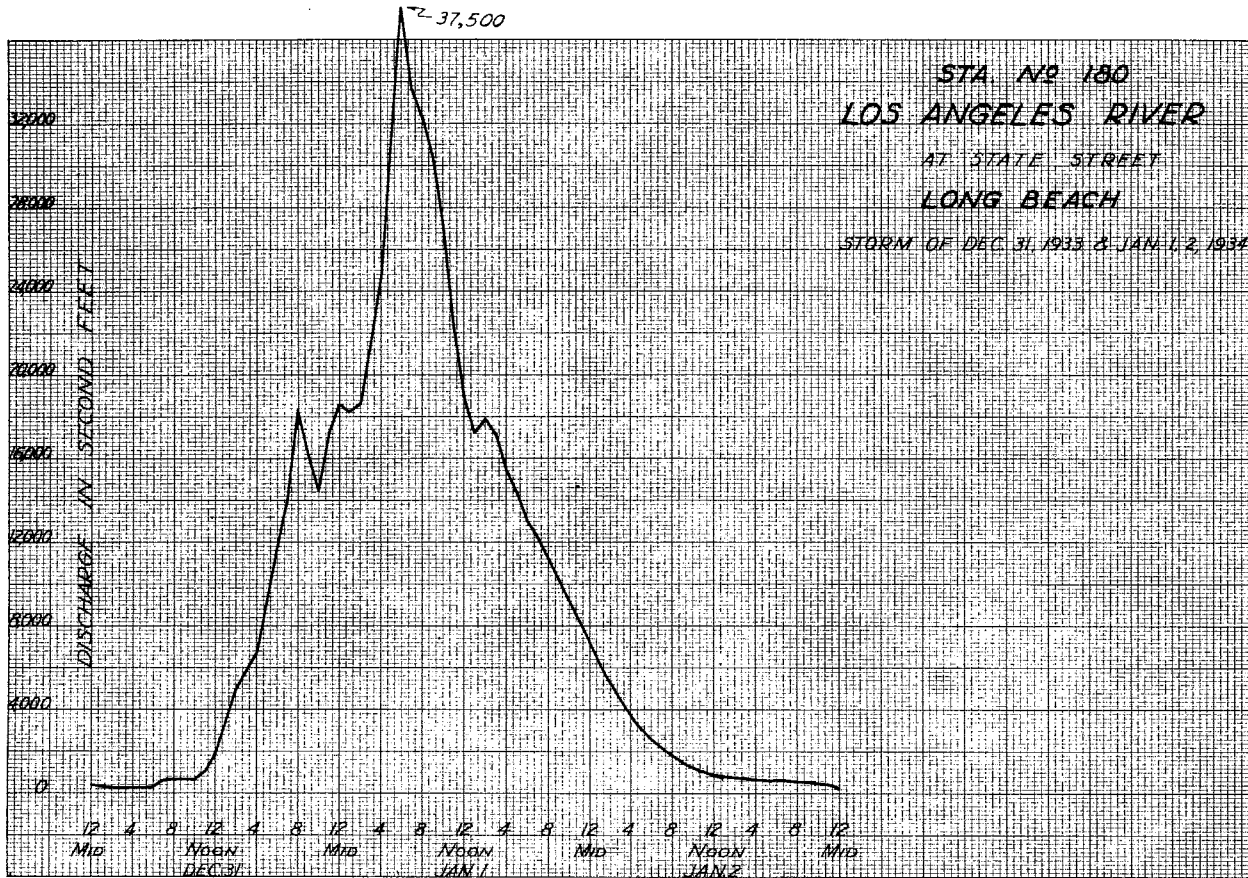
Table with columns for months (OCTOBER to SEPTEMBER) and rows for Gage height and Discharge. Includes summary rows for TOTAL, Mean Daily Discharge, and Second-foot per square mile.



ESPITEL & EMERY CO., N. Y. 80-108411
17.5 IN. X 22 IN.



ESPITEL & EMERY CO., N. Y. 80-108411
17.5 IN. X 22 IN.



F-130 R

MALIBU CREEK AT CRATER CAMP

Location At upper end of Malibu Gorge about 1/4 mile downstream from Crater Camp in Santa Monica Mountains, Los Angeles County, Calif.

Drainage Area 103 square miles.

Installed by Los Angeles County Flood Control District January 17, 1931.

Records Available January 17, 1931 to September 30, 1934 at offices of Los Angeles County Flood Control District, Los Angeles, California.

Gage Au continuous water stage recorder installed in small house on top of corrugated iron pipe stilling well on west side of stream 1/4 mile below Crater Camp.

Discharge Measurements Low flows are made by wading near gage. High flows are made from cable car at gage.

Channel and Control Channel is soil and boulders with considerable growth of vegetation.

Extremes of Discharge

1930-1931 Maximum- 743.2 c.f.s. February 4, 1931. Minimum- 0.07 c.f.s. September 30, 1931. 1931-1932 Maximum- 3100 c.f.s. February 9, 1932. Minimum- 0.01 c.f.s. August 28-30, 1932. 1932-1933 Maximum- 4456 c.f.s. January 19, 1933. Minimum- 0.10 c.f.s. September 5, 1933. 1933-1934 Maximum- 9647.0 c.f.s. January 1, 1934. Minimum- Dry various days during year.

Diversions A number of diversions exist on tributaries of Malibu Creek above gage.

Regulation Flow regulated by a number of small dams located on the tributaries of Malibu Creek.

Accuracy Fair.

Operation Located and installed by the Los Angeles County Flood Control District and operated by the Los Angeles County Flood Control District in conjunction with U. S. G. S. Water Resources Branch.

F. C. Dist. Form 104A

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 130

Discharge measurements of Malibu Creek at Crater Camp during the year ending September 30, 1934.

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec.-ft., Rating Percent, Method, Mean gage No., G. H. Change Total, Time Hours, Meter No.

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec.-ft., Rating Percent, Method, Mean gage No., G. H. Change Total, Time Hours, Meter No.

F. C. D. Form 104A 1M 1-34

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 130

Discharge measurements of Malibu Creek at Crater Camp during the year ending September 30, 1934.

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec.-ft., Rating Percent, Method, Mean gage No., G. H. Change Total, Time Hours, Meter No.

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of MALIBU CREEK
At Crater Camp for the Year Ending September 30, 1933

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Drainage Area 103.0 Square Miles. (C. E. Bollinger Observer.) Gage Road Continuous Used rating table dated 8/26/33

Table with columns for DAY, OCTOBER, NOVEMBER, DECEMBER, JANUARY, FEBRUARY, MARCH, APRIL, MAY, JUNE, JULY, AUGUST, SEPTEMBER, and DAY. Includes discharge and gage height data for each month, with a 'TOTAL' row at the bottom.

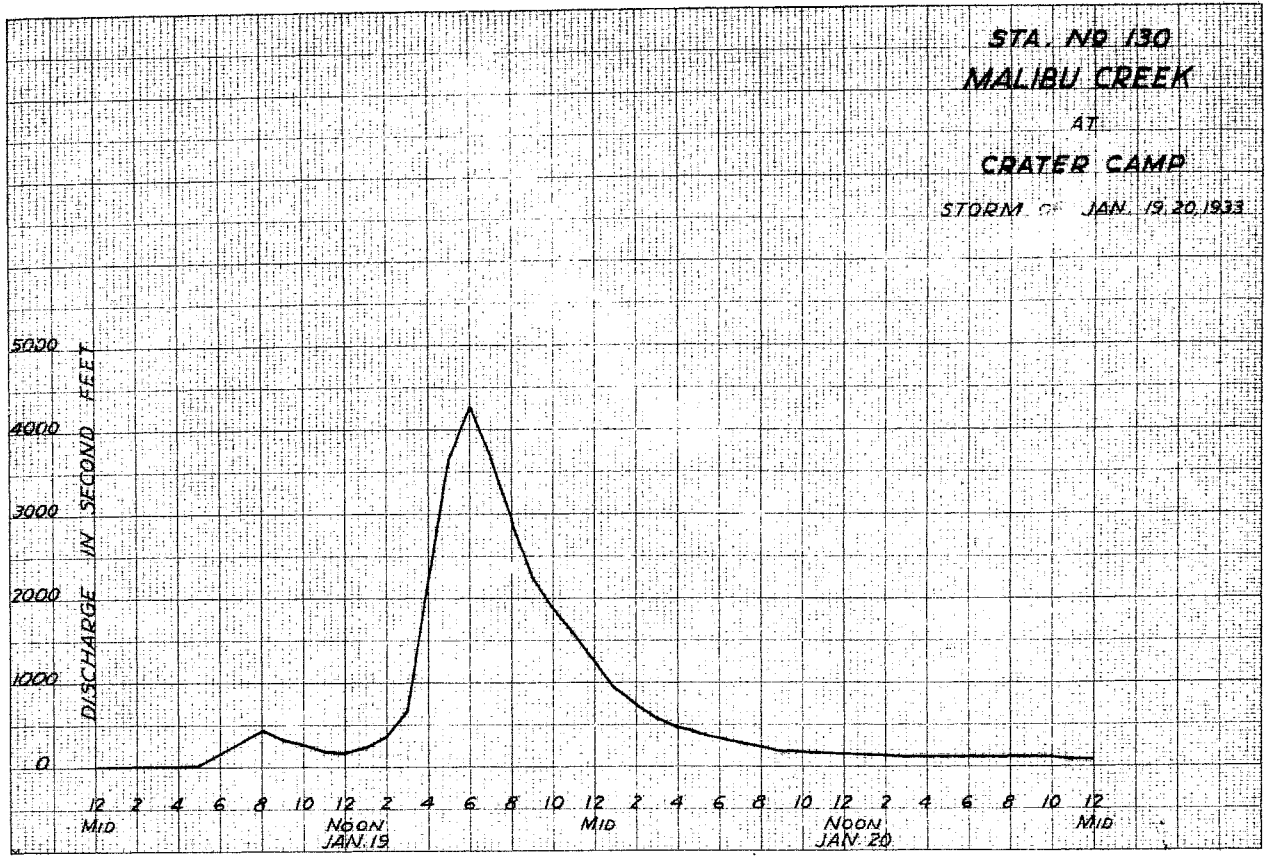
Daily Gage Height, in Feet, and Discharge, in Second-Foot, of MALIBU CREEK
At CRATER CAMP for the Year Ending September 30, 1934

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

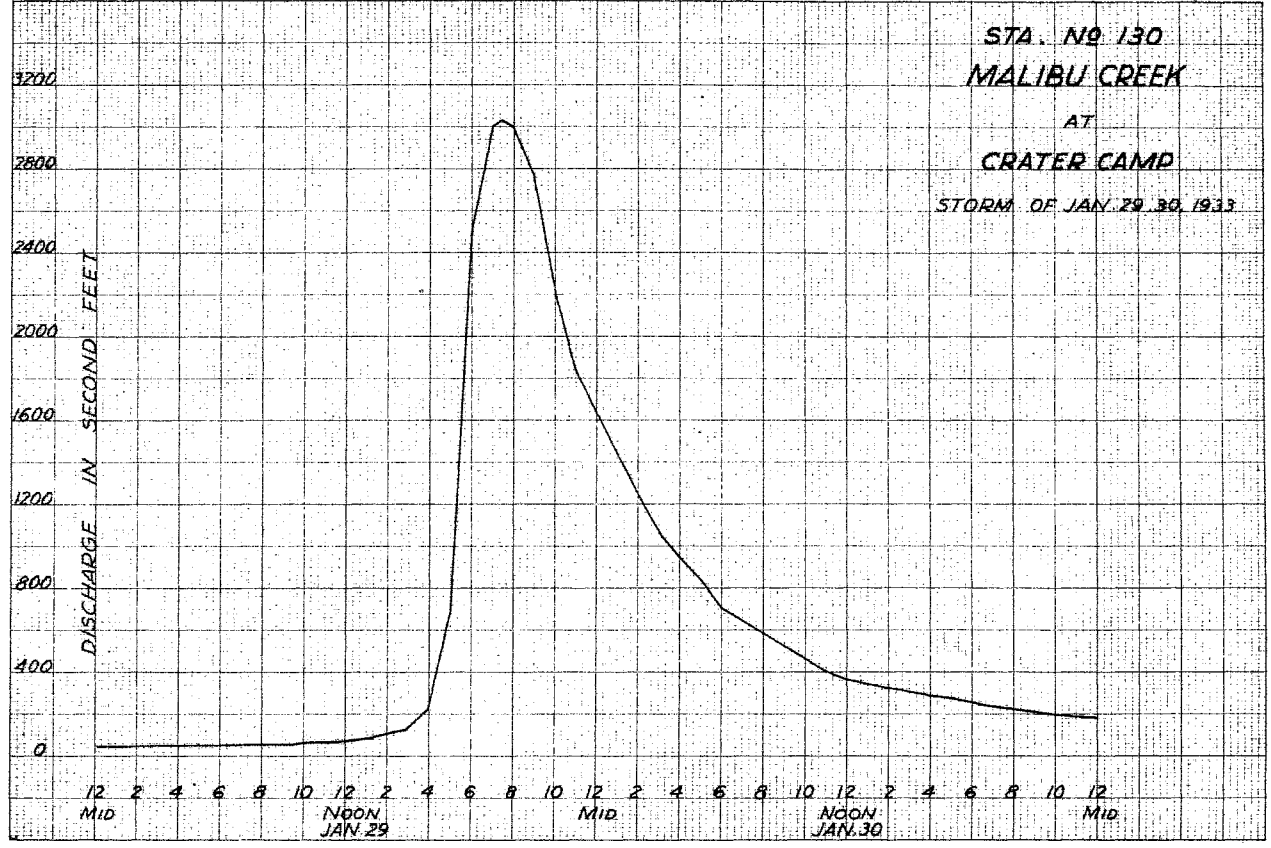
Drainage Area 103.0 Square Miles. (C. E. Bollinger Observer.) Gage Road CONTINUOUS Used rating table dated 1/1/34 to 1/1/34

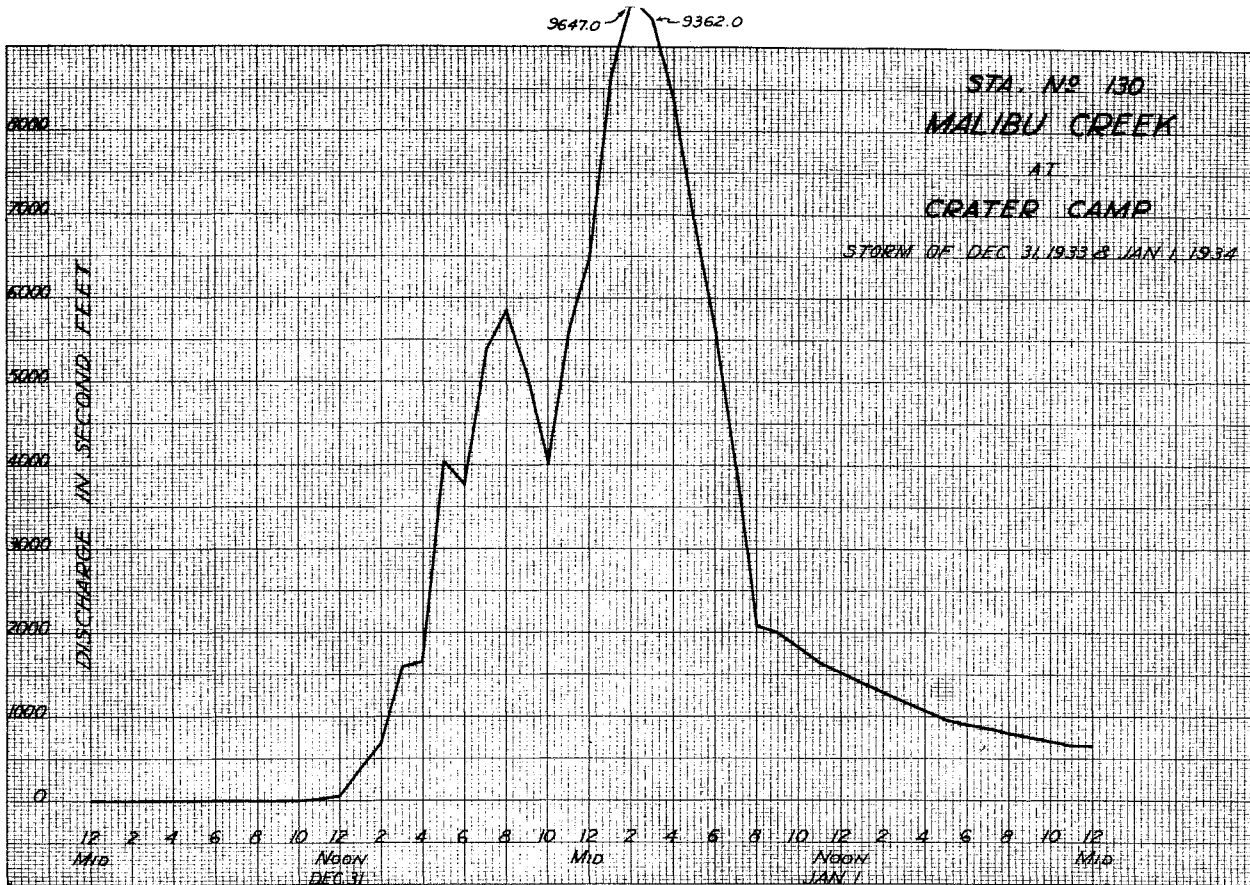
Table with columns for DAY, OCTOBER, NOVEMBER, DECEMBER, JANUARY, FEBRUARY, MARCH, APRIL, MAY, JUNE, JULY, AUGUST, SEPTEMBER, and DAY. Includes discharge and gage height data for each month, with a 'TOTAL' row at the bottom.

HOFFEL & CO. INC. N. Y. 40 WEST 111 ST. N. Y. 1933



HOFFEL & CO. INC. N. Y. 40 WEST 111 ST. N. Y. 1933





F. C. Dist. Form 104A

F-112 R

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. 112

MILL CREEK .6 MILE ABOVE JUNCTION WITH BIG TUJUNGA CREEK

Location
On Mill Creek 200' below junction of North Fork of Mill Creek,
.6 mile above junction with Big Tujunga Creek.

Discharge measurements of Mill Creek
at .6 mi. above Junction with Big Tujunga, during the year ending September 30, 1933.
near

Drainage Area
21.1 square miles.

Installed by
Los Angeles County Flood Control District November 16, 1930.

Records Available
October 1, 1930 to September 30, 1934 at offices of the Los
Angeles County Flood Control District, Los Angeles, California.

Gage
A continuous water stage recorder installed in a galvanized
iron shelter house on east bank of stream. Stilling well is
constructed of galvanized iron pipe.

Discharge Measurements
Low water measurements made with V. notch weir and by wading
near gage.
High water measurements made from cable 10' above gage.

Channel and Control
Channel- Rock and gravel.
Control- Is of concrete and rock for low water.

Extremes of Discharge
1930-1931
Maximum- 1.73 c.f.s. on April 26, 1931.
Minimum- Dry at various times during year.
1931-1932
Maximum- 512 c.f.s. on February 9, 1932.
Minimum- Dry at various times during year.
1932-1933
Maximum- 19.50 c.f.s. January 19, 1933.
Minimum- Dry various times of year.
1933-1934
Maximum- 179.0 c.f.s. January 1, 1934.
Minimum- Dry at various times during year.

Diversions
None.

Regulation
None.

Accuracy
Good.

Operation
Located, installed by the Los Angeles County Flood Control Dis-
trict and operated by the Los Angeles County Flood Control
District in conjunction with U.S.G.S. Water Resources Branch.

No.	Date	Made by	Width Feet	Area of section sq. ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec.-ft.	Rating Percent Method diff.	Mean stage No.	G. Ht. Change Total	Time Hours	Master No.
1932												
3	11/5	Irwin-Oase				1.86	.02	"	Year			
4	11/19	Irwin				1.90	.11	"				
5	12/1	"				1.96	.25	"				
6	12/12	"				2.00	.46	"				
7	12/22	Delaney-Irwin				1.98	.33	"				
8	12/29	Delaney				1.97	.33	"				
1933												
9	1/5	Delaney				1.98	.35	"				
10	1/12	"				1.97	.33	"				
11	1/18	"	4.3	1.22	.67	2.04	.82	.6	6	0	1/6	FC 11
12	1/26	"	5.5	1.86	.62	2.06	1.15	.6	6	0	1/12	"
13	2/2	"	5.5	1.90	.62	2.06	1.18	.6	6	0	1/12	"
14	2/9	" Irwin	5.5	1.39	.68	2.04	.95	.6	6	0	1/4	FC 30
15	2/17	"	5.5	1.44	.69	2.04	.99	.6	6	0	1/6	FC 11
16	2/24	"	5.5	1.44	.66	2.03	.95	.6	6	0	1/6	"
17	3/2	"	5.5	1.38	.66	2.02	.90	.6	6	0	1/6	"
1933												
19	3/9	Delaney	5.8	1.5	.63	2.04	.96	.6	6	0	1/6	FC 11
20	3/16	"	5.8	1.4	.61	2.03	.91	.6	5	0	1/6	"
21	3/23	"	5.8	1.4	.63	2.03	.91	.6	5	0	1/6	"
22	3/27	"	5.8	1.5	.57	2.02	.90	.6	6	0	1/6	FC 30
22A	4/6	"	5.8	1.4	.55	2.00	.80	.6	6	0	1/12	"
23	4/13	"	5.8	1.4	.51	0.98	.72	.6	6	0	1/6	"
24	4/21	Irwin	5.5	1.3	.54	2.00	.73	.6	4	0	1/6	"

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 112

Discharge measurements of Mill Creek

at .6 Mi. above Junc. with Big Tujunga during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec.-ft., Rating Percent full, Method, Mean sec. No., G. St. change Feet, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 112

Discharge measurements of Mill Creek

at .6 Mi. above Junction with Big Tujunga during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec.-ft., Rating Percent full, Method, Mean sec. No., G. St. change Feet, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 112

Discharge measurements of Mill Creek

at .6 Mi. above Junction with Big Tujunga during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec.-ft., Rating Percent full, Method, Mean sec. No., G. St. change Feet, Time Hours, Meter No.

Daily Gage Height, in Feet, and Discharge, in Second-Feet, of MILL CREEK, .6 MILE ABOVE JUNCTION WITH BIG TUJUNGA CREEK for the Year Ending September 30, 1933

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. 112

Large table with columns: DAY, OCTOBER, NOVEMBER, DECEMBER, JANUARY, FEBRUARY, MARCH, APRIL, MAY, JUNE, JULY, AUGUST, SEPTEMBER, DAY. Includes sub-headers for Gage height and Discharge. Includes summary rows at the bottom for totals and averages.

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of

MILL CREEK

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

File No. 112

Above Big Tujunga Creek

for the Year Ending September 30, 1934

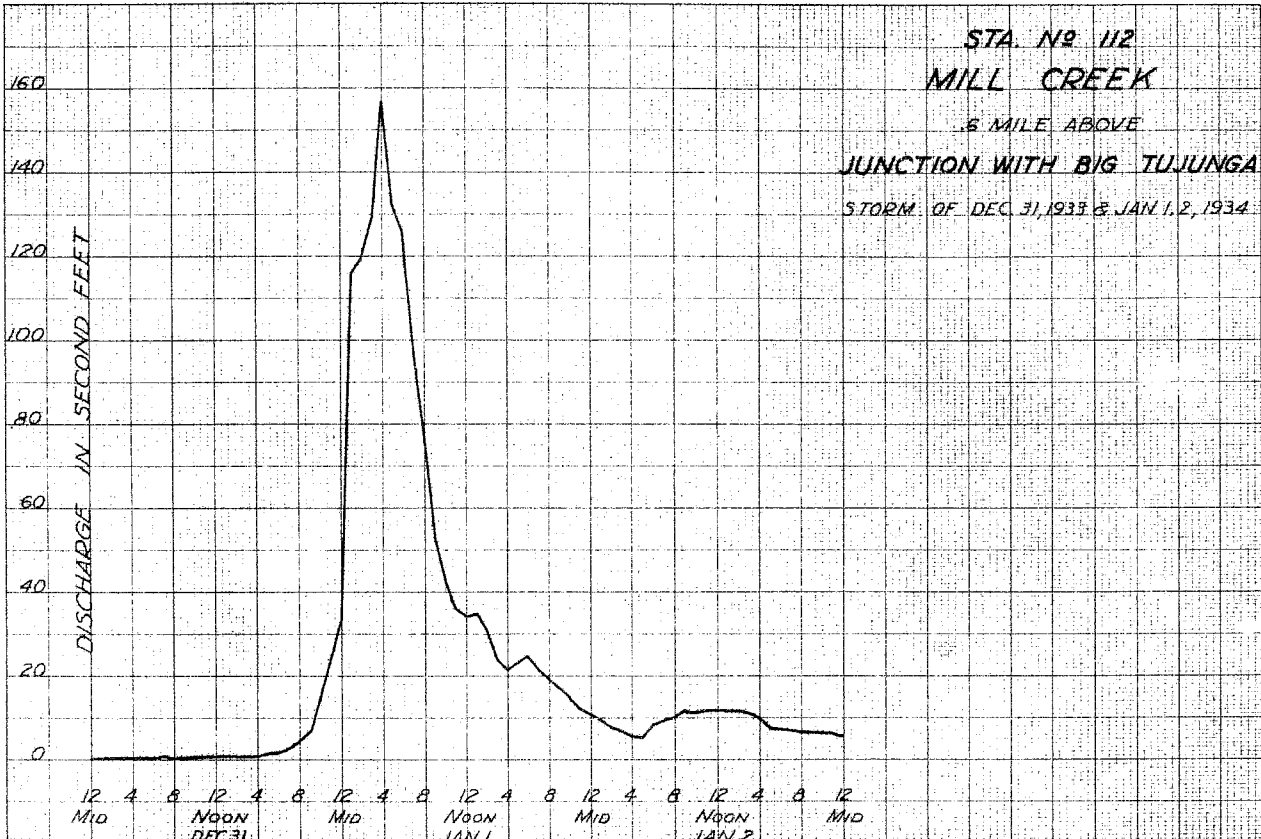
Drainage Area 21.1 Square Miles.

E. S. Bonadiman & J. L. Irwin (Observer.)

Gage Read Continuous

Used rating table dated 1933 & 1934

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		DAY		
	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge			
1							H	57.59	1.98	0.35	2.06	0.77	1	2.04	0.65	1.96	0.27	1.93	0.18	1.88	0.07			1			
2							H	8.76	1.99	0.40	2.06	0.77	2	2.04	0.65	1.96	0.27	1.93	0.18	1.87	0.05			2			
3								2.26	3.38	2.00	0.45	2.05	0.71	3	2.05	0.71	1.97	0.31	1.93	0.18	1.87	0.05			3		
4								2.18	1.79	2.01	0.50	2.06	0.77	4	2.05	0.71	1.96	0.27	1.93	0.18	1.87	0.05			4		
5								2.10	1.07	2.01	0.50	2.05	0.71	5	2.06	0.77	1.96	0.27	1.99	0.40	1.87	0.05			5		
6								2.03	0.60	2.01	0.50	2.05	0.71	6	2.05	0.71	1.95	0.24	1.98	0.35	1.86	0.03			6		
7								1.85	0.02	2.02	0.55	2.00	0.45	7	2.04	0.65	1.95	0.24	1.98	0.35	1.86	0.03			7		
8								1.84	0.01	2.01	0.50	2.01	0.50	8	2.03	0.60	1.95	0.24	1.97	0.31	1.85	0.02			8		
9								1.84	0.01	1.99	0.40	2.02	0.55	9	2.03	0.60	1.96	0.27	1.95	0.24	1.84	0.01			9		
10								1.84	0.01	1.98	0.35	2.02	0.55	10	2.02	0.55	1.95	0.24	1.96	0.27	1.84	0.01			10		
11								1.84	0.01	1.98	0.35	2.03	0.60	11	2.02	0.55	1.95	0.24	1.95	0.24	1.84	0.01			11		
12								1.86	0.03	1.94	0.21	2.02	0.55	12	2.02	0.55	1.95	0.24	1.95	0.24	1.83	0.01			12		
13								H	0.77	1.94	0.21	2.02	0.55	13	2.01	0.50	1.93	0.18	1.95	0.24	1.83	0.01			13		
14								1.95	0.24	1.94	0.21	2.01	0.50	14	2.02	0.55	1.95	0.18	1.95	0.24	1.83	0.01			14		
15								1.95	0.24	1.94	0.21	2.00	0.45	15	2.02	0.55	1.95	0.18	1.95	0.24	1.83	0.01			15		
16								1.95	0.24	1.93	0.18	2.00	0.45	16	2.02	0.55	1.92	0.15	1.95	0.24					16		
17								1.95	0.24	1.94	0.21	2.00	0.45	17	2.03	0.60	1.92	0.15	1.94	0.21					17		
18								1.95	0.24	1.94	0.21	2.00	0.45	18	2.02	0.55	1.92	0.15	1.94	0.21					18		
19								1.94	0.21	1.96	0.27	2.02	0.55	19	2.03	0.60	1.92	0.15	1.94	0.21					19		
20								1.95	0.24	1.97	0.31	2.00	0.45	20	2.00	0.45	1.92	0.15	1.94	0.21					20		
21								1.96	0.27	1.99	0.40	2.02	0.55	21	2.00	0.45	1.91	0.13	1.94	0.21					21		
22								1.96	0.27	2.00	0.45	2.04	0.65	22	2.00	0.45	1.91	0.13	1.94	0.21					22		
23								1.97	0.31	2.00	0.45	2.09	0.99	23	2.01	0.50	1.91	0.13	1.92	0.15					23		
24								1.97	0.31	2.03	0.60	2.12	1.23	24	2.01	0.50	1.90	0.11	1.91	0.13					24		
25								1.97	0.31	2.03	0.60	2.08	0.91	25	2.01	0.50	1.92	0.15	1.91	0.13					25		
26								1.98	0.35	2.02	0.55	2.07	0.84	26	1.99	0.40	1.93	0.18	1.90	0.11					26		
27								1.97	0.31	2.02	0.55	2.08	0.91	27	1.97	0.31	1.95	0.18	1.90	0.11					27		
28								1.96	0.27	2.00	0.45	2.06	0.77	28	1.97	0.31	1.93	0.18	1.90	0.11					28		
29								1.93	0.18	1.99	0.40	-	-	29	1.96	0.27	1.93	0.18	1.89	0.09					29		
30								1.91	0.13	1.99	0.40	-	-	30	1.96	0.27	1.93	0.18	1.88	0.07					30		
31								H	3.29	1.98	0.35	-	-	31	-	-	1.93	0.18	-	-					31		
TOTAL								8.51		82.56		16.60		18.89		16.01		6.12		6.24		0.42				155.35	
Mean Daily Discharge in Second-foot								0.27		2.66		0.59		0.61		0.53		0.20		0.21		0.01				0.43	
Second-foot per square mile								0.013		0.126		0.028		0.029		0.025		0.009		0.010		0.000				0.020	
Run-off, depth in inches								0.015		0.146		0.029		0.034		0.028		0.010		0.011		0.001				0.274	
Run-off in acre-feet								16.88		163.76		32.92		37.47		31.76		12.14		12.38		0.85				308.14	
Maximum Mean Daily Discharge in Second-foot								3.29		57.59		1.23		0.84		0.77		0.31		0.40		0.07				57.59	
Minimum Mean Daily Discharge in Second-foot								0		0.18		0.35		0.27		0.11		0.07		0						0	



MONROVIA CANYON CREEK - ABOVE JUNCTION WITH SAWPIT CREEK

Location
In Monrovia Canyon 150' above junction with Sawpit Creek, about 3 miles northeast of town of Monrovia, Los Angeles County, Calif.

Drainage Area
1.90 square miles as measured on U.S.G.S. topographic map.

Installed by
Los Angeles County Flood Control District November 10, 1927.

Records Available
From November 10, 1927 to September 30, 1932 at offices of Los Angeles County Flood Control District, Los Angeles, California.

Gage
Staff gage installed on rubble masonry recorder house. An continuous water stage recorder installed in rubble masonry house on south side of creek.

Discharge Measurements
Low water measurements made by wading near gage and by weir.
High water measurements made from bridge installed at gage.

Channel and Control
Channel is rock and gravel.
Concrete control located 10' below gage with a two foot crest.
Cippoletti weir for measuring low water flow.

Extremes of Discharge
1927-1928
Maximum- 0.84 c.f.s. February 4, 1928.
Minimum- 0.05 c.f.s. July 30-31, 1928.
1928-1929
Maximum- 7.08 c.f.s. March 10, 1929.
Minimum- 0.02 c.f.s. at various times during year.
1929-1930
Maximum- 5.86 c.f.s. January 15, 1930.
Minimum- Dry at various times during year.
1930-1931
Maximum- 13.26 c.f.s. April 26, 1931.
Minimum- Dry September 19 to 30, 1931.
1931-1932
Maximum- 24. c.f.s. February 9, 1932.
Minimum- .005 c.f.s. at various times during year.
1932-1933
Maximum- 58.50 c.f.s. January 19, 1933.
Minimum- Dry September 5 to 8, 1933, inclusive.
1933-1934
Maximum- 108.25 c.f.s. January 1, 1934.
Minimum- Dry various times of year.

Diversions
Monrovia Pipe line diverts water above gage.

Regulation
None.

Accuracy
Good for low flows.

Operation
Located and constructed by the Los Angeles County Flood Control District and operated by Los Angeles County Flood Control District in conjunction with U.S.G.S. Water Resources Branch.

F. C. Dist. Form 104A

**LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT**

Station No. 22

Discharge measurements of Monrovia Creek

at 200' above Junction with Sawpit Crk., during the year ending September 30, 1933

No.	Date	Made by	Weir Feet	Area of Section Sq. Ft.	Mean Velocity ft. per sec.	Gage Height Feet	Discharge Sec.-ft.	Rating	Method	Mean No.	G. H. Change Feet	Time Hour	Meter No.
1	10/7	Lindsey				.04	.01		Weir				
2	10/14	"				.04	.01		"				
3	10/21	"				.04	.01		"				
4	10/28	"				.04	.01		"				
5	11/4	"				.04	.01		"				
6	11/10	"				.04	.01		"				
7	11/16	"				.04	.01		"				
8	11/25	"				.04	.01		"				
9	12/2	Lindsey-Dockweiler				.04	.01		"				
10	12/9	Lindsey				.05	.02		"				
11	12/12	"				.06	.04		"				
12	12/16	"				.06	.04		"				
13	12/22	"				.06	.04		"				
14	12/30	"				.06	.04		"				
	1933												
15	1/5	Lindsey				.06	.04		"				
16	1/13	"				.06	.04		"				
17	1/16	Lindsey & Burke				.11	.15		"				
18	1/17	"				.13	.21		"				
19	1/19	"	6.5	6.28	3.23	1.30	20.57	.6	6	0	1/3	282883	
20	1/20	"	4.3	1.85	1.45	.50	2.68	.6	4	0	1/12	"	
21	1/23	"	4.2	1.54	1.15	.38	1.76	.6	4	0	1/12	"	
22	1/27	"				.16	.32		Weir				
23	1/30	"				.27	.79		"				

at 200' above Junction with Sawpit Creek, during the year ending September 30, 1933

No.	Date	Made by	Weir Feet	Area of Section Sq. Ft.	Mean Velocity ft. per sec.	Gage Height Feet	Discharge Sec.-ft.	Rating	Method	Mean No.	G. H. Change Feet	Time Hour	Meter No.
24	2/5	Lindsey				.14	.25		Weir				
25	2/9	"				.11	.15		"				
26	2/16	"				.10	.12		"				
27	2/23	"				.08	.08		"				
28	3/2	"				.08	.08		"				
29	3/9	"				.07	.06		"				
30	3/13	"				.07	.05		"				
31	3/16	"				.07	.05		"				
32	3/23	"				.06	.04		"				
33	3/30	"				.06	.04		"				
34	4/6	"				.06	.04		"				
35	4/13	"				.06	.04		"				
36	4/21	"				.06	.04		"				
37	4/28	"				.06	.04		"				
38	5/5	"				.06	.04		"				
39	5/11	"				.06	.04		"				
40	5/18	"				.06	.04		"				
41	5/25	"				.05	.03		"				
42	6/2	"				.06	.04		"				
43	6/9	"				.06	.04		"				
44	6/14	"				.06	.04		"				
45	6/21	"				.05	.02		"				
46	6/30	"				.05	.02		"				
47	7/7	"				.05	.02		"				
48	7/12	Lindsey-Patterson				.04	.01		Weir				
49	7/20	Patterson				.04	.01		"				
50	7/27	"				.04	.01		"				
51	8/4	"				.04	.01		"				
52	8/11	Lindsey				.04	.005		"				
53	8/17	"				.035	.005		"				
54	8/25	"				.035	.005		"				
55	9/1	"				.04	.01		"				
56	9/7	"				0.03	.00		"				
57	9/14	"				0.035	.005		"				
58	9/22	"				0.04	0.01		"				
59	9/28	"				0.04	0.01		"				

F. C. Dist. Form 104A IM 514

**LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT**

Station No. 22

Discharge measurements of MONROVIA CREEK

at 200' above Jct. with Sawpit Creek, during the year ending September 30, 1934

No.	Date	Made by	Weir Feet	Area of Section Sq. Ft.	Mean Velocity ft. per sec.	Gage Height Feet	Discharge Sec.-ft.	Rating	Method	Mean No.	G. H. Change Feet	Time Hour	Meter No.
1	10/5	R. Lindsey				.02		Dry					
2	10/11	"				Weir	.04	.01					
3	10/19	"						Dry					
4	10/26	"				Weir	.04	.01					
5	10/31	"				Weir	.04	.01					
6	11/2	"				Weir	.04	.01					
7	11/9	"				Weir	.04	.01					
8	11/16	"				Weir	.04	.01					
9	11/23	"				Weir	.04	.01					
10	11/28	"				Weir	.04	.01					
11	12/7	"				Weir	.04	.01					
12	12/13	Lindsey-Richards	4.3	1.31	1.36	.48	1.50	.6	4		--021/10	282	283
13	12/14	"				Weir	.12	.15					
14	12/20	R. Lindsey				Weir	.06	.08					
15	12/27	"				Weir	.08	.08					
16	1/1	Lindsey-Richards	5.0	4.46	1.85	1.13	8.27	.6	5		--021/6	282	283
17	1/4	"	3.6	1.11	1.04	.25	1.15	.6	5		1/6	282	283

200' above Junction with Sawpit Creek for the Year Ending September 30, 1934

Drainage Area **1.9** Square Miles

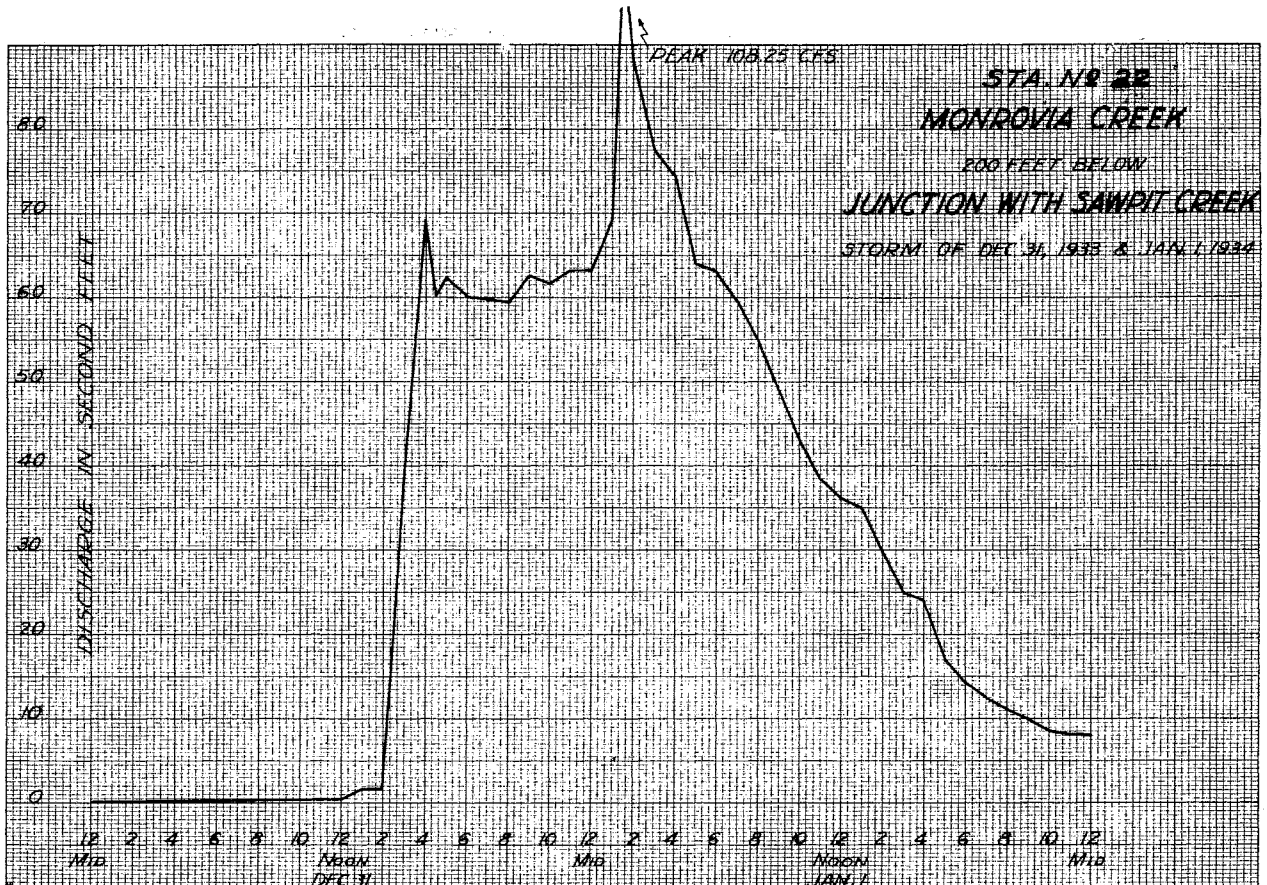
R. Lindsay

Observer

Gage Read **Continuous**

Used rating table dated **1933-34**

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		DAY	
	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge		Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge		PERIOD YEAR
1	0.04	0.01	0.04	0.01	0.04	0.01	H	40.16	0.08	0.08	0.10	0.12	1	0.06	0.04	0.06	0.04	0.05	0.02	0.05	0.02	0.04	0.01	0.04	0.01	1	
2	0.04	0.01	0.04	0.01	0.04	0.01	0.77	5.03	0.03	0.08	0.10	0.12	2	0.06	0.04	0.06	0.04	0.05	0.02	0.05	0.02	0.04	0.01	0.04	0.01	2	
3	0.03	-	0.04	0.01	0.04	0.01	0.51	2.33	0.05	0.08	0.10	0.12	3	0.06	0.04	0.06	0.04	0.05	0.02	0.05	0.02	0.04	0.01	0.04	0.01	3	
4	0.02	-	0.04	0.01	0.04	0.01	0.35	1.20	0.08	0.08	0.10	0.12	4	0.06	0.04	0.06	0.04	0.05	0.02	0.05	0.02	0.04	0.01	0.04	0.01	4	
5	0.02	-	0.04	0.01	0.04	0.01	0.27	0.74	0.07	0.06	0.10	0.12	5	0.06	0.04	0.06	0.04	0.05	0.02	0.05	0.02	0.04	0.01	0.04	0.01	5	
6	0.03	-	0.04	0.01	0.04	0.01	0.24	0.60	0.07	0.06	0.09	0.10	6	0.06	0.04	0.06	0.04	0.05	0.02	0.05	0.02	0.04	0.01	0.04	0.01	6	
7	0.04	0.01	0.04	0.01	0.04	0.01	0.22	0.50	0.07	0.06	0.09	0.10	7	0.06	0.04	0.06	0.04	0.05	0.02	0.05	0.02	0.04	0.01	0.04	0.01	7	
8	0.04	0.01	0.04	0.01	0.04	0.01	0.19	0.38	0.07	0.06	0.09	0.10	8	0.06	0.04	0.06	0.04	0.05	0.02	0.05	0.02	0.04	0.01	0.04	0.01	8	
9	0.04	0.01	0.04	0.01	0.04	0.01	0.17	0.31	0.07	0.06	0.09	0.10	9	0.06	0.04	0.06	0.04	0.05	0.02	0.05	0.02	0.04	0.01	0.04	0.01	9	
10	0.04	0.01	0.04	0.01	0.04	0.01	0.15	0.25	0.07	0.06	0.08	0.08	10	0.06	0.04	0.05	0.02	0.05	0.02	0.05	0.02	0.04	0.01	0.04	0.01	10	
11	0.04	0.01	0.04	0.01	0.04	0.01	0.13	0.19	0.07	0.06	0.08	0.08	11	0.06	0.04	0.05	0.02	0.05	0.02	0.05	0.02	0.04	0.01	0.04	0.01	11	
12	0.04	0.01	0.04	0.01	0.04	0.01	0.12	0.16	0.06	0.04	0.08	0.08	12	0.06	0.04	0.05	0.02	0.05	0.02	0.05	0.02	0.04	0.01	0.04	0.01	12	
13	0.04	0.01	0.04	0.01	0.04	0.01	H	2.70	0.11	0.14	0.06	0.08	13	0.06	0.04	0.05	0.02	0.05	0.02	0.05	0.02	0.04	0.01	0.04	0.01	13	
14	0.04	0.01	0.04	0.01	0.04	0.01	0.28	0.11	0.14	0.06	0.04	0.08	14	0.06	0.04	0.05	0.02	0.05	0.02	0.05	0.02	0.04	0.01	0.04	0.01	14	
15	0.04	0.01	0.04	0.01	0.04	0.01	0.19	0.11	0.14	0.06	0.04	0.08	15	0.06	0.04	0.05	0.02	0.05	0.02	0.05	0.02	0.04	0.01	0.04	0.01	15	
16	0.04	0.01	0.04	0.01	0.04	0.01	0.14	0.10	0.12	0.06	0.04	0.08	16	0.06	0.04	0.05	0.02	0.05	0.02	0.05	0.02	0.04	0.01	0.04	0.01	16	
17	0.03	-	0.04	0.01	0.04	0.01	0.14	0.10	0.12	0.06	0.04	0.08	17	0.06	0.04	0.05	0.02	0.05	0.02	0.05	0.02	0.04	0.01	0.04	0.01	17	
18	0.02	-	0.04	0.01	0.04	0.01	0.10	0.10	0.12	0.06	0.04	0.08	18	0.06	0.04	0.05	0.02	0.05	0.02	0.05	0.02	0.04	0.01	0.04	0.01	18	
19	0.02	-	0.04	0.01	0.04	0.01	0.08	0.10	0.12	0.06	0.04	0.08	19	0.06	0.04	0.05	0.02	0.05	0.02	0.05	0.02	0.04	0.01	0.04	0.01	19	
20	0.02	-	0.04	0.01	0.04	0.01	0.08	0.09	0.10	0.06	0.04	0.07	20	0.06	0.04	0.05	0.02	0.05	0.02	0.05	0.02	0.04	0.01	0.04	0.01	20	
21	0.03	-	0.04	0.01	0.04	0.01	0.08	0.09	0.10	0.06	0.04	0.07	21	0.06	0.04	0.05	0.02	0.05	0.02	0.05	0.02	0.04	0.01	0.04	0.01	21	
22	0.03	-	0.04	0.01	0.04	0.01	0.08	0.09	0.10	0.06	0.04	0.07	22	0.06	0.04	0.05	0.02	0.05	0.02	0.05	0.02	0.04	0.01	0.04	0.01	22	
23	0.03	-	0.04	0.01	0.04	0.01	0.08	0.09	0.10	0.06	0.04	0.07	23	0.06	0.04	0.05	0.02	0.05	0.02	0.05	0.02	0.04	0.01	0.04	0.01	23	
24	0.03	-	0.04	0.01	0.04	0.01	0.08	0.08	0.08	0.08	H	1.33	0.06	0.04	0.05	0.02	0.05	0.02	0.05	0.02	0.04	0.01	0.04	0.01	24		
25	0.03	-	0.04	0.01	0.04	0.01	0.08	0.08	0.08	0.08	H	1.33	0.06	0.04	0.05	0.02	0.05	0.02	0.05	0.02	0.04	0.01	0.04	0.01	25		
26	0.03	-	0.04	0.01	0.04	0.01	0.08	0.08	0.08	0.08	0.24	0.60	0.06	0.04	0.05	0.02	0.05	0.02	0.05	0.02	0.04	0.01	0.04	0.01	26		
27	0.04	0.01	0.04	0.01	0.04	0.01	0.08	0.08	0.08	0.08	0.20	0.48	0.06	0.04	0.05	0.02	0.05	0.02	0.05	0.02	0.04	0.01	0.04	0.01	27		
28	0.04	0.01	0.04	0.01	0.04	0.01	0.08	0.08	0.08	0.08	0.14	0.22	0.06	0.04	0.05	0.02	0.05	0.02	0.05	0.02	0.04	0.01	0.04	0.01	28		
29	0.04	0.01	0.04	0.01	0.04	0.01	0.09	0.10	0.08	0.08	0.11	0.14	0.06	0.04	0.05	0.02	0.05	0.02	0.05	0.02	0.04	0.01	0.04	0.01	29		
30	0.04	0.01	0.04	0.01	0.10	0.12	0.08	0.08	-	-	0.06	0.04	30	0.06	0.04	0.05	0.02	0.05	0.02	0.05	0.02	0.04	0.01	0.04	0.01	30	
31	0.04	0.01	-	-	H	23.65	0.08	0.08	-	-	0.06	0.04	31	-	-	0.02	0.02	-	-	-	0.04	0.01	0.05	0.005	0.05	0.005	31
TOTAL		0.18		0.30		28.42		53.59		5.90		2.30		1.20		0.80		0.80		0.38		0.32		0.20		94.59	
Mean Daily Discharge in Second-foot		0.0058		0.01		0.92		1.74		0.211		0.974		0.4		0.26		0.27		0.012		0.010		0.007		0.259	
Second-foot per square mile		0.003		0.005		0.484		0.915		0.111		0.339		0.021		0.114		0.14		0.006		0.005		0.004		0.024	
Run-off, depth in inches		0.004		0.006		0.556		1.049		0.115		0.045		0.024		0.116		0.16		0.007		0.006		0.004		1.847	
Run-off in acre-foot		0.36		0.60		56.37		106.30		11.70		4.56		2.38		1.59		1.59		0.75		0.63		0.40		187.22	
Maximum Mean Daily Discharge in Second-foot		0.01		0.01		23.65		40.16		1.99		0.12		0.04		0.04		0.04		0.02		0.02		0.01		40.16	
Maximum Mean Daily Discharge in Second-foot		0		0.01		0.01		0.08		0.04		0.04		0.04		0.02		0.02		0.01		0.005		0.005		0	



MONROVIA STORM DRAIN AT PEAK ROAD

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 195

Location

On the east wing wall of approach to concrete channel of Monrovia Storm Drain at Peak Road. About 1 mile north of Monrovia, Los Angeles County, California.

Discharge measurements of Monrovia Storm Drain

Drainage Area 4.47 square miles.

at Peak Road during the year ending September 30, 1933

Installed by The Los Angeles County Flood Control District, May 1, 1932.

Records Available May 1, 1932 to September 30, 1934 stream measurements available at the offices of Los Angeles County Flood Control District.

Gage Stevens Type L 8 day water stage recorder, installed in wooden shelter house on top of corrugated iron stilling well. Staff gage on wing wall 2 feet from stilling well.

Discharge Measurements High and low flows made by wading.

Channel and Control Channel - sand and gravel. Concrete control.

Extremes of Discharge 1932-1933 Maximum - Not determined. Minimum - Dry most of the year. 1933-1934 Maximum - 554.0 c.f.s. January 1, 1934. Minimum - Dry most of the year.

Diversions None

Regulations None

Accuracy Fair

Operation Located, installed and operated by the Los Angeles County Flood Control District

Table with columns: No., Date, Made by, Width Feet, Area of Section Sq. Ft., Mean Velocity ft. per sec., Gage Height Feet, Discharge Sec.-ft., Rating Method, Mass No., G. H. Station Total, Time Hours, Meter No.

F.C.D. Form 104A 1M 3-34

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 195

Discharge measurements of Monrovia Storm Drain

at Peak Road during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of Section Sq. Ft., Mean Velocity ft. per sec., Gage Height Feet, Discharge Sec.-ft., Rating Method, Mass No., G. H. Station Total, Time Hours, Meter No.

F.C. Div. - Form No. 100-3-34

Daily Gage Height, in Feet, and Discharge, in Second-Feet, of MONROVIA STORM DRAIN

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. 195

near At PEAK ROAD for the Year Ending September 30, 1934

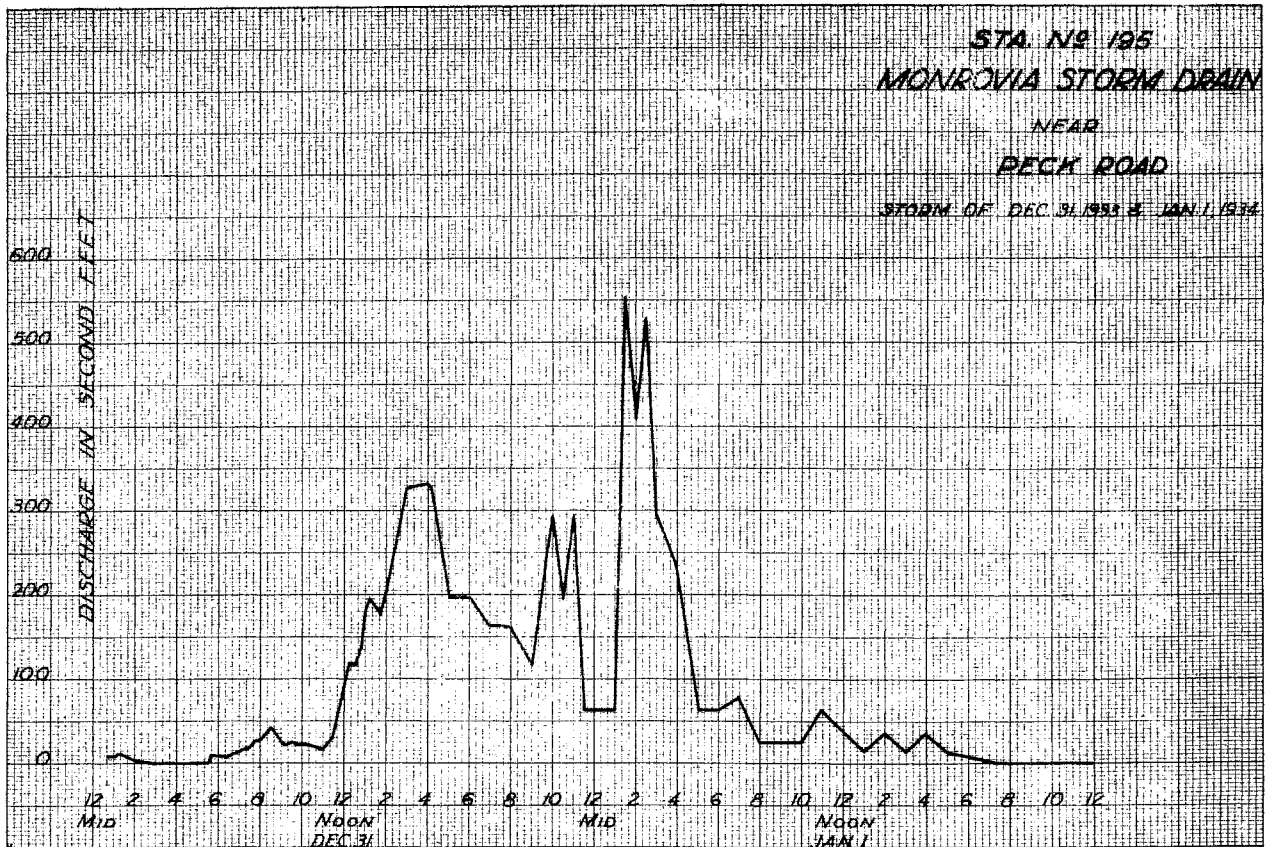
Drainage Area 4.47 Square Miles

Observer: R. Lindsay

Gage Road Continuous

Used rating table date: 1933-34

Main data table with columns for months (OCTOBER to SEPTEMBER), daily gage height, discharge, and summary statistics at the bottom.



F-181 R

MONTEBELLO STORM DRAIN OUTLET INTO RIO HONDO AT MINES AVENUE

Location

On south wing wall of storm drain outlet 200 feet east of Mines Avenue and 220' west of west bank of the Rio Hondo at Montebello, Los Angeles County, California.

Drainage Area

9.6 square miles.

Installed by

Los Angeles County Flood Control District January 12, 1932.

Records Available

January 12, 1932 to September 30, 1934 at the offices of the Los Angeles County Flood Control District, Los Angeles, California.

Gage

Stevens type L 8 day water stage recorder installed in small house on top of corrugated iron pipe stilling well fastened to south wing wall of storm drain outlet.

Discharge Measurements.

High flows measured at gaging bridge 75' below gage.
Low flows measured by wading near gage.

Channel and Control

Concrete apron with drop below gage.
Low flows controlled by drop.

Extremes of Discharge

1931-1932
Maximum- 531. January 31, 1932.
Minimum- Dry at various times of year.
1932-1933
Maximum- 713.0 c.f.s. January 19, 1933.
Minimum- Dry at various times during year.
1933-1934
Maximum- 1360 c.f.s. January 1, 1934.
Minimum- Dry at various times of year.

Regulation

None.

Accuracy

Good for low water.

Operation

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

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. 181

Discharge measurements of Montebello Storm Drain

at Outlet in Rio Hondo at Mines Ave., during the year ending September 30, 1933

No.	Date	Made by	Width Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec.-ft.	Rating from gage	Method	Max. wind No.	G. H. class. Total	Time Hours	Water No.
1	11/16	Slaughter					0.10	Est.					
2	12/11	Jordan	14.	8.30	3.02	.30	25.0	.6	8	0	1/6	FO 5	
3	12/11	"	14.	8.75	2.97	.30	26.0	.6	8	0	1/6	"	
4	1/17	Jordan	11.0	1.80	0.92	-	1.65	.6	5	0	1/6	FO 5	
5	1/19	Jordan-Fergus	30.	58.1	2.55	1.3	148.5	.6	8	0	1/6	"	
6	1/20	"	14.	8.82	2.90	0.28	25.5	.6	7	-.04	1/6	"	
7	1/21	Slaughter	8.0	0.60	0.80	-	0.64	Float					
8	1/28	"	6.0	0.30	0.67	-	0.20	"					
9	1/29	Jordan-Fergus	27.5	54.5	2.13	1.05	116.2	.6	8	-.10	1/6	FO 5	

R.C.D. Form 106 (11-24)

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. 181

Discharge measurements of Montebello Storm Drain

at Outlet into Rio Hondo at Mines Ave., during the year ending September 30, 1933

No.	Date	Made by	Width Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec.-ft.	Rating from gage	Method	Max. wind No.	G. H. class. Total	Time Hours	Water No.
1	1933 10/31	OESlaughter	4.0	0.20	0.55		0.11	.6	2	-	1/30		
2	12/13	Jordan-Sanknar	14.0	20.8	4.53	1.00	94.5	.6	7	-	1/4	FO 5	
2A	12/21	OESlaughter					.05	Est.					
3	12/31	Jordan-Sanknar	35.	94.6	4.15	2.15	392.4	.6	8	+10	1/4	"	
4	12/31	"	35.	94.9	4.38	2.25	414.7	.6	8	+10	1/4	"	
5	1/1	"				6.0	1360.	Est.					
6	2/23	OESlaughter	6.0	0.90	1.20		1.08	Float	2	-	1/30		
7	3/28	"	2.0	0.02	0.18		0.01	Float	2	-	1/30		
8	5/8	ESBonadiman						Trace					
9	5/31	"						Dry					
10	6/5	"	14.	7.61	2.54	0.26	19.39	.6	6	-.04	1/6	FO 27	
11	6/7	"						Dry					
12	6/14	"						Dry					
13	6/21	"						Dry					
14	7/12	"						Trace					
15	8/24	"					0.02	Est.					

F.C. Dist.—Form 105—1000—9-31

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of MONTEBELLO STORM DRAIN

at Outlet into Rio Hondo at Mines Avenue for the Year Ending September 30, 1933.

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

File No. 181

Drainage Area 9.6 Square Miles.

Slaughter (Observer.)

Gage Read Continuous

Use rating table dated JANUARY 9, 1933

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		DAY
	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	
1																									1
2																									2
3																									3
4																									4
5																									5
6																									6
7																									7
8																									8
9																									9
10																									10
11					.30	24.0																			11
12																									12
13																									13
14																									14
15																									15
16																									16
17								H	1.34																17
18								H	32.48																18
19									Dry																19
20								H	124.92																20
21								H	32.92																21
22								H	1.77																22
23								H	14.26																23
24					H	.91	H	21.81																	24
25																									25
26																									26
27																									27
28																									28
29																									29
30								H	43.28																30
31								H	.81																31
TOTAL									24.91																298.51
Mean Daily Discharge in Second-foot									.803																.82
Second-foot per square mile									.084																.085
Run-off, depth in inches									.097																1.16
Run-off in acre-feet									49.41																592.10
Maximum Mean Daily Discharge in Second-foot									24.0																124.92
Minimum Mean Daily Discharge in Second-foot									0																0

Daily Gage Height in Feet, and Discharge, in Second-Feet, of **MONTEBELLO STORM DRAIN**

**LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT**

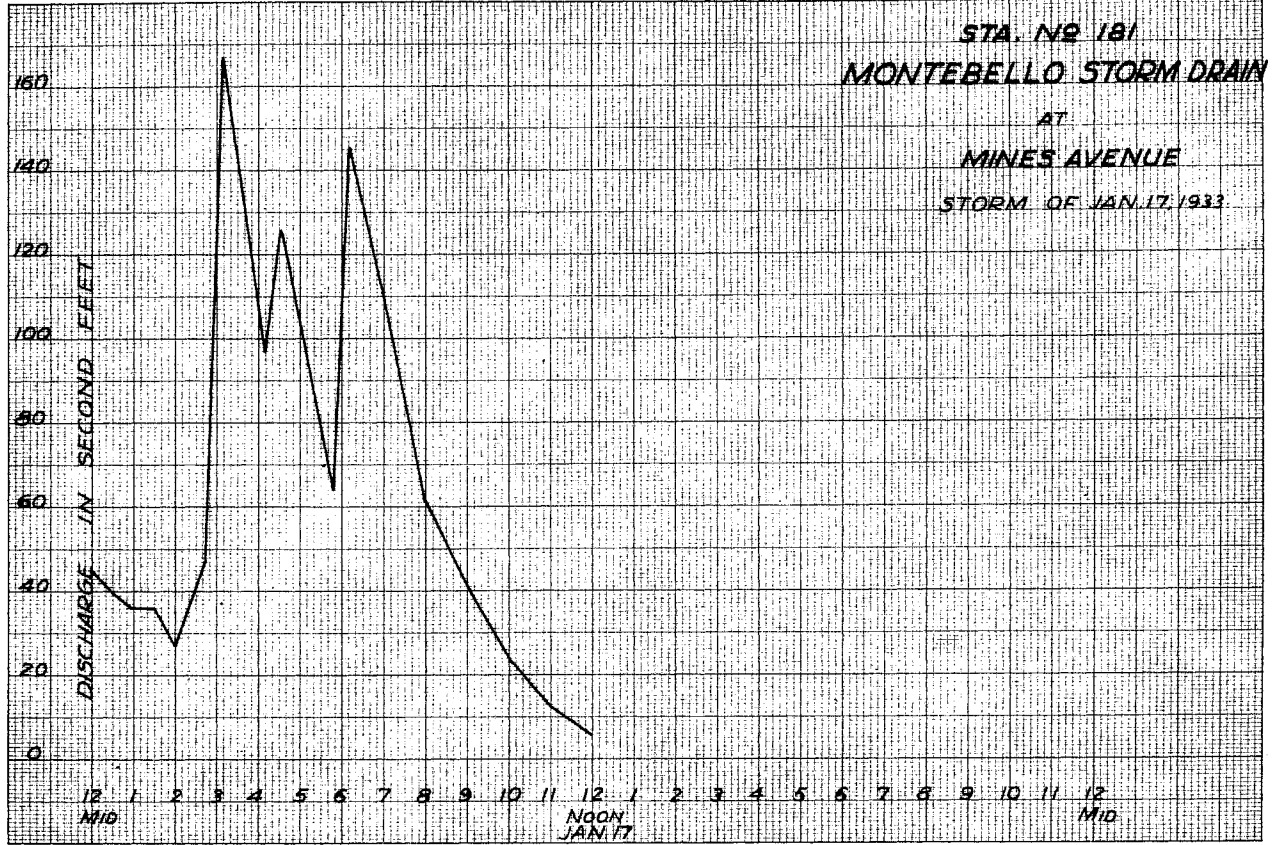
Outlet into Rio Hondo,
At MINES AVENUE.

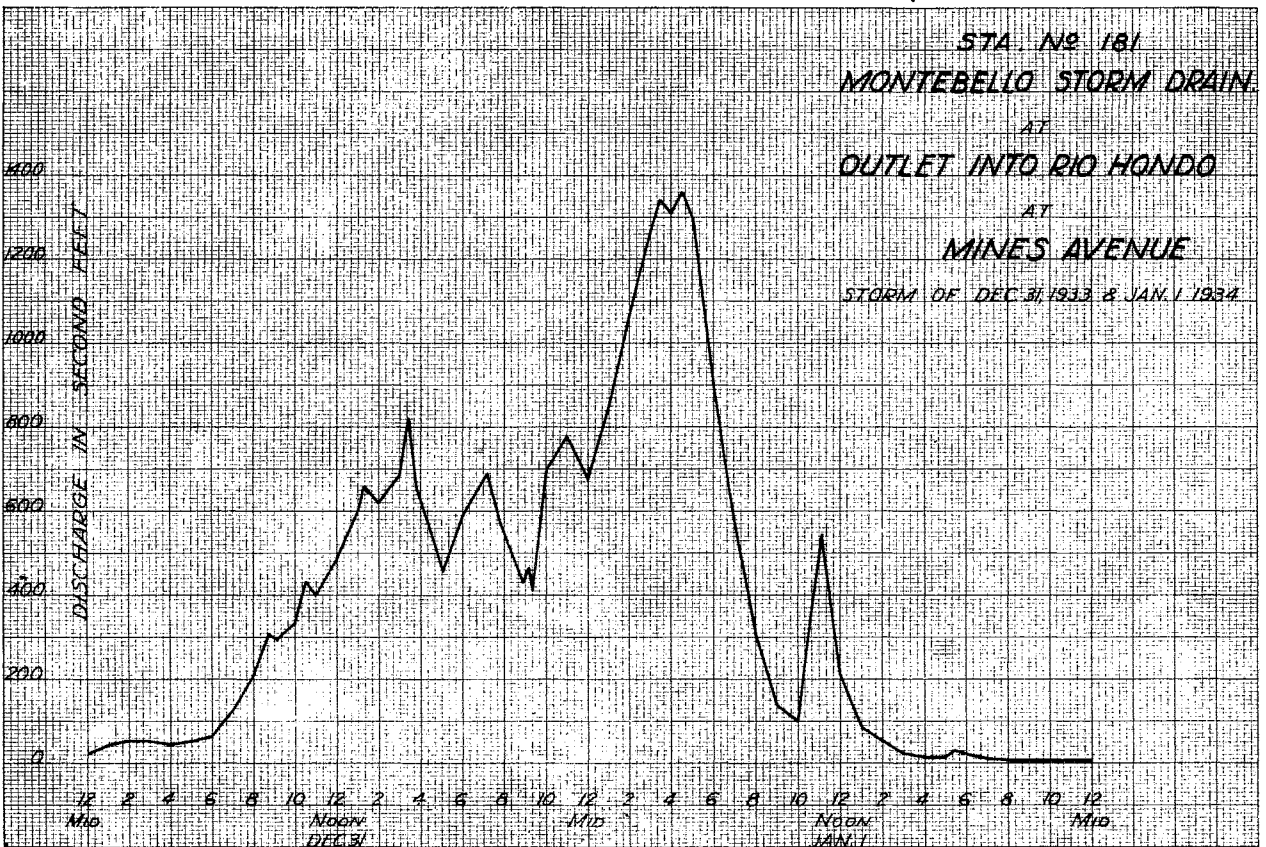
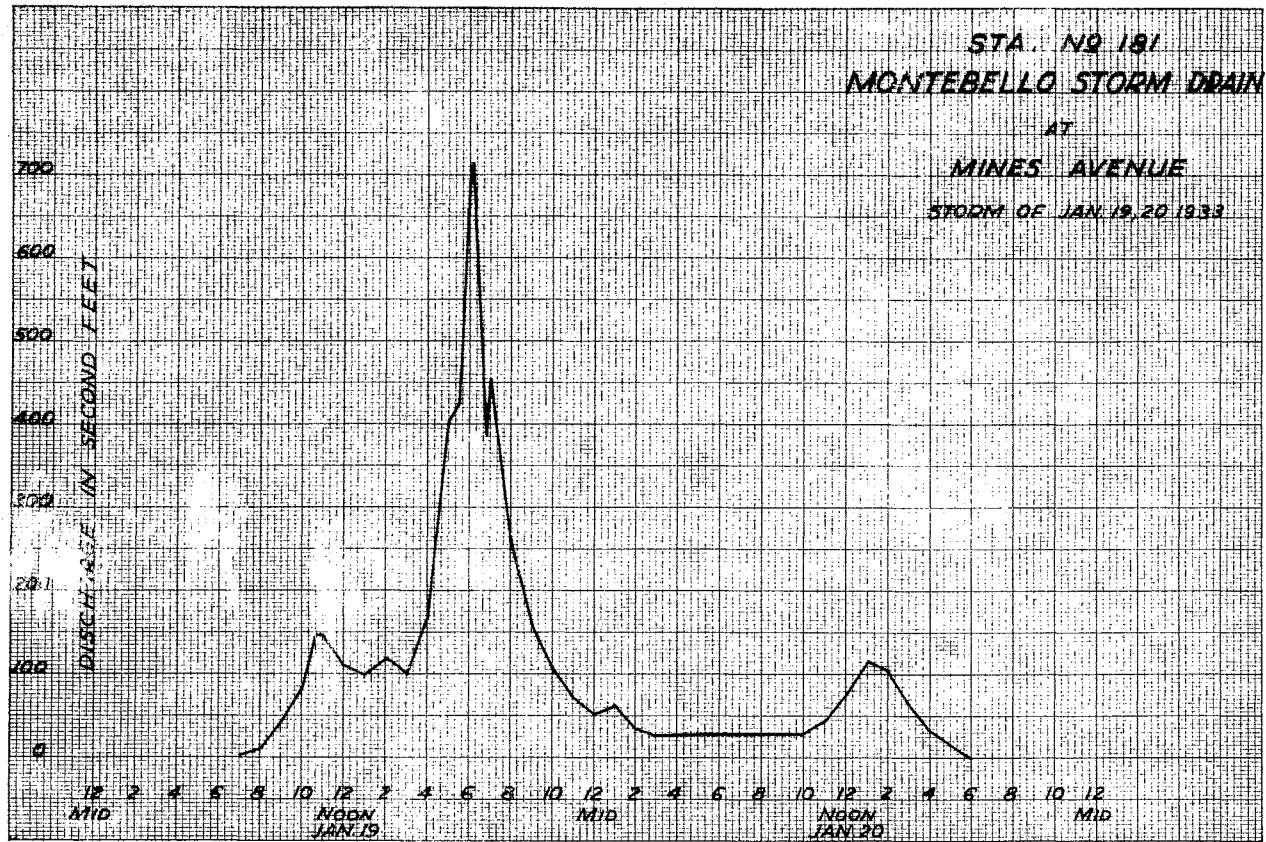
for the Year Ending September 30, 1934
G. E. Slaughter
W. S. Bonadiman

Gage Road CONTINUOUS

Used rating table dated July 17, 1934

Date	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
1							H	385.36																
2																								
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
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26																								
27																								
28																								
29																								
30																								
31	M	0.11	-	-	H	34.82																		
TOTAL		0.11				526.18		366.02		48.75							2.10							963.16
Mean Daily Discharge in Second-Feet		0.004				16.97		12.45		1.74							0.07							2.64
Second-Feet per square mile						1.766		1.296		0.181							0.007							0.275
Depth in inches						2.026		1.494		0.189							0.008							3.729
Feet in one foot		0.218				1043.68		765.67		96.70							4.17							1910.42
Discharge in Second-Feet		0.11				391.35		385.36		27.48							2.10							391.35
Discharge in Second-Feet		0				0		0		0							0							0





NIGGER SLOUGH AT WILMINGTON AVENUE

**LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT**

Location
On north bank of slough about 50' above intersection of Wil-
mington Avenue and Wilmington Street 2 miles north of the City
of Wilmington, Los Angeles County, California.

Discharge measurements of **NIGGER SLOUGH**
at **Wilmington Avenue** during the year ending September 30, 19 **33**

Drainage Area
66 square miles.

Installed by
Los Angeles County Flood Control District November, 1928.
Recorder installed January 14, 1930.

Records Available
November 24, 1928 to September 30, 1934 at office of Los Angeles
County Flood Control District, Los Angeles, California.

Gage
Rational 7 day water stage recorder installed in small shelter
house on top of a corrugated iron stilling well at upstream end
of culvert under road, north side of slough.

Discharge Measurements
Low water measurements taken by wading.
High water measurements taken from bridge.

Channel and Control
Channel in clay. No control.

Extremes of Discharge

- 1928-1929
Maximum- 4.96 c.f.s. March 15, 1929.
Minimum- 0.79 c.f.s. December 22, 1928.
- 1929-1930
Maximum- 42.47 c.f.s. March 17, 1930.
Minimum- 3.07 c.f.s. April 26, 1930.
- 1930-1931
Maximum- 15.16 c.f.s. April 26, 1931.
Minimum- .77 c.f.s. January 23, 1931.
- 1931-1932
Maximum- 47.0 c.f.s. February 10, 1932.
Minimum- 1.00 c.f.s. December 13, 1931.
- 1932-1933
Maximum- 28.12 c.f.s. January 31, 1933.
Minimum- Dry four days in September, 1933.
- 1933-1934
Maximum- 66.04 c.f.s. January 2, 1934.
Minimum- -1.36 c.f.s. January 1, 1934.

Diversions
None.

Regulation
None.

Accuracy
Poor, due to inflow from sewer below station backing up water
at gage and water from refineries and oil fields depositing
the residue from oil.

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

F. C. Dist. Form 104A

**LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT**

Station No. **FC 46**

Discharge measurements of **Nigger Slough**
at **Wilmington Avenue** during the year ending September 30, 19 **33**

No.	Date	Made by	Width Feet	Area of section Sq. ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec.-ft.	Rating Percent	Method	Max. No.	G. Ft. Gage Total	Time Hours	Meter No.
24	1933 3/9	Slaughter	6.0			1.94	0.83		Weir				
25	3/16	"	6.0			1.96	1.05		"				
26	3/23	"	6.0	1.14	0.17	2.01	0.19		Flood				
27	3/30	"	6.4	4.30	0.13	1.91	0.58			.6	5	0 2/15	FC 6
28	4/3	"	6.6	5.07	0.21	1.94	1.06			.6	6	0 2/15	"
29	4/13	"	6.6	5.60	0.24	2.00	1.34			.6	6	0 1/6	"
30	4/20	"	6.6	5.12	0.08	2.02	0.44		Flood				
31	4/27	"	6.5	5.22	0.32	1.93	1.67			.6	6	0 1/7	FC 6
32	5/3	"	6.0			1.94	0.83		Weir				
33	5/10	"	6.0			1.93	0.73		"				
34	5/17	"	6.0			1.93	0.73		"				
35	5/24	"	6.0			1.91	0.54		"				
36	6/3	"	6.0			1.94	0.83		"				
37	6/8	"	6.0			1.98	1.28		"				
38	6/13	"	6.0			1.93	0.73		"				
39	6/22	"	6.0			1.95	0.93		"				
40	6/29	"	6.0			1.93	0.73		"				
41	7/6	"	6.0			1.97	1.16		"				
42	7/13	"	6.0			1.95	0.93		"				
43	7/20	"	6.0			1.98	1.28		"				
43A	7/27	Hardgrove	6.8	5.86	0.18	1.97	1.05			.6	7	0	- 282821
44	8/3	Slaughter	6.0	0.00	-	1.98	1.28		Weir				
45	8/10	"	6.0			1.98	1.28		"				
46	8/17	"	6.0			2.01	1.64		"				
47	8/24	"	6.0			2.02	1.76		"				
48	1933 8/31	Slaughter	6.6	5.25	0.36	2.01	1.92			.6	5	0 2/15	FC 6
49	9/7	"	6.6	6.68	0.1	2.23	0.67		Est.				
50	9/14	"	7.0	7.31	0.05	2.34	0.36		"				
51	9/21	"	6.7	6.51	0.12	2.23	1.79			.6	5	0 1/6	FC 6
52	9/28	"	6.9	6.12	0.24	2.19	1.43			.6	4	0 1/6	"

Discharge measurements of **NIGGER SLOUGH**
at **Wilmington Ave.** during the year ending September 30, 19 **34**

No.	Date	Made by	Width Feet	Area of section Sq. ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec.-ft.	Rating Percent	Method	Max. No.	G. Ft. Gage Total	Time Hours	Meter No.
1	1932 10/6	Slaughter	5.4	3.58	0.51	1.70	1.21	.6	5	0	1/6	FC 6	
2	10/13	"	5.4	3.39	0.65	1.72	1.21	.6	5	-01	1/6	"	
3	10/20	"	5.4	3.72	0.56	1.74	1.13	.6	6	0	1/6	"	
4	10/27	"	5.2	3.06	.52	1.72	1.58	.6	4	.01	1/4	"	
5	11/3	"	5.5	3.44	0.34	1.60	1.12	.6	5	0	1/6	"	
6	11/9	"	5.4	3.63	0.53	1.72	1.91	.6	5	0	1/6	"	
7	11/16	"	6.5	3.21	0.40	1.73	1.47	.6	5	0	1/6	"	
8	11/23	"				2.03	0.75		Weir				
9	11/30	"				2.00	0.60		"				
10	12/7	Slaughter-Dockweiler				2.64	0.10		"				
11	12/12	Slaughter	6.5	5.60	0.64	1.15	3.09	.6	6	.01	1/6	FC 6	
12	12/14	"	5.8	4.72	0.1	1.96	0.47		Est.				
13	12/22	Slaughter-Purdy	5.8	5.04	0.39	1.98	1.97	.6	6	0	1/6	FC 6	
14	12/29	Slaughter	5.6	4.51	0.37	1.95	1.66	.6	5	0	1/6	"	
15	1933 1/5	Slaughter	5.2	4.58	0.40	1.95	1.84	.6	5	0	1/6	FC 6	
16	1/12	"	5.2	4.83	0.35	1.94	1.60	.6	5	0	1/6	"	
17	1/26	"	9.8	14.7	0.29	2.90	4.31	.6	9	0	1/4	"	
18	1/31	"	12.3	17.9	0.18	4.32	21.91	.6	6	-.05	1/6	"	
19	2/2	"	12.3	19.3	0.75	3.75	22.15	.6	6	-.01	1/6	"	
20	2/9	"	10.3	19.0	0.45	2.78	8.65	.6	6	-.01	1/6	"	
21	2/16	"	9.5	15.6	0.21	2.52	3.34	.6	5	-.02	1/6	"	
22	2/23	"	8.8	13.0	0.24	2.10	3.09	.6	5	0	1/6	"	
23	3/2	"	6.0			2.00	1.16		Weir				

No.	Date	Made by	Width Feet	Area of section Sq. ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec.-ft.	Rating Percent	Method	Max. No.	G. Ft. Gage Total	Time Hours	Meter No.
1	1933 10/5	C. E. Slaughter	6.8	7.63	0.17	2.33	1.30		Peak	1		1/30	
2	10/12	C. E. Slaughter				1.96	1.05		Weir				
3	10/19	C. E. Slaughter				1.97	1.16		"				
4	10/26	C. E. Slaughter				1.97	1.16		"				
5	11/2	C. E. Slaughter				1.97	1.16		"				
6	11/9	C. E. Slaughter				1.96	1.05		"				
7	11/16	C. E. Slaughter				1.95	0.93		"				
8	11/23	C. E. Slaughter				1.95	0.93		"				
9	11/30	C. E. Slaughter				1.96	1.05		"				
10	12/7	C. E. Slaughter				1.96	1.05		"				
11	12/14	Slaughter & Johnson				2.00	1.50		"				
12	12/21	C. E. Slaughter				1.95	0.93		"				
13	12/28	C. E. Slaughter				1.98	1.08		"				
14	1/7	Slaughter & Johnson	6.0	1.68	.37	4.08	1.54		"				
15	1934 1/1	McAuley and Landis				5.2			"				
16	1/2	Slaughter & Johnson	17.8	40.35	1.16	5.42	59.48	.6	7		1/2	FC 6	
17	1/4	Slaughter & Johnson	15.0	46.05	1.74	5.58	72.77	.6	5		1/6	FC 6	
18	1/11	Slaughter & Johnson	12.5	20.28	1.16	3.72	24.39	.6	6		1/6	FC 6	
19	1/18	Slaughter & Johnson	9.0	16.87	0.92	3.00	10.48	.6	5		7/60	FC 6	
20	1/25	C. E. Slaughter	8.1	9.92	0.71	2.29	4.22	.6	4		2/15	FC 6	
21	2/1	C. E. Slaughter				2.02	2.66		Weir				
22	2/8	C. E. Slaughter				1.99	1.40		"				
23	2/14	C. E. Slaughter				1.95	0.93		"				

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 46

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 46

Discharge measurements of NIGGER SLOUGH at Wilmington Ave during the year ending September 30, 1934

Discharge measurements of NIGGER SLOUGH at Wilmington Ave during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section, Mean velocity, Gauge No., Discharge Sec. Ft., Rating, Method, Mean No., G. H. stage, Time, Misc No.

Table with columns: No., Date, Made by, Width Feet, Area of section, Mean velocity, Gauge No., Discharge Sec. Ft., Rating, Method, Mean No., G. H. stage, Time, Misc No.

F. C. Dist. Form 105-1000-9-31

Daily Gage Height, in Feet, and Discharge, in Second-Feet, of NIGGER SLOUGH at Wilmington Ave for the Year Ending September 30, 1933

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. 46

Drainage Area 66 Square Miles. C. E. Slaughter Observer. Gage Read Continuously by Rational Recorder Used rating table dated 10/1/32 to 9/30/33

Large table with columns for months (OCTOBER to SEPTEMBER) and days, containing Gage height and Discharge data. Includes summary rows for totals and monthly averages.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 118

Discharge measurements of Pacoima Creek at Below F. O. Dam during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec.-ft., Rating Project No., Method, Mean No., G. H. stage Total, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 118

Discharge measurements of Pacoima Creek at Below F. O. Dam during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec.-ft., Rating Project No., Method, Mean No., G. H. stage Total, Time Hours, Meter No.

Daily Gage Height, in Feet, and Discharge, in Second-Feet, of PACOIMA CREEK

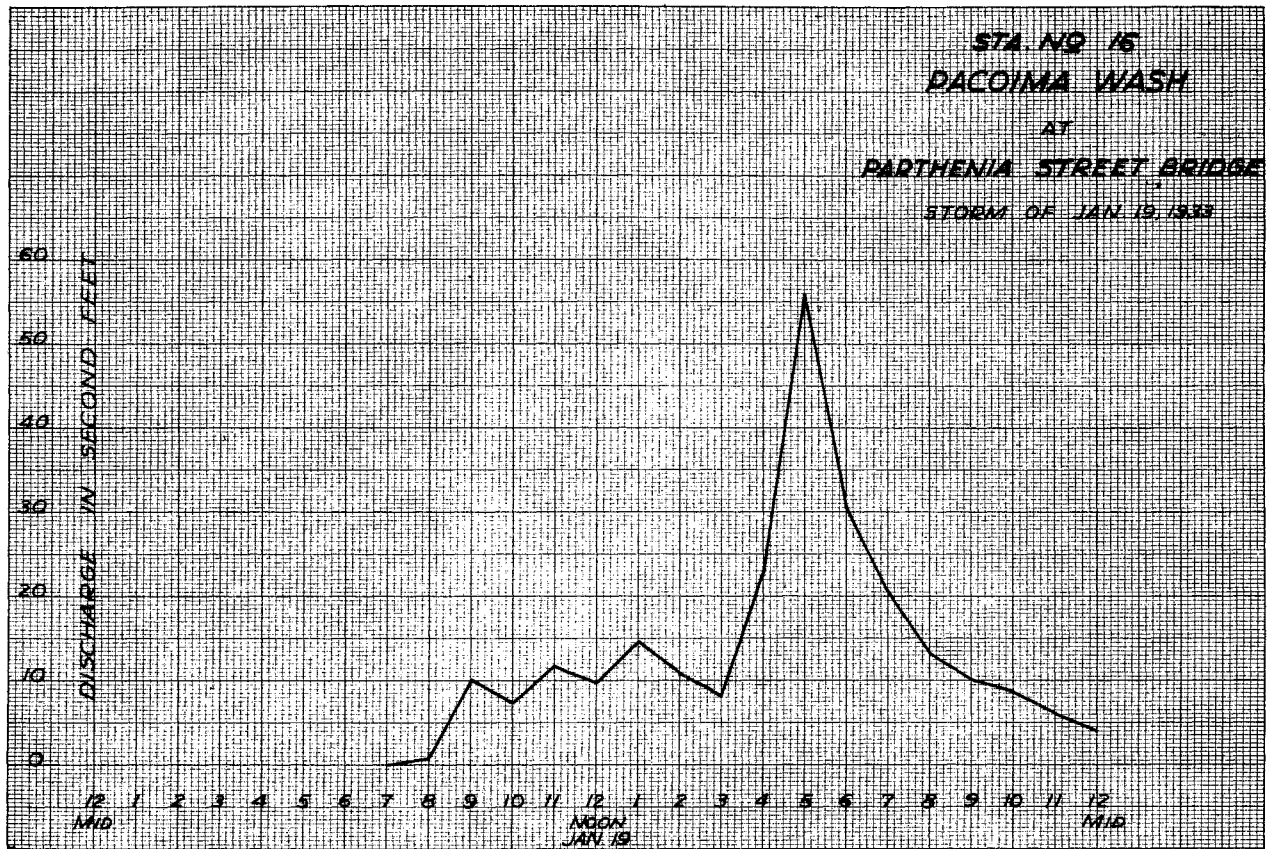
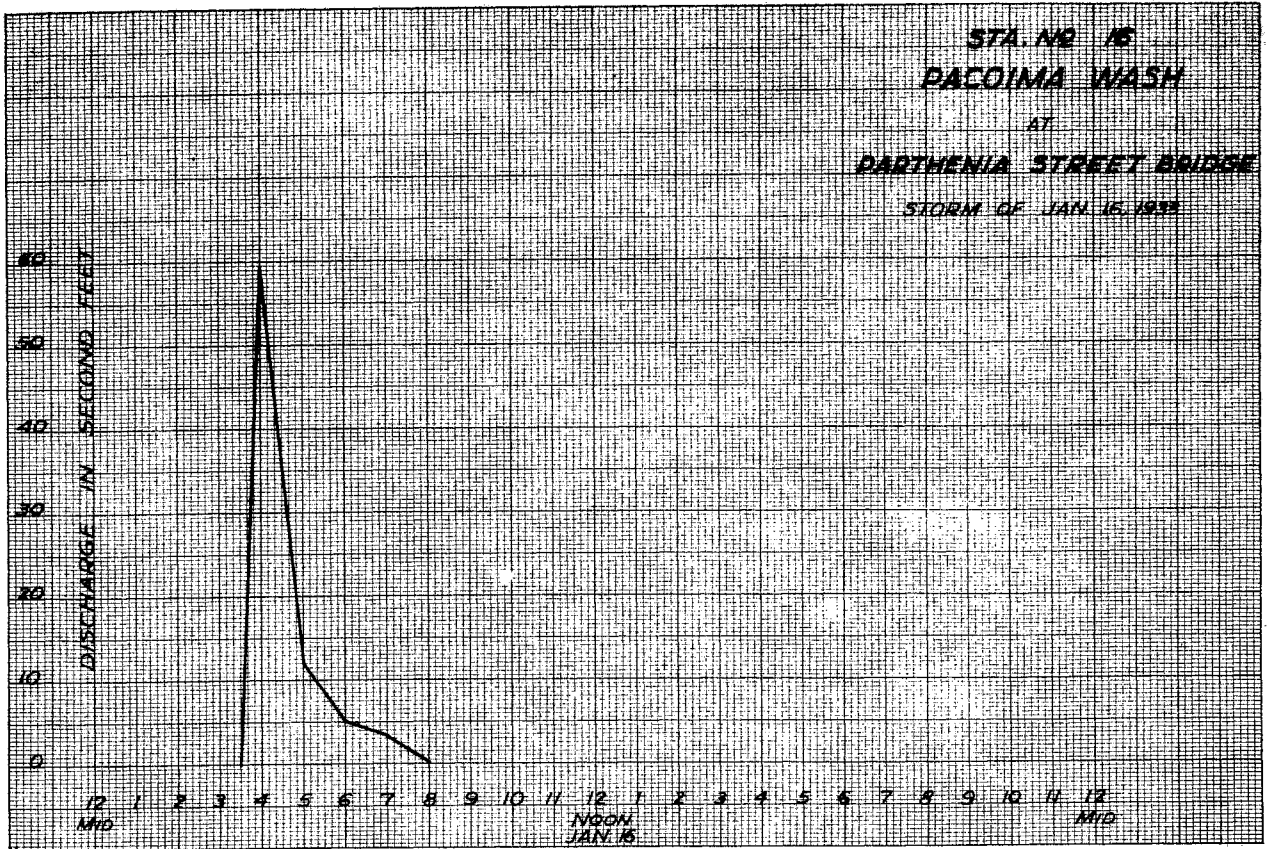
LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

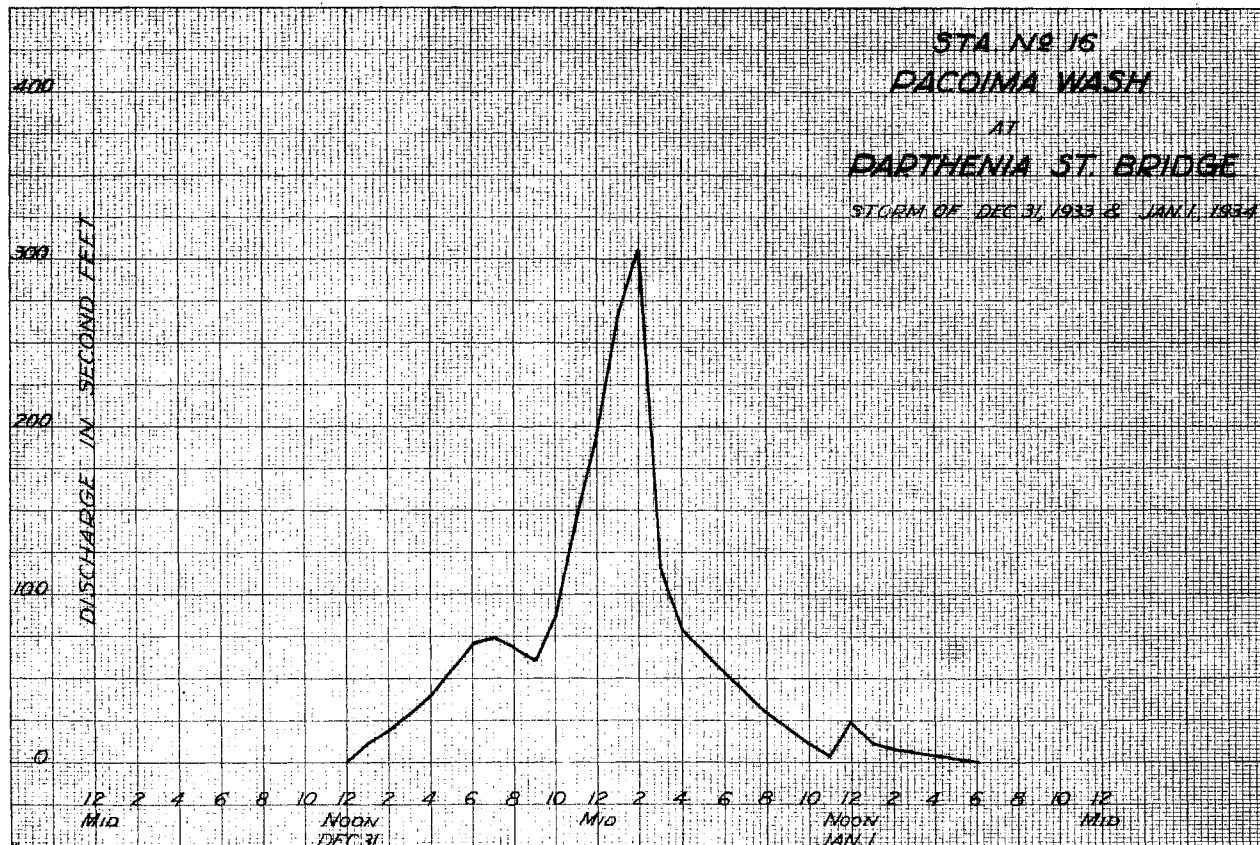
File No. 118

At Below Flood Control Dam for the Year Ending September 30, 1933.

Large table with columns: DAY, OCTOBER, NOVEMBER, DECEMBER, JANUARY, FEBRUARY, MARCH, APRIL, MAY, JUNE, JULY, AUGUST, SEPTEMBER, DAY. Includes sub-headers for Gage height and Discharge. Includes a 'TOTAL' row at the bottom.

* Recorder installed March 24, 1933.





F-40 R

PUDDINGSTONE CREEK BELOW FLOOD CONTROL DAM NEAR SAN DIMAS,
CALIFORNIA

Location
Concrete shelter house and stilling well on east side Puddingstone Channel approximately 1000' below Puddingstone Dam near San Dimas, Los Angeles County, California.

Drainage Area
32.7 square miles, including drainage area above diversion dam in San Dimas Creek.

Installed by
Los Angeles County Flood Control District, December 28, 1927.

Records Available.
December 28, 1927 to September 30, 1934 at offices of Los Angeles County Flood Control District, Los Angeles, California.

Gage
An continuous water stage recorder located in concrete house on east bank of stream. Staff gage attached to recorder house.

Discharge Measurements
Made by wading near recorder house.

Channel and Control
Channel of sand and gravel with bed rock near gage. Control, reinforced concrete with Cippoletti weir 18' deep by 24" wide.

Extremes of Discharge

- 1927-1928
Maximum - 0.60 c.f.s. February 4, 1928
Minimum - Dry at various times during year.
- 1928-1929
Maximum - 2.03 c.f.s. December 13, 1928.
Minimum - Dry at various times during year.
- 1929-1930
Maximum - 1.45 c.f.s. May 3, 1930.
Minimum - Dry at various times during year.
- 1930-1931
Maximum - 0.94 c.f.s. April 26, 1931.
Minimum - Dry at various times during year.
- 1931-1932
Maximum - 15.0 c.f.s. February 9, 1932.
Minimum - 0.01 c.f.s. October 29, 1931.
- 1932-1933
Maximum - 32.70 January 29, 1933.
Minimum - Dry at various times during year.
- 1933-1934
Maximum - Not determined.
Minimum - .005 c.f.s. September 17, 18 and 20, 1934.

Diversions
Water released from dam pumped for irrigation by water companies.

F-40 R

Regulation
Flow regulated by Los Angeles County Flood Control District's dam 1000' above gage.

Accuracy
Good.

Operation
Located and constructed by Los Angeles County Flood Control District and operated by the Los Angeles County Flood Control District in conjunction with U. S. O. S. Water Resources Branch.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 40

Discharge measurements of Puddingstone Creek during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of Section Sq. Ft., Mean Velocity Ft. per Sec., Stage Feet, Discharge Sec.-ft., Rating, Method, Mean No., G. H. Stage Feet, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 40

Discharge measurements of Puddingstone Creek during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of Section Sq. Ft., Mean Velocity Ft. per Sec., Stage Feet, Discharge Sec.-ft., Rating, Method, Mean No., G. H. Stage Feet, Time Hours, Meter No.

RIO HONDO AT LOWER AZUSA ROAD

Location
On Highway Bridge where Lower Azusa Road crosses the Rio Hondo, about 1 1/2 miles north of El Monte, Los Angeles County, California.

Drainage Area
Not determined

Installed by
Los Angeles County Flood Control District, February 22, 1932.

Records Available
February 22, 1932 to March 29, 1932 stream measurements only. March 29, 1932 to September 30, 1934 recorder records at office of Los Angeles County Flood Control District, Los Angeles, Calif.

Gage
A continuous water stage recorder in house on top of corrugated iron pipe stilling well fastened to bridge pier at downstream side of bridge near east bank.

Discharge Measurements
High flows are measured from cable just below bridge. Low flows are measured by wading near gage.

Channel and Control
Channel sard and gravel. No control.

Extremes of Discharge
1931-1932
Maximum- Not determined
Minimum- Dry at various times of year.
1932-1933
Maximum- 5,160 c.f.s. January 20, 1933.
Minimum- Dry most of the year.
1933-1934
Maximum- 5865 c.f.s. January 1, 1934.
Minimum- Dry most of year.

Regulation
Los Angeles County Flood Control Dams regulate flow of some tributaries in mountains.

Diversions
Water diverted at Edison Intake and near mouth of San Gabriel Canyon for power and irrigation.

Accuracy
Fair.

Operation
Located and constructed by the Los Angeles County Flood Control District and operated by Los Angeles County Flood Control District in conjunction with the U.S.G.S. Water Resources Branch.

**LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT**

Discharge measurements of Rio Hondo
at Lower Azusa Road Bridge during the year ending September 30, 1934

No.	Date	Made by	Wash Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Cross Section	Discharge Sec.-ft.	Rating Point	Method	Mean No.	G. H. change	Time Hours	Mean No.
1	12/13	R. Lindsey-H. Richards	13.5	3.22	1.66	2.82	5.35	.6	6	-0.4	1/10	282853	
2	12/14	do.	27.0	4.54	2.90	3.11	42.21	.6	11	-	1/3	"	
3	12/14	Cornick-Potter	17.7	3.26	0.94	2.82	3.02	.6	5	-		271647	
4	12/15	do.				2.6	Dry						
5	12/31	Potter-Cole	40.5	4.45	2.63	3.16	38.04	.6	9	+0.2	1/4	271647	
6	12/31	do.		Two Channels		4.12	104.6	.6	22	+3.5	2 1/2		
7	1/1	Lindsay-Richards	41.0	4.94	6.84	4.57	37.5	.6	20	+1.7	1/2	282853	
8	1/2	Cole-Potter	27.0	4.99	2.14	2.74	32.02	.6	6	-	1/6	271647	
9	1/2	Lindsay-Richards	29.6	3.78	2.25	2.71	31.00	.6	11	-	1/2	282853	
10	1/4	Cole-Potter	17.0	9.40	2.73	2.54	25.63	.6	6	-0.6	1/6	271647	
11	1/3	Potter-Cole	10.0	2.82	0.94	2.16	2.66	.6	5	-	1/6	271647	
12	1/3	R. Lindsey	18.0	8.72	2.85	2.35	24.90	.6	7	-0.1	1/6	282853	
13	1/12	Cole-Potter	28.0	9.69	1.98	2.33	19.21	.6	6	-	1/6	271647	
14	1/27	R. Lindsey	17.0	9.94	2.51	2.51	24.95	.6	9	-0.2	1/3	282853	
15	1/30	Lindsay-Richards	17.5	7.93	2.03	2.57	16.06	.6	9	-0.3	1/6	"	
15A	1/30	do.	15.5	6.03	1.35	2.48	8.13	.6	8	-0.4	1/4	"	
16	1/30	"	14.5	4.31	0.84	2.42	3.62	.6	8	-0.3	1/2	"	
17	1/30	"	10.8	2.95	0.66	2.38	1.94	.6	8	-0.2	1/10	"	
18	1/30	"	8.40	1.68	0.36	"	0.60	.6	8	-	1/12	"	
19	2/23	Cole-Potter	9.0	2.61	0.69	2.34	1.79	.6	5	-	1/4	271647	
20	4/5	Slaughter-Cole-Potter	39.5	35.48	4.84	3.11	171.	.6	8	-1.4	1/4	"	
21	4/5	do.	37.5	31.98	4.81	3.01	153.	.6	8	-0.5	1/6	"	
22	4/5	Cole-Potter	37.0	26.2	4.44	2.96	125.	.6	8	-0.6	7/60	"	
23	4/5	do.	36.3	26.11	4.13	2.89	107.	.6	8	-0.7	1/6	"	

* Water not reaching gage.

**LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT**

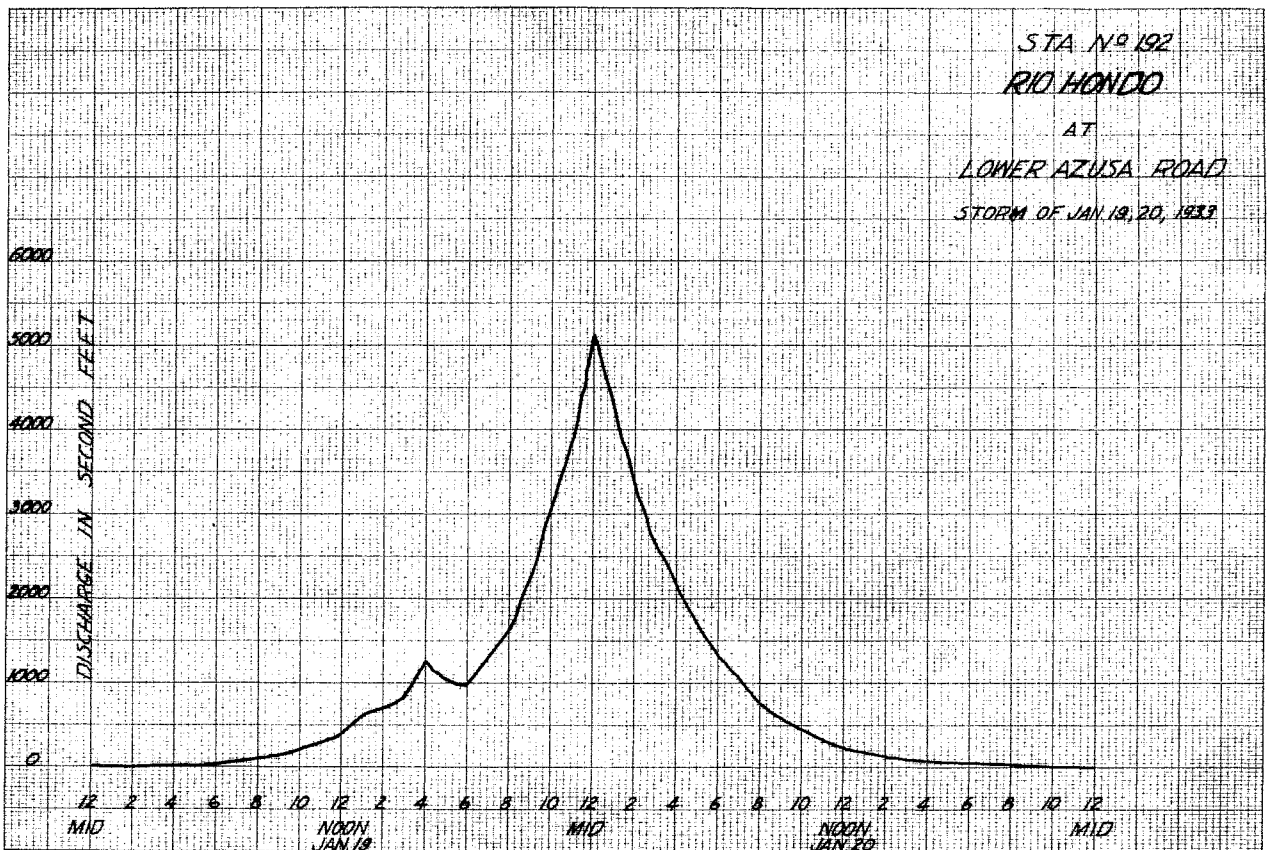
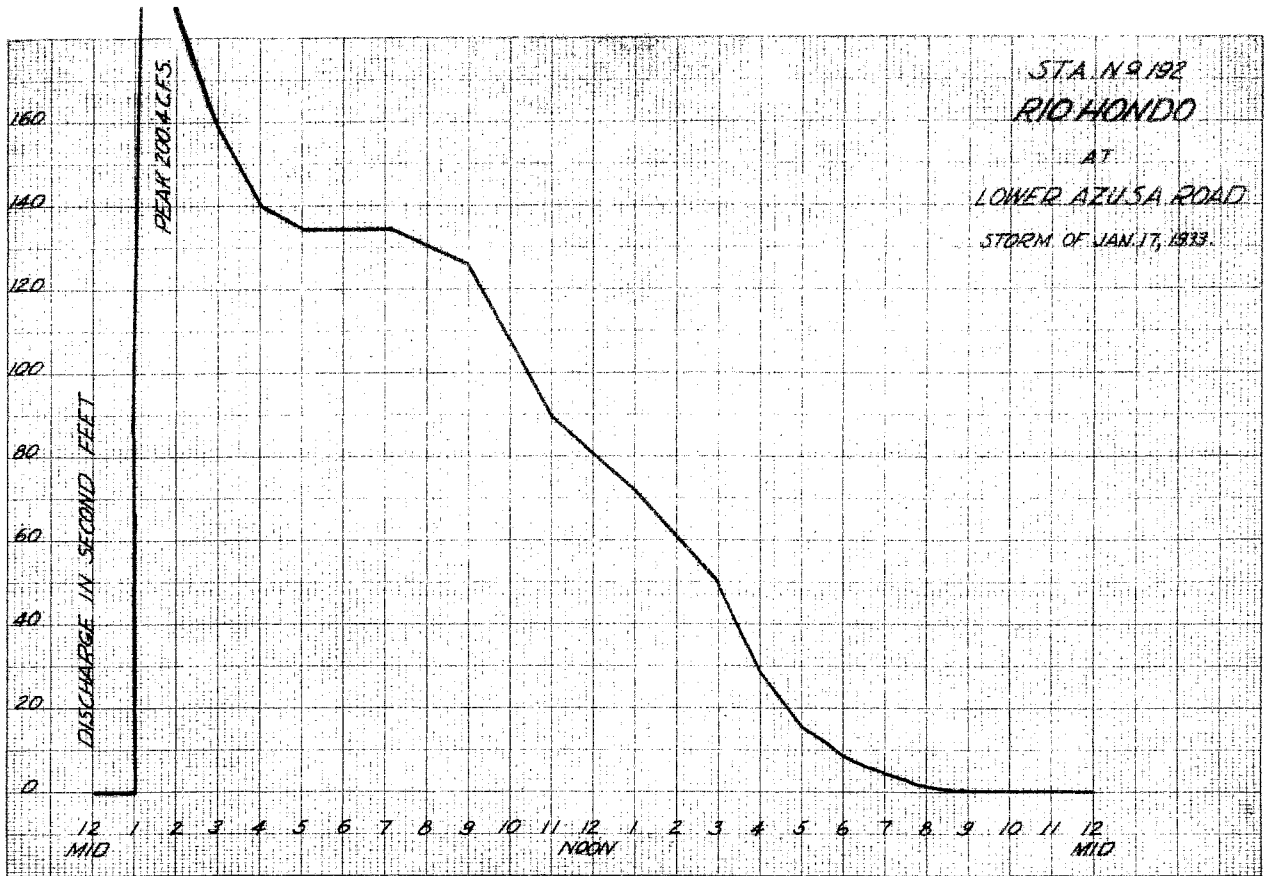
Discharge measurements of RIO HONDO
at Lower Azusa Road Bridge during the year ending September 30, 1933

No.	Date	Made by	Wash Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Cross Section	Discharge Sec.-ft.	Rating Point	Method	Mean No.	G. H. change	Time Hours	Mean No.
1	1/17	Lindsay-Burke	2	Channels	3.06	104.60	.6	18	-0.4	5/12	282853		
2	1/17	Cornick-Wood	"	"	2.94	54.98	.6	17	-0.6	1/4	271619		
3	1/19	Cornick-Gron	294.	240.0	4.74	3.51	1147.	.6	20	-1.2	1 1/2	"	
4	1/20	Lindsay	52.0	47.8	5.0	2.28	238.70	.6	13	-	1/2	282853	
5	1/20	Griggs-Gron	36.6	32.2	3.9	1.36	125.83	.6	18	+0.3	1/2	271619	
6	1/23	"	31.0	12.02	5.9	1.13	30.84	.6	13	+0.1	1/3	"	

**LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT**

Discharge measurements of Rio Hondo
at Lower Azusa Road Bridge during the year ending September 30, 1934

No.	Date	Made by	Wash Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Cross Section	Discharge Sec.-ft.	Rating Point	Method	Mean No.	G. H. change	Time Hours	Mean No.
24	4/5	Cole-Potter	35.1	7.96	1.79	2.49	14.25	.6	8	-0.2	1/6	271647	
25	4/5	do.	71.0	55.25	4.67	3.14	258.	.6	8	-0.8	5/12	"	
26	4/5	"	39.0	21.53	2.94	2.76	63.33	.6	6	-0.8	1/4	"	
27	4/5	"	38.8	15.74	2.15	2.68	33.85	.6	6	-0.4	1/6	"	
28	4/5	"	38.4	11.87	1.80	2.64	21.30	.6	6	-0.2	1/6	"	



RIO HONDO 1000' ABOVE MISSION BRIDGE

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Location

On west side of Rio Hondo approximately 1000' above Mission Bridge near Montebello Oil Fields, 2 miles northeast of Montebello, Los Angeles County, California.

Discharge measurements of RIO HONDO

at near 1000' above Mission Bridge during the year ending September 30, 1933

Drainage Area

350 square miles.

Installed by

Los Angeles County Flood Control District, July, 1928. Originally installed by the State of California, Division of Water Rights.

Records Available

July 1928 to September 30, 1934 at offices of the Los Angeles County Flood Control District, Los Angeles, California. See State of California, Division of Water Rights, Bulletina for records prior to July 1928.

Gage

An continuous water stage recorder installed in wooden shelter house on west bank of stream. Vertical metal staff gage attached to wood stilling well.

Discharge Measurements

High water measurements made from cable car 60' below recorder house. Low water measurements made by wading near recorder house.

Channel and Control

Shifting sand channel. No control.

Extremes of Discharge

1928-1929

Maximum- 2400 c.f.s. November 14, 1928.

Minimum- 6.23 c.f.s. August 23, 1929.

1929-1930

Maximum- 1260 c.f.s. March 15, 1930.

Minimum- 5.88 c.f.s. September 4, 1930.

1930-1931

Maximum- 4040 c.f.s. February 3, 1931.

Minimum- 4.77 c.f.s. August 31, 1931.

1931-1932

Maximum- 6317 c.f.s. on February 9, 1932.

Minimum- 1.70 c.f.s. on October 2, 1931.

1932-1933

Maximum- 4412.5 c.f.s. January 19, 1933.

Minimum- 3.5 c.f.s. July 26, 1933.

1933-1934

Maximum- 11,760 c.f.s. January 1, 1934.

Minimum- 0.30 c.f.s. December 1, 1933.

Diversions

No diversions immediately above gage.

Regulation

Some tributaries are regulated by Flood Control Dams in mountains.

Accuracy

Fair

Operation

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

Discharge measurements of Rio Hondo

at near 1000' above Mission Bridge during the year ending September 30, 1933

No.	Date	Made by	Width Feet	Area of section Sq. ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec.-ft.	Rating Percent Method	Mess. mark No.	G. M. Slope Total	Time Hours	Metric No.		
22	1/19	Lindsay-Burke	150.	398.	3.51	4.33	3387.				.6 10	0 2/5	271666	
23	1/19	"	150.	413.	7.70	4.17	3189.				.6 11	0 1/2	"	
24	1/20	"	150.	382.	8.04	4.14	3076.				.6 10	-12 5/12	"	
25	1/20	"	105.	149.	3.32	2.44	570.1				.6 10	-03 13/60	"	
26	1/20	"	105.	142.	3.92	2.41	558.7				.6 10	-03 7/30	"	
27	1/21	"	25.3	16.6	2.23	1.43	37.12				.6 10	0 1/3	20 23	
28	1/23	"	105.	111.	4.51	2.32	502.9				.6 10	-05 1/4	22283	
29	1/26	Brewster	33.0	12.7	1.53	1.44	19.50				.6 11	0 1/3	271666	
29	1/29	Lindsay-Burke	100.0	145.	4.43	2.40	646.1				.6 9	-20 13/60	222	
30	1/29	"	100.0	139.	4.47	2.44	624.3				.6 10	+28	"	
31	2/2	Brewster	9.0	7.55	2.29	1.48	17.26				.6 8	0 1/4	271666	
32	2/9	"	18.0	8.80	1.47	1.44	12.97				.6 9	0 1/4	"	
33	2/16	"	11.0	7.01	1.65	1.46	11.54				.6 6	0 1/4	"	
34	2/23	"	14.0	7.58	1.41	1.48	10.70				.6 7	0 1/4	"	
35	3/2	"	23.0	10.5	1.64	1.52	17.39				.6 11	0 1/4	"	
36	3/9	"	29.0	11.0	1.26	1.49	13.92				.6 11	+02	1/4	"
37	3/15	"	40.0	12.8	1.40	1.49	17.91				.6 13	0 1/12	"	
38	3/16	"	26.0	8.14	1.39	1.42	11.32				.6 13	0 1/4	"	
39	3/16	"	44.0	13.8	1.34	1.49	18.49				.6 22	0 1/6	"	
40	3/23	"	21.0	8.84	1.36	1.40	12.05				.6 11	0 1/4	"	
41	3/23	"	42.0	12.8	1.33	1.48	17.02				.6 11	0 1/4	"	
42	3/30	"	33.0	10.1	1.24	1.40	12.49				.6 11	0 1/4	"	
43	3/30	"	19.0	6.46	1.25	1.37	8.10				.6 10	0 1/4	"	
44	4/6	"	30.0	7.83	1.22	1.38	9.54				.6 10	0 1/4	"	
45	4/6	Brewster	36.0	13.9	1.35	1.46	18.92				.6 11	0 1/4	271666	
46	4/13	"	18.0	6.58	1.27	1.38	8.38				.6 9	0 1/4	"	
47	4/13	"	38.0	12.0	1.35	1.45	16.18				.6 10	0 1/4	"	
48	4/20	"	18.0	7.50	1.36	1.38	10.20				.6 9	0 1/4	"	
49	4/20	"	42.0	12.6	1.20	1.44	15.09				.6 11	0 1/4	"	
50	4/27	"	18.0	7.08	1.31	1.38	9.25				.6 9	0 1/4	"	
51	4/27	"	41.0	15.3	1.24	1.44	18.96				.6 11	0 1/4	"	
52	5/2	"	20.0	7.40	1.53	1.38	11.30				.6 10	0 1/4	"	
53	5/11	"	28.0	7.01	1.15	1.38	8.07				.6 10	0 1/12	"	
54	5/11	"	35.0	10.2	1.26	1.42	12.92				.6 11	0 1/4	"	
55	5/18	"	21.0	5.55	1.30	1.39	7.19				.6 11	0 1/4	"	
56	5/18	"	32.0	9.35	1.43	1.42	13.38				.6 10	0 1/4	"	
57	5/25	"	27.0	9.06	1.11	1.39	10.08				.6 9	0 1/4	"	
58	6/1	"	32.0	7.62	.99	1.39	7.57				.6 11	0 1/4	"	
59	6/6	"	51.	12.9	1.18	1.44	15.34				.6 13	0 1/4	"	
60	6/13	"	43.0	13.9	1.08	1.44	15.11				.6 11	0 1/4	"	
61	6/20	"	50.0	13.6	1.11	1.45	15.17				.6 11	0 1/3	"	
62	6/28	"	24.0	9.61	1.27	1.42	12.22				.6 10	0 1/4	"	
63	7/6	"	18.0	5.54	1.09	1.36	6.02				.6 9	0 1/4	"	
64	7/13	"	32.0	11.8	1.22	1.49	15.14				.6 10	0 1/4	"	
65	7/20	"	30.0	9.51	1.24	1.46	11.81				.6 11	0 1/4	"	
66	7/27	Brewster-Godsoe-Rich	27.0	10.8	1.13	1.46	12.28				.6 9	0 1/4	"	
67	8/3	Brewster	31.0	10.9	1.22	1.49	13.35				.6 11	0 1/4	"	
68	8/10	"	34.0	12.9	1.31	1.51	16.94				.6 11	0 1/4	"	
69	8/17	Brewster	39.0	13.09	1.18	1.50	15.41				.6 11	0 1/4	271666	
70	8/24	"	37.0	12.89	1.35	1.55	17.44				.6 11	0 1/4	"	
71	8/31	"	32.0	10.72	1.30	1.55	13.98				.6 9	0 1/4	"	
72	9/7	"	35.0	12.56	1.45	1.58	18.26				.6 10	0 1/4	"	
73	9/14	"	32.0	12.72	1.30	1.60	16.48				.6 9	0 1/4	"	
74	9/21	"	32.0	13.69	1.38	1.64	18.88				.6 11	0 1/4	"	
75	9/28	"	30.0	13.73	1.22	1.67	18.09				.6 11	0 1/3	"	

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 64

Discharge measurements of Rio Hondo at 1000' above Mission Bridge during the year ending September 30, 1934

Table with columns: No, Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Stage height Feet, Discharge Sec. ft., Rating Percent full, Method, Mean No., C. Ft. change Total, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 64

Discharge measurements of Rio Hondo at 1000' above Mission Bridge during the year ending September 30, 1934

Table with columns: No, Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Stage height Feet, Discharge Sec. ft., Rating Percent full, Method, Mean No., C. Ft. change Total, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 64

Discharge measurements of Rio Hondo at 1000' above Mission Bridge during the year ending September 30, 1934

Table with columns: No, Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Stage height Feet, Discharge Sec. ft., Rating Percent full, Method, Mean No., C. Ft. change Total, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 64

Discharge measurements of Rio Hondo at 1000' above Mission Bridge during the year ending September 30, 1934

Table with columns: No, Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Stage height Feet, Discharge Sec. ft., Rating Percent full, Method, Mean No., C. Ft. change Total, Time Hours, Meter No.

Daily Gauge Height, in Feet, and Discharge, in Second-Foot, of RIO HONDO

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

At Mission Bridge

for the Year Ending September 30, 1933

Table with columns for months (October to September), gauge height, discharge, and totals. Includes notes on recorded gauge heights and maximum/minimum values.

I - Interpolated.

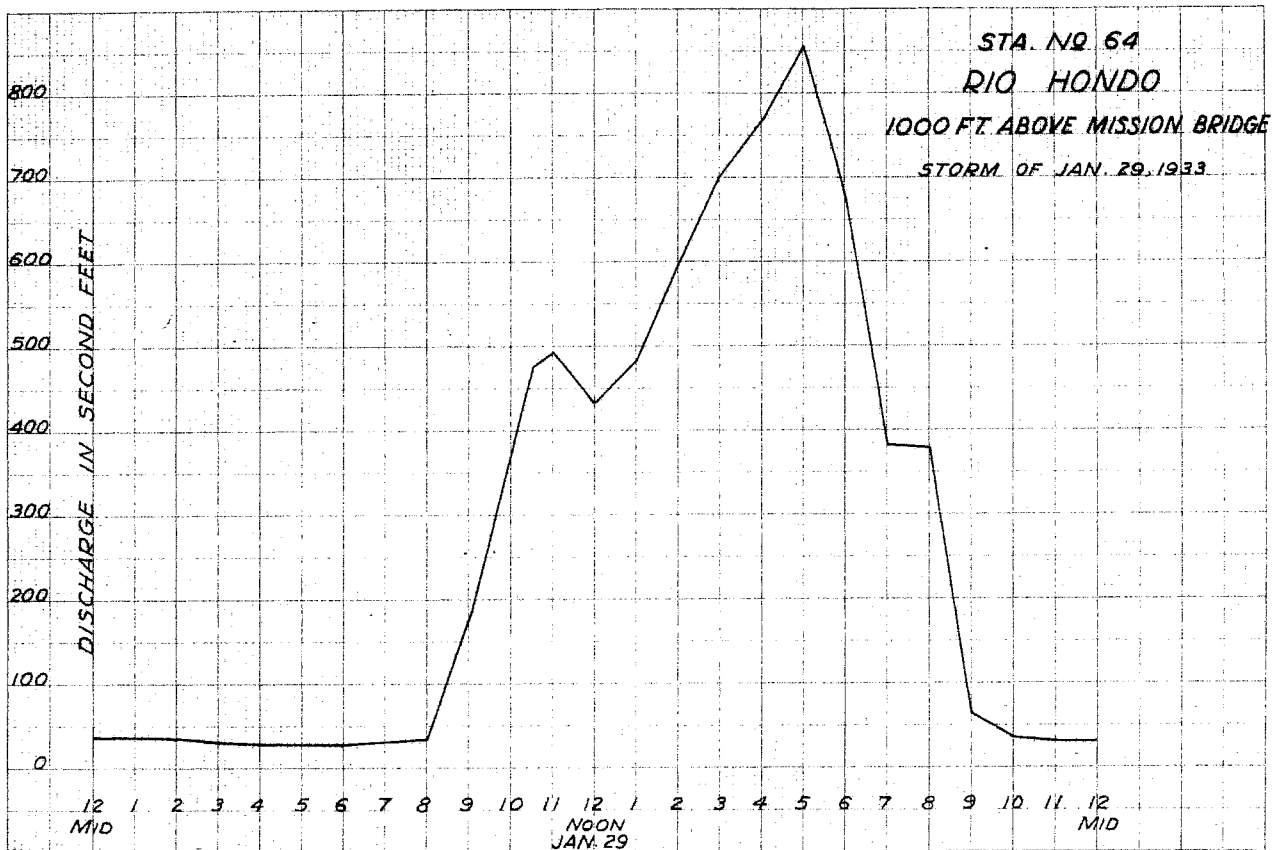
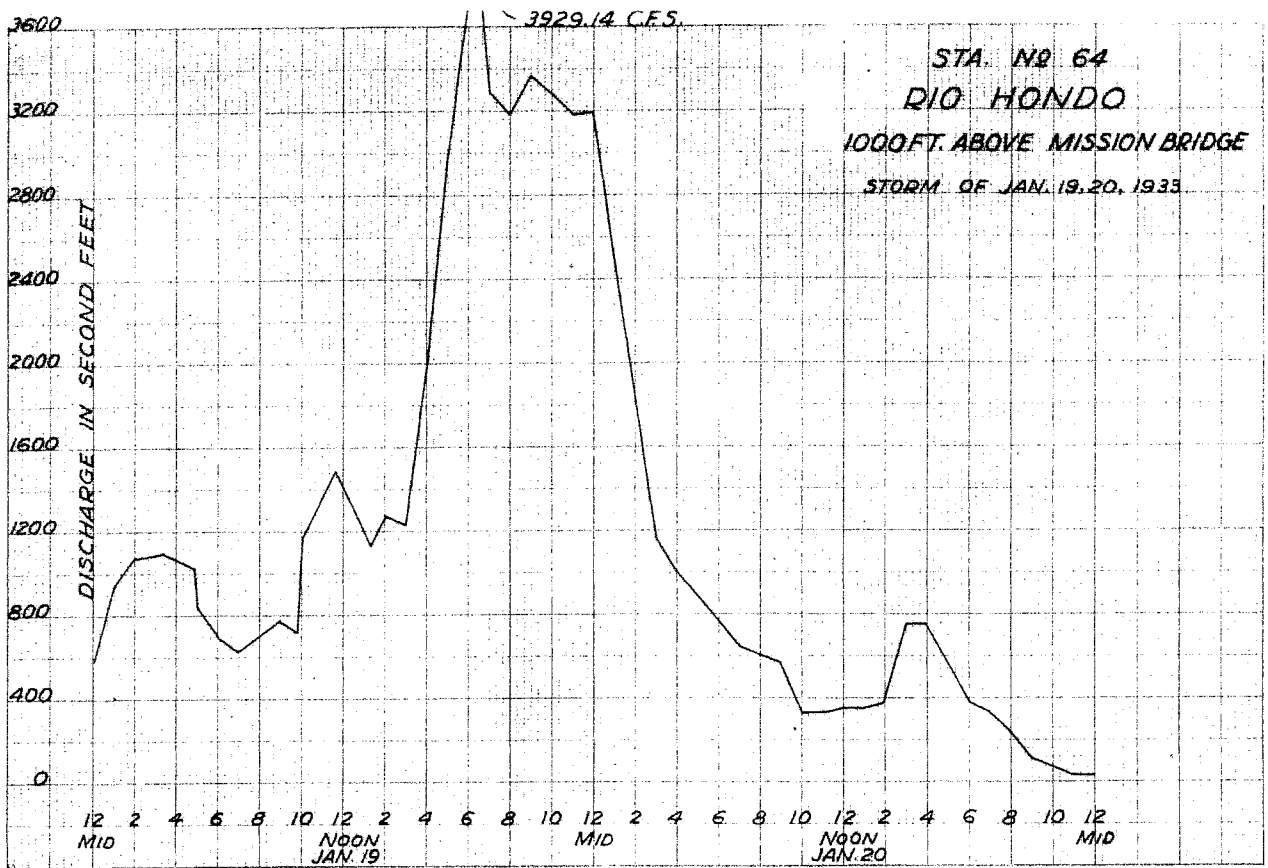
Daily Gauge Height, in Feet, and Discharge, in Second-Foot, of RIO HONDO

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

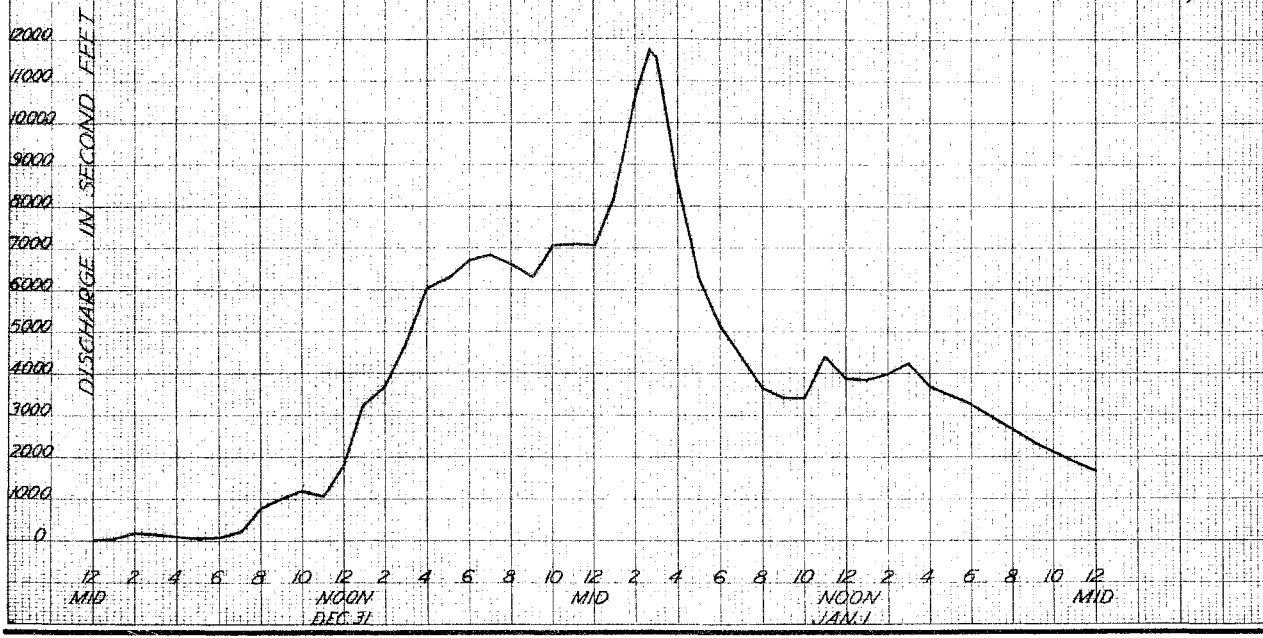
At 1000' ABOVE MISSION BRIDGE

for the Year Ending September 30, 1934

Table with columns for months (October to September), gauge height, discharge, and totals. Includes notes on recorded gauge heights and maximum/minimum values.



STA NO 64
RIO HONDO
 1000 FT. ABOVE
MISSION BRIDGE
 STORM OF DEC. 31, 1933 & JAN. 1, 1934



F-45 R

LOS ANGELES COUNTY
 FLOOD CONTROL DISTRICT
 HYDROGRAPHIC DEPARTMENT
 Station No. 45

RIO HONDO AT STEWART AND GRAY ROAD BRIDGE

Location On highway bridge over Rio Hondo at Stewart and Gray Road about 1 1/2 miles west of Downey, Los Angeles County, California, and 1/2 mile above junction of Rio Hondo and Los Angeles River.

Drainage Area 373 square miles.

Installed by California State Division of Water Rights, 1923.

Re-established by Los Angeles County Flood Control District, March 1, 1928.

Records Available Some records previous to March 1, 1928 in Bulletin No. 5, California State Division of Water Rights, San Gabriel Investigation. Records from March 1, 1928 to September 30, 1934 available at Los Angeles County Flood Control District office, Los Angeles, California.

Gage Rational 7 day water stage recorder in small house set on top of corrugated pipe stilling well attached to bridge pier on downstream side.

Discharge Measurements. High water measurements made from cable car 200 ft. above bridge. Low water measurements by wading near gage.

Channel and Control Channel- sandy, rock riprap banks. Control- none.

Extremes of Discharge
 1928-1929
 Maximum- 912 c.f.s. April 4, 1929.
 Minimum- Dry at various times during year.
 1929-1930
 Maximum- 743 c.f.s. March 15, 1930.
 Minimum- Dry at various times during year.
 1930-1931
 Maximum- 841 c.f.s. February 4, 1931.
 Minimum- Dry at various times during year.
 1931-1932
 Maximum- 4610 c.f.s. February 9, 1932.
 Minimum- Dry at various times during year.
 1932-1933
 Maximum- 2730 c.f.s. January 19, 1933.
 Minimum- Dry at various times during year.
 1933-1934
 Maximum- 16000 c.f.s. January 1, 1934.
 Minimum- Dry at various times during year.

Diversions Arroyo Ditch diverts from stream near Beverly Boulevard.

Regulation None.

Accuracy Good for low flows. Bottom cuts and fills during high flows.

Operation Located and constructed by Los Angeles County Flood Control District and operated in conjunction with U.S.G.S. Water Resources Branch.

Discharge measurements of RIO HONDO at Stewart & Gray Road Bridge during the year ending September 30, 19 33

No.	Date	Made by	Width Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec. Ft.	Rating Point Method	Max. No.	G. H. Change Feet	Time Hour	Stage No.
1	1/17	Jordan	51.	25.9	2.82	5.15	73.1	.6	12	+0.02	1/4	FO 5
2	1/19	Jordan & Fergus	91.	94.0	4.07	5.32	363.0	.6	13	+0.04	1/3	"
3	1/19	"	105.	199.0	5.90	6.64	1176.	.6	11	-0.01	5/12	"
4	1/20	Jordan	90.	98.9	3.91	5.55	387.2	.6	14	-0.02	1/3	"
5	1/23	Jordan & Wood	90.	96.5	3.93	5.59	379.0	.6	11	-0.02	3/12	"
6	1/23	"	87.	51.6	2.40	5.26	124.4	.6	10	-0.03	1/6	"
7	3/9	Slaughter	6.	1.10	0.32	4.53	0.35	.6	3	0	1/15	FO 6
8	3/9	"	2.	0.4	0.52	4.68	0.21	.6	2	0	-	"
9	3/16	"	2.	0.45	0.67	4.46	0.03	.6	2	0	-	"
10	3/30	"	4.	0.90	0.28	4.55	0.25	.6	4	0	1/12	"
11	4/6	"	4.	0.40	0.27	4.54	0.11	.6	2	0	1/50	"

Discharge measurements of Rio Hondo at Stewart and Gray Road Bridge during the year ending September 30, 19 34

No.	Date	Made by	Width Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec. Ft.	Rating Point Method	Max. No.	G. H. Change Feet	Time Hour	Stage No.
1	12/13	Jordan-Senkner	95.0	100.	4.32	5.94	432.	.6	10	-0.30	1/3	FO 5
2	12/13	"	62.0	24.3	1.18	5.22	28.7	.6	11	-0.04	4/15	"
3	12/13	"	116.	487.	10.92	9.25	5320.	.6	6	+1.0	3/4	"
4	1/2	Jordan				11.8	16000 Est.					
5	1/1	Jordan-Senkner	118.	504.	9.45	7.15	4764.	.6	7	-0.6	1	"
6	1/2	"	91.0	62.6	2.16	4.56	135.	.6	8	-	1/2	"
7	1/4	Slaughter-Johnson	13.4	10.42	1.86	3.90	19.37	.6	9	-	1/4	FO 6
8	5/9	E. H. Bonadiman				2.68	Dry					
9	5/17	"				3.00	"					
10	5/31	"				2.73	"					
11	6/7	"				3.00	"					
12	6/14	"				3.00	"					
13	7/12	"					"					

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of

RIO MONDO

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. 45

Name: STEWART & GRAY ROAD BRIDGE for the Year Ending September 30, 1933

Drainage Area		Square Miles		Slaughter		Observer		Gage Head		Continuous		Used rating table dated		Oct. 1, 1932			
DAY	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	DAY	Gage height	Discharge	Gage height	Discharge	DAY	Gage height	Discharge	
1	Dry								1	4.45	0.03	4.46	0.09	Dry			
2									2	4.45	0.03						
3									3	4.49	0.12						
4									4	4.43	0.01						
5									5	4.45	0.03						
6									6	4.49	0.12						
7									7	4.53	0.36						
8									8	4.47	0.07						
9									9								
10									10	4.48	0.09						
11									11	4.47	0.07						
12									12	4.40	0.01						
13									13								
14									14								
15									15	4.58	1.40						
16									16	4.57	1.10						
17									17	4.50	0.15						
18									18	4.59	1.70						
19									19	4.51	0.22						
20									20	4.48	0.09						
21									21	4.48	0.09						
22									22	4.46	0.05						
23									23	4.44	0.02						
24									24	4.44	0.02						
25									25	4.42	0.01						
26									26	4.52	0.29						
27									27	4.49	0.12						
28									28	4.47	0.07	4.43	0.01				
29									29	4.50	0.15	Dry					
30									30	4.51	0.22	4.46	0.05				
31	Dry								31	4.46	0.05						
TOTAL		0		0		2236.44		0		6.01		0.85		0.09		0	
Mean Daily Discharge in Second-foot						72.14				0.20		0.03		0.003		6.15	
Second-foot per square mile						0.2				0.0007		0.00007		0.00001		0.016	
Run-off, depth in inches						0.22				0.00067		0.00001				0.22	
Run-off in acre-foot						4435.98				11.92		1.52		0		4449.60	
Maximum Mean Daily Discharge in Second-foot						971.20				1.70		0.36		0.09		971.20	
Minimum Mean Daily Discharge in Second-foot						0				0		0				0	

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of

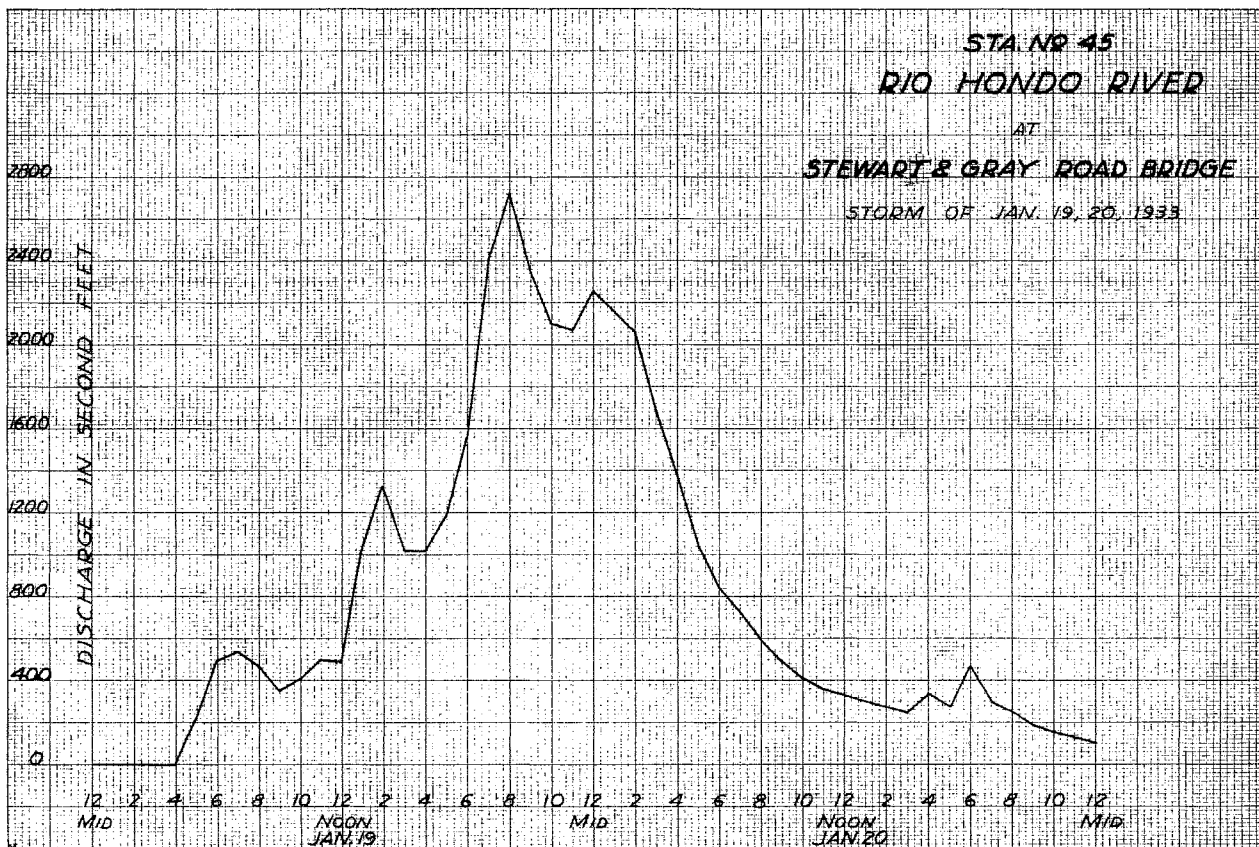
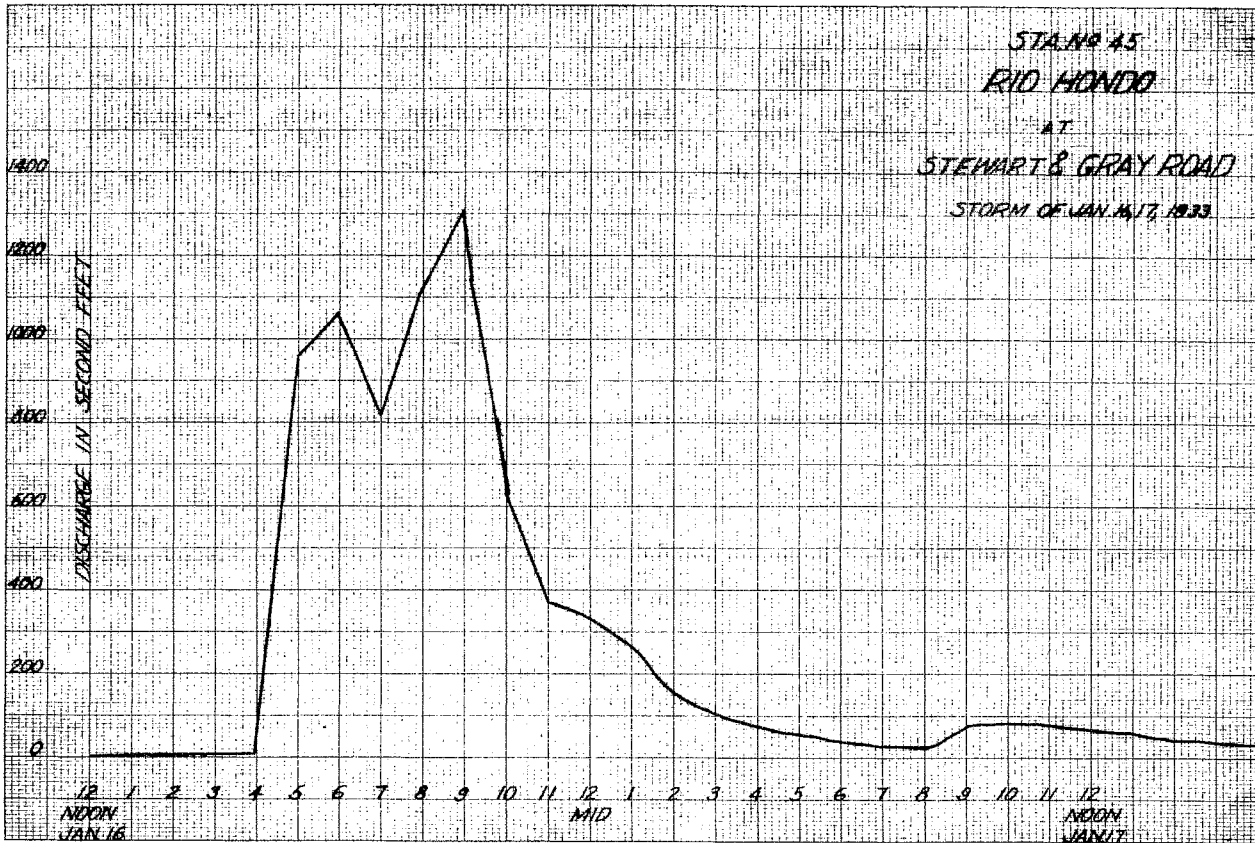
RIO MONDO

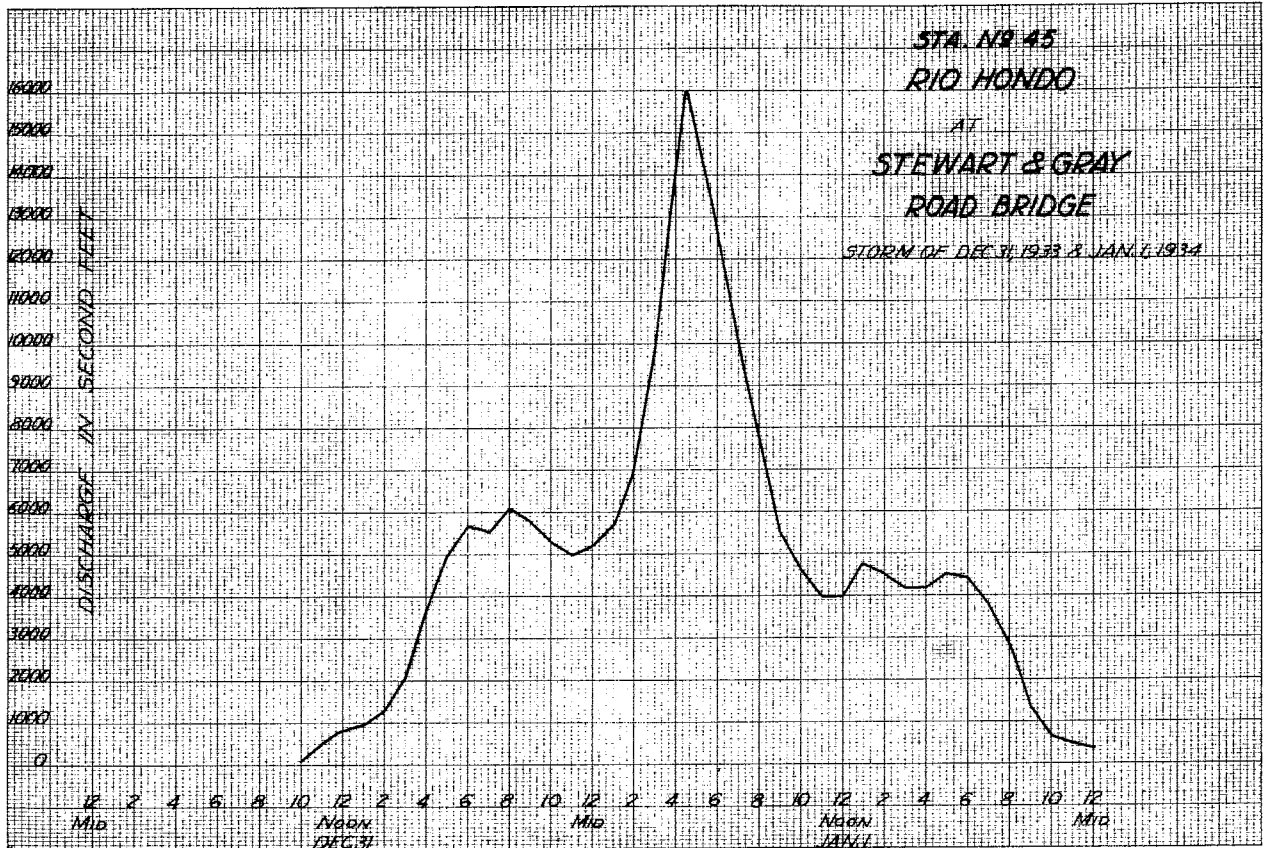
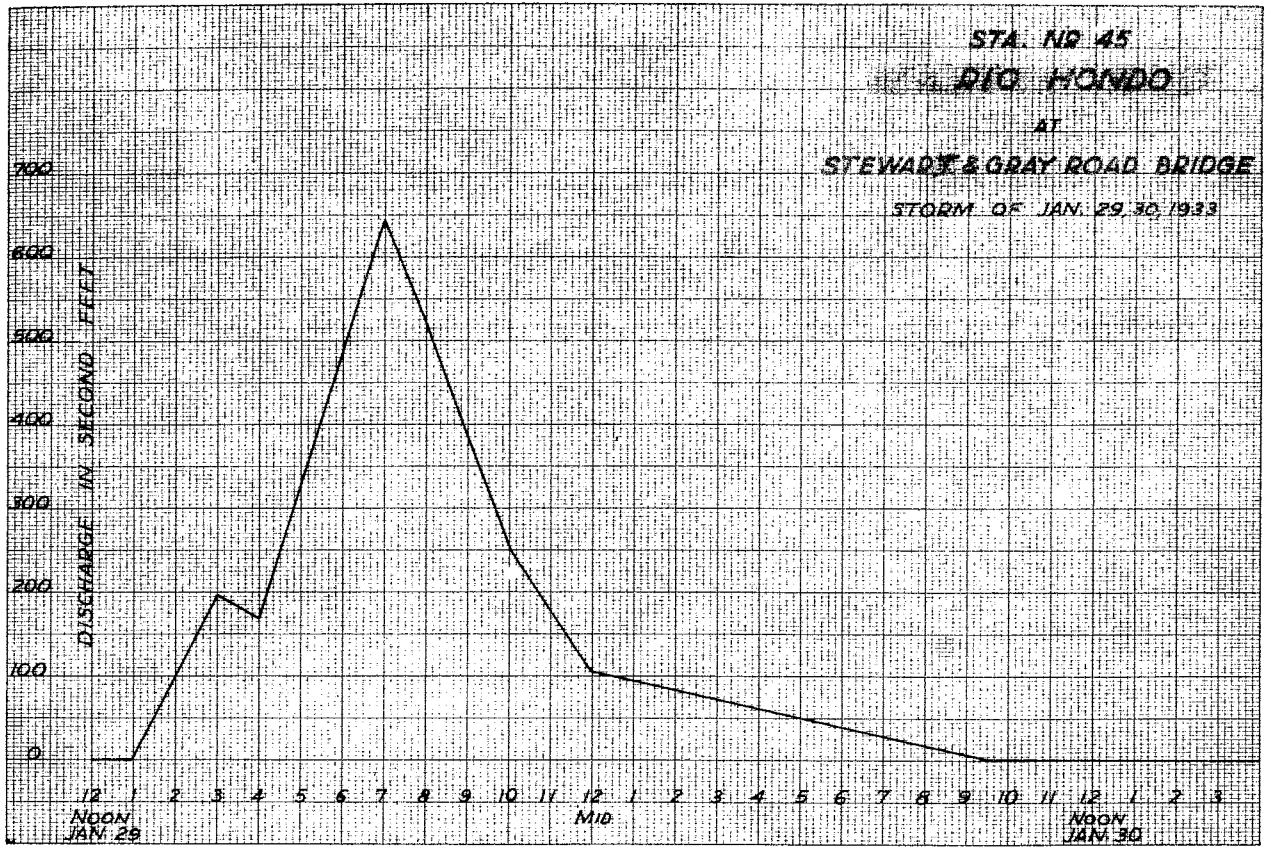
LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. 45

Name: STEWART AND GRAY ROAD BRIDGE for the Year Ending September 30, 1934

Drainage Area		Square Miles		Slaughter		Observer		Gage Head		Continuous		Used rating table dated		#1 & #2 5/29/34			
DAY	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	DAY	Gage height	Discharge	Gage height	Discharge	DAY	Gage height	Discharge	
1									1					1			
2									2					2			
3									3					3			
4									4					4			
5									5					5			
6									6					6			
7									7					7			
8									8					8			
9									9					9			
10									10					10			
11									11					11			
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22									22					22			
23									23					23			
24									24					24			
25									25					25			
26									26					26			
27									27					27			
28									28					28			
29									29					29			
30									30					30			
31									31					31			
TOTAL				2458.15		5940.00		185.21						8587.36			
Mean Daily Discharge in Second-foot				79.30		191.61		6.61						23.52			
Second-foot per square mile																	
Run-off, depth in inches																	
Run-off in acre-foot				4875.74		11781.99		367.26						17025.09			
Maximum Mean Daily Discharge in Second-foot				2130.0		5806.0		168.44						5806.0			
Minimum Mean Daily Discharge in Second-foot				0		0		0						0			





RIO HONDO SLOUGH AT SAN GABRIEL BOULEVARD BRIDGE

Location On west abutment, upstream side of San Gabriel Boulevard bridge across Rio Hondo Slough.
Drainage Of seepage and rising water.
Installed by Los Angeles County Flood Control District; recorder established June 14, 1930.
Records Available July 2, 1928 to September 30, 1934 at office of Los Angeles County Flood Control District, Los Angeles, California.
Gage Rational 7 day water stage recorder in shelter house on top of corrugated iron stilling well attached to upstream end of west bridge abutment.
Discharge Measurements All flow measured by wading.
Channel and Control. Sand banks overgrown with weeds. No control.
Extremes of Discharge 1929-1930 Maximum- 19.69 c.f.s. on February 3, 1930.
Minimum- 13.52 c.f.s. on September 12, 1930.
1930-1931 Maximum- 49.04 c.f.s. February 4, 1931.
Minimum- 11.63 c.f.s. September 18, 1931.
1931-1932 Maximum- 44.25 c.f.s. February 8, 1932.
Minimum- 0.44 c.f.s. October 15, 1931.
1932-1933 Maximum- 50.75 c.f.s. various times during the year.
Minimum- .45 c.f.s. various times during the year.
1933-1934 Maximum- 166.50 c.f.s. January 1, 1934.
Minimum- 6.33 c.f.s. August 4, 1934.
Diversion Some water pumped from stream for irrigation above station.
Accuracy Good.
Regulation None.
Operation Located and installed by Los Angeles County Flood Control District and operated by Los Angeles County Flood Control District.

Table with columns: No., Date, Made by, Weir Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Stage height Feet, Discharge Sec.-ft., Rating, Method, Mean sec. No., G. H. change Total, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 83

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 83

Discharge measurements of Rio Hondo Slough

Discharge measurements of Rio Hondo Slough

at San Gabriel Blvd. Bridge during the year ending September 30, 1933

at San Gabriel Blvd. Bridge during the year ending September 30, 1934

Table with columns: No., Date, Made by, Weir Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Stage height Feet, Discharge Sec.-ft., Rating, Method, Mean sec. No., G. H. change Total, Time Hours, Meter No.

Table with columns: No., Date, Made by, Weir Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Stage height Feet, Discharge Sec.-ft., Rating, Method, Mean sec. No., G. H. change Total, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 83

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 83

Discharge measurements of Rio Hondo Slough

Discharge measurements of Rio Hondo Slough

near San Gabriel Blvd. Brg. during the year ending September 30, 1934

at San Gabriel Blvd. Bridge during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width, Area, Mean velocity, Stage, Discharge, Rating, Method, Mean No., Time, Mean No.

Table with columns: No., Date, Made by, Width, Area, Mean velocity, Stage, Discharge, Rating, Method, Mean No., Time, Mean No.

F.C. Dist. Form 105-1000-9-31

Daily Gage Height, in Feet, and Discharge, in Second-Feet, of RIO HONDO SLOUGH

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. 83

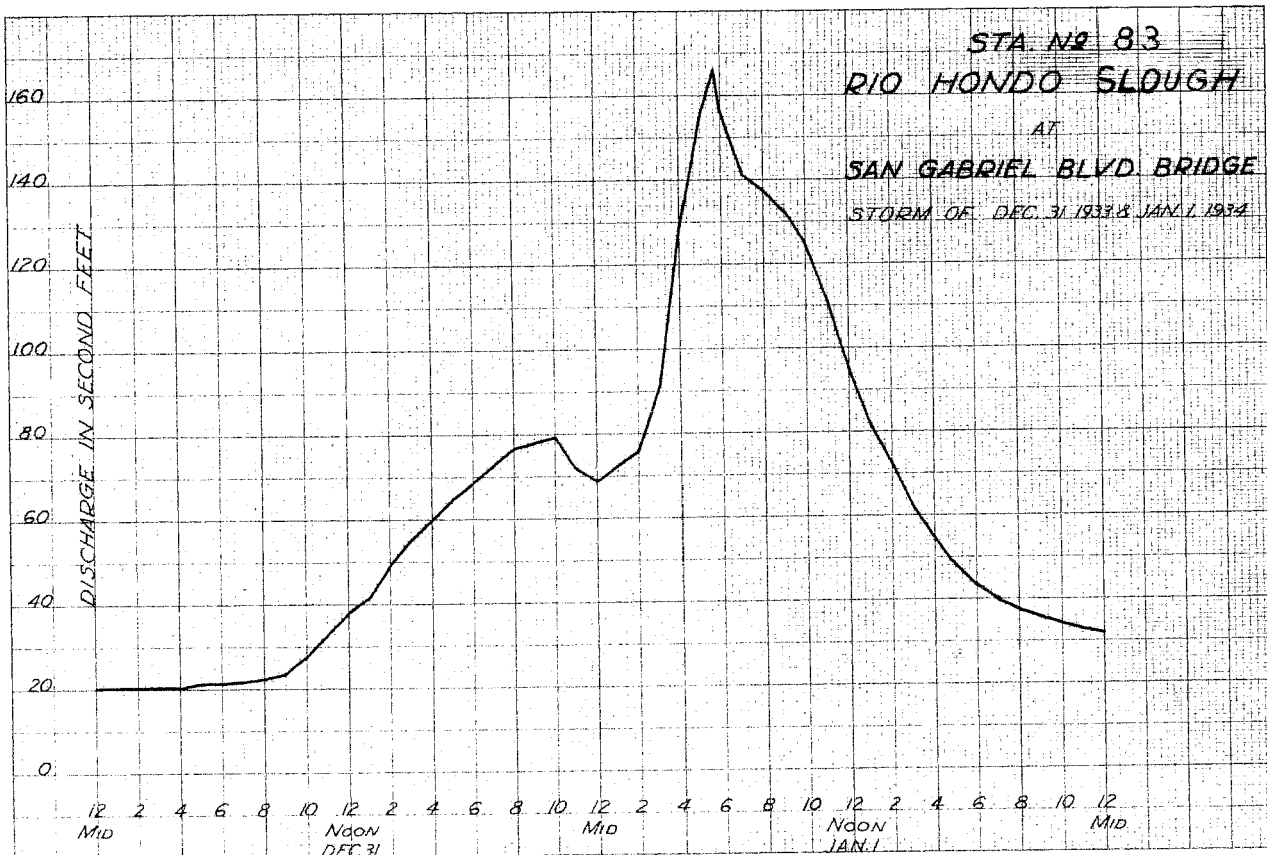
At San Gabriel Blvd. Bridge for the Year Ending September 30, 1933

Large table with columns for months (OCTOBER to SEPTEMBER), DAY, Gage height, Discharge, and various summary statistics at the bottom.

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of RIO HONDO SLOUGH
At SAN GABRIEL BLVD. BRIDGE for the Year Ending September 30, 1934.

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Table with columns for months (October to September), gage height, and discharge. Includes summary statistics at the bottom such as 'TOTAL', 'Mean Daily Discharge in Second-Foot', and 'Run-off in acre-feet'.



RUBIO WASH AT BROADWAY BRIDGE

Location On west side of Rubio Wash, 300' east of the intersection of San Gabriel Boulevard and Broadway Street, 75' below Broadway Bridge, San Gabriel, Los Angeles County, California.

Drainage Area 13 square miles.

Installed by Los Angeles County Flood Control District November 1928.

Records Available Stream measurements from November 1928 to September 30, 1929. Recorder records from October 1, 1929 to September 30, 1934. During the period October 1, 1930 to January 19, 1932 recorder was located at Los Tunas Boulevard 1000' upstream. On January 20, 1932 the recorder was relocated below the Broadway Street Bridge.

Gage Stevens Type L & S day recorder installed in large shelter house on west side of channel on corrugated iron stilling well set outside of channel wall. Staff gage on concrete wall at stilling well inlet.

Discharge Measurements Low water measurements made by wading. High water measurements made from foot bridge 20' above station.

Channel and Control Concrete channel with a drop 9' below gage. Small concrete dam for low flows. 7' drop 9' below station.

Extremes of Discharge 1929-1930 Maximum- 660.60 c.f.s. March 14, 1930. Minimum- Dry most of year.

1930-1931 Maximum- 1690 c.f.s. on February 3, 1931. Minimum- Dry most of year.

1931-1932 Maximum- 798 c.f.s. November 27, 1931. Minimum- Dry most of year.

1932-1933 Maximum- 1510 c.f.s. January 16, 1933. Minimum- Dry most of year.

1933-1934 Maximum- 2074 c.f.s. December 31, 1933. Minimum- Dry most of year.

Diversions None.

Accuracy Good.

Operation Located and installed by the Los Angeles County Flood Control District and operated by the Los Angeles County Flood Control District.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Discharge measurements of Rubio Wash at Broadway Bridge during the year ending September 30, 1933.

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec.-ft., Rating Percent, Method, Mean sec. No., G. H. Change Feet, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Discharge measurements of Rubio Wash at Broadway Bridge during the year ending September 30, 1934.

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec.-ft., Rating Percent, Method, Mean sec. No., G. H. Change Feet, Time Hours, Meter No.

Daily Gage Height, in Feet, and Discharge, in Second-Feet, of RUBIO WASH

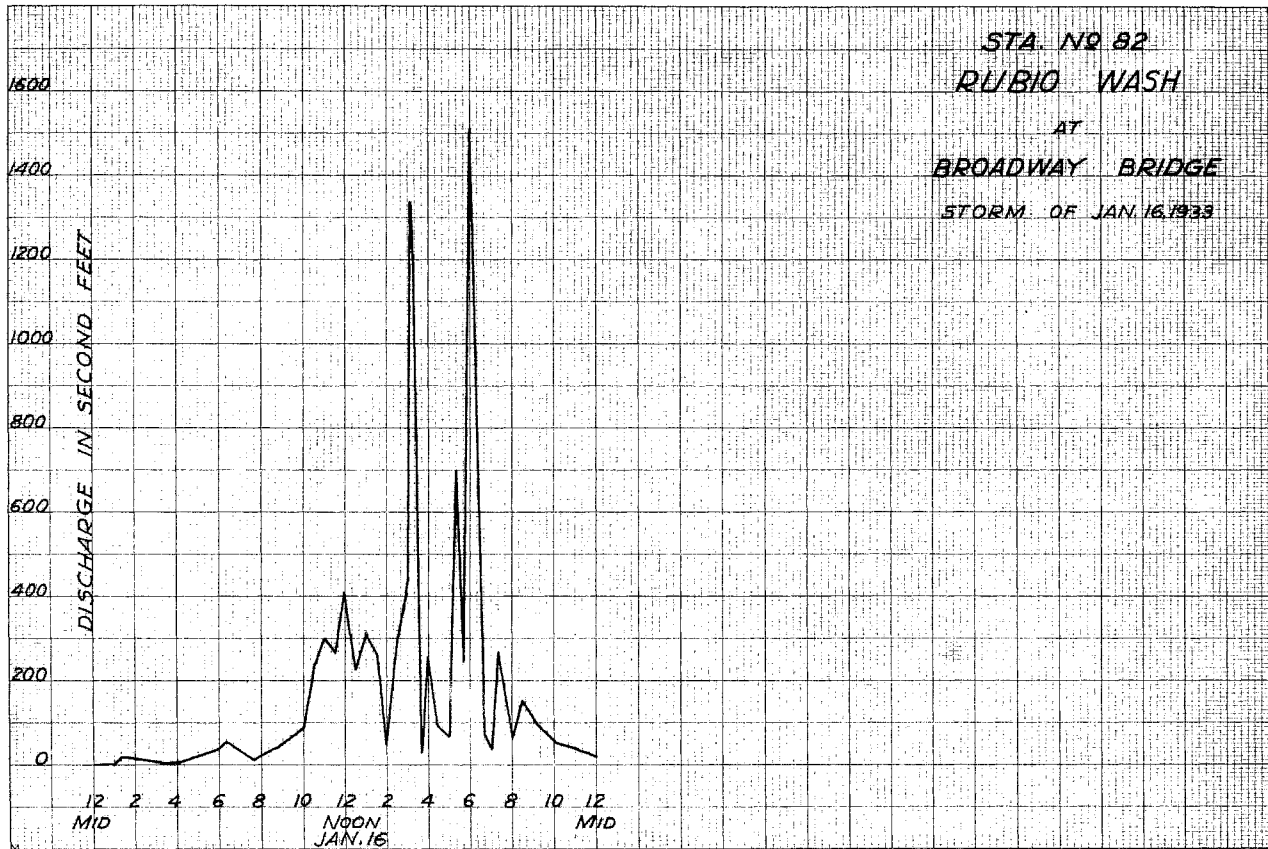
At Broadway Bridge - San Gabriel for the Year Ending September 30, 1933

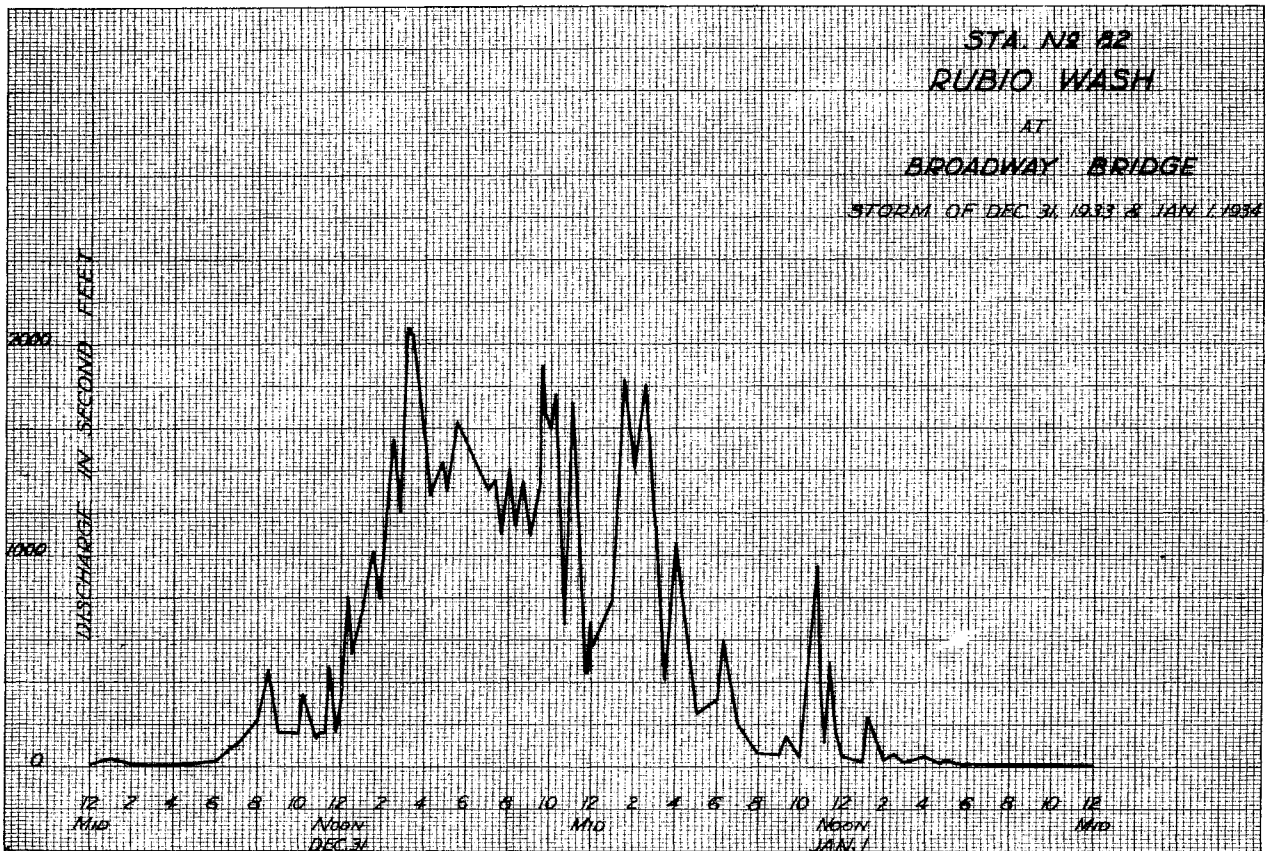
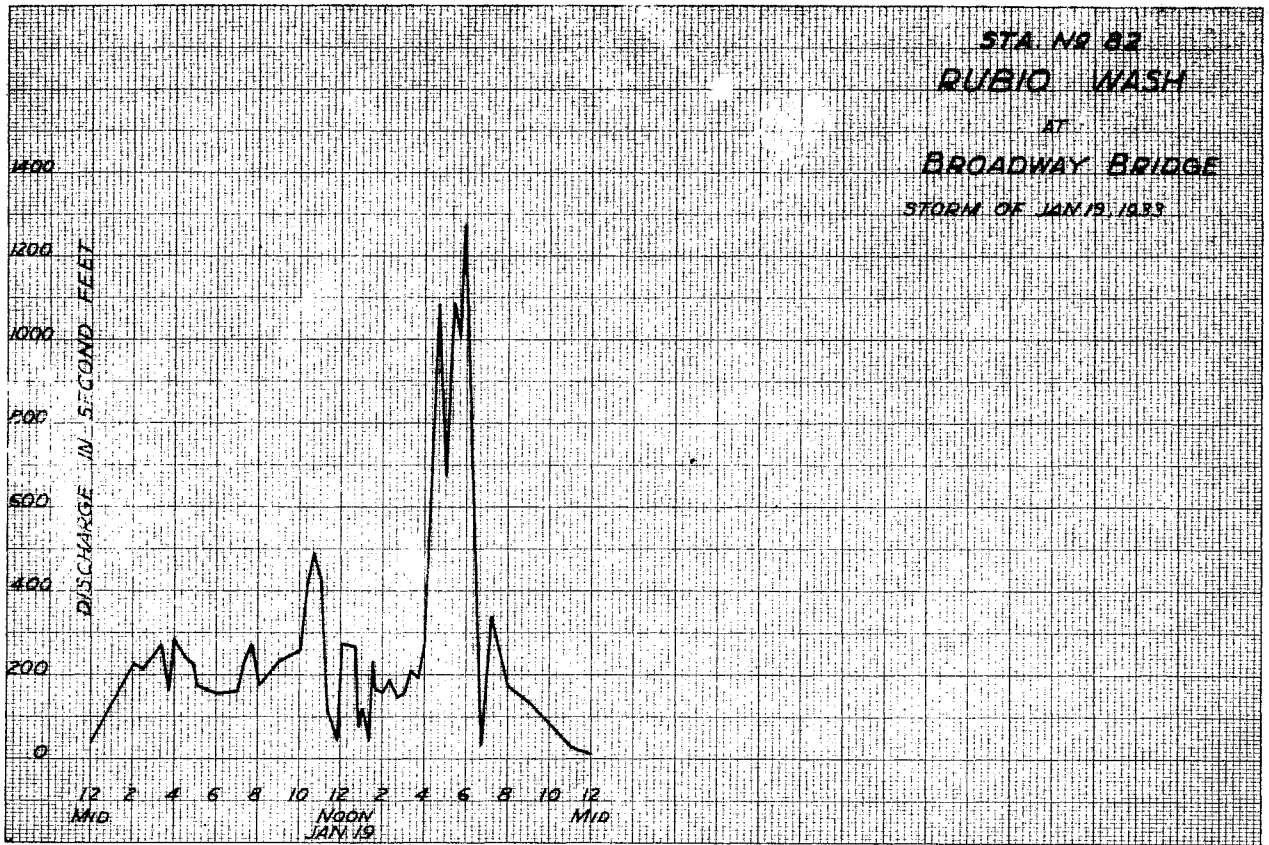
Drainage Area 13.0 Square Miles. Gage Head Continuous. Used rating table dated 1/20/32 - 9/30/33

Main data table with columns for months (OCTOBER to SEPTEMBER) and days (1-31). Includes sub-columns for Gage height and Discharge. Includes summary rows for TOTAL, Mean Daily Discharge, Second-foot per square mile, Run-off, etc.

Drainage Area **13.0** Square Miles. (**R. E. Lindsay** Observer.) Gage Read **Continuous** Used rating table dated **Apr. 25, 1934.**

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		DAY
	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	
1							H	297.41																1	
2							0.05	1.00																2	
3																								3	
4																								4	
5																								5	
6																								6	
7																								7	
8																								8	
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26																								26	
27																								27	
28																								28	
29																								29	
30																								30	
31																								31	
TOTAL	14.54	1.80	853.67	302.30	124.90																				1301.32
Mean Daily Discharge in Second-foot	0.47	0.06	27.54	9.75	4.46																				3.57
Second-foot per square mile	0.036	0.005	2.118	0.750	0.343																				0.275
Run-off, depth in inches	0.042	0.005	2.438	0.863	0.357																				3.717
Run-off in acre-foot	28.84	3.57	1693.25	599.61	247.74																				2581.17
Maximum Mean Daily Discharge in Second-foot	14.54	1.80	684.40	297.41	65.41																				684.4
Maximum Mean Daily Discharge in Second-foot	0	0	0	0	0																				0





LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 151

SAN ANTONIO CREEK AT MOUTH OF CANYON

Location 200' upstream from headgates of Pomona Valley Protective Association spreading canal, 4 miles northeast of Claremont, Los Angeles County, California.

Discharge measurements of San Antonio Creek at Mouth of Canyon during the year ending September 30, 1933

Drainage Area 25 square miles.

Installed by Los Angeles County Flood Control District, February 20, 1931.

Records Available February 20, 1931 to September 30, 1934 at offices of Los Angeles County Flood Control District, Los Angeles, California.

Gage Rational 7 day water stage recorder installed in shelter house mounted on iron pipe stilling well on west bank of creek. Outside vertical staff gage installed on stilling well.

Discharge Measurements High water measurements made from cable car 10' above recorder. Low water measurements made by wading in creek near gage.

Channel and Control Channel- Gravel and boulders. Control- Concrete control in channel below gage.

Extremes of Discharge 1930-1931 Maximum- 98 c.f.s. on April 26, 1931. Minimum- Dry at various times during year. 1931-1932 Maximum- 405 c.f.s. February 8 & 9, 1932. Minimum- Dry at numerous times during year. 1932-1933 Maximum- 167.0 c.f.s. January 19, 1933. Minimum- Dry most of year. 1933-1934 Maximum- 200 c.f.s. January 1, 1934. Minimum- Dry most of year.

Diversions Two diversions above station for power and irrigation use.

Regulation None.

Accuracy Good normally.

Operation Located and constructed by the Los Angeles County Flood Control District and operated by the Los Angeles County Flood Control District in conjunction with the U.S.G.S. Water Resources Branch and the Pomona Valley Protective Association.

Table with columns: No., Date, Made by, Width Feet, Area of Section Sq. Ft., Mean Velocity ft. per sec., Gage Height Feet, Discharge Sec.-ft., Rating Period, Method, Mean No., G. H. Change Total, Time Hours, Meter No.

F.C.D. Form 1048 121 3-31

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 151

Discharge measurements of San Antonio Creek at Mouth of Canyon during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of Section Sq. Ft., Mean Velocity ft. per sec., Gage Height Feet, Discharge Sec.-ft., Rating Period, Method, Mean No., G. H. Change Total, Time Hours, Meter No.

F.C. Form 1048-1000-3-31

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of SAN ANTONIO CREEK

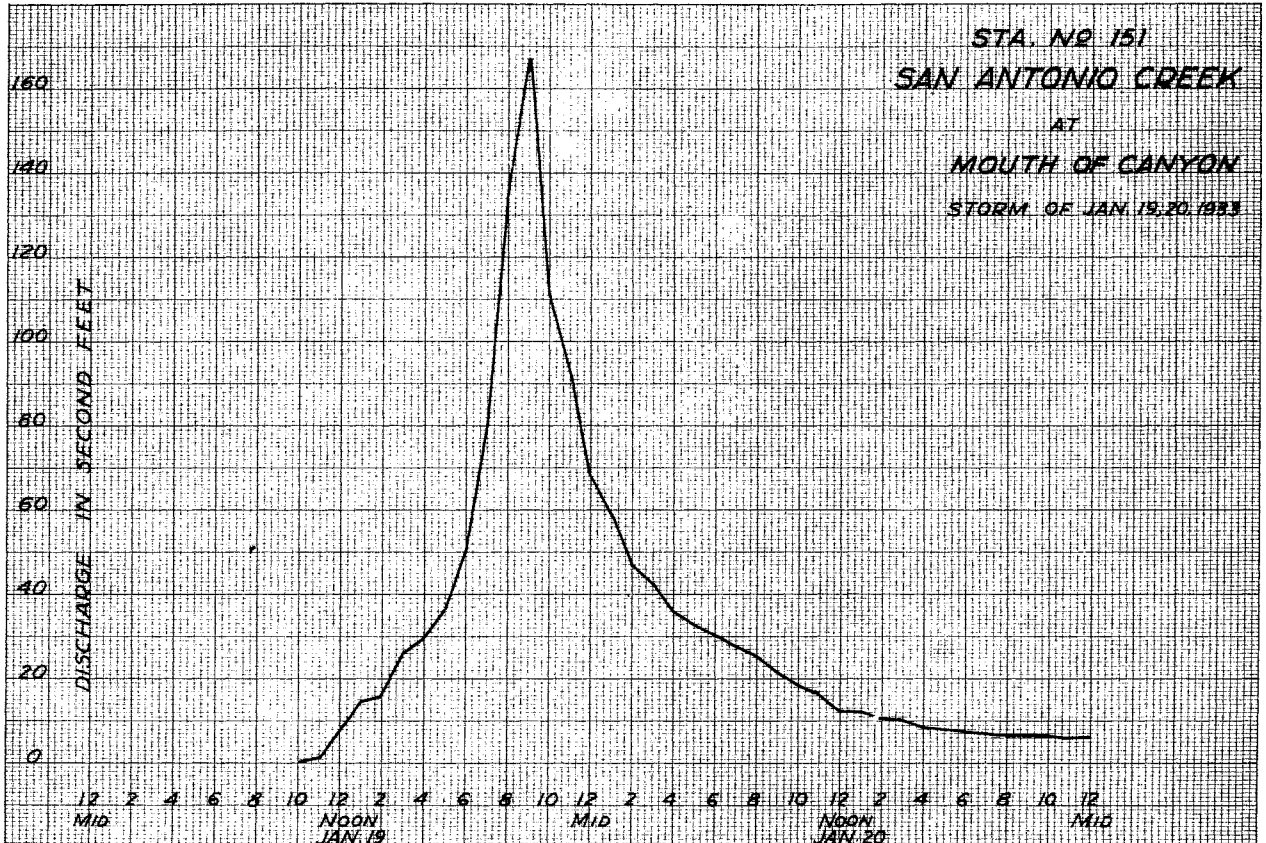
LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. 151

at Mouth of Canyon for the Year Ending September 30, 1933

Large monthly table with columns for months (OCTOBER to SEPTEMBER), Gage height, Discharge, and a summary section at the bottom for 'TOTAL' and 'PERIOD YEAR'.

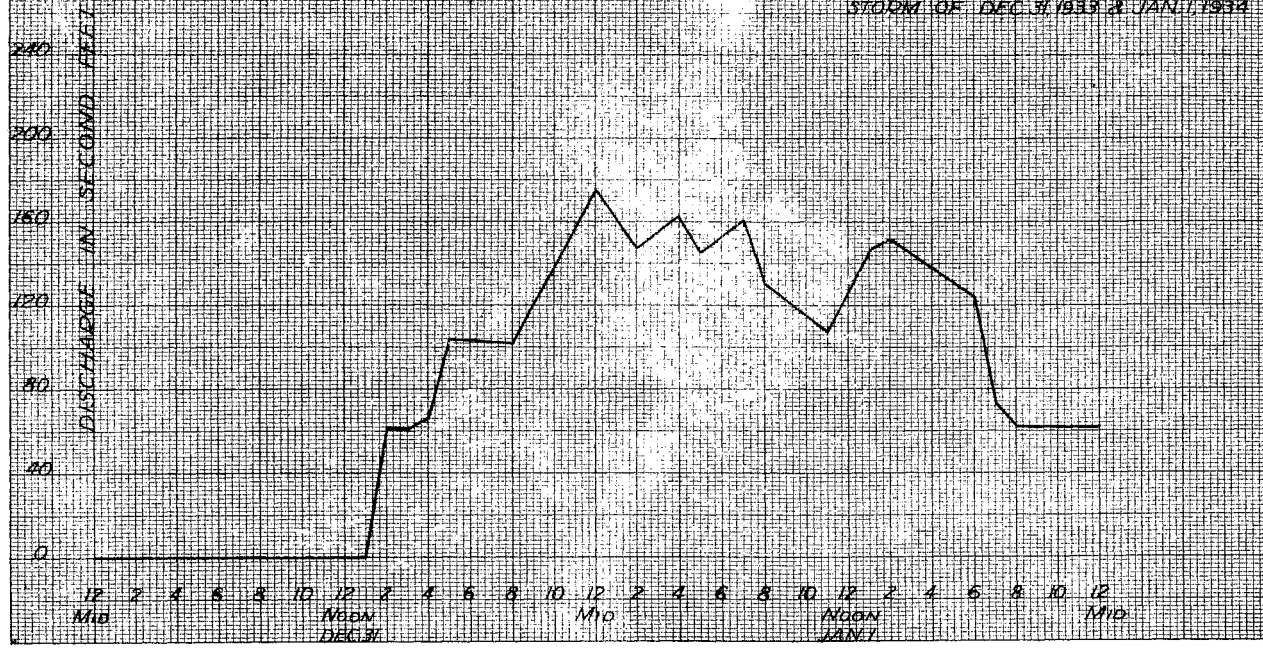
DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	
1							H	123.27																	
2							H	44.34																	
3							H	19.74																	
4							H	7.53																	
5							H	4.85																	
6							H	9.85																	
7							H	4.05	6.07																
8								3.98	2.05																
9								3.98	2.05																
10								3.98	2.05																
11							H	13.74																	
12							H	18.87																	
13							H	1.70																	
14							H	3.97	1.70																
15							H	3.97	1.70																
16								3.96	1.41																
17								3.96	1.41																
18							H	1.09																	
19																									
20																									
21																									
22																									
23																									
24																									
25																									
26																									
27																									
28																									
29																									
30																									
31							H	46.08																	
TOTAL							54.11	263.42																	317.53
Mean Daily Discharge in Second-foot							1.75	8.50																	0.87
Second-foot per square mile							0.063	0.304																	0.031
Run-off depth in inches							0.072	0.350																	0.422
Run-off in acre-foot							107.33	522.49																	629.82
Maximum Mean Daily Discharge in Second-foot							46.08	123.27																	123.27
Minimum Mean Daily Discharge in Second-foot							0	0																	0



STA. NO. 151
SAN ANTONIO CREEK

AT
MOUTH OF CANYON

STORM OF DEC. 31, 1933 & JAN. 1, 1934



P-96 R

SAN GABRIEL RIVER EAST FORK 1/4 MILE BELOW MOUTH OF CATTLE CANYON

Location
On north bank of East Fork, San Gabriel River, 5 miles above junction of East and West Forks, 1/4 mile below mouth of Cattle Canyon.

Drainage Area
78.35 square miles.

Installed by
Los Angeles County Flood Control District October, 1929.

Records Available
October 1, 1929 to September 30, 1934 at offices of Los Angeles County Flood Control District, Los Angeles, California.

Gage
A continuous water stage recorder installed in galvanized iron shelter house on top of corrugated iron pipe stilling well and secured to vertical rock bank on north bank of stream.

Discharge Measurements
High water flows are measured from cable car located 20' above recorder house.
Low water flows are measured by wading near gage.

Channel and Control
Channel- Sand, gravel and boulders.
Control- Low control built of boulders not permanent; washed out storm of February 8, 1932.

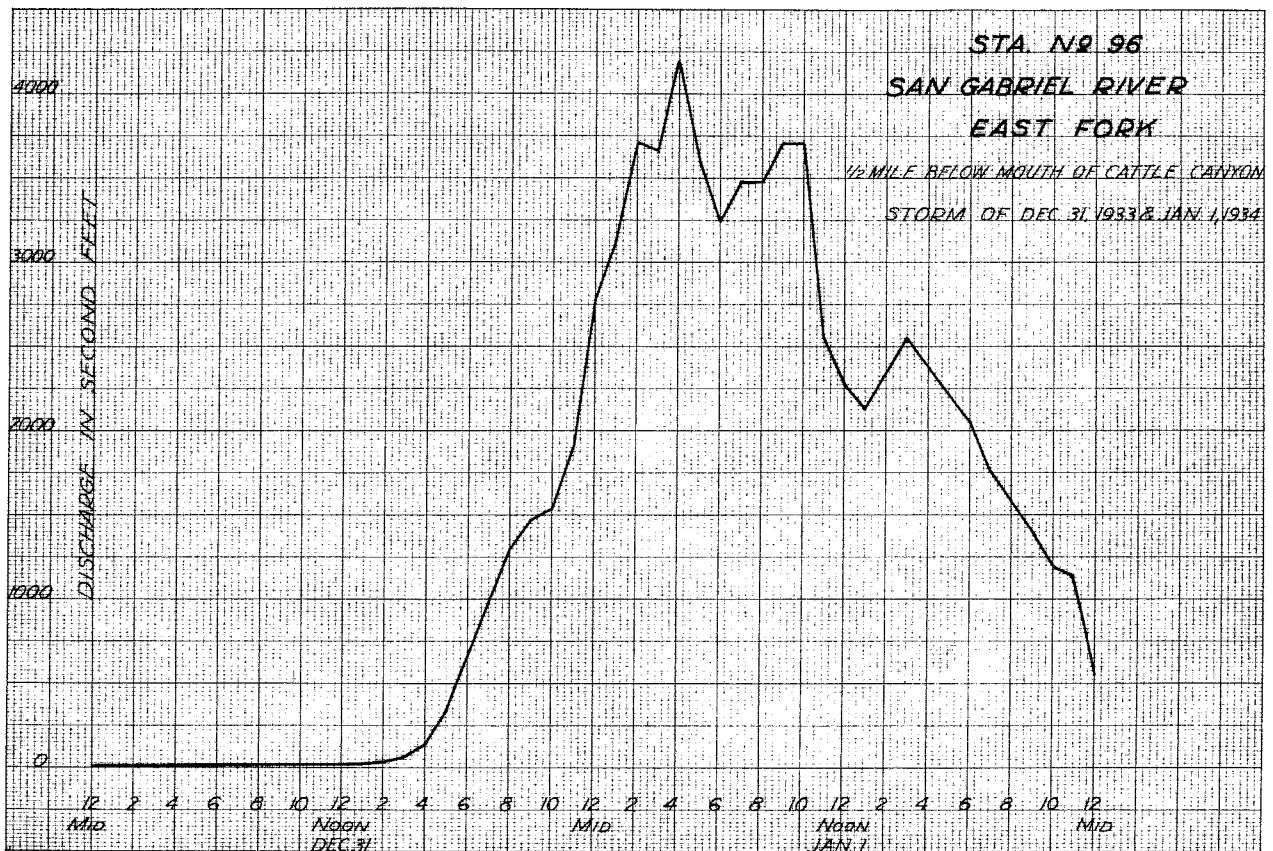
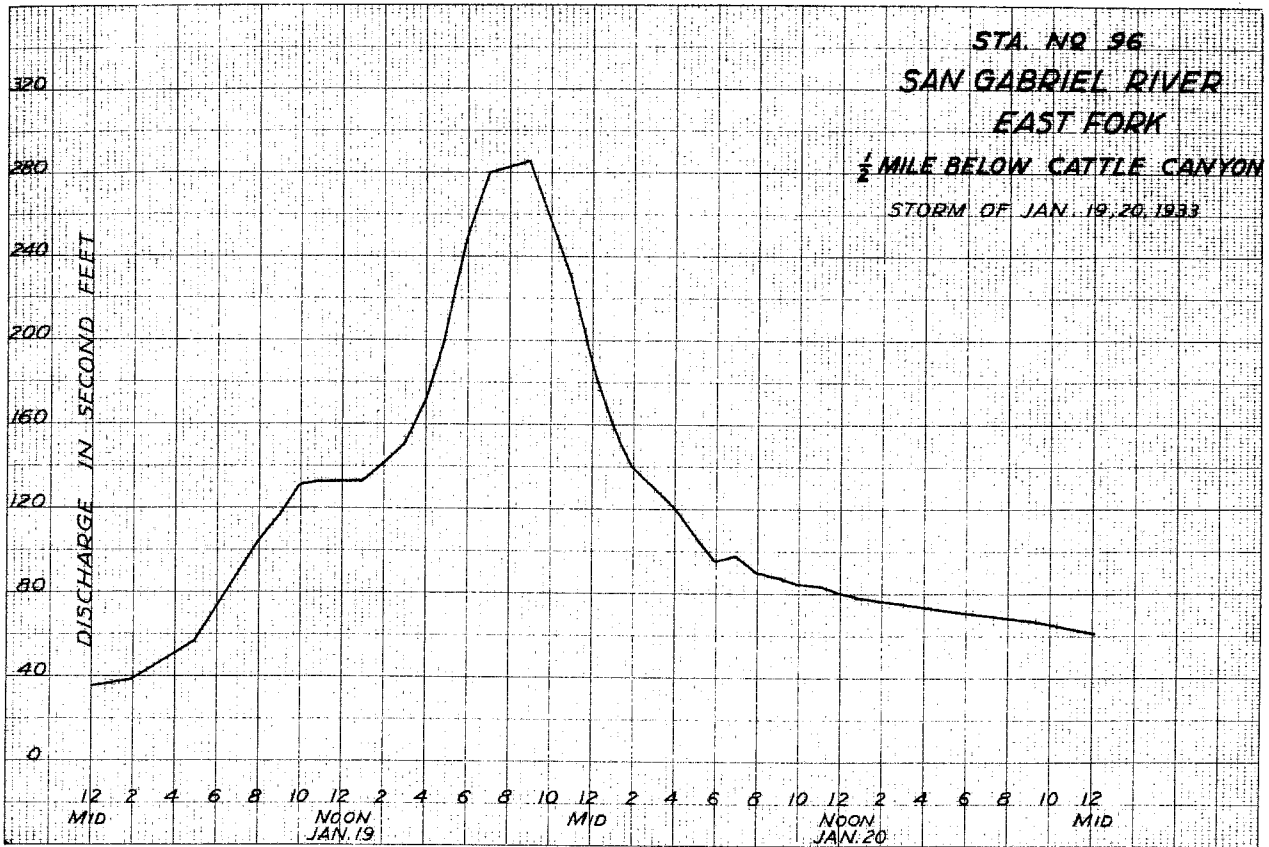
Extremes of Discharge
1929-1930
Maximum- 108.50 c.f.s. May 16, 1930.
Minimum- 6.90 c.f.s. various times during year.
1930-1931
Maximum- 776.6 c.f.s. April 26, 1931.
Minimum- 1.0 c.f.s. August 24, 1931.
1931-1932
Maximum- 4700 c.f.s. at mid. February 8-9, 1932.
Minimum- 10 c.f.s. October 10-16, 1931.
1932-1933
Maximum- 310.0 c.f.s. January 19, 1933.
Minimum- 5.2 c.f.s. September 4, 1933.
1933-1934
Maximum- 4200.0 c.f.s. January 1, 1934.
Minimum- 4.2 c.f.s. several days in September 1934.

Diversions
Intermittent diversions for placer mining above station.

Regulation
None.

Accuracy
Fair.

Operation
Located and constructed by Los Angeles County Flood Control District; operated in conjunction with the U.S.G.S. Water Resources Branch.



SAN GABRIEL RIVER-EAST FORK-P.W.D. STATION 2 1/2 MI. ABOVE FORKS

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. P 4

Location

On the north bank of the East Fork of the San Gabriel River above the high flow line of San Gabriel Dam No 1, 2 miles above the Forks and 8 miles north of Glendora, Los Angeles County, California.

Drainage Area

91.4 square miles

Installed by

The Los Angeles County Flood Control District for the Pasadena Water Department November 30, 1932.

Records Available

November 30, 1932 to September 30, 1934. Records from 1924 to October 1, 1932 were taken at station 4 miles upstream. Records from October 1, 1927 to September 30, 1933 are available at the offices of the Los Angeles County Flood Control District and previous records available at Pasadena Water Department.

Gage

An continuous water stage recorder installed in corrugated iron house on top of a corrugated iron stilling well on North bank of stream. Staff gage on stilling well.

Discharge Measurements

Low water measurements made by wading near gage. High water measurements made from cable car at gage.

Channel and Control

Channel-sand, gravel and boulders. High water flows in two or three channels. No control.

Extremes of Discharges

1932-1933

Maximum - 335 c.f.s. January 19, 1933. Minimum - Not determined.

1933-1934

Maximum - 8500 c.f.s. January 1, 1934. Minimum - 3.0 c.f.s. September 30, 1934.

Diversions

Miners divert water above gage.

Regulations

Flood Control Dam No. 2 controls flow.

Accuracy

Poor, due to water flowing in a number of channels.

Operation

By the Los Angeles County Flood Control District in conjunction with the Pasadena Water Department and U.S.G.S. Water Resources Branch.

Discharge measurements of San Gabriel River - East Fork - P.W.D. Station at near 2 1/2 mi. above Forks above Reservoir #1 during the year ending September 30, 1933.

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec.-ft., Rating Percent off, Method, Max. amt. No., G. H. change Total, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. P 4

Discharge measurements of San Gabriel River-East Fork P. W. D. Station

at near 2 1/2 mi. above Forks during the year ending September 30, 1933 Above Reservoir #1

Discharge measurements of San Gabriel River-East Fork P.W.D. Sta.

at near 2 1/2 Mi. above Forks during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec.-ft., Rating Percent off, Method, Max. amt. No., G. H. change Total, Time Hours, Meter No.

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec.-ft., Rating Percent off, Method, Max. amt. No., G. H. change Total, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. P-4

Discharge measurements of San Gabriel River-East Fork P.W.D. Sta. at near 2 1/2 Mi. above Forks during the year ending September 30, 19 34

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gate height Feet, Discharge Sec.-ft., Rating Point, Method, Mean No., G. H. Stage Total, Time Hour, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. P-4

Discharge measurements of San Gabriel River-East Fork P.W.D. Sta. at near 2 1/2 Mi. above Forks during the year ending September 30, 19 34

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gate height Feet, Discharge Sec.-ft., Rating Point, Method, Mean No., G. H. Stage Total, Time Hour, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. P-4

Discharge measurements of San Gabriel River-East Fork P.W.D. Sta. at near 2 1/2 Mi. above Forks during the year ending September 30, 19 34

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gate height Feet, Discharge Sec.-ft., Rating Point, Method, Mean No., G. H. Stage Total, Time Hour, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. P-4

Discharge measurements of San Gabriel River - East Fork P.W.D. Sta. at near 2 1/2 Mi. above Forks during the year ending September 30, 19 34

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gate height Feet, Discharge Sec.-ft., Rating Point, Method, Mean No., G. H. Stage Total, Time Hour, Meter No.

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of SAN GABRIEL RIVER EAST FORK P.W.D. STA.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. P 4

Near At 2 1/2 MI. ABOVE FORKS for the Year Ending September 30, 1933

Table with columns for months (OCTOBER to SEPTEMBER) and days (1-31). Rows include Gage height, Discharge, and various summary statistics like 'TOTAL', 'Max Daily Discharge', and 'Run-off, depth in inches'.

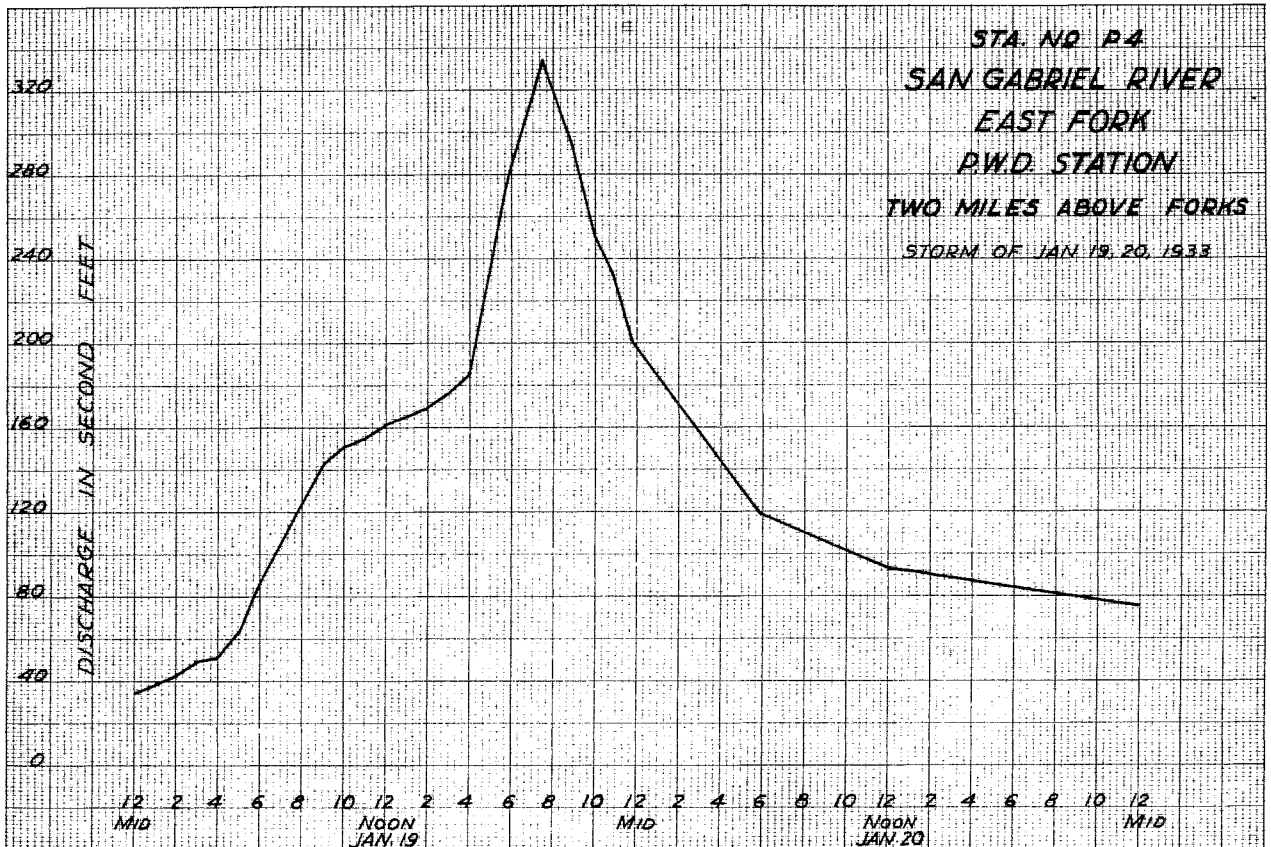
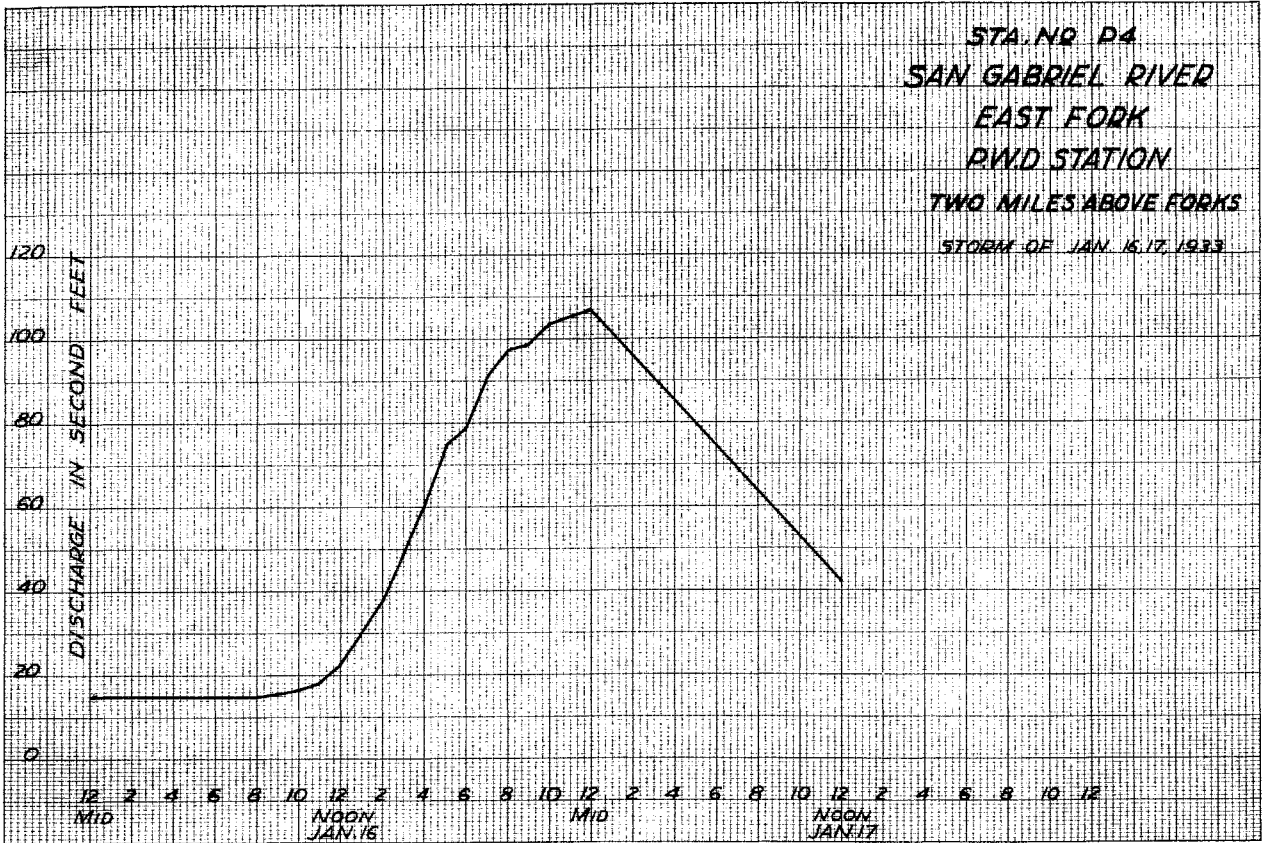
Daily Gage Height, in Feet, and Discharge, in Second-Foot, of SAN GABRIEL RIVER - P.W.D. - EAST FORK

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. P 4

Near At 2-1/2 MI. ABOVE FORKS for the Year Ending September 30, 1934

Table with columns for months (OCTOBER to SEPTEMBER) and days (1-31). Rows include Gage height, Discharge, and various summary statistics like 'TOTAL', 'Max Daily Discharge', and 'Run-off, depth in inches'.



P-228 R

**SAN GABRIEL RIVER WEST FORK
3-1/2 MILES ABOVE SAN GABRIEL DAM NO. 2**

Location
On the bank of the West Fork of the San Gabriel River, 3-1/2 miles above San Gabriel Dam No. 2 and 10 miles above the junction of the East and West Forks of the San Gabriel River.

Drainage Area
14.45 square miles.

Installed by
The Los Angeles County Flood Control District December 6, 1933.

Records Available
December 6, 1933 to September 30, 1934 at offices of the Los Angeles County Flood Control District, Los Angeles, California.

Gage
An automatic water stage recorder installed in shelter house on top of corrugated iron stilling well. Staff gages on outside and inside of stilling well.

Discharge Measurements
Low flow measurements are made from cable car 12 feet below gage.

Channel and Control
Channel sand gravel and boulders. No control.

Extremes of Measurements
1933-1934
Maximum - 1850 c.f.s. January 1, 1934.
Minimum - Dry part of year.

Diversions
None.

Regulations
None.

Accuracy
Good.

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

F. C. D. Form 104A IM 1-34

**LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT**

Station No. 228

F. C. D. Form 104A IM 1-34

**LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT**

Station No. 228

Discharge measurements of San Gabriel River

Discharge measurements of San Gabriel River

at West Fork above No. 2 Reservoir during the year ending September 30, 1934

at West Fork above No. 2 Reservoir during the year ending September 30, 1934

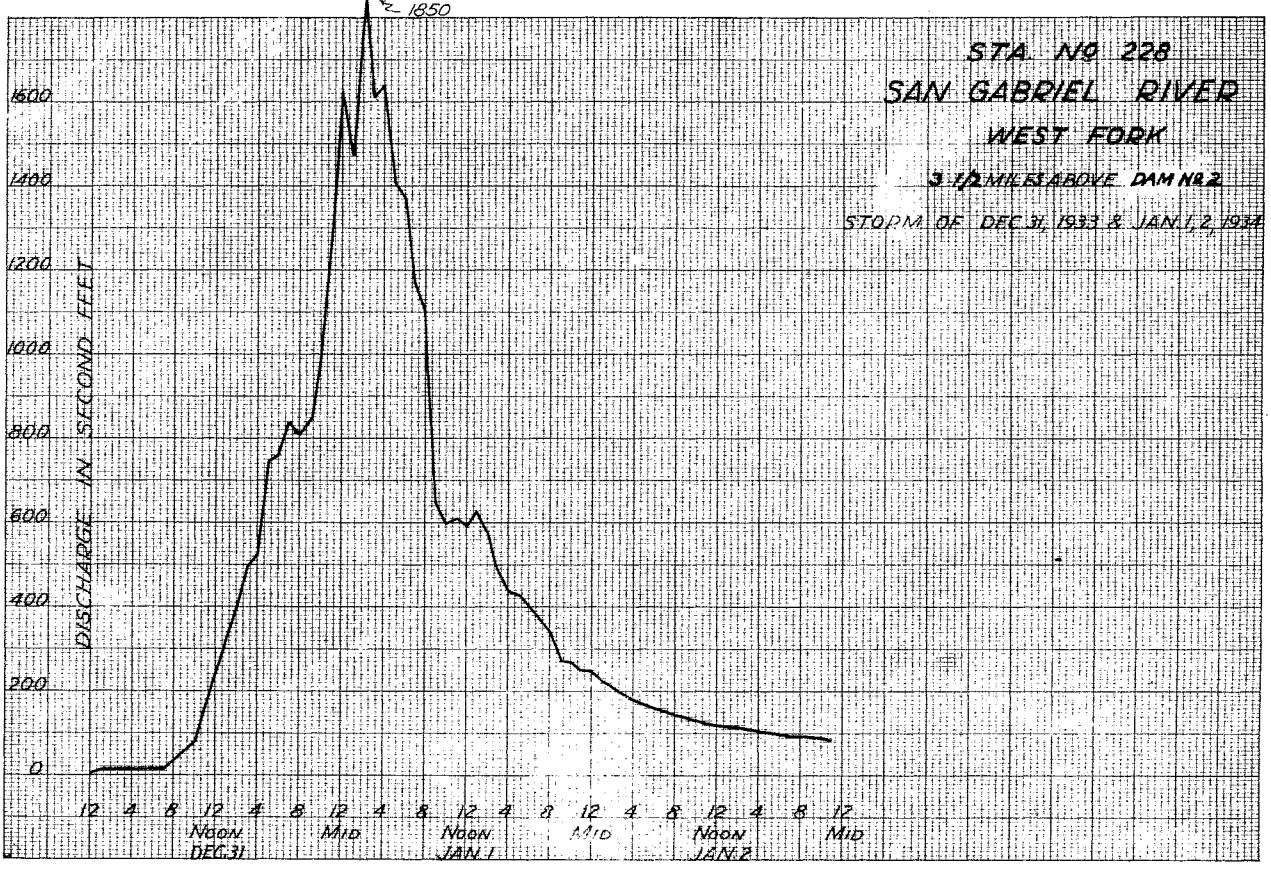
No.	Date	Made by	Width Feet	Area of cross-section Sq. Ft.	Mean velocity ft. per sec.	Cross-section Feet	Discharge Sec.-ft.	Rating Factor	Method	Mean No. of Gauging Feet	Time Hours	Meas. No.	
1	1933 11/8	G. Patterson	0.3	.045			0.04	Float	1	-	1/12		
2	11/16	T. A. Cooper	0.6	0.04	0.78	2.39	0.031	"	3	-	1/12		
3	11/23	"	0.6	0.04	0.90	2.50	0.036	"	3	-	1/12		
4	11/29	"	1.0	0.25	1.32	2.74	0.33	"	5	-	2/15		
5	12/12	Cooper-Waddicor	1.2	0.29	1.30	2.79	0.374	"	5	-	1/12		
6	12/14	T. A. Cooper	15.0	12.10	0.72	3.15	8.72	.6	8	-	13/60	271640	
7	12/21	"	13.0	6.07	0.32	2.93	1.94	.6	7	-	1/5	"	
8	12/23	"	13.0	5.63	0.19	2.92	1.63	.6	7	-	13/60	"	
9	12/29	"	5.0	1.45	1.22	2.91	1.77	.6	5	-	2/15	"	
10	1934 1/4	"	25.7	19.79	2.31	3.78	45.71	.6	11	-	4/15	"	
11	1/4	"	25.7	19.70	2.35	3.78	46.37	.6	10	-	1/3	"	
12	1/12	"	12.3	11.72	1.16	3.32	13.63	.6	10	-	4/15	"	
13	1/24	"	9.0	5.10	1.65	3.17	8.40	.6	9	-	1/5	"	
14	2/2	"	8.0	4.19	1.45	3.11	6.06	.6	8	-	1/4	"	
15	2/11	"	8.0	3.69	1.38	3.06	5.08	.6	8	-	1/4	"	
16	2/16	"	7.8	3.78	1.37	3.07	5.18	.6	8	-	1/5	"	
17	2/23	"	25.0	16.42	2.13	3.62	35.02	.6	10	-	3/10	282891	
18	2/23	"	27.0	14.56	2.09	3.575	30.52	.6	11	-	1/3	"	
19	2/23	"	26.7	13.98	2.03	3.55	28.36	.6	10	-	3/10	"	
20	3/1	"	16.0	10.59	1.25	3.31	13.25	.6	9	-	4/15	"	
21	3/8	"	12.4	11.13	0.77	3.19	8.58	.6	9	-	4/15	"	
22	3/15	"	12.3	10.48	0.64	3.13	6.69	.6	8	-	4/15	"	
23	3/22	"	12.1	9.83	0.51	3.10	5.06	.6	9	-	4/15	"	
24	3/29	"	6.9	3.18	1.45	3.06	4.60	.6	7	-	1/5	"	
25	1934 4/5	T. A. Cooper	6.8	3.03	1.36	3.03	4.11	.6	10	-	4/15	282891	
26	4/12	"	6.8	2.77	1.06	3.00	2.94	.6	10	-	17/60	"	
27	4/13	"	6.7	2.71	1.16	2.99	3.15	.6	10	-	3/10	"	
28	4/19	"	6.6	2.71	1.13	2.98	3.06	.6	11	-	9/20	"	
29	4/26	"	6.3	2.30	0.96	2.96	2.22	.6	10	-	3/20	"	
30	5/3	"	6.5	2.55	0.89	2.955	2.24	.6	7	-	.005	1/4	FC 20
31	5/10	"	6.2	2.05	0.66	2.89	1.35	.6	6	-	1/5	"	
32	5/17	"	5.8	1.71	0.60	2.86	1.03	.6	8	-	7/30	282891	
33	5/24	"	5.5	1.50	0.53	2.82	0.79	.6	7	-	1/5	FC 20	
34	5/31	"	4.7	1.35	0.82	2.86	1.02	.6	7	-	1/5	"	
35	6/7	"	4.6	1.43	0.90	2.88	1.28	.6	7	-	7/30	"	
36	6/14	Hofmann	5.0	1.22	0.72	2.87	0.88	.6	5	-		FC 28	
37	6/21	R. Waddicor	5.5	1.50	0.61	2.84	0.91	.6	6	-	1/6	FC 26	
38	6/28	T. A. Cooper	4.3	0.84	0.39	2.76	0.33	.6	6	-	1/5	282891	
39	7/5	"	2.8	0.49	0.20	2.70	0.10	.6	5	-	1/5	FC 20	
40	7/12	"	0.8	0.06	1.10	2.66	0.066	Float	3	-	1/10		
41	7/19	"	0.6	.024	0.62	2.57	0.015	"	3	-	1/15		
42	7/26	"				2.50	0.01	Est.					
43	8/2	"				2.47	0.01	Est.					
44	8/9	"				2.44	0.01	Est.					

Drainage Area, Square Miles, **T. A. COOPER**, Observer.

Gage Read, **Continuously**

Used with table dated, **1933-34**

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	
1																									
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27																									
28																									
29																									
30																									
31																									
TOTAL																									
Mean Daily Discharge in Second-foot																									
Second-foot per square mile																									
Run-off, depth in inches																									
Run-off in acre-foot																									
Maximum Mean Daily Discharge in Second-foot																									
Maximum Mean Daily Discharge in Second-foot																									



LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 227

SAN GABRIEL RIVER - DEVILS CANYON

Location: On bank of Devils Canyon 3 miles above San Gabriel Dam No. 2. About 10 miles above the junction of the east and west forks of the San Gabriel River.
Drainage Area: 15.4 square miles.
Installed By: The Los Angeles County Flood Control District December 22, 1933.
Records Available: December 22, 1933 to September 30, 1934 at the office of the Los Angeles County Flood Control District, Los Angeles, California.
Gage: An automatic water stage recorder installed in a corrugated iron shelter house on top of a corrugated iron stilling well. Staff gages on inside and outside of stilling well.
Discharge Measurements: Low flow measurements are made by wading near gage. High flow measurements made from cable car at station.
Channel and Control: Channel sand, gravel and boulders. No control.
Extremes of Discharge 1933-1934: Maximum - 1556.3 c.f.s. January 1, 1934. Minimum - Dry part of year.
Diversions: None.
Regulations: None.
Accuracy: Fair.
Operation: Located, constructed and operated by The Los Angeles County Flood Control District.

Discharge measurements of San Gabriel River at Devils Canyon above No. 2 Reservoir during the year ending September 30, 1934.

Table with columns: No., Date, Made by, Width Feet, Area of gage in Sq. Ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec.-ft., Rating, Method, Mean No., G. H. change Total, Time Hours, Meter No. Rows 25-48.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 227

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 227

Discharge measurements of San Gabriel River at Devils Canyon above No. 2 Reservoir during the year ending September 30, 1934.

Discharge measurements of San Gabriel River at Devils Canyon above No. 2 Reservoir during the year ending September 30, 1934.

Table with columns: No., Date, Made by, Width Feet, Area of gage in Sq. Ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec.-ft., Rating, Method, Mean No., G. H. change Total, Time Hours, Meter No. Rows 1-24.

Table with columns: No., Date, Made by, Width Feet, Area of gage in Sq. Ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec.-ft., Rating, Method, Mean No., G. H. change Total, Time Hours, Meter No. Rows 49-67.

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of **SAN GABRIEL RIVER - DEVILS CANYON**

**LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT**

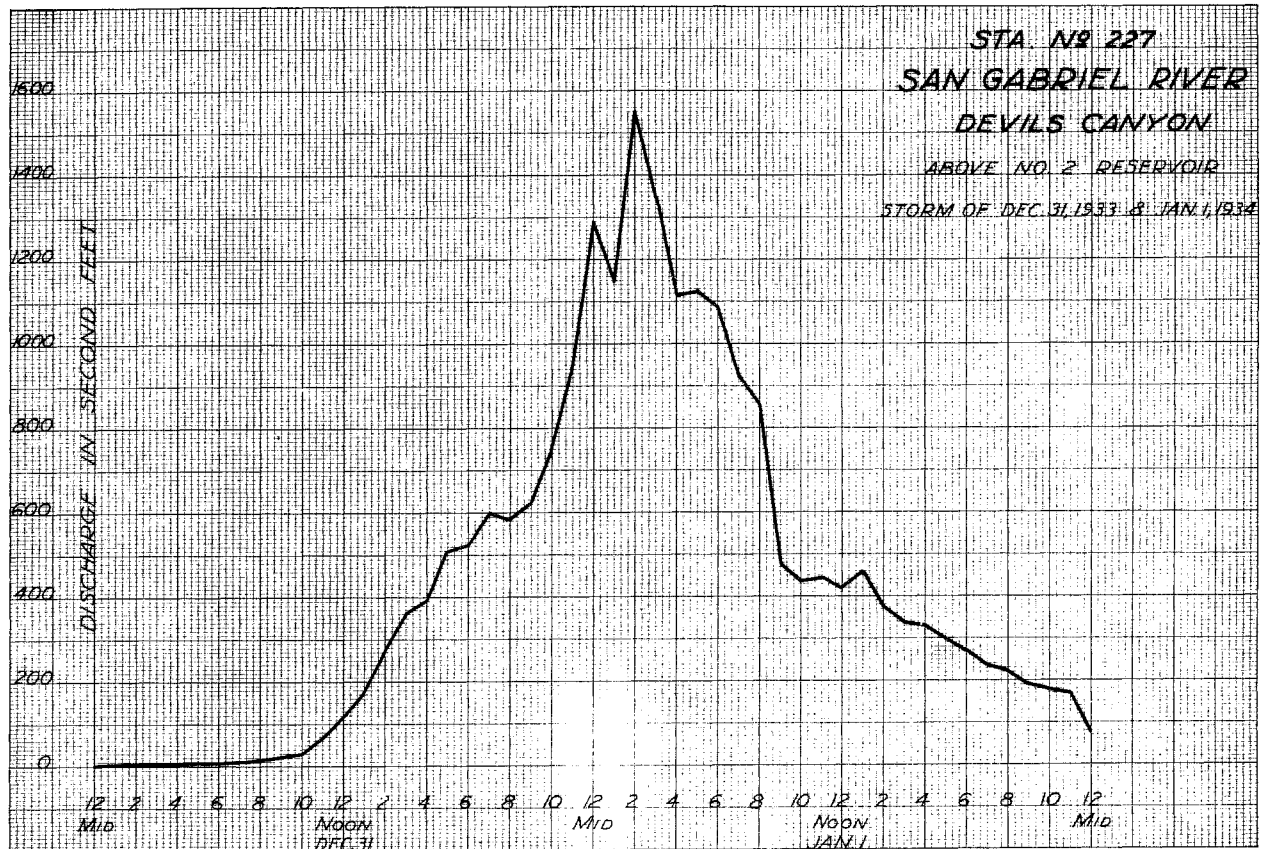
Year **ABOVE NO. 2 RESERVOIR** for the Year Ending September 30, 19**34**

Drainage Area _____ Square Miles (_____) **T. A. Cooper** (Observer.)

Gage Read **CONTINUED AFTER 12/23/33**

Used rating table dated **1933-1934**

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		DAY	
	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge		
1					I	0.25	H	613.95	3.64	2.28	3.87	6.14	1	5.59	1.69	3.52	0.92	3.44	0.18	3.33	0.06			1		
2					I	0.45	H	4.94	81.20	3.63	2.16	3.85	5.70	2	5.61	1.92	3.52	0.92	3.44	0.18	3.32	0.06			2	
3					I	0.65	H	4.47	31.78	3.62	2.04	3.83	5.30	3	5.60	1.80	3.51	0.81	3.44	0.18	3.31	0.05			3	
4					I	0.85	H	4.28	19.68	3.62	2.04	3.81	4.90	4	5.60	1.80	3.50	0.70	3.44	0.18	3.30	0.05			4	
5					I	1.05	H	4.15	14.20	3.61	1.92	3.78	4.36	5	5.60	1.80	3.49	0.60	3.45	0.20	3.28	0.04			5	
6					I	1.25	H	4.08	11.78	3.60	1.80	3.78	4.36	6	5.57	1.47	3.48	0.50	3.46	0.30	3.26	0.03			6	
7					M	1.45	H	4.01	9.61	3.60	1.80	3.76	4.02	7	5.57	1.47	3.48	0.50	3.46	0.30	3.26	0.03			7	
8					I	1.50	H	3.96	8.26	3.60	1.80	3.74	3.70	8	5.57	1.47	3.49	0.60	3.46	0.30	3.26	0.03			8	
9					I	1.60	H	3.92	7.28	3.60	1.80	3.72	3.40	9	5.57	1.47	3.49	0.60	3.45	0.20	3.26	0.03			9	
10					I	1.70	H	3.89	6.58	3.60	1.80	3.71	3.25	10	5.56	1.36	3.48	0.50	3.45	0.20	3.26	0.03			10	
11					I	1.80	H	3.87	6.14	3.62	2.04	3.70	3.10	11	5.56	1.36	3.47	0.40	3.43	0.17	3.27	0.03			11	
12					I	1.90	H	3.84	5.50	3.63	2.16	3.70	3.10	12	5.55	1.25	3.46	0.30	3.42	0.15	3.28	0.04			12	
13					I	2.00	H	3.83	5.30	3.63	2.16	3.69	2.96	13	5.55	1.25	3.46	0.30	3.43	0.17	3.29	0.04			13	
14					I	2.10	H	3.82	5.10	3.64	2.28	3.69	2.96	14	5.55	1.25	3.46	0.30	3.44	0.18	3.29	0.04			14	
15					M	2.20	H	3.80	4.70	3.66	2.54	3.68	2.82	15	5.56	1.36	3.46	0.30	3.42	0.15	3.29	0.04			15	
16					I	1.65	H	3.79	4.53	3.67	2.68	3.67	2.68	16	5.56	1.36	3.46	0.30	3.40	0.12	3.28	0.04			16	
17					I	1.10	I	4.36	3.66	2.54	3.66	2.54	17	5.57	1.47	3.46	0.30	3.39	0.11	3.28	0.04			17		
18					I	0.93	I	4.36	3.66	2.54	3.65	2.40	18	5.56	1.36	3.46	0.30	3.39	0.11	3.28	0.04			18		
19					I	0.77	M	4.19	3.66	2.54	3.65	2.40	19	5.55	1.25	3.45	0.20	3.39	0.11	3.27	0.03			19		
20					M	0.62	I	4.02	3.67	2.68	3.64	2.28	20	5.54	1.14	3.45	0.20	3.39	0.11	3.26	0.03			20		
21					I	0.53	I	3.85	3.66	2.54	3.63	2.16	21	5.53	1.03	3.45	0.20	3.39	0.11	3.25	0.03			21		
22					M	0.51	I	3.55	3.66	2.54	3.63	2.16	22	5.53	1.03	3.44	0.19	3.38	0.10	3.24	0.02			22		
23					M	0.04	I	3.50	0.70	I	3.40	H	10.50	23	5.53	1.03	3.45	0.20	3.37	0.09	3.23	0.02			23	
24					I	0.04	I	3.48	0.50	I	3.25	H	23.44	24	5.53	1.03	3.45	0.20	3.37	0.09	3.22	0.02			24	
25					I	0.04	I	3.49	0.60	I	2.96	4.08	11.78	25	5.53	1.03	3.44	0.19	3.36	0.08	3.20	0.01			25	
26					I	0.04	M	3.51	0.81	M	2.82	3.98	8.78	26	5.52	0.92	3.45	0.20	3.36	0.08	3.19	0.01			26	
27					I	0.05	I	3.51	0.81	I	2.82	3.93	7.52	27	5.51	0.81	3.45	0.20	3.36	0.08	3.18	0.01			27	
28					I	0.05	I	3.51	0.81	I	2.54	3.89	6.58	28	5.51	0.81	3.45	0.20	3.36	0.08	3.18	0.01			28	
29					M	0.05	I	3.51	0.81	I	2.54	-	-	29	5.50	0.70	3.46	0.30	3.36	0.08	3.17	0			29	
30					I	0.05	I	3.55	1.25	I	2.40	-	-	30	5.50	0.70	3.46	0.30	3.35	0.07	3.17	0			30	
31					-	-	H	278.76	I	2.28	-	-	3.59	31	-	-	3.46	0.30	-	-	3.16	0			31	
TOTAL							311.91	884.93	117.28		94.11	38.32			12.03	4.46			0.91							
Mean Daily Discharge in Second-foot							10.06	28.55	4.19		3.04	1.28			0.39	0.15			0.03							
Second-foot per square mile							0.452	1.294	0.188		0.137	0.057			0.017	0.006			0.001							
Run-off, depth in inches							0.522	1.480	0.196		0.157	0.064			0.020	0.007			0.002							
Run-off in acre-foot							618.67	1755.26	232.62		186.67	76.15			23.86	8.85			1.80							
Maximum Mean Daily Discharge in Second-foot							278.76	613.95	23.44		6.14	1.92			0.92	0.30			0.06							
Maximum Mean Daily Discharge in Second-foot							0.25	2.28	1.80		1.69	0.70			0.19	0.07			0							



SAN GABRIEL RIVER WEST FORK
1/2 MILE BELOW SAN GABRIEL DAM NO. 2

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. 209

Location On the bank of the San Gabriel River about 3/4 miles below San Gabriel Dam No. 2 about 7 miles above junction of the east and west forks.

Discharge measurements of San Gabriel River - West Fork at near below Dam No. 2 during the year ending September 30, 1933

Drainage Area 40.82 square miles.

Installed by The Los Angeles County Flood Control District. Staff gage May 26, 1932--Recorder Dec. 8, 1933.

Records Available May 26, 1932 to Dec. 8, 1933 stream measurements only Dec. 8, 1933 to Sept. 8, 1934 recorder records. Available at offices of the Los Angeles County Flood Control District, Los Angeles, California.

Gage An automatic water stage recorder installed in shelter house on top of a corrugated iron pipe stilling well. Stilling well fastened to bank of stream. Staff gages on inside and outside of stilling well.

Discharge Measurements Low flows measured by wading near gage. High flows measured from cable car just below recorder house.

Channel and Control Channel and banks are of sand and boulders. No control.

Extremes of Discharge 1933-1934 Maximum - 4401 c.f.s. January 1, 1934. Minimum - not determined.

Diversions None

Regulations Flow regulated by San Gabriel Dam No. 2.

Accuracy Fair.

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

Table with columns: 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, Max. no. No., C. H. change Total, Time Hours, Meter No. Rows include measurements from 1933 by Patterson-Green, Patterson, Lindsay, and Patterson.

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. 209

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. 209

Discharge measurements of San Gabriel River - West Fork at near below Dam No. 2 during the year ending September 30, 1933

Discharge measurements of San Gabriel River - West Fork at near Below Dam No. 2 during the year ending September 30, 1934

Table with columns: 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, Max. no. No., C. H. change Total, Time Hours, Meter No. Rows include measurements from 1932 and 1933 by Patterson, Green, and Cooper.

Table with columns: 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, Max. no. No., C. H. change Total, Time Hours, Meter No. Rows include measurements from 1933 and 1934 by G. Patterson, T. A. Cooper, and Cooper-Christenson.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 209

Discharge measurements of San Gabriel River-West Fork

at Below Dam site No. 2, during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Gate height, Discharge, Rating, Method, Mean stage, G. H. stage total, Time, Meter No. Rows 25-48.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 209

Discharge measurements of San Gabriel River-West Fork

at Below Dam site No. 2, during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Gate height, Discharge, Rating, Method, Mean stage, G. H. stage total, Time, Meter No. Rows 73-96.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 209

Discharge measurements of San Gabriel River-West Fork

at Below Dam site No. 2, during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Gate height, Discharge, Rating, Method, Mean stage, G. H. stage total, Time, Meter No. Rows 49-72.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 209

Discharge measurements of San Gabriel River-West Fork

at Below Dam site No. 2, during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Gate height, Discharge, Rating, Method, Mean stage, G. H. stage total, Time, Meter No. Rows 97-120.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 209

Discharge measurements of San Gabriel River - West Fork at Below Dam Site No. 2 during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. ft., Mean velocity ft. per sec., Gauge Height Feet, Discharge Sec. ft., Rating Percent diff., Method, Mean No., G. H. Change Feet, Time Hours, Meter No. Rows 121-144.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 209

Discharge measurements of San Gabriel River - West Fork at Below Dam Site No. 2 during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. ft., Mean velocity ft. per sec., Gauge Height Feet, Discharge Sec. ft., Rating Percent diff., Method, Mean No., G. H. Change Feet, Time Hours, Meter No. Rows 169-192.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 209

Discharge measurements of San Gabriel River - West Fork at Below Dam Site No. 2 during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. ft., Mean velocity ft. per sec., Gauge Height Feet, Discharge Sec. ft., Rating Percent diff., Method, Mean No., G. H. Change Feet, Time Hours, Meter No. Rows 145-168.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 209

Discharge measurements of San Gabriel River - West Fork at Below Dam Site No. 2 during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. ft., Mean velocity ft. per sec., Gauge Height Feet, Discharge Sec. ft., Rating Percent diff., Method, Mean No., G. H. Change Feet, Time Hours, Meter No. Rows 193-216.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 209

Discharge measurements of San Gabriel River - West Fork at Below Damsite No. 2 during the year ending September 30, 1934

Table with columns: No., Date, Made by, Waik Feet, Area of Section, Mean velocity, Gage height, Discharge, Rating, Method, etc. Rows 217-240.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 209

Discharge measurements of San Gabriel River - West Fork at Below Damsite No. 2 during the year ending September 30, 1934

Table with columns: No., Date, Made by, Waik Feet, Area of Section, Mean velocity, Gage height, Discharge, Rating, Method, etc. Rows 241-262.

Daily Gage Height, in Feet, and Discharge, in Second-Feet, of WEST FORK - SAN GABRIEL RIVER

Near At BELOW DAMSITE NO. 2 for the Year Ending September 30, 1934

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. 209

Drainage Area: Square Miles. [] T. A. Cooper (Observer.)

Gage Road: Continuous Used rating table dated: May 7, 1934

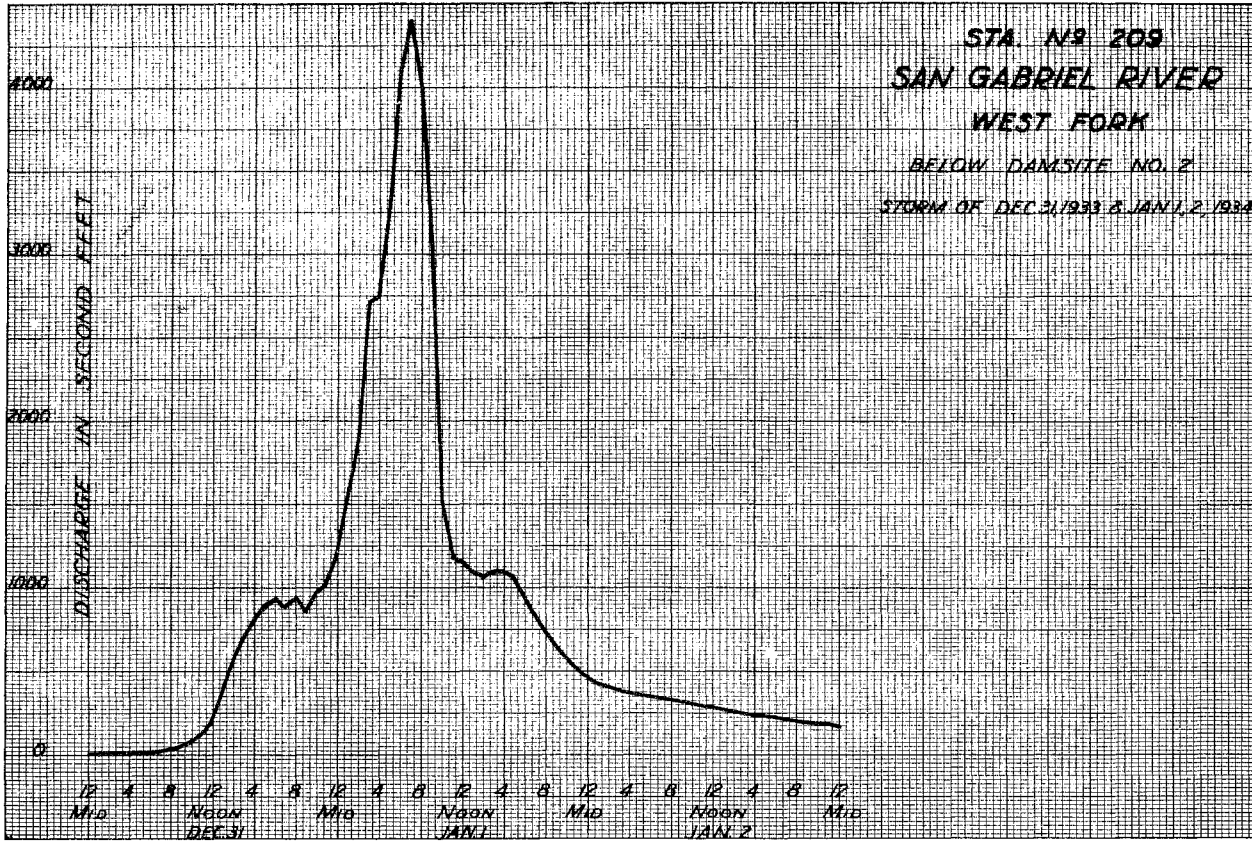
Large monthly data table with columns for months (October-September), Gage height, Discharge, and various summary statistics at the bottom.

(NB) Recorder installed - No surface water at station - Small flow below station.

**STA. NO. 209
SAN GABRIEL RIVER
WEST FORK**

BELOW DAMSITE NO. 2

STORM OF DEC. 31, 1933 & JAN. 1, 2, 1934



F. C. Dist. Form 191A

**LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT**

Station No. 97

F-97 R

SAN GABRIEL RIVER WEST FORK

Location
On north bank of West Fork, San Gabriel River, 3/4 miles above junction of the West and North Forks.

Drainage Area
49 square miles.

Installed by
Los Angeles County Flood Control District, August 1929.

Records Available
October 1, 1929 to September 30, 1934 at offices of Los Angeles County Flood Control District, Los Angeles, California.

Gage
A continuous type, water stage recorder installed in galvanized iron shelter house on corrugated iron stilling well and secured to a vertical rock bank approximately 40 feet high, on north bank of stream.

Discharge Measurements
High water flows are measured from cable located just below recorder house.
Low water measurements by wading near gage.

Channel and Control
Channel - Sand and gravel, rock and boulders.
Control - Rock and gravel.

Extremes of Discharge
1929-1930
Maximum- 206 c.f.s. March 14, 1930.
Minimum- 2.06 c.f.s. various times.
1930-1931
Maximum- 751 c.f.s. April 26, 1931.
Minimum- 0.05 c.f.s. various times during year.
1931-1932
Maximum- 2705 c.f.s. February 8, 1932.
Minimum- 0.09 c.f.s. October 6, 1931.
1932-1933
Maximum- 2888 c.f.s. January 19, 1933.
Minimum- 0.08 c.f.s. various days in August and September, 1933.
1933-1934
Maximum- 4840.0 c.f.s. January 1, 1934.
Minimum- 0.06 c.f.s. October 18, 1933.

Diversions
Hydraulic operations at Dam No. 2 affected flow

Regulation
None.

Accuracy
Fair.

Operation
Located and constructed by the Los Angeles County Flood Control District and operated by the Los Angeles County Flood Control District in conjunction with U. S. G. S. Water Resources Branch.

Discharge measurements of San Gabriel River - West Fork
at 3 1/4 mi. above N. Fork during the year ending September 30, 1933

No.	Date	Made by	Width Feet	Area of section Sq. ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec.-ft.	Dating Percent Dis.	Method	Mean. No.	Q. Mt. Change Total.	Time Hours	Mean No.
1	10/7	Patterson	6.4	3.24	.23	2.13	.73	.6	6	0	1/6	FO 22	
2	10/13	"	5.0	1.7	0.43	2.14	.73	.6	4	0	1/6	"	
3	10/20	"	5.0	1.7	.44	2.13	.74	.6	4	0	1/6	"	
4	10/27	"	4.0	1.27	.64	2.15	.81	.6	4	0	1/6	"	
5	11/2	"	5.0	1.5	0.67	2.19	1.0	.6	5	0	1/6	"	
6	11/10	"	4.5	1.61	0.7	2.19	1.1	.6	4	0	1/6	"	
7	11/18	"	5.0	1.5	.67	2.18	1.0	.6	4	0	1/6	"	
8	11/25	"	6.0	2.2	.68	2.22	1.5	.6	5	0	1/6	"	
9	12/2	"	5.0	2.5	0.68	2.25	1.7	.6	3	0	1/6	"	
10	12/7	"	7.0	3.58	0.54	2.25	1.94	.6	7	0	1/4	"	
11	12/15	Patterson-Green	11.5	7.88	0.56	2.41	4.21	.6	5	0	1/6	"	
12	12/21	Patterson-Cooper	11.2	7.9	0.45	2.37	3.52	.6	7	0	1/6	"	
13	12/29	Patterson-Lindsay	11.5	8.27	0.46	2.41	3.82	.6	7	0	1/6	"	
14	1/5	Patterson	7.0	3.8	0.92	1.47	3.5	.6	7	0	1/4	FO 22	
15	1/13	Cooper	11.3	7.85	.46	2.38	3.65	.6	10	0	23/60	FO 12	
16	1/27	Green-Cooper	28.5	22.4	2.13	2.84	47.73	.6	15	0	23/60	FO 31	
17	2/3	Patterson	28.5	22.9	2.39	2.03	55.0	.6	12	0	1/3	FO 22	
18	2/10	Cooper-Green	32.0	17.3	1.92	2.84	33.43	.6	13	0	1/4	FO 12	
19	2/17	Green	34.5	23.7	1.90	2.95	45.22	.6	12	0	1/3	FO 31	
20	2/23	"	34.0	34.7	1.19	2.88	41.21	.6	11	0	1/3	"	
21	3/1	"	28.0	29.4	1.26	2.86	37.01	.6	11	0	1/3	"	
22	3/9	Green-Cooper	31.5	31.6	1.29	2.89	40.07	.6	12	0	1/3	FO 1	
23	3/17	"	31.4	28.6	.90	3.05	25.81	.6	11	0	1/3	"	

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 97

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 97

Discharge measurements of San Gabriel River - West Fork at near 3 1/2 mi. above N. Fork during the year ending September 30, 1933

Discharge measurements of San Gabriel River - West Fork at near 3 1/2 miles above North Fork during the year ending September 30, 1934

Table with columns: 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, Mean gage No., G. H. change Total, Time Hours, Meter No. Rows 24-45.

Table with columns: 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, Mean gage No., G. H. change Total, Time Hours, Meter No. Rows 1-24.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 97

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 97

Discharge measurements of SAN GABRIEL RIVER - West Fork at near 3 1/2 mi. above N. Fork during the year ending September 30, 1933

Discharge measurements of San Gabriel River - West Fork at near 3 1/2 miles above North Fork during the year ending September 30, 1934

Table with columns: 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, Mean gage No., G. H. change Total, Time Hours, Meter No. Rows 46-51.

Table with columns: 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, Mean gage No., G. H. change Total, Time Hours, Meter No. Rows 25-43.

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of SAN GABRIEL RIVER WEST FORK

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. 97

At 3 1/2 miles above North Fork for the Year Ending September 30, 1933.

Table with columns for months (October to September), gage height, and discharge. Includes a 'Rating curve drawn to a computed point for high flows' note and a 'Period Year' summary at the bottom.

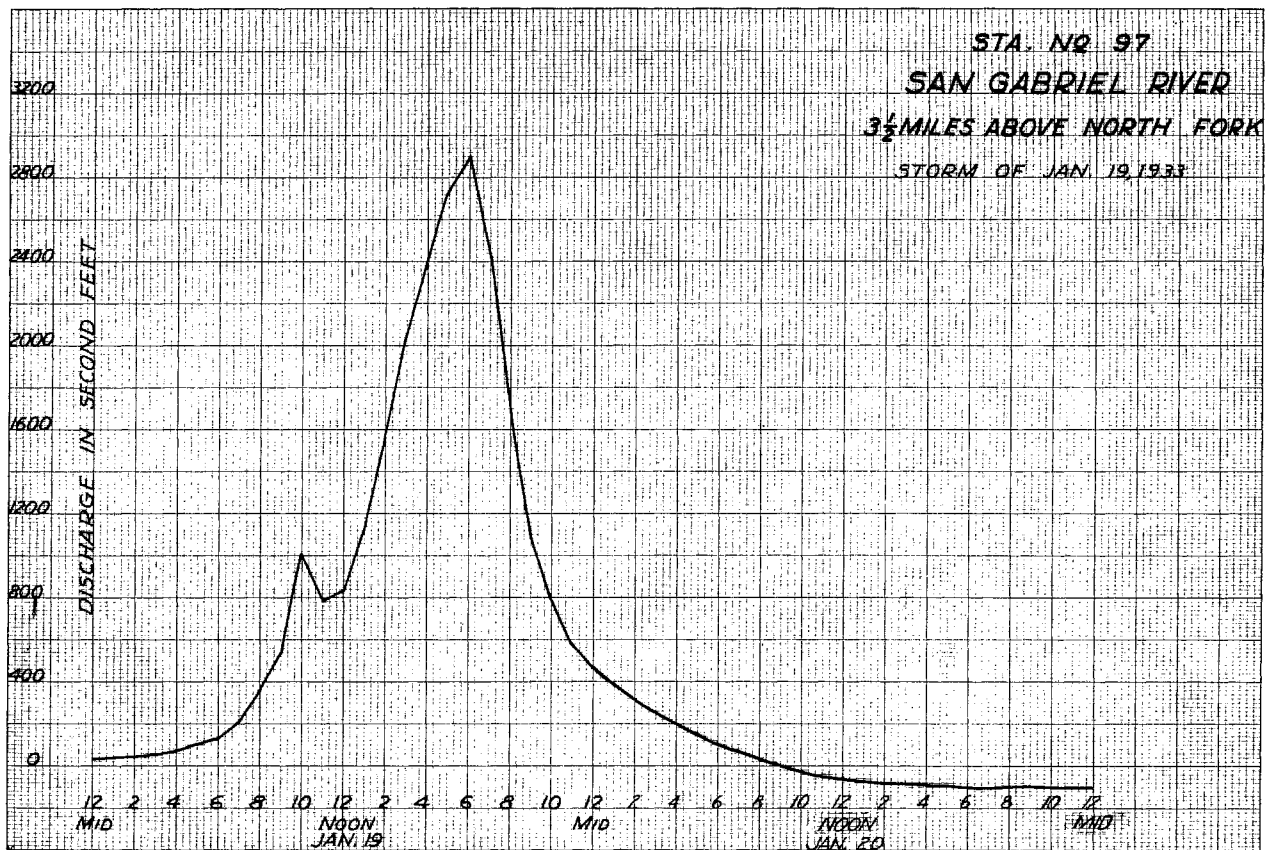
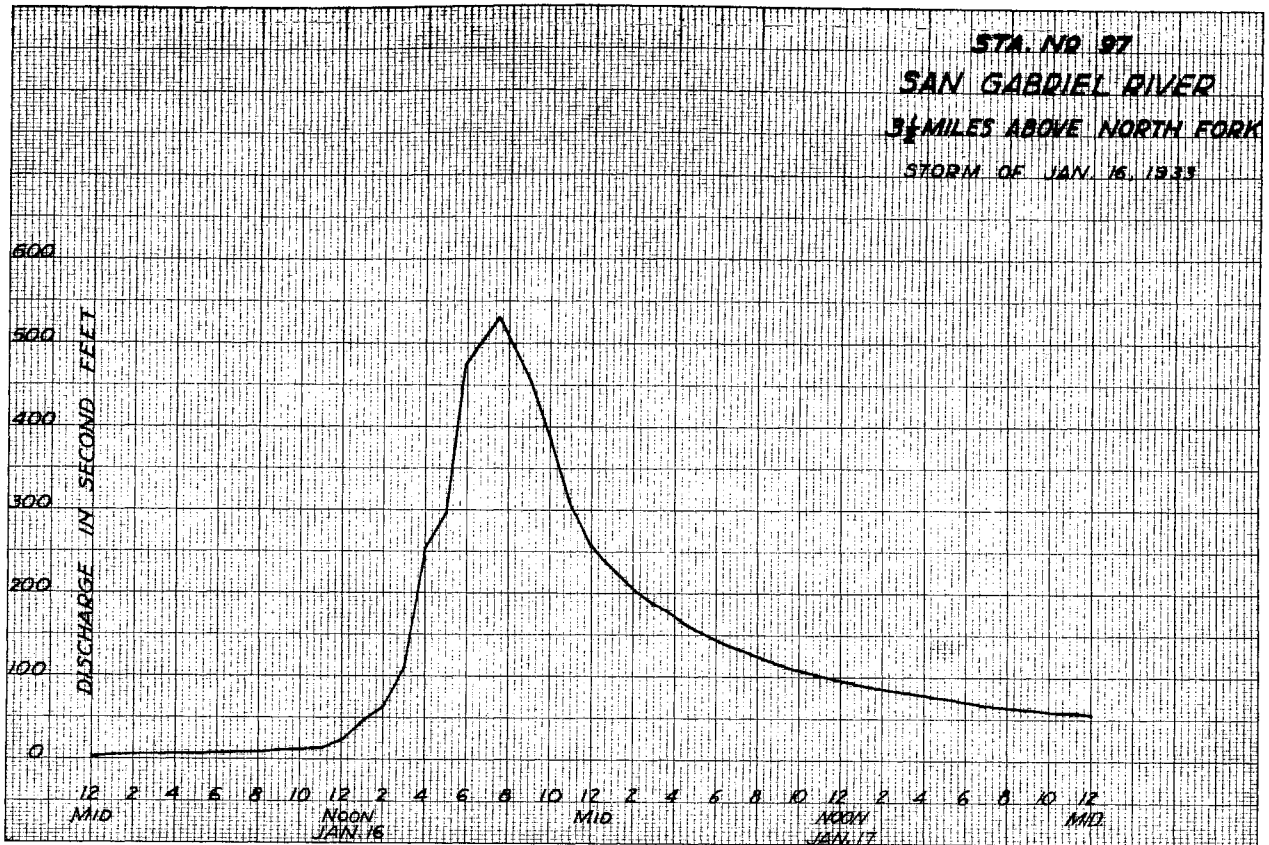
Daily Gage Height, in Feet, and Discharge, in Second-Foot, of SAN GABRIEL RIVER - WEST FORK

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

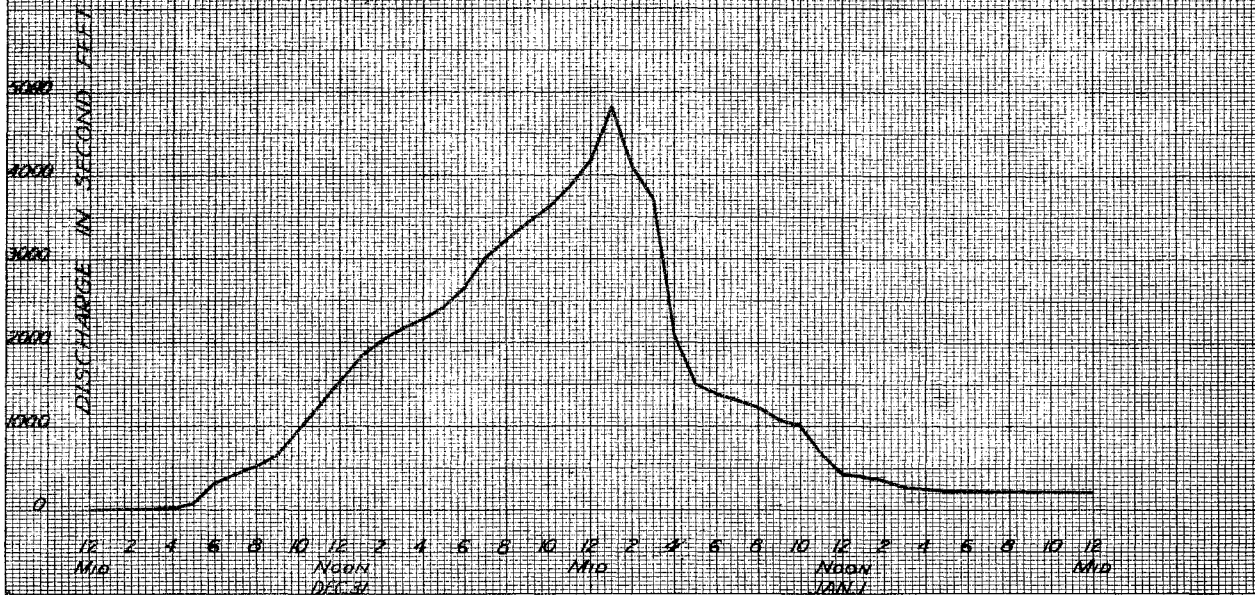
File No. 97

At 3-1/2 MILES ABOVE NORTH FORK for the Year Ending September 30, 1934.

Table with columns for months (October to September), gage height, and discharge. Includes a 'Rating curve #2 used for low flows after January 7' note and a 'Period Year' summary at the bottom.



STA. NO. 97
SAN GABRIEL RIVER
WEST FORK
 3 1/2 MILES ABOVE NORTH FORK
 STORM OF DEC. 31, 1933 & JAN. 1, 1934



F. C. Dist. Form 184A

F-99 R

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. 99

SAN GABRIEL RIVER- BEAR CREEK

Location
 On East bank of Bear Creek, a tributary to San Gabriel River, 1 1/2 miles above mouth (of Bear Creek) at Pasadena's Boy Scout Camp.

Discharge measurements of San Gabriel River - Bear Creek
 at Boy Scout's Camp during the year ending September 30, 1933.

Drainage Area
 26 square miles.

Installed by
 Los Angeles County Flood Control District, July, 1929.

Records Available
 October 1, 1929 to September 30, 1934 at offices of Los Angeles County Flood Control District, Los Angeles, California.

Gage
 An continuous type water stage recorder installed in galvanized iron shelter house on corrugated iron stilling well secured to sloping rock bank on east bank of stream.

Discharge Measurements
 High water flows are measured from cable located just below recorder house.
 Low water measurements by wading near gage.

Channel and Control
 Channel - sand, gravel, rock and boulders.
 Control - sand and gravel.

Extremes of Discharge
 1929-1930
 Maximum- 106.00 c.f.s. May 3, 1930.
 Minimum- .10 c.f.s. October 13, 1929.
 1930-1931
 Maximum- 527 c.f.s. April 26, 1931.
 Minimum- 0.01 c.f.s. August 27, 1931.
 1931-1932
 Maximum- 1512 c.f.s. February 9, 1932.
 Minimum- 0.10 c.f.s. September 16, 1932.
 1932-1933
 Maximum- 566.5 c.f.s. January 19, 1933.
 Minimum- 0.01 c.f.s. several times latter part of September, 1933.
 1933-1934
 Maximum- 1600.0 c.f.s. January 1, 1934.
 Minimum- Dry part of the year.

Diversions
 None

Regulation
 None

Accuracy
 Fair

Operation
 Located and constructed by the Los Angeles County Flood Control District and operated by Los Angeles County Flood Control District in conjunction with U.S.G.S. Water Resources Branch.

No.	Date	Made by	Wick Feet	Area of section Sq. ft.	Mean velocity ft. per sec.	Cage height Feet	Discharge Sec.-ft.	Rating Percent. GE.	Method	Mean. sec. No.	Q. Ht. change Total	Time Hours	Meter No.
1	10/7	Patterson	5.0	1.76	.47	2.17	.83	.6	4	0	1/6	FO 22	
2	10/13	"	5.0	1.7	.44	2.15	.74	.6	4	0	1/12	"	
3	10/27	"	10.0	5.9	.20	2.20	1.24	.6	5	0	1/6	"	
4	11/2	"	10.0	6.3	.19	2.25	1.2	.6	5	0	1/6	"	
5	11/10	"	6.0	2.6	.58	2.25	1.5	.6	6	0	1/6	"	
6	11/18	"	5.5	2.4	.67	2.26	1.6	.6	4	0	1/6	"	
7	11/25	"	4.5	2.0	.85	2.29	1.7	.6	4	0	1/6	"	
8	12/2	"	9.5	3.6	.56	2.33	2.0	.6	7	0	1/4	"	
9	12/7	"	9.0	2.5	.92	2.34	2.3	.6	6	0	1/6	"	
10	12/15	Patterson-Green	8.0	4.1	.76	2.41	3.1	.6	6	0	1/6	"	
11	12/21	Patterson-Green	8.2	4.6	.76	2.43	3.5	.6	6	0	1/6	"	
12	12/29	Patterson	5.0	2.8	1.46	2.46	4.0	.6	4	0	1/6	"	
13	1/5	Patterson	15.0	15.1	.30	2.47	4.49	.6	7	0	1/4	FO 22	
14	1/13	"	8.5	5.3	.62	2.34	3.3	.6	7	0	1/4	"	
15	1/27	Green-Cooper	19.9	18.6	0.83	2.59	15.53	.6	11	0	1/3	FO 31	
16	2/3	Patterson	21.0	18.7	.98	2.67	18.3	.6	11	0	5/12	FO 22	
17	2/10	Cooper-Green	21.2	26.5	.74	2.66	19.7	.6	9	0	1/4	FO 12	
18	2/17	Cooper	21.5	29.1	.92	2.81	27.81	.6	10	0	1/3	"	
19	2/23	Green	22.0	29.8	.90	2.81	26.3	.6	11	0	1/3	FO 31	
20	3/3	Cooper	22.1	30.9	.99	2.85	30.55	.6	10	0	1/3	FO 12	
21	3/9	Green-Cooper	25.5	29.3	1.19	2.90	34.97	.6	12	0	1/4	FO 1	
22	3/17	"	25.0	25.6	1.03	-	26.40	.6	11	0	1/4	"	
23	3/24	Cooper	21.2	28.1	0.77	2.73	21.61	.6	10	0	1/3	FO 12	

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 99

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 99

Discharge measurements of San Gabriel River - Bear Creek at near at Boy Scout's Camp during the year ending September 30, 1933

Discharge measurements of San Gabriel River - Bear Creek at near at Scout Camp during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of Section Sq-ft, Mean Velocity ft per sec, Gage Height Feet, Discharge Sec-ft, Rating Percent, Method, Mean No., G. H. Stage Total, Time Hours, Meter No.

Table with columns: No., Date, Made by, Width Feet, Area of Section Sq-ft, Mean Velocity ft per sec, Gage Height Feet, Discharge Sec-ft, Rating Percent, Method, Mean No., G. H. Stage Total, Time Hours, Meter No.

I. C. Div.—Form 105—1000—3-31

Daily Gage Height, in Feet, and Discharge, in Second-Feet, of SAN GABRIEL RIVER - BEAR CREEK

At Near Boy Scout Camp for the Year Ending September 30, 1933

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. 99

Large table with columns: Drainage Area, Square Miles, Gage Road, Continuous, Used rating table dated 1932-1933, and monthly discharge data from October to September.

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of **SAN GABRIEL RIVER-BEAR CREEK**

**LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT**

At **BOY SCOUTS' CAMP** for the Year Ending September 30, 1934

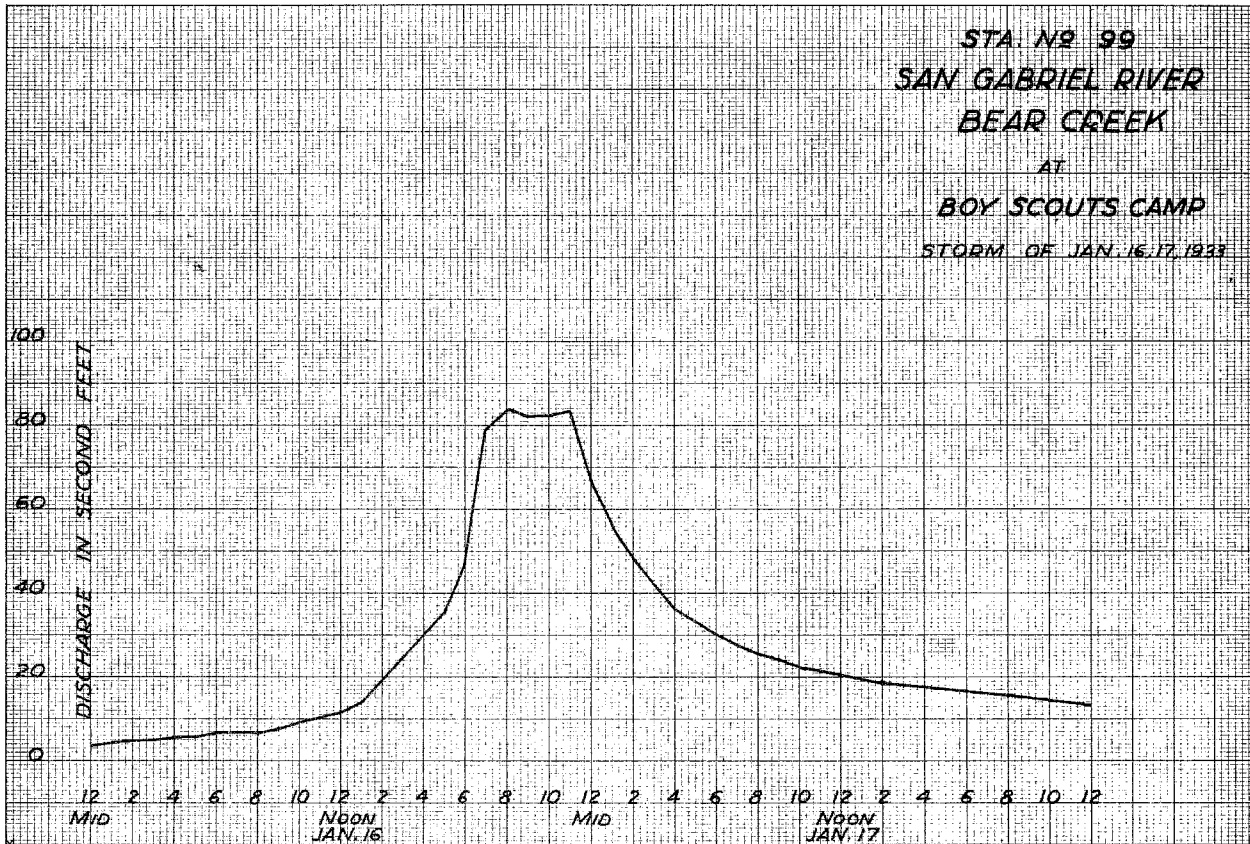
Drainage Area **26.0** Square Miles.

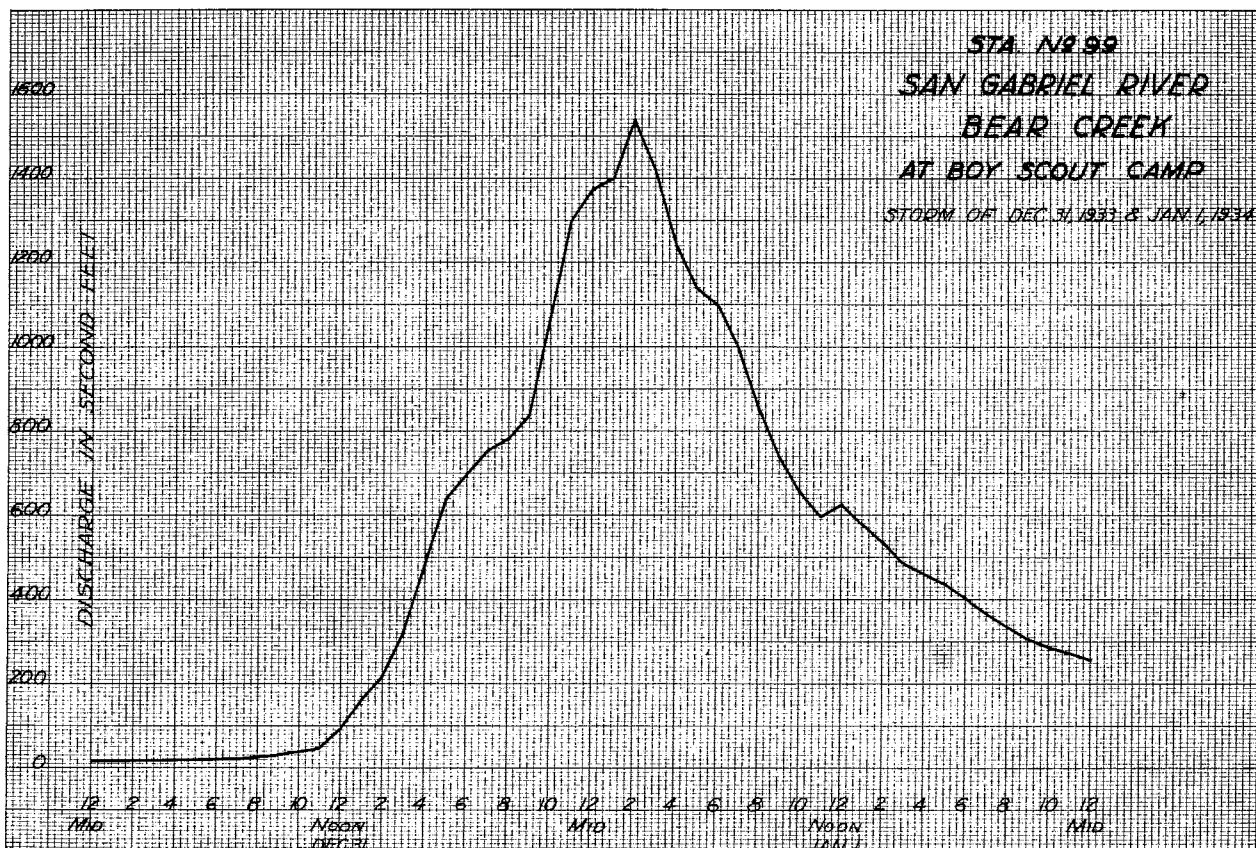
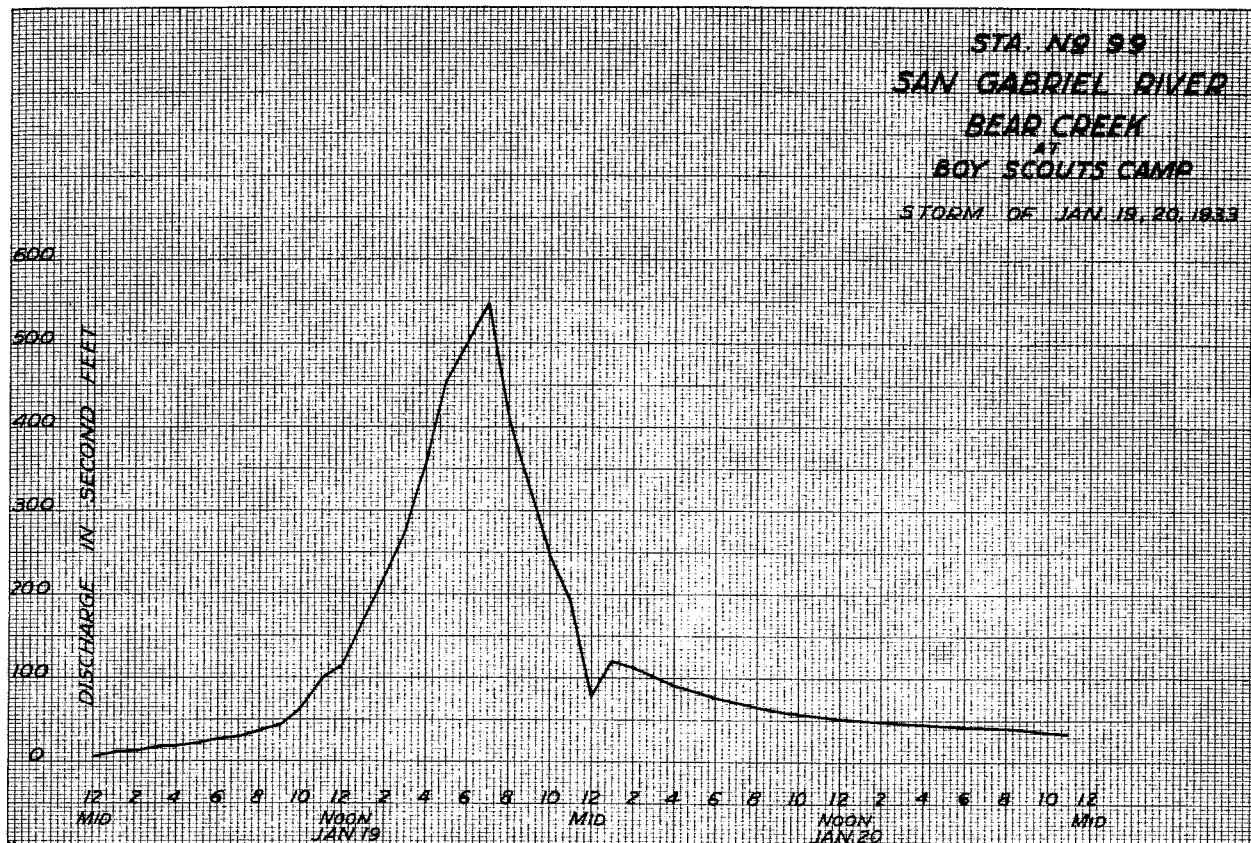
[**Cooper - Waddoor** (Observer.)

Gage Read. **Continuous**

Used rating table dated **Nov. 15, 1933**

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		DAY	
	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge		
1	1.99	0.08	2.05	0.30	2.19	1.68	H	732.0	2.37	5.22	2.63	15.62	1	2.41	6.32	2.29	3.30	2.23	2.22	2.13	0.98	2.00	0.10			
2	1.97	0.04	2.04	0.26	2.19	1.68	3.82	156.0	2.37	5.22	2.68	15.08	2	2.41	6.32	2.29	3.20	2.22	2.08	2.12	0.87	2.00	0.10			
3	1.97	0.04	2.02	0.18	2.18	1.56	3.37	84.8	2.36	4.96	2.61	14.54	3	2.39	5.74	2.30	3.50	2.22	2.08	2.11	0.76	1.99	0.08			
4	1.97	0.04	2.00	0.10	2.19	1.68	3.16	58.2	2.36	4.96	2.60	14.00	4	2.38	5.48	2.30	3.50	2.22	2.08	2.11	0.76	2.00	0.10			
5	1.96	0.02	2.01	0.14	2.19	1.68	3.02	44.0	2.37	5.22	2.58	13.54	5	2.37	5.22	2.29	3.30	2.26	2.70	2.11	0.76	2.00	0.10			
6	1.97	0.04	2.01	0.14	2.19	1.68	2.92	34.6	2.37	5.22	2.57	12.62	6	2.36	4.96	2.29	3.30	2.27	2.90	2.09	0.58	1.99	0.08	1.96	0.02	
7	1.98	0.06	2.01	0.14	2.19	1.68	2.83	27.85	2.36	4.96	2.57	10.86	7	2.35	4.70	2.28	3.10	2.24	2.36	2.07	0.44	1.98	0.06	1.97	0.04	
8	1.97	0.04	2.02	0.18	2.19	1.68	2.77	23.80	2.37	5.22	2.50	9.60	8	2.35	4.70	2.28	3.10	2.22	2.08	2.06	0.37	1.97	0.04	2.01	0.14	
9	1.98	0.06	2.03	0.22	2.19	1.68	2.72	20.70	2.37	5.22	2.48	8.80	9	2.35	4.70	2.28	3.10	2.22	2.08	2.05	0.30	1.97	0.04	2.02	0.18	
10	1.99	0.08	2.03	0.22	2.20	1.80	2.70	19.50	2.35	4.70	2.45	7.60	10	2.34	4.46	2.26	2.70	2.21	1.94	2.04	0.26	1.99	0	2.03	0.22	
11	1.98	0.06	2.03	0.22	2.20	1.80	2.67	17.82	2.35	4.70	2.42	6.64	11	2.33	4.22	2.25	2.50	2.19	1.68	2.03	0.22			2.01	0.14	
12	1.97	0.04	2.04	0.26	2.24	2.24	2.64	16.16	2.36	4.96	2.39	5.74	12	2.33	4.22	2.25	2.50	2.19	1.68	2.02	0.18			2.00	0.10	
13	1.96	0.02	2.04	0.26	H	45.95	2.61	14.54	2.35	4.70	2.37	5.22	13	2.33	4.22	2.24	2.36	2.20	1.80	2.03	0.22			1.99	0.08	
14	1.96	0.02	2.04	0.26	H	15.94	2.59	13.54	2.35	4.70	2.36	5.48	14	2.35	4.70	2.24	2.36	2.22	2.08	2.02	0.18			1.96	0.02	
15	1.99	0.08	2.05	0.30	2.51	10.02	2.57	12.62	2.36	4.96	2.39	5.74	15	2.37	5.22	2.23	2.22	2.22	2.08	2.01	0.14					
16	2.00	0.10	2.06	0.37	2.47	8.40	2.54	11.28	2.37	5.22	2.40	6.00	16	2.37	5.22	2.23	2.22	2.20	1.80	2.00	0.10					
17	2.01	0.14	2.07	0.44	2.43	6.96	2.52	10.44	2.38	5.48	2.43	6.32	17	2.37	5.22	2.24	2.36	2.18	1.56	2.00	0.10					
18	2.00	0.14	2.07	0.44	2.41	6.32	2.51	10.02	2.37	5.22	2.42	6.64	18	2.35	4.70	2.25	2.50	2.18	1.56	2.00	0.10					
19	2.00	0.10	2.08	0.51	2.39	5.74	2.50	9.60	2.38	5.48	2.43	6.96	19	2.34	4.46	2.25	2.50	2.18	1.56	2.00	0.10					
20	2.00	0.10	2.09	0.58	2.37	5.22	2.48	8.80	2.41	6.32	2.48	8.80	20	2.33	4.22	2.24	2.36	2.19	1.68	2.00	0.10					
21	2.01	0.14	2.10	0.65	2.35	4.70	2.47	8.40	2.39	5.74	2.49	9.20	21	2.31	3.74	2.24	2.36	2.21	1.94	2.00	0.10					
22	1.99	0.08	2.09	0.58	2.34	4.46	2.46	8.00	2.37	5.22	2.48	8.80	22	2.31	3.74	2.23	2.22	2.18	1.56	2.01	0.14					
23	1.98	0.06	2.10	0.58	2.33	4.22	2.45	7.60	H	30.77	2.49	9.20	23	2.32	3.98	2.23	2.22	2.16	1.32	2.00	0.10					
24	1.98	0.06	2.09	0.58	2.32	3.98	2.44	7.28	H	44.40	2.49	9.20	24	2.32	3.98	2.23	2.22	2.17	1.44	2.00	0.10					
25	1.97	0.04	2.09	0.58	2.31	3.74	2.43	6.96	2.41	6.32	2.49	9.20	25	2.31	3.74	2.24	2.36	2.19	1.68	2.00	0.10					
26	1.98	0.06	2.10	0.65	2.30	3.50	2.42	6.64	2.70	19.50	2.47	8.40	26	2.29	3.30	2.24	2.70	2.19	1.68	2.00	0.10					
27	1.98	0.06	2.11	0.76	2.31	3.74	2.42	6.64	2.65	16.70	2.47	8.40	27	2.28	3.10	2.26	2.70	2.18	1.56	1.99	0.08					
28	1.98	0.06	2.17	1.44	2.31	3.74	2.41	6.32	2.64	16.16	2.43	6.96	28	2.29	3.30	2.25	2.50	2.17	1.44	1.99	0.08					
29	2.00	0.10	2.19	1.68	2.30	3.50	2.41	6.32	-	-	2.41	6.32	29	2.28	3.10	2.25	2.50	2.15	1.20	2.00	0.10					
30	2.00	0.10	2.18	1.56	2.43	6.96	2.39	5.74	-	-	2.41	6.32	30	2.28	3.10	2.26	2.70	2.16	1.32	2.00	0.10					
31	2.04	0.26	-	-	H	346.25	2.39	5.74	-	-	2.40	6.00	31	-	-	2.25	2.50	-	-	2.00	0.10					
TOTAL		2.32	14.65	515.40	1401.91	267.58	273.80	134.08	83.06	55.14	8.62	0.70	0.94	2758.2												
Mean Daily Discharge in Second-foot		0.07	0.49	16.62	45.22	9.56	8.83	4.47	2.68	1.84	0.28	0.03	9.24													
Second-foot per square mile		0.003	0.019	0.640	1.737	0.368	0.340	0.172	0.103	0.071	0.011	0	0.36													
Run-off, depth in inches		0.003	0.021	0.737	2.004	0.583	0.392	0.192	0.119	0.079	0.012	0.001	0.001	3.946												
Run-off in acre-foot		4.60	29.06	1022.30	2780.69	530.74	543.08	265.95	164.75	109.37	17.10	1.39	1.86	5470.89												
Maximum Mean Daily Discharge in Second-foot		0.26	1.68	346.25	732.0	44.40	15.62	6.32	3.50	2.90	0.98	0.10	0.22	732.0												
Minimum Mean Daily Discharge in Second-foot		0.02	0.10	1.56	5.74	4.70	5.22	3.10	2.22	1.20	0.08	0	0	0												





LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 98

F-98 R

SAN GABRIEL RIVER NORTH FORK 2000 FEET ABOVE NARROWS

Discharge measurements of San Gabriel River - North Fork

Location On east bank of North Fork, San Gabriel River .7 mile above mouth (of North Fork). Approximately 15 miles north of the town of Azusa, Los Angeles County, California.

at near 2000' above Narrows during the year ending September 30, 1933

Drainage Area 18.8 square miles.

Installed by Los Angeles County Flood Control District, September, 1929.

Records Available October 1, 1929 to September 30, 1934 at offices of Los Angeles County Flood Control District, Los Angeles, California.

Gage AU continuous type water stage recorder installed in galvanized iron shelter house on corrugated iron stilling well and secured to vertical rock bank, approximately 25 feet high, on east bank of stream.

Discharge Measurements High water flows are measured from cable located just above recorder house. Low water measurements are made by wading near gage.

Channel and Control Channel - sand, gravel, rock and boulders. Control - permanent rubble, concrete control installed October 1931.

Extremes of Discharge 1929-1930 Maximum- 18.42 c.f.s. on May 3, 1930 Minimum- 1.56 c.f.s. at various times during year. 1930-1931 Maximum- 15.65 c.f.s. April 26, 1931. Minimum- 1.64 c.f.s. September 30, 1931. 1931-1932 Maximum- 223.20 c.f.s. on February 8, 1932. Minimum- 2.8 c.f.s. on October 1-6, 1931. 1932-1933 Maximum- 126.50 c.f.s. January 19, 1933. Minimum- 1.40 c.f.s. various times of the year. 1933-1934 Maximum- 276.14 c.f.s. January 1, 1934. Minimum- 0.03 c.f.s. August 28, 1934.

Diversions None above gage.

Regulation None.

Accuracy Good.

Operation Located and installed by the Los Angeles County Flood Control District and operated by the Los Angeles County Flood Control District in conjunction with U.S.G.S. Water Resources Branch.

Table with columns: No., Date, Made by, Width Feet, Area of section Sq-ft, Mean velocity ft. per sec., Gage height Feet, Discharge Sec-ft., Rating Percent, Method, Mean sea No., G. Ht. change Total, Time Hours, Meter No. Rows 24-47.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 98

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 98

Discharge measurements of San Gabriel River - North Fork

Discharge measurements of San Gabriel River - North Fork

at near 2000' above Narrows during the year ending September 30, 1933

at near 2000' above Narrows during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq-ft, Mean velocity ft. per sec., Gage height Feet, Discharge Sec-ft., Rating Percent, Method, Mean sea No., G. Ht. change Total, Time Hours, Meter No. Rows 1-23.

Table with columns: No., Date, Made by, Width Feet, Area of section Sq-ft, Mean velocity ft. per sec., Gage height Feet, Discharge Sec-ft., Rating Percent, Method, Mean sea No., G. Ht. change Total, Time Hours, Meter No. Rows 48-62.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. F 98

Discharge measurements of San Gabriel North Fork

at Above Narrows during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width, Area, Mean velocity, Gage height, Discharge, Rating, Time, Mean No. Includes data for G. Patterson and R. A. Waddicor.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. F 98

Discharge measurements of San Gabriel North Fork

at Above Narrows during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width, Area, Mean velocity, Gage height, Discharge, Rating, Time, Mean No. Includes data for R. A. Waddicor, Patterson - Waddicor, and Hofmann.

Daily Gage Height, in Feet, and Discharge, in Second-Feet, of

SAN GABRIEL RIVER-NORTH FORK

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. F 98

at Above Narrows for the Year Ending September 30, 1933

Large table with columns: DAY, OCTOBER, NOVEMBER, DECEMBER, JANUARY, FEBRUARY, MARCH, APRIL, MAY, JUNE, JULY, AUGUST, SEPTEMBER, DAY. Includes sub-tables for 'Adjustments used on Gage Heights' and 'TOTAL'.

SAN GABRIEL RIVER - NORTH FORK

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of

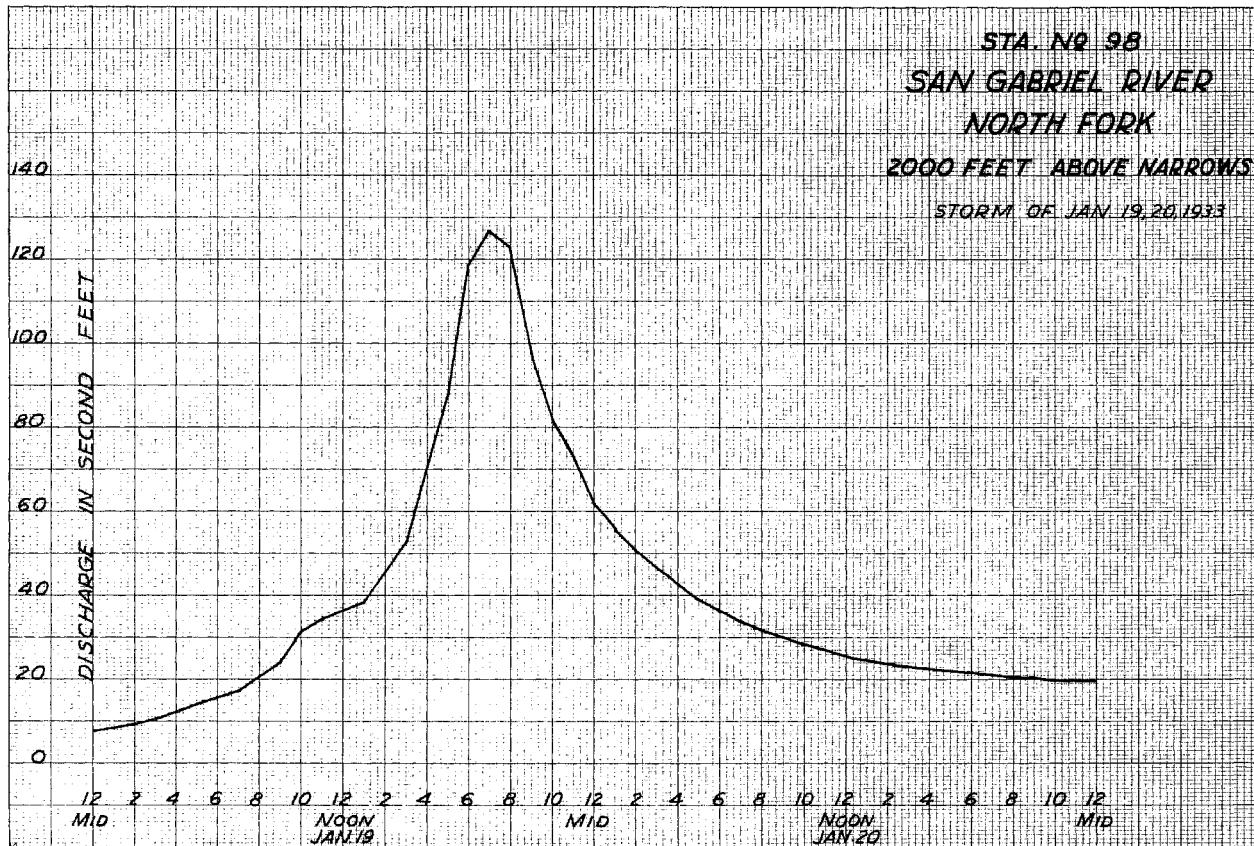
Year At 2000' ABOVE NARROWS for the Year Ending September 30, 1934

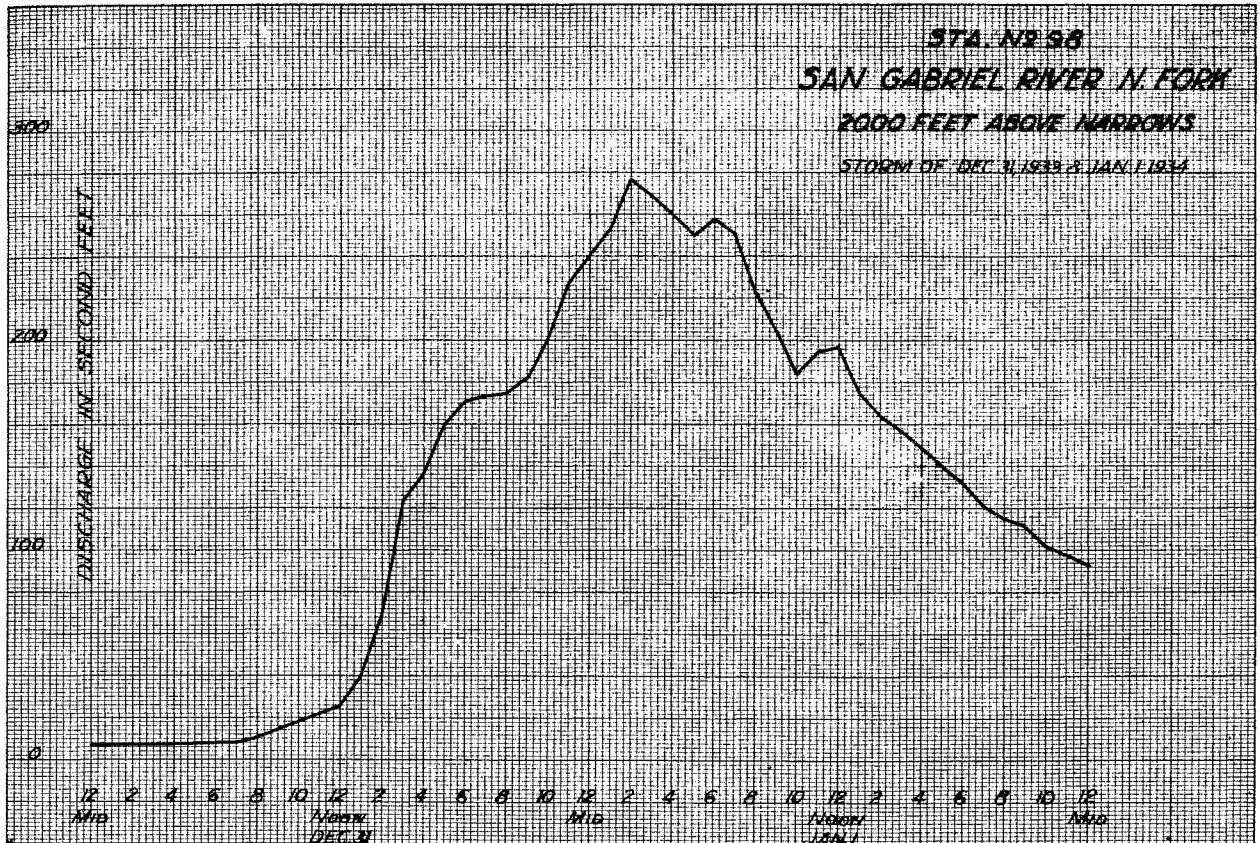
Drainage Area 18.8 Square Miles G. PATTERSON (Observer)

Gage Read CONTINUOUS

Used rating table dated MAY 16, 1934

Table with columns for months (OCTOBER to SEPTEMBER) and days (1-31). Rows include Gage height, Discharge, and summary statistics (TOTAL, Mean Daily Discharge, etc.).





P-3 R

P.C. Dec. Form 1944

SAN GABRIEL RIVER-WEST FORK-P.W.D. STATION-2 MI. ABOVE FORKS

**LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT**

Station No. P 3

Location

One quarter mile above Camp Rincon Ranger Station of the south bank of West Fork of San Gabriel River 13.5 miles north of Azusa, Los Angeles County, California.

Drainage Area

102. square miles.

Installed by

County Road Department for Pasadena Water Department. This station was moved from P.1 which was about 1 1/2 miles downstream.

Records Available

December 2, 1930 to September 30, 1934 at offices of Los Angeles County Flood Control District, Los Angeles, Calif. Records from 1924 to November 19, 1930 were taken at P.1.

Gage

Vertical Staff Gages on inside and outside of corrugated iron stilling well on South bank of river. Stevens and An continuous water stage recorders installed in house on top of stilling well.

Discharge Measurements

High water measurements made from cable car 15 feet above gage. Low water measurements made by wading near gage.

Extremes of Discharge

1930-1931

Maximum - 1529 c.f.s. on April 26, 1931.
Minimum - 0.85 c.f.s. on September 5, 1931.

1931-1932

Maximum - 3787.5 c.f.s. on February 9, 1932.
Minimum - 0.28 c.f.s. on October 17, 1931.

1932-1933

Maximum - 3454 c.f.s. on January 19, 1933.
Minimum - 2.52 c.f.s. on various days during year.

1933-1934

Maximum - 5320 c.f.s. on January 1, 1934.
Minimum - 0.90 c.f.s. on September 17, 1934.

Channel and Control

Channel is gravel and sand. Control of large boulders.

Diversions

Hydraulic operations at No. 2 Dam site, also some diversion to Fish Hatchery in North Fork.

Regulation

None

Accuracy

Good

Operation

Operated by Pasadena Water Department previous to October 1, 1927. Now operated by Los Angeles County Flood Control District in conjunction with U.S.G.S. Water Resources Branch and Pasadena Water Department.

Discharge measurements of San Gabriel River West Fork P. W. D. Station
at 2 miles above Forks during the year ending September 30, 1933

No.	Date	Made by	Width Feet	Area of section Sq.-ft.	Mean velocity ft. per sec.	Catch Basin Feet	Discharge Sec.-ft.	Rating Point above gage	Mean Discharge	Q. Ht. Cont'd	Time Hours	Notes
1	1932 10/7	Patterson	13.0	8.4	.83	2.51	7.0		.6	8	0	1/4 FG 22
2	10/13	"	11.0	6.0	.94	2.47	5.6		.6	6	0	1/4 "
3	10/20	"	13.0	8.1	.67	2.47	5.4		.6	8	0	1/4 "
4	10/27	"	10.0	6.26	.80	2.47	5.05		.6	6	0	1/4 "
5	11/3	"	11.5	7.07	.83	2.50	5.9		.6	6	0	1/4 "
6	11/10	"	11.5	7.00	.83	2.50	5.9		.6	6	0	1/4 "
7	11/17	"	13.0	8.92	.71	2.53	6.4		.6	7	0	1/4 "
8	11/25	"	13.0	16.1	.41	2.55	6.72		.6	5	0	1/6 "
9	12/2	"	13.0	8.04	1.09	2.60	8.74		.6	7	0	1/4 "
10	12/9	"	13.0	8.95	1.23	2.68	11.0		.6	7	0	1/6 "
11	12/16	Patterson-Green	22.0	19.8	0.7	2.74	13.9		.6	11	0	1/4 "
12	12/22	Patterson-Cooper	22.5	20.1	.62	2.72	12.59		.6	11	0	1/3 "
13	12/30	"	23.0	22.2	.63	2.73	13.9		.6	12	0	1/3 "
	1933											
14	1/6	Cooper	23.0	21.6	.71	2.66	15.47		.6	9	0	1/3 FG 12
15	1/13	"	22.7	21.5	.63	2.63	13.53		.6	12	0	1/4 "
16	1/16	Cooper-Green	33.0	52.6	1.65	3.20	86.95		.6	10	0	1/3 "
17	1/16	"	56.0	155.	4.44	4.90	688.5		.6	11	0	3/4 "
18	1/17	"	33.7	52.0	2.24	3.38	116.7		.6	12	0	1/4 "
19	1/18	Cooper	31.0	33.5	1.73	3.03	57.95		.6	12	-0.1	1/3 "
20	1/20	Cooper-Green	65.8	94.4	3.78	4.18	353.9		.6	14	+0.1	1/4 "
21	1/20	"	65.6	92.8	3.80	4.17	353.1		.6	14	-0.2	1/3 "
22	1/20	"	65.3	90.5	3.78	4.13	342.5		.6	14	-0.1	1/4 "
23	1/21	Cooper	41.9	56.9	2.6	3.58	148.0		.6	11	-0.2	7/15 271640

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. P-3

Discharge measurements of San Gabriel River-West Fork P.W.D. Sta. at near 2 Mi. above Forks during the year ending September 30, 19 34

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Gage height, Discharge, Rating, Method, Mean gage, G. H. change, Time, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. P-3

Discharge measurements of San Gabriel River-West Fork P.W.D. Sta. at near 2 Mi. above Forks during the year ending September 30, 19 34

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Gage height, Discharge, Rating, Method, Mean gage, G. H. change, Time, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. P-3

Discharge measurements of San Gabriel River-West Fork P.W.D. Sta. at near 2 Mi. above Forks during the year ending September 30, 19 34

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Gage height, Discharge, Rating, Method, Mean gage, G. H. change, Time, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. P-3

Discharge measurements of San Gabriel River - West Fork P.W.D. Sta. at near 2 Mi. above Forks during the year ending September 30, 19 34

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Gage height, Discharge, Rating, Method, Mean gage, G. H. change, Time, Meter No.

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of SAN GABRIEL RIVER, W. FORK, P.W.D. STA.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

2 Mi. above Forks for the Year Ending September 30, 1933

Drainage Area 102.0 Square Miles. (Gilbert Patterson Observer) Gage Head Continuous Used rating table dated July 28, 1933

Table with columns for months (OCTOBER to SEPTEMBER) and days (1-31). Rows include gage height and discharge data. Includes summary rows for 'TOTAL' and 'Mean Daily Discharge in Second-foot'.

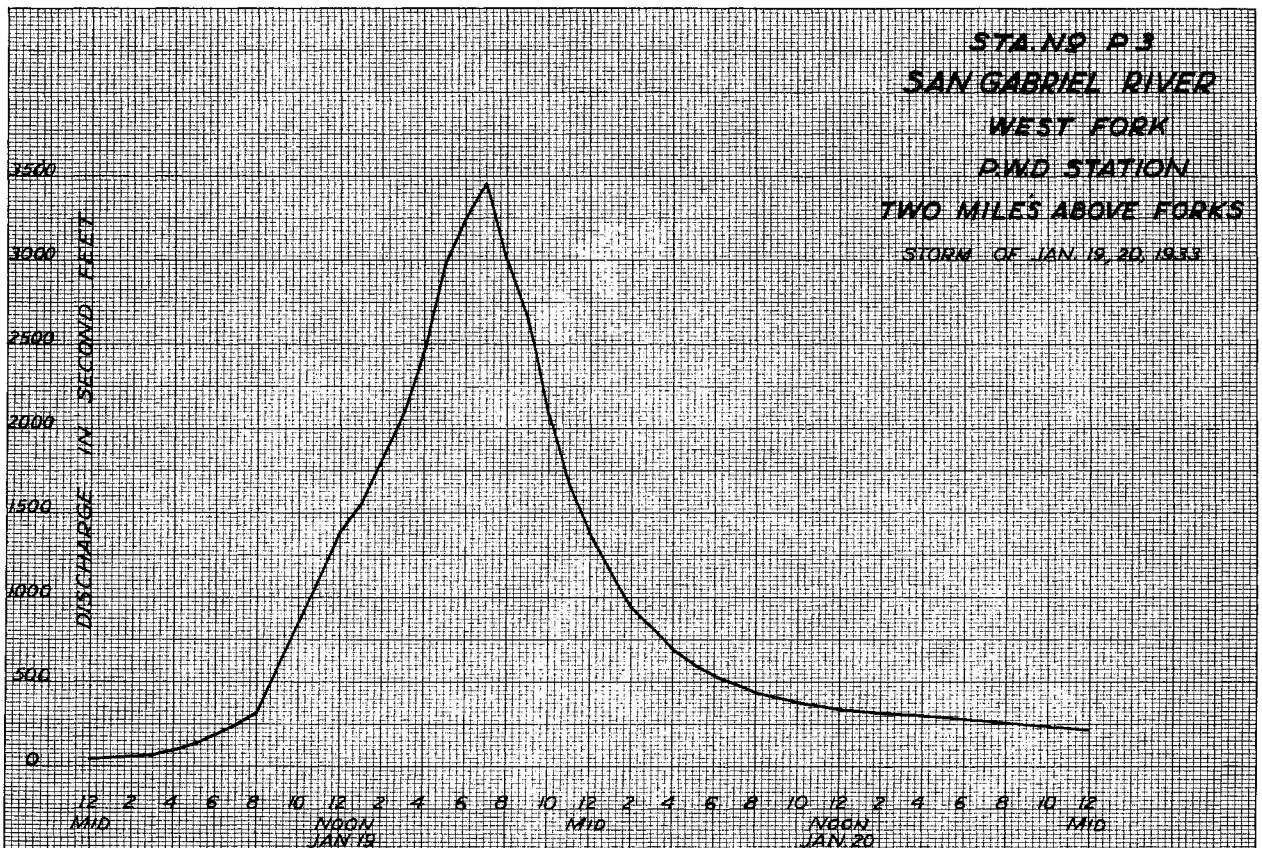
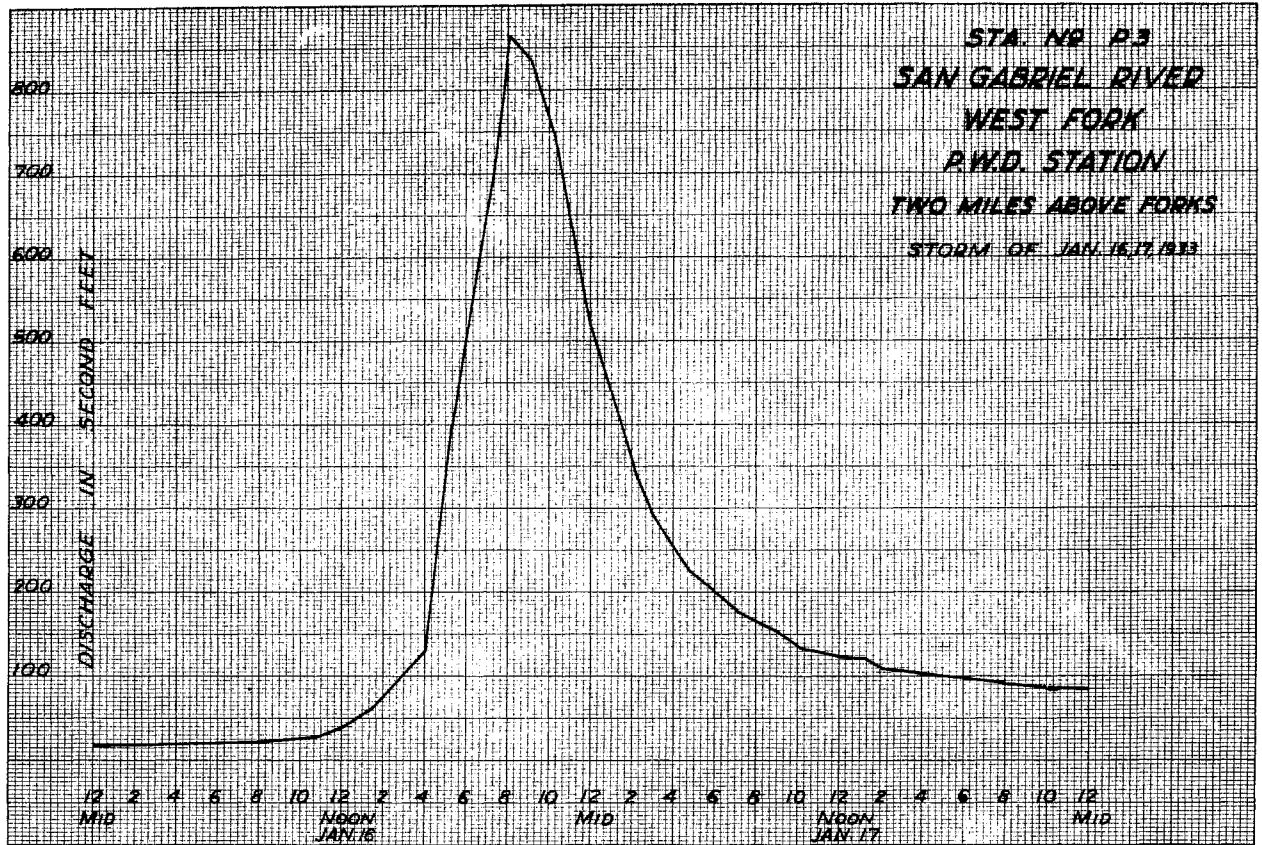
Daily Gage Height, in Feet, and Discharge, in Second-Foot, of SAN GABRIEL RIVER-P.W.D.-WEST FORK

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

2 MI. ABOVE FORKS for the Year Ending September 30, 1934

Drainage Area 102 Square Miles. (Patterson-Turner-Waddisior Observer) Gage Head Continuous Used rating table dated May 3, 1934

Table with columns for months (OCTOBER to SEPTEMBER) and days (1-31). Rows include gage height and discharge data. Includes summary rows for 'TOTAL' and 'Mean Daily Discharge in Second-foot'.



LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 833

F-233 R

SAN GABRIEL RIVER AT ROBERTS RELAY

Discharge measurements of San Gabriel River

Location

On the east bank of the San Gabriel River about 1 mile above the San Gabriel Dam No. 1 and 6 miles north of Glendora. This station replaces the station at Edison Intake 1/2 mile below.

at Roberts' Relay Station during the year ending September 30, 1934

Drainage Area

201 square miles.

Installed by

The Los Angeles County Flood Control District February 8 1934.

Records Available

February 8, 1934 to September 30, 1934. Records from November 6, 1927 to September 30, 1934 taken at Edison Intake Station 1/2 mile below.

Gage.

An automatic water recorder installed in a corrugated iron shelter house on top of a corrugated iron pipe stilling well. Well fastened to rock cliff at side of stream. Staff gages on inside and outside of well.

Discharge Measurements

Low flow measurements made by wading near station. High flow measurements made from cable car at station.

Channel and Control

Channel gravel and boulders. Control changes during high flows.

Extremes of Discharge

See Edison Intake Station.

Diversions

Placer miners divert some of low flow water.

Regulations

San Gabriel Dam No. 2 controls some flow.

Accuracy

Fair.

Operations

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

Table with columns: No., Date, Made by, Staff No., Area of catchment, Mean velocity, Gage height, Discharge, Rating, Method, Mean No., G. H. Intake, Time, Name. Contains 5 entries for 1934.

F. C. D. Form 1944 (M 1-34)

Daily Gage Height, in Feet, and Discharge, in Second-Feet, of SAN GABRIEL RIVER

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. 833

Near ROBERTS RELAY STATION for the Year Ending September 30, 19 34

Drainage Area 201 Square Miles. G. Patterson Observer.

Gage Read. Continuous

Using rating table dated

Main data table with columns for months (OCTOBER to SEPTEMBER) and days (1-31). Includes gage height and discharge data. Includes summary rows for TOTAL, Mean Daily Discharge, and Run-off.

SAN GABRIEL RIVER AT EDISON INTAKE

Location

In SE 1/4 Sec. 31 T. 2 N. R. 9 W. About 500' above submerged diversion dam and intake of Southern California Edison's conduit, about 10 miles North of Azusa, Los Angeles County, California. At same location as U.S.G.S. gage washed out by flood of February 1914.

Drainage area

202 square miles. Elevation is about 1200' above sea level.

Installed by

U.S.G.S. Water resources Branch in 1912.

Re-established

November 6, 1927 by Los Angeles County Flood Control District.

Records Available

For 1912-14 see U.S.G.S. Water Suppl. or #447 (Page 374). For Oct. 1, 1927 to Sept. 30, 1934, Los Angeles County Flood Control District offices, Los Angeles, California.

Gage

Vertical staff gage on inside and outside wall of concrete stilling well, on west bank of stream. An continuous water stage recorder installed in house on concrete stilling well on west bank of stream.

Discharge Measurements

High water measurements made from cable car near gags. Low water measurements are made by wading near gags.

Channel and Control

Channel - Gravel and boulders. Control - Changed during high flows.

Extremes of Discharge

- 1927-1928 Maximum-1832 c.f.s. February 4, 1928. Minimum-2.7 c.f.s. September 5, 1928. 1928-1929 Maximum-380 c.f.s. March 10, 1929. Minimum-3.5 c.f.s. August 13, 1929. 1929-1930 Maximum-799 c.f.s. May 3, 1930. Minimum-8.65 c.f.s. October 14, 1929. 1930-1931 Maximum-2905 c.f.s. April 26, 1931. Minimum-10.10 c.f.s. August 21, 1931. 1931-1932 Maximum-9110 c.f.s. February 9, 1932. Minimum-9.6 c.f.s. October 4, 1931. 1932-1933 Maximum-7550 c.f.s. January 19, 1933. Minimum-7.6 c.f.s. September 7, 1933. 1933-1934 Maximum-18000 c.f.s. January 1, 1934. Minimum-5.2 c.f.s. September 3, 1934.

Diversion

Placer mining, dams and road construction diverts some low flows.

Regulation

None.

Accuracy

Good. San Gabriel Dam No. 1 constructed below station affected high flows during 1933-1934.

Operation

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

Discharge measurements of San Gabriel

at Edison Intake during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section, Mean velocity, Open height, Discharge, Rating, Method, Mean time, G. Ht. change, Time hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Discharge measurements of San Gabriel

at Edison Intake during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section, Mean velocity, Open height, Discharge, Rating, Method, Mean time, G. Ht. change, Time hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Discharge measurements of San Gabriel

at Edison Intake during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section, Mean velocity, Open height, Discharge, Rating, Method, Mean time, G. Ht. change, Time hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. F 28

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 28

Discharge measurements of San Gabriel at Edison Intake during the year ending September 30, 1933

Discharge measurements of San Gabriel River at Edison Intake during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section, Mean velocity, Gate height, Discharge, Rating, Method, Mean gage No., G. Ht., Time, Meter No. Rows 73-99.

Table with columns: No., Date, Made by, Width Feet, Area of section, Mean velocity, Gate height, Discharge, Rating, Method, Mean gage No., G. Ht., Time, Meter No. Rows 23-44.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 28

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 28

Discharge measurements of San Gabriel River at Edison Intake during the year ending September 30, 1934

Discharge measurements of San Gabriel River at Edison Intake during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section, Mean velocity, Gate height, Discharge, Rating, Method, Mean gage No., G. Ht., Time, Meter No. Rows 1-22.

Table with columns: No., Date, Made by, Width Feet, Area of section, Mean velocity, Gate height, Discharge, Rating, Method, Mean gage No., G. Ht., Time, Meter No. Rows 45-68.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 28

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 28

Discharge measurements of San Gabriel River

Discharge measurements of San Gabriel River

at Edison Intake during the year ending September 30, 1934

at Edison Intake during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq.-ft., Mean velocity ft. per sec., Stage Height Feet, Discharge Sec.-ft., Rating Percent GE, Method, Mean No., G. Mt. Change Total, Time Hours, Meter No.

Table with columns: No., Date, Made by, Width Feet, Area of section Sq.-ft., Mean velocity ft. per sec., Stage Height Feet, Discharge Sec.-ft., Rating Percent GE, Method, Mean No., G. Mt. Change Total, Time Hours, Meter No.

Daily Gage Height, in Feet, and Discharge, in Second-Feet, of SAN GABRIEL RIVER

EDISON INTAKE for the Year Ending September 30, 1933

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Table with columns for months (October to September), days, gage height, discharge, and summary statistics. Includes notes on adjustments and maximum/minimum stages.

Daily Gage Height, in Feet, and Discharge, in Second-Feet, of SAN GABRIEL RIVER

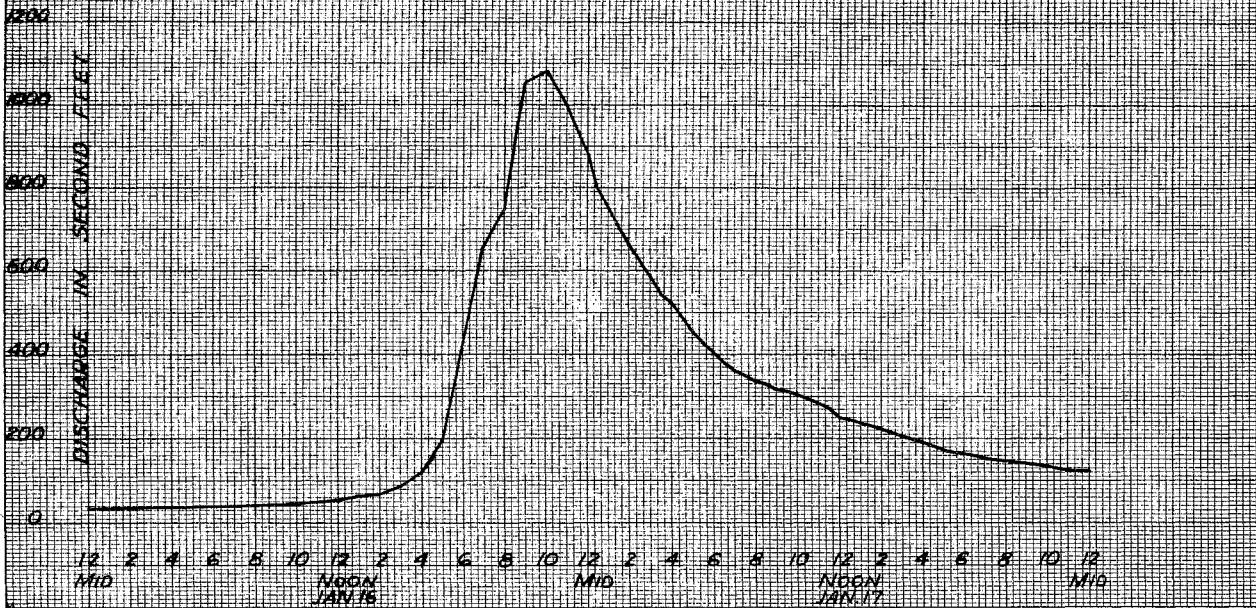
EDISON INTAKE for the Year Ending September 30, 1934

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

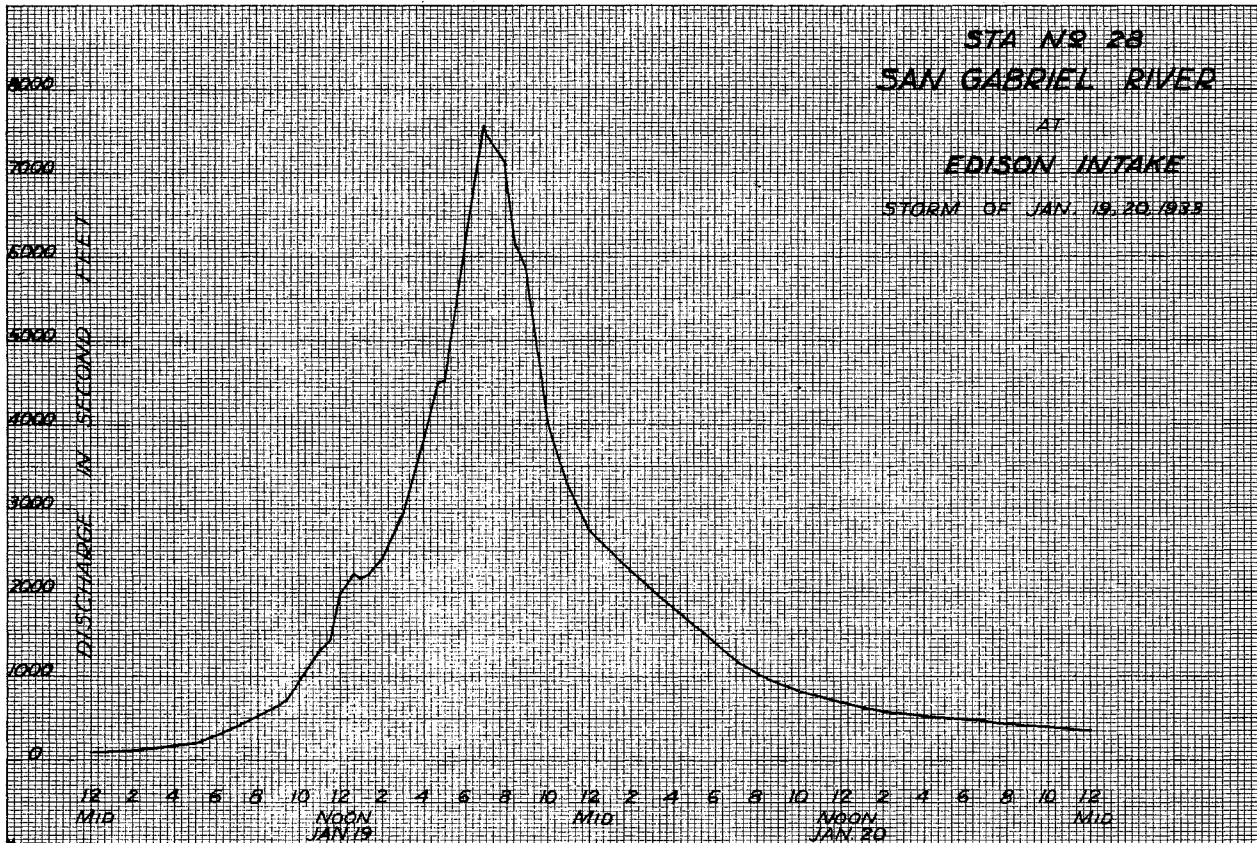
Table with columns for months (October to September), days, gage height, discharge, and summary statistics. Includes notes on recorders and measurements.

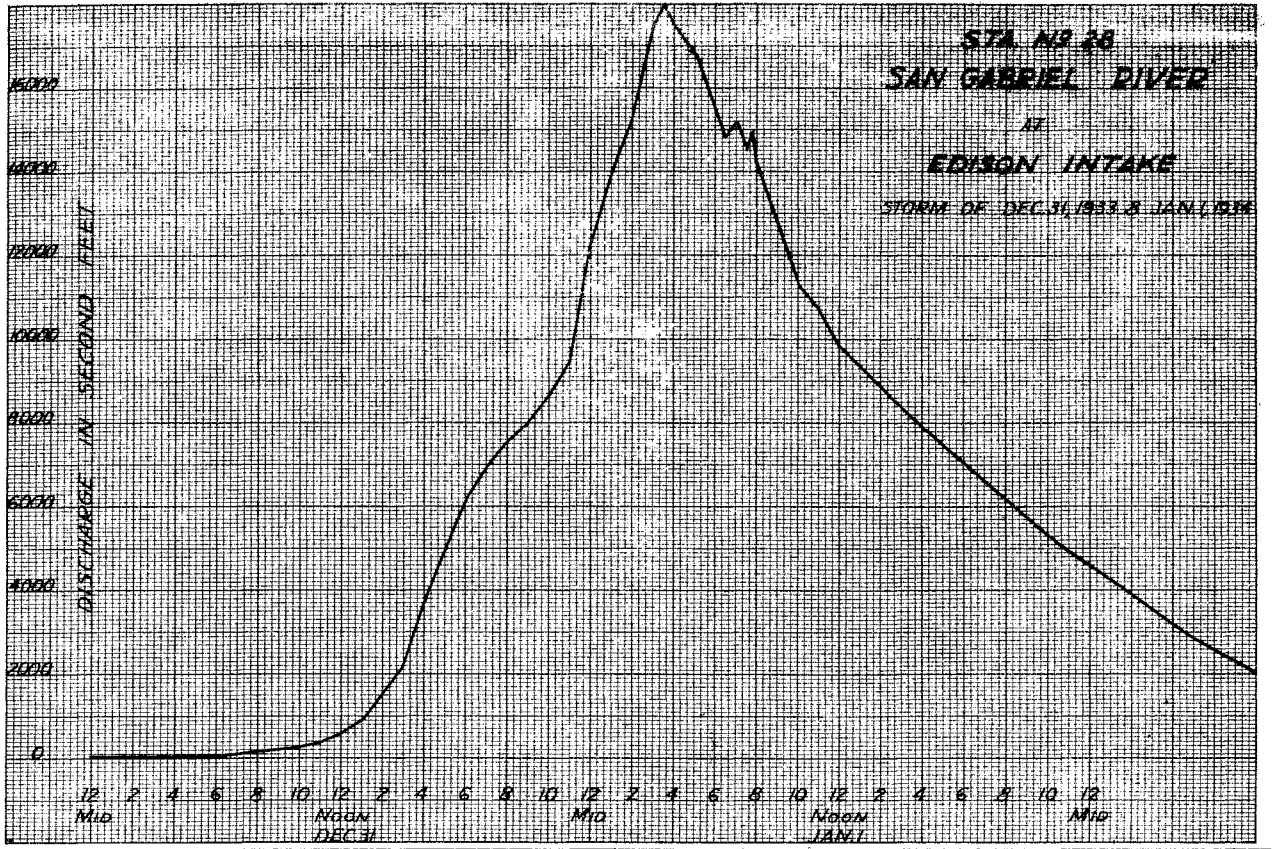
I = Interpolated by comparison with Station F-233

STA NO 28
 SAN GABRIEL RIVER
 AT
 EDISON INTAKE
 STORM OF JAN. 16, 17, 1933



STA NO 28
 SAN GABRIEL RIVER
 AT
 EDISON INTAKE
 STORM OF JAN. 19, 20, 1933





F.C.D. Form 104A IM 3-34

**LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT**

Station No. 22 30

F-230 R

SAN GABRIEL RIVER

EDISON CONDUIT 100 FEET BELOW SAND BOX

Discharge measurements of San Gabriel River (Below Sand Box) Edison Conduit

Location
On the west side at the south end of Pasadena Water Department's structure "A", 100 feet below San Gabriel Dam No. 1 Sand box, 7 miles north of Glendora.

at South End Structure A, during the year ending September 30, 1934

Installed By
Los Angeles County Flood Control District March 30, 1934.

Records Available
March 17, 1934 to September 30, 1934 at offices of the Los Angeles County Flood Control District, Los Angeles, California.

Gage
An automatic water stage recorder installed in galvanized iron shelter house on top of a concrete stilling well at side of conduit. Staff gages on both sides of conduit at recorder house.

Discharge Measurements
All measurements made from top of conduit.

Channel and Control
Concrete channel. Gates and sand box above recorder controls flow.

Extremes of Discharge
1933-1934
Maximum - not determined.
Minimum - not determined.

Operations
Located, installed, and operated by the Los Angeles County Flood Control and Pasadena Water Department.

No.	Date	Made by	Width Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Gate height Feet	Discharge Sec.-ft.	Rating Method	Method	Mean No.	C. H. Coefficient	Time Hours	Mean No.
1	4/2	Turner-Waddicor	4.5	5.94	9.27	1.32	55.07	.6	9			3/10	FO 22
2	4/20	Turner	4.5	9.09	5.13	2.02	46.57	.6	9			1/6	FO 23
3	4/20	Turner	4.5	9.09	5.14	2.02	46.75	.6	9			1/6	"
4	4/21	"	4.5	9.13	5.12	2.03	46.74	.6	9			1/5	"
5	4/21	"	4.5	8.91	4.75	1.98	42.34	.6	9			1/6	"
6	4/22	"	4.5	9.00	4.87	2.00	43.77	.6	9			1/6	"
7	4/24	Patterson-Turner	4.5	8.93	4.75	1.98	42.42	.6	9			3/20	FO 22
8	4/24	"	4.5	8.93	4.72	1.98	42.15	.6	9			2/15	FO 22
9	4/24	"	4.5	8.98	4.91	1.99	44.09	.6	9			2/15	"
10	4/26	Turner	4.5	8.47	4.79	1.88	40.57	.6	9			1/6	FO 23
11	5/3	Turner, Waddicor & Patterson	4.5	8.3	4.36	1.84	36.09	.6	9			1/6	FO 26
12	5/3	"	4.5	8.3	4.22	1.84	34.96	.6	9			1/6	"
13	5/8	Waddicor-Hofmann	4.5	8.01	4.19	1.77	33.58	.6	9			13/60	"
14	5/10	Waddicor	4.5	7.83	3.88	1.74	30.41	.6	9			11/60	"
15	5/11	Waddicor-Turner	4.5	7.83	3.78	1.74	29.58	.6	9			1/6	"
16	5/12	Turner	4.5	7.78	3.78	1.73	29.40	.6	9			3/20	FO 12
17	5/12	Turner	4.5	7.77	3.79	1.73	29.44	.6	9			1/6	"
18	5/13	Turner	4.5	7.93	3.79	1.76	30.05	.6	9			3/20	"
19	5/13	"	4.5	7.93	3.84	1.76	30.43	.6	9			3/20	"
20	5/14	Patterson	4.5	7.9	3.78	1.75	29.82	.6	9			1/6	FO 22
21	5/16	Waddicor	4.5	7.74	3.70	1.72	28.61	.6	9			3/10	FO 26
22	5/17	"	4.5	7.83	3.76	1.74	29.49	.6	9			3/20	"
23	5/18	" & Patterson	4.5	7.65	3.78	1.70	28.90	.6	9			1/6	"
24	5/19	Turner	4.5	7.52	3.74	1.67	28.10	.6	9			1/5	FO 23

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. F 230

Discharge measurements of San Gabriel River (Asusa Sand Box) Edison Conduit

at near So. End Structure A during the year ending September 30, 19 34

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gate height Feet, Discharge Sec. ft., Rating Project diff., Method, Mean gage No., G. H. Change Total, Time Hours, Meter No. Rows include measurements from 1934/5/19 to 1934/6/6.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. F 230

Discharge measurements of San Gabriel River (Below Sand Box) Edison Conduit

at near South End Structure A during the year ending September 30, 19 34

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gate height Feet, Discharge Sec. ft., Rating Project diff., Method, Mean gage No., G. H. Change Total, Time Hours, Meter No. Rows include measurements from 1934/7/3 to 1934/7/27.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. F 230

Discharge measurements of San Gabriel River (Below Sand Box) Edison Conduit

at near South End Structure A during the year ending September 30, 19 34

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gate height Feet, Discharge Sec. ft., Rating Project diff., Method, Mean gage No., G. H. Change Total, Time Hours, Meter No. Rows include measurements from 1934/6/7 to 1934/7/2.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. F 230

Discharge measurements of San Gabriel River (Below Sand Box) Edison Conduit

at near South End Structure A during the year ending September 30, 19 34

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gate height Feet, Discharge Sec. ft., Rating Project diff., Method, Mean gage No., G. H. Change Total, Time Hours, Meter No. Rows include measurements from 1934/7/28 to 1934/8/17.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. F 230

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. F 230

Discharge measurements of San Gabriel River (Below Sand Box) Edison Conduit at South End Structure A during the year ending September 30, 1934

Discharge measurements of San Gabriel River (Below Sand Box) Edison Conduit at South End Structure A during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width, Area of Section, Mean Velocity, Coefficient, Discharge, Rating, Method, Mean No., G. H. (Stage), Time, Meter No.

Table with columns: No., Date, Made by, Width, Area of Section, Mean Velocity, Coefficient, Discharge, Rating, Method, Mean No., G. H. (Stage), Time, Meter No.

Daily Gage Height, in Feet, and Discharge, in Second-Feet, of SAN GABRIEL RIVER - EDISON CONDUIT Near 100 ft. below Sandbox - At South end of Structure A for the Year Ending September 30, 1934

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. 230

Large table with columns for months (OCTOBER to SEPTEMBER) and days, containing Gage height, Discharge, and various notes. Includes a 'WATER FLOW TIME' section and a 'DRY' section.

EDISON CONDUIT AT NORTH PORTAL OF A-B TUNNEL

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Location

On the side of open concrete conduit connecting A-A and B-B tunnels of the Edison Power Conduit that diverts water from the San Gabriel River. About 9 miles north of Azusa, Los Angeles County, California.

Installed by

The Los Angeles County Flood Control District, Feb. 26, 1933

Records Available

February 26, 1933 to September 30, 1934, at offices of Los Angeles County Flood Control District, Los Angeles, Calif.

Gage

An continuous water stage recorder installed in iron shelter house on corrugated iron stilling well fastened to side of conduit. Staff gage on side of conduit opposite stilling well.

Discharge Measurements

Measurements are made from top of opening.

Channel and Control

Open and closed conduit concrete lined. No control.

Extremes of Discharge

1932-1933

Maximum - Not determined. Year not complete.

Minimum - Not determined. Year not complete.

1933-1934

Maximum - 86.58 c.f.s. January 20, 1934.

Minimum - Dry various times of the year.

Diversion

None.

Regulation

Size of inlet regulates maximum capacity.

Accuracy

Fair

Operation

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

Discharge measurements of San Gabriel - Edison Conduit

at North Portal Tunnel 4B during the year ending September 30, 1934

Table with 13 columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gate height Feet, Discharge Sec.-ft., Rating, Method, Mean No., G. H. change Feet, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Discharge measurements of Edison Conduit

at North Portal #4-B Tunnel during the year ending September 30, 1933

Table with 13 columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gate height Feet, Discharge Sec.-ft., Rating, Method, Mean No., G. H. change Feet, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Discharge measurements of San Gabriel - Edison Conduit

at North Portal Tunnel 4B during the year ending September 30, 1934

Table with 13 columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gate height Feet, Discharge Sec.-ft., Rating, Method, Mean No., G. H. change Feet, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 220

Discharge measurements of San Gabriel - Edison Conduit

at North Portal Tunnel 4B during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gate height Feet, Discharge Sec. Ft., Rating Factor, Method, Meas. No., G. H. Change Feet, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 220

Discharge measurements of San Gabriel - Edison Conduit

at North Portal Tunnel 4B during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gate height Feet, Discharge Sec. Ft., Rating Factor, Method, Meas. No., G. H. Change Feet, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 220

Discharge measurements of San Gabriel - Edison Conduit

at North Portal Tunnel 4B during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gate height Feet, Discharge Sec. Ft., Rating Factor, Method, Meas. No., G. H. Change Feet, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 220

Discharge measurements of San Gabriel - Edison Conduit

at North Portal Tunnel 4B during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gate height Feet, Discharge Sec. Ft., Rating Factor, Method, Meas. No., G. H. Change Feet, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 220

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 220

Discharge measurements of San Gabriel - Edison Conduit

Discharge measurements of San Gabriel - Edison Conduit

at North Portal Tunnel 4B, during the year ending September 30, 1934

at North Portal Tunnel 4B, during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Coefficient of contraction, Discharge Sec. Ft., Rating Point, Method, Manning No., G. H. change Feet, Time Hours, Meter No.

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Coefficient of contraction, Discharge Sec. Ft., Rating Point, Method, Manning No., G. H. change Feet, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 220

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 220

Discharge measurements of San Gabriel - Edison Conduit

Discharge measurements of San Gabriel - Edison Conduit

at North Portal Tunnel 4B, during the year ending September 30, 1934

at North Portal Tunnel 4B, during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Coefficient of contraction, Discharge Sec. Ft., Rating Point, Method, Manning No., G. H. change Feet, Time Hours, Meter No.

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Coefficient of contraction, Discharge Sec. Ft., Rating Point, Method, Manning No., G. H. change Feet, Time Hours, Meter No.

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of SAN GABRIEL RIVER — EDISON CONDUIT

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

At North PORTAL TUNNEL #4-B for the Year Ending September 30, 1933

Table with columns for months (OCTOBER to SEPTEMBER) and days (1-31). Includes gage height and discharge data. Includes notes: 'Gage heights interpolated by comparison with Station F-219', 'INSTALL AU RECORDEUR - FEBRUARY 26, 1933', 'Gage Road CONTINUOUS', 'Used rating table dated July 2, 1934'. Includes summary rows for 'TOTAL', 'Mean Daily Discharge in Second-foot', etc.

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of SAN GABRIEL RIVER — EDISON CONDUIT

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

At North PORTAL — #4-B TUNNEL for the Year Ending September 30, 1934

Table with columns for months (OCTOBER to SEPTEMBER) and days (1-31). Includes gage height and discharge data. Includes notes: 'Gage heights interpolated by comparison with F-28', 'Recorder gage heights adjusted to rating curve', 'Gage Road CONTINUOUS', 'Used rating table dated July 1, 1934'. Includes summary rows for 'TOTAL', 'Mean Daily Discharge in Second-foot', etc.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 100

SAN GABRIEL SPREADING DITCH AT MOUTH OF SAN GABRIEL CANYON

Location

On upstream side of Canyon Line Railroad Bridge, near mouth of San Gabriel Canyon, 2 miles north of Azusa, Los Angeles County, California.

Installed by

Los Angeles County Flood Control District, February 13, 1929.

Records Available

February 8, 1929 to September 30, 1934 at offices of Los Angeles County Flood Control District, Los Angeles, California.

Gage

Rational 7 day water stage recorder installed in recorder house mounted on corrugated iron pipe stilling well at north end and upstream side of bridge. Outside vertical staff gage installed on stilling well.

Discharge Measurements

High water measurements made at bridge. Low water measurements made by wading in ditch near gage.

Channel and Control.

Channel is hard bottom, not easily eroded. Control is good.

Extremes of Discharge

1929-1930 Maximum- 66.1 c.f.s. April 7, 1930. Minimum- Dry at various times of year. 1930-1931 Maximum- 76.1 c.f.s. May 5, 1931. Minimum- Dry at various times during year. 1931-1932 Maximum- 63.0 c.f.s. March 13, 1932. Minimum- Dry part of year. 1932-1933 Maximum- 72.38 c.f.s. February 22, 1933. Minimum- Dry at various times during year. 1933-1934 Maximum- 83.50 c.f.s. Mar. 31, Apr. 1 & 2, 1934. Minimum- Dry various times during year.

Diversions

This station is on a ditch which receives water from two sources. One is waste water from Southern California Edison Company's power house tailrace. The other is by direct diversion from San Gabriel River through a tunnel. Record represents major part of water spread by East Side Water Co. See page 214 for total.

Regulation

By diversion gates.

Accuracy

Good.

Operation

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

Discharge measurements of San Gabriel Spreading Ditch

at Mouth of Canyon during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity Ft. per sec., Gage height Feet, Discharge Sec. Ft., Rating Factor, Method, Mean gage No., G. H. change Total, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 100

Discharge measurements of San Gabriel Spreading Ditch

at Mouth of Canyon during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity Ft. per sec., Gage height Feet, Discharge Sec. Ft., Rating Factor, Method, Mean gage No., G. H. change Total, Time Hours, Meter No.

F - #100 A-B

Azusa - Duarte Tunnel Diversion

Location

300' South of Canyon Road at Outlet of the Tunnel 1-3/4 miles north of Azusa.

Records Available

1918 - 1934 at offices of the Los Angeles County Flood Control District.

Gage

Staff installed in weir box.

Discharge Meas.

All flows measured by wading at tunnel inlet and in river above and below tunnel entrance.

Channel and Control

Concrete weir box with 2 large broad crested weirs.

Regulation

At tunnel inlet and at weir.

Accuracy

Fair. Capacity Approximately 100 c.f.s.

Operations

Constructed and operated by East Side Water Committee and West Side Water Committee, under supervision of Morgan Peirce assisted by Los Angeles County Flood Control District.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 100 A

Discharge measurements of Azusa-Duarte Tunnel Diversion

at Mouth of San Gabriel Canyon during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity Ft. per sec., Gage height Feet, Discharge Sec. Ft., Rating Factor, Method, Mean gage No., G. H. change Total, Time Hours, Meter No.

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of SAN GABRIEL SPREADING GROUNDS, MAIN CANAL

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Table for San Gabriel Spreading Grounds, Main Canal. Columns: DAY, OCTOBER, NOVEMBER, DECEMBER, JANUARY, FEBRUARY, MARCH, APRIL, MAY, JUNE, JULY, AUGUST, SEPTEMBER, DAY. Includes gage height and discharge data for each day, with a 'TOTAL' row at the bottom.

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of SAN GABRIEL SPREADING DITCH

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Table for San Gabriel Spreading Ditch. Columns: DAY, OCTOBER, NOVEMBER, DECEMBER, JANUARY, FEBRUARY, MARCH, APRIL, MAY, JUNE, JULY, AUGUST, SEPTEMBER, DAY. Includes gage height and discharge data for each day, with a 'TOTAL' row at the bottom.

1932-33

Daily Record of Water diverted from the San Gabriel River through the Azusa - Duarte Tunnel by the San Gabriel River Water Committee.

Season 1932-33

Date	Jan.	Feb.	Mar.	Apr.
1		36.50	86.76	43.04
2		62.20	93.82	48.71
3		83.31	98.34	66.64
4		89.65	102.86	86.76
5		86.08	102.86	93.82
6		88.46	96.83	93.82
7		94.69	96.83	86.76
8		88.46	102.86	86.76
9		81.32	111.95	62.96
10		73.39	111.95	43.04
11		70.41	115.04	40.07
12		70.41	108.89	26.30
13		107.03	101.36	28.01
14		135.11	93.82	18.72
15		135.11	86.76	18.72
16		135.11	79.74	16.86
17		136.70	88.19	16.86
18		101.67	96.83	28.84
19		133.87	83.94	18.72
20		133.57	79.74	9.48
21		133.57	79.74	5.04
22		120.12	83.94	3.37
23		82.55	79.74	2.18
24		87.79	77.12	
25		82.55	61.73	
26		71.88	48.71	
27	9.56	66.64	48.71	
28	19.12	75.81	48.71	
29	21.74	--	48.71	
30	34.63	--	45.30	
31	32.33	--	43.04	--

Total Ac. Ft. 117.38 2663.66 2604.82 945.48

Total for Season 6331.34 Acre Feet

Measurements by Morgan J. Peirce

1933-34

Daily Record of Water diverted from the San Gabriel River through the Azusa - Duarte Tunnel by the San Gabriel River Water Committee.

Season 1933-34

Date	Dec.	Jan.	Mar.	Apr.	May
1				160.26	Small Amount)
2				160.26	Short time
3				160.26	
4		25.39		116.55	Small Amount)
5		11.31		29.71	
6			17.26	83.94	
7			20.95	136.70	
8			24.60	124.17	
9			24.60	115.04	
10			14.28	127.34	
11		14.28		125.75	
12		24.60		124.17	
13		12.30		124.17	
14	31.73			124.17	
15	43.00			124.17	14.36
16	36.50		80.05	124.17	60.69
17	26.30			113.45	3.57
18	16.07			160.26	
19	16.07			160.26	
20	10.83			160.26	
21	3.37			160.26	130.43
22				160.26	128.85
23				160.26	128.85
24				160.26	128.85
25				160.26	101.36
26			160.26	74.86	
27		12.85	160.26	22.89	
28		39.07	160.26	129.40	
29		44.15	160.26	136.86	
30		25.80	160.26	34.51	
31			160.26		

Total Ac. Ft. 183.87 309.44 2483.95 3483.99 78.62

Total for Season 6539.87 Acre Feet

Measurements by Morgan J. Peirce

1932-33

Water Spread by the East Side Water Committee in Canyon Basin and Main Basin.

Season 1932-33

Date	Dec.	Jan.	Feb.	Mar.	Apr.	May
1		7.2	62.9	86.8	21.7	
2		7.6	75.4	87.9	24.5	
3		7.6	85.9	80.5	33.6	42.8
4		8.0	82.1	77.4	43.7	55.0
5		7.2	74.3	77.4	47.3	45.4
6		6.9	75.5	74.3	47.3	16.0
7		6.9	78.6	74.3	43.7	14.3
8		7.8	75.5	76.8	43.7	14.1
9		5.4	71.9	78.5	31.7	11.6
10		3.1	68.5	73.1	21.7	7.1
11		3.1	67.1	74.4	20.2	6.8
12		2.5	67.1	71.7	13.3	6.7
13		3.0	51.5	67.5	14.1	7.1
14	3.00	3.9	45.9	63.7	9.4	6.4
15	5.46	3.3	46.1	60.1	9.4	5.2
16	6.20	18.5	45.7	56.6	8.5	5.4
17	6.26	42.1	71.2	62.5	8.5	
18	7.44	46.8	52.1	64.4	14.5	
19	7.90	36.6	52.3	57.4	9.4	
20	7.96	37.7	51.6	51.1	4.8	
21	7.30	45.4	51.1	46.9	2.5	
22	7.16	52.2	70.2	47.2	.80	
23	7.30	52.1	80.7	40.2	.24	
24	9.10	51.8	85.4	38.9		
25	8.58	49.1	83.2	31.1		
26	8.24	47.4	78.9	24.6		
27	6.86	51.6	76.3	24.6		
28	7.00	57.1	80.9	24.6		
29	6.58	52.9	--	24.6		
30	6.86	61.6	--	22.8		
31	6.58	60.9	--	21.7		

Total C. f. s. 125.78 847.3 1907.9 1763.6 474.54 244.9

Acre Feet
Canyon Basin 221 1631 3456 3161 941 486
Main Basin 29 50 328 337 --- ---
Total A.F. 250 1681 3784 3498 941 486

Measurements by Morgan Peirce
Checked by R. E. Lindsay

1933-34

Water Spread by the East Side Water Committee in Canyon Basin and Main Basin.

Season 1933-34

Date	Dec.	Jan.	Feb.	Mar.	Apr.	May
1			47.6	48.2	93.5	5.0
2			47.2	48.1	87.6	2.8
3			46.4	48.6	83.5	1.0
4		12.4	46.4	48.8	58.1	.5
5		5.7	45.7	48.8	14.7	.3
6		8.7	44.9	48.8	18.6	.3
7		10.6	45.9	48.8	47.0	.2
8		12.4	45.1	48.6	40.2	.3
9		12.4	44.2	49.2	31.8	1.6
10		7.2	44.5	49.2	34.8	
11		7.2	44.7	48.8	31.6	
12		12.4	39.0	48.8	29.9	
13		29.2	33.3	46.5	30.1	
14	16.0	49.5	27.7	44.0	30.4	
15	24.5	53.9	16.8	41.8	38.1	
16		36.3	63.9	15.8	37.2	38.5
17		31.8	76.2	14.8	43.7	32.4
18		24.9	75.1	14.6	42.4	40.6
19		25.0	76.3	14.4	43.1	40.2
20		20.5	73.1	23.9	42.3	40.6
21		16.8	72.1	28.2	38.6	39.4
22		15.4	72.1	29.2	35.1	38.9
23		15.9	63.4	42.7	36.9	39.0
24		15.2	71.9	27.7	40.4	39.1
25		14.7	67.4	29.6	36.1	28.4
26		14.9	58.5	45.8	36.1	20.0
27		15.0	64.7	48.1	30.8	4.9
28		12.6	77.2	48.2	28.6	36.0
29		12.9	79.0	--	22.9	38.1
30		12.3	69.3	--	17.7	9.8
31		12.7	55.4	--	48.4	--

Total c. f. s. 335.4 1337.2 1002.4 1297.6 1145.1 12.0

Acre Feet
Canyon Basin 665 2472 1810 2349 2109 24
Main Basin 180 178 225 180
Total A.F. 665 2652 1988 2574 2289 24

Measurements by Morgan J. Peirce

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of

SAN GABRIEL RIVER

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. 190

FOOTHILL BOULEVARD

for the Year Ending September 30, 1933

Gage Road CONTINUOUS

Used rating table dated March 22, 1934

Drainage Area 229.6 Square Miles

Lindsay

Observer

Table with columns for months (OCTOBER to SEPTEMBER) and days (1-31). Rows contain Gage height and Discharge data. Includes summary rows for TOTAL, Mean Daily Discharge, Second-foot per square mile, etc.

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of SAN GABRIEL RIVER

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. 190

FOOTHILL BOULEVARD BRIDGE

for the Year Ending September 30, 1934

Gage Road CONTINUOUS

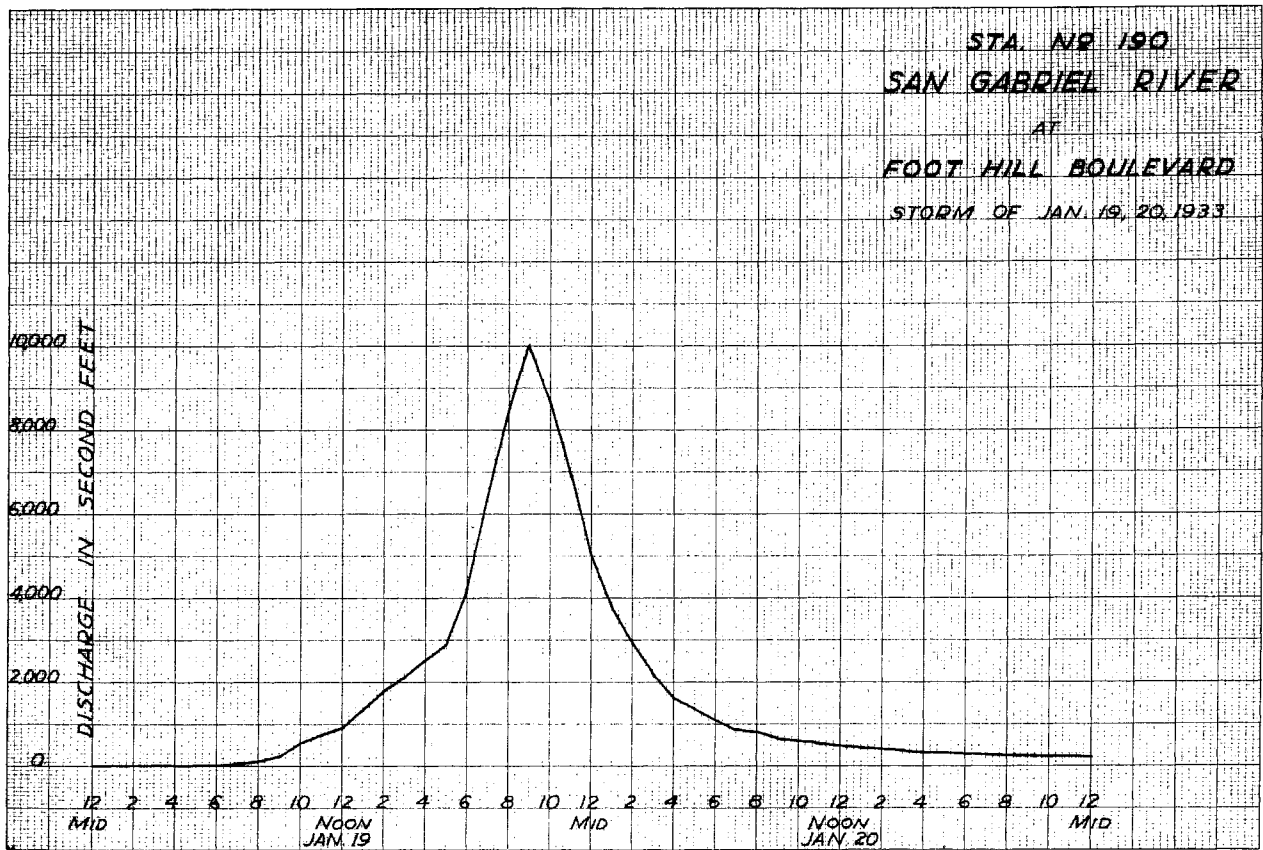
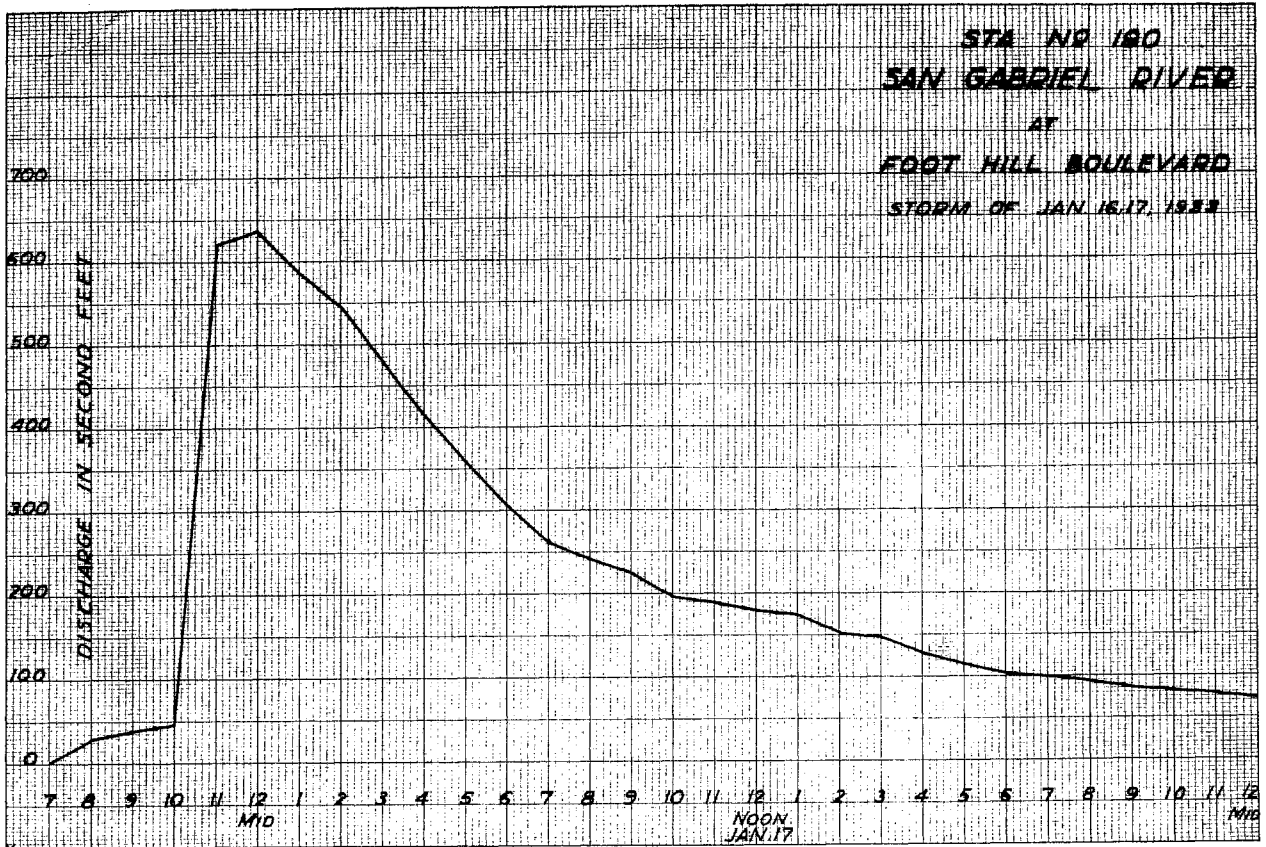
Used rating table dated 1933 - 1934

Drainage Area 229.6 Square Miles

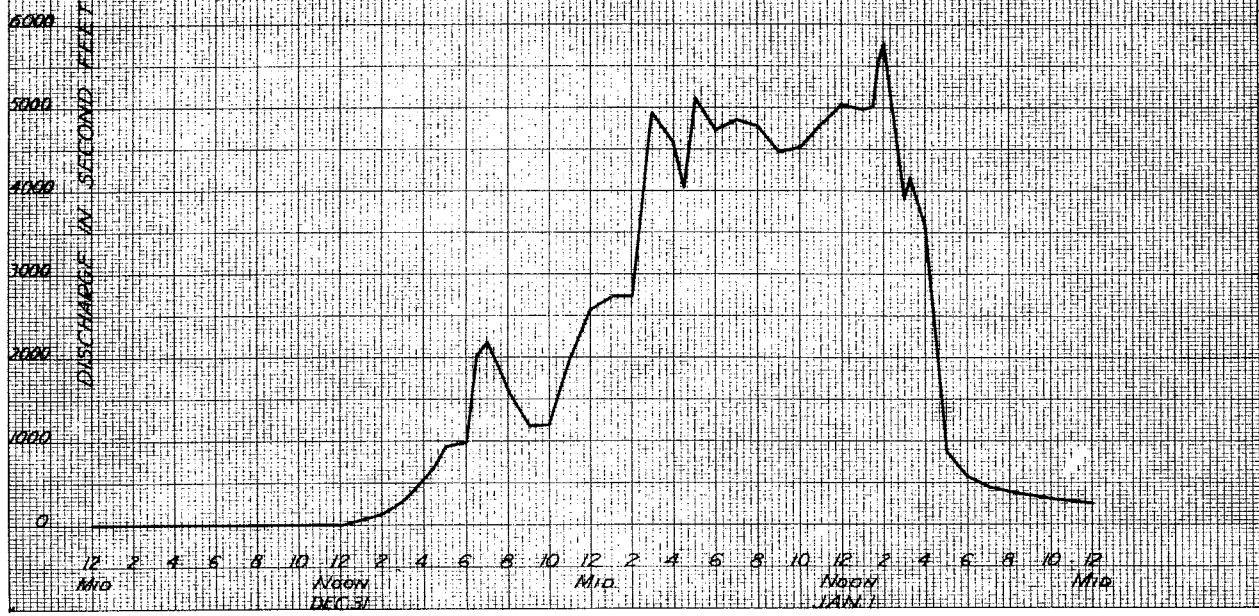
Cornick Lindsay

Observer

Table with columns for months (OCTOBER to SEPTEMBER) and days (1-31). Rows contain Gage height and Discharge data. Includes summary rows for TOTAL, Mean Daily Discharge, Second-foot per square mile, etc.



STA NO 190
SAN GABRIEL RIVER
 AT
FOOTHILL BLVD. BRIDGE
 STORM OF DEC 3, 1933 & JAN 1, 1934



F-191 R

SAN GABRIEL RIVER AT EL MONTE BOULEVARD BRIDGE

Location
 On the highway bridge where El Monte Boulevard crosses San Gabriel River, 2 miles east of El Monte, Los Angeles County, California.

Drainage Area
 Not determined

Installed by
 Los Angeles County Flood Control District February 22, 1932.

Records Available
 Stream measurements only from February 22, 1932 to March 31, 1932. Recorder records from April 1, 1932 to September 30, 1934 at the offices of the Los Angeles County Flood Control District, Los Angeles, California.

Gage
 A continuous water stage recorder installed in shelter house on corrugated iron pipe stilling well fastened to bent on downstream side near west end of bridge. Staff gage on bridge bent at stilling well.

Discharge Measurements
 High flows measured from Rook Company's Railroad Bridge. Low flows measured by wading near gage.

Channel and Control
 Channel sand and gravel. No control.

Extremes of Discharge
 1931-1932 Not determined.
 1932-1933 Maximum- 949.0 c.f.s. January 19, 1933.
 Minimum- Dry most of year.
 1933-1934 Maximum- 796.0 c.f.s. January 1, 1934.
 Minimum- Dry most of the year.

Regulation
 None.

Diversions
 Water diverted at Edison Intake and near mouth of San Gabriel Canyon for power and irrigation.

Accuracy
 Fair

Operation
 Station located and constructed by the Los Angeles County Flood Control District and operated by the Los Angeles County Flood Control District in conjunction with the U.S.G.S. Water Resources Branch.

Discharge measurements of San Gabriel River
 at El Monte Blvd. Bridge during the year ending September 30, 1933
 during the year ending September 30, 1934

No.	Date	Made by	Width Feet	Area of Section Sq. ft.	Mean Velocity ft. per sec.	Obs. Depth Feet	Discharge Sec.-ft.	Dating System	Method	Mean. No.	C. H. Error Total	Time Hours	Meter No.	
1	1/17	Cornick-Wood	12.0	4.42	1.17	-	5.17			.6	6	0	0	271619
2	1/17	Brewster	5.0	1.95	1.34	2.74	2.62			.6	5	0	1/12	271666
3	1/19	Cornick-Cron	74.0	69.7	3.94	3.56	275.			.6	9	0	2/3	271619
4	1/20	Griggs-Cron	59.5	21.8	2.38	3.27	54.07			.6	10	-02	0	"
5	1/21	"	21.5	6.52	1.89	3.16	32.39			.6	10	0	1/6	"
6	1/23	"	12.5	3.82	1.88	3.19	7.17			.6	7	0	7/60	"
7	1/24	"	4.5	0.82	1.67	2.94	1.36			.6	4	-017	7/60	"
8	2/16	Brewster-Lindsay	16.0	3.16	1.29	3.00	4.08			.6	8	0	1/6	271666
1	12/14	Cornick-Potter	31.1	12.3	2.46	3.30	30.18			.6	15	-	2/3	271647
2	12/15	"	45.4	13.4	1.52	3.12	17.25			.6	11	-	2/3	"
3	12/31	Potter-Cole												
4	1/1	Lindsay-Richards	162	149	4.60	3.83	684.6			.6	8	-	1/3	282883
5	1/2	Potter-Cole												
6	1/5	Potter-Cole												
7	1/18	R Lindsay	2 Channels			3.16	19.40			.6	19	-	1/2	282883
8	1/27	Potter-Cole	4 Channels			3.22	16.28			.6	18	-	1/4	271647
9	1/30	"	3 Channels			3.16	29.36			.6	11	-	1/4	"
10	2/23	"												
11	4/4	Brewster-Boone	15.	6.0	1.86	2.94	11.14			.6	5	-	1/10	271666
12	4/4	"	24.	11.2	2.54	3.02	28.48			.6	6	+08	1/6	"
13	4/4	"	30.	15.9	2.83	3.11	45.09			.6	6	-	1/12	"
14	4/5	"	30.	19.7	3.29	3.17	64.74			.6	6	-	1/10	"
15	4/5	"	45.	24.3	3.48	3.25	84.66			.6	9	-03	1/6	"
16	4/5	"	36.	17.9	3.17	3.01	56.79			.6	7	-06	1/10	"
17	4/5	"	25.	11.6	2.59	2.89	30.08			.6	5	-02	1/6	"
18	4/5	"	45.	27.0	3.34	3.25	90.28			.6	9	-06	1/5	"
19	4/5	"	40.	22.2	3.03	3.06	67.06			.6	8	-07	2/15	"
20	4/6	"	16.	6.67	1.97	2.78	13.16			.6	5	-	1/10	"

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of SAN GABRIEL RIVER

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

At EL MONTE BOULEVARD for the Year Ending September 30, 1933.

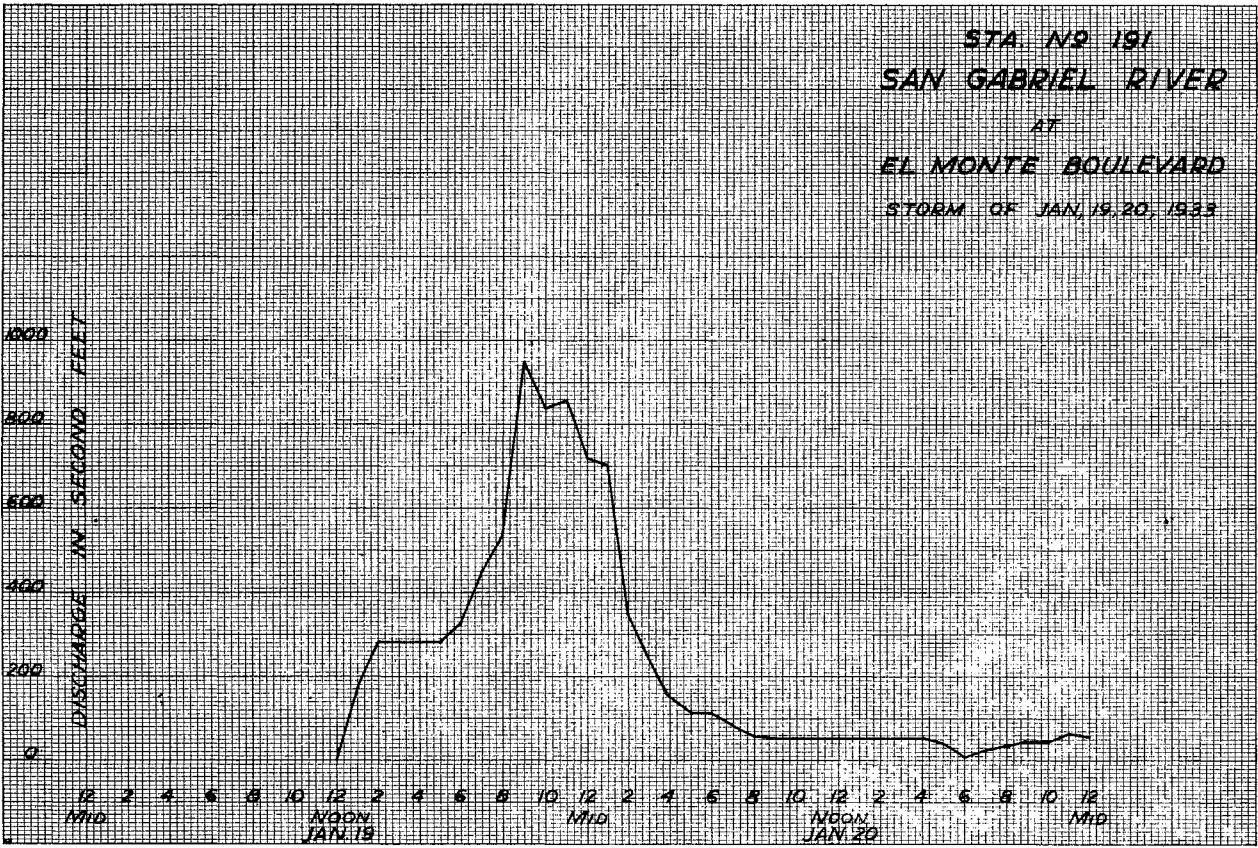
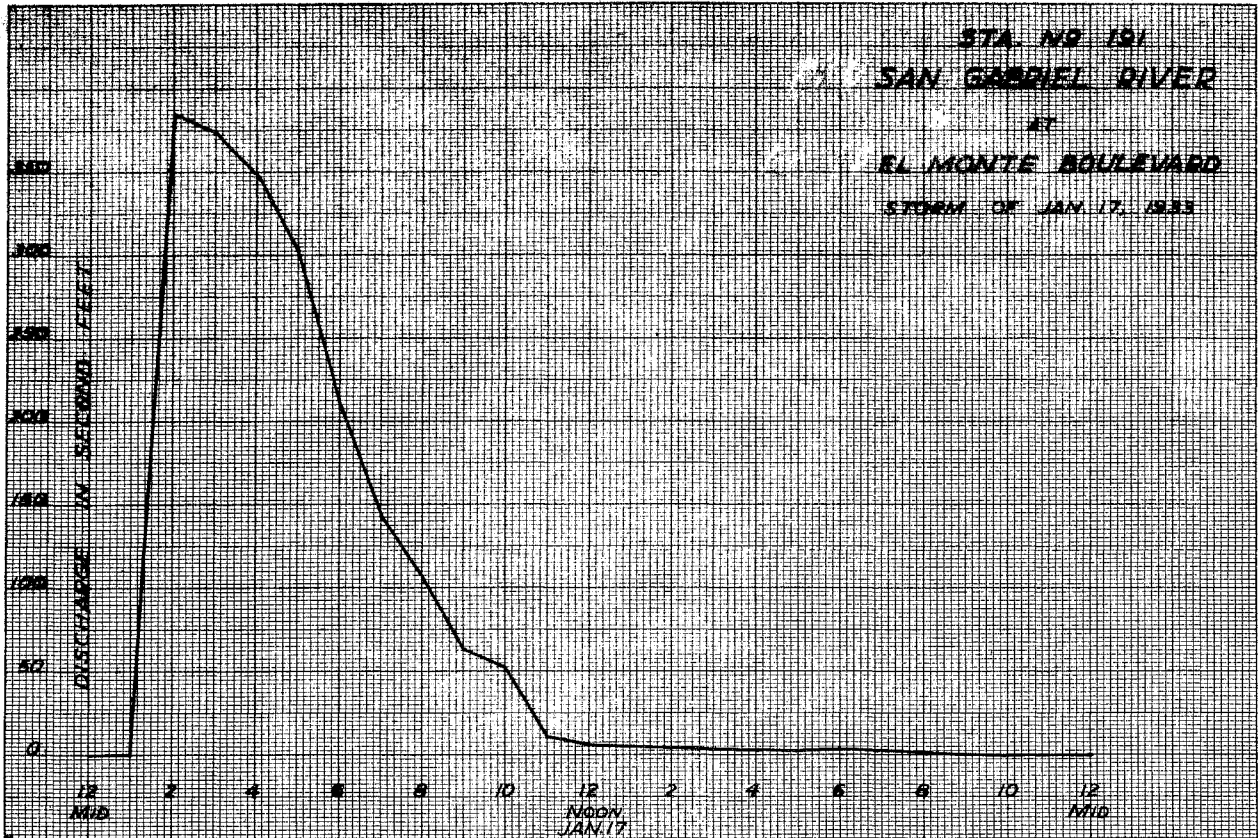
Table with columns for months (OCTOBER to SEPTEMBER) and days (1-31). Includes sub-columns for Gage height and Discharge. Includes summary rows for TOTAL, Mean Daily Discharge, and Run-off.

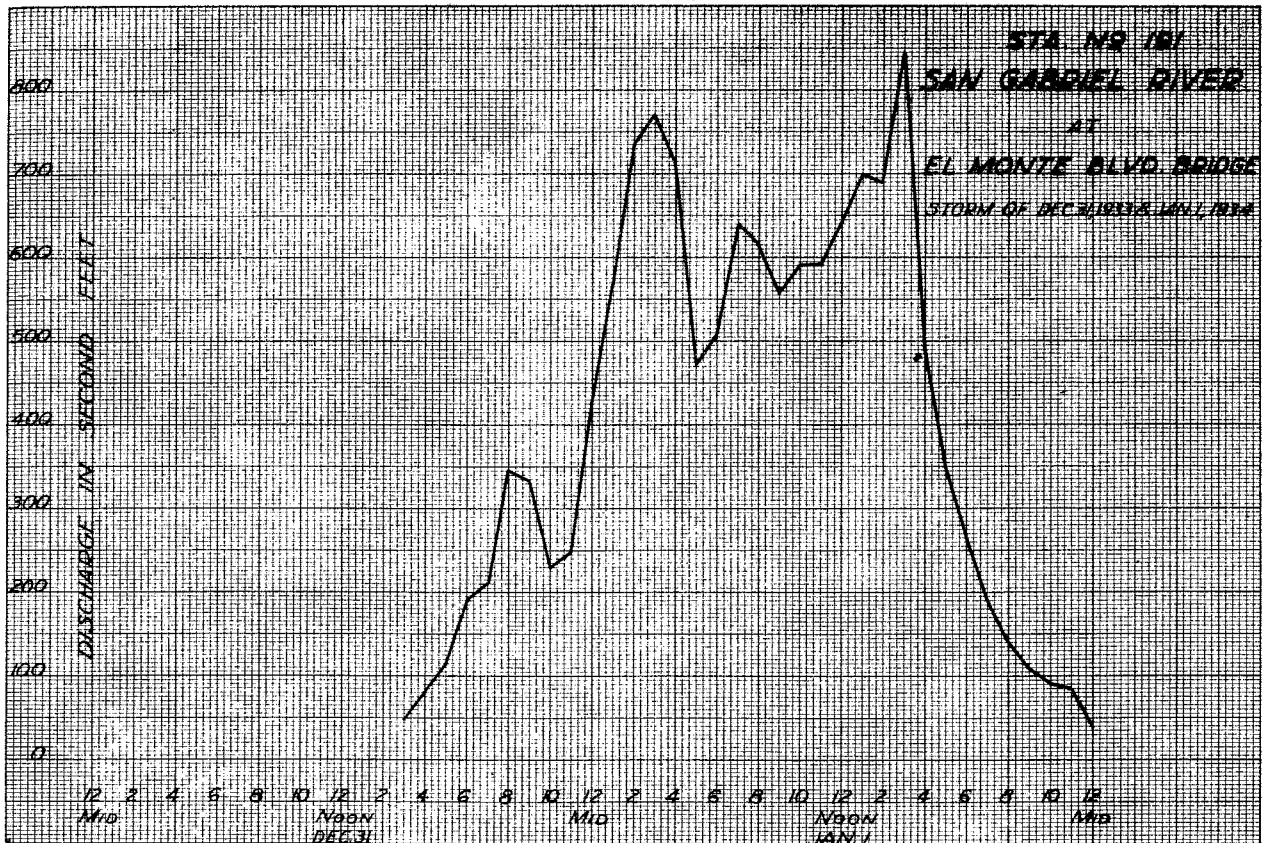
Daily Gage Height, in Feet, and Discharge, in Second-Foot, of SAN GABRIEL RIVER

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

At EL MONTE BLVD. for the Year Ending September 30, 1934

Table with columns for months (OCTOBER to SEPTEMBER) and days (1-31). Includes sub-columns for Gage height and Discharge. Includes summary rows for TOTAL, Mean Daily Discharge, and Run-off.





F-63 R

SAN GABRIEL RIVER AT WHITTIER BOULEVARD BRIDGE

Location
On highway bridge crossing the San Gabriel River at Whittier Boulevard, just west of Whittier, Los Angeles County, California.

Drainage Area
410 square miles.

Installed by
Originally established by the State of California, Division of Water Rights in 1923-1924. Re-established by Los Angeles County Flood Control District, July 1928.

Records Available
State of California, Division of Water Rights Bulletins for records previous to July 1928. July 1928 to September 30, 1934 at offices of Los Angeles County Flood Control District, Los Angeles, California.

Gage
A continuous water stage recorder installed in wooden recorder house on top of stilling well attached to downstream end of bridge pier. A vertical staff gage in stilling well and one attached to outside of stilling well.

Discharge Measurements
High water measurements made from cable car 500' below bridge. Low water measurements made by wading at station.

Channel and Control
Channel - shifting sand and silt.
Control - none.

Extremes of Discharge
1928-1929
Maximum - 297 c.f.s. March 10, 1929.
Minimum - Dry at various times of year.
1929-1930
Maximum - 5755 c.f.s. January 11, 1930.
Minimum - Dry at various times during year.
1930-1931
Maximum - 404 c.f.s. February 4, 1931.
Minimum - Dry at various times during year.
1931-1932
Maximum - 3830 c.f.s. on February 9, 1932.
Minimum - Dry most of year.
1932-1933
Maximum - 1451 c.f.s. January 29, 1933.
Minimum - Dry most of year.
1933-1934
Maximum - 22000 c.f.s. January 1, 1934.
Minimum - Dry various times during year.

Diversions
A number of canals divert water from stream above gage.

Accuracy
Fair.

Operation
Located and installed by the Los Angeles County Flood Control District and operated by Los Angeles County Flood Control District in conjunction with U.S.G.S. Water Resources Branch.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 63

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 63

Discharge measurements of San Gabriel River at Whittier Blvd. Bridge during the year ending September 30, 1933

Discharge measurements of San Gabriel River at Whittier Blvd. Bridge during the year ending September 30, 1934

Table with columns: No., Date, Made by, Weir Feet, Area of section, Mean velocity, Gage height, Discharge, Rating, Method, Mean No., G. H. Error, Time Hours, Meter No.

Table with columns: No., Date, Made by, Weir Feet, Area of section, Mean velocity, Gage height, Discharge, Rating, Method, Mean No., G. H. Error, Time Hours, Meter No.

Daily Gage Height, in Feet, and Discharge, in Second-Feet, of SAN GABRIEL RIVER at WHITTIER BLVD. BRIDGE for the Year Ending September 30, 1933

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. 63

Drainage Area 410 Square Miles, Brewster, Gage Head Continuous, Used rating table dated Oct. 1, 1932

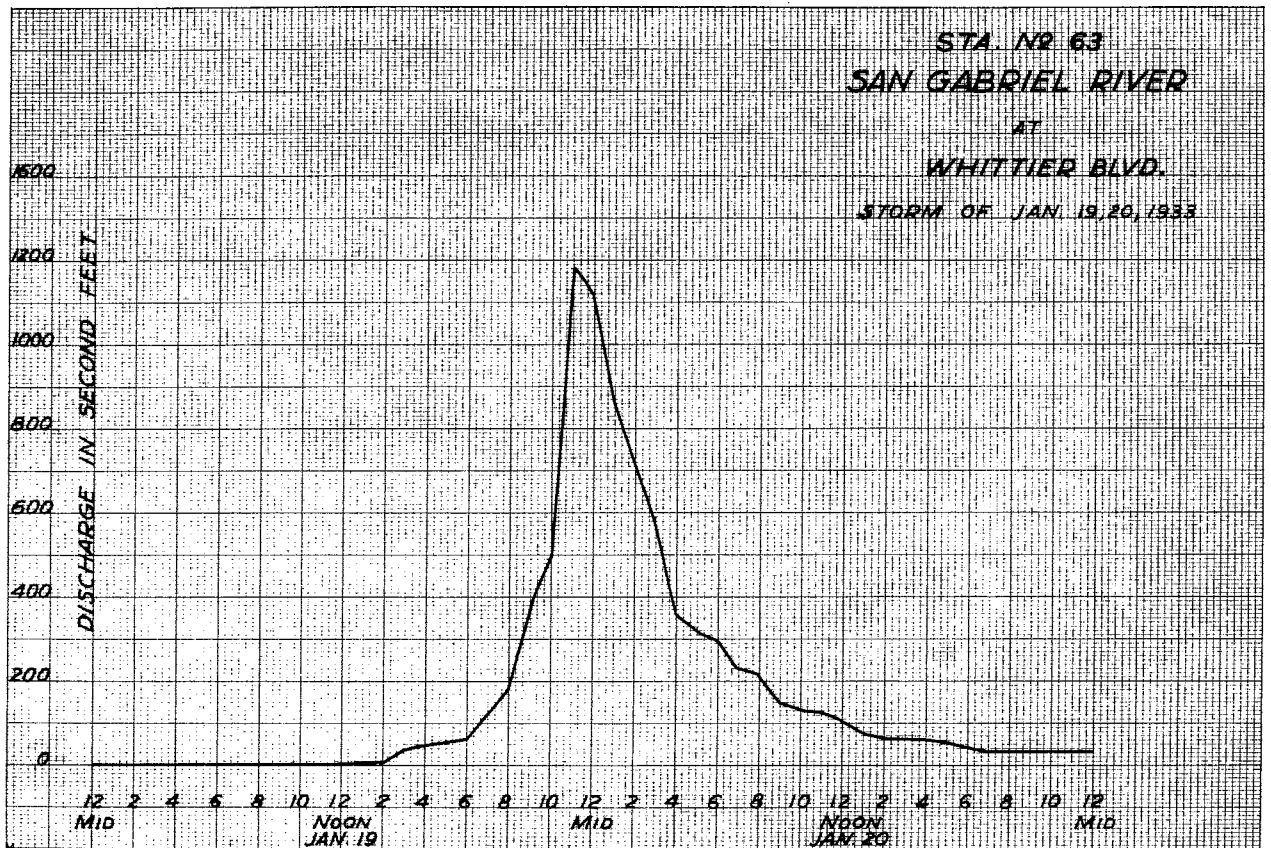
Large table with columns for months (OCTOBER to SEPTEMBER) and days (1-31), containing Gage height and Discharge data. Includes summary rows for TOTAL, Mean Daily Discharge, etc.

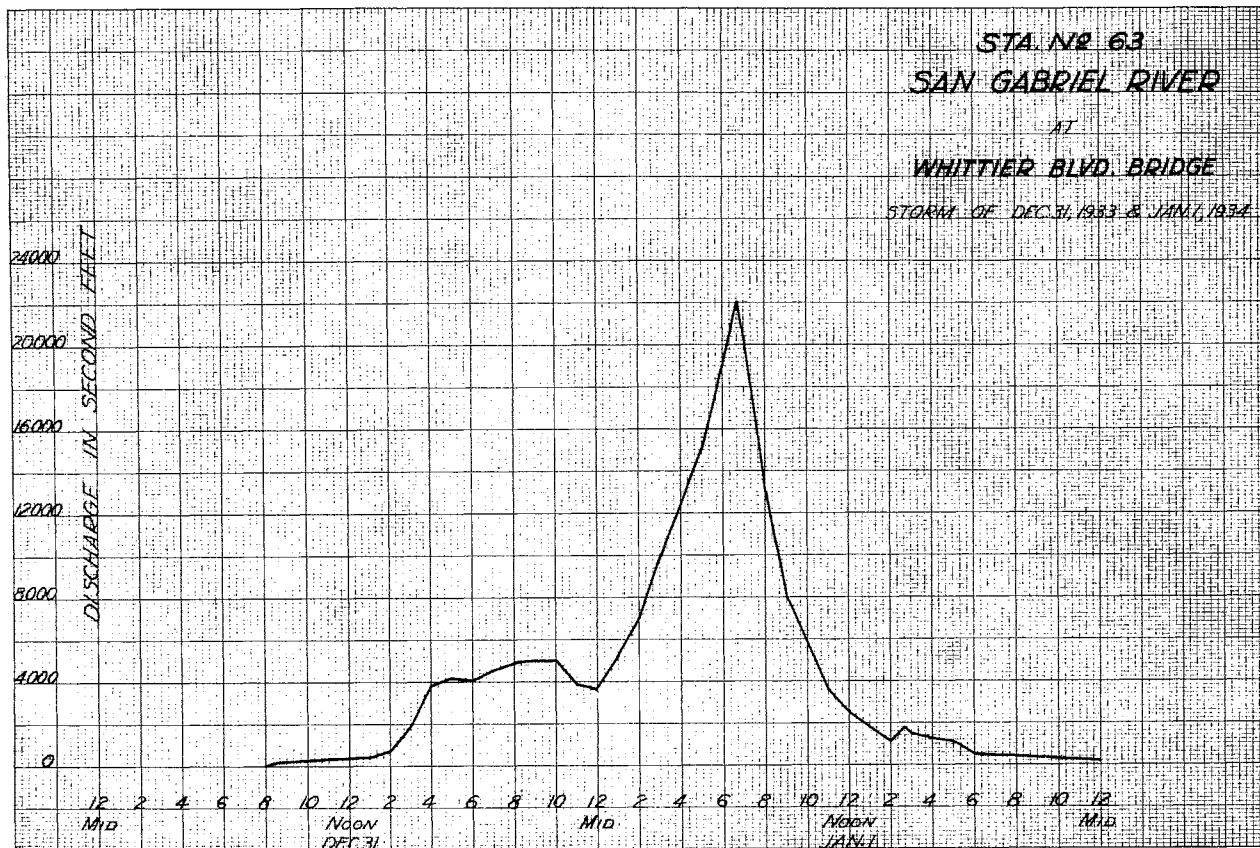
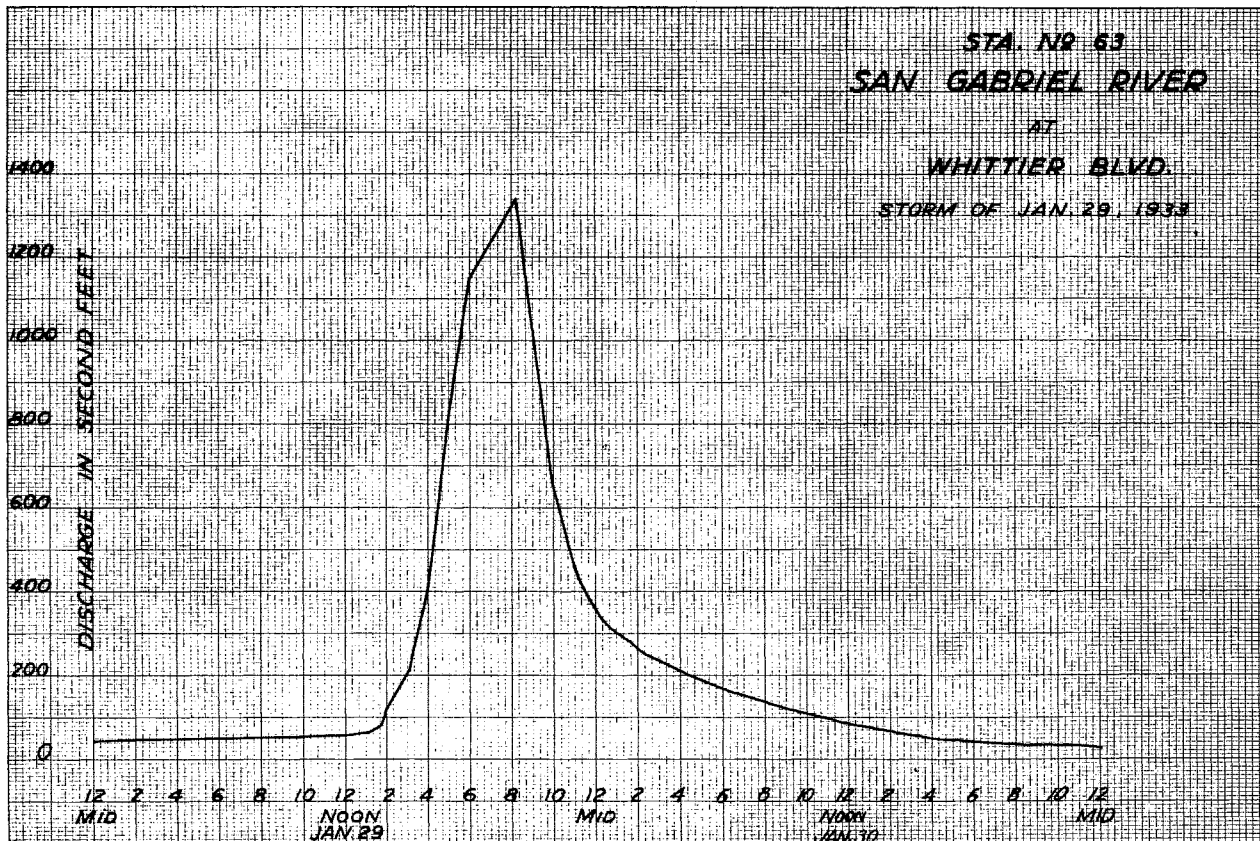
At **WHITTIER BOULEVARD BRIDGE** for the Year Ending September 30, 1934

Discharge Area **410** Square Miles. [**Browster** Observer.] Gage Road **Continuous** Used rating table dated **1932-33 & 1933-34**

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		DAY	Precipitation	Wind	Temp	Humidity	Cloud	Remarks
	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge		Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge							
1							H	5579.0	3.47	13.10	M	13.86	1	#	1.70										1							
2							M	36.07	3.41	7.50	#	13.64	2	#	1.50										2							
3							M	35.90	3.44	10.10	#	13.43	3	#	1.50										3							
4							M	25.70	3.43	9.20	#	13.21	4	#	1.60										4							
5							M	25.27	3.44	10.10	#	12.99	5												5							
6							#	24.85	3.44	10.10	#	12.77	6												6							
7							#	24.43	3.41	7.50	#	12.56	7												7							
8							#	24.01	3.47	13.10	M	12.34	8												8							
9							#	23.59	3.42	9.30	#	12.15	9												9							
10							#	23.17	3.41	7.50	#	11.96	10												10							
11							M	22.75	3.43	8.30	#	11.76	11												11							
12							#	24.30	3.43	9.20	#	11.57	12												12							
13							H	11.4	#	25.85	3.42	8.30	#	11.38	13										13							
14							H	0.62	7.00	#	27.40	3.43	9.20	#	11.18	14									14							
15							H	1.93	3.59	28.95	3.43	9.20	M	10.99	15										15							
16								3.54	21.65	#	9.20	#	10.84	16											16							
17								3.49	15.30	#	9.20	#	10.70	17											17							
18								3.44	10.10	#	9.20	#	10.55	18											18							
19								3.45	11.05	#	9.20	#	10.40	19											19							
20								3.48	14.20	#	9.20	#	10.25	20											20							
21								3.49	15.30	3.43	9.20	#	10.11	21											21							
22								3.45	11.05	3.44	10.10	M	9.96	22											22							
23								3.49	15.30	3.48	14.20	#	9.58	23											23							
24								3.47	13.10	3.53	20.30	3.43	9.20	24											24							
25								3.47	13.10	3.47	13.10	3.45	11.05	25											25							
26								3.43	9.20	3.48	12.05	3.45	11.05	26											26							
27								3.44	10.10	3.46	12.05	3.45	11.05	27											27							
28								3.45	11.05	3.45	11.05	3.43	9.20	28											28							
29								3.52	19.00	-	-	-	M	9.79	29										29							
30								3.51	17.70	-	-	-	#	2.15	30										30							
31							H	1720.0	3.52	19.00	-	-	-	#	1.80	31									31							
TOTAL								1740.33		6177.34		288.85		333.47																		
Base Daily Discharge in Second-foot								56.13		199.27		10.31		10.76																		
Second-foot per square mile																																
Run-off, depth in inches																																
Run-off in acre-foot								3451.94		12252.75		572.93		661.44																		
Maximum Mean Daily Discharge in Second-foot								1720.0		5579.0		20.30		13.86																		
Maximum Mean Daily Discharge in Second-foot								0		9.20		7.50		1.80																		

x - Gage lowered 4.0 feet. # - Discharge Interpolated. M - Measurement





LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. 237

SAN GABRIEL RIVER AT TELEGRAPH ROAD

Location
On south side of Telegraph Road Bridge, 130' from the East end of bridge, about 3 miles West of Santa Fe Springs, Los Angeles County, California.

Drainage Area
Not determined.

Installed by
Installed by State of California Division of Water Resources, November 1926. (See Bulletin No. 6) Re-established by Los Angeles County Flood Control District April 4, 1934.

Records Available
Previous to April 4, 1934 in Bulletin No. 6, State Division of Water Rights. Records from April 4, 1934 available at offices of Los Angeles County Flood Control District, Los Angeles, California.

Gage
Rational 8 day water stage recorder, installed in recorder house on top of large corrugated iron pipe stilling well, on downstream side of bridge. Staff gage fastened to bridge pier at stilling well.

Discharge Measurements
High flows measured from bridge.
Low flows measured by wading near gage.

Channel and Control
Channel - sand and gravel. No control.

Extremes of Discharge
1933-34
Maximum - Not determined.
Minimum - Dry most of the year.

Regulation
Mountain flow partially controlled by Pasadena's Morris Dam, and Los Angeles County Flood Control Dams. Valley flow uncontrolled.

Diversions
Water diverted for Power and Irrigation in the San Gabriel Canyon and at Whittier Narrows.

Accuracy
Poor.

Operation
Operated by the Los Angeles County Flood Control District.

Discharge measurements of San Gabriel River
at Telegraph Road Bridge during the year ending September 30, 1934

No.	Date	Made by	Width Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec. Ft.	Rating Percent off	Method	Mean No.	G. H. Change Tool	Time Hours	Mean No.
1	1934 4/4	OS Slaughter	2.5	0.28	0.50	3.76	0.18		Float	3	0	1/20	
2	5/8	ES Bonadiman							Dry				
3	5/17	"							Dry				
4	5/31	"							Dry				
5	6/5	"							Dry				
6	6/14	"	4.0	0.71	0.78	3.80	0.51			3	0	1/20	FC27
7	6/21	"							Dry				
8	7/18	"							Dry				

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. FC 42

SAN GABRIEL RIVER AT SPRING STREET NEAR LONG BEACH

Location
On Spring Street Bridge crossing the San Gabriel River about 4 miles east of Signal Hill, Long Beach, Los Angeles County, California.

Drainage Area
479 square miles.

Installed by
First installed by State Division of Water Rights 1924. Re-established by Los Angeles County Flood Control District, February 6, 1928.

Records Available
Records previous to February 6, 1928 at offices of State of California, Division of Water Rights. February 6, 1928 to September 30, 1934 at offices of Los Angeles County Flood Control District, Los Angeles, California.

Gage
Rational 7 day water stage recorder located in wooden shelter house set on corrugated iron stilling well attached to bridge pier on downstream side of bridge. Staff gage fastened to pier beside the stilling well.

Discharge Measurements
Low water measurements are made by wading below bridge.
High flows are measured from upstream side of bridge.

Channel and Control
Channel of sand and silt. No control.

Extremes of Discharge
No flow 1927-28, 1928-1929, 1929-1930 or 1930-1931.
1931-1932
Maximum- 4467.5 c.f.s. February 9, 1932.
Minimum- Dry most of year.
1932-1933
Maximum- 2252 c.f.s. January 20, 1933.
Minimum- Dry most of year.
1933-1934
Maximum- 14950 c.f.s. January 1, 1934.
Minimum- Dry at various times of the year.

Diversions
Irrigation canals divert water at mouth of canyon and at Whittier Narrows.

Regulation
None.

Accuracy
Fair.

Operation
Located and constructed by the Los Angeles County Flood Control District and operated by the Los Angeles County Flood Control District in conjunction with U.S.G.S. Water Resources Branch.

Discharge measurements of SAN GABRIEL RIVER
at Spring St., Long Beach during the year ending September 30, 1933

No.	Date	Made by	Width Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec. Ft.	Rating Percent off	Method	Mean No.	G. H. Change Tool	Time Hours	Mean No.
1	1933 1/20	Slaughter	111.0	46.4	1.3	3.47	60.75			.6	25	1/7	FC 27
2	1/29	Slaughter-Purdy	103.4	1746	3.5	4.33	627.2			.5	14	1/3	FC 6

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. 42

Discharge measurements of San Gabriel River
at Spring Street, Long Beach during the year ending September 30, 1934

No.	Date	Made by	Width Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec. Ft.	Rating Percent off	Method	Mean No.	G. H. Change Tool	Time Hours	Mean No.
1	1934 1/1	Slaughter-Johnson	105.	684.	9.55	8.67	6534.			.6	8	1/2	FC 6
2	1/2	McAulay-Delaney							Trace				
3	1/2	Slaughter-Johnson	14.	8.7	1.22	4.60	10.6		Float	4	0	1/18	
4	5/8	ES Bonadiman							Dry				
5	5/17	"							Dry				
6	5/31	"							Dry				
7	6/14	"							Dry				
8	7/22	"							Dry				

Daily Gage Height, in Feet, and Discharge, in Second-Feet, of **SAN GABRIEL RIVER**

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. **42**

At **Spring Street** for the Year Ending September 30, 19 **33**.

Drainage Area **479** Square Miles. (**O. E. Slaughter** Observer.)

Gage Read **Continuously by Au Recorder.**

Used rating table dated **10-1-32 to 9-30-33**

Table with columns for months (OCTOBER to SEPTEMBER) and days (1-31). Rows include gage height, discharge, and various totals. Includes notes on gage heights and discharge curves.

Daily Gage Height, in Feet, and Discharge, in Second-Feet, of **SAN GABRIEL RIVER**

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. **45**

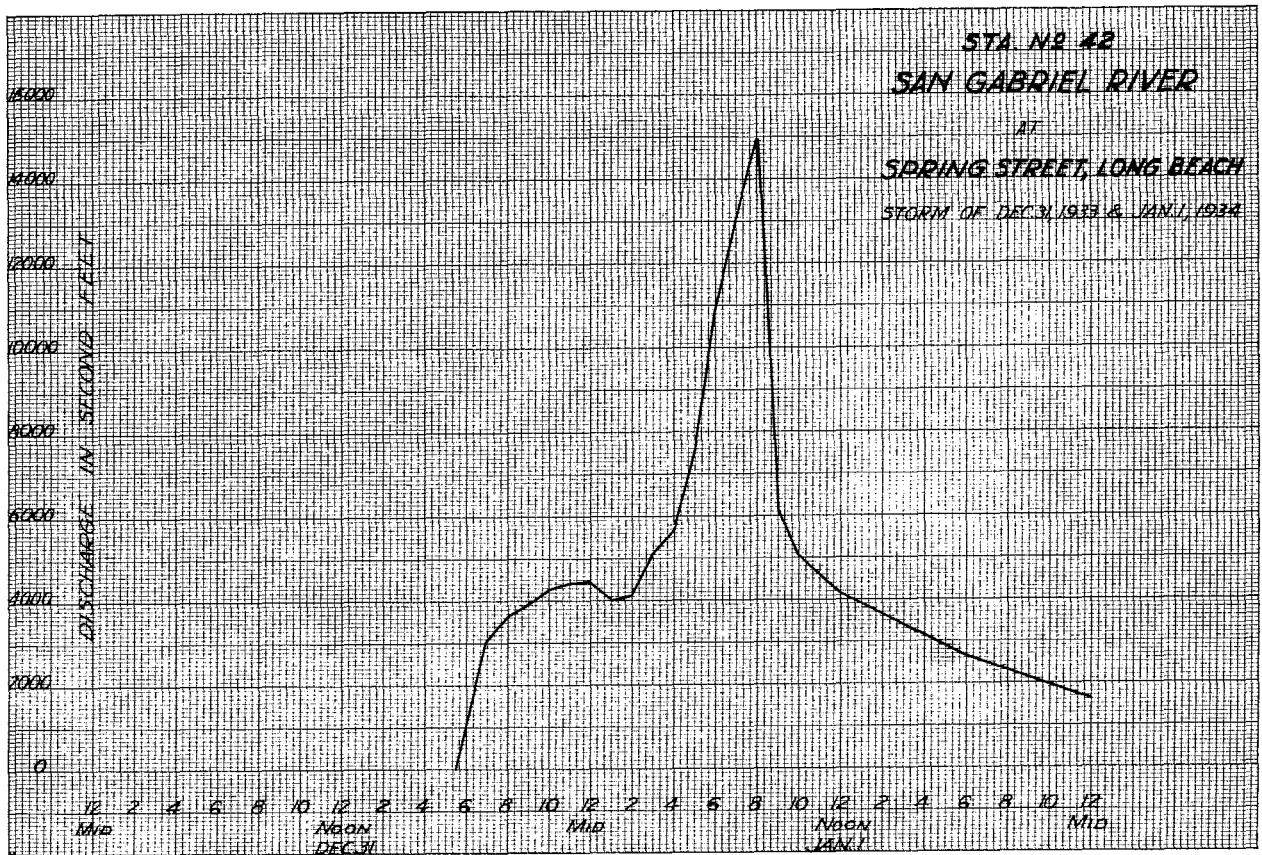
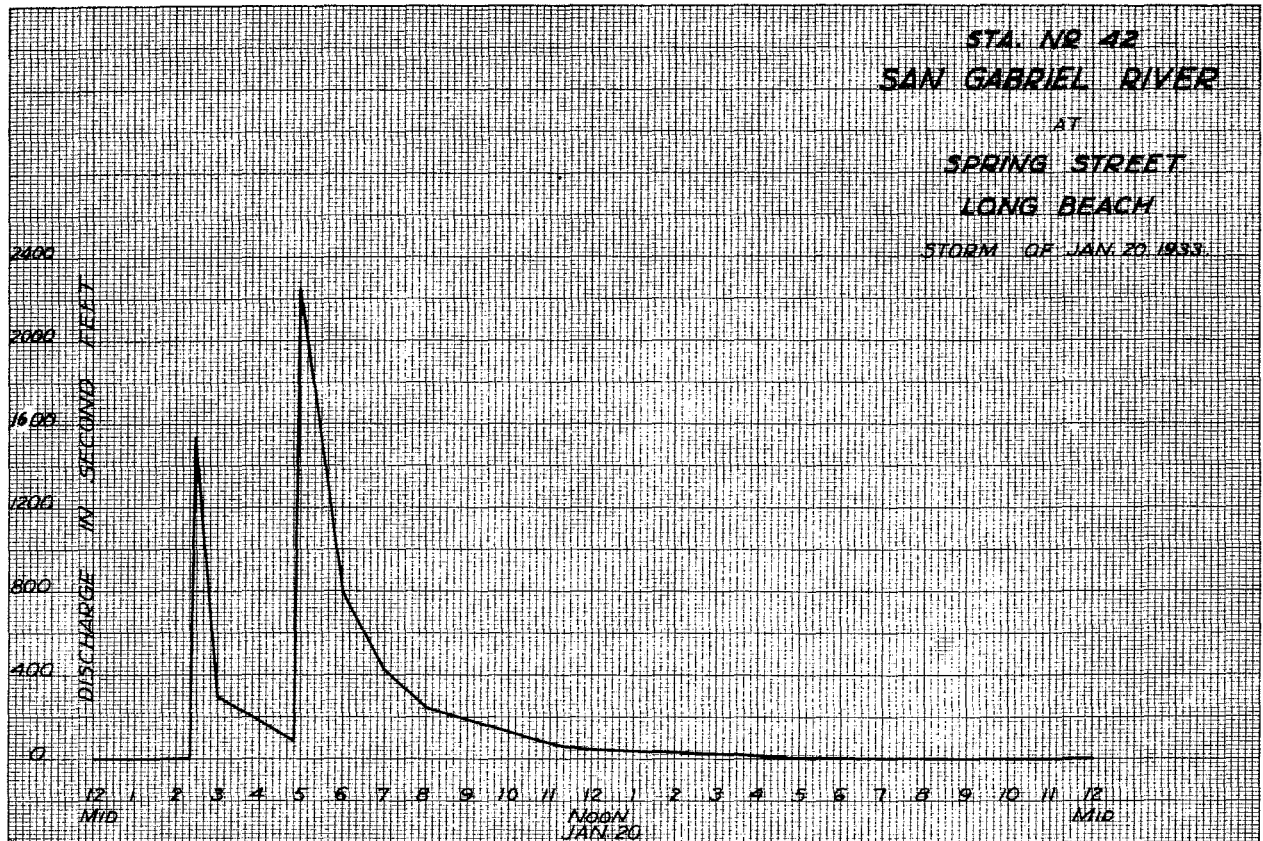
At **SPRING STREET, LONG BEACH** for the Year Ending September 30, 19 **34**.

Drainage Area **479** Square Miles. (**O. E. Slaughter** Observer.)

Gage Read **Continuous**

Used rating table dated **1933-34**

Table with columns for months (OCTOBER to SEPTEMBER) and days (1-31). Rows include gage height, discharge, and various totals. Includes notes on discharge curve and velocity.



SAN JOSE CREEK AT WORKMAN MILL ROAD BRIDGE

Location
Workman Mill Road Bridge over San Jose Creek about 3 miles north of Whittier, Los Angeles County, California.

Drainage Area
65 square miles.

Installed by
Recorder Station and Cable Station established in 1923 about 2000' above Workman Mill Road Bridge by the State of California, Division of Water Rights. Recorder re-located January 2, 1929 by Los Angeles County Flood Control District on downstream side of Workman Mill Road Bridge. Cable Station moved to 200' above Workman Mill Road Bridge in March, 1931.

Records Available
Records previous to January 2, 1929 published in State of California, Division of Water Rights, Bulletins. From January 2, 1929 to September 30, 1934 at offices of Los Angeles County Flood Control District, Los Angeles, California.

Gage
A continuous water stage recorder installed in small wooden shelter house on top of corrugated iron pipe stilling well fastened to downstream end of bridge pier. Vertical staff gage set on bridge pier near stilling well.

Discharge measurements
High water flows are measured from cable car 200' above bridge. Low flows are measured by wading near station.

Channel and control
Channel - shifting sand and silt. No control.

Extremes of Discharge
1928-1929
Maximum- 77 c.f.s. March 10, 1929.
Minimum- Dry at various times during year.
1929-1930
Maximum- 264 c.f.s. January 15, 1930.
Minimum- Dry at various times during year.
1930-1931
Maximum- 323 c.f.s. February 4, 1931.
Minimum- 0.04 c.f.s. June 2 and 7, 1931.
1931-1932
Maximum- 1535 c.f.s. February 9, 1932.
Minimum- 0.06 c.f.s. September 17, 1932.
1932-1933
Maximum- 825 c.f.s. January 29, 1933.
Minimum- 0.01 c.f.s. various times of year.
1933-1934
Maximum- 13071.5 c.f.s. January 1, 1934.
Minimum- Dry several times in 1933.

Diversion
None above gage.

Regulation
None.

Operation
Located and constructed by the Los Angeles County Flood Control District and operated by the Los Angeles County Flood Control District in conjunction with U.S.G.S. Water Resources Branch.

F. C. Div. Form 104A

**LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT**

Station No. 48

Discharge measurements of San Jose Creek
at Workman Mill Road Bridge, during the year ending September 30, 1933

No.	Date	Made by	Width Feet	Area of section Sq. ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec.-ft.	Rating	Method	Mean No.	G. Ht. Change Total	Time Hours	Mean No.
23	1/29	Brewster	62.0	98.04	3.30	3.15	323.8	.6	10	-.05	1/3	271666	
24	1/30	"	28.0	19.92	2.01	2.14	40.06	.6	7	-.02	1/4	"	
25	1/31	"	3.0	.74	.92	1.58	.69	.6	3	0	1/12	"	
26	2/2	"	3.0	.54	.80	1.54	.43	.6	3	0	1/12	"	
27	2/9	"	3.0	.48	.68	1.49	.33	.6	3	0	1/12	"	
28	2/16	"	1.5	.24	.54	1.48	.13	.6	3	0	1/12	"	
29	2/23	"	1.5	.23	.78	1.50	.18	.6	3	0	1/12	"	
30	3/2	"	1.0	.25	.60	1.48	.15	.6	2	0	1/12	"	
31	3/9	"	1.0	.24	.68	1.48	.15	.6	2	0	1/12	"	
32	3/16	"	1.5	.17	.59	1.47	.10	.6	3	0	1/12	"	
33	3/23	"	1.0	.20	.50	1.47	.10	.6	2	0	1/12	"	
34	3/30	"	1.0	.21	.57	1.48	.12	.6	2	0	1/12	"	
35	4/6	"	1.0	.15	.73	1.50	.11	.6	2	0	1/12	"	
36	4/13	"	1.0	.18	.61	1.50	.11	.6	2	0	1/12	"	
37	4/20	"	1.5	.33	.64	1.66	.21	.6	3	0	1/12	"	
38	4/27	"	1.0	.13	.85	1.56	.11	.6	2	0	1/12	"	
39	5/2	"	1.0	.22	.50	1.55	.11	.6	2	0	1/12	"	
40	5/11	"	1.0	.12	1.00	1.61	.12	.6	2	0	1/12	"	
41	5/18	"	1.0	.20	.65	1.63	.13	.6	2	0	1/12	"	
42	5/25	"	1.0	.16	.62	1.62	.10	.6	2	0	1/12	"	
43	6/1	"	1.0	.20	.55	1.62	.11	.6	2	0	1/12	"	
44	6/6	"	1.0	.22	.50	1.62	.11	.6	2	0	1/20	"	
45	6/13	"	1.0	.10	.60	1.62	.06	.6	2	0	1/12	"	
46	6/20	"	1.0	.18	.44	1.63	.08	.6	2	0	1/12	"	
47	6/28	Brewster	0.5	.07	1.00	1.62	.07	.6	1	0	1/12	271666	
48	7/6	"	0.5	.10	.50	1.59	.05	.6	1	0	1/30	"	
49	7/13	"	0.5	.07	.86	1.60	.06	.6	1	0	1/30	"	
50	7/20	"				1.57	0.04	Est.					
51	7/27	"				1.50	.01	"					
52	8/3	"	0.5	.10	.40	1.57	.04	.6	1	0	1/30	271666	
53	8/10	"	0.5	.09	.33	1.56	.03	.6	1	0	1/30	"	
54	8/17	"				1.50	.01	Est.					
55	8/24	"	0.5	.07	.57	1.52	.04	.6	1	0	1/30	"	
57	8/31	"	1.0	.14	.50	1.57	.07	.6	2	0	1/20	"	
58	9/7	"	0.5	.07	.86	1.52	.06	.6	1	0	1/30	"	
59	9/14	"	1.0	.13	.53	1.55	.07	.6	2	0	1/12	"	
60	9/21	"	1.0	.10	.50	1.53	.05	.6	2	0	1/30	"	
61	9/28	"	1.0	.12	.42	1.52	.05	.6	2	0	1/30	"	

F. C. D. Form 104A IM 3-34

**LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT**

Station No. 48

Discharge measurements of San Jose Creek
at Workman Mill Road Bridge, during the year ending September 30, 1934

No.	Date	Made by	Width Feet	Area of section Sq. ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec.-ft.	Rating	Method	Mean No.	G. Ht. Change Total	Time Hours	Mean No.
1	10/5	Brewster	1.0	0.18	0.39	1.54	0.07	.6	2	-	1/20	271666	
2	10/11	"	1.0	0.20	0.61	1.58	0.13	.6	2	-	1/20	"	
3	10/19	"	0.5	0.07	0.29	1.47	0.02	.6	1	-	1/20	"	
4	10/23	"	0.5	0.06	0.50	1.48	0.03	.6	1	-	1/20	"	
5	11/2	"	1.0	0.12	0.25	1.50	0.03	.6	2	-	1/20	"	
6	11/9	"	1.0	0.17	0.24	1.50	0.04	.6	2	-	1/20	"	
7	11/16	"	0.5	0.08	0.38	1.49	0.03	.6	1	-	1/20	"	
8	11/29	"	0.5	0.09	0.44	1.51	0.04	.6	1	-	1/30	"	
9	12/7	"	0.5	0.05	0.20	1.46	0.01	.6	1	-	1/30	"	
10	12/13	"	51.0	38.05	1.66	2.21	63.07	.6	9	-.02	1/4	"	
11	12/13	Brewster-Lindsay	17.0	12.08	1.07	1.85	12.98	.6	5	-	1/6	"	
12	12/14	Brewster	4.0	0.79	0.97	1.51	0.77	.6	4	-	1/15	"	
13	12/21	"	1.0	0.11	0.36	1.44	0.04	.6	2	-	1/30	"	
14	12/28	"	0.5	0.06	0.50	1.44	0.03	.6	1	-	1/30	"	
15	12/30	"	1.5	0.35	0.63	1.47	0.22	.6	3	-	1/20	"	
16	12/31	"	78.0	93.0	3.19	2.95	296.	.6	8	-	1/3	"	

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 46

Discharge measurements of San Jose Creek at Workman Mill Road Bridge during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of Section, Mean Velocity, Gage Height, Discharge, Rating, Method, Mean No., G. H. Stage, Time, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 48

Discharge measurements of San Jose Creek at Workman Mill Road Bridge during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of Section, Mean Velocity, Gage Height, Discharge, Rating, Method, Mean No., G. H. Stage, Time, Meter No.

F. C. D. Form 105-1000-9-31

Daily Gage Height, in Feet, and Discharge, in Second-Feet, of SAN JOSE CREEK At Workman Mill Road Bridge for the Year Ending September 30, 1933

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. 48

Drainage Area 85 Square Miles, Brewster, Gage Road Continuous, Used rating table dated Sept. 30, 1933

Large table with columns for months (OCTOBER to SEPTEMBER) and days (1 to 31), including Gage height, Discharge, and various summary statistics at the bottom.

Name: WORKMAN MILL ROAD BRIDGE for the Year Ending September 30, 1934

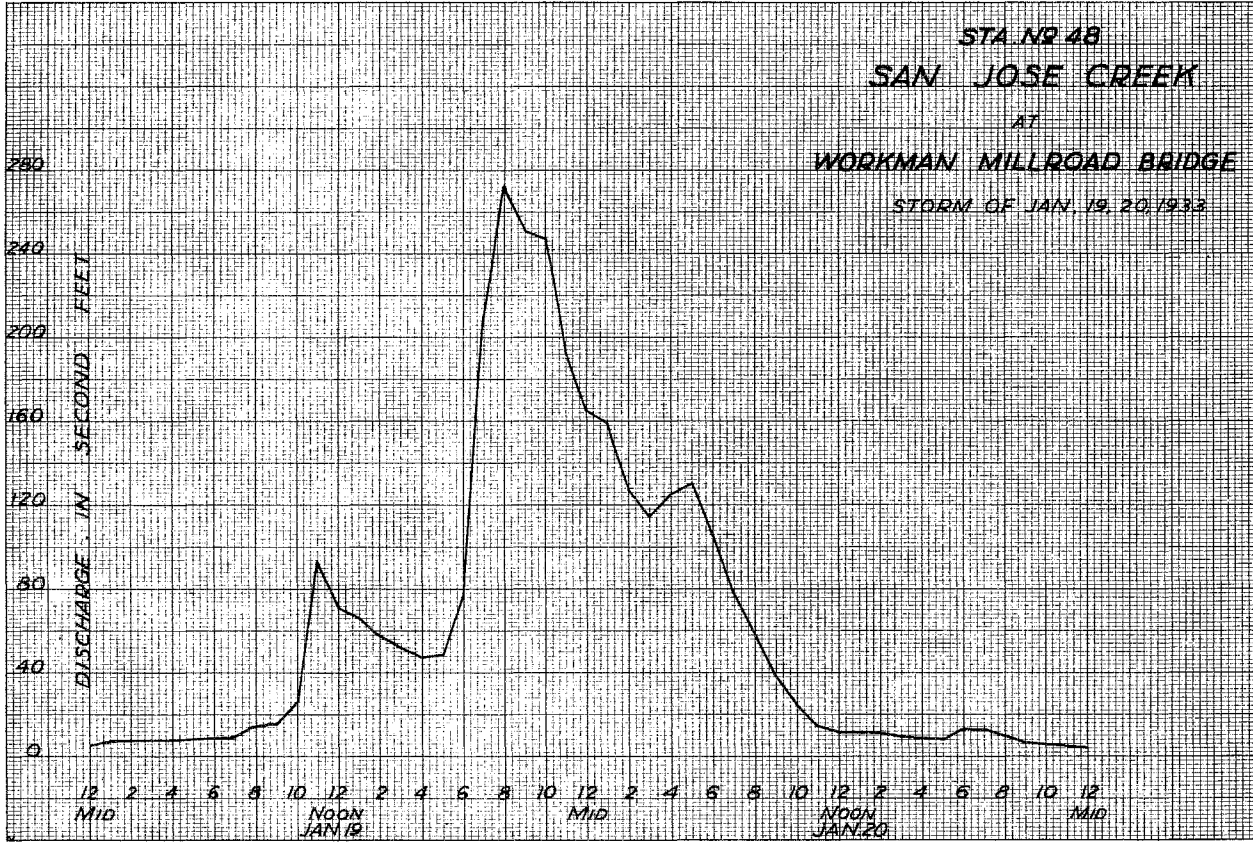
Drainage Area: 85.2 Square Miles

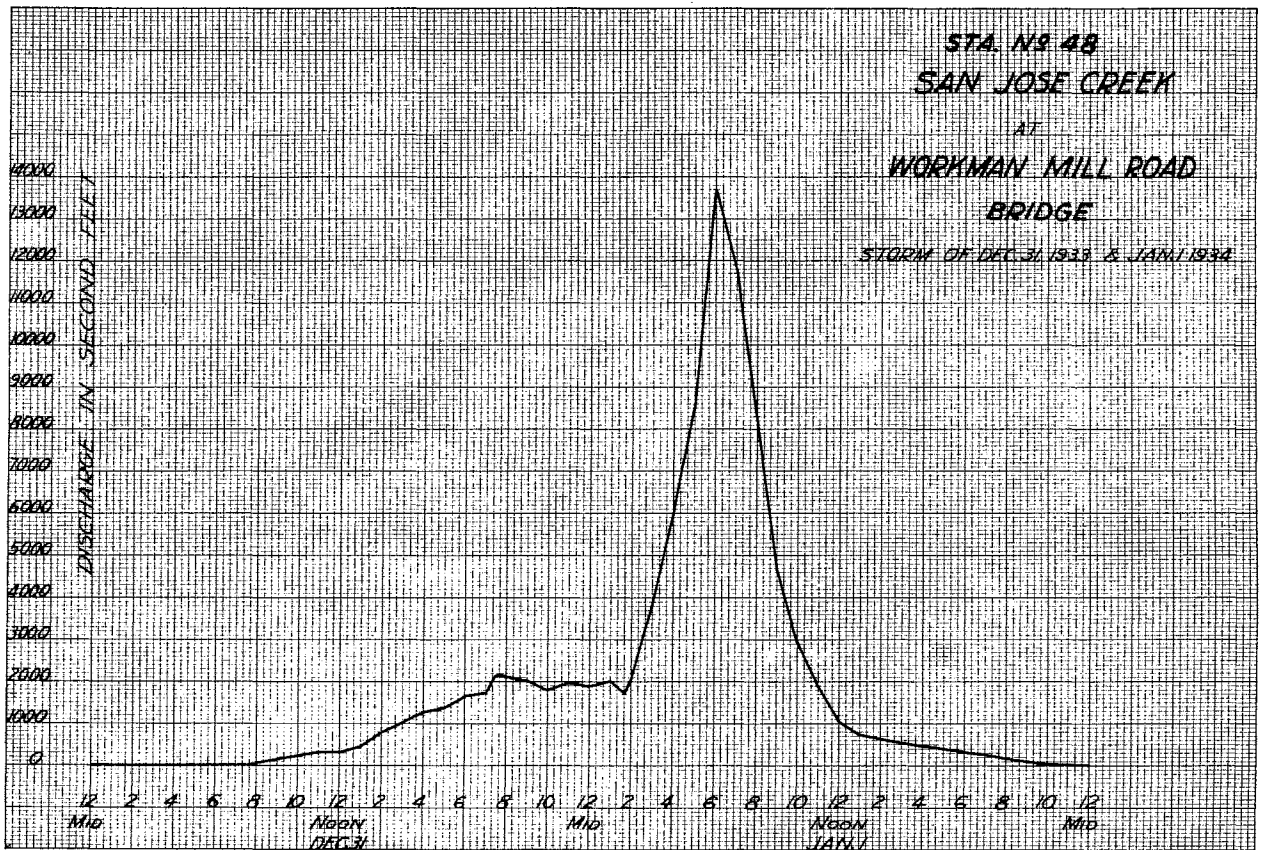
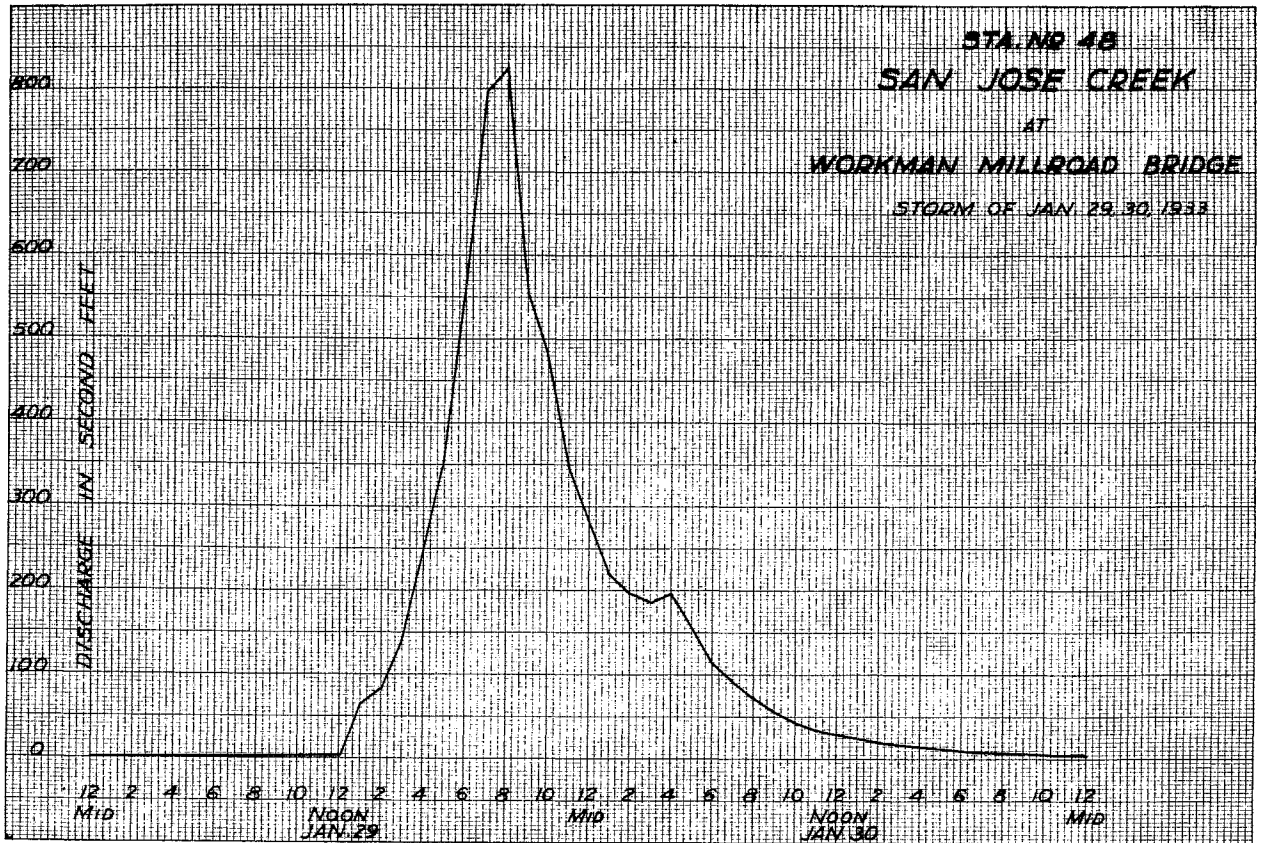
Brewster (Observer)

Gage Read: Continuous

Used rating table dated:

Table with columns for months (October to September), gage height, discharge, and daily measurements. Includes summary rows for totals and various discharge metrics.





F-193 R

SANTA ANITA WASH BELOW ARROW HIGHWAY

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 193

Location On the east bank of Santa Anita Wash, 1000 ft. below Arrow Highway. About 2 miles southeast of Azusa.

Discharge measurements of Santa Anita Wash

Drainage Area 19.79 square miles

at Below Arrow Highway during the year ending September 30, 1933

Installed by The Los Angeles County Flood Control District, May 1, 1932.

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec.-ft., Rating Percent, Method, Mean gage No., G. H. Change Total, Time Hours, Meter No.

Records Available May 1, 1932 to September 30, 1934 stream measurements at the offices of the Los Angeles County Flood Control District, Los Angeles, California.

Gage National 5 day automatic water stage recorder installed in wooden shelter house on corrugated iron pipe stilling wall. Staff gage fastened to outside stilling wall.

Discharge Measurements Low flows measured by wading near gage. High flows measured from foot bridge 25 feet above gage.

Channel and Control Channel sand and gravel. No control.

Extremes of Discharge 1932-1933 Maximum - Not determined. Minimum - Dry most of the year. 1933-1934 Maximum - 399.1 c.f.s. January 1, 1934. Minimum - Dry most of the year.

F. C. Dist. Form 194A 124 734

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 193

Diversions None.

Discharge measurements of Santa Anita Wash

Regulation 13.55 square miles of drainage area controlled by Dam.

at Below Arrow Highway during the year ending September 30, 1934

Accuracy Fair.

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec.-ft., Rating Percent, Method, Mean gage No., G. H. Change Total, Time Hours, Meter No.

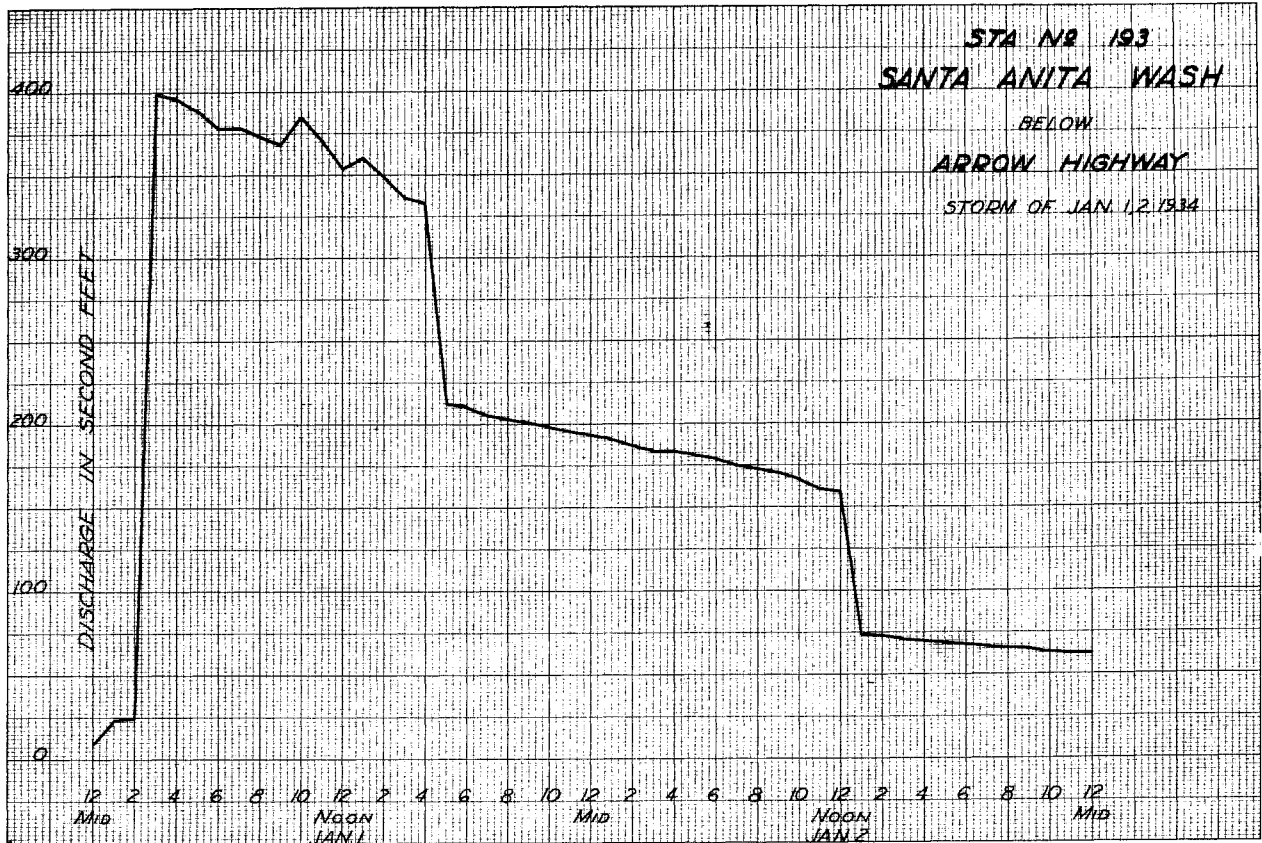
Operation Located, constructed and operated by the Los Angeles County Flood Control District.

Daily Gage Height, in Feet, and Discharge, in Second-Feet, of SANTA ANITA WASH at Below Arrow Highway for the Year Ending September 30, 1934 (13.55 controlled by dams) Drainage Area 19.79 Square Miles. R. E. Lindsay Observer.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. 193

Main data table with columns for months (OCTOBER to SEPTEMBER) and rows for gage height and discharge. Includes summary rows for TOTAL, Mean Daily Discharge, Second-foot per square mile, Run-off, and Maximum Mean Daily Discharge.



F-92 R

9 C. Dist. Form 104A

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. 92

SANTA OLARA RIVER AT OLD HIGHWAY BRIDGE
4 MILES WEST OF SAUGUS, CALIF.

Location
On downstream end of south of old Highway Bridge, about
4 miles west of Saugus, Los Angeles County, California.

Discharge measurements of SANTA OLARA RIVER

at Old Hwy. Bridge 4 mi. West of Saugus, during the year ending September 30, 1933.

Drainage Area
355 square miles.

Records Available
October 1, 1929 to January 18, 1930 weekly measurements only.
January 18, 1930 to September 30, 1934 recorder records available at offices of the Los Angeles County Flood Control District, Los Angeles, California.

Gage
A continuous water stage recorder in small house on top of corrugated iron pipe stilling well fastened to south bridge pier on downstream side; staff gage same location.

Discharge Measurements
High water flows made from cable at upstream end of pier.
Low flows made by wading.

Channel and Control
Channel sand and Gravel. No control.

Extremes of Discharge
1929-1930
Maximum- 193.25 o.f.s. March 15, 1930.
Minimum- 0.02 o.f.s. July 16, 1930.
1930-1931
Maximum- 230.8 o.f.s. February 17, 1931.
Minimum- 0.11 o.f.s. July 2, 3 and 4, 1931.
1931-1932
Maximum- 205.8 o.f.s. February 9, 1932.
Minimum- 0.10 o.f.s. September 22, 1932.
1932-1933
Maximum- 618.4 o.f.s. January 19, 1933
Minimum- Dry on August 10, 1933.
1933-1934
Maximum- 3866.4 o.f.s. January 1, 1934.
Minimum- 0.01 o.f.s. various times in October, 1933.

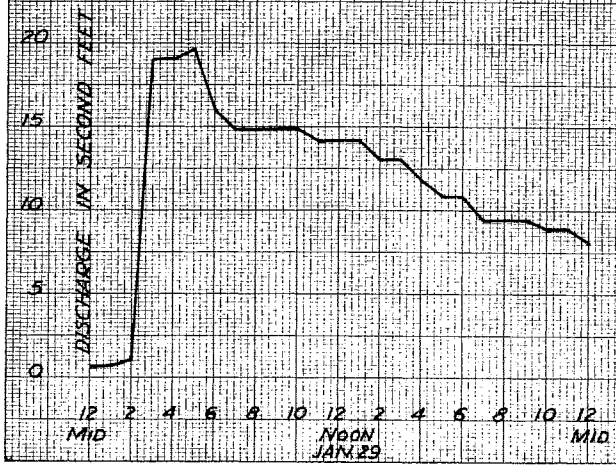
Diversions
None near station.

Regulation
None

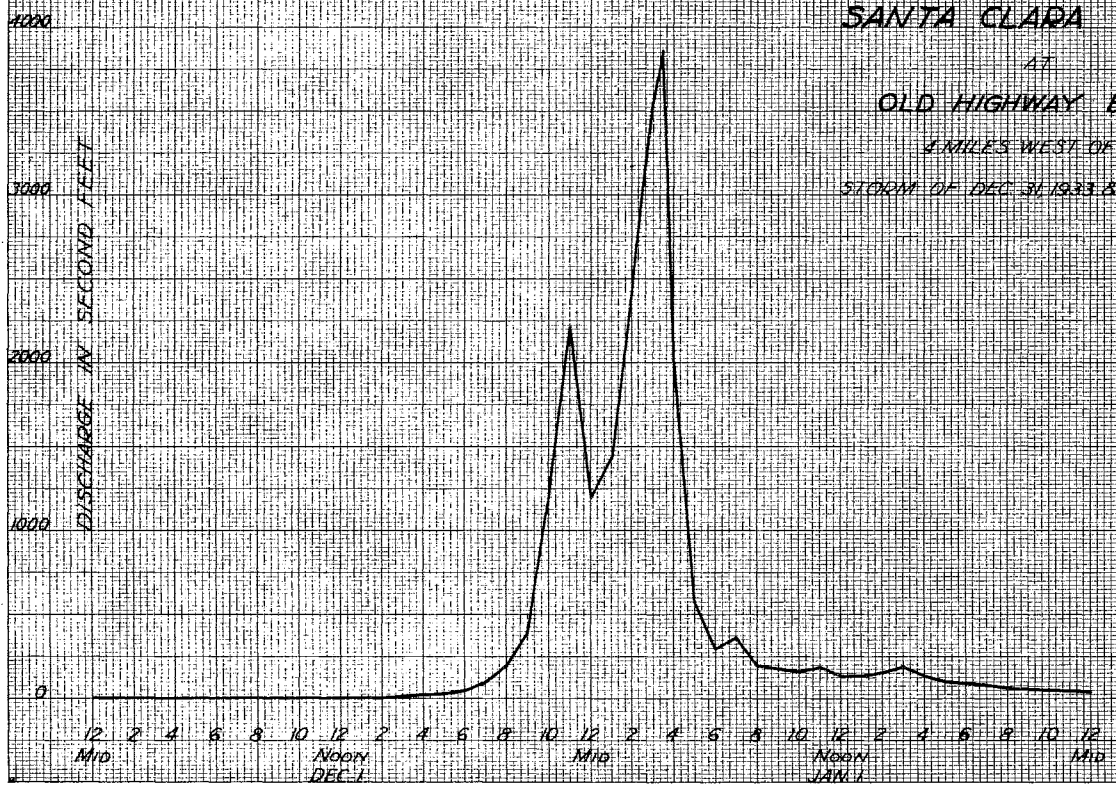
Operation
Located and constructed by the Los Angeles County Flood Control District and operated by the Los Angeles County Flood Control District in conjunction with U.S.G.S. Water Resources Branch.

No.	Date	Made by	Width Feet	Area of section Sq.-ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec.-ft.	Rating Factor diff.	Rating Method	Mean stage No.	G. Ht. Stage Total	Time Hours	Meter No.
1932													
1	10/7	Luce	2.7	.37	.62	9.30	.23	.6	4	0	1/12	FC 13	
2	12/16	"	3.0	.67	.53	9.42	.36	.6	3	0	1/12	"	
1933													
3	1/16	Luce-Lindsey	3.25	7.572	.46	10.83	18.63	.6	11	-.02	1/6	FC 13	
4	1/17	"	4.8	.99	.77	10.72	0.77	.6	5	0	1/12	"	
5	1/19	"	36.0	47.45	4.05	12.03	192.1	.6	7	-.02	1/3	Cable 25	
6	1/20	"	12.9	3.152	0.11	11.95	6.35	.6	12	0	1/4	FC 13	
7	1/26	Luce	7.5	.781	.05	10.17	.76	.6	7	0	1/12	"	
8	1/30	Luce-Marchand	18.0	3.152	.11	10.83	6.66	.6	11	0	1/6	"	
9	2/10	Luce	4.5	.54	.98	10.14	.53	.6	7	0	1/6	"	
10	2/18	Marchand	4.7	.48	1.10	10.16	.52	.6	9	0	1/6	FC 25	
11	2/25	Luce	4.4	.37	.11	10.09	.43	.6	7	0	1/6	FC 25	
12	3/10	"	4.0	4.0	.85	9.98	.34	.6	7	0	1/12	FC 13	
13	3/16	"	2.3	.43	1.13	9.89	.49	.6	5	0	1/12	"	
14	3/23	"	2.0	.38	.92	10.30	.35	.6	4	0	1/12	"	
15	3/31	"	4.7	.53	.94	10.34	.50	.6	8	0	1/6	"	
16	4/20	"	2.3	.29	1.10	10.40	.32	.6	5	0	1/12	"	
17	5/4	"	2.4	.32	1.34	10.26	.44	.6	5	0	1/12	"	
18	5/22	"	2.5	.23	.96	10.28	.22	.6	5	0	1/12	"	
19	6/2	"	3.0	.27	.84	10.34	.20	.6	5	0	1/6	"	
20	6/15	"	2.1	.17	.05	10.20	.10	.6	4	0	1/12	"	
21	6/22	"	1.8	.13	.04	10.30	.08	.6	3	0	1/12	"	
22	6/30	"	1.5	.15	.47	10.2	.07	.6	3	0	1/12	"	

STA. NO. 92
 SANTA CLARA RIVER
 AT
 OLD HIGHWAY BRIDGE
 STORM OF JAN. 29, 1933



STA. NO. 92
 SANTA CLARA RIVER
 AT
 OLD HIGHWAY BRIDGE
 4 MILES WEST OF SAUGUS
 STORM OF DEC. 31, 1933 & JAN. 1, 1934



LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 194

SAWPIT WASH ABOVE ARROW HIGHWAY

Location On the north end of the west wing wall of a culvert at Langdon Avenue east of Peck Road, Monrovia, Los Angeles County, California.

Discharge measurements of Sawpit Wash at near Above Arrow Highway during the year ending September 30, 1933

Drainage Area Not determined.

Installed by The Los Angeles County Flood Control District, February 22, 1932.

Records Available February 22, 1932 to September 30, 1934 at the offices of the Los Angeles County Flood Control District.

Gage National 5 day automatic water stage recorder installed in a small house on top of a corrugated iron pipe stilling well. Staff gage on wing wall of culvert.

Discharge Measurements Measurements are made by wading above gage.

Channel and Control Channel - sand and small boulders. Control - concrete culvert below station forms a control.

Extremes of Discharge 1932-1933 Maximum - 21.56 c.f.s. January 19, 1933. Minimum - Dry most of the year. 1933-1934 Maximum - Not determined. Minimum - Dry most of the year.

Diversions None.

Regulation Sawpit Dam regulates mountain flow.

Accuracy Fair.

Operation Located and installed by the Los Angeles County Flood Control District and operated by the Los Angeles County Flood Control District in conjunction with U.S.G.S. Water Resources Branch.

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec.-ft., Rating Factor, Method, Mean stage, G. H. change Total, Time Hours, Meter No.

F. C. Dist. Form 104A IM 3-34

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 194

Discharge measurements of Sawpit Wash at near Above Arrow Highway during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec.-ft., Rating Factor, Method, Mean stage, G. H. change Total, Time Hours, Meter No.

There was no appreciable runoff during 1933-34 except on December 31, 1933 and January 1, 1934. During this storm the recorder was damaged and no record was obtained. The estimated peak was 200 c.f.s.

F. C. Dist. Form 105-1000-9-31

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of Sawpit Wash Above Arrow Highway for the Year Ending September 30, 1933.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. 194

Main data table with columns for months (OCTOBER to SEPTEMBER) and days (1-31). Includes sub-columns for Gage height and Discharge. Includes summary rows for TOTAL, Mean Daily Discharge, Second-foot per square mile, Run-off, etc.

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. 185

F-185 B

SEPULVEDA CREEK AT CHARNOCK ROAD

Location

On east wing wall at the downstream side of bridge where Charnock Road crosses Sepulveda Creek, about 1200 feet west of Sawtelle Boulevard, about 1 mile north of Albright City, Los Angeles County, California.

Discharge measurements of Sepulveda Creek

at Charnock Road during the year ending September 30, 1933

Drainage Area

25.68 square miles.

Installed by

Los Angeles County Flood Control District, January 1, 1932.

Records Available

January 1, 1932 to October 1, 1932 stream measurements only. October 1, 1932 to September 30, 1933 recorder records. These records are available at the office of the Los Angeles County Flood Control District, Los Angeles, California.

Gage

Stevens 8 day automatic water stage recorder installed in recorder house on top of corrugated iron pipe stilling well fastened to wing wall of bridge. Staff gage on stilling well.

Discharge Measurements

High flows measured from foot bridge 600 feet below gage. Low flows measured by wading near gage.

Channel and Control

Channel - adobe and sand. Control - 1 foot diversion weir constructed 20 feet below recorder.

Extremes of Discharge

1932-1933
Maximum - 834.0 c.f.s. January 29, 1933.
Minimum - Dry August 2, 1933.
1933-1934
Maximum - 1152.3 c.f.s. December 31, 1933.
Minimum - Dry various times during the year.

Diversions

None above station.

Regulation

None above station.

Accuracy

Good for small flows. Poor for high flows due to water breaking through banks above station.

Operation

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

No.	Date	Made by	Width Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec.-ft.	Rating	Method	Mean No.	G. H. Total	Time Hours	Meter No.
23	1/19	Hardgrove-Vandergoof	29.0	74.3	4.7	6.725	352.9	.6	7	+05	1/4		282960
23A	1/19	Hardgrove-Vandergoof	22.	32.2	3.71	5.67	119.4	.6	6	-.05	1/6		282881
24	1/20	Hardgrove-Keifer	25.	35.4	4.64	6.15	164.7	.6	7	-.10	1/6		FO 20
25	1/22	"	22.	24.6	4.06	5.6	100.	.6	11	0	0		
26	1/23	"	22.	18.8	4.39	5.47	82.5	.6	11	-.05	1/6		
27	1/23	"	22.	17.9	3.90	5.42	70.10	.6	6	-.05	1/6		
28	1/25	Allen-Hillman	23.	26.7	3.72	5.71	99.21	.6	6	-.18	1/6		FO 1
29	1/25	"	22.	21.4	3.70	5.54	78.70	.6	12	-.16	1/10		
30	1/27	Hardgrove				3.34	0.14		Weir				
31	1/29	"	25.0	34.6	4.55	6.07	156.6	.6	7	+03	1/4		282891
32	1/29	"	25.0	38.6	4.91	6.09	189.5	.6	7	+02	1/6		
33	1/29	"	27.0	25.5	4.60	6.05	117.7	.6	7	+10	1/6		
34	1/29	Allen-Hillman	30.0	119.	5.98	7.89	713.0	.6	9	-.03	1/3		FO 1
34A	1/29	"	30.0	121.	6.17	7.86	746.6	.6	9	-.02	1/4		
35	1/30	Hardgrove-MoBride	3.	0.63	2.11	3.60	1.33	.6	3	0	0		282881
36	2/3	Hardgrove				3.14	0.27		Weir				
37	2/10	"				3.14	0.20		"				
38	2/17	"				3.07	0.10		"				
39	2/24	"				3.15	0.03		"				
40	3/3	"				3.10	0.08		"				
41	3/10	"				3.07	0.05		"				
42	3/17	"				3.32	0.07		"				
43	3/24	"				3.08	0.04		"				
44	3/31	"				3.34	0.19		"				
45	4/7	Hardgrove				3.03	0.04		Weir				
46	4/14	"				3.23	0.14		"				
47	4/21	"				3.20	0.10		"				
48	4/28	"				3.22	0.22		"				
49	5/2	Hardgrove-Bollinger				3.09	0.12		"				
50	5/12	"				3.08	0.02		"				
51	5/19	"				3.17	0.19		"				
52	5/26	"				3.14	0.16		"				
53	6/2	"				3.08	0.03		"				
54	6/9	"				3.08	0.03		"				
55	6/16	"				3.10	0.05		"				
56	6/23	"				3.08	0.03		"				
57	6/30	"				3.11	0.11		"				
58	7/7	"				3.11	0.04		"				
59	7/14	"				3.17	0.09		"				
60	7/21	"				3.16	0.18		"				
61	7/28	Hardgrove				3.18	0.12		Weir				
62	8/4	"				3.13	.09		"				
63	8/11	"				3.20	0.06		"				
64	8/18	"				3.28	0.18		"				
65	8/24	"				3.08	0.06		"				
66	9/5	Bollinger	1.6	.13	.92	3.07	.12		Float				
67	9/14	Hardgrove				3.10	0.03		Weir				
68	9/21	"				3.11	0.10		"				
69	9/29	"				3.06	0.02		"				

F. C. Dist. Form 104A

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. 185

Discharge measurements of Sepulveda Creek

at Charnock Road during the year ending September 30, 1933

No.	Date	Made by	Width Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec.-ft.	Rating	Method	Mean No.	G. H. Total	Time Hours	Meter No.
1	10/6	Irwin				3.38	.35		Weir				
2	10/14	"				3.38	.25		"				
3	10/21	Hardgrove				3.39	.16		"				
4	10/28	"				3.45	.19		"				
5	11/4	"				3.37	.18		"				
6	11/10	"				3.39	.17		"				
7	11/18	"				3.40	.18		"				
8	11/25	"				3.37	.18		"				
9	12/2	"				3.36	.11		"				
10	12/11	Keifer-Hardgrove	21.0	15.65	2.94	5.28	46.0	.6	6	-.09	1/5		FO 18
11	12/11	Keifer	15.	10.55	2.54	5.04	26.8	.6	5	0	1/6		
12	12/12	"	15.6	12.62	2.28	4.90	28.8	.6	6	0	1/6		
13	12/12	"	14.	7.60	2.1	4.78	16.1	.6	5	0	1/6		
14	12/12	"	16.5	17.57	2.45	5.24	43.0	.6	6	0	1/4		
15	12/19	Hardgrove				3.39	0.17		Weir				
16	12/22	"				3.36	0.21		"				
17	12/30	"				3.39	0.30		"				
18	1/6	Hardgrove				3.48	0.13		Weir				
18B	1/13	"				3.46	0.12		"				
19	1/16	Keifer-Hardgrove	27.	87.8	5.53	7.10	4.86	.6	8	0	1/3		
20	1/16	Hardgrove	26.	95.8	5.22	7.15	500.0	.6	7	+10	1/4		
21	1/17	Keifer-Hardgrove	3.0	.4	1.07	3.37	.43	.6	3	0	0		
22	1/19	"	28.	71.3	4.60	6.65	328.6	.6	8	0	1/6		

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 185

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 185

Discharge measurements of Sepulveda Creek at Charnock Road during the year ending September 30, 1934

Discharge measurements of Sepulveda Creek at Charnock Road during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width, Area, Mean velocity, Gate height, Discharge, Rating, Method, Mean rise, G. H. change, Time, Mean No.

Table with columns: No., Date, Made by, Width, Area, Mean velocity, Gate height, Discharge, Rating, Method, Mean rise, G. H. change, Time, Mean No.

F.C. Dist.—Form 105—1000—9-31

Daily Gate Height, in Feet, and Discharge, in Second-Feet, of SEPULVEDA CREEK at Charnock Road for the Year Ending September 30, 1933.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. 185

Large table with columns: DAY, Gage height, Discharge, OCTOBER, NOVEMBER, DECEMBER, JANUARY, FEBRUARY, MARCH, APRIL, MAY, JUNE, JULY, AUGUST, SEPTEMBER, DAY, Discharge, Gage height. Includes summary rows for TOTAL, Mean Daily Discharge, Second-foot per square mile, Runoff, etc.

Daily Gage Height, in Feet, and Discharge, in Second-Feet, of SEPULVEDA CREEK
 Near CHARNOCK ROAD for the Year Ending September 30, 1934

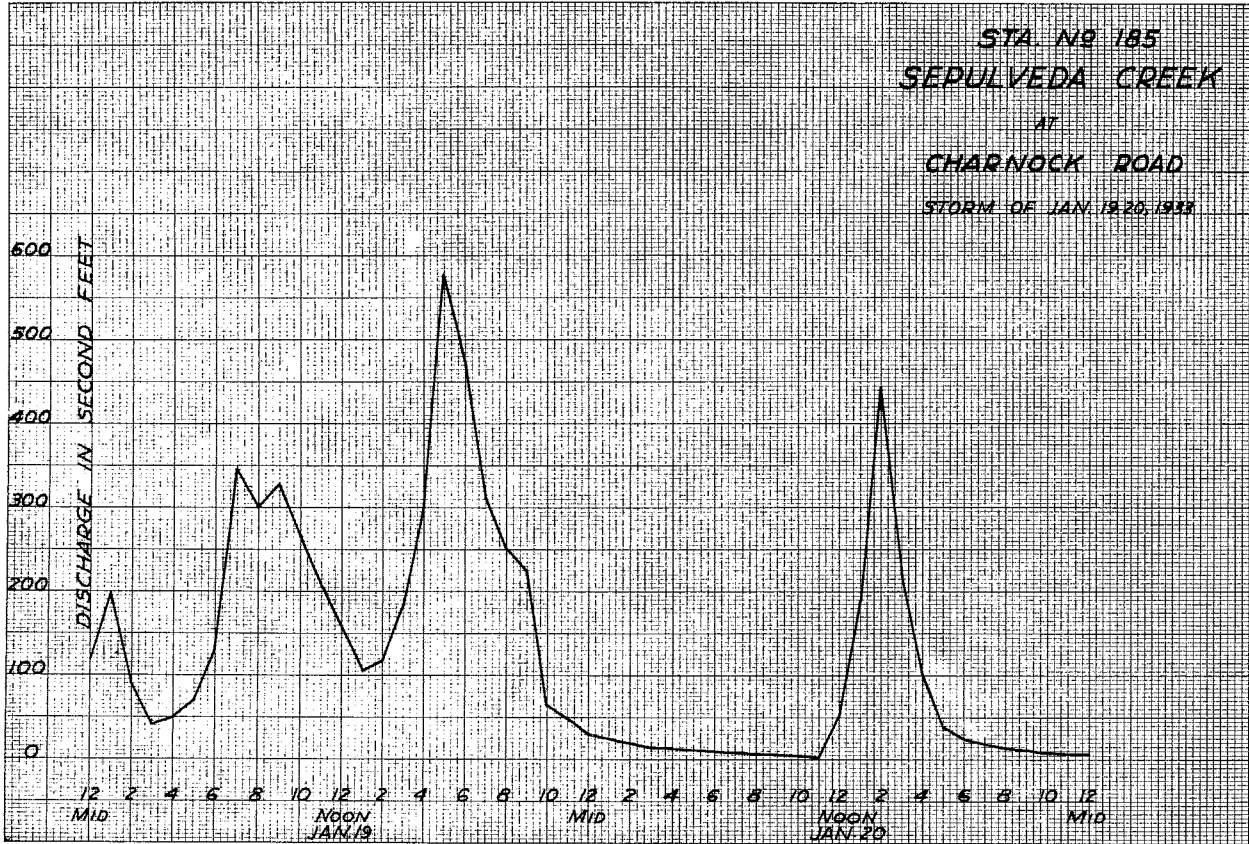
LOS ANGELES COUNTY
 FLOOD CONTROL DISTRICT
 HYDROGRAPHIC DEPARTMENT

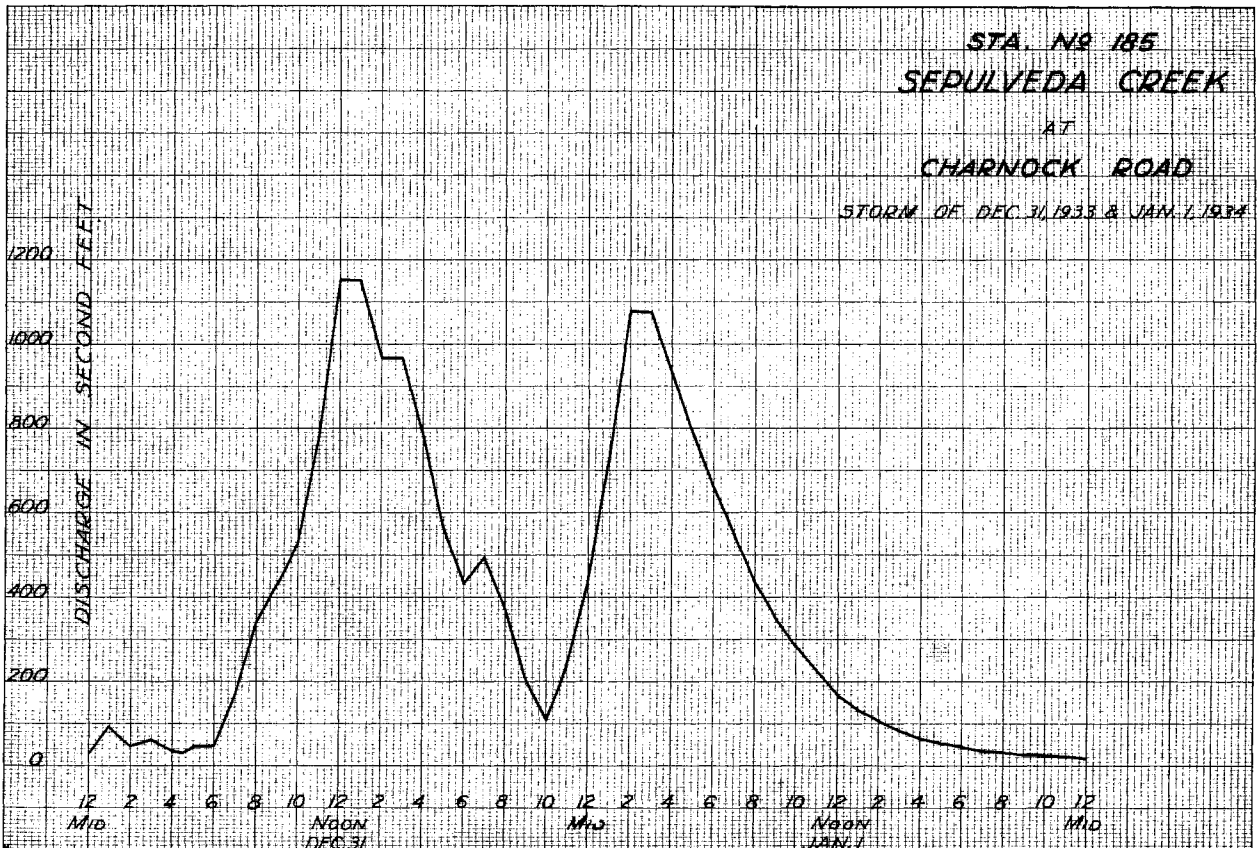
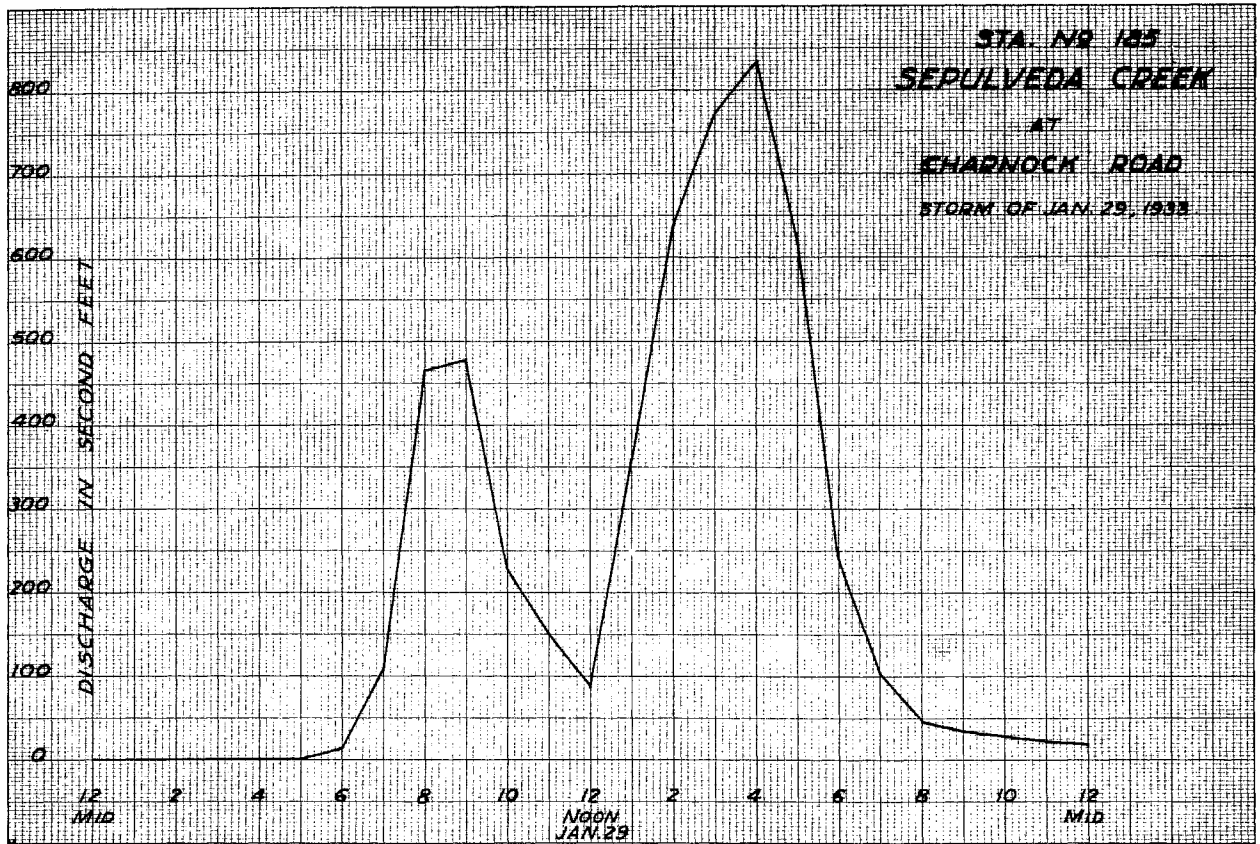
Drainage Area, Square Miles, (Hardgrove - Prickett) (Observer)

Gage Read CONTINUOUS

Used rating table dated MAR. 2, 1934

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		DAY	Time of Year	Discharge	
	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge		Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge				Quarter
1			2.20	0.12	3.14	0.07	H	538.36		DRY	3.38	0.31	1	3.39	0.32	3.55	0.75	3.20	0.12	3.50	0.56	3.52	0.64	3.31	0.22	1	First		
2			3.33	0.24	3.06	0.03	H	10.53	3.16	0.09	3.37	0.29	2	3.42	0.38	3.51	0.60	3.15	0.08	3.50	0.56	3.45	0.43	3.32	0.23	2	Second		
3			3.36	0.27	3.11	0.06		3.89	3.96	3.24	0.15	3.36	0.28	3	3.40	0.34	3.52	0.64	3.05	0.02	3.42	0.38	3.38	0.31	3.34	0.25	3	Third	
4			3.30	0.21	3.16	0.09		3.73	2.42	3.32	0.23	3.26	0.28	4	3.39	0.33	3.44	0.41	3.05	0.02	3.40	0.34	3.33	0.24	3.38	0.31	4	Fourth	
5			3.23	0.15	3.15	0.08		3.44	0.41	3.19	0.11	3.35	0.26	5	3.37	0.29	3.46	0.45	H	21.00	3.40	0.34	3.33	0.24	3.48	0.50	5	First	
6			3.24	0.16	3.23	0.15	3.35	0.26	3.12	0.06	3.35	0.26	6	3.39	0.32	3.47	0.47	3.44	0.41	3.40	0.34	3.32	0.23	3.55	0.75	6	Second		
7			3.25	0.16	3.10	0.05	3.34	0.25	3.17	0.10	3.34	0.25	7	3.34	0.25	3.47	0.47	3.48	0.50	3.48	0.50	3.33	0.24	3.53	0.68	7	Third		
8			3.07	0.03	3.04	0.01	3.38	0.31	3.30	0.21	3.33	0.24	8	3.32	0.23	3.40	0.34	3.50	0.56	3.44	0.41	3.37	0.29	3.52	0.64	8	Fourth		
9			3.28	0.19		Dry	3.43	0.40	3.25	0.16	3.33	0.24	9	3.32	0.23	3.45	0.43	3.51	0.60	3.44	0.41	3.35	0.26	3.58	0.64	9	First		
10			3.19	0.11		Dry	3.48	0.51	3.10	0.05	3.32	0.23	10	3.30	0.21	3.32	0.23	3.55	0.75	3.46	0.45	3.33	0.24	3.52	0.64	10	Second		
11			3.16	0.09	3.06	0.03	3.53	0.68	3.21	0.13	3.32	0.23	11	3.30	0.21	3.42	0.38	3.52	0.64	3.44	0.41	3.35	0.26	3.58	0.64	11	Third		
12			3.20	0.12	H	48.40	3.56	0.84	3.18	0.10	3.31	0.22	12	3.29	0.20	3.34	0.25	3.52	0.64	3.40	0.34	3.34	0.25	3.69	2.06	12	Fourth		
13	3.10	0.05	3.15	0.08	H	186.73	3.40	0.34	3.10	0.05	3.30	0.21	13	3.28	0.19	3.32	0.23	3.52	0.64	3.46	0.45	3.32	0.23	3.47	0.40	13	First		
14	3.08	0.04		Dry	H	37.23	3.24	0.15	3.11	0.06	3.29	0.20	14	3.35	0.26	3.38	0.31	3.52	0.64	3.46	0.45	3.32	0.23	3.45	0.43	14	Second		
15	3.08	0.04		H	H	2.50	3.51	0.60	H	2.22	3.29	0.20	15	3.35	0.26	3.38	0.31	3.52	0.64	3.46	0.45	3.32	0.23	3.45	0.43	15	Third		
16	3.10	0.05	3.12	0.08	3.17	0.10	3.24	0.43	3.18	0.10	3.29	0.20	16	3.33	0.24	3.45	0.43	3.68	1.94	3.48	0.50	3.34	0.25	3.36	0.27	16	Fourth		
17	3.01	Dry	3.16	0.09	3.10	0.05	3.52	0.64	3.24	0.15	3.29	0.20	17	3.33	0.24	3.47	0.47	3.66	1.76	3.44	0.41	3.33	0.24	3.37	0.28	17	First		
18	3.10	0.05	3.14	0.07	3.06	0.03	3.16	0.09	3.35	0.26	3.28	0.19	18	3.22	0.14	3.55	0.75	3.66	1.76	3.78	2.92	3.32	0.23	3.43	0.40	18	Second		
19	3.11	0.06	3.19	0.11		Dry	3.10	0.05	H	4.75	3.28	0.19	19	3.18	0.10	3.20	0.12	3.61	1.29	3.86	3.66	3.31	0.22	3.45	0.43	19	Third		
20	3.18	0.10	3.23	0.15	3.14	0.07		Dry	H	4.34	3.39	0.32	20	3.18	0.10	3.20	0.12	3.57	0.93	3.99	4.92	3.26	0.17	3.47	0.47	20	Fourth		
21	3.20	0.12	3.23	0.15	3.30	0.21		H	3.35	0.26	3.38	0.31	21	3.26	0.17	3.20	0.12	3.61	1.29	3.88	3.84	3.20	0.12	3.47	0.47	21	First		
22	3.26	0.17	3.23	0.15	3.32	0.23		H	3.38	0.31	3.32	0.23	22	3.31	0.22	3.20	0.12	3.47	0.48	3.78	2.92	3.29	0.20	3.45	0.54	22	Second		
23	3.24	0.15	3.14	0.07	3.27	0.18	3.07	0.03	H	8.25	3.33	0.24	23	3.18	0.10	3.20	0.12	3.44	0.41	3.46	0.45	3.30	0.21	3.50	0.56	23	Third		
24	3.21	0.13	3.17	0.10	3.24	0.15	3.12	0.07	H	43.68	3.38	0.31	24	3.27	0.18	3.20	0.12	3.42	0.38	3.46	0.45	3.29	0.20	3.55	0.75	24	Fourth		
25	3.05	0.02	3.08	0.04	3.24	0.15	3.07	0.03	3.26	0.17	3.32	0.23	25	3.37	0.29	3.21	0.13	3.42	0.38	3.49	0.53	3.29	0.20	3.57	0.93	25	First		
26	3.02	Dry	3.09	0.04	3.27	0.18	3.26	0.17	3.47	0.49	3.37	0.29	26	3.38	0.31	3.23	0.14	3.42	0.38	3.50	0.56	3.29	0.20	3.60	1.20	26	Second		
27				Dry	3.28	0.19	3.08	0.04	3.36	0.27	3.59	1.11	27	3.45	0.43	3.24	0.15	3.38	0.31	3.47	0.48	3.28	0.19	3.59	1.11	27	Third		
28	3.11	0.06	3.05	0.02	3.29	0.20	3.08	0.04	3.40	0.34	3.59	1.11	28	3.45	0.43	3.13	0.07	3.37	0.29	3.39	0.33	3.28	0.19	3.58	1.02	28	Fourth		
29	3.08	0.04	3.06	0.03	3.25	0.16					3.31	0.22	29	3.47	0.48	3.16	0.09	3.39	0.33	3.52	0.64	3.28	0.19	3.64	1.58	29	First		
30	3.51	0.60	3.16	0.09	H	4.21	3.12	0.07			3.36	0.27	30	3.48	0.50	3.24	0.15	3.43	0.40	3.53	0.68	3.28	0.19	3.56	0.84	30	Second		
31	H	7.93			H	426.38	3.04	0.01			3.36	0.27	31			3.25	0.16			3.50	0.56	3.30	0.21			31	Third		
TOTAL		9.61		3.10		707.92		365.73		57.69		9.39		8.23		12.75		39.97		30.29		7.52		19.51		1281.71			
Mean Daily Discharge in Second-foot		0.31		0.10		22.83		11.80		2.42		0.30		0.27		0.41		1.33		0.98		0.24		0.65		3.51			
Second-foot per square mile																													
Run-off, Depth in Inches																													
Run-off in acre-foot		19.06		6.15		1404.16		725.43		134.26		18.63		16.32		25.29		79.28		60.08		14.92		38.70		2542.27			
Maximum Mean Daily Discharge in Second-foot		7.93		0.27		426.38		338.36		43.68		1.11		0.54		3.75		21.00		4.92		0.64		2.06		426.38			
Minimum Mean Daily Discharge in Second-foot		0		0		0		0		0		0.19		0.10		0.07		0.02		0.33		0.12		0.22		0			





Location SYCAMORE STORM DRAIN LOWER STATION - ADAMS SQUARE, GLENDALE
At Adams Square, Lower Chevy Chase Drive, Glendale, California.

Drainage Area 6.2 Square miles.

Installed by Los Angeles County Flood Control District December 15, 1927.

Records Available December 15, 1927 to September 30, 1934 at offices of Los Angeles County Flood Control District, Los Angeles, California.

Gage Stevens Type L Water stage register located in manhole of concrete drain in service station yard. One staff gage installed in stilling well, another on east wall of drain near inlet to stilling well.

Discharge Measurements Made by wading near gage and by weir for low flows. High flow measurements made, with meter suspended from cable or pipe, from planks across drain.

Channel and Control Concrete flood control channel. Small notch weir serving as control during low flows and as a sand trap during high flows.

Extremes of Discharge 1927-1928 Maximum- 34 c.f.s. February 3, 1928. Minimum- Dry most of year. 1928-1929 Maximum- 904 c.f.s. November 14, 1928. Minimum- Dry most of year. 1929-1930 Maximum- 51.0 c.f.s. May 3, 1930. Minimum- Dry most of year. 1930-1931 Maximum- 212 c.f.s. February 3, 1931. Minimum- Dry most of year. 1931-1932 Maximum- 191 c.f.s. November 27, 1931. Minimum- Dry at various times during year. 1932-1933 Maximum- 400.6 c.f.s. January 19, 1933. Minimum- Dry various times of the year. 1933-1934 Maximum- 1147.0 c.f.s. January 1, 1934. Minimum- Dry various times of year.

Diversions None above gage.

Regulation None.

Accuracy Fair.

Operation Located and constructed by the Los Angeles County Flood Control District and operated by Los Angeles County Flood Control District in conjunction with U.S.G.S. Water Resources Branch.

at Adams Square - Glendale during the year ending September 30, 1933
near during the year ending September 30, 1934

Table with columns: No., Date, Made by, Wash Feet, Area of ground sq. ft., Mean velocity ft. per sec., Gage height, Discharge c.f.s., Rising or falling, Method, Max. No. of H. stage, G. H. stage, Time Hours, Meter No.

F.C. Dist.—Form 165—100—9-31

Daily Gage Height, in Feet, and Discharge, in Second-Feet, of SYCAMORE, LOWER STORM DRAIN
At Adams Square - Glendale for the Year Ending September 30, 1933

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. 44

Drainage Area 6.2 Square Miles. G. E. Bollinger (Observer) Gage Read Continuous Used rating table dated 10/1/32 - 9/30/33

Main data table with columns for months (OCTOBER to SEPTEMBER), DAY, Gage height, Discharge, and various summary statistics at the bottom.

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of **SYCAMORE LOWER STORM DRAIN**

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

File No. **44**

Year At **ADAMS SQUARE, GLENDALE** for the Year Ending September 30, 19**34**

"A" dated 10-17-33
"B" dated 9-24-34

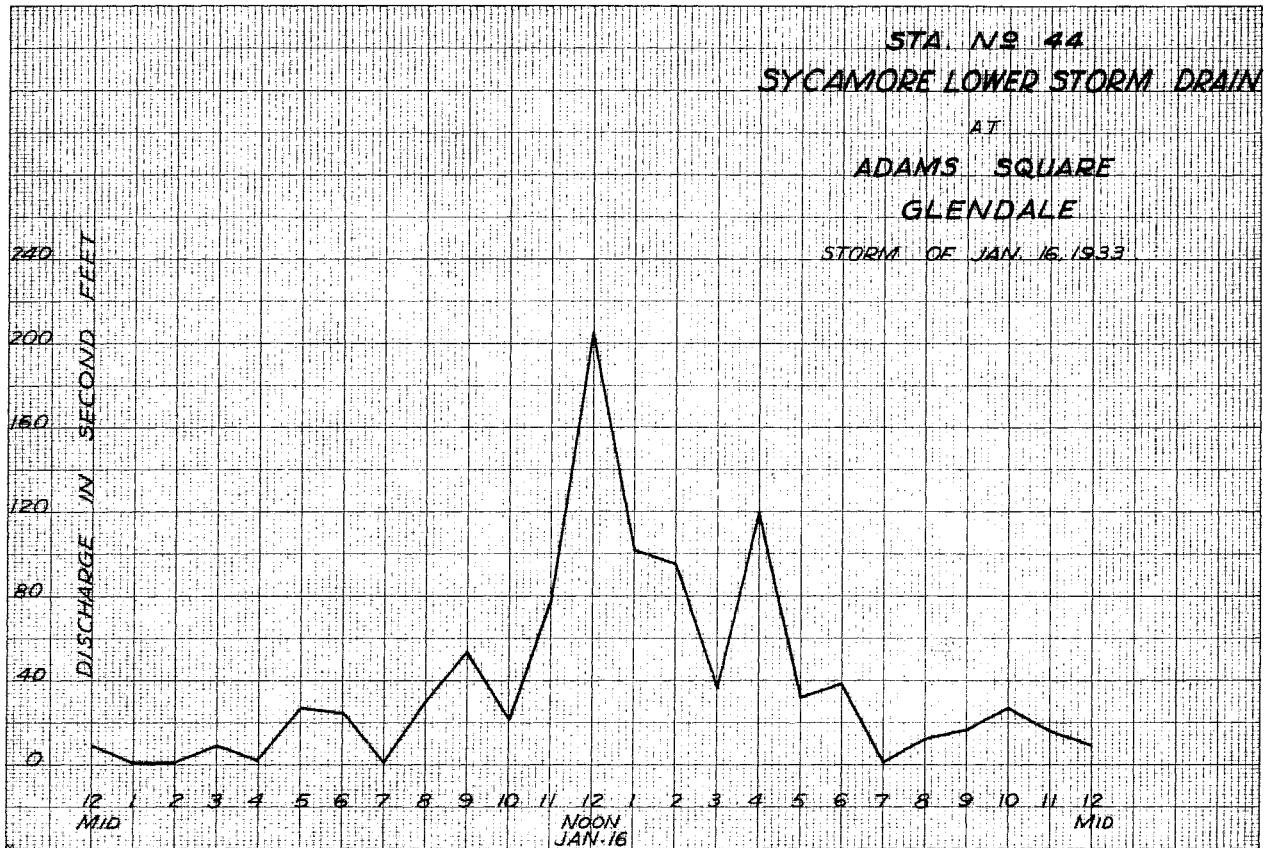
Drainage Area **6.2** Square Miles.

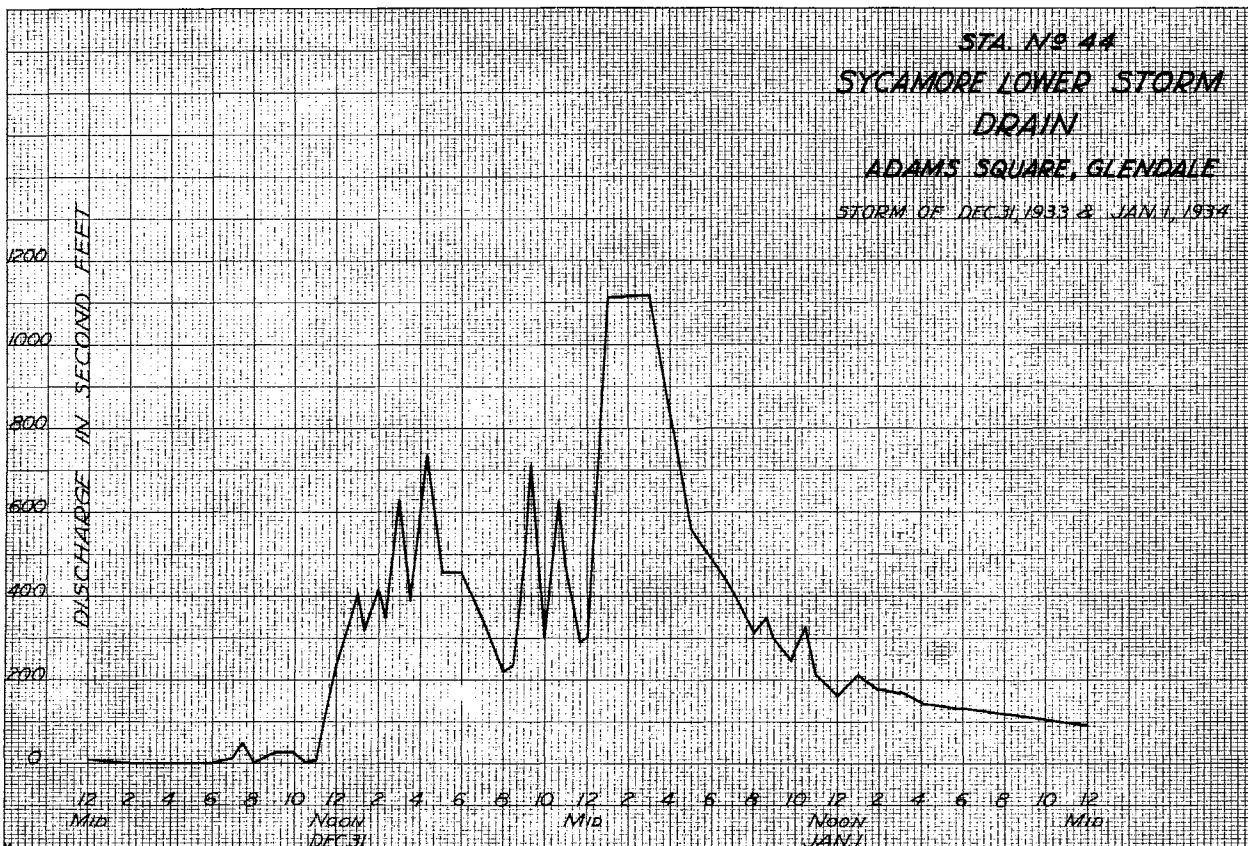
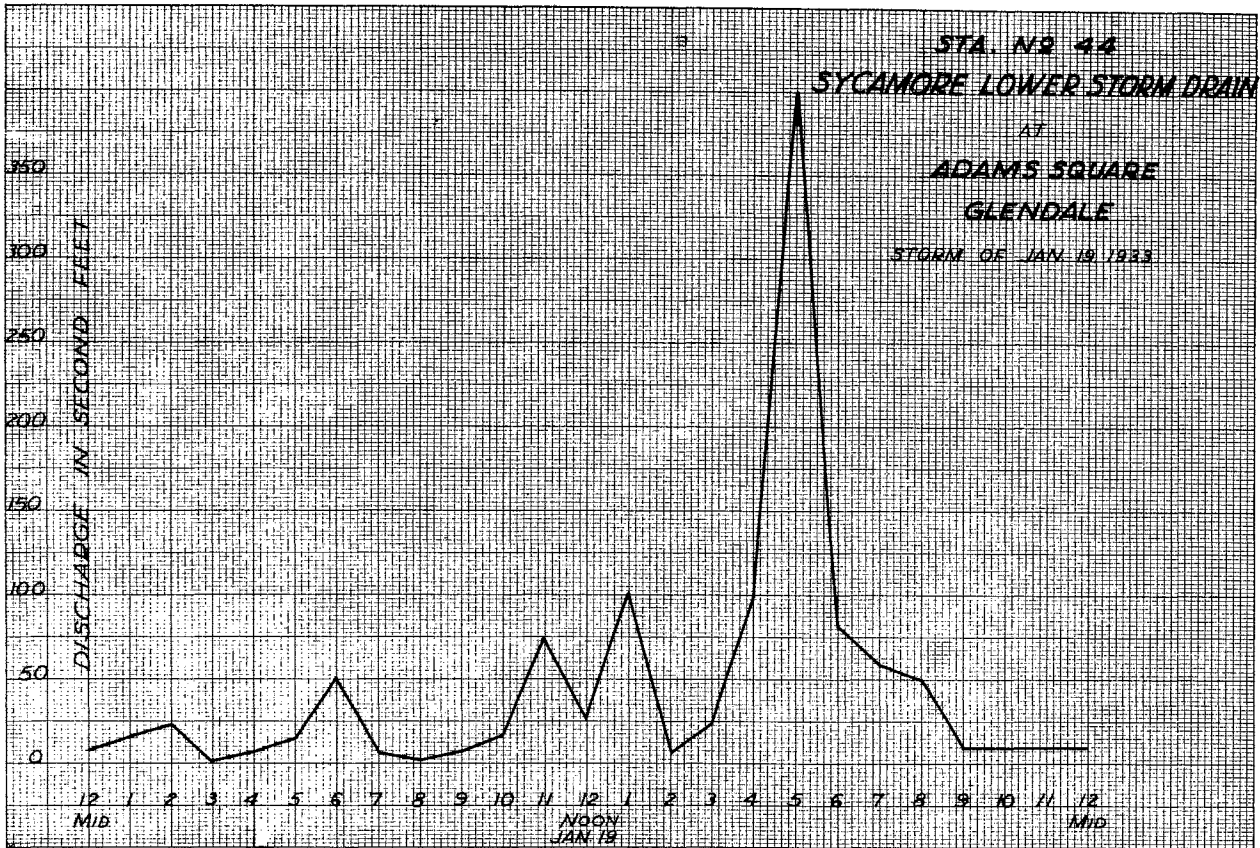
[**G. E. Hollings** Observer]

Gage Read. **CONTINUOUS**

Used rating table dated **"B" dated 9-24-34**

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		DAY	
	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge		
1	0	0	0.02	0.02	0.02	0.02	H	366.41																	1	
2	0.02	0.02	0.01	0.01	0.02	0.02	0.02	1.82	60.4																2	
3	0.01	0.01					0.01	0.01	1.31	11.0															3	
4	0.01	0.01	0.01	0.01	0.03	0.03	I	9.5																	4	
5	0.01	0.01	0.01	0.01	0.01	0.01	I	8.5																	5	
6	0.03	0.03	0.02	0.02	0.01	0.01	I	7.5																	6	
7	0.04	0.04	0.02	0.02	0.02	0.02	I	6.5																	7	
8			0.01	0.01			I	5.5																	8	
9	0.01	0.01					I	5.0																	9	
10	0.01	0.01					I	3.5																	10	
11							I	3.0																	11	
12							H	4.69	1.15	2.5															12	
13							H	21.90	1.14	2.0															13	
14							0.12	0.14	1.15	2.5															14	
15							0.06	0.06	1.14	2.0															15	
16	0.02	0.02					0.03	0.03	1.14	2.0															16	
17	0.01	0.01					0.01	0.01	1.13	1.5															17	
18	0.02	0.02					0.01	0.01	1.12	1.0															18	
19	0.03	0.03					0.01	0.01	1.12	1.0															19	
20	0.01	0.01	0.02	0.02	0.01	0.01	1.11	0.75	1.36	15.0	1.04	0.20													20	
21	0.02	0.02	0.01	0.01	0.01	0.01	1.10	0.50	1.36	15.0	1.04	0.20													21	
22			0.03	0.03	0.01	0.01	1.06	0.30	1.47	21.0	1.03	0.15													22	
23			0.04	0.04			I	0.15	1.66	41.2	1.02	0.10													23	
24					0.01	0.01	1.36	15.0	H	30.9	1.04	0.20													24	
25					0.02	0.02	0.01	0.01		1.14	2.0	1.06	0.30												25	
26	0.01	0.01	0.01	0.01	0.01	0.01			1.05	0.25	1.04	0.20													26	
27			0.02	0.02	0.01	0.01			1.05	0.25	1.05	0.25													27	
28			0.03	0.03	0.01	0.01			1.01	0.05	1.02	0.10													28	
29					0.01	0.01					1.02	0.10													29	
30	0.07	0.07			0.31	0.63					1.02	0.10													30	
31	H	2.98			H	215.68					1.02	0.10													31	
TOTAL		3.30		0.81		243.42		518.01		125.9		3.00														896.49
Mean Daily Discharge in Second-foot		0.11		0.03		7.85		16.71		4.50		0.097														2.46
Second-foot per square mile		0.018		0.005		1.266		2.695		0.726		0.156														0.397
Run-off, depth in inches		0.020		0.005		1.460		3.107		0.755		0.180														5.377
Run-off in acre feet		6.55		1.61		482.82		1027.47		249.72		5.95														1778.19
Maximum Mean Daily Discharge in Second-foot		2.98		0.30		215.68		366.41		41.2		0.30														366.41
Maximum Mean Daily Discharge in Second-foot		0		0		0		0		0		0														0





LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. 54

F-54 R

TOPANGA CREEK AT HIGHWAY BRIDGE 2 MILES ABOVE MOUTH

Location
On Topanga Canyon Highway Bridge about 2 miles from ocean, about 6 miles northwest of Santa Monica, Los Angeles County, California.

Drainage Area
16 square miles.

Installed by
Los Angeles County Flood Control District, January 1, 1930.

Records Available
January 1, 1930 to September 30, 1934 at offices of Los Angeles County Flood Control District, Los Angeles, California.

Gage
A continuous water stage recorder located in small shelter house on top of corrugated iron stilling well at west wing wall of bridge.

Discharge Measurements
High water measurements are made from cable located 450' above recorder. Low water measurements made by wading near gage.

Channel and Control
Rocky and full of boulders. No control.

Extremes of Discharge
1929-1930
Maximum- 340 c.f.s. March 14 and 15, 1930.
Minimum- 0.01 c.f.s. at various times of year.
1930-1931
Maximum- 386 c.f.s. February 4, 1931.
Minimum- .01 c.f.s. at various times of year.
1931-1932
Maximum- 1250 c.f.s. February 8, 1932.
Minimum- 0.02 c.f.s. at various times of year.
1932-1933
Maximum- 1428.5 c.f.s. January 19, 1933.
Minimum- 0.01 c.f.s. at various times of year.
1933-1934
Maximum- 4505.5 c.f.s. December 31, 1933.
Minimum- Dry Oct. 18 & 19, 1933.

Diversions
None

Regulation
None

Accuracy
Fair.

Operation
Located and constructed by the Los Angeles County Flood Control District and operated by the Los Angeles County Flood Control District in conjunction with U.S.G.S. Water Resources Branch.

Discharge measurements of Topanga Creek

at Highway Bridge 2 miles above Mouth during the year ending September 30, 1933

No.	Date	Made by	Width Feet	Area of section Sq. ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec.-ft.	Rating	Method	Max. base No.	G. Ht. Gauge Total	Time Hours	Meter No.
24	1933 2/17	Hardgrove	6.	2.31	0.80	1.05	1.86	.6	6	0	-		282861
25	2/24	"	4.	1.14	0.81	1.04	0.92	.6	4	0	-		"
26	3/3	"	4.	.94	.88	0.99	0.83	.6	4	0	-		FG 20
27	3/10	"				0.95	0.36		Weir				
28	3/17	"	4.	1.09	1.31	.95	1.43	.6	4	0	-		282861
29	3/24	"	3.	.56	.77	.95	.43	.6	3	0	-		"
30	3/31	"	3.	.62	1.30	.92	.80	.6	3	0	-		"
31	4/7	"				.90	0.20		Weir				
32	4/14	"				.85	0.32		"				
33	4/21	"				.88	0.28		"				
34	4/28	"				.88	0.28		"				
35	5/2	Hardgrove-Bollinger				.84	0.28		"				
36	5/12	Hardgrove				.83	0.40		"				
37	5/19	"				.83	0.23		"				
38	5/26	"				.82	0.20		"				
39	6/2	"				.78	0.10		"				
40	6/9	"				.81	0.25		"				
41	6/16	"				.79	0.18		"				
42	6/23	"				.67	0.12		"				
43	6/30	"				.65	0.14		"				
44	7/7	"				.70	0.15		"				
45	7/14	"				.69	0.16		"				
46	7/21	"				.67	0.18		"				

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. 54

Discharge measurements of TOPANGA CREEK

at Highway Bridge 2 miles above Mouth during the year ending September 30, 1933

No.	Date	Made by	Width Feet	Area of section Sq. ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec.-ft.	Rating	Method	Max. base No.	G. Ht. Gauge Total	Time Hours	Meter No.
1	1932 10/14	Irwin				0.68	.02		Weir				
2	10/21	Hardgrove				0.68	.01		Est.				
3	10/28	"				.68	.01		"				
4	11/4	"				.69	.02		"				
5	11/10	"				.69	.01		"				
6	11/18	"				.69	.01		"				
7	11/25	"				.67	.01		"				
8	12/2	"				.68	.02		Weir				
9	12/9	"				.70	.03		"				
10	12/16	"				.70	.07		"				
11	12/22	"				.70	.06		"				
12	12/30	"				.82	.05		"				
13	1/6	Hardgrove				.75	.04		Weir				
14	1/13	"				.82	.03		"				
15	1/17	"	5.0	2.03	.67	.23	1.36	.6	5	0	-		FG 20
16	1/20	Hardgrove-Keifer	24.	50.6	3.45	2.28	39.5	.6	11	-.04	1/3		282861
17	1/22	"	24.5	24.28	2.8	2.14	68.7	.6	12	-.01	1/4		"
18	1/27	Hardgrove	18.	6.9	0.9	1.20	6.25	.6	7	0	-		"
19	1/29	Hardgrove-McBride	25.	52.9	3.0	2.31	98.3	.6	7	-.02	1/6		"
20	1/29	"	24.	31.2	2.72	2.30	84.8	.6	6	0	1/6		"
21	1/31	"	18.	16.6	0.94	1.48	15.6	.6	9	0	-		"
22	2/3	Hardgrove	9.	3.80	1.62	1.27	6.16	.6	8	0	-		"
23	2/10	"	5.	2.15	1.12	1.11	2.42	.6	5	0	-		"

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. 54

Discharge measurements of Topanga Creek

at Highway Bridge 2 miles above Mouth during the year ending September 30, 1933

No.	Date	Made by	Width Feet	Area of section Sq. ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec.-ft.	Rating	Method	Max. base No.	G. Ht. Gauge Total	Time Hours	Meter No.
47	1933 7/28	Hardgrove				0.69	0.16		Weir				
48	8/4	"				0.70	0.20		"				
49	8/11	"				0.75	0.03		"				
50	8/18	"				0.73	0.03		"				
51	9/5	Bollinger	5.	.02	.80	0.75	.02		Float				
52	9/14	Hardgrove				0.76	0.03		Weir				
53	9/21	"				0.76	0.03		"				
54	9/24	"				0.79	0.02		"				
55	9/28	"				0.80	0.04		"				

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 54

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 54

Discharge measurements of TOPANGA CREEK

Discharge measurements of TOPANGA CREEK

at Highway Bridge 2 miles above mouth, during the year ending September 30, 1934.

at Highway Bridge 2 miles above mouth, during the year ending September 30, 1934.

Table with columns: No., Date, Made by, Width, Area of cross section, Mean velocity, Gage height, Discharge, Rating, Method, Mean No., G. H. change, Time, Name. Contains 24 rows of discharge data.

Table with columns: No., Date, Made by, Width, Area of cross section, Mean velocity, Gage height, Discharge, Rating, Method, Mean No., G. H. change, Time, Name. Contains 24 rows of discharge data.

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of TOPANGA CREEK AT HIGHWAY BRIDGE

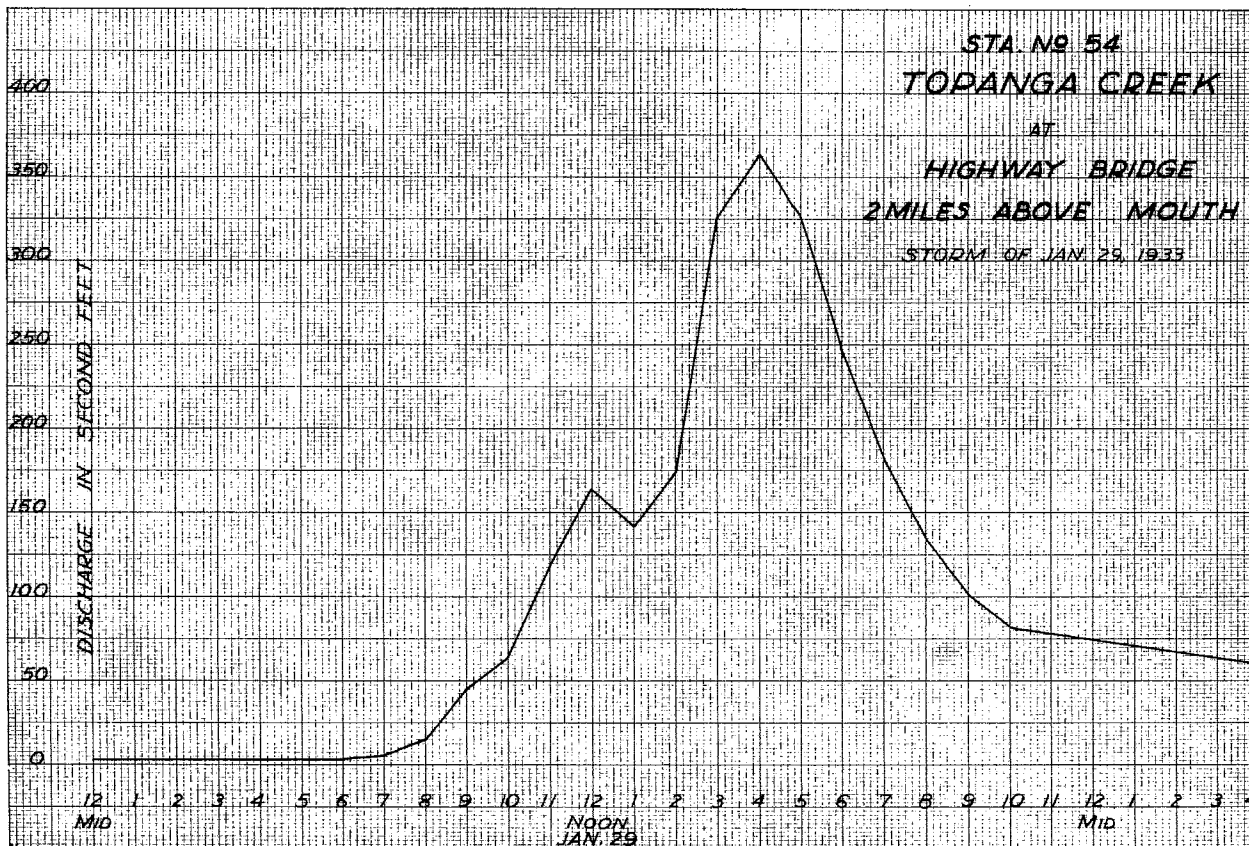
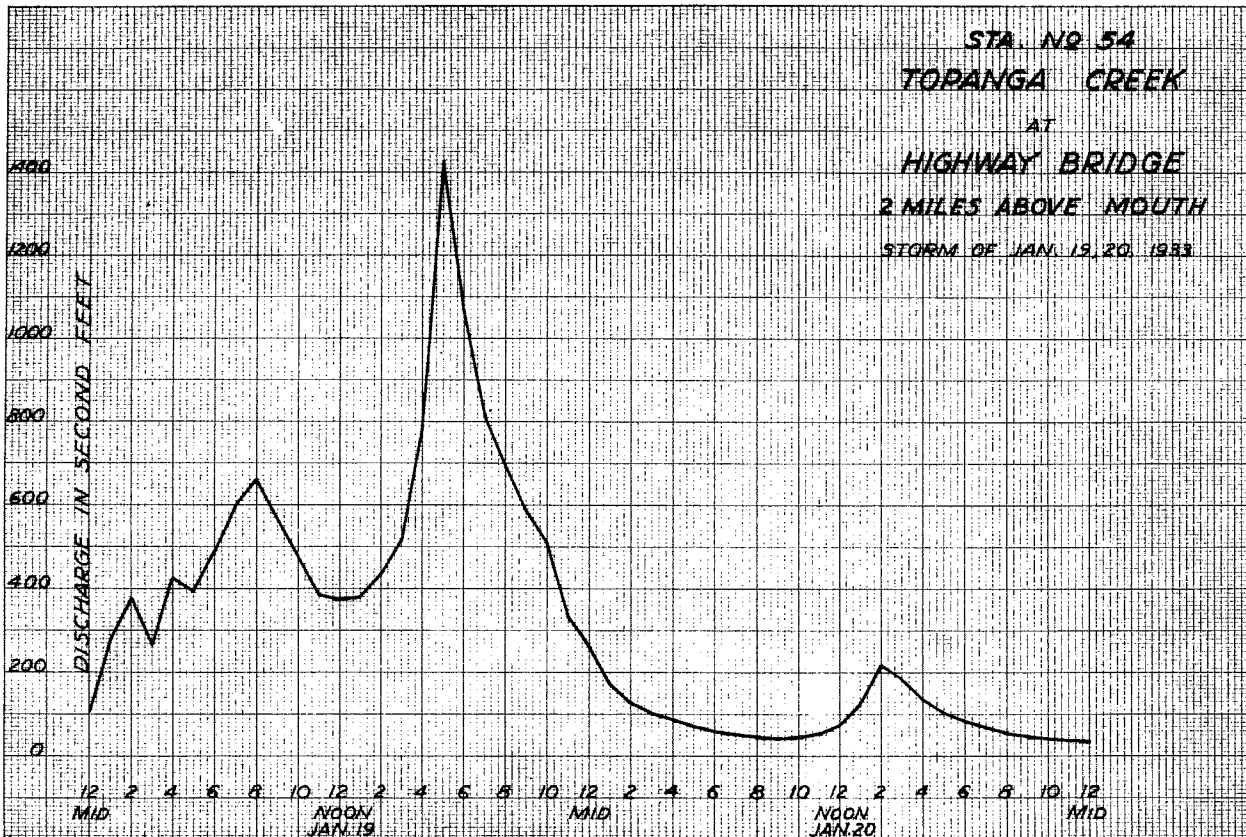
LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

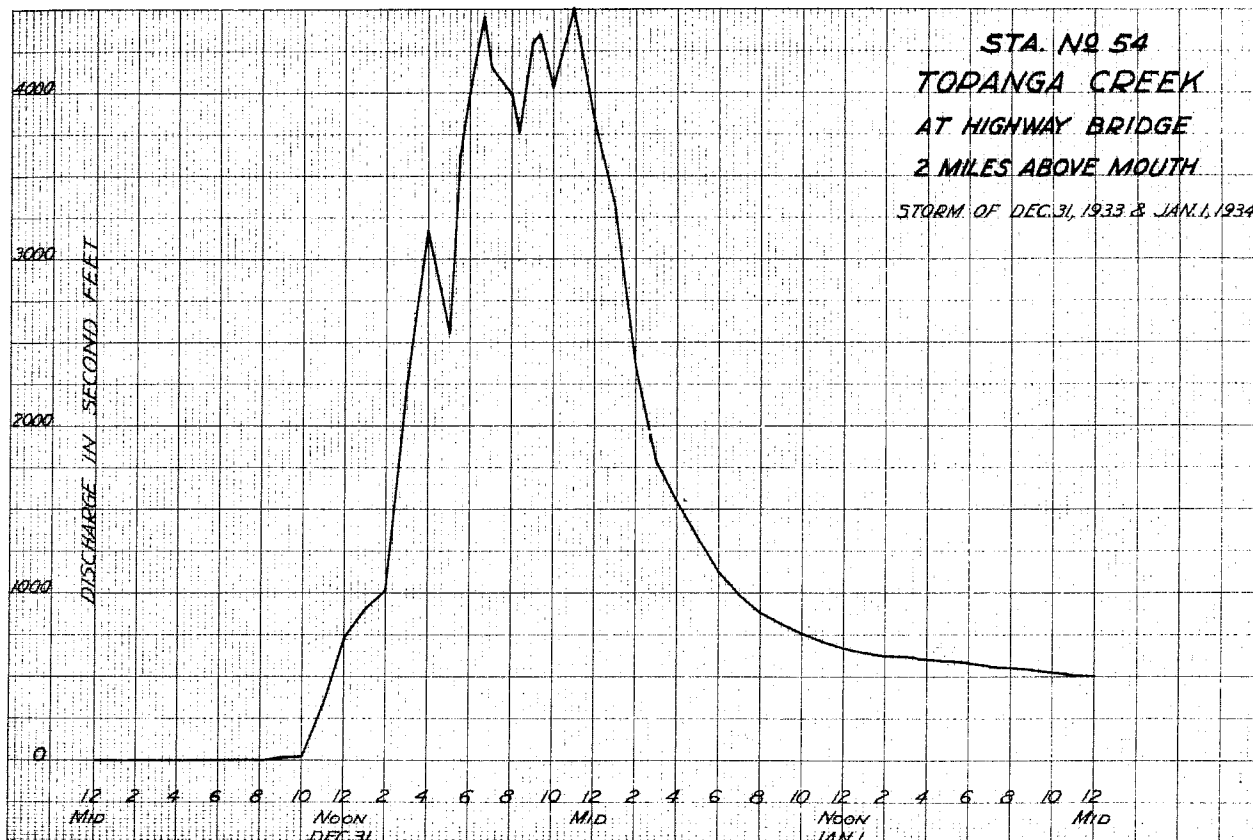
File No. 54

at Highway Bridge 2 miles above Mouth for the Year Ending September 30, 1933

Drainage Area 18 Square Miles, W. S. Herdgrove (Observer), Gage Read Continuous, Using rating table dated July 21, 1933

Large table with columns for months (OCTOBER to SEPTEMBER) and days (1 to 31). Includes sub-columns for Gage height and Discharge. Includes summary rows at the bottom for totals and averages.





F-9 R

VERDUGO STORM DRAIN AT GLEN OAKS BOULEVARD, GLENDALE

Location
On Glen Oaks Boulevard Bridge spanning Verdugo Wash, in the City of Glendale, County of Los Angeles, California.

Drainage Area
22.5 square miles.

Installed by
Los Angeles County Flood Control District December 12, 1928.

Records Available
December 12, 1928 to December 30, 1933 at offices of Los Angeles County Flood Control District, Los Angeles, Calif. Station destroyed by flood of December 31, 1933.

Gage
Staff gage on downstream side of bridge on North side of concrete channel at lower end of pier. A groove is cut in the concrete floor from the lowest point in the channel to the gage in order to obtain a reading at low flows. Stevens type 4, 8 day water stage recorder installed in small wooden house on top of corrugated iron pipe stilling well.

Discharge Measurements
Low water measurements made by wading at gage
High water measurements are made from bridge.

Channel and Control
Concrete Flood Control channel with V shaped bottom and perpendicular sides. Control is very good.

Extremes of Discharge
1928-1929
Maximum - 55.5 c.f.s. April 4, 1929.
Minimum - Dry at various times during year.
1929-1930
Maximum - 80.43 c.f.s. May 3, 1930.
Minimum - Dry at various times during year.
1930-1931
Maximum - 46.15 c.f.s. April 26, 1931.
Minimum - .01 c.f.s. at various times during year.
1931-1932
Maximum - 145. c.f.s. February 9, 1932.
Minimum - .01 c.f.s. at various times during year.
1932-1933
Maximum - 391. c.f.s. January 19, 1933.
Minimum - .10 c.f.s. at various times during year.
1933-1934
Maximum - Not determined.
Minimum - .01 c.f.s. at various times during year.

Regulation
None

Diversions
Verdugo Canyon Water Company diverts low flow about 1 mile above gage.

Accuracy
Good

F-236 R

VERDUGO STORM DRAIN AT OPECHEE WAY, GLENDALE

Location
On the down stream end of the west abutment of bridge crossing Verdugo Wash at Opechee Way in the City of Glendale.

Drainage Area
Not determined.

Installed by
The Los Angeles County Flood Control District Feb. 9, 1934.

Records Available
February 9, 1934 to September 30, 1934. Records from December 12, 1928 to December 30, 1933 taken at Glen Oaks Boulevard about 2 miles below. All records available at the offices of the Los Angeles County Flood Control District, Los Angeles, California.

Gage
Rational vertical automatic water stage recorder installed in a galvanized house on top of a corrugated iron stilling well. Staff gage on outside of stilling well.

Discharge Measurements
High flow measurements made from bridge.
Low flow measurements made by wading.

Channel and Control
Channel - sand and rock. No Control.

Extremes of Discharges
1933-1934
Maximum - Not Determined.
Minimum - Dry most of the year.

Regulations
None.

Diversions
None.

Accuracy
Poor.

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

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. F.C.9

Discharge measurements of Verdugo Storm Drain at Glen Oaks Blvd., Glendale, during the year ending September 30, 1933

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 9

Discharge measurements of Verdugo Storm Drain at Glen Oaks Blvd. Bridge, Glendale, during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Gate height, Discharge, Rating, Method, Mean gage, G. H. change, Time, Meter. Rows 1-24.

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Gate height, Discharge, Rating, Method, Mean gage, G. H. change, Time, Meter. Rows 1-24.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. F.C.9

Discharge measurements of VERDUGO STORM DRAIN at Glen Oaks Blvd., Glendale, during the year ending September 30, 1933

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 236

Discharge measurements of Verdugo Storm Drain at Opeschea Way, Glendale, during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Gate height, Discharge, Rating, Method, Mean gage, G. H. change, Time, Meter. Rows 25-30.

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Gate height, Discharge, Rating, Method, Mean gage, G. H. change, Time, Meter. Rows 1-4.

Daily Gage Height, in Feet, and Discharge, in Second-Feet, of VERDUGO STORM DRAIN
At Glen Oaks Blvd., for the Year Ending September 30, 1933

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Table with columns for months (OCTOBER to SEPTEMBER) and days (1-31). Rows include Gage height, Discharge, and various summary statistics like 'TOTAL', 'Mean Daily Discharge', etc. Includes notes like 'Channel sanded up - flow restricted to Nov. 10th.' and 'Flow restricted'.

Daily Gage Height, in Feet, and Discharge, in Second-Feet, of VERDUGO STORM DRAIN
At GLEN OAKS BOULEVARD and OPPECHEE WAY, GLENDALE for the Year Ending September 30, 1934

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Table with columns for months (OCTOBER to SEPTEMBER) and days (1-31). Rows include Gage height, Discharge, and various summary statistics. Includes notes like 'RECORDER INSTALLED FEBRUARY 9, 1934, AT GLEN OAKS BLVD.' and 'RECORD LOST'.

F-47 R

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 47

WALNUT WASH AT COVINA BOULEVARD BRIDGE

Location On downstream side of highway bridge crossing Walnut Wash at Covina Blvd. Approximately 1/2 mile southwest of Baldwin Park, Los Angeles County, California.

Discharge measurements of Walnut Creek

at near Covina Blvd. Bridge during the year ending September 30, 1933.

Drainage Area 99 square miles.

Installed by Los Angeles County Flood Control District, December 15, 1928. Originally installed by State of California, Division of Water Rights, 1923-1924.

Records Available December 15, 1928 to September 30, 1934 at offices of Los Angeles County Flood Control District, Los Angeles, California. See State of California, Division of Water Rights, Bulletins for records previous to December, 1928.

Gage Rational 7 day water stage recorder, installed in shelter house on corrugated iron pipe stilling well attached to downstream end of highway bridge pier. Vertical staff gage installed on bridge pier at stilling well.

Discharge Measurements High water flows are measured from bridge. Low water measurements by wading near gage.

Channel and Control Channel - Sand and gravel. Control - None.

Extremes of Discharge 1928-1929 Maximum- 302 c.f.s. March 10, 1929. Minimum- Dry at various times during year.

1929-1930 Maximum- 900 c.f.s. January 11, 1930. Minimum- Dry at various times during year.

1930-1931 Maximum- 122.70 c.f.s. February 4, 1931. Minimum- Dry at various times during year.

1931-1932 Maximum- 1781 c.f.s. February 9, 1932. Minimum- Dry most of year.

1932-1933 Maximum- 748 c.f.s. January 19, 1933. Minimum- Dry most of year.

1933-1934 Maximum- 8058.7 c.f.s. January 1, 1934. Minimum- Dry most of year.

Diversions None above gage.

Regulation Los Angeles County Flood Control District's Puddingstone and Big Dalton Dams regulate flow of tributaries.

Accuracy Fair.

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec.-ft., Rating Percent full, Method, Max. gage No., G. St. change Feet, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 47

Discharge measurements of Walnut Creek

at near Covina Boulevard Bridge during the year ending September 30, 1934.

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec.-ft., Rating Percent full, Method, Max. gage No., G. St. change Feet, Time Hours, Meter No.

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of WALNUT CREEK At near Covina Blvd. Bridge for the Year Ending September 30, 1933.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. 47

Large monthly table with columns for months (OCTOBER to SEPTEMBER) and days (1-31). Includes sub-columns for Gage height and Discharge. Includes summary rows for Max Daily Discharge, Second-foot per square mile, etc.

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of **WALNUT CREEK**

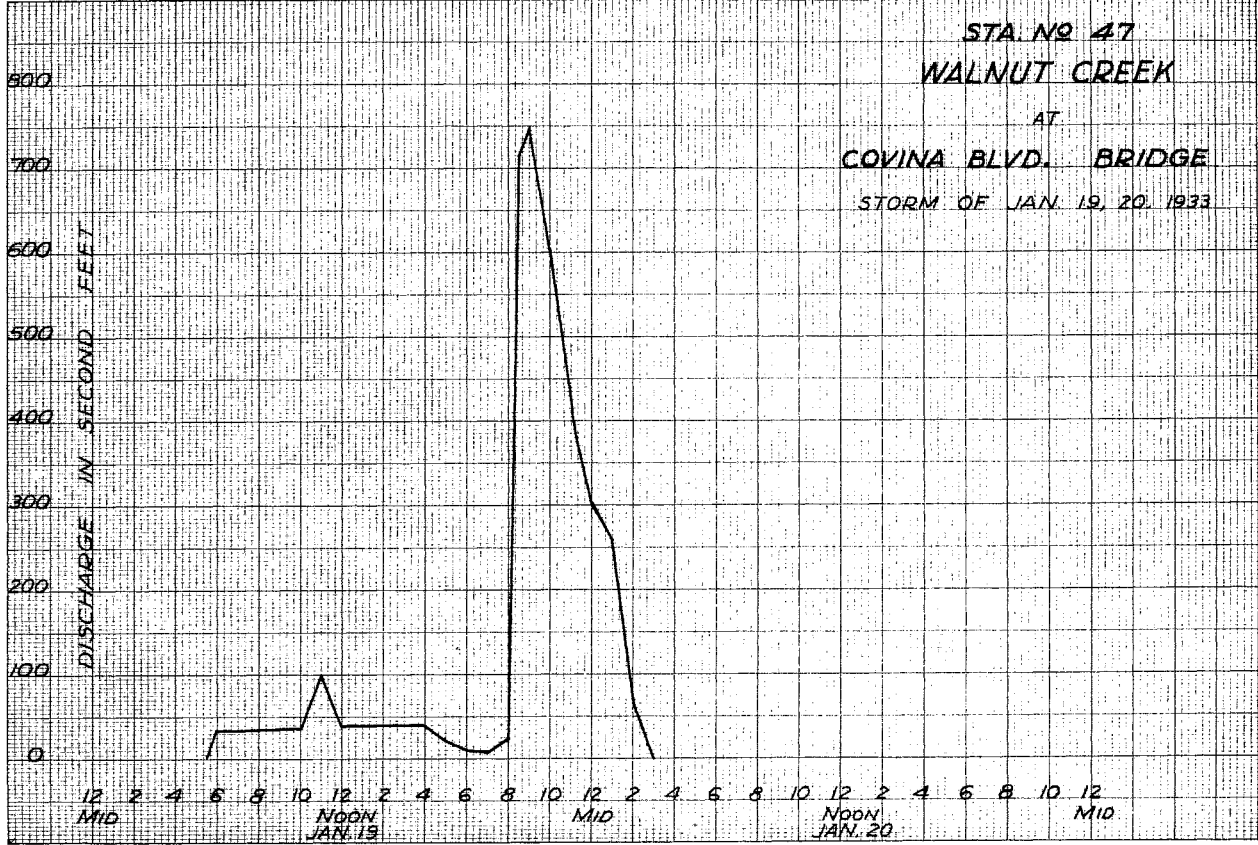
LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

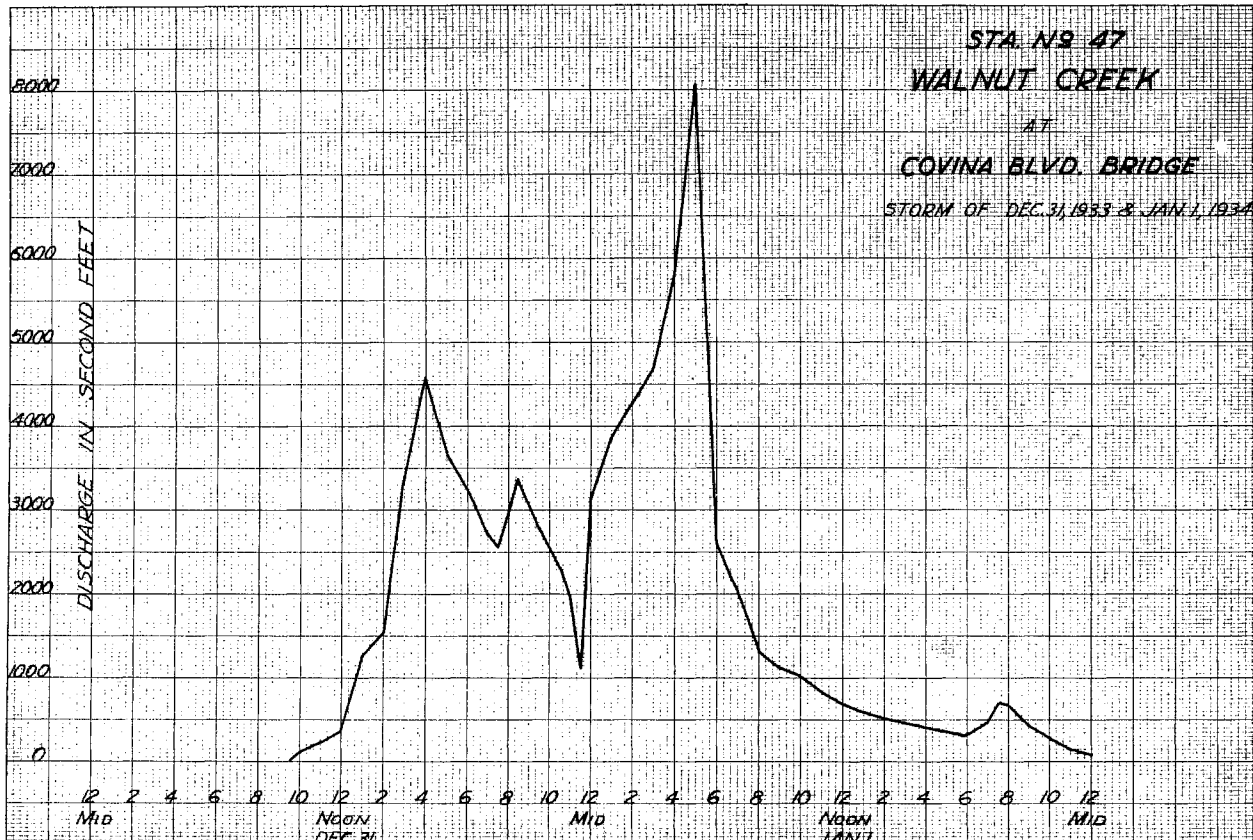
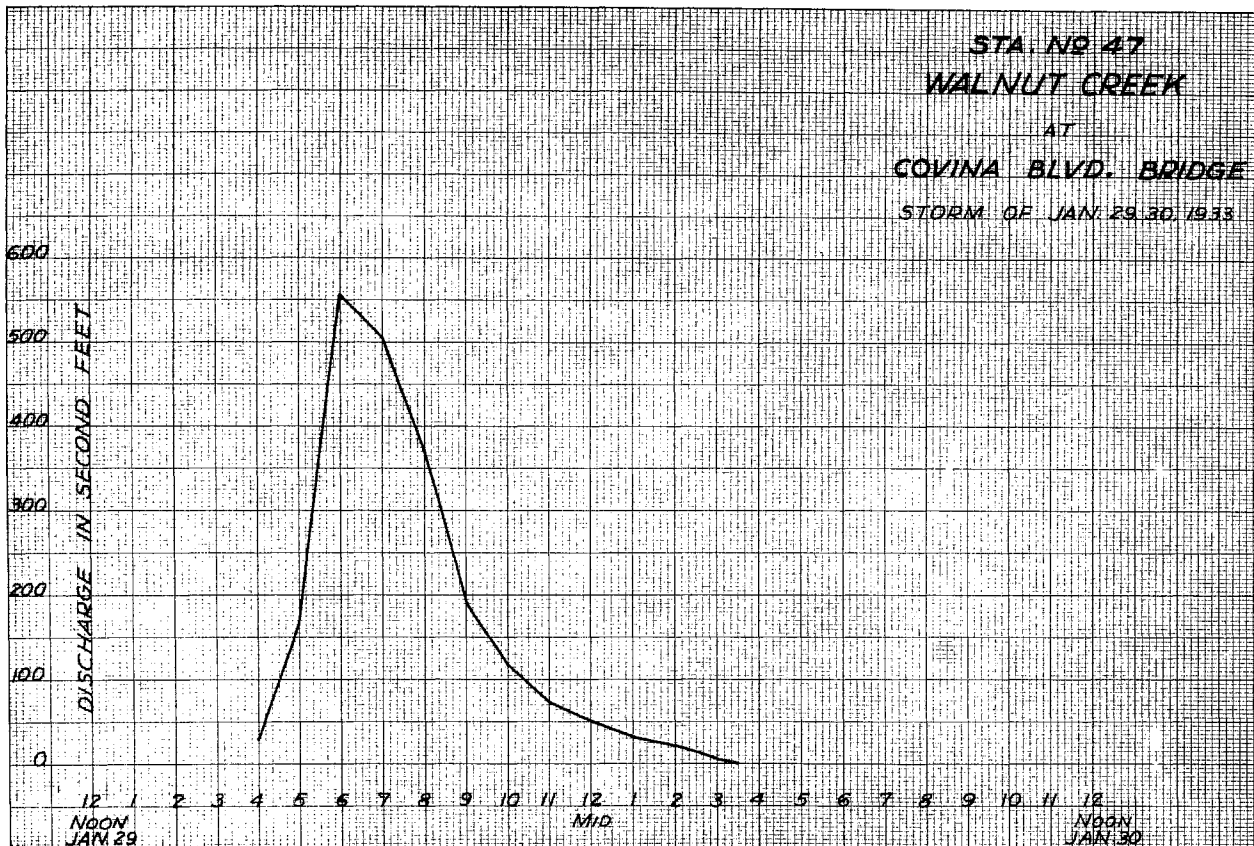
File No. **47**

At **COVINA BLVD. BRIDGE** for the Year Ending September 30, 19 **34**

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		DAY																				
	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge																					
1							H 1774.0																	1																					
2							H 2.5																	2																					
3																								3																					
4																								4																					
5																								5																					
6																								6																					
7																								7																					
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27																								27																					
28																								28																					
29																								29																					
30																								30																					
31																								31																					
TOTAL																																													3179.1
Mean Daily Discharge in Second-foot																																													8.71
Second-foot per square mile																																													0.088
Run-off, depth in inches																																													1.192
Run-off in acre-foot																																													2771.54
Maximum Mean Daily Discharge in Second-foot																																													1349.4
Maximum Mean Daily Discharge in Second-foot																																													0

Maximum stage 6.28 feet at 5:00 A.M. on Jan. 1, 1934
Minimum stage Dry feet at West of the gage.
Discharge 8058.7 second-foot.
Recorder gage heights adjusted to rating curve.





Daily Gage Height, in Feet, and Discharge, in Second-Foot, of RISING WATER - Excluding Pumping on Gate Ditch

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No.

Near Whittier Narrows for the Year Ending September 30, 19 33

Table with columns for months (October to September), days, gage height, discharge, and totals. Includes sub-sections for 'Computed from weekly measurements marked M.' and 'Computed from runoff at Lower Azusa Road and El Monte Blvd.'

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of RISING WATER

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No.

Near Whittier Narrows for the Year Ending September 30, 19 34

Table with columns for months (October to September), days, gage height, discharge, and totals. Includes sub-sections for 'Computed from runoff at Lower Azusa Road and El Monte Blvd.' and 'Pumpage into Gate Ditch deducted.'

U 1

ARROYO SECO - U.S.G.S. STATION - 3 MI. ABOVE FLOOD CONTROL DAM, NEAR PASADENA, CALIFORNIA

Location

Near south line of Sec. 30 T. 2N., R. 12 W., (unsurveyed) just below trail crossing at Forest Ranger's Cabin in Angeles National Forest, 1 1/2 miles above mouth of Millard Canyon, 5 1/2 miles northwest of Pasadena, and 3 miles above Devils Gate Dam.

Drainage Area

16.4 square miles.

Records Available

December, 1910 to September 30, 1934 at U.S.G.S. office, Los Angeles, California.

Gage

Water stage recorder on west bank.

Discharge Measurements

Made from cable 150 feet above gage or by wading.

Channel and Control

Bed consists of solid rock, gravel and boulders. A concrete dam, extending to bedrock was built across the channel 15 feet below gage well with a notch in the crest 2 feet wide and 1 foot deep. In July, 1919 a concrete intake box was built from gage house down to the control.

Extremes of Discharge

1931-1932

Maximum - 48.0 c.f.s. December 28, 1931. Minimum - Dry at certain times of year.

1932-1933

Maximum - Not determined. Minimum - Less than .1 c.f.s. various times during year.

1933-1934

Maximum - 96.0 c.f.s. Jan. 1, 1934. Minimum - .01 c.f.s. Various times during year.

Diversions

None.

Regulations

None.

Accuracy

Good.

Operation

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

F. C. Dist. Form 104A

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. U1

Discharge measurements of ARROYO SECO - U.S.G.S. Station

at 3 miles above Flood Control Dam, near Pasadena, Calif., during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq-ft, Mean velocity ft. per sec., Gage height Feet, Discharge Sec.-ft., Rating Percent, Method, Mean No., G. Ht. Change Total, Time Hours, Meter No.

Table with columns: No., Date, Made by, Width Feet, Area of section Sq-ft, Mean velocity ft. per sec., Gage height Feet, Discharge Sec.-ft., Rating Percent, Method, Mean No., G. Ht. Change Total, Time Hours, Meter No.

F. C. D. Form 104A (M 134)

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. U1

Discharge measurements of ARROYO SECO at 3 miles above F. C. Dam during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq-ft, Mean velocity ft. per sec., Gage height Feet, Discharge Sec.-ft., Rating Percent, Method, Mean No., G. Ht. Change Total, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 17.1

Discharge measurements of ARROYO SECO

at 3 miles above P. O. Dam during the year ending September 30, 19 33

Table with columns: No., Date, Made by, Weir Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gate height Feet, Discharge Sec.-ft., Rating, Method, Mean No., G. H. Change Total, Time Hours, Meter No.

Table with columns: No., Date, Made by, Weir Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gate height Feet, Discharge Sec.-ft., Rating, Method, Mean No., G. H. Change Total, Time Hours, Meter No.

F.C. Dist. Form 105-1000-9-31

Daily Gauge Height in Feet and Discharge, in Second-Feet, of ARROYO SECO

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. U. 1

at Pasadena, California, for the Year Ending September 30, 19 33. 3 miles above P. O. Dam

Drainage Area 16.4 Square Miles.

Gage Read

Used rating table dated

Large table with columns for months (OCTOBER to SEPTEMBER) and days (1 to 31). Includes sub-columns for Gage height and Discharge. Includes summary rows for TOTAL, Mean Daily Discharge, Second-foot per square mile, Feet-ft. depth in inches, etc.

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		DAY
	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	
1					0.1	406.			5.5		10.		2.0	1.2		0.5		0.4							1
2					.1	60.			6.		8.5		2.0	1.0		.4		.3							2
3					.1	42.			5.5		7.		2.0	1.0		.5		.3							3
4					.1	29.			5.5		7.		2.0	.9		.5		.3							4
5					.1	24.			4.5		6.5		1.9	.9		1.2		.3							5
6					.1	20.			3.8		6.5		1.9	.7		1.3		.2							6
7					.1	18.			3.8		6.		1.9	.6		1.2		.2							7
8					.2	16.			3.4		5.5		1.7	.5		.9		.2							8
9					.1	13.			3.8		5.		1.7	.5		.9		.1							9
10					.1	11.			3.4		4.5		1.7	.7		.7		.1							10
11					.1	9.5			2.9		4.5		1.7	.6		.6		.1							11
12					.5	6.5			2.9		4.2		1.7	.6		.6		.1							12
13					57.	6.5			2.4		3.8		1.7	.5		.6		.1							13
14					10.	6.			2.9		3.8		1.7	.5		.9		.1							14
15					4.2	7.			3.4		2.9		1.6	.4		.9		.1							15
16					2.9	6.5			2.9		2.9		1.4	.4		1.0		.1							16
17					2.4	6.5			2.9		2.9		1.4	.4		1.0		.1							17
18					2.0	6.			2.9		2.9		1.4	.5		1.0		.1							18
19					2.0	5.5			4.7		3.4		1.3	.5		.7		.1							19
20					1.7	5.5			6.5		3.4		1.4	.4		.6		.1							20
21					1.2	5.			5.5		3.4		1.4	.4		.6		.1							21
22					1.2	5.5			8.		3.4		1.4	.5		.6		.1							22
23					1.2	5.			38.		3.4		1.2	.5		.6		.1							23
24					.9	4.5			57.		3.4		1.2	.4		.7		.1							24
25					.9	4.5			38.		3.4		1.2	.4		.6		.1							25
26					.9	5.			20.		2.9		1.2	.4		.5		.1							26
27					.9	5.			12.		2.4		1.2	.5		.4		.1							27
28					.9	6.5			11.		2.0		1.2	.5		.4		.1							28
29					.7	6.5			---		2.0		1.2	.4		.4		.1							29
30					1.6	5.5			---		2.0		1.2	.5		.4		.1							30
31					134.	5.5			---		2.0		---	.5		---		.1							31
TOTAL					228.3	763.			269.1		132.5		46.5	17.8		21.2		4.5							
Mean Daily Discharge in Second-Feet		0.1	.06	7.36	24.6	9.61	4.27	1.55	.57	.71	.14	.05	.02	4.08											
Second-foot per square mile		.006	.003	.449	1.500	.586	.260	.095	.043	.009	.001	.249													
Discharge in cubic feet per second		.007	.004	.518	1.726	.610	.301	.105	.048	.010	.004	.001	3.372												
Discharge in acre-feet		6.1	3.6	453.	1510.	534.	263.	92.2	35.3	42.0	8.9	3.1	1.2	2950											
Maximum Daily Discharge in Second-Feet				134	406	57	10	2.0	1.2	1.3	.4			406.											
Maximum Daily Discharge in Cubic Feet				.1	4.5	2.4	2.0	1.2	.4	.1															

U-9
 BIG DALTON CREEK - U.S.G.S. STATION, BELOW FLOOD CONTROL DAM, NEAR GLENDORA, CALIFORNIA.

Location
 In center of Sec. 21, T. 1 N., R. 9 W., at Glendora Consolidated Mutual Irrigation Company's Dam, 1/4 mile above mouth of arroyo and 2 1/2 miles northeast of Glendora and 2 miles below Flood Control Dam.

Drainage Area
 7.5 square miles.

Installed by
 U. S. G. S. Water Resources Branch.

Records Available
 December, 1919 to September 30, 1934 at U. S. G. S. Office, Los Angeles, California.

Gage
 Stevens continuous water stage recorder installed in concrete wall and house on west bank of stream.

Discharge Measurements
 Low water flow measured by wading near gage. High water flow measured from cable 50 feet above gage.

Channel and Control
 Control is a rubble masonry dam. Crest of dam is five feet lower at the center than at wings. Pool at dam fills with silt and control is not effective.

Extremes of Discharge
 1931-1932
 Maximum- 57 c.f.s. on February 11, 1932.
 Minimum- Dry most of year.
 1932-1933
 Maximum- 2.3 c.f.s. - January 19, 1933.
 Minimum- Dry most of the year.
 1933-1934
 Maximum- 130 c.f.s. Jan. 1, 1934.
 Minimum- Dry most of year.

Diversions
 The Glendora Consolidated Mutual Irrigation Company's dam diverts water 1/8 mile and 1 1/2 miles above gage through a 10" pipe line. A 12" pipe line diverts water at the dam.

Regulation
 Flow regulated by Los Angeles County Flood Control District's Big Dalton Dam above gage.

Accuracy
 Good.

Operation
 Constructed by U. S. G. S. Water Resources Branch and operated by U. S. G. S. Water Resources Branch in Conjunction with Los Angeles County Flood Control District.

F. C. D. Form 106A (M. 3-34)

LOS ANGELES COUNTY
 FLOOD CONTROL DISTRICT
 HYDROGRAPHIC DEPARTMENT

Station No. U9

Discharge measurements of Big Dalton Creek - U. S. G. S. Station
 at Below Flood Control Dam, near
 near Glendora, California. during the year ending September 30, 1933.

No.	Date	Made by	Wind	Area of section	Mean velocity	Gage height	Discharge	Rating	Method	Mean gage	G. H. gauge	Time	Mean
			Dir.	Sq. ft.	ft. per sec.	Feet	Sec.-ft.	Point		Feet	Feet	Hours	No.
1	1933												
1	1-20	F. O. Ebert	3.4	1.5	.57	1.09	.85	.6	7				271, 666
2	1-20	Brewster-J.G.Lindsay	3.0	1.64	.84	1.09	1.37	.6	3			1/12	271, 666
3	1-21	F. O. Ebert	3.1	1.0	.30	1.04	.3	.6	6			1/6	271, 666
4	1-21	Brewster	3.0	1.40	.44	1.04	.61	.6	3			1/12	271, 666
5	1-23	F. O. Ebert	3.3	1.5	.67	1.09	1.0	.6	7			1/6	271, 666
6	1-26	Waddicor-Ebert	3.0	1.21	.31	1.03	.38	.6	6			1/12	F.O.26
7	1-27	Brewster	2.0	.72	.44	1.02	.32	.6	4			1/12	271, 666
8	1-29	Brewster	3.0	1.65	.72	1.05	1.18	.6	3			1/12	271, 666
9	1-30	Turner	3.2	1.66	.82	1.10	1.36	.6	7			1/6	F.O.26
10	2-1	R. A. Waddicor	3.0	1.30	.50	1.08	.64	.6	4			1/12	F.O.26
11	2-3	Brewster	3.0	1.49	.71	1.07	1.06	.6	3			1/12	271, 666
12	2-10	Brewster	3.0	1.45	.58	1.06	.84	.6	3			1/12	271, 666
13	2-10	H. J. Tompkins	1.5	.44	.80	1.02	.35	.6	2			1/12	271, 666
14	2-13	R. A. Waddicor	3.5	1.39	.45	1.06	.62	.6	4			1/6	F.O.26
15	2-17	Brewster	2.4	.93	.63	1.05	.59	.6	3			1/12	271, 666
16	2-17	H. J. Tompkins	2	.7	.50	1.04	.35	.6	4			1/6	271, 666
17	2-24	Brewster	2.4	1.13	.69	1.06	.78	.6	3			1/12	271, 666
18	3-1	H. J. Tompkins	2.0	.8	.62	1.06	.5	.6	2			1/12	271, 666
19	3-3	Brewster	2.0	.80	.75	1.06	.60	.6	4			1/12	271, 666
20	3-10	Brewster	2.0	.64	.77	1.04	.49	.6	4			1/12	271, 666
21	3-17	Brewster	2.0	.67	.64	1.04	.43	.6	4			1/12	271, 666
22	3-24	Brewster	2.0	.68	.53	1.03	.36	.6	4			1/12	271, 666
23	3-31	Brewster	1.0	.20	.55	.98	.11	.6	2			1/12	271, 666
24	4-7	Brewster	.5	.11	.64	.95	.07	.6	1			1/12	271, 666

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. U 2

Discharge measurements of BIG DALTON CREEK at Below F. C. Dam near during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section, Mean velocity, Gage height, Discharge, Rating, Method, Mean No., G. H. Gauge Feet, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. U 2

Discharge measurements of BIG DALTON CREEK at Below F. C. Dam near during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section, Mean velocity, Gage height, Discharge, Rating, Method, Mean No., G. H. Gauge Feet, Time Hours, Meter No.

Daily Gage Height and Estimated Discharge, in Second-Foot, of BIG DALTON CREEK - U. S. G. S. STATION Below Flood Control Dam near Glendora, California for the Year Ending September 30, 1933.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. U 2

Large table with columns for months (OCTOBER to SEPTEMBER) and days (1-31), including sub-columns for Gage height and Discharge. Includes summary statistics at the bottom.

Drainage Area 7.5 Square Miles. [Observer]

Gage Road

Used rating table dated

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		DAY	Gage height	Discharge	Gage height	Discharge
	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge							
1					0		6.2		.5		.6			2											1				
2							1.4		.5		.5			3											2				
3							7		.4		.5			3											3				
4							4.1		.4		.4			3											4				
5							2.7		.3		.4			3											5				
6							1.9		.3		.4			3											6				
7							1.9		.3		.4			3											7				
8							3.7		.4		.4			1.6											8				
9							5		.4		.4			2.1											9				
10							4.4		.4		.4			.9											10				
11							4.8		.4		.4			.2											11				
12							5		.4		.4			.2											12				
13							5.5		.3		.4			.1											13				
14							5.5		.3		.4			.1											14				
15							5.5		.3		.4			.1											15				
16							7		.3		.4			.1											16				
17							11		.3		.4			.1											17				
18							12		.3		.3			.1											18				
19							11		.4		.3			.1											19				
20							1.9		.4		.3			.1											20				
21							.7		.4		.3			.1											21				
22							.7		.8		.3			.1											22				
23							.7		1.6		.3			.1											23				
24							.8		1.6		.5			.1											24				
25							.7		1.1		.5			.1											25				
26							.7		1.0		.4			.1											26				
27							.7		.9		.4			.1											27				
28							.6		.8		.3			.3											28				
29							.6		.3		.3			.1											29				
30							.6		-		.2			.1											30				
31							21		.6		.2			-											31				

TOTAL
 Stage Daily Discharge in Second-foot .68
 Second-foot per square mile .091
 Run-off, depth in inches .104
 Run-off in acre-feet 41.7
 Maximum Stage Daily Discharge in Second-foot 21
 Minimum Stage Daily Discharge in Second-foot 0

ESTIMATED—Jan. 20-22, Jan. 27 to Feb. 3, Feb. 10-21, and Mar. 3 to July 31.
 Period Year

P. C. Dist. Form 1004

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. U14

U-14

BIG ROCK CREEK U.S.G.S. STATION - 1 MILE ABOVE VALYERMO POST OFFICE

Discharge measurements of Big Rock Creek - U. S. G. S. Station

at 1 mile above Valyermo Post Office during the year ending September 30, 1933

Location In S.E. 1/4 Sec. 20 T. 4 N., R. 9 W., a quarter of a mile south of the boundary line of the Angeles National Forest, about 1-3/4 miles southeast of Valyermo, Los Angeles County California.

Drainage Area 23.25 square miles.

Records Available 1/15/28 to 9/30/34 at U.S.G.S. Water Resources Branch, office at Los Angeles, California.

Gage Stevens Continuous Water Stage Recorder in wooden well and shelter on west bank.

Discharge Measurements Made from foot bridge 20 feet below the gage or by wading.

Channel and Control Boulders and gravel which may shift at high stages; fairly permanent at low and medium stages.

Extremes of Discharge 1921-1932
 Maximum- 251 c.f.s. February 8, 1932.
 Minimum- 2.4 c.f.s. November 1, 1931.
 1932-1933
 Maximum- 24.0 c.f.s. April 4, 1933.
 Minimum- 2.4 c.f.s. September 17, 1933
 1933-1934
 Maximum- 246 c.f.s. January 1, 1934.
 Minimum- 1.6 c.f.s. several days in September 1934.

Accuracy Stage Discharge relation not permanent. Rating curve fairly well defined. Water stage recorder record excellent. Daily discharge ascertained by applying mean daily gage height to rating table. Records good.

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

No.	Date	Made by	Width Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec.-ft.	Rating Point	Method	Mean gage height	G. H. Change Total	Time Hour	Remarks
1	1932 10-1	Luce	8.5	7.95	1.11	1.42	8.8	.6	9			1/6	F.O.13
2	10-5	Luce	8.0	6.80	1.19	1.38	8.0	.6	9			1/6	F.O.13
3	10-12	K. R. Melin	12.0	6.30	.97	1.32	6.1	.6	11			1/6	
4	10-28	K. R. Melin	11.5	6.60	.89	1.33	5.9	.6	11			1/6	
5	11-21	H. J. Tompkins	10.5	5.40	1.00	1.30	5.4	.6	9			1/2	
6	12-9	H. J. Tompkins	10.0	5.30	.94	1.30	5.0	.6	10			1/3	
7	12-17	Luce	8.0	4.81	1.38	1.29	6.7	.6	8			1/6	F.O.13
8	12-26	H. J. Tompkins	9.6	6.20	.98	1.30	6.1	.6	10			1/2	
9	1-12	H. J. Tompkins	10.0	5.60	.93	1.28	5.2	.6	11			1/3	
10	1-14	Luce	8.0	4.68	1.28	1.28	6.0	.6	9			1/6	F.O.13
11	1-25	Luce - Lindsay	7.5	4.45	1.31	1.29	6.8	.6	8			1/6	F.O.13
12	2-2	H. J. Tompkins	11.0	6.80	1.00	1.30	6.8	.6	11			1/3	
13	2-12	Luce	9.5	5.09	1.23	1.34	6.2	.6	9			1/6	F.O.13
14	2-18	H. J. Tompkins	9.0	5.10	1.40	1.38	7.2	.6	9			1/4	
15	3-4	Luce	9.4	6.23	2.23	1.52	14.0	.6	10			1/6	F.O.13
16	3-8	H. J. Tompkins	17.0	10.0	1.50	1.64	15.0	.6	15			1/3	
17	3-9	Luce	10.2	7.25	2.24	1.68	16.3	.6	10			1/6	F.O.13
18	3-13	H. J. Tompkins	19.0	12.0	1.33	1.66	16.0	.6	17			2/3	
19	4-2	Luce	10.2	8.22	2.52	1.75	20.7	.6	10			1/6	F.O.13
20	4-3	H. J. Tompkins	21.0	14.0	1.43	1.76	20.0	.6	20			1/3	
21	4-13	K. R. Melin	13.0	11.0	1.18	1.58	13.0	.6	12			1/6	
22	4-22	Luce	10.3	6.56	2.07	1.58	13.6	.6	10			1/6	F.O.13
23	4-29	H. J. Tompkins	16.0	12.0	1.08	1.54	13.0	.6	15			1/2	
24	5-22	H. J. Tompkins	16.0	11.0	1.09	1.55	12.0	.6					

Sheet No. 1 of Two Sheets

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 014

Discharge measurements of Big Rock Creek - U. S. G. S. Station

at 1 mile above Valyermo Post Office during the year ending September 30, 19 33

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec. Ft., Rating, Method, Mean No., G. H. Storage Feet, Time Hour, Meter No.

Discharge measurements of BIG ROCK CREEK

at 1 mile above Valyermo P. O. during the year ending September 30, 19 34

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec. Ft., Rating, Method, Mean No., G. H. Storage Feet, Time Hour, Meter No.

F. C. Dist. Form 105-1000-9-31

Daily Discharge in Second-Feet, of BIG ROCK CREEK - U. S. G. S. STATION

at 1 mi. above Valyermo P. O., for the Year Ending September 30, 19 33

Drainage Area 23.25 Square Miles

Observer

Gage Road

Used rating table dated

Large table with columns for months (OCTOBER to SEPTEMBER) and days (1-31), containing discharge measurements in second-feet and other data.

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of BIG ROCK CREEK - U.S.G.S. STATION

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. 14

near 1.1 mi. above Valerino, P.O. near Valerino, California for the Year Ending September 30, 1934

Drainage Area 23.25 Square Miles.

Observer:

Gage Read:

Used rating table dated:

Main data table with columns for months (OCTOBER to SEPTEMBER), Gage height, and Discharge. Includes a 'TOTAL' row at the bottom and a 'PERIOD YEAR' column on the far right.

Summary table with columns for 'TOTAL', 'Mean Daily Discharge in Second-foot', 'Sum of feet per square mile', 'Sum of feet in inches', 'Sum of feet in cubic feet', and 'Maximum Run Daily Discharge in Second-foot'.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 04

U-4

BIG SANTA ANITA CREEK - U.S.G.S. STATION ABOVE FLOOD CONTROL DAM NEAR SIERRA MADRE, CALIF.

Location In SW 1/4 NE 1/4 Sec. 10, T. 1 N., R. 11 W., at head of Hermit's Falls, 4 miles northeast of Sierra Madre. About 1 mile above L. A. County Flood Control Reservoir.

Drainage Area 10.5 square miles.

Records Available July 16, 1916 to September 30, 1934 at U.S.G.S. office.

Gage Water Stage Recorder on right bank at pool at head of Hermit's Falls.

Discharge Measurements Made from Cable 300 feet below gage, or by wading.

Channel and Control Channel at gage is pool in bedrock; bed is rough and steep above and below pool. Banks are high, clean and not subject to overflow. Control is bedrock, the same for all stages, and is permanent.

Extremes of Discharge 1931-1932 Maximum- 336 c.f.s. February 9, 1932. Minimum- Less than .10 c.f.s. several times during year. 1932-1933 Maximum- 390 c.f.s. January 19, 1933. Minimum- Less than 0.1 c.f.s. various times during year. 1933-1934 Maximum- 564 c.f.s. Jan. 1, 1934. Minimum- Less than .01 c.f.s. various times during year.

Diversions None.

Regulation None.

Accuracy Good.

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

Discharge measurements of Big Santa Anita Creek - U. S. G. S. Station at Above Flood Control Dam, near Sierra Madre, Calif. during the year ending September 30, 1933

Detailed discharge data table with columns: No., Date, Made by, Vane Feet, Area of section (sq. ft.), Mean velocity (ft. per sec.), Gage height (Feet), Discharge (Sec. Ft.), Rating Percent, Method, Mean area (sq. ft.), G. M. change (Cub. Feet), Time (mins), Flow No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 174

Discharge measurements of Big Santa Anita Creek - U. S. G. S. Station

at Above Flood Control Dam, near Sierra Madre, Calif., during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gate height Feet, Discharge Sec.-ft., Rating Fromed diff., Method, Mass. No., G. H. change Total, Time Hours, Meter No.

Sheet No. 2 of Two Sheets

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 174

Discharge measurements of BIG SANTA ANITA CREEK

at Above F. C. Dam during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gate height Feet, Discharge Sec.-ft., Rating Fromed diff., Method, Mass. No., G. H. change Total, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 174

Discharge measurements of BIG SANTA ANITA CREEK

at Above F. C. Dam during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gate height Feet, Discharge Sec.-ft., Rating Fromed diff., Method, Mass. No., G. H. change Total, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 174

Discharge measurements of BIG SANTA ANITA CREEK

at Above F. C. Dam during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gate height Feet, Discharge Sec.-ft., Rating Fromed diff., Method, Mass. No., G. H. change Total, Time Hours, Meter No.

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of BIG SANTA ANITA CREEK - U.S.G.S. STATION

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. U 4

Above Flood Control Dam, near Sierra Madre, Calif. for the Year Ending September 30, 1933

Table with columns for months (OCTOBER to SEPTEMBER) and rows for daily gage height and discharge. Includes summary rows for totals and various discharge metrics.

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of BIG SANTA ANITA CREEK - U.S.G.S. STATION

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. U-4

Above Flood Control Dam, near Sierra Madre, California for the Year Ending September 30, 1934

Table with columns for months (OCTOBER to SEPTEMBER) and rows for daily gage height and discharge. Includes summary rows for totals and various discharge metrics.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. U2

U-2

EATON CREEK U.S.G.S. STATION, AT MOUNT WILSON TOLL ROAD NEAR PASADENA, CALIFORNIA

Discharge measurements of Eaton Creek, U.S.G.S. Station at Mt. Wilson Toll Road Bridge, near Pasadena, California.

during the year ending September 30, 1933

Location: Near line between Section 2 and 11, T. 1 N., R. 12 W., at mouth of canyon just above Mount Wilson Toll Bridge, and four miles northeast of Pasadena.

Drainage Area: 6.5 square miles.

Records Available: March 1, 1918 to September 30, 1934 at U.S.G.S. office, Los Angeles, California.

Gage: Water Stage Recorder on east bank just above toll road bridge.

Discharge Measurements: Made by wading near gage.

Extremes of Discharge: 1931-1932 Maximum - 361 c.f.s. February 9, 1932. Minimum - Dry most of year. 1932-1933 Maximum - 182.0 c.f.s. January 19, 1933. Minimum - Dry most of year. 1933-1934 Maximum - 330 c.f.s. Jan. 1, 1934. Minimum - Dry most of year.

Diversions: City of Pasadena diverts water above the station.

Regulation: None.

Accuracy: Good.

Operation: Constructed by U.S.G.S. Water Resources Branch and Operated by the U.S.G.S. Water Resources Branch in conjunction with the City of Pasadena and the Los Angeles County Flood Control District.

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec. ft., Rating Percent full, Method, Mean No., G. H. Total, Time Hour, Meter No. Includes data for dates 1-17, 1-20, 1-23, 1-24, 1-26, 2-1.

F. C. Dist. Form 104A IM 334

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. U 2

Discharge measurements of EATON CREEK

at Mt. Wilson Toll Road during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec. ft., Rating Percent full, Method, Mean No., G. H. Total, Time Hour, Meter No. Includes data for dates 12/13, 12/14, 1/2, 1/4, 2/23, 2/23, 2/24, 2/27, 2/28.

F.C. Dist. Form 105-1000-9-31

Daily Stage and Discharge in Second-Foot, of EATON CREEK - U.S.G.S. Station

At Mt. Wilson Toll Road, near Pasadena, California, for the Year Ending September 30, 1933

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. U 2

Large table with columns for months (OCTOBER to SEPTEMBER) and days (1-31). Rows include Gage height, Discharge, and various summary statistics at the bottom.

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of **FISH CREEK - U.S.G.S. STATION**

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. U-7

Near **at Mt. Wilson Toll Road** for the Year Ending September 30, 1934

At **Pasadena, California.**

Drainage Area **6.5** Square Miles. [Observer.]

Gage Road. Used rating table dated.

Main data table with columns for months (OCTOBER to SEPTEMBER) and days (1-31). Includes sub-tables for 'Maximum stage' and 'Minimum stage' on the left side.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. U7

U-7

FISH CREEK - U.S.G.S. STATION, 4000 FEET ABOVE MOUTH OF CANYON, NEAR DUARTE, CALIFORNIA

Discharge measurements of Fish Creek - U. S. G. S. Station

at 4000 ft. Above Mouth of Canyon, near Duarte, California, during the year ending September 30, 1934

Location In SW 1/4 SW 1/4 Sec. 15, T. 1 N. R. 10 W., about 3/4 of a mile above mouth of canyon and 4 miles northeast of Duarte.

Drainage Area 6.5 square miles.

Records Available July 23, 1916 to September 30, 1934 at U. S. G. S. Office in Los Angeles, California.

Gage Water stage recorder, installed July 28, 1917 on left bank. Vertical staff gage at same site and elevation.

Discharge Measurements Made by wading.

Channel and Control Gravel and boulders; apparently permanent. Both banks are high and not subject to overflow. Concrete control has been built a short distance below gage.

Extremes of Discharge 1931-1932 Maximum- 415 c.f.s. December 28, 1931. Minimum- Less than .10 c.f.s. several times during year. 1932-1933 Maximum- 299.0 January 19, 1933. Minimum- Less than 0.1 c.f.s. various times during year. 1933-1934 Maximum- 640 c.f.s. Jan. 1, 1934. Minimum- Less than 0.1 c.f.s. various times during year.

Diversions None above gage.

Regulation None.

Accuracy Good.

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

Measurement log table with columns: No., Date, Made by, Weir Part, Area of opening, Mean velocity, Gage height, Discharge, Rating, Method, Max. No., G. H. change, Time, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 07

Discharge measurements of Fish Creek - U. S. G. S. Station

4000 ft. Above Mouth of Canyon, near Duarte, Calif., during the year ending September 30, 19 33.

Table with 16 columns: No., Date, Made by, Width Feet, Area of section Sq. ft., Mean velocity ft. per sec., Gauge height Feet, Discharge Sec.-ft., Rating Percent diff., Method, Meas. No., G. H. change Total, Time Hours, Meter No. Rows include measurements by F. C. Ebert, H. J. Tompkins, R. A. Waddoor, R. Lindsay, L. J. Turner, and H. J. Tompkins.

Sheet No. 2 of Four Sheets

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 07

Discharge measurements of Fish Creek - U. S. G. S. Station

4000 ft. Above Mouth of Canyon, near Duarte, California, during the year ending September 30, 19 33.

Table with 16 columns: No., Date, Made by, Width Feet, Area of section Sq. ft., Mean velocity ft. per sec., Gauge height Feet, Discharge Sec.-ft., Rating Percent diff., Method, Meas. No., G. H. change Total, Time Hours, Meter No. Rows include measurements by R. Lindsay, H. J. Tompkins, and H. J. Tompkins.

Sheet No. 3 of Four Sheets

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 07

Discharge measurements of Fish Creek - U. S. G. S. Station

4000 ft. Above Mouth of Canyon, near Duarte, California, during the year ending September 30, 19 33.

Table with 16 columns: No., Date, Made by, Width Feet, Area of section Sq. ft., Mean velocity ft. per sec., Gauge height Feet, Discharge Sec.-ft., Rating Percent diff., Method, Meas. No., G. H. change Total, Time Hours, Meter No. Rows include measurements by H. J. Tompkins, R. Lindsay, G. Patterson, and R. Lindsay.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 07

Discharge measurements of FISH CREEK

4000' Above Mouth of Canyon, during the year ending September 30, 19 34.

Table with 16 columns: No., Date, Made by, Width Feet, Area of section Sq. ft., Mean velocity ft. per sec., Gauge height Feet, Discharge Sec.-ft., Rating Percent diff., Method, Meas. No., G. H. change Total, Time Hours, Meter No. Rows include measurements by R. Lindsay, H. J. Tompkins, Allen-Howan, and H. J. Tompkins.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. U 7

Discharge measurements of FISH CREEK

at 4000' Above Mouth of Canyon during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width, Area of pool, Mean velocity, Gage height, Discharge, Rating, Method, Mean No., G. H. above, Time, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. U 7

Discharge measurements of FISH CREEK

at 4000' Above Mouth of Canyon during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width, Area of pool, Mean velocity, Gage height, Discharge, Rating, Method, Mean No., G. H. above, Time, Meter No.

Daily Discharge in Second-Foot, of FISH CREEK - U.S.G.S. STATION

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. U 7

at 4000' above Mouth of Canyon, near Duarte, California, for the Year Ending September 30, 1933

Drainage Area 6.5 Square Miles. (Observer)

Gage Head Used rating table dated

Large table with columns for months (OCTOBER to SEPTEMBER) and days (1-31), including sub-columns for Gage height and Discharge. Includes summary rows for TOTAL, Mean Daily Discharge, Second-foot per square mile, etc.

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		DAY		
	Gage height		Gage height		Gage height		Gage height		Gage height		Gage height		Gage height		Gage height		Gage height		Gage height		Gage height		Gage height			DAY	
	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge			
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31																											
TOTAL			7.0		292.4		620.2		133.4		91.6		34.9		18.2		19.8										
Mean Daily Discharge in Second-feet			.048		.23		9.43		20.0		4.76		2.95		1.31		.59		.66		.116		.030		.04		3.37
Second-foot per square mile			.007		.035		1.451		3.977		.732		.454		.202		.091		.102		.018		.005		.006		.518
Run-off, depth in inches			.008		.040		1.673		3.547		.764		.525		.225		.104		.113		.020		.005		.007		7.037
Run-off in acre-feet			2.9		13.9		580.		1230		265		182		78.1		36.1		39.3		7.1		1.8		2.4		2440.0
Maximum Mean Daily Discharge in Second-feet			.5		209		360		37		6.0		2.2		1.0		1.3		1.3		.4						360.0
Maximum Mean Daily Discharge in Second-foot			.2		.4		1.8		1.5		2.0		.7		.4		.4		.4		.4						

U-12 HAINES CREEK U.S.G.S. STATION NEAR TUJUNGA LOS ANGELES COUNTY FLOOD CONTROL DISTRICT Station No. **U 12**
HYDROGRAPHIC DEPARTMENT

Location In N.E. 1/4 Sec. 18, T. 2 N., R. 12 W., 800 feet above mouth of canyon and 1 1/2 miles northeast of Tujunga.

Drainage Area 1.2 square miles.

Installed by U.S.G.S. Water Resources Branch.

Records Available February, 1917 to September 30, 1934 at U.S.G.S. Water Resources Branch, office at Los Angeles, California.

Gage Water Stage Recorder located on west side of stream.

Discharge Measurements Low water measurements made by wading at the station. High water measurements made from bridge at the station.

Channel and Control Concrete Control at Station.

Extremes of Discharge
 1931-1932
 Maximum- 3.8 c.f.s. February 9, 1932.
 Minimum- Dry most of the year.
 1932-1933
 Maximum- 12.0 c.f.s. January 19, 1933.
 Minimum- Dry most of the year.
 1933-1934
 Maximum- Not determined.
 Minimum- Dry most of the year.

Diversions A tunnel driven into stream bed 1 mile above station diverts into a 4 inch pipe past gage for domestic supply of Tujunga. Similar tunnel short distance below station diverts small supply for part of year.

Regulation Several small check dams have been built across stream in upper part of drainage basin.

Accuracy Fair.

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

Discharge measurements of **Haines Canyon Creek - U. S. G. S. Station** at **Tujunga, California** during the year ending September 30, 1933

No.	Date	Made by	Width Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec. Ft.	Runoff Method	Mean gage height	G. H. Gauge Total	Time Meas.	Mean No.
1	1-19	H. J. Tompkins	3.5	2.4	2.92	1.41	7.0					
2	1-24	L.A.Co.Flood Control				.34	.06	3"	Venturi flume			
3	1-25	L.A.Co.Flood Control				.42	.13	3"	Venturi flume			
4	1-26	L.A.Co.Flood Control				.39	.09	3"	Venturi flume			
5	1-26	L.A.Co.Flood Control				.34	.06	3"	Venturi flume			
6	1-29	J. L. Irwin	.8	.064	1.11	.40	.07	.6	2	1/6	F.O.30	
7	2-14	Waddicor-Turner		.05	1.01	.35	.05				F.O.26	
8	3-23	H. J. Tompkins				.31	.03	Vol.				
9	5-19	H. J. Tompkins				.30	.0008	Vol.				
Station U12 1933-34												
1	3/7	H. J. Tompkins				0.48	.13	Vol.				
2	3/31	"				.32	.04	Vol.				
3	4/10	"				.32	.013	Vol.				
4	4/18	"				.32	.011	Vol.				
5	4/26	"				.32	.009	Vol.				
6	5/11	"				.32	.011	Vol.				
7	5/17	"				.30	.007	Vol.				
8	6/2	"				.34	.0063	Vol.				
9	6/8	"				.34	.0069	Vol.				
10	6/16	"				.34	.0061	Vol.				
11	6/23	"				.36	.0042	Vol.				
12	6/27	"				.34	.0043	Vol.				
13	7/6	"				.34	.0049	Vol.				
14	7/12	"				.30	.0080	Vol.				
15	7/21	"				.28	.0031	Vol.				
16	8/2	"				.30	.0017	Vol.				

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of HAINES CREEK - U.S.G.S. STATION

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

At Tujunga, California for the Year Ending September 30, 1933.

Table with columns for months (OCTOBER to SEPTEMBER) and days (1-31). Includes sub-columns for Gage height and Discharge. Includes summary rows for TOTAL, Mean Daily Discharge, and Run-off.

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of HAINES CANYON CREEK - U.S.G.S. STATION

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

At Tujunga, California for the Year Ending September 30, 1934.

Table with columns for months (OCTOBER to SEPTEMBER) and days (1-31). Includes sub-columns for Gage height and Discharge. Includes summary rows for TOTAL, Mean Daily Discharge, and Run-off.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 03

U-3

LITTLE SANTA ANITA CREEK U.S.G.S. STATION ABOVE FLOOD CONTROL DAM NEAR SIERRA MADRE, CALIFORNIA

Discharge measurements of Little Santa Anita Creek - U. S. G. S. Station

Location Near center of T 7 S, Sec. 9, T. 1 N., R. 11 W., 2 miles northeast of Sierra Madre. 2 miles above Flood Control Debris Dam.

at Above Flood Control Dam, near Sierra Madre, Calif. during the year ending September 30, 1933.

Drainage Area 1.9 square miles.

Installed by U.S.G.S. Water Resources Branch.

Records Available April 15, 1916 to September 30, 1934 at U.S.G.S. office, Los Angeles, California.

Gage Water stage recorder on left bank about 150 feet below Soherer's cabin.

Discharge Measurements Made from wooden bridge near gage, or by wading.

Channel and Control Bed consists of gravel and boulders. Right bank is rock cliff. Left bank is stone wall 8 feet high. Control is small concrete dam with triangular notch at left end, just below gage. Control not permanent for high stage on account of gravel deposited in pool just above dam.

Extremes of Discharge 1931-1932 Maximum- 47 c.f.s. on February 9, 1932. Minimum- Dry at various times of year. 1932-1933 Maximum- 72.0 c.f.s. January 19, 1933. Minimum- Less than 0.1 c.f.s. various times during year. 1933-1934 Maximum- 89.0 c.f.s. Dec. 31, 1933. Minimum- Less than 0.1 c.f.s. various times during year.

Diversions None above station.

Regulation None.

Accuracy Good.

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

Table with 13 columns: No., Date, Made by, Width, Area, Mean velocity, Stage, Discharge, Rating, Method, Meter No., G. Ht. change, Time, Meter No. Rows 25-28.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. U 3

Discharge measurements of LITTLE SANTA ANITA CREEK

at Above F. C. Dam during the year ending September 30, 1934.

Table with 13 columns: No., Date, Made by, Width, Area, Mean velocity, Stage, Discharge, Rating, Method, Meter No., G. Ht. change, Time, Meter No. Rows 1-31.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 03

Discharge measurements of Little Santa Anita Creek - U. S. G. S. Station

at Above Flood Control Dam, near Sierra Madre, Calif. during the year ending September 30, 1933.

Table with 13 columns: No., Date, Made by, Width, Area, Mean velocity, Stage, Discharge, Rating, Method, Meter No., G. Ht. change, Time, Meter No. Rows 1-24.

Sheet No. 1 of Two Sheets

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of LITTLE SANTA ANITA CREEK - U.S.G.S. STATION

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Discharge at Above Flood Control Dam, near Sierra Madre, Calif. for the Year Ending September 30, 1933

Table with columns for months (OCTOBER to SEPTEMBER) and days (1-31). Rows include Gage height, Discharge, and summary statistics like TOTAL, Mean Daily Discharge, and Run-off.

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of LITTLE SANTA ANITA CREEK - U.S.G.S. STATION

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Discharge at ABOVE FLOOD CONTROL DAM PASADENA, CALIFORNIA for the Year Ending September 30, 1934

Table with columns for months (OCTOBER to SEPTEMBER) and days (1-31). Rows include Gage height, Discharge, and summary statistics like TOTAL, Mean Daily Discharge, and Run-off.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 06

U-6

ROGER'S CREEK - ABOVE MOUTH OF CANYON NEAR AZUSA, CALIFORNIA

Discharge measurements of Rogers Creek - U. S. G. S. Station

Above Mouth of Canyon, near Azusa, Calif., during the year ending September 30, 1933

Location In N. W. 1/4, N. W. 1/4 Sec. 23 T. 1 N., R. 10 W., one half mile above mouth of creek and 2 1/2 miles north of Azusa.

Drainage Area 6.4 square miles.

Records Available May 8, 1916 to September 20, 1934, U.S.G.S. office in Los Angeles, California.

Gage Water stage recorder on North bank near mouth of Canyon.

Discharge measurements Made by wading or from cable about 150 feet below gage.

Extremes of Discharge 1931-1932 Maximum- 296 c.f.s. on Dec. 28, 1931. Minimum- Dry at various times during year. 1932-1933 Maximum- 200 c.f.s. Jan. 19, 1933. Minimum- Dry at various times during year. 1933-1934 Maximum- 825 c.f.s. Jan. 1, 1934. Minimum- Dry at various times during year.

Diversion Two small diversions above station.

Regulation None

Accuracy Fair

Operation Constructed by U.S.G.S. Water Resources Branch and operated by U.S.G.S. Water Resources Branch in conjunction with Los Angeles County Flood Control District.

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec. Ft., Rating Percent, Method, Max. No., G. H. Change Feet, Time Hour, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. U 6

Discharge measurements of ROGERS CREEK

Above Mouth of Canyon during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec. Ft., Rating Percent, Method, Max. No., G. H. Change Feet, Time Hour, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 06

Discharge measurements of Rogers Creek - U. S. G. S. Station

Above Mouth of Canyon, near Azusa, Calif., during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec. Ft., Rating Percent, Method, Max. No., G. H. Change Feet, Time Hour, Meter No.

Daily Gage Height, Stage and Discharge, in Second-Foot, of ROGERS CREEK (Above mouth of Canyon) AZUSA, CALIF. for the Year Ending September 30, 1933

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. U 6

Table with columns for months (OCTOBER to SEPTEMBER) and days (1-31). Rows include Gage height, Discharge, and summary statistics like TOTAL, Mean Daily Discharge, and Maximum Mean Daily Discharge.

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of ROGERS CREEK - U.S.G.S. STATION Above mouth of canyon AZUSA, CALIFORNIA for the Year Ending September 30, 1934

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. U 6

Table with columns for months (OCTOBER to SEPTEMBER) and days (1-31). Rows include Gage height, Discharge, and summary statistics like TOTAL, Mean Daily Discharge, and Maximum Mean Daily Discharge.

U-15

SAN ANTONIO CREEK U.S.G.S. STATION NEAR CLAREMONT, CALIF.

Location

1 NW 1/4 of SW 1/4 Sec. 36, T. 2 N., R. 8 W., one-half mile below Southern California Edison Company's Sierra Power Plant, and 8 miles NE of Claremont, California.

Drainage Area

16.9 square miles.

Installed by

U.S.G.S. Water Resources Branch.

Records Available

March, 1901 to September 30, 1934 at U.S.G.S. Water Resources Branch, office at Los Angeles, California.

Gage

Stevens continuous water stage recorder.

Channel and Control

Sand and Boulders.

Extremes of Measurements

1931-1932

Maximum- 191 c.f.s. on February 9, 1932.

Minimum- 0.30 October 1 and 2, 1931.

1932-1933

Maximum- 6.5 c.f.s. January 19, 1933.

Minimum- 0.2 c.f.s. August 15 to September 14, 1932.

1933-1934

Maximum- 119.0 c.f.s. January 1, 1934.

Minimum- 0.1 c.f.s. August 16 to September 30, 1934.

Diversions

Southern California Edison Company diverts water above station for power purposes which is measured separately.

Control

None.

Accuracy

Fair.

Operation

Installed by the U.S.G.S. Water Resources Branch and operated in conjunction with the Los Angeles County Flood Control District.

F. C. D. Form 104A, 10-5-34

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. U15

Discharge measurements of San Antonio Creek - U. S. G. S. Station

at Claremont during the year ending September 30, 1933

No.	Date	Made by	Wash Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec. Ft.	Rating Purpose gage	Method	Mean gage No.	G. H. change Feet	Time Hours	Mean No.
1	1932 10-3	R. Stanley Lord	3.7	1.2	.58	1.86	.70	.6	6			2/35	
2	10-17	R. Stanley Lord	2.5	1.1	.64	1.85	.70	.6	5			1/6	
3	10-28	K. R. Melin	2.8	.5	.94	1.90	.47	.6	4			1/12	
4	11-17	H. J. Tompkins	1.8	.9	.72	1.92	.65	.6	2			1/4	
5	11-25	H. J. Tompkins	1.8	.7	.86	1.90	.60	.6	2			1/6	
6	12-6	J. Oliver	2.5	1.4	.54	1.89	.75	.6	5			1/12	
7	12-12	H. J. Tompkins	1.8	.9	1.11	1.96	1.00	.6	2			1/6	
8	12-28	H. J. Tompkins	1.9	.95	.84	1.94	.80	.6	4			1/3	
9	1933 1-8	H. J. Tompkins	1.8	.90	.83	1.94	.75	.6	4			1/4	
10	1-14	H. J. Tompkins	1.8	.90	.83	2.05	.75	.6	3			1/4	
11	1-18	F. C. Ebert	3.5	1.5	.73	1.93	1.1	.6	6			1/6	
12	1-24	H. J. Tompkins	1.8	1.1	1.46	1.94	1.6	.6	4			1/2	
13	2-3	F. C. Ebert	3.2	1.4	.79	1.92	1.1	.6	6			1/6	
14	2-10	H. J. Tompkins	1.8	1.1	1.27	2.02	1.4	.6	4			1/6	
15	2-20	H. J. Tompkins	1.8	1.1	1.36	2.04	1.5	.6	4			1/4	
16	3-1	H. J. Tompkins	1.8	1.1	1.36	2.08	1.5	.6	2			1/6	
17	3-6	H. J. Tompkins	1.8	1.1	1.36	2.10	1.5	.6	2			1/6	
18	3-22	H. J. Tompkins	1.8	1.1	1.36	2.12	1.5	.6	4			1/6	
19	3-31	H. J. Tompkins	1.8	1.1	1.35	2.12	1.5	.6	4			1/6	
20	4-6	H. J. Tompkins	1.8	1.2	1.58	2.16	1.9	.6	4			1/4	
21	4-14	H. J. Tompkins	1.8	1.1	1.36	2.10	1.5	.6	4			1/4	
22	4-20	H. J. Tompkins	1.8	1.1	1.27	2.10	1.4	.6	4			1/6	
23	5-5	H. J. Tompkins	1.8	1.1	1.27	2.10	1.4	.6	4			1/6	
24	5-15	H. J. Tompkins	1.8	1.0	1.00	2.08	1.0	.6	4			1/4	

Sheet No. 1 of Two Sheets

No.	Date	Made by	Wash Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec. Ft.	Rating Purpose gage	Method	Mean gage No.	G. H. change Feet	Time Hours	Mean No.
25	1933 5-25	H. J. Tompkins	1.8	1.1	1.18	2.05	1.3	.6	4			1/4	
26	6-6	"	1.8	1.1	1.00	2.02	1.1	.6	4			1/6	
27	6-15	"	1.8	.95	.79	1.96	.75	.6	4			1/6	
28	6-21	"	1.8	1.00	.75	1.98	.75	.6	4			1/4	
29	6-28	"	1.8	1.00	.70	1.90	.70	.6	4			1/3	
30	7-7	"	1.8	.90	.60	1.88	.54	.6	4			1/4	
31	7-12	"	1.8	.90	.51	1.86	.46	.6	4			1/4	
32	7-19	"	1.8	.90	.52	1.84	.47	.6	4			1/4	
33	7-28	"	1.2	.36	1.14	1.82	.41	.6	2			1/12	
34	8-3	"	1.2	.36	1.09	1.84	.39	.6	2			1/6	
35	8-10	"	1.2	.36	.95	1.82	.34	.6	2			1/6	
36	8-23	"	.6	.24	.67	1.82	.16	.6	2			1/6	
37	9-1	"	.6	.20	1.15	1.80	.23	.6	2			1/6	
38	9-6	"	.7	.14	1.00	1.80	.14	.6	2			1/6	
39	9-12	"	.7	.18	1.22	1.82	.22	.6	2			1/12	
40	9-25	"	.7	.20	1.50	1.84	.30	.6	2			1/6	

Discharge measurements of SAN ANTONIO CREEK

at Near Claremont during the year ending September 30, 1934

No.	Date	Made by	Wash Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec. Ft.	Rating Purpose gage	Method	Mean gage No.	G. H. change Feet	Time Hours	Mean No.
1	10/3	H. J. Tompkins	.6	.16	.72	1.80	.13	.6	2			1/6	28131
2	10/10	"	1.5	.44	.82	1.84	.37	.6	2			1/6	"
3	10/24	"	1.5	.80	.67	1.82	.20	.6	2			1/4	"
4	10/31	"	1.5	.44	1.02	1.86	.45	.6	2			1/12	"
5	11/18	"	1.5	.44	.86	1.88	.38	.6	2			1/6	"
6	11/25	"	1.0	.80	1.13	1.88	.34	.6	2			1/6	"
7	12/1	"	1.0	.40	2.38	2.10	.55	.6	2			1/6	"
8	12/14	F. C. Ebert	4.7	1.102	.73	2.78	3.00	.6	8			1/6	27214
9	12/16	H. J. Tompkins	4.0	1.10	1.18	2.22	1.30	.6	4			1/6	28131
10	12/18	R. Stanley Lord	4.6	.81	1.10	2.18	.90	.6	9			1/6	1215
11	1/1	F. C. Ebert	22.5	16.0	4.69	2.55	75.0	.6	9			1/3	27214
12	1/3	"	9.0	4.7	1.47	2.46	6.9	.6	8			1/4	"
13	1/6	H. J. Tompkins	5.0	2.2	1.61	2.24	3.7	.6	5			1/4	28131
14	1/22	"	5.0	2.0	.90	2.08	1.8	.6	5			1/6	"
15	1/30	"	5.0	2.0	.75	2.08	1.5	.6	5			1/4	"
16	2/15	"	5.0	1.8	.78	2.05	1.4	.6				1/4	"
17	2/24	F. C. Ebert	76.0	2.7	.78	2.19	2.1	.6	13			1/3	27214
18	3/2	H. J. Tompkins	4.4	1.8	.83	2.10	1.5	.6	5			1/6	28131
19	3/5	R. Stanley Lord	5.8	1.8	.67	2.08	1.2	.6	10			1/6	1215
20	3/12	H. J. Tompkins	4.3	1.7	.65	2.04	1.1	.6	4			1/2	28131
21	3/19	"	4.0	1.7	.59	2.03	1.0	.6	8			1/4	"
22	3/30	"	4.0	1.5	.60	2.03	.9	.6	8			1/6	"
23	4/11	"	1.3	.4	1.38	2.00	.55	.6	2			1/6	"
24	4/20	"	1.3	.4	1.38	2.00	.55	.6	2			1/6	"
25	4/28	H. J. Tompkins	1.2	.36	1.28	1.96	.46	.6	2			1/6	28131
26	5/4	"	1.2	.36	1.19	1.98	.43	.6				1/6	"
27	5/10	"	2.0	.75	1.00	1.94	.75	.6	4			1/6	"
28	5/18	"	1.7	.55	.87	1.91	.48	.6	4			1/4	"
29	5/24	"	1.6	.44	1.00	1.90	.44	.6	3			1/6	"
30	5/31	"	1.7	.55	1.00	1.94	.55	.6	3			1/4	"
31	6/7	"	1.7	.60	1.00	1.94	.60	.6	3			1/2	"
32	6/14	"	1.7	.60	1.08	1.94	.65	.6	3			1/4	"
33	6/22	"	1.0	.80	1.10	1.84	.32	.6	2			1/3	"
34	6/27	"	1.0	.30	1.07	1.84	.32	.6	2			1/2	"
35	7/5	"	1.0	.30	.93	1.78	.28	.6	2			1/4	"
36	7/11	"	1.0	.30	.77	1.77	.25	.6	2			1/6	"
37	7/18	"	.9	.28	.71	1.74	.20	.6					"
38	7/25	"	.9	.28	.68	1.74	.19	.6	2			1/4	"
39	8/3	"	.9	.28	.68	1.66	.19	.6	2			1/2	"
40	8/10	"	.9	.28	.61	1.67	.17	.6	2			1/2	"
41	8/31	"	.5	.16	.75	1.55	.12	.6					"
42	9/8	"	.5	.16	.75	1.54	.12	.6	2			1/6	"
43	9/14	"	.5	.16	.63		.10	.6	2				"
44	9/20	"	.5	.16	.75	2.20	.12	.6	2			1/12	"
45	9/27												

Daily Gauge Height, in Feet, and Discharge, in Second-Feet, of SAN ANTONIO CREEK - U.S.G.S. Station

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Near CLAREMONT, CALIFORNIA for the Year Ending September 30, 1933

Table with columns for months (OCTOBER to SEPTEMBER) and days (1-31). Rows include gauge height, discharge, and summary statistics like 'TOTAL', 'Mean Daily Discharge', etc.

Daily Gauge Height, in Feet, and Discharge, in Second-Feet, of SAN ANTONIO CREEK - U.S.G.S. Station

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Near CLAREMONT, CALIFORNIA for the Year Ending September 30, 1934

Table with columns for months (OCTOBER to SEPTEMBER) and days (1-31). Rows include gauge height, discharge, and summary statistics like 'TOTAL', 'Mean Daily Discharge', etc.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Table with columns for months (October to September), gauge height, discharge, and summary statistics. Includes sub-headers for 'Drainage Area' and 'Gage Read'. Summary rows include 'TOTAL', 'Mean Daily Discharge in Second-foot', 'Run-off, depth in inches', etc.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Table with columns for months (October to September), gauge height, discharge, and summary statistics. Includes sub-headers for 'Drainage Area' and 'Gage Read'. Summary rows include 'TOTAL', 'Mean Daily Discharge in Second-foot', 'Run-off, depth in inches', etc.

Table with columns for months (October to September), gage height, discharge, and various summary statistics. Includes sub-headers for 'Drainage Area', 'Square Miles', and 'Gage Road'. Summary rows include 'TOTAL', 'New July Discharge in Second-foot per square mile', 'New July Discharge in Second-foot', and 'New July Discharge in Second-foot'.

Table with columns for months (October to September), gage height, discharge, and various summary statistics. Includes sub-headers for 'Drainage Area', 'Square Miles', and 'Gage Road'. Summary rows include 'TOTAL', 'New July Discharge in Second-foot per square mile', 'New July Discharge in Second-foot', and 'New July Discharge in Second-foot'.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. U10

U-10

SAN DIMAS CREEK U.S.G.S. STATION, BELOW F. C. DAM NEAR SAN DIMAS, CALIFORNIA.

Discharge measurements of San Dimas Creek - U. S. G. S. Station

at Below Flood Control Dam, near San Dimas, California, during the year ending September 30, 1933

Location In SW 1/4 Sec. 25, T. 1 N., R. 9 W., at mouth of San Dimas Canyon, 5 miles northeast of San Dimas, about 1 mile below Los Angeles County Flood Control Dam.

Drainage Area 18.4 square miles.

Records Available From November 8, 1916 to September 30, 1934, at U.S.G.S. office.

Gage Stevens Continuous water stage recorder installed in concrete stilling well just above concrete control.

Discharge Measurements High water measurements made by wading near gage.

Extremes of Discharge 1931-1932 Maximum- 96 c.f.s. on February 9, 1932. Minimum- Less than .1 c.f.s. at various times during year. 1932-1933 Maximum- 16.0 c.f.s. January 23, 1933. Minimum- Less than .1 c.f.s. at various times during year. 1933-1934 Maximum- 210 c.f.s. January 1, 1934. Minimum- Less than .1 c.f.s. at various times during year.

Diversions None.

Regulation Regulated by Los Angeles County Flood Control District Dam.

Accuracy Good.

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

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec. Ft., Rating, Method, Mean No., G. H. Stage Foot, Time Hours, Meter No. Contains data for measurements from 1933-2-10 to 1933-9-28.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. U10

Discharge measurements of San Dimas Creek - U. S. G. S. Station

at Below Flood Control Dam, near San Dimas, California, during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec. Ft., Rating, Method, Mean No., G. H. Stage Foot, Time Hours, Meter No. Contains data for measurements from 1932-10-6 to 1933-9-28.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. U 10

Discharge measurements of SAN DIMAS CREEK

at Below F. C. Dam during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec. Ft., Rating, Method, Mean No., G. H. Stage Foot, Time Hours, Meter No. Contains data for measurements from 1934-10/5 to 1934-11/23.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. U 10

Discharge measurements of SAN DIMAS CREEK

at Below F. C. Dam during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of Section Sq. Ft., Mean Velocity Ft. per Sec., Gage Height Feet, Discharge Sec. Ft., Method, Meter No., G. H. Total, Time Hours, Meter No.

Table with columns: No., Date, Made by, Width Feet, Area of Section Sq. Ft., Mean Velocity Ft. per Sec., Gage Height Feet, Discharge Sec. Ft., Method, Meter No., G. H. Total, Time Hours, Meter No.

Daily Discharge, in Second-Feet, of SAN DIMAS CREEK - U.S.G.S. STATION

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

File No. U 10

Below Flood Control Dam near San Dimas, Calif. for the Year Ending September 30, 1933.

Large table with columns for months (OCTOBER to SEPTEMBER) and days, including sub-columns for Gage height and Discharge. Includes summary statistics at the bottom.

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of San Dimas Creek - U.S.G.S. Station

Near Below F.C. Dam, San Dimas, Calif. for the Year Ending September 30, 1934

**LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT**

Form No. **U10**

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		DAY	Completed Checked Date							
	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge			First	Second	Third	Fourth			
1																																	
2																																	
3																																	
4																																	
5																																	
6																																	
7																																	
8		.1																															
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26		.1																															
27		.1																															
28		.1																															
29		.1																															
30		.1																															
31		.1																															
TOTAL																																	
Mean Daily Discharge in Second-foot		.075		.122		1.20		15.8		1.20		1.15		2.59		2.49		.098		.033		.040		.040									2.09
Second-foot per square mile		.004		.007		.065		.859		.065		.063		.141		.135		.005		.002		.002		.002									.114
Run-off, depth in inches		.005		.007		.075		.990		.066		.072		.157		.156		.006		.002		.002		.002									1.539
Run-off in acre-foot		4.6		7.3		73.9		972.		66.4		70.8		154.0		153.0		5.9		2.0		2.5		2.4								1510.	
Maximum Mean Daily Discharge in Second-foot		.1		.2		27.		144.		2.3		2.5		3.2		3.3		.3															144.
Minimum Mean Daily Discharge in Second-foot								1.1		.9		.8		2.0		.3																	

U-8

**SAN GABRIEL RIVER AT MOUTH OF CANYON U.S.G.S. STATION
NEAR AZUSA, CALIFORNIA**

**LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT**

Station No. **U8**

Location In NW 1/4 Sec. 22, T. 1 N., R. 10 W., .4 miles above mouth of Canyon and 2 1/2 miles north of Azusa.

Discharge measurements of San Gabriel River - U. S. G. S. Station

at Mouth of Canyon near Azusa, California.

Drainage Area 214 square miles.

Records Available 1894 to September 30, 1933 at U.S.G.S. offices. Records include flow of Southern California Edison Company's Canal.

Gage Waterstage recorder on east bank at cable 2000 feet above mouth of canyon, and 1000 feet above the tunnel diversion; station originally installed November 18, 1922, but the location has been changed several times since.

Discharge Measurements Made from cable 200 feet below station or by wading.

Channel and Control Gravel and boulders; shifting during high water.

Extremes of Discharge
1931-1932
Maximum- 7500 c.f.s. on February 9, 1932.
Minimum- Dry at various times during year.
1932-1933
Maximum- 5820 c.f.s. January 19, 1933.
Minimum- Dry at various times of year.
1933-1934
Maximum- 6120 c.f.s. Jan. 1, 1934.
Minimum- Dry at various times of year.

Diversions The power canal of Southern California Edison Company diverts from San Gabriel River about 5 miles above the station (see U.S.G.S. Records for daily discharge of this canal as observed at power house).

Regulation None.

Accuracy Fair.

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

No.	Date	Made by	Discharge	Stage	Time	Remarks	
1	1-17	F. C. Ebert	77.5 77.0	1.71	3.12	.132	
2	1-17	Lindsay - Burke	.72.0 73.4	1.76	3.07	123.0	
3	1-18	R. Lindsay	25.0 18.1	1.37	2.54	25.15	
4	1-19	Anderson-Winslow	142.0 224.	3.57	4.45	868.3	
5	1-19		147.0 303.15	3.7	5.22	1628.7	
6	1-19	Anderson-Winslow	151.0 390.36	3.50	5.83	2536.	
7	1-20	Anderson Winslow	133.0 174.0	3.56	3.98	647.0	
8	1-20	F. C. Ebert	129.0 144.0	3.14	3.76	452.	
9	1-21	F. C. Ebert	111.0 82.0	2.11	3.04	173.0	
10	1-22	Anderson-Winslow	114.0 65.1	1.89	2.89	123.0	
11	1-22	Anderson-Winslow	114.0 67.65	1.86	2.91	126.1	
12	1-23	Anderson-Winslow	120.0 71.49	2.17	2.99	155.0	
13	1-23	Anderson-Winslow	106.0 76.28	2.17	3.02	165.29	
14	1-26	F. C. Ebert	66.0 48.0	1.27	2.68	.51	
15	1-27	R. Lindsay	57.5 47.75	1.10	2.68	52.62	
16	2-2	R. Lindsay	58.0 56.9	1.3	2.78	86.55	
17	2-3	F. C. Ebert	70.0 53.0	1.43	2.75	76.0	
18	2-10	R. Lindsay	50.5 44.5	1.09	2.60	49.0	
19	2-10	H. J. Thompkins	52.	46.	1.04	2.59	48.
20	2-15	Waddison-Tamer	61.0 68.4	1.73	2.92	118.48	
21	2-16	R. Lindsay	67.5 66.2	2.26	3.00	148.99	
22	2-16	H. J. Thompkins	57.	67.	1.91	2.96	128.
23	2-23	H. J. Thompkins	50.	50.	1.18	2.68	59.
24	2-24	R. Lindsay	52.0 50.38	1.24	2.68	62.51	

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 06

Discharge measurements of San Gabriel River - U. S. G. S. Station at Mouth of Canyon, near Azusa, Calif., during the year ending September 30, 19 33

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 08

Discharge measurements of SAN GABRIEL RIVER at Mouth of Canyon during the year ending September 30, 19 34

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gate height Feet, Discharge Sec.-ft., Rating Percent diff., Method, Mean No., G. H. Stage Total, Time Hours, Meter No.

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gate height Feet, Discharge Sec.-ft., Rating Percent diff., Method, Mean No., G. H. Stage Total, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 08

Discharge measurements of SAN GABRIEL RIVER

at Mouth of Canyon during the year ending September 30, 19 34

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gate height Feet, Discharge Sec.-ft., Rating Percent diff., Method, Mean No., G. H. Stage Total, Time Hours, Meter No.

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gate height Feet, Discharge Sec.-ft., Rating Percent diff., Method, Mean No., G. H. Stage Total, Time Hours, Meter No.

Daily Stage, Height, Discharge, in Second-Foot, of SAN GABRIEL RIVER - U. S. G. S. Station

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

At Mouth of Canyon, near Azusa, Calif. for the Year Ending September 30, 1933

Drainage Area 214 Square Miles.

Observer

Gage Read

Used rating table dated

Table with columns for months (OCTOBER to SEPTEMBER) and days (1-31). Rows include Gage height, Discharge, and summary statistics (TOTAL, Mean Daily Discharge, etc.).

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of SAN GABRIEL RIVER - U. S. G. S. STATION

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

At Mouth of Canyon, near Azusa, California for the Year Ending September 30, 1934

Drainage Area 214 Square Miles.

Observer

Gage Read

Used rating table dated

Table with columns for months (OCTOBER to SEPTEMBER) and days (1-31). Rows include Gage height, Discharge, and summary statistics (TOTAL, Mean Daily Discharge, etc.).

SAN GABRIEL RIVER U.S.G.S. STATION
DAILY GAGE HEIGHT, IN FEET, AND DISCHARGE, IN SECOND-FOOT, OF SOUTHERN CALIFORNIA EDISON CO'S CANAL

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

At NEAR AZUSA, CALIFORNIA for the Year Ending September 30, 1933.

Table with columns for months (OCTOBER to SEPTEMBER) and rows for Gage height and Discharge. Includes summary rows for TOTAL, Mean Daily Discharge, and Run-off.

SOUTHERN CALIFORNIA EDISON CO'S CANAL
SAN GABRIEL RIVER U.S.G.S. STATION

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

At AT MOUTH OF CANYON NEAR AZUSA, CALIFORNIA for the Year Ending September 30, 1934.

Table with columns for months (OCTOBER to SEPTEMBER) and rows for Gage height and Discharge. Includes summary rows for TOTAL, Mean Daily Discharge, and Run-off.

Drainage Area		Square Miles		Observer		Gage Head		Used rating table dated												
feet	feet	feet	feet	feet	feet	feet	feet	feet	feet											
Maximum stage	Minimum stage	Maximum stage	Minimum stage	Maximum stage	Minimum stage	Maximum stage	Minimum stage	Maximum stage	Minimum stage											
DAY	GAUGE HEIGHT	DISCHARGE	GAUGE HEIGHT	DISCHARGE	GAUGE HEIGHT	DISCHARGE	GAUGE HEIGHT	DISCHARGE	GAUGE HEIGHT	DISCHARGE	GAUGE HEIGHT	DISCHARGE	GAUGE HEIGHT	DISCHARGE	GAUGE HEIGHT	DISCHARGE	GAUGE HEIGHT	DISCHARGE	QUARTER	DATE
1	24	22	24	24	33	167	145	1	198	82	68	28	13.2	9.2	1					
2	24	23	25	25	33	162	152	2	111	86	65	28	13.2	9.7	2					
3	24	23	24	24	33	149	154	3	115	82	65	26	12.4	9.7	3					
4	24	24	23	23	33	139	157	4	120	78	64	26	13.2	9.5	4					
5	22	24	24	24	32	136	154	5	121	79	64	24	12.0	9.0	5					
6	21	24	24	24	32	137	149	6	119	79	65	25	12.6	8.9	6					
7	23	24	24	24	32	137	152	7	119	79	62	24	12.4	8.7	7					
8	24	23	25	25	33	134	154	8	118	77	56	22	11.3	8.9	8					
9	25	23	29	29	32	130	162	9	111	79	54	22	11.4	8.9	9					
10	25	22	30	30	32	123	157	10	104	80	53	20	11.0	10.2	10					
11	23	23	31	31	30	120	154	11	104	81	50	19.2	10.6	10.2	11					
12	22	23	39	39	31	122	149	12	101	78	49	19	10.6	9.9	12					
13	24	23	37	37	31	128	147	13	100	75	47	18.2	9.9	9.9	13					
14	23	23	39	39	31	117	140	14	96	71	44	17.8	10.2	9.7	14					
15	23	22	38	38	31	120	135	15	96	69	44	17.8	10.4	9.5	15					
16	22	22	37	37	161	126	135	16	97	71	41	17.6	11.0	9.2	16					
17	21	21	35	35	248	130	133	17	97	71	42	17.4	10.6	9.2	17					
18	22	19.4	35	35	96	142	130	18	98	71	41	17.1	10.6	9.2	18					
19	22	21	34	34	1690	140	125	19	96	72	38	16.3	10.6	9.2	19					
20	22	22	34	34	666	133	124	20	91	71	37	16.3	11.2	9.0	20					
21	22	23	34	34	258	136	127	21	87	72	35	16.0	11.4	8.9	21					
22	22	22	34	34	198	132	125	22	87	74	32	16.3	11.0	9.0	22					
23	22	22	34	34	218	141	125	23	85	70	33	14.4	10.2	8.6	23					
24	22	22	37	37	174	142	121	24	83	68	32	15.0	10.2	9.5	24					
25	21	22	36	36	153	136	116	25	84	66	32	13.5	9.2	9.5	25					
26	22	22	35	35	132	133	111	26	86	67	32	13.0	9.2	9.7	26					
27	21	22	33	33	138	133	109	27	86	68	31	12.4	10.6	9.5	27					
28	21	22	32	32	143	136	110	28	86	69	30	14.2	9.4	8.2	28					
29	22	23	32	32	170	-	112	29	90	68	30	13.3	9.0	9.4	29					
30	22	23	33	33	225	-	110	30	90	69	29	13.9	8.8	8.6	30					
31	22	-	32	32	180	-	110	31	-	70	-	13.2	9.0	-	31					
TOTAL	699	673.4	983	5355	3781	4184		2946	2298	1365	576.9	336.9	278.9	23517.10						
Mean Daily Discharge in Second-foot	22.5	22.4	31.7	173	135	135		29.5	74.1	5.5	18.6	10.9	9.30	64.4						
Run-off, depth in inches	1,380	1,330	1,950	10,600	7,500	2,300		1,920	5,560	2,710	1,140	670	553	46,600						
Maximum Mean Daily Discharge in Second-foot	25	24	39	1690	167	162		121	88	68	28	13.2	10.2	1690						
Minimum Mean Daily Discharge in Second-foot	21	19.4	23	30	117	109		83	66	29	12.4	8.8	8.2	8.2						

Monthly discharge, in acre-feet, of San Gabriel River near Azusa, Calif., for the year ending September 30, 1934.

Month	MORRIS RESERVOIR		OVERFLOW AND RELEASE FROM STORAGE		AZUSA CANAL		Total Run-off San Gabriel River near Azusa, Calif.
	Gain or Loss in storage at Morris Reservoir	Evaporation at Morris Reservoir	San Gabriel River near Azusa, Calif.	To Pasadena	near Azusa, Cal.	River near Azusa, Calif.	
October	0	0	0	0	578	578	
November	0	0	0	0	713	713	
December	+3,035	0	1,410	0	1,710	6,155	
January	+9,211	48	13,100	0	2,870	25,189	
February	+1,851	36	99	0	3,710	5,696	
March	+ 83	81	2,820	0	2,490	5,474	
April	-4,582	85	4,510	137	3,000	3,013	
May	- 341	102	0	112	1,790	1,800	
June	- 845	77	0	0	1,470	1,470	
July	-1,401	108	0	0	769	769	
August	-1,362	89	0	1,287	571	571	
September	-1,277	65	0	1,234	559	559	
Total	+4,372	691	22,080	4,760	20,190	52,000	

* During this month the run-off was computed as the sum of the river and the Azusa Canal.

SAWPIT CREEK U.S.G.S. STATION, 1/2 MILE BELOW DAM NEAR MONROVIA, CALIFORNIA.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Location In SW 1/4 Sec. 13, T. 1 N., R. 11 W., 3/8 mile below highway bridge, which is just below junction of two main branches and 2 miles north of Monrovia. One half mile below the Los Angeles County Flood Control District's Dam.

Drainage Area 5.3 square miles.

Installed by U. S. G. S. Water Resources Branch.

Records Available November 8, 1916 to September 30, 1934 at U. S. G. S. office, in Los Angeles, California.

Gage Continuous water stage recorder installed in rubble masonry well and shelter, on east bank of stream.

Discharge Measurements Low water measurements by wading near gage. High water measurements from gaging bridge 5 feet below gage.

Channel and Control Stream bed consists of coarse gravel and boulders. Concrete control built in summer of 1927, with low water notch 1 foot deep and 2 feet crest. High water notch 3 feet deep, 10 feet wide.

Extremes of Discharge 1931-1932 Maximum- 52.0 c.f.s. on February 9, 1932. Minimum- Dry at various times of year. 1932-1933 Maximum- 34.0 c.f.s. January 19, 1933. Minimum- Dry various times during year. 1933-1934 Maximum- 260 c.f.s. January 1, 1934. Minimum- Dry various times during year.

Diversions Part of the Water supply for the City of Monrovia is obtained from the two branches of Sawpit Creek above the gage. See U.S.G.S. records for Monrovia Pipe Line.

Regulation Flow partly regulated by the Los Angeles County Flood Control District's Dam.

Accuracy Good.

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

Discharge measurements of SAWPIT CREEK

at 1/2 mile Below Dam, during the year ending September 30, 19 34

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Gage height, Discharge, Rating, Method, Meas. No., G. H., Time, Meter No. Rows include measurements by Lindsay-Richards, F. C. Ebert, Lindsay, and H. J. Tompkins.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Discharge measurements of Sawpit Creek - U. S. G. S. Station

at 1/2 mile below Dam near Monrovia, Calif., during the year ending September 30, 19 33.

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Gage height, Discharge, Rating, Method, Meas. No., G. H., Time, Meter No. Rows include measurements by F. C. Ebert, Lindsay, R. Lindsay, and G. Patterson.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Discharge measurements of SAWPIT CREEK

at 1/2 mile Below Dam, during the year ending September 30, 19 34

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Gage height, Discharge, Rating, Method, Meas. No., G. H., Time, Meter No. Rows include measurements by Lindsay, H. J. Tompkins, Lindsay, Brewster, and Lindsay.

Daily Stage, Height, and Discharge, in Second-Foot, of Sawpit Creek

**LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT**

At 1/2 Mi. below Flood Control Dam for the Year Ending September 30, 1933
near Monrovia, California.

Drainage Area: 5.3 Square Miles. (Observer: _____) Gauge Read _____ Used rating table dated _____

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		DAY	Comments	Checked	Date
	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge				
1							0.0		3.3				0				0		0.3					1				
2							0		3.3				0				0		0.3					2				
3							0		3.2				0				0		0.3					3				
4							0		3.3				0				0		0.2					4				
5							0		3.0				0				0		0.2					5				
6							0		3.0				0				0		0.2					6				
7							0		2.8				0				0		0.1					7				
8							0		1.2				0				0		0.1					8				
9							0		1.1				0				0		0.1					9				
10							0		1.1				0				0		0.1					10				
11							0		1.1				0				0		0.1					11				
12							0		1.2				0				0		0.1					12				
13							0		1.3				0				0		0.1					13				
14							0		1.1				0				0		0.1					14				
15							0		1.1				0				0		0.1					15				
16							0.1		1.1				0				0		0.1					16				
17							0.4		1.1				0				0		0.1					17				
18							0.2		1.1				0				0		0.1					18				
19							1.4		0				0				0.3		0.1					19				
20							4.7		0				0				7.7		0.1					20				
21							1.2		0				0				0.5		0.1					21				
22							0.9		0				0				0.3		0.1					22				
23							2.4		0				0				0.3		0.1					23				
24							7		0				0				0.2		0					24				
25							6		0				0				0.2		0					25				
26							4.1		0				0				0.4		0					26				
27							7.5		0				0				0.4		0					27				
28							7.5		0				0				0.4		0					28				
29							3.8		0				0				0.4		0					29				
30							4.1		0				0				0.3		0					30				
31							3.5		0				0				0.3		0					31				
TOTAL									67.4			24.4					3		4.4			3.1					99.60	
Mean Daily Discharge in Second-foot									2.17			0.871					0.01		0.15			0.10					0.27	
Second-foot per square mile									.409			.164					.002		.028			.019					.051	
Run-off, depth in inches									.471			.171					.002		.031			.022					.697	
Run-off in acre-feet									133			48.4						0.6		3.7			6.1				197	
Maximum Mean Daily Discharge in Second-foot									14.0			3.3						.2		.7			.3				14.0	
Maximum Mean Daily Discharge in Second-foot									0			0						0		0			0				0	

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of Sawpit Creek - U.S.G.S. Station

**LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT**

At 1/2 mile below Flood Control Dam for the Year Ending September 30, 1934
near Monrovia, California.

Drainage Area: 5.3 Square Miles. (Observer: _____) Gauge Read _____ Used rating table dated _____

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		DAY	Comments	Checked	Date
	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge				
1							1.44		0.1		0.9						0.1		0.1			1.0			1			
2							4.1		1		0.6						0.1		0.1			0.7			2			
3							2.2		1		0.4						0.1		0.1			1.2			3			
4							1.2		1		0.3						0.1		0.1			1.2			4			
5							1.0		1		0.2						0.2		0.1			0.6			5			
6							0.8		1		0.2						0.2		0.1			0.5			6			
7							0.5		1		0.3						0.2		0.1			0.5			7			
8							0.3		1		0.4						0.2		0.1			0.5			8			
9							1		1		0.2						0.2		0.1			0.4			9			
10							1		1		0.2						0.2		0.1			0.4			10			
11							1		1		0.1						0.2		0.1			0.4			11			
12							1		1		0.1						0.3		0.1			0.4			12			
13							2.7		1		0.1						0.2		0.1			0.3			13			
14							0.4		1		0.1						0.2		0.1			0.3			14			
15							0.3		1		0.1						0.2		0.1			0.3			15			
16							0.3		1		0.1						0.2		0.1			0.3			16			
17							0.1		1		0.1						0.2		0.1			0.3			17			
18							0.1		1		0.1						0.3		0.1			0.3			18			
19							0.1		1		0.1						0.4		0.1			0.3			19			
20							0.1		1		0.1						0.3		0.1			0.3			20			
21							0.1		1		0.1						0.2		0.1			0.3			21			
22							0.1		1		0.4						0.2		0.1			0.3			22			
23							1		1		0.9						0.2		0.1			0.2			23			
24							6		1		1						0.2		0.1			0.3			24			
25							3.2		1		1						0.2		0.1			0.7			25			
26							2.2		1		1						0.2		0.1			0.5			26			
27							1.7		1		1						0.2		0.1			0.2			27			
28							1.2		1		1						0.2		0.1			0.1			28			
29							0.7		1		1						0.2		0.1			0.1			29			
30							0.1		1		1						0.3		0.1			0.1			30			
31							0.1		1		1						0.2		0.1			0.2			31			
TOTAL									31.1			154.8					7		4.9			2.7						
Mean Daily Discharge in Second-foot									1.00			4.99					.17		.09			.41						.66
Second-foot per square mile									.189			.942					.032		.017			.077						.124
Run-off, depth in inches									.218			1.087					.035		.019			.090						1.678
Run-off in acre-feet									61.7			307					1.4		9.7			25.4						474.0
Maximum Mean Daily Discharge in Second-foot	</																											

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of Sawpit Creek - U.S.G.S Station
Monrovia Pipe Line

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Near At MONROVIA, California for the Year Ending September 30, 1933

Table with columns for months (October to September), days (1-31), gage height, discharge, and summary statistics (TOTAL, Max Daily Discharge, etc.). Includes drainage area and gage head information.

Daily Gage Height, in Feet, and Discharge, in Second-Foot, of Sawpit Creek - U.S.G.S Station
Monrovia Pipe Line
Near At 1/2 mile below F O Dam near Monrovia, Calif. for the Year Ending September 30, 1934

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Table with columns for months (October to September), days (1-31), gage height, discharge, and summary statistics (TOTAL, Max Daily Discharge, etc.). Includes drainage area and gage head information.

Combined Daily Discharge, in Second-Foot, of SAWYER CREEK AND MONROVIA PIPE LINE Near MONROVIA, CALIFORNIA for the Year Ending September 30, 19 33.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Table with columns for months (OCTOBER to SEPTEMBER) and days (1-31). Rows include gage height, discharge, and summary statistics like TOTAL, Mean Daily Discharge, and Run-off in acre-feet.

Combined Daily Discharge, in Second-Foot, of SAWYER CREEK AND MONROVIA PIPE LINE U. S. G. S. STATION Near MONROVIA, CALIFORNIA for the Year Ending September 30, 19 34.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Table with columns for months (OCTOBER to SEPTEMBER) and days (1-31). Rows include gage height, discharge, and summary statistics like TOTAL, Mean Daily Discharge, and Run-off in acre-feet.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 199

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 116

Discharge measurements of Arroyo Creek

Discharge measurements of Arroyo Ditch

at 1/2 mi. above Soledad Canyon Road during the year ending September 30, 1933

at 1/2 mi. North of Whittier Blvd. during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Gage height, Discharge, Rating, Method, Max. gage, G. Ht. change, Time, Meter. Includes data for 1933 and 1934 at Station 199.

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Gage height, Discharge, Rating, Method, Max. gage, G. Ht. change, Time, Meter. Includes data for 1933 at Station 116.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 116

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 116

Discharge measurements of Arroyo Ditch

Discharge measurements of Arroyo Ditch

at 1/2 mi. North of Whittier Blvd. during the year ending September 30, 1933

at 1/2 mi. North of Whittier Blvd. during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Gage height, Discharge, Rating, Method, Max. gage, G. Ht. change, Time, Meter. Includes data for 1932-1933 at Station 116.

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Gage height, Discharge, Rating, Method, Max. gage, G. Ht. change, Time, Meter. Includes data for 1933 at Station 116.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 116

Discharge measurements of Arroyo Ditch

at 1/2 Mile North of Whittier Blvd. during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Stage Height Feet, Discharge Sec. Ft., Rating Percent diff., Method, Mean No., G. H. Change Total, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 116

Discharge measurements of Arroyo Ditch

at 1/2 Mile North of Whittier Blvd. during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Stage Height Feet, Discharge Sec. Ft., Rating Percent diff., Method, Mean No., G. H. Change Total, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 221

Discharge measurements of Arroyo Saco

at Bridge at Mouth of Canyon during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Stage Height Feet, Discharge Sec. Ft., Rating Percent diff., Method, Mean No., G. H. Change Total, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. FC 58

Discharge measurements of Arroyo Seco

at Ave. 26 Bridge during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Stage Height Feet, Discharge Sec. Ft., Rating Percent diff., Method, Mean No., G. H. Change Total, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 257

Discharge measurements of Arroyo Sequia

at Roosevelt Highway Bridge during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Stage Height Feet, Discharge Sec. Ft., Rating Percent diff., Method, Mean No., G. H. Change Total, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 27

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 87

Discharge measurements of Santa Ditch

Discharge measurements of Santa Ditch

at Head of Pipe Line during the year ending September 30, 1933

at Head of Pipe Line during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Open height, Discharge, Rating, Method, Mean No., O. H. change, Time, Meter No. Rows include measurements from 1933 to 1934.

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Open height, Discharge, Rating, Method, Mean No., O. H. change, Time, Meter No. Rows include measurements from 1933 to 1934.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 166

Discharge measurements of Ballona Creek at Jacob St., Culver City during the year ending September 30, 1933

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 166

Discharge measurements of Ballona Creek at Jacob Street, Culver City during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section, Mean velocity, Gage height, Discharge, Rating, Method, Mean gage No., D. M. distance, Time, Meter No. Contains data for years 1932 and 1933.

Table with columns: No., Date, Made by, Width Feet, Area of section, Mean velocity, Gage height, Discharge, Rating, Method, Mean gage No., G. M. distance, Time, Meter No. Contains data for year 1934.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 156

Discharge measurements of Ballona Creek at East Branch So. of Adams St. during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Gage height, Discharge, Rating, Method, Mean gage, G. Mt. change, Time, Meter No. Contains data for Station 156 from 1932 to 1933.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 156

Discharge measurements of Ballona Creek at East Branch So. of Adams St. during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Gage height, Discharge, Rating, Method, Mean gage, G. Mt. change, Time, Meter No. Contains data for Station 156 from 1933 to 1934.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 198

Discharge measurements of Bear Canyon Creek at 1000' above Soledad Canyon during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Gage height, Discharge, Rating, Method, Mean gage, G. Mt. change, Time, Meter No. Contains data for Station 198 from 1933 to 1934.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 142

Discharge measurements of Big Rock Creek at Mouth of Canyon during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq-ft, Mean velocity ft. per sec., Stage height Feet, Discharge Sec-ft., Rating Percent diff., Method, Max. peak No., G. H. change Total, Time Hours, Meter No. Includes data for 1933 and 1934.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 143

Discharge measurements of Big Rock Creek - (Rising Water) at 300' above Palette Creek during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq-ft, Mean velocity ft. per sec., Stage height Feet, Discharge Sec-ft., Rating Percent diff., Method, Max. peak No., G. H. change Total, Time Hours, Meter No. Includes data for 1932 and 1933.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 171

Discharge measurements of Big Rock Creek at 1 mi. below Montas Sta. at submerged Dam during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq-ft, Mean velocity ft. per sec., Stage height Feet, Discharge Sec-ft., Rating Percent diff., Method, Max. peak No., G. H. change Total, Time Hours, Meter No. Includes data for 1933.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 127

Discharge measurements of Big Rock Creek - S. Fork at 500' above Big Rock Creek during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq-ft, Mean velocity ft. per sec., Stage height Feet, Discharge Sec-ft., Rating Percent diff., Method, Max. peak No., G. H. change Total, Time Hours, Meter No. Includes data for 1933.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 177

Discharge measurements of Big Tujunga Creek at Below Damsite No. 2 during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq-ft, Mean velocity ft. per sec., Stage height Feet, Discharge Sec-ft., Rating Percent diff., Method, Max. peak No., G. H. change Total, Time Hours, Meter No. Includes data for 1932 and 1933.

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. 10

Discharge measurements of Big Tujunga Creek
at 800' Below F. G. Dam
during the year ending September 30, 1933

No.	Date	Made by	Width Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec. Ft.	Rating	Method	Mean sec. No.	G. Ht. Change Feet	Time Hours	Meter No.
1	1/13	Irwin				.33	1.44		Flume				
2	1/24	"				.77	5.34		"				
3	1/25	"				.78	5.44		"				
4	1/27	"				.78	5.44		"				
5	2/3	"				.78	5.44		"				
6	2/10	"				.74	5.02		"				
7	4/20	"				.75	5.12		"				
8	4/27	"				1.08	9.01		"				
9	5/11	"				6.52	9.67		"				
10	5/18	"				1.13	9.67		"				
11	5/25	Luce				1.12	9.54		"				
12	6/9	"				1.16	10.07		"				
13	6/15	Irwin				1.14	9.54		"				
14	6/22	"				1.13	9.67		"				
15	6/30	"				1.13	9.67		"				
16	7/7	"				1.12	9.54		"				
17	7/13	"				1.12	9.54		"				
18	7/21	"				1.12	9.54		"				
19	7/27	"				1.07	8.88		"				
20	8/4	"				.99	7.88		"				
21	8/9	"				1.17	10.20		"				
22	8/11	"				1.16	10.07		"				
23	8/15	"				1.14	9.80		"				
24	8/15	"				1.14	9.80		"				
25	8/15	Irwin				1.14	9.80		Flume				
26	8/15	"				1.14	9.80		"				
27	8/15	"	3.0	3.37	2.72	1.15	9.18	.6 6 0	1/12	FC 31			
28	8/15	"				1.14	9.80		Flume				
29	8/15	"				1.15	9.94		"				
30	8/18	"				1.14	9.80		"				
31	8/18	"	3.0	3.36	2.68	1.14	9.02	.6 6 0	1/6	FC 31			
32	8/18	"	3.0	3.36	2.70	1.14	9.07	.6 6 0	1/12	"			
33	8/18	"				1.14	9.80		Flume				
34	8/22	"				1.12	9.54		"				
35	8/22	"	3.0	3.00	2.66	1.12	7.99	.6 6 0	1/6	FC 31			
36	8/22	"	2.0	1.82	3.85	1.12	7.02	.6 4 0	1/9	"			
37	8/22	"				1.12	9.54		Flume				
38	8/24	"				1.11	9.40		"				
39	8/25	"				1.11	9.40		"				
40	8/31	"				1.11	9.40		"				
41	8/31	"	3.9	4.48	1.82	1.11	8.18	.6 8 0	1/6	"			
42	8/31	"	3.9	4.48	1.82	1.11	8.19	.6 8 0	1/6	"			
43	9/7	"				1.14	9.80		Flume				
44	9/7	"	3.9	4.56	1.85	1.14	8.42	.6 8 0	1/6	FC 31			
45	9/7	"	3.9	4.56	1.89	1.14	8.46	.6 8 0	1/6	"			
46	9/7	"				1.14	9.80		Flume				
47	9/14	"				1.19	10.48		"				
48	9/14	"	3.9	4.8	1.78	1.19	8.57	.6 8 0	1/3	FC 31			
49	9/14	Irwin	3.9	4.8	1.97	1.19	9.44	.6 8 0	1/6	FC 31			
50	9/28	"				.99	7.88		Flume				
51	9/21	"				1.29	11.87		"				
52	9/21	"	4.0	5.12	1.87	1.29	9.59	.6 8 0	1/6	FC 31			
53	9/21	"	4.0	5.16	1.94	1.29	10.04	.6 4 0	"				

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. 10

Discharge measurements of Big Tujunga Flume
at Below Dam No. 1
during the year ending September 30, 1934

No.	Date	Made by	Width Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec. Ft.	Rating	Method	Mean sec. No.	G. Ht. Change Feet	Time Hours	Meter No.
1	10/6	Irwin				1.12	9.54						2 Foot Venturi
2	10/12	"				0.90	6.80						"
3	10/26	"				0.33	1.44						"
4	11/2	"				0.33	1.44						"
5	11/16	"				0.33	1.44						"
6	11/17	"				0.32	1.37						"
7	11/19	"				0.16	0.58						"
8	1/23	Bonediman	2.30	0.87	0.51	0.16	0.44	.6 5	1/6	FC 27			
9	1/26	"				0.16	0.44						Venturi
10	2/2	"				0.16	0.44						"
11	2/9	"				0.19	0.58						"
12	2/16	"				0.17	0.48						"
13	2/23	"				0.18	0.56						"
14	5/2	"				0.18	0.53						"
15	3/9	"				0.18	0.53						"
16	3/15	"					0.66						"
17	3/22	"				2.0	0.21	0.71					"
18	3/29	"				2.0	0.21	0.71					"
19	4/5	"					0.21	0.71					"
20	4/12	"					0.22	0.82					"
21	4/19	"					0.21	0.71					"
22	4/30	"				2.00	1.03	8.38					"
23	4/26	"				2.00	1.03	8.38					"
24	5/3	"				2.00	1.03	8.38					"
25	5/11	Irwin				1.47	14.54						Venturi
26	5/16	"				1.47	14.54						"
27	5/31	"				1.37	13.03						"
28	6/7	"				1.38	13.16						"
29	7/26	"				1.29	11.87						"

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. 155

Discharge measurements of BIG TUJUNGA WASH
at Foothill Blvd. Bridge
during the year ending September 30, 1933

No.	Date	Made by	Width Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec. Ft.	Rating	Method	Mean sec. No.	G. Ht. Change Feet	Time Hours	Meter No.
1	2/7	Irwin	27.5	10.4	1.24	-	12.95	.6 10 0	1/3	FC 30			
2	2/13	Delaney	8.5	4.53	.29	-	1.34	.6 6 0	1/12	FC 11			
3	2/27	"	1.7	7.55	.47	-	3.54	.6 7 0	1/6	"			
4	2/28	"	16.5	7.49	.50	-	3.76	.6 7 0	1/6	"			
5	3/6	"	16.5	5.75	.28	-	1.59	.6 6 0	1/6	"			
6	3/7	"	11.	5.91	.41	-	2.42	.6 5 0	1/6	"			
6A	4/4	"	3.0	1.93	.12	-	.24	.6 3 0	1/12	FC 30			
7	4/27	Irwin	16.0	8.42	.46	-	3.88	.6 8 0	-	"			
8	5/3	"	8.5	5.28	.66	-	3.48	.6 8 0	1/6	FC 10			
9	7/21	Luce	9.0	1.25	.30	-	1.01	.6 11 0	1/4	FC 13			
10	8/31	"	5.3	2.66	1.27	-	3.36	.6 6 0	1/6	"			
11	9/28	"	3.7	2.46	1.04	-	2.57	.6 5 0	1/6	"			
Station 155 1933-1934													
Big Tujunga Wash - Foothill Blvd. Bridge													
1	1/2	Luce	27.0	29.94	3.03	-	90.63	.6 11	1/6	FC 13			
2	1/8	Turner	16.5	5.88	1.54	-	9.10	.6 9	1/4	FC 25			
3	3/29	Luce	4.6	.93	.47	-	.44	.6 4	1/12	FC 13			
4	5/24	Luce	20.3	7.30	.93	-	6.82	.6 10	1/4	FC 13			
5	5/31	"	19.5	7.39	.96	-	7.10	.6 11	1/6	FC 13			
6	6/7	Luce	19.5	5.58	1.29	-	7.22	.6 11	1/6	FC 13			
7	6/13	G. E. Bollinger	20.7	6.42	1.24	None	7.95	.6 11	1/6	FC 10			
8	6/20	G. E. Bollinger	19.5	5.50	1.41	-	7.75	.6 13	1/6	FC 10			27650
9	7/26	Luce	9.3	1.93	1.15	-	2.22	.6 11	1/6	FC 13			

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. 11

Discharge measurements of **Big Tujunga East Wash**
at **Sherman Way**
near _____, during the year ending September 30, 19**34**

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	Mean sea No.	G. Ht. change Feet	Time Hours	Meter No.
1	1934 1/1	Luce	42.5	23.8	4.62		110.4		.6	12		1/3	FC 13

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. 175

Discharge measurements of **BREAKBROCK CREEK**
at **Mouth**
near _____, during the year ending September 30, 19**33**

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	Mean sea No.	G. Ht. change Feet	Time Hours	Meter No.
3	1933 1/24	Irwin	3.0	0.45	.06	1.20	.30		.6	4	0	1/6	FC 30
4	2/3	"				2.4	.11		Weir				

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. 167

Discharge measurements of **BULL CREEK**
at **San Fernando Mission Bridge**
near _____, during the year ending September 30, 19**33**

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	Mean sea No.	G. Ht. change Feet	Time Hours	Meter No.
1	1933 3/23	Luce	4.3	.83	.97	-	.81		.6	7	0	1/6	FC 13
2	4/22	"					.22		Weir				
3	5/4	"					.21		"				
4	5/12	"					.16		"				
5	5/25	"					.08		"				
6	6/8	"	1.5	.13	.03	-	.04		.6	3	0	1/12	FC 13
7	6/22	"					.08		Weir				
8	7/7	"					.06		"				
9	7/14	"					.05		"				
10	7/21	"					.04		"				
11	7/27	"					.036		"				
12	8/4	"					.05		"				
13	8/11	"					.03		"				
14	8/18	"					.11		"				
15	8/25	"					.13		"				
16	8/31	"					.036		"				
17	9/21	"					.03		"				
18	9/29	"					.03		"				
Station 167 1933-1934													
Bull Creek - San Fernando-Mission Bridge													
1	1934 2/21	Luce	2.0	.39	1.95		.39		.6	4		1/12	FC 13
2	3/9	Luce	2.2	.41	.90		.37		.6	5		1/12	FC 13
3	4/6	Luce	2.4	.70	.70		.22		.6	5		1/12	13

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. 108

Discharge measurements of **Castaic Creek**
at **1 1/2 mi. W. of Castaic Junction**
near _____, during the year ending September 30, 19**33**

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	Mean sea No.	G. Ht. change Feet	Time Hours	Meter No.
1	1933 1/20	Luce-Lindsay	16.0	4.30	2.02	2.60	8.70		.6	8	0	1/4	FC 13
2	1/22	"	15.0	3.18	1.50	2.55	4.78		.6	9	0	1/4	"
3	1/31	Luce-Marchand	19.0	3.25	1.05	2.55	3.73		.6	10	0	1/6	"
Station 108 1933-1934													
Castaic Creek -- Elizabeth Lake Road Bridge													
1	1/5	Waddicor -- Turner	4.5	.66	.71	2.22	.49		.6	5		1/12	FC 25
2	1/17	Turner	4.5	.50	.70		.35		.6	9		1/12	FC 25
3	2/24	Luce--Turner	34.5	12.6	2.53		31.90		.6	20		1/4	FC 13
4	2/24	"	18.1	10.3	2.86	2.49	29.56		.6	10		1/6	FC 13
5	3/23	Luce	3.0	.28	.68		.19		.6	5		1/12	FC 13

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. 140

Discharge measurements of **Castaic Creek**
at **Hwy. Bridge near Elizabeth Lake Canyon**
near _____, during the year ending September 30, 19**33**

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	Mean sea No.	G. Ht. change Feet	Time Hours	Meter No.
1	1933 1/22	Luce-Lindsay	21.5	8.86	2.62	2.62	22.05		.6	9	0	1/4	FC 13
2	1/31	Luce-Marchand	13.5	5.30	2.25	2.53	11.04		.6	9	0	1/6	"
3	2/10	"	2.7	.39	.72	-	.28		.6	3	0	1/12	"
4	2/18	Marchand	7.0	1.52	1.00	2.43	1.67		.6	7	0	1/6	FC 25
5	2/18	"	3.5	.53	.62	-	.33		.6	4	0	1/6	"
6	2/25	Luce	7.0	1.37	.82	2.41	1.13		.6	9	0	1/4	"
7	3/3	"	3.5	.58	.68	-	.40		.6	4	0	1/12	FC 13
8	3/10	"	3.0	.34	.64	-	.22		.6	3	0	1/12	"
9	3/23	"	3.2	.46	.36	-	.17		.6	4	0	1/12	"
10	3/31	"	3.5	.71	.62	-	.44		.6	4	0	1/12	"
11	3/31	"	.27	.50	.46	-	.23		.6	5	0	1/12	"
12	4/3	"	2.6	.29	1.26	-	.37		.6	4	0	1/12	"
13	4/14	"	2.5	.49	.59	-	.27		.6	4	0	1/12	"
14	4/20	"	3.0	.53	.37	-	.20		.6	4	0	1/12	"
15	4/27	"				-	.21		Weir				
16	5/4	"				-	.15		"				
17	5/12	"				-	.12		"				
18	5/22	"	1.30	.12	.70	-	.09		.6	3	0	1/12	FC 13
19	5/25	"				-	.05		Weir				
20	6/2	"				-	.04		"				
21	6/8	"				-	.025		"				
22	1934 2/23	Luce-Turner	18.1	11.21	3.50	2.48	39.23		.6	10		1/6	FC 13

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 84

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 84

Discharge measurements of Gate Ditch at Below Headgate during the year ending September 30, 1933

Discharge measurements of Gate Ditch at Below Headgate during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gate height Feet, Discharge Sec.-ft., Rating Percent full, Method, Mean No., Q. Ft. change Total, Time Hours, Meter No. Rows include measurements for 1932 and 1933.

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gate height Feet, Discharge Sec.-ft., Rating Percent full, Method, Mean No., Q. Ft. change Total, Time Hours, Meter No. Rows include measurements for 1933 and 1934.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 173

Discharge measurements of Clear Creek

at near Mouth during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq-ft, Mean velocity ft. per sec., Stage Height Feet, Discharge Sec-ft., Rating Percent, Method, Meas. No., G. Ht. Change Total, Time Hours, Meter No. Contains data for Clear Creek from 1932 to 1933.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. FC 61

Discharge measurements of Cold Creek

at Crater Camp during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq-ft, Mean velocity ft. per sec., Stage Height Feet, Discharge Sec-ft., Rating Percent, Method, Meas. No., G. Ht. Change Total, Time Hours, Meter No. Contains data for Cold Creek from 1933 and summary data for Station 61.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 184

Discharge measurements of Devil's Canyon Creek

at 1000' above Junction with San Gabriel River during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq-ft, Mean velocity ft. per sec., Stage Height Feet, Discharge Sec-ft., Rating Percent, Method, Meas. No., G. Ht. Change Total, Time Hours, Meter No. Contains data for Devil's Canyon Creek from 1932 to 1933.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 178

Discharge measurements of Devil's Punch Bowl Creek

at near 100' above Big Rock Creek during the year ending September 30, 1933

Table with columns: 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, Mean gage No., G. H. Change Total, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 74

Discharge measurements of Eaton Wash

at near Foothill Blvd. Bridge during the year ending September 30, 1933

Table with columns: 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, Mean gage No., G. H. Change Total, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 141

Discharge measurements of Elizabeth Lake Creek

at near Bridge at Center Cabin Site during the year ending September 30, 1933

Table with columns: 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, Mean gage No., G. H. Change Total, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 141

Discharge measurements of Elizabeth Lake Creek

at near Bridge at Center Cabin Site during the year ending September 30, 1933

Table with columns: 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, Mean gage No., G. H. Change Total, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 141

Discharge measurements of Elizabeth Lake Creek

at near Bridge at Center Cabin Site during the year ending September 30, 1934

Table with columns: 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, Mean gage No., G. H. Change Total, Time Hours, Meter No.

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. 131

Discharge measurements of Gayin Canyon Creek

at Weldon Cr. Hwy. 100' above Towley Cr., during the year ending September 30, 1933

No.	Date	Made by	Width Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Cross Section Feet	Discharge Sec.-ft.	Rating Point dist.	Method	Mean gage No.	G. H. Gauge Total	Time Hours	Meter No.
1	1933 1/22	Luce-Lindsey	5.5	2.84	3.15	-	8.94		.6	7	0	1/6	FO 13
2	1/30	Luce-Marchand	8.5	3.14	2.36	-	7.43		.6	5	0	1/6	"
3	2/10	"	8.5	1.74	1.05	.11	1.82		.6	6	0	1/6	"
4	2/18	Luce	4.1	.49	.91	-	.41		.6	5	0	1/6	FO 25
5	2/25	"	2.9	.39	.86	-	.34		.6	5	0	1/6	"
6	3/3	"	4.5	.84	.89	-	.75		.6	5	0	1/12	FO 13
7	3/10	"	4.0	.60	.95	-	.57		.6	5	0	1/12	"
8	4/22	"	1.5	.13	.40	-	.05		.6	3	0	1/12	"

F. C. Dist. Form 104A

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. 132

Discharge measurements of Gayin Canyon Creek

at Weldon Cr. Hwy. 1000' below Towley Cr., during the year ending September 30, 1933

No.	Date	Made by	Width Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Cross Section Feet	Discharge Sec.-ft.	Rating Point dist.	Method	Mean gage No.	G. H. Gauge Total	Time Hours	Meter No.
1	1933 1/16	Luce-Luce	5.5	1.52	.99	0.05	1.50		.6	5	0	1/6	FO 13
2	1/22	Luce-Lindsey	19.4	9.38	3.3	0.50	31.46		.6	10	0	1/4	"
3	1/30	Luce-Marchand	20.0	8.44	4.0	0.81	34.47		.6	10	0	1/6	"
4	2/18	Marchand	5.5	1.05	1.1	-	1.24		.6	6	0	1/6	FO 25
5	2/25	Luce	5.5	.94	.88	-	.83		.6	5	0	1/6	"
6	3/23	"					.33		Weir				
7	4/1	"					.25		"				
8	4/14	"					.18		"				
9	4/22	"	2.0	.20	.70	-	.14		.6	4	0	1/12	FO 13
10	4/27	"					.15		Weir				
11	5/4	"					.11		"				
12	5/18	"					.06		"				
Station 132 1933-1934													
Gayin Canyon Creek - Weldon Canyon Hwy. 1000' Below Towley Canyon													
1	1933 12/14	Luce-Turner	3.4	0.44	0.61	0.06	0.27		.6	5	0	1/12	FO 13
2	1934 1/1	"	25.6	18.10	4.88	2.43	88.54		.6	10	0	1/6	"
3	1/11	Turner	7.0	0.80	1.46		1.17		.6	8	0	1/6	FO 25
4	2/23	Luce	20.0	6.60	2.30	1.71	15.22		.6	9	0	1/6	FO 13
5	2/24	Luce	20.8	4.96	2.72	1.48	13.48		.6	11	0	1/4	FO 13
6	3/8	Luce	5.6	.49	.76	1.36	.37		.6	8	0	1/12	FO 13

F. C. Dist. Form 104A 104 134

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. 170

Discharge measurements of Gold Canyon Creek

at Above Big Tujunga Creek, during the year ending September 30, 1933

No.	Date	Made by	Width Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Cross Section Feet	Discharge Sec.-ft.	Rating Point dist.	Method	Mean gage No.	G. H. Gauge Total	Time Hours	Meter No.
3	1933 1/16	J. L. Irwin	5.0	2.42	3.08	-	7.44		.6	5	0	1/4	FO 30
4	1/25	"	4.0	.58	3.00	-	1.78		.6	4	0	1/4	"
6	2/3	"	"	"	"	"	.48		"	"	"	"	"
5	2/7	"	2.5	.19	2.07	-	.39		.6	4	0	1/6	FO 30
7	2/10	"	"	"	"	"	.60		"	"	"	"	"
8	4/27	"	"	"	"	"	.04		"	"	"	"	"
9	5/18	"	"	"	"	"	.02		Est.	"	"	"	"
10	9/21	"	"	"	"	"	.02		Est.	"	"	"	"
11	9/28	"	"	"	"	"	.02		Est.	"	"	"	"

F. C. Dist. Form 104A

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. 174

Discharge measurements of Hansen Creek

at Mouth, during the year ending September 30, 1933

No.	Date	Made by	Width Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Cross Section Feet	Discharge Sec.-ft.	Rating Point dist.	Method	Mean gage No.	G. H. Gauge Total	Time Hours	Meter No.
1	1933 11/10	Irwin					1.01	0.01	Weir				
2	12/	"					1.01	.0085	"				
3	1933 1/16	"	3.1	1.35	1.65		3.23		.6	6	0	1/4	FO 30
4	1/27	"					2.12	.20	Weir				
5	2/3	"					2.05	.11	"				
6	2/10	"					2.01	.023	"				
7	2/16	Delaney	1.0	.10	.02	-	.02		.6	2	0	1/12	FO 11
8	2/23	"	1.0	.08	.37	-	.03		.6	1	0	1/12	"
9	3/3	"					.01		Est.				
10	4/20	Irwin					1.96	.04	Weir				
11	3/24	Delaney					.01		Est.				
12	4/27	Irwin					1.95	.016	Weir				
13	5/3	"	0.5	-	1.0	1.96	.025		.6	2	0	1/12	FO 10
14	5/18	"	(Est.) .7	.14	.5	2.00	.070		.6	-	-	01/12	FO 30
15	6/15	"					1.99	.02	Weir				
16	6/22	"					1.99	.02	"				
17	6/30	"					1.98	.02	"				
18	7/7	"					1.98	.01	"				
19	7/13	"					1.99	.01	"				
20	7/21	"					1.96	.01	"				
21	8/4	"					1.99	.01	"				
22	8/9	"					1.99	.01	"				
23	8/11	"					1.99	.01	"				
24	8/18	"					1.99	.01	"				
25	8/15	"					1.99	.01	"				
26	1933 8/25	Irwin					1.99	.01	Weir				
27	8/31	"					1.99	.01	"				
28	9/7	"					1.99	.01	"				
29	9/14	"					1.99	.01	"				
30	9/21	"					1.99	.01	"				
31	9/28	"					1.99	.01	"				
Station 174 1933-1934													
Hansen Creek at Mouth													
1933 10/26	Irwin						1.99	.01	Weir				

F. C. Dist. Form 104A

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. 179

Discharge measurements of Holoomb Creek

at 1000' above Big Rock Creek, during the year ending September 30, 1933

No.	Date	Made by	Width Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Cross Section Feet	Discharge Sec.-ft.	Rating Point dist.	Method	Mean gage No.	G. H. Gauge Total	Time Hours	Meter No.
1	1933 1/9	Luce	8.0	2.41	1.35	-	3.26		.6	8	0	1/6	FO 13
2	4/2	"	8.5	1.74	2.17	-	3.78		.6	7	0	1/6	"
3	4/22	"	8.0	1.98	.97	-	1.93		.6	9	0	1/6	"
4	6/3	"	4.0	1.12	1.41	-	1.59		.6	7	0	1/6	"
5	6/16	"	3.5	.68	1.23	-	.84		.6	6	0	1/6	"
6	6/24	"	2.8	.33	.69	-	.23		.6	4	0	1/12	"
7	6/29	"	2.5	.33	.66	-	.22		.6	4	0	1/12	"
8	7/11	Luce-Irwin	1.9	.17	.05	-	.10		.6	4	0	1/6	"
9	7/18	"	1.0	.06	.33	-	.02		.6	2	0	1/12	"
10	7/25	"					.03		Est.				
11	8/16	Luce					.02		"				
12	8/26	"					.01		"				
13	9/5	"					.01		"				

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. LA 1

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. LA 1

Discharge measurements of LOS ANGELES RIVER - (Rising Water)

Discharge measurements of LOS ANGELES RIVER - (Rising Water)

at California St. during the year ending September 30, 1933

at California St. during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gate height Feet, Discharge Sec.-ft., Rating Percent diff., Method, Manning No., G. Ht. above Tread, Time Hours, Meter No. Contains data for 1932 and 1933 measurements at California St.

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gate height Feet, Discharge Sec.-ft., Rating Percent diff., Method, Manning No., G. Ht. above Tread, Time Hours, Meter No. Contains data for 1933 measurements at California St.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 6

Discharge measurements of Los Angeles River

at Whitsett Ave. Bridge during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gate height Feet, Discharge Sec.-ft., Rating Percent diff., Method, Manning No., G. Ht. above Tread, Time Hours, Meter No. Contains data for 1933 measurements at Whitsett Ave. Bridge.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 201

Discharge measurements of Kagel Canyon Creek

at Little Tujunga Road during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gate height Feet, Discharge Sec.-ft., Rating Percent diff., Method, Manning No., G. Ht. above Tread, Time Hours, Meter No. Contains data for 1933 measurement at Little Tujunga Road.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 232

Discharge measurements of Los Angeles River at 1/4 mile below Buena Vista Street, during the year ending September 30, 1933

Table with columns: 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, Mean sea No., G. Ht. Change Total, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 176

Discharge measurements of Maple Creek at Mouth, during the year ending September 30, 1933

Table with columns: 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, Mean sea No., G. Ht. Change Total, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 56

Discharge measurements of Manderilla Canyon Creek at Above Administration Building, during the year ending September 30, 1933

Table with columns: 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, Mean sea No., G. Ht. Change Total, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 153

Discharge measurements of Willard Creek at 1/2 mi. above Devil's Gate Dam, during the year ending September 30, 1933

Table with columns: 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, Mean sea No., G. Ht. Change Total, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 158

Discharge measurements of Nicholas Canyon Creek at Roosevelt Highway Bridge, during the year ending September 30, 1933

Table with columns: 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, Mean sea No., G. Ht. Change Total, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 196

Discharge measurements of Paoima Creek at Maclay Avenue Bridge, during the year ending September 30, 1933

Table with columns: 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, Mean sea No., G. Ht. Change Total, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 197

Discharge measurements of PACOIMA WASH at Arletta Street during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Stage height, Discharge, Rating, Method, Mass, G. H., Time, Meter. Includes data for Station No. 197, 1932-1933, PACOIMA WASH AT ARLETTA STREET.

F. C. Dist. Form 104A

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 121

Discharge measurements of PALLETTE CREEK - (Rising Water) at 1 mi. above Big Rock Creek during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Stage height, Discharge, Rating, Method, Mass, G. H., Time, Meter. Includes data for Station No. 121, PALLETTE CREEK.

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Stage height, Discharge, Rating, Method, Mass, G. H., Time, Meter. Includes data for Station 17, Station 16, Station 16, Station No. 204, Station No. 205.

F. C. Dist. Form 104A

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 122

Discharge measurements of PALLETTE CREEK at Big Rock Creek during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Stage height, Discharge, Rating, Method, Mass, G. H., Time, Meter. Includes data for Station No. 122, PALLETTE CREEK.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 133

Discharge measurements of Pico Canyon Creek at near Redon Canyon Highway during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq-ft, Mean velocity ft. per sec., Stage height Feet, Discharge Sec.-ft., Rating Percent diff., Method, Mean temp. No., G. Ht. change Total, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 115

Discharge measurements of Puddingstone Div. Channel at near Outlet into Puddingstone Dam during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq-ft, Mean velocity ft. per sec., Stage height Feet, Discharge Sec.-ft., Rating Percent diff., Method, Mean temp. No., G. Ht. change Total, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 129

Discharge measurements of Rice Canyon Creek at near Weldon Canyon Highway during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq-ft, Mean velocity ft. per sec., Stage height Feet, Discharge Sec.-ft., Rating Percent diff., Method, Mean temp. No., G. Ht. change Total, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 238

Discharge measurements of Rustic Canyon Storm Drain at near Channel Lane during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq-ft, Mean velocity ft. per sec., Stage height Feet, Discharge Sec.-ft., Rating Percent diff., Method, Mean temp. No., G. Ht. change Total, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 91

Discharge measurements of San Dimas Creek at near Above F. O. Dam during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq-ft, Mean velocity ft. per sec., Stage height Feet, Discharge Sec.-ft., Rating Percent diff., Method, Mean temp. No., G. Ht. change Total, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 92

FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 1

Discharge measurements of W. San Fernando Creek

at Devonshire Ave. during the year ending September 30, 1933

Discharge measurements of SAN DIMAS

at Above F. C. Dam during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Gage height, Discharge, Rating, Method, Meter No., Time Hours. Contains data for stations 1 through 33.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 101

Discharge measurements of San Dimas Creek

at near Below F. C. Dam during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Gage height, Discharge, Rating, Method, Meter No., Time Hours. Contains data for stations 1 through 5.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 110

Discharge measurements of San Dimas Wash

at near 50' below Puddingstone Div. Dam during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Gage height, Discharge, Rating, Method, Meter No., Time Hours. Contains data for stations 1 through 6.

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Gage height, Discharge, Rating, Method, Meter No., Time Hours. Contains data for stations 1 through 3.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 109

Discharge measurements of San Fernando Creek

at near Devonshire Ave. during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Gage height, Discharge, Rating, Method, Meter No., Time Hours. Contains data for stations 1 through 6.

F. C. D. Form 104A

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 206

Discharge measurements of SAN GABRIEL RIVER - West Fork

at near above Devil's Canyon during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Gage height, Discharge, Rating, Method, Meter No., Time Hours. Contains data for stations 1 through 36.

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. F 76

F. C. D. Form 10A (M 5-34)

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. F 206

Discharge measurements of San Gabriel River - West Fork

Discharge measurements of San Gabriel River West Fork

at above Bear Creek during the year ending September 30, 1933

at Above Devils Canyon during the year ending September 30, 1934

No.	Date	Made by	Width Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Cross height Feet	Discharge Sec.-ft.	Rating Percent diff.	Method	Mean No.	G. Ht. change Total	Time Hours	Meter No.
1	3/20	Green-Cooper	28.0	15.7	1.67	1.75	26.30	.6	11	0	1/3	FO 1	
2	3/23	"	28.0	16.0	1.59	1.72	25.49	.6	11	0	1/4	"	
3	3/30	Cooper	24.0	14.0	1.57	1.66	21.96	.6	11	0	1/4	FO 12	
4	4/6	Patterson-Green	23.0	15.5	1.30	1.78	20.11	.6	8	0	1/3	FO 1	
5	4/20	Patterson	23.5	12.6	1.15	1.58	14.5	.6	9	0	1/4	FO 22	
6	4/28	"	22.5	12.7	1.14	1.58	14.5	.6	10	0	1/4	"	
7	5/18	"	21.5	11.1	.97	1.47	10.8	.6	9	0	1/4	"	
8	7/13	"	5.0	1.5	.40	1.14	.60	.6	6	0	1/6	"	
9	7/27	"	2.0	.45	.38	1.06	.17	.6	4	0	1/6	"	
10	8/4	"	2.2	.44	.32	1.07	.14	.6	3	0	1/12	"	
11	8/11	"	2.0	.37	.27	1.06	.10	.6	3	0	1/12	"	
12	8/17	"	1.5	.22	.18	1.03	.04	.6	2	0	1/12	"	
13	8/24	"	1.5	.22	.14	1.02	.03	.6	2	0	1/12	"	
14	8/31	"	1.5	.22	.14	1.02	.03	.6	2	0	1/12	"	
15	9/14	"	2.0	.40	.26	.97	.12	.6	4	0	1/6	"	
16	9/28	"	3.5	.74	.30	1.05	.22	.6	3	0	1/12	"	

Station 76 1933-1934

No.	Date	Made by	Width Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Cross height Feet	Discharge Sec.-ft.	Rating Percent diff.	Method	Mean No.	G. Ht. change Total	Time Hours	Meter No.
1	12/15	Cooper	16.5	9.24	0.82		7.57	.6	9			1/4	FO 12
2	12/17	"	15.0	6.79	0.61		4.14	.6	8			1/5	"
3	12/23	"	4.8	2.32	1.18		2.74	.6	6			1/6	"
4	1/4	"	34.3	22.3	2.32		51.90	.6	9			1/4	"
5	1/19	"	20.0	10.2			10.82	.6	8			1/5	"
6	5/2	"	6.4	2.29	1.06		2.42	.6	7			1/5	FO 20
7	5/10	"	4.9	1.83	0.85		1.56	.6	6			1/5	"

F. C. D. Form 10A (M 5-34)

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. F 29

Discharge measurements of SAN GABRIEL RIVER - CATTLE CANYON

at Above Junction during the year ending September 30, 1933

San Gabriel River - West Fork Above Bear Creek

No.	Date	Made by	Width Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Cross height Feet	Discharge Sec.-ft.	Rating Percent diff.	Method	Mean No.	G. Ht. change Total	Time Hours	Meter No.
1	10/5	Patterson	2.3	.44	.30	1.02	.13	.6	3		1/12	FO 22	
2	10/10	"	2.8	.67	.43	1.03	.29	.6	3		1/12	"	
3	10/19	"	2.5	.48	.33	1.02	.16	.6	3		1/12	"	
4	11/2	- Cooper	2.7	.65	.66	1.12	.43	.6	4		1/6	"	
5	11/9	"	2.8	.65	.66	1.13	.43	.6	4		1/6	"	
6	11/16	Cooper	2.5	.58	.78	1.14	0.45	.6	5		10/60	FO 12	
7	11/23	"	2.5	0.64	.78	1.14	0.50	.6	5		10/60	"	
8	11/29	"	2.5	.95	1.30	1.21	1.24	.6	5		1/6	"	

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. K 25

Discharge measurements of San Gabriel River - Bear Creek

at Mouth of Canyon during the year ending September 30, 1933

No.	Date	Made by	Width Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Cross height Feet	Discharge Sec.-ft.	Rating Percent diff.	Method	Mean No.	G. Ht. change Total	Time Hours	Meter No.
1	3/15	Green	12.0	7.5	1.68		12.6	.6	7	0	1/3	272639	
2	3/31	Patterson	12.0	8.3	1.06		8.8	.6	7	0	1/4	FO 22	
3	4/21	Lindsay	6.2	3.78	.71		2.57	.6	6	0	1/10	282883	
4	7/14	Patterson	7.0	3.6	.53		1.9	.6	7	0	1/6	FO 22	
5	7/19	"	9.0	3.3	.61		2.0	.6	5	0	1/6	"	
6	7/26	"	5.0	2.2	.58		1.5	.6	5	0	1/6	"	
7	9/3	"	4.8	2.0	.80		1.6	.6	5	0	1/6	"	

Station 29 1933-1934

San Gabriel River - Cattle Canyon Above Junction

No.	Date	Made by	Width Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Cross height Feet	Discharge Sec.-ft.	Rating Percent diff.	Method	Mean No.	G. Ht. change Total	Time Hours	Meter No.
1	10/5	G. Patterson	4.6	1.35	.66		1.89	.6	3			FO 22	
2	10/11	G. Patterson	5.5	1.9	.79		1.5	.6	3			1/6	FO 22
3	10/20	G. Patterson	5.0	1.6	.75		1.2	.6	3			1/6	FO 22
4	11/22	G. Patterson	4.9	2.0	.65		1.3	.6	5			1/6	FO 22

F. C. D. Form 10A

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. 223

Discharge measurements of San Gabriel River

at 400' below Intake of Edison Tunnel during the year ending September 30, 1933

No.	Date	Made by	Width Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Cross height Feet	Discharge Sec.-ft.	Rating Percent diff.	Method	Mean No.	G. Ht. change Total	Time Hours	Meter No.
1	3/30	Cooper	20.0	19.7	.99		19.46	.6	9		1/4	FO 12	
2	4/20	Patterson	19.5	17.6	.82		14.4	.6	9		1/4	FO 22	
3	4/28	"	18.5	17.1	.77		13.2	.6	10		1/3	"	
4	8/4	"	3.3	1.12	.60		.67	.6	5		1/6	"	
5	8/11	"	3.3	1.06	.56		.60	.6	5		1/6	"	
6	8/17	"	3.3	.97	.27		.26	.6	5		1/6	"	
7	8/24	"	3.0	.80	.26		.21	.6	3		1/12	"	
8	8/31	"	3.0	.74	.24		.18	.6	3		1/6	"	
9	9/14	"	2.7	.69	.27		.19	.6	4		1/6	"	
10	9/28	"	2.4	.54	.27		.20	.6	3	0	1/12	"	

Station 25 1933-1934

San Gabriel River - Bear Creek at Mouth of Canyon

No.	Date	Made by	Width Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Cross height Feet	Discharge Sec.-ft.	Rating Percent diff.	Method	Mean No.	G. Ht. change Total	Time Hours	Meter No.
1	10/5	Patterson	2.9	.65	.23		.15	.6	3		1/12	FO 22	
2	10/10	"	3.0	.70	.29		.20	.6	3		1/12	"	
3	10/19	"	3.0	.68	.26		.18	.6	3		1/12	"	
4	11/2	- Cooper	3.3	.97	.58		.56	.6	5		1/6	"	
5	11/9	"	3.4	1.14	.58		.66	.6	5		1/6	"	
6	11/16	Cooper	3.3	1.07	.68		0.73	.6	6		1/6	FO 12	
7	11/29	"	3.5	1.55	1.24		1.93	.6	7		1/6	"	
8	12/7	"	3.2	1.43	1.24		1.77	.6	6		1/6	"	
9	1/11	- Waddoor	18.2	20.37	1.03		20.95	.6	11		1/5	FO 26	
10	1/25	Waddoor	16.8	15.32	.69		10.49	.6	8		1/6	"	
11	2/8	"	16.8	14.02	.51		7.13	.6	9		13/60	"	
12	4/3	"	17.0	14.23	.44		6.30	.6	10		1/4	"	
13	4/24	"	15.0	12.54	.36		4.52	.6	9		1/5	"	
14	6/18	Hoffmann	3.4	2.74	.77		2.21	.6	7		1/6	28	
15	7/3	Waddoor	10.0	6.95	.12	2.04	.86	.6	4		1/10	FO 26	

No.	Date	Made by	Width Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Cross height Feet	Discharge Sec.-ft.	Rating Percent diff.	Method	Mean No.	G. Ht. change Total	Time Hours	Meter No.
1	2/22	Cooper	16.5	15.6	1.20		18.81	.6	9	0	1/4	FO 12	
2	3/4	"	16.0	16.7	1.29		21.68	.6	9	0	1/4	"	
3	3/9	Patterson	38.0	31.4	.98	2.02	30.7	.6	11	0	1/3	FO 22	
4	3/11	Cooper	18.0	19.9	1.46	2.03	29.25	.6	10	0	1/4	FO 12	
5	3/18	"	19.0	23.0	1.80	2.145	41.33	.6	10	0	1/4	"	
6	3/21	Green	19.0	22.2	1.62	2.06	36.0	.6	9	0	1/3	FO 1	
7	3/24	Patterson-Cooper	19.0	20.4	1.41	1.96	28.8	.6	11	0	1/3	FO 22	
8	3/25	Cooper	18.2	17.9	1.40	1.885	25.24	.6	11	-.01	1/4	FO 12	
9	3/28	Patterson-Green	19.0	19.7	1.22	1.92	24.0	.6	9	0	1/3	FO 1	
10	3/31	Cooper	18.5	18.3	1.12	1.97	20.63	.6	10	-.19	1/6	FO 12	
11	4/10	Patterson-Green	19.0	19.0	1.22	1.88	23.00	.6	9	0	1/4	FO 1	

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 222

Discharge measurements of San Gabriel River at 300' below No. 1 Dam during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. ft., Mean velocity ft. per sec., Obs. height Feet, Discharge Sec.-ft., Rating Percent, Method, Mean No., G. Ht. change Total, Time Hours, Meter No. Contains data for 1933 measurements from 2/15 to 9/29.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 79

Discharge measurements of San Gabriel River - Brown's Gulch at Mouth - Near Junction during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. ft., Mean velocity ft. per sec., Obs. height Feet, Discharge Sec.-ft., Rating Percent, Method, Mean No., G. Ht. change Total, Time Hours, Meter No. Contains data for 1933 measurements from 3/27 to 9/30.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. P. 5

Discharge measurements of San Gabriel River P.W.D. Station at 1 mi. above Pasadena Damsite during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. ft., Mean velocity ft. per sec., Obs. height Feet, Discharge Sec.-ft., Rating Percent, Method, Mean No., G. Ht. change Total, Time Hours, Meter No. Contains data for 1933 measurements from 10/14 to 9/29.

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. 224

Discharge measurements of San Gabriel River
at near On R. R. Bridge during the year ending September 30, 1933

No.	Date	Made by	Width Feet	Area of section Sq. ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec. ft.	Rating Point (ft.)	Method	Mean sea level	G. H. stage Total	Time Hours	Meter No.
1	3/21	Green	26.0	24.5	1.76	-	43.17	.6	9	0	1/3	FC 1	
2	3/25	Cooper	24.8	19.3	1.45	-	28.04	.6	10	0	1/4	FC 12	
3	3/27	Green-Cooper	24.5	16.8	.96	.83	16.24	.6	9	0	1/4	"	
4	3/28	Patterson-Green	25.0	18.5	1.19	.85	22.0	.6	9	+02	1/4	"	
5	3/31	Cooper	24.9	19.1	1.32	0.945	25.21	.6	10	-05	1/4	"	
6	5/5	Patterson	7.5	2.3	.48	0.30	1.1	.6	7	0	1/6	FC 22	
7	5/12	"	6.0	2.2	.68	0.36	1.5	.6	5	0	1/6	"	
8	5/19	"	5.0	1.5	.67	0.28	1.0	.6	5	0	1/6	"	
9	5/26	"	5.0	1.66	.41	0.22	.68	.6	4	0	1/6	"	

F. C. D. Form 104A 1M 1-34

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. F 0

Discharge measurements of San Gabriel River
at near Hoeg's Ranch during the year ending September 30, 1933

No.	Date	Made by	Width Feet	Area of section Sq. ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec. ft.	Rating Point (ft.)	Method	Mean sea level	G. H. stage Total	Time Hours	Meter No.
1	2/15	Green	46.0	54.1	2.25	4.56	121.7	.6	10	0	1/3	FC 31	
2	2/28	"	44.0	42.7	1.30	4.18	56.5	.6	11	0	1/3	FC 31	
3	3/11	Cooper	45.0	44.1	1.66	4.29	73.33	.6	13	0	5/12	FC 12	
4	3/10	Patterson	45.0	46.0	1.68	4.32	77.3	.6	13	0	5/12	FC 22	
5	3/21	Green	44.0	37.3	1.05	4.10	39.1	.6	10	0	1/3	FC 1	
6	3/24	Patterson	31.0	28.2	1.35	4.05	38.1	.6	8	0	1/3	FC 22	
7	3/28	Patterson & Green	42.0	29.5	.78	3.93	22.9	.6	10	0	1/3	FC 1	
8	3/31	Patterson	40.5	30.1	.87	4.00	26.2	.6	10	0	1/4	FC 22	
9	4/14	Patterson	40.5	25.5	.53	3.80	13.6	.6	10	0	1/4	FC 22	
10	4/29	Patterson & Green	39.0	50.9	1.31	4.88	78.5	.6	11	0	1/3	FC 22	
11	5/2	Patterson	40.5	62.3	1.39	4.80	86.9	.6	11	0	1/3	FC 22	
12	5/5	"	4.5	1.5	.80	3.71	1.2	.6	4	0	1/6	FC 22	
13	5/6	Patterson & Green	39.0	59.7	1.25	4.84	74.7	.6	10	0	1/3	FC 22	
14	5/12	Patterson	6.0	1.63	.34		.55	.6	4	0	1/6	FC 22	
15	5/19	"	1.8	.61	.46		.28	.6	3	0	1/12	FC 22	

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. 208

Discharge measurements of San Gabriel River
at near 1500 ft. Below Pasadena Dam during the year ending September 30, 1933

No.	Date	Made by	Width Feet	Area of section Sq. ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec. ft.	Rating Point (ft.)	Method	Mean sea level	G. H. stage Total	Time Hours	Meter No.
1	8/3	G. Patterson	2.1	.60	.37	-	.22	.6	4			1/12	282897
2	8/11	"	2.0	.56	.32	-	.18	.6	4			1/12	282897
3	8/18	"	2.0	.59	.36	-	.21	.6	4			1/12	282897
4	8/25	"	3.0	.80	.28	-	.22	.6	3			1/12	282897
5	8/31	"	1.7	.45	.40	-	.18	.6	3			1/12	282897
6	9/8	"	1.8	.51	.36	-	.18	.6	3			1/12	282897
7	9/15	"	1.5	.35	.34	-	.12	.6	3			1/12	282897
Station 208 1933-1934													
San Gabriel River - 1500 ft. Below Pasadena Dam													
1	10/6	G. Patterson	2.8	0.71	0.25		0.18	.6	3			1/12	282897
2	10/13	"	3.0	0.84	0.29		0.25	.6	3			1/12	"
3	10/19	"	3.0	0.76	0.26		0.20	.6	3			1/12	"
4	10/26	"	3.0	0.84	0.32		0.27	.6	3			1/12	"
5	11/10	Patterson-Cooper	2.8	0.86	0.35		0.30	.6	4			1/6	"
6	11/23	G. Patterson	3.7	1.9	0.33		0.62	.6	4			1/6	282897
7	12/28	"	8.9	4.8	0.54		2.6	.6	6			1/4	"
8	1/19	"	76.0	103.3	2.28		3.16	236.3	.6	11		5/12	"
9	2/2	"	7.0	3.6	0.69		1.42	2.5	.6	7		1/6	"
10	2/8	Patterson-Cornick	7.1	3.7	0.62		1.42	2.3	.6	8		1/4	"
11	2/15	G. Patterson	7.0	2.5	0.80		1.41	2.0	.6	4		1/6	"
12	2/23	"	8.8	4.73	0.67		1.77	3.2	.6	6		1/4	"
13	3/16	Waddicor-Turner	26.3	25.99	2.46		2.62	64.25	.6	11		13/30	FC 12
14	3/30	Patterson-Waddicor	33.5	40.0	2.27		2.65	91.0	.6	13		1/3	282897
15	4/19	"	37.5	29.3	2.36		2.88	69.3	.6	13		1/3	FC 26
16	4/26	Waddicor-Turner	29.5	10.75	.78		6.3	8.33	.6	8		17/60	FC 26
17	5/31	Patterson-Waddicor	2.8	.61	.31		2.12	.19	.6	5		1/5	FC 22
18	6/14	R. A. Waddicor	2.6	.56	.25		.14	.6	5			1/12	FC 26
19	6/29	G. Patterson	2.0	.57	.26		.15	.6	3			1/12	FC 22

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 56

Discharge measurements of San Gabriel River

at near Below Standifer Ditch during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Gate height, Discharge, Rating, Method, Mean gage No., G. M. change Total, Time, Meter No. Rows 1-52 covering dates from 10/6 to 9/28.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 86

Discharge measurements of San Gabriel River

at near Below Standifer Ditch during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Gate height, Discharge, Rating, Method, Mean gage No., G. M. change Total, Time, Meter No. Rows 1-52 covering dates from 10/5 to 9/27.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 93

Discharge measurements of SANTA CLARA RIVER - NATURAL CHANNEL

at Lang during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. ft., Mean velocity ft. per sec., Gate height Feet, Discharge Sec.-ft., Rating Percent diff., Method, Mean No., G. Ht. Change Total, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 119

Discharge measurements of Big Santa Anita Creek

at Below Venturi Flume during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. ft., Mean velocity ft. per sec., Gate height Feet, Discharge Sec.-ft., Rating Percent diff., Method, Mean No., G. Ht. Change Total, Time Hours, Meter No.

F. C. Dist. Form 104A

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 71

Discharge measurements of Santa Anita Wash

at Foothill Blvd. during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. ft., Mean velocity ft. per sec., Gate height Feet, Discharge Sec.-ft., Rating Percent diff., Method, Mean No., G. Ht. Change Total, Time Hours, Meter No.

F. C. Dist. Form 104A

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 93

Discharge measurements of Santa Clara Natural Channel

at Lang during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. ft., Mean velocity ft. per sec., Gate height Feet, Discharge Sec.-ft., Rating Percent diff., Method, Mean No., G. Ht. Change Total, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 93

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 137

Discharge measurements of SANTA CLARA RIVER - DIVERSION DITCH

Discharge measurements of Santa Clara River - (Rising Water)

at Lang during the year ending September 30, 1933

at 1 mi. W. of Castaic Junction during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section sq. ft., Mean velocity ft. per sec., Open height Feet, Discharge Sec.-ft., Rating Percent, Method, Manning No., G. H. change Total, Time Hours, Meter No. Contains data for Station 93 from 1933 to 1934.

Table with columns: No., Date, Made by, Width Feet, Area of section sq. ft., Mean velocity ft. per sec., Open height Feet, Discharge Sec.-ft., Rating Percent, Method, Manning No., G. H. change Total, Time Hours, Meter No. Contains data for Station 137 from 1933 to 1934.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 137

Discharge measurements of Santa Clara River - (Rising Water)

at 1 mi. W. of Castaic Junction during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section sq. ft., Mean velocity ft. per sec., Open height Feet, Discharge Sec.-ft., Rating Percent, Method, Manning No., G. H. change Total, Time Hours, Meter No. Contains data for Station 137 from 1933 to 1934.

Table with columns: No., Date, Made by, Width Feet, Area of section sq. ft., Mean velocity ft. per sec., Open height Feet, Discharge Sec.-ft., Rating Percent, Method, Manning No., G. H. change Total, Time Hours, Meter No. Contains data for Station 137 from 1933 to 1934.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 55

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 55

Discharge measurements of Santa Monica Canyon at North Channel Road during the year ending September 30, 1933

Discharge measurements of Santa Monica Canyon at North Channel Road during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec.-ft., Rating Percent, Method, Mean sec. No., G. H. Change Feet, Time Hours, Meter No.

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec.-ft., Rating Percent, Method, Mean sec. No., G. H. Change Feet, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 125

Discharge measurements of Santiago Creek at 500' above Little Rock Creek during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gage height Feet, Discharge Sec.-ft., Rating Percent, Method, Mean sec. No., G. H. Change Feet, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 85

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 85

Discharge measurements of Standifer Ditch at Below Headgate during the year ending September 30, 1933

Discharge measurements of Standifer Ditch at Below Headgate during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section, Mean velocity, Gate height, Discharge, Rating, Method, Max. velocity, O. H. change, Time, Meter No. Rows include measurements from 1932 to 1933 and 1934.

Table with columns: No., Date, Made by, Width Feet, Area of section, Mean velocity, Gate height, Discharge, Rating, Method, Max. velocity, O. H. change, Time, Meter No. Rows include measurements from 1933 to 1934.

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. FC 43

Discharge measurements of Sycamore upper Storm Drain

at Solway St., Glendale during the year ending September 30, 1933

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	Mean gage No.	G. Ht. change Total	Time Hours	Meter No.
1	4/7	Bollinger				0.10	.10		Weir				
2	4/14	"				0.10	.11		"				
3	4/19	"				0.10	.11		"				
4	6/16	"				0.05	.04		"				
5	6/16	"				.06	.05		"				
6	6/23	"				.04	.03		"				
7	6/29	"				.03	.02		"				
8	7/7	"				.03	.02		"				

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. 160

Discharge measurements of Triunfo Creek

at Above Lobe Canyon during the year ending September 30, 1933

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	Mean gage No.	G. Ht. change Total	Time Hours	Meter No.
1	1933 2/9	Bollinger					2.5		Est.				

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. 148

Discharge measurements of Weldon Canyon Creek

at R.R. Bridge 1/2 mi. above Aqueduct during the year ending September 30, 1933

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	Mean gage No.	G. Ht. change Total	Time Hours	Meter No.
1	1933 1/22	Luce-Lindsay	5.30	1.45	1.27	0	1.83	.6	5	0	1/6	FC 13	

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. 169

Discharge measurements of Trail Canyon Creek

at Above Big Tujunga Creek during the year ending September 30, 1933

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	Mean gage No.	G. Ht. change Total	Time Hours	Meter No.
3	1933 1/16	Irwin	7.0	5.04	1.49	4.12	7.50	.6	7	0	1/4	FC 30	
4	1/24	"	8.0	2.19	1.07	3.40	2.34	.6	6	0	1/4	"	
5	1/25	"	8.0	2.2	1.10	3.40	2.41	.6	8	.04	1/4	"	
6	2/3	"				.32	.87		Weir				
7	2/8	Delaney	6.5	1.85	.64	3.29	1.19	.6	6	0	1/12	FC 11	
8	2/10	"	7.0	1.92	.67	3.29	1.29	.6	6	0	1/6	"	
9	2/16	"	7.0	2.54	.85	3.37	2.15	.6	6	0	1/6	"	
10	2/23	"	7.0	2.10	.73	3.32	1.53	.6	6	0	1/6	"	
11	3/3	"	7.2	2.12	.70	3.30	1.48	.6	7	0	1/12	"	
12	3/7	"	6.0	1.79	.48	3.23	.86	.6	6	0	1/12	FC 30	
13	3/15	"	7.0	1.85	.63	3.27	1.17	.6	6	0	1/12	FC 11	
14	3/17	"	7.0	1.85	.64	3.27	1.18	.6	6	0	1/6	"	
15	3/24	"	7.0	1.67	.65	3.26	1.09	.6	6	0	1/12	FC 30	
16	3/31	"	6.0	1.58	.47	3.22	.75	.6	6	0	1/12	"	
17	4/20	Irwin	4.0	.84	.60	3.21	.50	.6	4	0	1/6	"	
18	4/27	"	4.0	.74	.51	3.20	.38	.6	4	0	1/6	"	
19	5/18	"	4.0	.60	.45	3.16	.27	.6	4	0	1/6	"	
20	6/15	"				2.01	.05		Weir				

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. 50

Discharge measurements of WILSON CANYON CREEK

at County Hospital during the year ending September 30, 1933

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	Mean gage No.	G. Ht. change Total	Time Hours	Meter No.
1	1933 1/20	Luce & Lindsay	4.0	0.34	1.06	0.25	0.36	.6	4	0	1/6	FC 13	
2	1/30	Luce & Merchand	11.5	3.11	3.50	0.60	10.88	.6	9	0	1/12	"	

**LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT**

Station No. 66

Discharge measurements of Tri-City Sewer Outfall

at Above Junction with Rio Hondo during the year ending September 30, 1933

No.	Date	Made by	Width Feet	Area of section Sq. ft.	Mean velocity ft. per sec.	Mean depth Feet	Discharge Cfs.	Rating Percent off	Method	Mean stage No.	G. H. (Stage Feet)	Time Hours	Meter No.
1	1932 10/6	Brewster	4.0	4.49	1.90	1.92	8.52	.6	4	0	1/6	271666	
2	10/13	"	5.5	5.32	1.78	1.88	9.47	.6	5	0	1/6	"	
3	10/20	"	10.0	5.18	1.88	4.78	9.76	.6	5	+0.1	1/6	"	
4	10/27	"	12.0	5.14	1.84	4.77	9.48	.6	6	0	1/6	"	
5	11/3	"	12.0	4.36	1.89	4.64	8.22	.6	6	+0.04	1/4	"	
6	11/9	"	9.0	5.46	2.0	4.70	10.71	.6	9	+0.01	1/5	"	
7	11/17	"	8.5	4.77	2.08	4.78	9.95	.6	8	+0.02	1/4	"	
8	11/23	"	8.5	4.97	1.96	4.68	9.75	.6	7	+0.04	1/6	"	
9	12/1	"	8.0	4.25	1.85	4.58	7.86	.6	7	0	1/4	"	
10	12/8	"	8.0	4.52	1.97	4.67	8.94	.6	8	+0.02	1/4	"	
11	12/15	"	8.0	4.67	2.12	4.69	9.90	.6	8	0	1/5	"	
12	12/22	"	8.0	4.50	1.95	4.66	8.77	.6	8	0	1/5	"	
13	12/29	"	8.0	3.88	1.98	4.60	7.68	.6	8	0	1/5	"	
14	1933 1/5	"	9.0	3.29	1.58	4.50	5.21	.6	9	0	1/5	"	
15	1/12	Brewster-Jordan	8.0	2.83	1.35	4.47	3.81	.6	8	0	1/6	"	
16	1/26	Brewster	22.0	8.78	1.48	4.81	12.99	.6	11	+0.02	1/4	"	
17	2/2	"	20.0	8.02	1.41	4.58	11.32	.6	10	0	1/6	"	
18	2/9	"	14.0	6.16	1.66	4.57	10.22	.6	7	0	1/6	"	
19	2/16	"	14.0	6.96	1.40	4.62	9.73	.6	7	0	1/6	"	
20	2/23	"	16.0	6.36	1.11	4.56	7.04	.6	8	0	1/6	"	
21	3/2	"	16.0	8.32	1.68	4.84	13.94	.6	8	0	1/6	"	
22	3/9	"	16.0	7.00	1.67	4.62	11.68	.6	8	0	1/6	"	
23	3/15	"	15.0	8.47	1.71	4.68	14.49	.6	8	0	1/6	"	
24	3/16	"	14.0	6.38	1.17	4.40	7.45	.6	7	0	1/4	"	
25	1933 3/16	Brewster	15.0	9.16	1.82	4.72	16.84	.6	8	0	1/4	271666	
26	3/23	"	14.0	6.50	1.12	4.41	7.31	.6	7	0	1/4	"	
27	3/23	"	16.0	8.94	1.54	4.70	13.77	.6	8	0	1/4	"	
28	3/30	"	12.0	4.78	1.05	4.42	5.00	.6	6	0	1/6	"	
29	3/30	"	15.0	7.63	1.27	4.58	9.68	.6	8	0	1/6	"	
30	4/6	"	8.0	2.52	1.27	4.28	3.31	.6	8	0	1/6	"	
31	4/6	"	20.0	8.34	1.50	4.80	12.55	.6	10	0	1/5	"	
32	4/13	"	12.0	3.64	1.27	4.40	4.62	.6	6	0	1/4	"	
33	4/13	"	22.0	8.44	1.43	4.70	12.08	.6	11	0	1/6	"	
34	4/20	"	20.0	6.00	1.10	4.48	6.61	.6	10	0	1/4	"	
35	4/20	"	20.0	7.64	1.32	4.70	10.11	.6	10	0	1/4	"	
36	4/27	"	18.0	5.14	1.12	4.50	5.77	.6	9	0	1/6	"	
37	4/27	"	22.0	8.76	1.66	4.78	14.50	.6	11	0	1/4	"	
38	5/11	"	16.0	4.24	1.20	4.56	5.07	.6	8	0	1/6	"	
39	5/11	"	22.0	7.64	1.37	4.50	10.45	.6	11	0	1/4	"	
40	5/12	"	18.0	5.96	1.28	4.58	7.62	.6	9	0	1/4	"	
41	5/18	"	7.0	2.73	1.34	4.38	3.65	.6	6	0	1/6	"	
42	5/18	"	20.0	6.51	1.47	4.58	9.53	.6	7	0	1/4	"	
43	5/25	"	22.0	6.02	1.06	4.53	6.35	.6	10	0	1/4	"	
43A	5/25	"	20.0	7.51	1.46	4.75	10.94	.6	7	0	1/4	"	
44	6/1	"	19.5	4.47	1.00	4.48	4.45	.6	10	0	1/5	"	
45	6/6	"	24	8.73	1.41	4.78	12.23	.6	8	0	1/4	"	
46	6/13	"	21	8.04	1.49	4.76	11.97	.6	7	0	1/4	"	
47	6/20	"	20	8.32	1.44	4.82	13.13	.6	7	0	1/4	"	
48	1933 6/28	Brewster	20.0	6.85	1.28	4.58	8.75	.6	7	0	1/4	271666	
49	7/6	"	5.0	2.49	1.48	4.28	3.68	.6	5	0	1/4	"	
50	7/13	"	22.0	10.2	1.31	4.64	13.39	.6	8	0	1/4	"	
51	7/20	"	20.0	7.28	1.35	4.50	9.81	.6	10	0	1/4	"	
52	7/27	Brewster, Godsoe & Richards	16.0	5.68	1.73	4.53	9.85	.6	8	+0.02	1/6	"	
53	8/3	Brewster	16.0	7.60	1.44	4.40	10.97	.6	8	0	1/4	"	
54	8/10	"	15.0	7.85	1.89	4.44	14.84	.6	8	0	1/4	"	
55	8/13	"	16.0	8.76	1.43	4.43	12.57	.6	8	0	1/4	"	
56	8/17	"	15.0	8.81	1.54	4.46	13.61	.6	7	0	1/4	"	
57	8/24	"	16.0	9.10	1.63	4.44	14.84	.6	8	0	1/4	"	
58	9/7	"	18.0	11.08	1.49	4.50	16.47	.6	9	0	1/4	"	

No.	Date	Made by	Width Feet	Area of Sq. ft.	Mean velocity ft. per sec.	Mean depth Feet	Discharge Cfs.	Rating Percent off	Method	Mean stage No.	G. H. (Stage Feet)	Time Hours	Meter No.
59	9/14	"	16.0	9.74	1.41	4.46	13.78	.6	8	0	1/4	"	
60	9/21	"	16	11.12	1.48	4.58	16.43	.6	8	0	1/4	"	
61	9/28	"	16.0	10.72	1.53	4.62	16.43	.6	8	0	1/4	"	

F. C. D. Form 1044 114 5-34

**LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT**

Station No. 66

Discharge measurements of Tri City Sewer Outfall

at Above Junction with Rio Hondo during the year ending September 30, 1934

No.	Date	Made by	Width Feet	Area of Sq. ft.	Mean velocity ft. per sec.	Mean depth Feet	Discharge Cfs.	Rating Percent off	Method	Mean stage No.	G. H. (Stage Feet)	Time Hours	Meter No.
1	1933 10/5	Brewster	16.0	10.60	1.57	4.60	16.62	.6	8	-	1/4	271666	
2	10/11	"	12.0	8.60	1.85	4.58	15.88	.6	6	-	1/4	"	
3	10/19	"	14.0	7.56	1.64	4.44	12.41	.6	7	-	1/4	"	
4	10/26	"	16.0	9.24	1.72	4.58	15.93	.6	8	-	1/4	"	
5	11/2	"	12.0	7.16	2.35	4.54	16.82	.6	6	-	1/4	"	
6	11/9	"	14.0	8.72	1.91	4.53	16.63	.6	7	-	1/4	"	
7	11/16	"	12.0	7.46	2.20	4.54	16.38	.6	6	-	1/4	"	
8	11/23	"	14.0	7.52	1.90	4.44	14.32	.6	7	-	1/4	"	
9	11/29	"	14.0	8.60	2.14	4.54	18.43	.6	7	-	1/4	"	
10	12/7	"	11.0	7.53	2.39	4.50	17.98	.6	6	-	1/4	"	
11	12/14	"	22.0	14.54	1.93	4.55	28.07	.6	8	-	1/4	"	
12	12/21	"	10.0	7.40	2.27	4.36	16.81	.6	5	-	1/4	"	
13	12/28	"	12.0	9.72	2.17	4.50	21.05	.6	6	-	1/4	"	
14	1934 1/4	"	12.0	12.24	1.64	5.50	20.13	.6	5	-	1/4	"	
15	1/11	"	16.0	8.75	1.66	5.20	14.56	.6	5	-	1/6	"	
16	1/18	"	16.0	10.34	1.69	5.20	17.51	.6	8	-	1/4	"	
17	1/25	"	18.0	7.62	1.75	5.18	13.31	.6	9	-	1/4	"	
18	2/1	"	18.0	9.26	1.64	5.18	15.21	.6	9	-	1/4	"	
19	2/8	"	18.0	9.76	1.79	5.22	17.48	.6	9	-	1/4	"	
20	2/15	"	17.0	9.87	1.58	5.18	15.56	.6	6	-	1/4	"	
21	2/21	"	17.0	10.38	1.61	5.28	16.71	.6	6	-	1/4	"	
22	3/1	"	18.0	10.71	1.54	5.27	16.48	.6	6	-	1/4	"	
23	3/8	"	17.0	9.82	1.61	5.24	15.84	.6	6	-	1/4	"	
24	3/15	"	18.0	10.77	1.64	5.28	17.66	.6	6	-	1/4	"	
25	3/22	Brewster	17.0	9.97	1.58	5.24	15.74	.6	6	-	1/4	271666	
26	3/29	"	15.0	6.09	1.84	4.84	5.09	.6	5	-	1/4	"	
27	4/6	"	15.0	5.88	1.88	4.94	4.92	.6	5	-	1/6	"	
28	4/12	"	17.0	10.06	1.76	5.28	17.70	.6	6	-	1/4	"	
29	4/19	"	17.0	10.27	1.52	5.28	16.37	.6	6	-	1/6	"	
30	4/26	"	16.0	9.4	1.54	5.26	14.01	.6	5	-	1/4	"	
31	5/3	"	15.0	6.00	1.06	4.99	6.74	.6	5	-	1/4	"	
32	5/10	"	16.0	9.87	1.54	5.25	15.19	.6	5	-	1/4	"	
33	5/17	"	17.0	11.43	1.58	5.31	17.70	.6	6	-	1/4	"	
34	5/24	"	17.0	8.68	1.54	5.26	13.35	.6	6	-	1/4	"	
35	5/31	"	15.0	7.08	1.46	5.18	10.33	.6	5	-	1/4	"	
36	6/7	"	16.0	10.19	1.49	5.34	15.21	.6	5	-	1/4	"	
37	6/14	"	16.0	9.56	1.36	5.32	13.22	.6	5	-	1/4	"	
38	6/21	" Lindsey	16.0	8.87	1.33	5.275	11.82	.6	5	-	1/12	"	
39	6/28	Lindsey	13.5	7.70	1.27	1.28	9.79	.6	7	-	7/60	282883	
40	7/5	"	14.0	7.54	1.07	5.23	8.09	.6	7	-	1/6	"	
41	7/12	Brewster	12.0	7.20	1.16	5.28	8.53	.6	4	-	1/4	271666	
42	7/19	"	10.0	4.74	.75	4.98	3.54	.6	5	-	1/4	"	
43	7/26	"	10.0	4.86	.88	5.03	4.28	.6	5	-	1/6	"	
44	8/2	"	10.0	5.44	.98	5.04	5.34	.6	5	-	1/6	"	
45	8/9	"	10.0	4.85	1.24	4.98	6.03	.6	4	-	1/6	"	
46	8/16	"	10.0	5.08	1.06	5.17	5.40	.6	5	-	1/10	"	
47	8/23	"	10.0	8.82									

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Arroyo Seco Creek - Vicinity Devil's Gate Dam at near _____ during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section, Mean velocity, Gate height, Discharge, Rating, Method, Mean depth, G. H. Stage, Time, Meter No. Data includes entries for Arroyo Seco Creek - 1 mile above Dam - Inflow to Dam and West Inflow to Devil's Gate.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of BALLONA LAGOON at near 57th St. Bridge during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section, Mean velocity, Gate height, Discharge, Rating, Method, Mean depth, G. H. Stage, Time, Meter No. Data includes entries for Ballona Lagoon from 1934 to 1935.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of BALLONA LAGOON at near 57th St. Bridge during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section, Mean velocity, Gate height, Discharge, Rating, Method, Mean depth, G. H. Stage, Time, Meter No. Data includes entries for Ballona Lagoon from 1934 to 1935.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of BALLONA LAGOON at near 57th St. Bridge during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section, Mean velocity, Gate height, Discharge, Rating, Method, Mean depth, G. H. Stage, Time, Meter No. Data includes entries for Ballona Lagoon from 1934 to 1935.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Big Rock Creek, Tributaries and Diversions

at _____ during the year ending September 30, 19-33.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Big Rock Creek, Tributaries and Diversions

at _____ during the year ending September 30, 19-33.

Table with 13 columns: No., Date, Made by, Width, Area, Mean velocity, Gate height, Discharge, Rating, Method, Mean gage, G. H., Time, Meter. Includes entries for Valverde Creek - Highway to San Pines and Big Rock 1000' above South Fork.

Table with 13 columns: No., Date, Made by, Width, Area, Mean velocity, Gate height, Discharge, Rating, Method, Mean gage, G. H., Time, Meter. Includes entries for Diversion #2 from Big Rock Creek and Diversion #3 from Big Rock Creek - 300' below Montez.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Big Rock Creek, Tributaries and Diversions

at _____ during the year ending September 30, 19-33.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Big Rock Creek, Tributaries and Diversions

at _____ during the year ending September 30, 19-33.

Table with 13 columns: No., Date, Made by, Width, Area, Mean velocity, Gate height, Discharge, Rating, Method, Mean gage, G. H., Time, Meter. Includes entries for Diversion #1 from Big Rock Creek and Diversion #2 from Big Rock Creek - 300' below Montez.

Table with 13 columns: No., Date, Made by, Width, Area, Mean velocity, Gate height, Discharge, Rating, Method, Mean gage, G. H., Time, Meter. Includes entries for Diversion #4 from Big Rock Creek and Big Rock Ranch Co. Well - Discharge into Diversion #4.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Big Rock Creek, Tributaries and Diversions at near _____ during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Cipe height Feet, Discharge Sec.-ft., Rating Point gage, Method, Mean No., G. H. Stage Feet, Time Hours, Meter No. Includes entries for Diversion #5 from Big Rock Creek - Below Well Inlet and Spillback from Diversion #5.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Big Rock Creek, Tributaries and Diversions at near _____ during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Cipe height Feet, Discharge Sec.-ft., Rating Point gage, Method, Mean No., G. H. Stage Feet, Time Hours, Meter No. Includes entries for Palletta Creek - 1 mile above Main Highway and Weimer Diversion at Palletta Creek.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Big Rock Creek, Tributaries and Diversions at near _____ during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Cipe height Feet, Discharge Sec.-ft., Rating Point gage, Method, Mean No., G. H. Stage Feet, Time Hours, Meter No. Includes entries for Springs near County Ranger Station at Big Rock Creek and Holcomb Creek - 500' above Palletta Creek.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Big Rock Creek, Tributaries and Diversions at near _____ during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Cipe height Feet, Discharge Sec.-ft., Rating Point gage, Method, Mean No., G. H. Stage Feet, Time Hours, Meter No. Includes entries for Big Rock Creek at submerged Dam - 1 mile below Monte's Station and Big Rock Creek - Diversions #1, #2, and #3.

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Big Rock Creek, Tributaries and Diversions

at _____
near _____, during the year ending September 30, 1934

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.	Method	Mean gage No.	G. H. change Feet	Time Hours	Meter No.
<u>Big Rock Creek - Diversion #4</u>													
11-16-33		Luce	4.0	0.95	0.83		0.75		.6	5		1/6	FO13
12-2-33		"	5.5	1.21	0.91		1.10		.6	6		1/6	"
1-15-34		Luce Turner	4.7	0.94	0.69		0.65		.6	9		1/12	FO25
<u>Big Rock Creek - Spillback from Diversion #4</u>													
1-15-34		Luce Turner	2.7	0.29	1.03		0.30		.6	5		1/12	"
<u>Big Rock Creek - Diversion #5</u>													
11-16-33		Luce	2.5	1.15	1.59		1.83		.6	5		1/12	FO13
12-2-33		"	2.2	0.88	1.93		1.70		.6	5		1/12	"
1-15-34		Luce Turner	3.5	1.31	2.08		2.73		.6	7		1/12	FO25
<u>Palette Creek - Below Weimer's Diversion</u>													
11-16-33		Luce	2.5	0.49	1.20		0.59		.6	5		1/12	FO13
1-15-34		Luce Turner	2.2	0.38	1.45		0.55		.6	4		1/12	FO25
7-28-34		Luce	2.5	0.27	1.00		0.29		.6	4		1/12	FO13
<u>Palette Creek - Weimer's Diversion - 1 mile above Big Rock Creek</u>													
12-2-33		Luce	2.5	0.68	1.25		0.85		.6	5		1/12	FO13
5-26-34		"	2.6	0.45	0.84		0.38		.6	4		1/12	FO13

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Big Santa Anita Creek and Diversions

at _____
near _____, during the year ending September 30, 1934

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.	Method	Mean gage No.	G. H. change Feet	Time Hours	Meter No.
<u>Big Santa Anita Creek - 40' below Oakwood Syndicate Diversion Dam</u>													
12-27-33		R. Lindsey	2.3	0.36	1.61		0.58		.6	4		1/12	282853
<u>Big Santa Anita Creek - 175' below Flood Control Dam</u>													
2-8-34		R.P. Dalton	2.0	1.13	1.62		1.83		.6	4			
<u>Big Santa Anita Creek - 30' above Oakwood Syndicate Diversion Dam</u>													
6-1-34		R. Lindsey	3.8	0.99	1.46		1.46		.6	5		1/10	"
<u>Big Santa Anita Creek - Cook-Woodley Diversion 15' to 50' below Headgate</u>													
10-11-33		R. Lindsey	3.2	2.24	1.17		2.61		.6	6		1/6	"
10-19-33		"	2.4	1.61	1.11		1.78		.6	5		1/6	"
11-9-33		"	3.1	1.81	1.04		1.88		.6	6		1/10	"
<u>Big Santa Anita Creek - Oakwood Syndicate Diversion Canal 0' to 40' below hdgt.</u>													
12-7-33		R. Lindsey	2.5	1.63	1.05		1.70		.6	5		1/10	"
12-27-33		"	2.0	0.33	1.33		0.44		.6	4		1/12	"
4-13-34		"	2.3	1.84	0.57		1.04		.6	4		1/12	"
6-1-34		"	3.0	2.39	0.82		1.96		.6	6		1/10	"
6-1-34		"	2.4	2.54	0.69		1.75		.6	5		1/12	"
6-7-34		"	3.0	2.46	0.83		2.00		.6	6		1/10	"
6-14-34		"	3.0	2.43	0.79		1.93		.6	6		1/6	"
6-22-34		"	3.0	2.55	0.81		2.06		.6	6		1/10	"
8-23-34		"	3.0	3.02	0.98		2.96		.6	6		1/10	"

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Big Rock Creek, Tributaries and Diversions

at _____
near _____, during the year ending September 30, 1934

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.	Method	Mean gage No.	G. H. change Feet	Time Hours	Meter No.
<u>Valermo Creek - Big Rock Highway Bridge</u>													
10-28-33		Luce	1.5	0.26	0.46		0.12		.6	3		1/12	FO13
11-16-33		"	1.8	0.26	0.84		0.22		.6	4		1/12	"
12-2-33		"	1.9	0.28	0.57		0.16		.6	4		1/12	"
1-15-34		Luce Turner	1.8	0.78	0.60		0.47		.6	4		1/12	FO25
7-28-34		Luce	1.2	0.12	0.50		0.07		.6	2		1/12	FO13

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Big Santa Anita Creek, Tributaries and Diversions

at _____
near _____, during the year ending September 30, 1934

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.	Method	Mean gage No.	G. H. change Feet	Time Hours	Meter No.
<u>Cook Woodley Diversion Canal</u>													
11-9-32		Lindsey	2.2	1.00	0.33		.33		.6	2			282853
9-14-33		"	3.1	1.82	1.05		1.91		.6	4		1/12	"
9-14-33		"	3.1	1.90	1.11		2.10		.6	4		1/12	"
9-14-33		"	2.3	1.66	1.81		1.81		.6	4		1/12	"
9-21-33		"	3.1	1.83	1.05		1.92		.6	3		1/12	"
9-21-33		"	3.1	1.85	1.07		1.98		.6	6		1/12	"
9-21-33		"	3.1	1.85	1.04		1.93		.6	6		1/12	"
9-21-33		"	2.4	1.62	1.88		1.98		.6	5		1/12	"
9-21-33		"	2.4	1.62	1.22		1.97		.6	5		1/12	"
9-28-33		"	2.5	1.68	1.19		2.00		.6	5		1/12	"
9-28-33		"	3.1	1.89	1.07		2.02		.6	6		1/12	"

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Big Tujunga Creek, Tributaries, Diversions, and Inflow to Dam No. 1 during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width, Area, Mean velocity, Cipe height, Discharge, Rating, Method, Manning's N, G. H. Change, Time, Meter No. Rows include Fall Creek above Big Tujunga Creek - Edison Road Crossing and 1st Spring W. of Fall Springs 1000' above Big Tujunga Dam.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Big Tujunga Creek, Tributaries, Diversions, and Inflow to Dam No. 1 during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width, Area, Mean velocity, Cipe height, Discharge, Rating, Method, Manning's N, G. H. Change, Time, Meter No. Rows include 2nd Spring W. of Fall Springs 900' above Big Tujunga, Vogel Canyon at Road Crossing, and Ybarra's Diversion from Big Tujunga Creek.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Big Tujunga Creek, Tributaries, Diversions, and Inflow to Dam No. 1 during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width, Area, Mean velocity, Cipe height, Discharge, Rating, Method, Manning's N, G. H. Change, Time, Meter No. Rows include Swallow Springs - Inflow to Big Tujunga Dam and Fall Springs - Inflow to Big Tujunga Dam.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Big Tujunga Creek, Tributaries and Diversions, and Inflow to Dam No. 1 during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width, Area, Mean velocity, Cipe height, Discharge, Rating, Method, Manning's N, G. H. Change, Time, Meter No. Rows include Ybarra's Diversion from Big Tujunga Creek, Delta Canyon at Mouth, Gold Canyon at Mouth, and Monte Vista W. Co. Diversion from Big Tujunga Creek.

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. _____

F. C. D. Form 104A IM 3-34

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Big Tujunga Creek, Tributaries, Diversions, and
at Inflow to Dam No 1, during the year ending September 30, 1933

Discharge measurements of Big Tujunga Creek, Tributaries, Diversions, and
at Inflow to Dam No 1, during the year ending September 30, 1933

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	Mass no.	G. H. change Feet	Time Hours	Mean No.
<u>Monte Vista W. Co. Diversion from Big Tujunga Creek</u>													
4-20-33		Irwin	2.0	0.56	1.17		.66	.6	4		1/4	FC30	
4-27-33		"	2.5	0.37	0.94		.35	.6	5		1/6	"	
5-3-33		"	2.0	0.58	0.84		.49	.6	4		1/6	FC10	
5-18-33		"	2.0	0.66	1.07		.71	.6	4		1/6	FC30	
6-15-33		"	2.0	0.76	0.55		.42	.6	4		1/6	"	
6-22-33		"	2.0	0.74	0.67		.50	.6	4		1/6	"	
6-30-33		"				1.12			Weir				
7-7-33		"				.97			"				
7-13-33		"				.84			"				
7-21-33		"				.81			"				
7-27-33		"				.97			"				
8-4-33		"				.74			"				
8-9-33		"				.77			"				
8-11-33		"				1.16			"				
8-15-33		"				.60			"				
8-18-33		"	2.5	0.67	1.23		.83	.6	5		1/12	FC31	
8-21-33		"	2.7	0.87	1.35		1.18	.6	5		1/6	"	
8-25-33		"				.97			Weir				
8-31-33		"	3.0	0.90	1.17		1.06	.6	3		1/6	"	
9-7-33		"	3.0	1.00	1.34		1.34	.6	3		1/12	"	
9-14-33		"	2.9	1.18	1.45		1.72	.6	3		1/12	"	
9-21-33		"	2.6	1.07	1.53		1.64	.6	3		1/6	"	
9-28-33		"	2.6	0.97	1.40		1.29	.6	3		1/4	"	

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	Mass no.	G. H. change Feet	Time Hours	Mean No.
<u>Johnson Ranch Diversion from Big Tujunga Creek</u>													
8-11-33		Irwin					.80		Weir				
8-15-33		"					.74		"				
8-18-33		"	1.3	0.54	0.14		.79	.6	3		1/12	FC31	
8-22-33		"	2.0	0.70	1.20		.84	.6	4		1/12	"	
8-25-33		"					.87		Weir				
8-31-33		"	1.5	0.64	1.28		.82	.6	3		1/6	"	
9-14-33		"	1.5	0.09	1.00		.09	.6	3		1/12	"	
9-21-33		"							Dry				
<u>Pipe Canyon at Mouth</u>													
1-16-33		Irwin	2.0	0.69	3.19		2.14	.6	4		1/4	FC30	
1-19-33		"					6.00		Est				
1-19-33		"					30.0		Est				
1-25-33		"	2.5	0.32	0.81		.26	.6	5		1/4	"	
1-27-33		"					.01		Weir				
2-3-33		"					.12		"				
2-7-33		"	1.5	0.16	1.31		.02	.6	3		1/6	"	
2-10-33		"					.02		Weir				
8-11-33		"					.22		"				

F. C. D. Form 104A IM 3-34

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. _____

F. C. D. Form 104A IM 3-34

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Big Tujunga Creek, Tributaries, Diversions, and
at Inflow to Big Tujunga Dam No 1, during the year ending September 30, 1933

Discharge measurements of Big Tujunga Creek, Tributaries, Diversions, and
at Inflow to Dam No 1, during the year ending September 30, 1933

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	Mass no.	G. H. change Feet	Time Hours	Mean No.
<u>Brvant Canyon at Mouth</u>													
1-16-33		Irwin	3.5	1.75	3.09		5.41	.6	5			FC30	
1-19-33		"					5.0		Est				
1-19-33		"					65.0		Est				
1-19-33		"					150.		Est				
1-19-33		"					80.		Est				
1-25-33		"	3.0	0.69	0.97		.69	.6	6		1/6	"	
1-27-33		"					.25		Weir				
2-3-33		"					.33		"				
2-7-33		"	1.5	0.16			.048	.6	3				
2-10-33		"					.03		Weir				
8-11-33		"					.22		"				
<u>Johnson Ranch Diversion from Big Tujunga Creek</u>													
6-15-33		Irwin	1.5	0.44	0.43		.19	.6	3		1/12	"	
6-22-33		"	1.5	0.40	0.60		.24	.6	3		1/6	"	
6-30-33		"				1.04			Weir				
7-2-33		"				.60			"				
7-7-33		"				.81			"				
7-9-33		"	1.3	0.54	0.88		.48	.6	3		1/12	"	
7-13-33		"				.58			Weir				
7-27-33		"				.55			"				
8-4-33		"				.84			"				
8-9-33		"				.63			"				

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	Mass no.	G. H. change Feet	Time Hours	Mean No.
<u>L.A.W.P. Dept. Diversion from Big Tujunga Creek</u>													
11-10-32		Irwin					.90		Weir				
11-18-32		"					.87		"				
11-25-32		"					.87		"				
4-20-33		"	2.5	0.36	0.61		.22	.6	5		1/12	FC30	
4-27-33		"	1.5	0.37	1.35		.50	.6	3		1/6	"	
6-8-33		"	2.0	0.65	0.76		.50	.6	4		1/6	"	
6-15-33		"	2.0	1.03	0.66		.68	.6	4		1/12	"	
6-22-33		"	2.3	0.89	0.89		.80	.6	5		1/6	"	
6-30-33		"				1.25			Weir				
7-7-33		"				1.16			"				
7-13-33		"				.68			"				
7-21-33		"				1.01			"				
7-27-33		"				.60			"				
8-4-33		"				.20			"				
8-9-33		"				.28			"				
8-11-33		"				.80			"				
8-15-33		"				.66			"				
8-18-33		"	2.6	0.94	1.43		1.35	.6	5		1/6	FC31	
8-22-33		"	2.0	0.40	0.73		.29	.6	5		1/6	"	
8-25-33		"				.50			Weir				
8-31-33		"	2.0	0.25	1.84		.46	.6	4		1/12	"	
9-7-33		"	1.6	0.17	1.05		.18	.6	3		1/12	"	
9-14-33		"	1.5	0.11	0.36		.04	.6	3		1/12	"	
9-21-33		"							Dry				

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Big Tujunga Creek, Tributaries, Diversions, and at Inflow to Dam No 1 during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gate height Feet, Discharge Sec. Ft., Rating Percent off, Method, Mean No., G. No. (Gage No.), Time Hours, Meter No. Data includes Aiken's Ranch Diversion from Big Tujunga Creek.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Big Tujunga Creek, Tributaries, Diversions, and at Inflow to Dam No 1 during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gate height Feet, Discharge Sec. Ft., Rating Percent off, Method, Mean No., G. No. (Gage No.), Time Hours, Meter No. Data includes Aiken's Ranch Waste Ditch to Big Tujunga Creek and Discharge from Valve #4 and Leaks - below Big Tujunga Dam.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Big Tujunga Creek, Tributaries, Diversions, and at Inflow to Dam No 1 during the year ending September 30, 1933

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gate height Feet, Discharge Sec. Ft., Rating Percent off, Method, Mean No., G. No. (Gage No.), Time Hours, Meter No. Data includes Discharge from Big Tujunga Dam No 1 - Lower end of Pool, Big Tujunga Creek - 20' below Foot Bridge below Dam #1, Damite #2, Big Tujunga Creek at Mouth of Canyon, North Fork of Mill Creek above Mill Creek, Main Branch of Mill Creek above North Fork of Mill Creek, and Inflow - Big Tujunga Dam #1.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 386(213)

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Big Tujunga Creek

Discharge measurements of Big Tujunga Creek, Tributaries, Diversions, and

at Sunland during the year ending September 30, 1933

at Inflow to Dam #1 during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section, Mean velocity, Gage height, Discharge, Rating, Method, Mean gage, G. H. change, Time, Meter No. Rows include measurements from 1932 to 1933.

Table with columns: No., Date, Made by, Width Feet, Area of section, Mean velocity, Gage height, Discharge, Rating, Method, Mean gage, G. H. change, Time, Meter No. Rows include measurements for Big Tujunga Creek at Mouth of Sanjon and Mill Creek above North Fork of Mill Creek.

Measurements made by U. S. G. S.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 386(213)

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Big Tujunga Creek

Discharge measurements of Big Tujunga Creek, Tributaries, Diversions, and

at Sunland during the year ending September 30, 1933

at Inflow to Dam #1 during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section, Mean velocity, Gage height, Discharge, Rating, Method, Mean gage, G. H. change, Time, Meter No. Rows include measurements from 1933 to 1934.

Table with columns: No., Date, Made by, Width Feet, Area of section, Mean velocity, Gage height, Discharge, Rating, Method, Mean gage, G. H. change, Time, Meter No. Rows include measurements for North Fork of Mill Creek above Mill Creek and Fall Creek at Edison Road.

Measurements by U. S. G. S.

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Big Tujunga Creek, Tributaries, Diversions, and

at Inflow to Dam #1, during the year ending September 30, 1934

No.	Date	Made by	Width Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec.-ft.	Rating Pointed off.	Method	Mean gage No.	G. H. Change Total	Time Hours	Meter No.
<u>L.A. WEP Dent. Ranch Diversion</u>													
5-16-34		JL Irwin					Dry						
5-23-34		"					Dry						
5-31-34		"					Dry						
6-7-34		"					Dry						
<u>Ybarra's Diversion from Big Tujunga Creek</u>													
10-26-33		JL Irwin					0.01	Weir					
5-16-34		"	1.4	0.26	0.50		0.13		.6	3	1/12	FO31	
<u>Monte Vista Water Co. Diversion from Big Tujunga Creek</u>													
10-26-33		JL Irwin	2.5	0.84	1.30		1.09		.6	3	1/6	"	
11-9-33		"	3.0	1.02	0.63		0.64		.6	3	1/6	"	
11-16-33		"	2.2	0.56	0.84		0.47		.6	4	1/6	"	
5-16-34		"	2.4	0.70	1.04		0.73		.6	5	1/6	"	
5-23-34		"	2.2	0.76	0.90		0.69		.6	4	1/6	"	
5-31-34		"	2.0	0.82	1.03		0.85		.6	4	1/6	"	
6-7-34		"	2.0	0.53	0.94		0.50		.6	3	1/6	"	
<u>Diversion from Big Tujunga Creek near the Junction of Little Tujunga</u>													
7-26-34		JLuna	2.5	0.84	1.77		1.89		.6	5	1/12	FO13	
<u>Outflow of Big Tujunga Dam #1</u>													
4-26-34		ES Bonadiman	11.0	2.02	1.69		3.41		.6	5	1/6	FO27	

F. C. D. Form 10A IM 1-34

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Big Tujunga Creek, Tributaries, Diversions, and

at Inflow to Dam #1, during the year ending September 30, 1934

No.	Date	Made by	Width Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec.-ft.	Rating Pointed off.	Method	Mean gage No.	G. H. Change Total	Time Hours	Meter No.
<u>Inflow to Big Tujunga Dam #1</u>													
12-8-33		ES Bonadiman	1.5	0.58	0.19		1.10		.6	4	1/6	FO27	
12-21-33		"	4.9	1.78	0.61		1.08		.6	5	1/4	"	
12-28-33		"	5.7	1.29	0.57		0.73		.6	6	1/3	"	
1-11-34		"	2 streams				10.68		.6				
1-18-34		"					7.13		.6				
1-25-34		"					6.48		.6				
2-1-34		"					5.00		.6				
2-8-34		"					4.74		.6				
2-16-34		"					4.93		.6				
3-1-34		"					16.10		.6				
3-8-34		"					5.96		.6				
3-15-34		"					5.35		.6				
3-22-34		"					4.85		.6				
3-28-34		"	3				3.37		.6				
4-4-34		"	2				3.94		.6				
4-12-34		"					2.30		.6				
4-19-34		"					2.20		.6				
4-26-34		"					0.98		.6				
5-3-34		"	2				1.19		.6				
5-10-34		JL Irwin	3.0	0.36	0.58		0.21		.6	3		FO31	
5-16-34		"	1.4	0.10	0.80		0.08		.6	3		"	
5-23-34		"	1.0	0.08	0.50		0.04		.6	2		"	
6-8-34		"					0.20		Est				
8-15-34		ES Bonadiman											Trace

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Fish Canyon Spreading Grounds - Inflow

at _____, during the year ending September 30, 1934

No.	Date	Made by	Width Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec.-ft.	Rating Pointed off.	Method	Mean gage No.	G. H. Change Total	Time Hours	Meter No.
12-20-33		R. Lindsay					Total inflow						282563
12-27-33		"					6.81						"
1-14-34		"					3.25						"
1-25-34		"					10.99						"
1-31-34		"					12.50						"
2-8-34		"					11.89						"
2-21-34		"					10.79						"
3-1-34		"					15.74						"
3-8-34		"					12.09						"
3-14-34		"					11.50						"
3-21-34		"					11.01						"
3-30-34		"					5.96						"
4-12-34		"					1.49						"

F. C. D. Form 10A IM 1-34

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Live Oak Creek

at 50' below Flood Control Dam, during the year ending September 30, 1934

No.	Date	Made by	Width Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec.-ft.	Rating Pointed off.	Method	Mean gage No.	G. H. Change Total	Time Hours	Meter No.
1-26-34		R.P. Dalton	3.2	0.88	0.94		0.83		.6	2			
2-2-34		"	3.0	0.79	0.87		0.69		.6	3			
4-6-34		"	4.0	0.57	0.77		0.44		.6	3			
4-6-34		"	4.0	0.79	0.87		0.69		.6	3			
4-6-34		"	4.0	0.94	1.17		1.10		.6	3			
4-13-34		"	4.2	0.78	1.14		0.89		.6	3			

F. C. D. Form 10A IM 1-34

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Los Angeles River

at _____, during the year ending September 30, 1934

No.	Date	Made by	Width Feet	Area of section Sq. Ft.	Mean velocity ft. per sec.	Gage height Feet	Discharge Sec.-ft.	Rating Pointed off.	Method	Mean gage No.	G. H. Change Total	Time Hours	Meter No.
<u>Sunset Canyon below Dam</u>													
1-24-33		Waddicor - Turner	.6	0.06	.83		.05		.6	1	1/12	FO28	
1-27-33		"	.5	.02	.13		.01		Est				
<u>Unknown side canyon of Sunset</u>													
1-27-33		Waddicor - Turner	.5	.11	.09		.01		.6	2			FO26
<u>Brown's Canyon Creek - 50' below Aqueduct</u>													
2-10-33		Luce - Marchand	4.3	1.50	1.03		1.54		.6	5	1/12	FO13	

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Los Angeles River at _____ during the year ending September 30, 1934.

Table with columns: No., Date, Made by, Width, Area, Mean velocity, Gage height, Discharge, Rating, Method, Mean no., G. H. change, Time, Meter No. Rows include measurements at various points like Colton Avenue and Park Canyon Rd.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Los Angeles River at _____ during the year ending September 30, 1934.

Table with columns: No., Date, Made by, Width, Area, Mean velocity, Gage height, Discharge, Rating, Method, Mean no., G. H. change, Time, Meter No. Rows include measurements at Mariposa Street, 500' above Riverside Drive Bridge, and 500' below mouth of Verdugo Wash.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Various Streams and Tributaries at Picoima Creek during the year ending September 30, 1934.

Table with columns: No., Date, Made by, Width, Area, Mean velocity, Gage height, Discharge, Rating, Method, Mean no., G. H. change, Time, Meter No. Rows include measurements at Picoima Creek 50' below F. O. Dam, May Canyon Storm Drain, and Picoima Creek 1000' above Tyrone.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Picoima Creek, Tributaries and Diversions at _____ during the year ending September 30, 1934.

Table with columns: No., Date, Made by, Width, Area, Mean velocity, Gage height, Discharge, Rating, Method, Mean no., G. H. change, Time, Meter No. Rows include measurements at Picoima Creek 10' above Venturi Flume, Picoima Wash - At Van Owen Street, and Davis Diversion Overflow.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Rio Hondo - El Monte Sewer Inflow at _____ during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gauge height Feet, Discharge Sec.-ft., Rating Percent full, Method, Mean sec. No., G. H. change Feet, Time Hour, Meter No. Contains data for El Monte Sewer measurements from 3-15-33 to 9-27-33.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 11501

Discharge measurements of RIO HONDO at Rush Ave. during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gauge height Feet, Discharge Sec.-ft., Rating Percent full, Method, Mean sec. No., G. H. change Feet, Time Hour, Meter No. Contains data for RIO HONDO measurements from 1-14 to 6-14.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Miscellaneous measurements--Rio Hondo at _____ during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gauge height Feet, Discharge Sec.-ft., Rating Percent full, Method, Mean sec. No., G. H. change Feet, Time Hour, Meter No. Contains data for Miscellaneous measurements at Rio Hondo from 4/5 to 4/5.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. 11501

Discharge measurements of RIO HONDO at Rush Ave. during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Gauge height Feet, Discharge Sec.-ft., Rating Percent full, Method, Mean sec. No., G. H. change Feet, Time Hour, Meter No. Contains data for RIO HONDO measurements from 1-20 to 9-27.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Various Streams, Tributaries and Diversions

At San Gabriel River during the year ending September 30, 19 55

Table with columns: No., Date, Made by, Width, Area of Section, Mean Velocity, Gage Height, Discharge, Rating, Method, Mean No., G. H., Time, Name. Rows include Cornick Gulch, Kemman Canyon, Cedar Creek, Goldwater Canyon, Rincon Creek, Cow Canyon, East Fork, Little Cienega Creek, Soldier Creek, Little Coldbrook Creek, Biobota Creek, Bollinger Gulch, Bay Canyon, East Fork, Susanna Canyon, Burro Canyon, and Sharp's Canyon.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Various Streams, Tributaries and Diversions

At San Gabriel River during the year ending September 30, 19 55

Table with columns: No., Date, Made by, Width, Area of Section, Mean Velocity, Gage Height, Discharge, Rating, Method, Mean No., G. H., Time, Name. Rows include Committee of 9 Div. Tunnel at Mouth of San Gabriel Canyon, Old Duarte Ditch below Gage Tunnel, Old Duarte Ditch below Weir-San Gabriel Spreading Grounds, and San Gabriel River-Easy Street.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Various Streams and Tributaries of the

At San Gabriel River during the year ending September 30, 19 54

Table with columns: No., Date, Made by, Width, Area of Section, Mean Velocity, Gage Height, Discharge, Rating, Method, Mean No., G. H., Time, Name. Rows include Little Coldbrook Creek (San Gabriel Cn.) At Soldier Creek, Gravel Plant Creek--500' Above W. Fk. San Gabriel, San Gabriel River--Gravel Plant Creek--Elevation 2500', San Gabriel River West Fork--Below spring--Dam No. 2, and San Gabriel River West Fork--Dam No. 2--Outflow Above Spring.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Various Streams and tributaries on the San Gabriel River during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Stage height Feet, Discharge Sec.-ft., Rating Percent, Method, Meas. No., G. M. Change Total, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Various Streams and tributaries on the San Gabriel River during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Stage height Feet, Discharge Sec.-ft., Rating Percent, Method, Meas. No., G. M. Change Total, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Various Streams and Tributaries of the San Gabriel River during the year ending September 30, 1934

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Stage height Feet, Discharge Sec.-ft., Rating Percent, Method, Meas. No., G. M. Change Total, Time Hours, Meter No.

Discharge measurements of SAN GABRIEL WEST FORK

Table with columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Stage height Feet, Discharge Sec.-ft., Rating Percent, Method, Meas. No., G. M. Change Total, Time Hours, Meter No.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Santa Clara River, Tributaries and Diversions at _____ during the year ending September 30, 19____

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Gate height, Discharge, Rating, Method, Meter No., G. H. Gauge Total, Time, Meter No. Data includes Santa Clara River - 1 mile above Lane at Cam Grande and Santa Clara River - 1 1/2 miles below Ravenna.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Santa Clara River, Tributaries and Diversions at _____ during the year ending September 30, 19____

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Gate height, Discharge, Rating, Method, Meter No., G. H. Gauge Total, Time, Meter No. Data includes Diversion Ditch at Lang.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Santa Clara River, Tributaries and Diversions at _____ during the year ending September 30, 19____

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Gate height, Discharge, Rating, Method, Meter No., G. H. Gauge Total, Time, Meter No. Data includes Santa Clara River - 1.3 miles below Ravenna, Tunstall Ranch Diversion at Soledad Creek, and Diversion Ditch at Lang.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Miscellaneous Measurements--Santa Clara River at _____ during the year ending September 30, 1954

Table with columns: No., Date, Made by, Width, Area of section, Mean velocity, Gate height, Discharge, Rating, Method, Meter No., G. H. Gauge Total, Time, Meter No. Data includes Santa Clara River - 1.6 miles West of Ravenna and Santa Clara River Near the Ventura County Line.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Sawpit Creek and Inflow to Dam

at _____ during the year ending September 30, 19____ near _____

Table with 13 columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Cipe height Feet, Discharge Sec.-ft., Rating Percent full, Method, Mean No., G. H. above Taint, Time Hours, Meter No. Data includes measurements for Sawpit Creek - Inflow to Dam, Sawpit Creek - Caretaker's House, and Sawpit Creek - Below Dam.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Miscellaneous Single Measurements

at _____ during the year ending September 30, 19____ near _____

Table with 13 columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Cipe height Feet, Discharge Sec.-ft., Rating Percent full, Method, Mean No., G. H. above Taint, Time Hours, Meter No. Data includes measurements for Big Dalton at Spreading Ground, Gate Ditch opposite Temple School, Eaton Creek at Pasadena Intake, and Little Dalton at Sierra Madre Ave.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Sierra Madre Creek - Inflow and Outflow to Dam

at _____ during the year ending September 30, 19____ near _____

Table with 13 columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Cipe height Feet, Discharge Sec.-ft., Rating Percent full, Method, Mean No., G. H. above Taint, Time Hours, Meter No. Data includes measurements for Sierra Madre Creek - Inflow to Dam and Sierra Madre Creek - Outflow of Dam.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT HYDROGRAPHIC DEPARTMENT

Station No. _____

Discharge measurements of Various Streams and Tributaries throughout

at Los Angeles County during the year ending September 30, 1954 near _____

Table with 13 columns: No., Date, Made by, Width Feet, Area of section Sq. Ft., Mean velocity ft. per sec., Cipe height Feet, Discharge Sec.-ft., Rating Percent full, Method, Mean No., G. H. above Taint, Time Hours, Meter No. Data includes measurements for Tri-City Sewer--Rush Avenue, Big Dalton Spreading Area Intake, Elizabeth Lake Creek--5 miles above Ridge Route, Parthenia Street Storm Drain--10' Below Parthenia St., and Side ditch from Parthenia St. Storm Drain.

PERCOLATION MEASUREMENTS

BALLOHA River Creek WASH

January 31, 19 33

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
2:30 PM	Sentney St.	13.8	4000	20	80000	1.84	+3.50		
3:00 PM	Higuera St.	17.3	4200	22	92400	2.12	-2.40	1.13	
3:40 PM	Duquesne St.	14.9	6000	27	162000	3.72	0		
4:30 PM	1000' below Overland Ave.	14.9	7200	32	230000	5.29	- .10	.02	
5:00 PM	Inglewood Ave.	14.8							

PERCOLATION MEASUREMENTS

Balloha RIVER CREEK WASH

January 16, 19 34

Time	Location	disch in sec. ft.	Length of reach in ft.	aver. width of reach in ft.	area in sq.ft.	area in acres	Loss in Reach in sec.ft.	Loss in Sec.Ft. per acre wetted area	Remarks
8:30 A.M.	Jacob Street	51.22							
9:15 A.M.	Adams Street Storm Drain	1.41							
10:00 A.M.	100' below Duquesne Ave Bridge	60.85					+8.22		
10:45 A.M.	300' Above Overland Avenue Bridge	60.75					- .10		
	100' Above Centinela Bridge	60.64					- .11		

334

PERCOLATION MEASUREMENTS

Big Dalton RIVER CREEK WASH

March 7, 1934

Time	Location	disch in sec. ft.	Length of reach in ft.	aver. width of reach in ft.	area in sq.ft.	area in acres	Loss in Reach in sec.ft.	Loss in Sec.Ft. per acre wetted area	Remarks
10:00 A.M.	Ben Lomond Ave	3.13							
10:30 A.M.	Citrus Ave	2.14	3300	11.2	36960	.85	.99	1.16	
11:30 A.M.	Cerritos Ave	.37	3000	8.5	25500	.59	1.77	3.00	
12:05 P.M.	1/4 Mi. below Cerritos Ave.	.00	1400	3.8	5320	.12	.37	3.08	
						1.56	3.13	2.0	

PERCOLATION MEASUREMENTS

BIG ROCK River Creek WASH

July 29, 19 33

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
11:30 AM	1000' Above South Fork	.13							
11:45 AM	South Fork at Big Rock Cr.	0							
12:20 PM	Holcomb Cr.-500' Above Big Rock Creek	x .03						+4.20	
12:40 PM	Big Rock Cr.-U.S.G.S.Station	4.36							
12:30 PM	Devils Punchbowl Cr.	0							
12:35 PM	Diversion No.1-Big Rock Cr.	2.20							
12:45 PM	Diversion No.2-Big Rock Cr.	.19						-1.32	
1:30 PM	Diversion No.3-BigRock Cr. Below Diversion No. 3	.65							
		Dry							
1:55 PM	Valyermo Cr.-Springs at Hwy	x .20							
1:45 PM	Springs at Highway	x .12						+3.97	
2:10 PM	100' Above Pallette Creek	4.29							
2:55 PM	Pallette Cr.near Br.Cr. at Hwy.	.08							
2:30 PM	Div. #4- 100' above Well Inflow	1.10						-4.37	
	Inflow to Div.No.4 from Well	3.71							
3:45 PM	Div.#4 - Below Well Inflow	2.26							
3:30 PM	Div. #5- Above Well Inflow	.98							
3:55 PM	Big Rock Cr.-Mouth of Cr.	0							

x - Inflow to Big Rock Creek

PERCOLATION MEASUREMENTS

BIG ROCK River Creek Wash August 12, 19 33

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
10:30 AM	1000' above So. Fork	x .01							
10:40 AM	Inflow - So. Fork	Dry							
10:45 AM	Inflow - Holcomb Creek	x .02					+4.31		
10:55 AM	U. S. G. S. Station	4.34							
11:00 AM	Inflow - Devils Punchbowl Cr.	Dry							
11:10 AM	Outflow - Diversion #1	1.84							
11:25 AM	Outflow - Diversion #2	.17							
11:35 AM	Outflow - Diversion #3	.98					-1.35		
11:40 AM	Below Diversion #3	Dry							
11:45 AM	Inflow - Valyermo Creek	.07							
11:50 AM	Inflow - Springs at Highway near Ranger Station	.26					+3.12		
1:30 PM	100' above Palette Creek	3.45							
1:45 PM	Outflow - Diversion #4	.96							
1:55 PM	Well Discharge into Div. #4	3.49							
2:15 PM	Inflow - Palette Creek	.07							
3:10 PM	Outflow - Diversion #5 Well Discharge into Div. #5	1.35 .76					-1.22		

x - Estimated.

PERCOLATION MEASUREMENTS

Big Rock RIVER CREEK WASH November 24, 1933

Time	Location	disch in sec. ft.	Length of reach in ft.	aver. width of reach in ft.	area in sq.ft.	area in acres	Loss in reach in sec.ft.	Loss in Sec.Ft. per acre wetted area	Remarks
9:45 A.M.	1000 ft. Above South Fork								
9:55 A.M.	South Fork - 500' Above Big Rock Cr.	Dry							
10:20 A.M.	Holcomb Creek - 500' Above Big Rock Cr.	.005						+2.73	
10:45 A.M.	Big Rock Cr - 300' Below U.S.G.S.	2.74							
10:55 A.M.	Devil's Punchbowl Cr	Dry							
11:10 A.M.	Diversion No. 1	.45							
11:25 A.M.	Diversion No. 2	.49							
11:35 A.M.	Diversion No. 3	.49							
11:50 A.M.	Valyermo Cr - Inflow	1.35							
1:20 P.M.	Springs at Highway	.21							
1:35 P.M.	Inflow Palette Cr - Highway near Big Rock Inflow	.33							
1:50 P.M.	Big Rock Cr - 300' Above Palette Cr.	.27						+2.30	
		3.56							

PERCOLATION MEASUREMENTS

BIG ROCK River Creek Wash September 22, 19 33

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
9:30 AM	1000' above So. Fork	Dry							
9:45 AM	Inflow - So. Fork	Dry							
10:30 AM	Inflow - Holcomb Creek	x .01					+3.42		
10:45 AM	U.S.G.S. Station	3.43							
11:00 AM	Inflow - Devils Punchbowl Cr.	Dry							
10:55 AM	Outflow - Diversion #1	.28							
11:10 AM	Outflow - Diversion #2	.22							
11:25 AM	Outflow - Diversion #3	1.66					-1.27		
11:30 AM	Below Diversion #3	Dry							
1:10 PM	Inflow - Valyermo Creek	.12							
1:20 PM	Inflow - Springs near Ranger Station	.10					+2.41		
1:35 PM	300' above Palette Creek	2.63							
1:50 PM	Outflow - Diversion #4	.70							
2:00 PM	Well Discharge into Div. #4	3.88							
2:20 PM	Inflow - Palette Creek	.07							
2:55 PM	Outflow - Diversion #5	1.16							
3:05 PM	Well Discharge into Div. #5	1.01							
3:15 PM	Mouth of Canyon	Dry							

x - Estimated

PERCOLATION MEASUREMENTS

Big Rock RIVER CREEK WASH November 24, 1933

Time	Location	disch in sec. ft.	Length of reach in ft.	aver. width of reach in ft.	area in sq.ft.	area in acres	Loss in reach in sec.ft.	Loss in Sec.Ft. per acre wetted area	Remarks
2:15 P.M.	Diversion No. 4	.84							
3:05 P.M.	Outflow Diversion No. 5 Mouth of On. Outflow	1.74						- .98	
3:10 P.M.	Big Rock Creek - Mouth of On.	Dry							

335

PERCOLATION MEASUREMENTS

BIG SANTA ANITA River
Creek
Wash

January 27, 19 33

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
7:45 AM	F. C. Recorder Sta. #21	19.98						-5.26	
8:15 AM	Foothill Blvd.	14.72						-1.24	
8:30 AM	Huntington Drive	13.48						-5.72	
8:55 AM	Duarte Road	7.76						-6.15	
9:15 AM	Valnett St.	1.61						-1.51	
9:30 AM	Arrow Highway	0.0							

PERCOLATION MEASUREMENTS

Big Santa Anita CREEK
Wash

January 10, 1934

Time	Location	disch in sec. ft.	Length of reach in ft.	aver. width of reach in ft.	area in sq-ft	area in acres	Loss in reach in sec.ft.	Loss in Sec.Ft. per acre wetted area	Remarks
	Below Oakwood Syn- dicate Diversion	8.40							
	Inflow at Weir Box	Est 1.5							
	Total flow	9.90					9.90		

336

PERCOLATION MEASUREMENTS

BIG SANTA ANITA River
Creek
Wash

January 31, 19 33

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
10:00 AM	Sta.#0+0 = Big Santa Anita Dam								
	F.C. Gaging Sta. #21, Sta. #20+00 below F. C. Dam	40.72	3620	35.53	128628	2.95	-2.27	.77	
12:30 PM	Sta. #55+20 - Small Concrete Dam with Weir	38.45	2330	24.33	56689	1.30	-4.46	3.43	
1:45 PM	Sta. #79+50	33.99							
3:00 PM	Sta. #135+00 - Little Santa Anita Creek Inflow Est.	.30							
	Sta. 79+50 - Plus Little Santa Anita Inflow	34.29	6630	22.25	147510	3.39	-1.30	.38	
3:20 PM	Sta. #145+80 = 125' above Foothill Blvd.	32.99	?	?	?	?	-25.67		
5:00 PM	F. C. Sta.#193-1000' below Arrow Highway	7.32							

PERCOLATION MEASUREMENTS

BIG TUJUNGA River
Creek
Wash

January 4, 5 and 6, 19 33

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
9:40 AM	1-4-33 Big Tujunga River at Stilling Well at F.C. Station #213, Sta. 0+0	1.78							
8:50 AM	Big Tujunga River below F.C. Station #213 - 430 ft.	2.70	430		10530	.24	+ .92		
10:25 AM	Outflow from Big Tujunga Monte Vista W. Co. Diversion Sta. 10+0	Dry	500						
10:30 AM	Big Tujunga River 100' below Monte Vista W. Co. Diversion - Station 11+0	2.65	670		7460	.17	- .05		
10:00 AM	1-5-33 Big Tujunga River 100' below Monte Vista W. Co. Diversion Station 11+0	2.64							
10:50 AM	Inflow to Big Tujunga, Gold Canyon F.C. 170, Sta. 12+7	Dry	170						
11:00 AM	Inflow to Big Tujunga, Bryant Canyon - Sta. 24+0	Dry	1130						
11:30 AM	Outflow from Big Tujunga, Johnson Ranch Diversion, Station 68.0	Dry	4400						
11:45 AM	Big Tujunga River above let Crossing, Sta. 73.00	2.35	6300		101880	2.34	- .29	- .12	

PERCOLATION MEASUREMENTS

BIG TUJUNGA		River Creek Wash		Jan. 4, 5 and 6, 19 33						
Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec. Ft. Per Acre Wetted Area	Remarks	
12:00 Noon	Outflow from Big Tujunga, L.A.N. + P. Dept. Diversion Station 75 + 6	Dry	260							
12:15 PM	Inflow to Big Tujunga - Pipe Canyon - Sta. 76.0	Dry	40							
1:50 PM	Big Tujunga River, Atkin's Diversion Ditch	.31								
2:05 PM	Main Wash Station 130 + 0 Total flow at Sta. 130 + 0	1.36 1.67	5700		117,170	2.69	-.68	-.853		
1:50 PM	Outflow from Big Tujunga Atkin's Diversion, Sta. 130.0	.31	-							
3:00 PM	Big Tujunga River-Upper End at Olive Orchard, Sta. 155+0	.61	2500		38,500	.88	-.75	-.852		
11:15 AM	Big Tujunga River-Upper End of Olive Orchard, Sta. 155+0	.59								
12:15 PM	Inflow to Big Tujunga, Atkin's Waste Ditch - Sta. 175+0	.24	2000							
2:00 PM	Big Tujunga River below Mouth at Anderson Canyon, Sta. 192+3	1.56	3730		59,530	1.37	+.73			
4:15 PM	Big Tujunga River .7 mi. above Foothill Blvd., Station 258+0	Dry	6570		100,600	2.31	-1.56	-.675		

PERCOLATION MEASUREMENTS

BIG TUJUNGA		River Creek Wash		February 1, 19 33						
Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec. Ft. Per Acre Wetted Area	Remarks	
9:30 AM	Foothill Blvd. Bridge	40.31	11520	16.3	210816	4.840	-6.84	-1.413		
11:15 AM	Junction with Little Tujunga	33.47	2925	20.3	59378	1.363	-2.83	-2.076		
12:40 PM	Stonehurst	30.64	7870	21.0	165270	3.794	-23.26	-6.14 x		
4:15 PM	San Fernando Road	7.38	4820	20.2	97364	2.235	-7.38	-3.30		
5:15 PM	Sinking-300'-Laurel Canyon Rd.	0.00								
10:00 AM	Mouth of Canyon	6.70					+6.70			
	x Steam shovel working in channel tends to increase percolation in this reach, and also impounds a little of the flow.									

PERCOLATION MEASUREMENTS

BIG TUJUNGA		River Creek Wash		January 12, 19 33						
Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec. Ft. Per Acre Wetted Area	Remarks	
8:25 AM	Big Tujunga River, 250' above Sta. F.C. #213	2.50								
8:45 AM	Outflow, Monte Vista W. Co. Diversion	Dry	(1250)							
8:50 AM	Inflow, Gold Canyon	Dry	(270)							
9:15 AM	Inflow, Bryant Canyon	Dry	(1130)							
9:50 AM	Outflow, Johnson Ranch Diversion	Dry	(4400)							
10:00 AM	Big Tujunga, 200' above 1st Crossing	2.29	7650	15	114750	2.63	-.21	-.08		
10:30 AM	Outflow, L.A.W. & P. Dept. Diversion	Dry	(160)							
10:35 AM	Inflow, Pipe Canyon	Dry	(200)							
11:10 AM	Outflow, Atkin's Diversion	.32	5600							
12:10 AM	Big Tujunga, 100' below Upper End of Olive Orchard	.60	8100	20	162000	3.71	-1.37	-.37		
1:00 PM	Big Tujunga below Anderson Canyon, Sta. 192+3	1.88	3730	18	67140		+1.28			
3:00 PM	Big Tujunga, 0.7 mi. approx. above Foothill Blvd., Sta. 257+0	Dry	8470	14	118580	2.72	-1.88	-.69		

PERCOLATION MEASUREMENTS

BIG TUJUNGA		River Creek Wash		February 7, 19 33						
Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec. Ft. Per Acre Wetted Area	Remarks	
7:50 AM	Big Tujunga River, F.C. Sta. 213, Sta. 0+0	18.26								
8:15 AM	Outflow from Big Tujunga Monte Vista W. Co. Diversion	Dry	(1000)							
8:25 AM	Inflow to Big Tujunga, Gold Canyon	.39								
8:40 AM	Inflow to Big Tujunga, Bryant Canyon	.05								
9:10 AM	Outflow from Big Tujunga Johnson Ranch Diversion	Dry								
9:30 AM	Outflow from Big Tujunga, L.A.W. & P. Dept. Roh. Div.	Dry								
9:35 AM	Big Tujunga River, 400' above 1st Crossing, Sta. 72+0	18.83	7200		215000	4.94	+.13			
10:05 AM	Inflow to Big Tujunga, Pipe Canyon	.02								
11:05 AM	Big Tujunga River-Opposite Olive Orchard, Sta. 155+0	24.92	8300		264400	6.07	+6.07	1.00		
12:10 PM	Big Tujunga River below Anderson Canyon	19.53	3600		112000	2.57	-5.39	-2.10		
2:10 PM	Big Tujunga River at Foot- hill Blvd.	12.94	10700		327100	7.51	-6.59	-.88		
	Note: The measurement taken at 11:05 AM at the Big Tujunga River, opposite Olive Orchard, Sta. 155+0 was an unsatisfactory section.									

338

PERCOLATION MEASUREMENTS

BIG TUJUNGA River Creek Wash February 15, 19 33

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
1:00 PM	Below Dam #1	5.15	4750	18	85500	1.96	-.30	-.15	
	Inflow from Hansen Canyon	x .05							
	Inflow from Maple Canyon	x .17							
2:20 PM	Inflow from Clear Creek Damsite #2	.81 5.88							
2:55 PM	Inflow from Fusler Canyon Below Silver Creek	.05 7.48	5810	17	98770	2.26	+1.53		
3:25 PM	Above Vogel Canyon	8.72	5280	14	73920	1.70	+1.26		
4:00 PM	Inflow from Vogel Canyon Above Wildwood Lodge	.20 9.48	5280	16	84480	1.94	+.56		
4:30 PM	Above Trail Canyon	9.98	5280	18	95040	2.18	+.50		

x - Estimated.

PERCOLATION MEASUREMENTS

BIG TUJUNGA River Creek Wash February 21, 19 33

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
11:40 AM	Foothill Blvd. Bridge	8.42	2000	15'	30000	.69	-1.97	2.85	
12:05 PM	500' from W. End Rock Mat	6.45	2200	14'	30800	.71	-.75	1.05	
12:35 PM	200' Below 12" Pipe Line	5.70	800	16'	12800	.29	-.66	2.28	
1:10 PM	Opposite Gravel Pit	5.04	2300	13'	29900	.69	-1.28	1.85	
1:40 PM	Inflow from Gravel Pit At Junction of Channels	1.51 5.27							
2:05 PM	Inflow from Gravel Company 500' Above End Concrete Mat	1.66 7.30	1800	12'	21600	.50	+.37		
2:30 PM	300' Above Stonehurst Ave.	5.85	2000	13'	26,000	.60	-1.45	2.42	

PERCOLATION MEASUREMENTS

BIG TUJUNGA River Creek Wash February 20, 19 33

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
8:40 AM	F.C.Sta. #213	13.51	1000	20'	20000	.46	+1.54		
9:05 AM	Below Monte Vista Diversion	15.05	2000	20'	40000	.92	-4.38	4.76	
10:00 AM	Inflow from Gold Canyon Opposite 10" Exposed Pipe	.17 10.84	4400	18'	79200	1.82	+2.96		
10:30 AM	Above 1st Crossing	13.80	5600	17'	95200	2.19	-2.78	1.27	
11:10 AM	Below Atkins Diversion	11.02	3000	17'	51000	1.17	+1.49		
11:45 AM	Opposite Olive Orchard	12.51	3100	17'	52700	1.21	+1.21		
12:20 PM	Below 1st Narrows	13.72	2600	22'	57200	1.31	-.14	0.11	
12:50 PM	2nd Narrows Opp. Triple Sycamore	13.58	2300	18'	41400	.95	-1.22	1.28	
1:20 PM	Opposite E. End Rock Wall	12.36	2000	16'	32000	.73	+.42		
2:30 PM	2500' Above Foothill Blvd.	12.78	1500	18'	27000	.62	-3.59	5.79	
2:55 PM	1000' Above Foothill Blvd.	9.19	1000	17'	17000	.39	-1.70	4.36	
3:15 PM	Foothill Blvd. Bridge	7.49							

PERCOLATION MEASUREMENTS

BIG TUJUNGA River Creek Wash February 22, 19 33

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
9:20 AM	300' above Stonehurst Ave.	5.39	2000	12'	24000	.55	-1.09	-1.98	
9:45 AM	Opposite Mount of Olives	4.30	1000	10'	10000	.23	-.83	-3.61	
10:05 AM	1000' below Mount of Olives	3.47	1500	9'	13500	.31	-.61	-1.97	
10:25 AM	250' below Power Line	2.86	2300	6'	13800	.31	-2.46	-7.93	
10:45 AM	900' above San Fernando Rd.	.40	1200	3'	3600	.08	-.40	-5.00	
11:00 AM	300' below San Fernando Rd.	0.00							
							1.48	-5.39	-3.64

339

PERCOLATION MEASUREMENTS

BIG TUJUNGA River Creek Wash Feb. 23, 19 33

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec. Ft. Per Acre Wetted Area	Remarks
10:45 AM	Below Dam #1 Inflow from Hansen Canyon Inflow from Maple Creek Inflow from Clear Creek	.89 .03 .05 .75	4750	9'	42750	.98	+ .16		
11:50 AM	Damsite #2 Inflow from Fusier Canyon	1.86 .04	5810	9'	52290	1.20	+1.42		
12:20 Noon	Below Silver Creek	3.32	5280	12'	63360	1.45	+ .17		
12:50 PM	Above Vogel Canyon Inflow from Vogel Canyon	3.49 .10	5280	14'	73920	1.70	+1.10		
1:10 PM	Above Wildwood Lodge	4.69	5280	13'	68640	1.57	+ .80		
1:45 PM	Above Trail Canyon Inflow from Trail Canyon	5.49 1.53	5280	15'	79200	1.82	+3.18		
2:00 PM	F.C. Station #213	10.20							

PERCOLATION MEASUREMENTS

BIG TUJUNGA River Creek Wash February 26, 19 33

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec. Ft. Per Acre Wetted Area	Remarks
8:40 AM	Foothill Blvd.	3.74	2000	13'	26000	.60	-1.16	1.93	
9:00 AM	500' from W. End Rock Mt.	2.58	2800	12'	26400	.61	-1.11	1.83	
9:20 AM	200' below 12" Pipe Line	1.47	800	13'	10400	.24	- .45	1.87	
9:40 AM	Opposite Gravel Pit Inflow from Gravel Pit	1.02 1.54	2300	11'	25300	.58	- .69	1.19	
10:05 AM	At Junction of Two Channels Inflow from Gravel Company	1.87 1.25	1800	11'	19800	.45	+ .78		
10:35 AM	500' above End Concrete Mt.	3.90	2000	11'	22000	.51	- .64	1.25	
11:50 AM	300' above Stoneburst Ave.	3.26	2000	10'	20000	.46	- .75	1.63	
12:05 P.	Opposite Mount of Olives	2.51	1000	9'	9000	.21	- .19	.90	
12:15 PM	1000' below " " "	2.32	1500	8'	12000	.27	- .33	1.22	
12:35 PM	250' below Power Line, Crossing River	1.99	2600	3.5'	9800	.22	-1.99	9.05	
1:30 PM	350' above San Fernando Rd.	0.00							

PERCOLATION MEASUREMENTS

BIG TUJUNGA River Creek Wash Feb. 27, 19 33

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec. Ft. Per Acre Wetted Area	Remarks
8:30 AM	F.C. Station #213 Inflow from Gold Canyon	8.16 .19	7400	18'	133,200	3.06	- .80	.26	
9:05 AM	Above First Crossing	7.55	5600	15'	84,000	1.92	+ .20		
9:30 AM	Below Atkin's Diversion	7.75	3000	15'	45,000	1.03	-1.79	1.74	
10:00 AM	Opposite Olive Orchard	5.96	3100	15'	46,500	1.07	+2.52		
10:20 AM	Below 1st Narrows	8.48	2600	19'	49,400	1.13	-1.12	1.00	
10:45 AM	2nd Narrows Opposite Triple Syomore	7.36	2300	15'	34,500	.79	-1.37	1.73	
11:10 AM	Opposite E. End Rock Wall	5.99	2000	15'	30,000	.69	- .31	.45	
11:40 AM	2500' above Foothill Blvd.	5.68	1500	16'	24,000	.55	-1.22	2.22	
1:00 PM	1000' above Foothill Blvd.	4.46	1000	17'	17,000	.39	- .95	2.44	
1:20 PM	Foothill Blvd. Bridge	3.51							

PERCOLATION MEASUREMENTS

BIG TUJUNGA River Creek Wash March 6, 19 33

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec. Ft. Per Acre Wetted Area	Remarks
8:45 AM	F. C. Station #213 Inflow from Gold Canyon	6.55 .14	7400	16'	118400	2.72	+ .94		
9:05 AM	Above 1st Crossing	7.63	5600	13'	72800	1.67	-2.10	1.26	
9:50 AM	Below Atkin's Diversion	5.53	3000	14'	42000	.96	- .65	.68	
10:20 AM	Opposite Olive Orchard	4.88	3100	15'	46500	1.07	1.52		
10:45 AM	Below 1st Narrows	6.40	2600	18'	46800	1.07	- .36	.34	
11:05 AM	2nd Narrows Opposite Triple Syomore	6.04	2300	14'	32200	.74	- .40	.54	
11:30 AM	Opposite E. End Rock Wall	5.64	2000	13'	26000	.60	-1.94	3.24	
12:40 PM	2500' Above Foothill Blvd.	3.70	1500	15'	22500	.52	-1.34	2.61	
1:00 PM	1000' Above Foothill Blvd.	2.32	1000	16'	16000	.37	- .47	1.27	
1:20 PM	Foothill Blvd. Bridge	1.85							

PERCOLATION MEASUREMENTS

BIG TUJUNGA River Creek Wash March 7, 19 33

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec. Ft. Per Acre Wetted Area	Remarks
8:15 AM	Foothill Blvd. Bridge	2.42	2000	9'	18000	.41	-1.20	-2.92	
8:40 AM	500' Above W. End Rock Mat	1.22	1200	10'	12000	.27	-.73	-2.70	
8:55 AM	700' Below W. End Rock Mat	.49	1000	8'	8000	.18	-.24	-1.33	
9:05 AM	200' Below 12" Pipe Line	.25	500	3'	1500	.03	-.25	8.33	
9:30 AM	700' Below 12" Pipe Line	0.00							
						.89	-2.42	-2.72	

PERCOLATION MEASUREMENTS

BIG TUJUNGA River Creek Wash March 10, 19 33

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
9:00 AM	Below Submerged Dam Inflow from Gold Canyon	3.57 .01	7400	13'	96200	2.21	+0.82		
9:30 AM	Above First Crossing Outflow from Atkin's Diversion	4.40							
10:00 AM	Below Atkin's Diversion	1.61 1.88	5600	12'	67200	1.56	-.91	.54	
10:30 AM	Opposite Olive Orchard Inflow from Atkin's Place	1.32 .02	3000	11'	33000	.76	+ .90	.73	
11:05 AM	Below First Narrows	2.24	2600	13'	33800	.77	-.90	1.17	
11:35 AM	2nd Narrows (Opposite Triple Sycamore)	1.34	2300	9'	20700	.47	-.17	.36	
11:50 AM	Opposite E. End Rock Wall	1.17	2000	6'	12000	.27	-1.12	4.14	
12:30 PM	2500' Above Foothill Blvd.	.05	1500	1'	1500	.034	-0.05	1.47	
12:40 PM	1000' Above Foothill Blvd.	0.00							

PERCOLATION MEASUREMENTS

BIG TUJUNGA River Creek Wash March 8, 19 33

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec. Ft. Per Acre Wetted Area	Remarks
11:15 AM	Below Dam #1 Inflow from Hansen Canyon " Clear Creek	.90 .01 .53	4750	9'	42750	.98	-.29	.29	
11:45 AM	Damsite #2 Inflow from Fusier Creek	1.15 .01	5810	9'	52290	1.20	+1.26		
12:10 N.	Below Silver Creek	2.42	5280	12'	63360	1.45	-.23	.23	
12:30 PM	Above Vogel Canyon Inflow from Vogel Canyon	2.19 .03	5280	13'	68640	1.57	+ .95		
12:50 PM	Above Wildwood Lodge	3.17	5280	13'	68640	1.57	+ .49		
1:10 PM	Above Trail Canyon Inflow from Trail Canyon	3.66 1.19	5280	15'	79200	1.82	+1.32		
2:00 PM	F.C. Station #213	6.17							

PERCOLATION MEASUREMENTS

BIG TUJUNGA River Creek Wash March 13, 19 33

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
10:30 AM	F. C. Station #213 Outflow to Monte Vista Diversion	4.81 .39 .12							
11:10 AM	Inflow from Gold Canyon Above First Crossing	6.43	7400'	16'	118400	2.72	+1.89		
11:40 AM	Below Atkin's Diversion	5.15	5600'	13'	72800	1.67	-1.28	.77	
12:10 Noon	Opposite Olive Orchard	4.97	3000'	14'	42000	.96	-.18	.19	
12:30 PM	Below First Narrows	5.40	3100'	15'	46500	1.07	+ .43		
12:50 PM	2nd Narrows Opposite Triple Sycamore	5.91	2600'	17'	44200	1.01	+ .51		
1:10 PM	Opposite E. End Rock Wall	4.37	2300'	14'	32200	.74	-1.54	2.08	
2:25 PM	2500' Above Foothill Blvd.	2.65	2000'	13'	26000	.60	-1.72	2.86	
2:40 PM	1000' above Foothill Blvd.	1.66	1500'	15'	22500	.52	-.99	1.90	
2:55 PM	Foothill Blvd. Bridge	1.36	1000'	14'	14000	.32	-.30	.94	
3:20 PM	500' above W. End Rock Mat	.13	2000'	6'	12000	.27	-1.23	4.55	
3:40 PM	600' below W. End Rock Mat	0.00	1100'	2.5'	2750	.06	-.13	2.17	

PERCOLATION MEASUREMENTS

BIG TUJUNGA River
Creek
Wash

March 15, 19 33

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
10:05 AM	Below Dam #1 Inflow from Hansen Canyon Inflow from Clear Creek	.93 .01 .51	4750	9'	42750	.98	-.24	-.24	
10:40 AM	Damsite #2	1.21	5810	9'	52290	1.20	+1.42		
11:00 AM	Below Silver Creek	2.63	5280	12'	63360	1.45	-.01	.007	
11:25 AM	Above Vogel Canyon	2.62	5280	14'	73920	1.70	-.16	-.09	
12:20 Noon	Above Wildwood Lodge	2.46	5280	13'	68640	1.57	+1.51		
1:00 PM	Above T-eil Canyon	3.97	5280	15'	79200	1.82	-.96	-.52	
1:00 PM	Inflow from Trail Canyon	1.17							
1:20 PM	F. C. Station #213	4.18							

PERCOLATION MEASUREMENTS

BIG TUJUNGA River
Creek
Wash

March 20, 19 33

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec. Ft. Per Acre Wetted Area	Remarks
8:15 AM	F.C. Station #213	5.12							
	Outflow from Monte Vista Diversion	.38	7400	15'	111,000	2.54	.34	.13	
	Inflow from Gold Canyon	.10							
8:50 AM	Above First Crossing	5.18							
	Outflow from Atkin's Diver- sion	2.05	5600	12'	67,200	1.54	.10	.07	
	Below Atkin's Diversion	3.03							
9:15 AM	Below Atkin's Diversion	3.03	3000	13'	39,000	.89	.95	1.17	
10:00 AM	Opposite Olive Orchard	2.08	3100	14'	43,400	1.00	1.68	1.68	
	Inflow from Atkin's Place 1st. Narrows	.52							
10:40 AM	Below 1st Narrows	4.28	2600	15'	39,000	.89	+0.05		
11:00 AM	2nd. Narrow Opposite Triple Sycamore	4.33	2300	13'	29,900	.68	1.42	2.08	
11:20 AM	Opposite E. End Rock Wall	2.91	2000	12'	24,000	.55	1.80	3.27	
12:35 PM	2500' above Foothill Blvd.	1.11	1500	14'	21,000	.48	.72	1.50	
12:50 PM	1000' above Foothill Blvd.	.39							
			1000	12'	12,000	.27	.02		
1:00 PM	Foothill Blvd. Bridge	.37	2800	4'	11,200	.26	.37	1.43	
1:30 PM	Opposite West End Rock Mt.	.00							

PERCOLATION MEASUREMENTS

BIG TUJUNGA River
Creek
Wash

March 17, 19 33

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
8:25 AM	Below submerged Dam	3.99							
	Outflow to Monte Vista Diversion	0.48	7400	13'	96200	2.21	+ 0.72		
	Inflow from Gold Canyon	0.01							
	Outflow to L. A. Water Co. Diversion	0.61							
9:00 AM	Above First Crossing	3.63							
	Outflow to Atkin's Diver.	1.57	5600	12'	67200	1.54	- 0.08	.05	
9:35 AM	Below Atkin's Diversion	1.98							
10:00 AM	Opposite Olive Orchard	1.94	3100	11'	34100	.78	+ 0.35		
10:45 AM	Below First Narrows	2.29	2600	12'	31200	.72	- 0.16	.22	
11:15 AM	2nd Narrows (Opposite Triple Sycamore)	2.13	2300	9'	20700	.47	- .98	2.08	
11:30 AM	Opposite E. End Rock Wall	1.15	2000	6'	12000	.27	- 1.10	4.07	
12:00 Noon	2500' Above Foothill Blvd.	0.05	1500	1.5'	2250	.05	- 0.05	1.00	
12:15 PM	1000' " " "	0.00							

PERCOLATION MEASUREMENTS

BIG TUJUNGA River
Creek
Wash

March 28, 19 33

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec. Ft. Per Acre Wetted Area	Remarks
8:10 AM	F.C. Station #213	5.42							
	Outflow from Monte Vista Diversion	.44	7400	15'	111000	2.54	-.67	.27	
	Inflow from Gold Canyon	.01							
8:45 AM	Above First Crossing	4.32							
	Outflow from atkin's Diver- sion	1.69	5600	12'	67200	1.54	-.12	.08	
9:15 AM	Below atkin's Diversion	2.51							
9:50 AM	Opposite Olive Orchard	2.25	3100	14'	43400	1.00	+.81		
	Inflow from Atkin's Place	.38							
10:25 AM	Below First Narrows	3.44	2600	15'	39000	.89	- .48	.54	
10:50 AM	2nd Narrows Opposite Triple Sycamore	2.96	2300	13'	29900	.68	- .66	.97	
11:10 AM	Opposite E. End Rock Wall	2.30	2000	12'	24000	.55	-1.17	2.12	
11:30 AM	2500' above Foothill Blvd.	1.13							

PERCOLATION MEASUREMENTS

BIG TUJUNGA River Creek Wash April 4, 19 33

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
7:50 AM	Below Submerged Dam	4.06							
	Outflow to Monte Vista Diversion	.32							
	Inflow from Gold Canyon Above First Crossing	4.46	7400	13'	96200	2.21	+0.69		
9:00 AM	Outflow to Atkin's Diversion	1.25	5600	12'	67200	1.54	-0.33	-0.21	
9:20 AM	Below Atkin's Diversion	2.68	3000	12'	36000	.83	-0.90	-1.09	
9:50 AM	Opposite Olive Orchard	1.98	3100	13'	40300	.92	+1.50		
	Inflow from Atkin's Place	.26							
10:35 AM	Below First Narrows	3.74	2600	15'	39000	.89	-0.36	-0.40	
11:00 AM	2nd Narrows (Opposite Triple Sycamore)	3.38	2300	13'	29900	.68	-1.02	-1.50	
11:20 AM	Opposite E. End Rook Wall	2.36	2000	11'	22000	.50	-1.33	-2.66	
11:50 AM	2500' Above Foothill Blvd.	1.03	1500	13'	19500	.45	--.55	-1.22	
12:15 PM	1000' " " "	0.48	1000	6'	6000	.14	-0.24	-1.71	
12:25 PM	Foothill Blvd. Bridge	0.24	1100	3'	3300	.075	-0.24	-3.20	
1:00 PM	1100' below Foothill Bridge	0.00							

PERCOLATION MEASUREMENTS

BIG TUJUNGA River Creek Wash April 27, 19 33

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
11:20 AM	F. C. Gaging Station 213 - Station 0+0	9.55							
	Outflow - Monte Vista W. Co. Diversion - Station 10+0	.35	1000						
	Inflow - Gold Canyon at Mouth - Station 12+7	.04	270						
	Inflow - Bryant Canyon - Station 24+0	Dry	1130						
	Outflow - Johnson Ranch Diversion - Station 72+0	Dry	4800						
	Inflow - Pipe Canyon - Station 76+0	Dry	400						
	Outflow - L.A.W.&P. Dept. Ranch Diversion - Sta. 76+0	.32	400						
	Outflow - Aiken's Ranch Div. - Station 130+0	.06	5400						
	Inflow - Aiken's Ranch Diversion - Station 175+0	.06	4500						
	Big Tujunga Wash at Foothill Blvd. - Sta. 285+0	3.88	11000				-5.02		
	Inflow - Little Tujunga Canyon at Foothill Blvd. Station 358+0	Dry	7300						
	Big Tujunga Wash - Mullholland Sta. - Sta. 399+0	.70	4100				-3.18		
2:15 PM	Big Tujunga Wash - San Fernando Rd. - Sta. 473+0	Dry	7400				- .70		

PERCOLATION MEASUREMENTS

BIG TUJUNGA CREEK & WASH River Creek Wash May 3, 19 33

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
3:30 PM	Big Tujunga Creek - Sta. 0+0 Below submerged Dam	8.77	1000						
3:50 PM	Outflow - Monte Vista W. Co. Diversion - Station 10+0	.49	270						
3:45 PM	Inflow - Gold Canyon - Station 12+7	.02	1130						
3:47 PM	Inflow - Bryant Canyon - Station 24+0	Dry	4800						
3:55 PM	Outflow - Johnson Ranch Diversion - Station 72+0	Dry	360					-4.76	
4:00 PM	Outflow - L.A.W.&P. Dept. Ranch Diversion - Sta. 75+6	Dry	40						
3:55 PM	Inflow - Pipe Canyon - Station 76+0	Dry	5400						
4:10 PM	Outflow - Atkin's Diversion Station 130+0	.08	5300						
4:15 PM	Inflow - Aiken's Waste Ditch Station 183+0	.01	10200						
4:25 PM	Big Tujunga Wash - Foothill Blvd. - Sta. 285+0	3.46	10000						
4:30 PM	Inflow - Little Tujunga - Foothill Blvd. Sta. 385+0	Dry	1400					-2.64	
4:45 PM	Big Tujunga Wash - Mullholland St., Sta. 399+0	.82	7400					- .82	
5:10 PM	Big Tujunga Wash - San Fernando Road - Sta. 473+0	Dry							

PERCOLATION MEASUREMENTS

Big Tujunga RIVER CREEK WASH January 1, 19 34

Time	Location	disch in sec. ft.	Length of reach in ft.	width of reach in ft.	area in sq. ft.	area in acres	Loss in reach in sec. ft.	Loss in Sec. Ft. per acre wetted area	Remarks
9:30-9:40 A.M.	Stonehurst Ave	640.23							
12:00-12:20 P.M.	Sherman Way	110.47						529.76	
12:45- 1:00 P.M.	Magnolia Ave	65.83						44.64	

342

PERCOLATION MEASUREMENTS

RIVER
Big Tujunga CREEK
WASH

January 9, 1934

Time	Location	disch in sec. ft.	Length of reach in ft.	aver. width of reach in ft.	area in sq. ft.	area in acres	Loss in reach in sec. ft.	Loss in Sec. Ft. per acre wetted area	Remarks
9:35 A.M.	Big Tujunga Creek below Submerged Dam Gaging Station 213- At gage (Sta. 0+00)	8.90	7300	15	109500	2.52	+1.61		
10:56 A.M.	200' below First Crossing (Station 73+00)	10.71							
	Foothill Blvd. Bridge	5.29	18700	18	336600	7.73	-5.42	-0.70	
1:30 P.M.	Little Tujunga Ck. at Recorders Sta #19	0	15500	8	128000	2.94	-3.68	-1.25	
2:00 P.M.	Big Tujunga Creek at Stonhurst Ave. Recorder Station #20		5500	4	22000	0.51	-1.61	-3.16	
3:48 P.M.	Big Tujunga Creek Half way between Stonhurst Ave and San Fernando Road	Dry							
			No discharge from Dam No. 1						

PERCOLATION MEASUREMENTS

RIVER
Big Tujunga CREEK
WASH

March 12, 1934

Time	Location	disch in sec. ft.	Length of reach in ft.	aver. width of reach in ft.	area in sq. ft.	area in acres	Loss in reach in sec. ft.	Loss in Sec. Ft. per acre wetted area	Remarks
8:15 A.M.	At recorder Station No. 213 Percolation Sta. 0+00	4.76	7300	18.04	131714	3.02	1.52	- .53	
8:55 A.M.	200' above first crossing 7300' below Recorder Sta. 213 Percolation Sta. 73+00	3.24							
9:43 A.M.	Atkins Ranch Diversion	-.02	18700	19.46	363902	8.35	1.12	-.13	
	Foothill Blvd. Staff Gage Station #155	2.10	10000	10.03	100300	2.30	0.95	-0.41	
12:50 P.M.	Big Tujunga Creek at mouth of Little Tujunga Creek	1.15	5200	1.0	5200	0.12	-1.15	-9.58	
1:10 P.M.	Big Tujunga Creek at Stonhurst Avenue	Dry							
			No discharge from Big Tujunga Dam No. 1.						

PERCOLATION MEASUREMENTS

RIVER
Big Tujunga CREEK
WASH

February 5, 1934

Time	Location	disch in sec. ft.	Length of reach in ft.	aver. width of reach in ft.	area in sq. ft.	area in acres	Loss in reach in sec. ft.	Loss in Sec. Ft. per acre wetted area	Remarks
9:55 A.M.	Big Tujunga Creek below Submerged Dam Recorder Station 213-Percolation Sta. 0+00	3.99	7300	13	94,900	2.18	+0.62		
10:35 A.M.	200 Ft. below first Crossing 7300' below Recorder Sta. 213	4.61	18700	13	243,100	5.58	-.89	-.16	
12:00 Noon	Big Tujunga Creek at Foothill Blvd Staff Gage Sta. #155		15500	2	31,000	0.71	-3.72	-5.24	
2:10 P.M.	Big Tujunga Creek at Stonhurst Ave Recorder Sta. #20	Dry							

PERCOLATION MEASUREMENTS

RIVER
Big Tujunga CREEK
WASH

March 19, 1934

Time	Location	disch in sec. ft.	Length of reach in ft.	aver. width of reach in ft.	area in sq. ft.	area in acres	Loss in reach in sec. ft.	Loss in Sec. Ft. per acre wetted area	Remarks
8:50 A.M.	F.O. Recorder Sta. 213 Percolation Sta 0+00	3.55							
9:20 A.M.	Inflow from Gold Canyon	+1.10	7000	13.12	91840	2.11	+0.62		
10:18 A.M.	200 Ft. below first Crossing	4.27							
11:00 A.M.	Atkin's Ranch Diversion	-.03	9400	10.87	102178	2.35	-1.42	-0.61	
11:45 A.M.	1000' above Atkin's Ranch House	2.82	12600	16.00	201600	4.63	-2.21	-0.48	
1:55 P.M.	Foothill Blvd	.61	3400	3.50	11900	0.27	-0.61	-2.26	
2:20 P.M.	3400' below Foothill Blvd.	Dry							
			No flow from Big Tujunga Dam No. 1.						

PERCOLATION MEASUREMENTS

FISH CREEK River
Creek
Wash

Jan. 23, 1933

Time	Location	Disch. in Sec. Ft.	Length of Reach	Aver. Width of Reach	Area in Sq. Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec. Ft. Per Acre Wetted Area	Remarks
12:20 PM	55+00 Near Mouth of Fish Cr.	17.0							
3:30 PM	106+00 - 760' N. of P.E. Bridge	8.8	5100'	25'	127500	2.93	-8.2	2.76	

PERCOLATION MEASUREMENTS

Los Angeles River
Creek
Wash

Dec. 20, 1932

Time	Location	Disch. in Sec. Ft.	Length of Reach	Aver. Width of Reach	Area in Sq. Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec. Ft. Per Acre Wetted Area	Remarks
10:15 A.M.	Point 1200' below Elena Vista Street	17.54							
			825	26.6	21,945	.50	+9.1		
10:40 A.M.	875' above Beachwood Drive	18.45						.14	
			725	30.7	22,258	.51	-.07		
11:00 A.M.	150' above Beachwood Drive	18.38						-6.53	15.93
			475	37.5	17,860	.41			
11:20 A.M.	325' below Beachwood Drive	11.85						-.98	2.33
			550	33.0	18,150	.42			
1:15 P.M.	700 above Mariposa Street	10.87						+2.89	
			700	42.2	29,540	.68			
1:45 P.M.	Mariposa St. Sewer Crossing	13.76							

PERCOLATION MEASUREMENTS

FISH River
Creek
Wash

February 26, 1933

Time	Location	Disch. in Sec. Ft.	Length of Reach	Aver. Width of Reach	Area in Sq. Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec. Ft. Per Acre Wetted Area	Remarks
	Duarte Ditch	18.91							
	By-pass	0.60							
12:15 PM	Fish Creek below Resort	18.31							
	Total being spread	1.05							
		19.36							
	East of Dyke in San Gabriel River bottom				24200	.055			
	East of Fish Creek in Spreading Ground				129787	2.97			
	West of Fish Creek in Spreading Ground				165,842	3.81			
	Total Wetted Area				299848	6.88			
3:40 PM	Fish Creek Converge at all Water-Sta. 53+0	3.55					-15.81		

PERCOLATION MEASUREMENTS

LOS ANGELES River
Creek
Wash

December 29, 1932

Time	Location	Disch. in Sec. Ft.	Length of Reach	Aver. Width of Reach	Area in Sq. Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec. Ft. Per Acre Wetted Area	Remarks
9:00 AM	0+00 = 47+50 of Perco. Meas. of 12-21-32. 100' above Beachwood Dr. Produced	17.48							
	Beachwood Dr. (Produced)	15.51	1013	44.56	45135	1.04	-1.97	1.89	
	1350' downstream from start	14.49	337	29.50	9941	.23	-1.02	4.43	
	19+00	14.43	550	23.00	12650	.29	-.06	.20	
	Sewer Viaduct across River	15.62	686	20.30	13925	.32	+1.19		
	Sta. 33+00	15.56	714	33.70	24062	.55	-.06	.10	
	Sta. 42+00	16.45	900	65.0	58500	1.34	+ .89		
	Sta. 59+25	22.01	1725	72.3	124718	2.86	+5.56		

PERCOLATION MEASUREMENTS

LOS ANGELES River
Creek
Wash

January 5, 19 33

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
8:50 AM	California Street	9.40	2000	8.0	16000	.37	+8.93		
9:35 AM	Buena Vista Street	18.33	300	20.3	6090	.14	-2.33	16.6	
	300' Above Beachwood Drive	16.00	300	32.2	9660	.22	-4.03	18.3	
10:30 AM	At Beachwood Drive	11.97	300	32.15	9645	.22	-1.99	9.0	
x 1:45 PM	300' South of Beachwood Dr.	9.98	600	33.3	19980	.46	-7.20	15.6	
x 2:15 PM	900' Below Beachwood Dr.	2.78	300	27.9	8370	.19	-2.08	11.0	
2:45 PM	Mariposa St. - Sewer Crossing	.70	1100	9.8	10780	.25	- .50	2.0	
2:55 PM	2300' Downstream from Beachwood Drive	.20	1000	9.3	9300	.21	+ .72		
	Sta. 43+00	.92	1625	25.7	41762	.96	+4.73		
	Sta. 59+25	5.65	2225	59.1	131497	3.01	- .60	.20	
4:50 PM	525 ft. below Riverside Dr. Bridge	5.05							
	x - In vicinity of L.A.W.D. Galleries.								

PERCOLATION MEASUREMENTS

LOS ANGELES River
Creek
Wash

September 21, 19 33

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
1:50 PM	100' below LAWD, Venturi Flume at Niagra St.	x 9.42	1300'	12.1	15730	.36	+2.83		
2:30 PM	200' above Edison Co. High Power Line	x12.25	800	17.1	13680	.31	+3.80		
3:15 PM	150' below Monte Vista St.	x16.05	800	22.3	17840	.40	+2.30		
3:45 PM	800' below Monte Vista St.	18.35					-18.35	16.68	
	Mariposa St. (1)	0.00	3000	16.0	48000	1.10			
	x - Mean of 2 Measurements.								
	(1) - Galleries owned by LAWD had taken entire flow.								

PERCOLATION MEASUREMENTS

LOS ANGELES River
Creek
Wash

Aug. 24, 19 33

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Gain Loss in Reach in Sec. Ft.	Gain Loss in Sec. Ft. Per Acre Wetted Area	Remarks
10:40 AM	Niagra St., 100' below Venturi Flume owned by L.A.W.D.	9.22	900'	10.5	9450	.22	2.2	10.	
11:10 AM	900' below Niagra St.	11.44	600'	13.25	7950	.18	2.1	11.6	
11:30 AM	1500' below Niagra St.	13.54	450'	18.95	8528	.196	.78	4.0	
11:50 AM	Mountain View St., 1950' below Niagra St.	14.32							

PERCOLATION MEASUREMENTS

Los Angeles RIVER
CREEK
WASH

January 15, 1934

Time	Location	disch in sec. ft.	Length of reach in ft.	aver. width of reach in ft.	area in sq. ft.	area in acres	Loss in reach in sec. ft.	Loss in Sec. Ft. per acre wetted area	Remarks
10:27 A.M.	North Figueroa St	36.32							
11:45 A.M.	North Broadway	35.80						- .52	
4:20 P.M.	600 ft below Washington St Br.	24.22						-4.07	
12:40 P.M.	1000 ft below Soto Street Br.	20.15							
2:20 P.M.	300 ft below Florence Ave. Br.	19.85							
3:15 P.M.	150 ft Above Stewart and Grey Rd Bridge	22.06						+2.21	

PERCOLATION MEASUREMENTS

RIO HONDO River
Creek
Wash January 17, 19 33

Time	Location	Disch. in Sec. Ft.	Length of Reach	Aver. Width of Reach	Area in Sq. Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec. Ft. Per 1000' Length of Channel	Remarks
1:50 PM	Rio Hondo River at Mission Bridge	69.8							
2:30 PM	Rio Hondo Slough at Mission Bridge	17.8							
	Total at Mission Bridge	87.6							
3:00 PM	Rio Hondo Slough at Mouth	10.7					20.5	(7.1 in Slough) 0.79 in Slough 1.75 in R.H. Chan.	
3:20 PM	Rio Hondo River above Mouth of Rio Hondo Slough	56.4							
	Total at Junction	67.1	4200				-23.5	5.60	
4:20 PM	Rio Hondo River at Whittier Blvd.	43.6	14700				-27.3	1.85	
4:40 PM	Rio Hondo River at Telegraph Road	16.3	17700				-3.0	0.17	
5:25 PM	Rio Hondo River at S & G Rd.	13.3							

Note: Due to falling stage of stream and measurements of lower reaches not properly timed to get corresponding stages, the apparent loss is too small for the lower two reaches of the river. Flow of Rio Hondo Slough being nearly uniform the loss as determined is probably correct.

PERCOLATION MEASUREMENTS

RIO HONDO River
Creek
Wash FROM SPLIT January 26, 19 33

Time	Location	Disch. in Sec. Ft.	Length of Reach	Aver. Width of Reach	Area in Sq. Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec. Ft. Per Acre Wetted Area	Remarks
9:45 AM	Sta. 23+00 - Santa Fe R.R. Split	13.23							
10:45 AM	Sta. 53+00	3.50	3000	39	117000	2.68	-9.73	3.63	
11:05 AM	Sta. 68+00	0.44	1500	48	72000	1.65	-3.06	1.85	
	Sta. 78+00		1000	28	28000	.642	-0.44	0.69	

PERCOLATION MEASUREMENTS

RIO HONDO River
Creek
Wash January 24, 19 33

Time	Location	Disch. in Sec. Ft.	Length of Reach	Aver. Width of Reach	Area in Sq. Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec. Ft. Per Acre Wetted Area	Remarks
10:00 AM	Sta. #0+00- Split at Santa Fe RR. Bridge	51.36	5800		343200	7.88	-18.78	2.38	
11:25 AM	Sta. #58+00	32.58	8700		352800	8.10	-27.75	3.43	
1:20 PM	Sta. #145+00 - 500' above Arrow Highway	4.83	4000		69800	1.60	-4.82	3.01	
2:00 PM	Sta. #185+00 At Piling	0.01							

PERCOLATION MEASUREMENTS

RIO HONDO River
Creek
Wash from Split January 27, 19 33

Time	Location	Disch. in Sec. Ft.	Length of Reach	Aver. Width of Reach	Area in Sq. Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec. Ft. Per Acre Wetted Area	Remarks
10:53 AM	Sta. 0+0 (Santa Fe R.R.)	2.38	2000	13	26000	.597	-2.38	3.99	
	Sta. 20+00	0.0							

PERCOLATION MEASUREMENTS

RIO HONDO River
Creek Wash From Split Jan. 28, 1933

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec. Ft. Per Acre Wetted Area	Remarks
	Sta. 0+0 Split - Santa Fe R.R.	2.76	3500	18	63,000	1.45	2.21	1.52	
	Sta. 35+00	0.55	4000	13.5	5,400	1.24	0.55	0.443	
	Sta. 75+00								

PERCOLATION MEASUREMENTS

RIO HONDO River
Creek Wash February 1, 1933

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
9:10 AM	Sta. #0+0 = 550' Above Beverly Blvd.	25.91			215500	4.95	-10.64	2.15	
9:50 AM	Sta. #30+00 = 300' above Whittier Blvd.	15.27			147400	3.38	-13.96	4.13	
10:45 AM	Sta. #68+00 = 250' Above Montebello Storm Drain	1.31							
10:55 AM	Sta. #70+30 = Montebello Storm Drain Inflow	.35							
	Sta. #68+00 Plus Montebello Storm Drain =	1.66			6030	.14	-.97	6.93	
11:35 AM	Sta. #70+50 below Montebello Storm Drain	.69			9000	.21	-.69	3.29	
12:00 M	Sta. #79+50	0.0							

PERCOLATION MEASUREMENTS

RIO HONDO River
Creek Wash Below Split January 30, 1933

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
12:00 M	Sta. 0+0 = Split - Santa Fe Bridge	56.34	3500	62	217000	4.98	-7.07	1.42	
	Sta. 35+00	49.27	4500	74	333000	7.64	-3.78	0.49	
2:10 PM	Sta. 80+00	45.49	4000	55	220000	5.05	-16.04	3.18	
	Sta. 120+00 Above Gladstone Power Line 1000'	29.45	3500	53	186000	4.27	-11.54	2.71	
	Sta. 155+00 Below Arrow Highway 1000'	17.91	3500	38	133000	3.05	-7.20	2.36	
	Sta. 190+00 North West Line	10.71	4500	28	126000	2.89	-8.90	3.08	
	Sta. 235+00 Below Peck Rd., 1500'	1.81				27.88	-54.53	1.96	

PERCOLATION MEASUREMENTS

RIO HONDO River
Creek Wash Feb. 20, 1933

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
4:11 P.M.	Sta. 0+0 Santa Fe R.R. Bridge	23.19							
4:55 P.M.	Sta. 4+70 E. Channel Overflow from San Gabriel	4.39							
	Total	27.57							
5:35 P.M.	Sta. 22+50	21.63	2810	43	120830	2.77	-5.94	2.14	

PERCOLATION MEASUREMENTS

Rio Hondo River Creek Wash
February 22, 1933

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
9:07 AM	Below Santa Fe Br. Sta. 0 + 40	26.15							
9:34 AM	Sta. 4 + 70 Inflow	4.78		11.1			- 4.68		
12:05 PM	Sta. 37 + 12	26.25		49.6			-10.64		
1:55 PM	Sta. 90 + 00	15.61		38.6			-10.11		
3:07 PM	Sta. 123 + 00	5.50		37			- 3.56		
4:10 PM	Sta. 150 + 37	1.94							

PERCOLATION MEASUREMENTS

Rio Hondo River Creek Wash
1-4 19 33

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
1:30 P.M.	Rio Hondo Slough at mouth	15.04		16.5					
2:00 P.M.	Rio Hondo 100' above Slough	98.50	100	110.0					
	Total	113.54	4100				21.34		
3:00 P.M.	" " 150' above Whittier Blvd.	92.20		57.0					
4:00 P.M.	Inflow Montebello Storm Drain at Mines Ave.	0.79	5500				19.69		
4:10 P.M.	Rio Hondo 100' below Mines Ave	73.10		62.0					
	Flow Minus Storm Drain	72.31							
4:10 P.M.	Rio Hondo 100' below Mines Ave	73.10	9300	62.0			48.90		
4:45 P.M.	" " at Telegraph Rd.	24.20	17600	41.5			4.63		
5:20 P.M.	" " at Stewart & Gray Rd.	19.57		16.0					

PERCOLATION MEASUREMENTS

Rio Hondo River Creek Wash
1-3 19 33

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
3:45 P.M.	100' Above Beverly Blvd.	60.18							
4:15 P.M.	50' Above Mines Ave Storm Drain	38.39	6000	80	480,000	11.02	21.79	1.98	
	Mines Avenue Drain(Inflow)	.61							
6:20 P.M.	500' Above Santa Fe Railroad	11.32	7500	60	450,000	10.33	27.68	2.68	
4:40 P.M.	Telegraph Road	1.64	3200	30	96,000	2.20	9.68	4.4	
5:00 P.M.	3000' Below Telegraph Road.	0	3000	10	30,000	.69	1.64	2.38	
						24.24	60.79	2.51	
	(Lengths of reach) were not taken at time of measurements, but were taken from succeeding measurements.								

PERCOLATION MEASUREMENTS

Rio Hondo River Creek Wash
1-5 19 33

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
8:15 A.M.	600' above Beverly Blvd.	28.4	3600	39.5					
9:00 A.M.	At Whittier Blvd.	14.3	5600	25.0			14.1		
9:30 A.M.	300' below Mines Ave.	0					14.3		

PERCOLATION MEASUREMENTS

Rio Hondo River
Creek
Wash

January 10, 19 34

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
10:45 A.M.	70' Above Beverly Blvd.	30.89							
11:40 A.M.	Station 18+00	26.45	1800	103.8	186850	4.29	-4.44	1.03	
12:50 P.M.	Station 50+50	20.05	3250	74.3	241425	5.54	-6.40	1.16	
1:20 P.M.	Station 58+50 - Inflow	0.45							
1:35 P.M.	Station 69+00 - Inflow Montebello Storm Drain	0.02	2350	72.7	170960	3.92	-7.49	1.91	
2:00 P.M.	Station 74+00	13.03	3650	54.0	197100	4.52	+ .09		
2:55 P.M.	Station 110+50	13.12	5000	51.0	255000	5.85	-9.92		
3:40 P.M.	Station 160+50	3.20	1150	13.0	14950	.34	-3.20		
4:10 P.M.	Station 172+00	0							
	Crest of rise in River caught up with party at 2:55 P.M. causing a gain in the preceding reach								

PERCOLATION MEASUREMENTS

Rio Hondo River
Creek
Wash

January 16, 17, 18 19 34

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
12:00 Noon	Sta 125+00	41.11							
4:00 P.M.	(Rio Hondo Station) = 170+00 (San Gabriel 378+50)	30.18	4000	36.5	146,000	3.35	10.93	3.26	

PERCOLATION MEASUREMENTS

Rio Hondo River
Creek
Wash

January 16, 17-18 19 34

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
11:00 A.M.	Sta. 0+00-Santa Fe R.R. Bridge	148.54							January 16th.
2:10 P.M.	Sta 50+00-5000' below Santa Fe R.R.	126.37	5000	88.6	442,750	10.16	22.17	2.18	
5:20 P.M.	Sta. 90+00-9000' below, Santa Fe R.R.	105.86	4000	110.75	443,000	10.17	20.51	2.02	
11:20 A.M.	Sta. 90+00-9000' below Santa Fe R.R.	105.29	3500	107.9	377,750	8.67	16.05	1.85	January 17th.
3:20 P.M.	Sta. 125+00-12500' below Santa Fe R.R. About 1000' above Arrow Hwy.	89.24							
12:00 Noon	Sta. 125+00-12500' below Santa Fe R.R. about 1000' above Arrow Hwy.	85.46							January 18th.
	(Outflow to San Gabriel River) (just below Station 125+00)	41.11							
	Flow remaining in Rio Hondo	44.35							
4:35 P.M.	Station 165+60-3060' below Arrow Highway	27.44	4060	62.22	252,560	5.80	16.91	2.92	

Measurements were also taken on the branch of the Rio Hondo which leaves the main stream at Station 125+00 and enters the San Gabriel River at Station (170+00-Rio Hondo Stationing) or (378+50-San Gabriel Stationing)

PERCOLATION MEASUREMENTS

Rio Hondo River
Creek
Wash

January 18 19 34

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
9:05 A.M.	Station 165+60-3060' below Arrow Highway	35.57	4440	86.0	381,900	8.78	22.74	2.59	
10:15 A.M.	Sta. 210+00-7500' below Arrow Highway	12.83	9200	44.5	408,800	9.38	10.63	1.13	
12:10 P.M.	Station 302+00-(Lower Anasa Rd) Bridge	2.20							

PERCOLATION MEASUREMENTS

Rio Hondo ^{River} ~~Creek~~ ~~Wash~~ January 27, 1934

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
8:35 A.M.	0+00-Santa Fe R.R. Bridge	133.85	5000	76.9	384,500	8.83	5.16	.58	
9:45 A.M.	Sta.50+00-5000' below Santa Fe R.R.	128.69							
11:24 A.M.	{ Sta.125+00-12,500' below Santa Fe R.R. } { Stream splits into E&W branches }	51.72 55.66	7500	105.4	790,250	18.14	21.51	1.17	
	Total flow	107.38							
1:00 P.M.	Sta.165+60 Main Stream Rio Hondo	54.83	8060	51.5	415,400	9.54	16.13	1.69	
1:20 P.M.	Sta.170+00-E.Br.-At point of confluence with San Gabriel R.	36.42 91.25							
2:00 P.M.	Sta.210+00-7500' below Arrow Highway	40.84	4440	94.4	418,900	9.62	13.99	1.45	
3:20 P.M.	Sta.302+00(Lower Azusa Rd.Br.)	24.95	9200	78.1	718,200	16.49	15.89	0.96	
4:15 P.M.	Sta.372+00(Valley Blvd.Bridge)	12.19	7000	57.5	402,600	9.24	12.76	1.38	
						71.86	85.24	1.19	

PERCOLATION MEASUREMENTS

RIVER ~~CREEK~~ ~~WASH~~ San Gabriel and Rio Hondo January 4, 1934

Time	Location	disch in sec. ft.	Length of reach in ft.	aver. width of reach in ft.	area in sq.ft.	area in acres	Loss in reach in sec.ft.	Loss in Sec.Ft. per acre wetted area	Remarks
10:10 A.M.	Mouth of Canyon(U-S)	258.98							
11:05 A.M.	Diversion Tunnel San Gabriel Spreading Grounds	18.20							
10:50 A.M.	Rogers Cr. at San Gabriel R.	8.88					73.46		
2:05 P.M.	Fish Cr. at San Gabriel R.	3.22							
3:00 P.M.	San Gabriel R. at Foothill Blvd.	179.42					153.79		
4:50 P.M.	Rio Hondo at Lower Azusa Rd. San Gabriel at El Monte Av.	25.63 Dry							
	Total Flow	25.63							

PERCOLATION MEASUREMENTS

Rio Hondo ^{River} ~~Creek~~ ~~Wash~~ January 30, 1934

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
8:45 A.M.	Sta. 0+00-Santa Fe R.R. Bridge	164.55							
11:30 A.M.	Sta.125+00-12500' below Santa Fe R.R. W. Branch E. Branch	81.63 63.21 144.84	12500	114.2	1,427,500	32.8	19.71	0.60	
	The following measurements are taken on the branch at the Rio Hondo which leaves the main stream at Station 125+00(1000' above Arrow Highway) and enters the San Gabriel River at Station 170+00.								
9:15 A.M.	Sta.125+00-1000' above Arrow Highway	57.29							
9:30 A.M.	Sta.125+00-Flow Renters Rio Hondo	5.84 51.45							
10:15 A.M.	{ Rio Hondo } = { San Gabriel R. } { Sta.170+00 } = { 378+50 }	44.20	4500	36.7	165,000	3.79	7.25	1.91	

PERCOLATION MEASUREMENTS

RIVER ~~CREEK~~ ~~WASH~~ San Gabriel and Rio Hondo January 5, 1934

Time	Location	disch in sec. ft.	Length of reach in ft.	aver. width of reach in ft.	area in sq.ft.	area in acres	Loss in reach in sec.ft.	Loss in Sec.Ft. per acre wetted area	Remarks
10:15 A.M.	San Gabriel(Mouth Canyon - U-S)	138.32							
9:50 A.M.	Diversion Tunnel to San Gabriel Spreading Grounds	6.30							
	Rogers Cr. at San Gabriel R.	8.00							
	Fish Cr at San Gabriel R.	3.00						54.46	
11:35 A.M.	San Gabriel R. at Foothill Blvd.	88.56						85.9	
1:40 P.M.	Rio Hondo at Lower Azusa Rd.	2.66							
12:05 P.M.	San Gabriel at El Monte Ave.	Dry							
	Total Flow	2.66						33.90	
3:25 P.M.	Rio Hondo at Mission Bridge	36.56							
3:45 P.M.	San Gabriel at Valley Blvd	Dry							
	Total Flow	36.56							

350

RIVER
San Gabriel and Rio Hondo CREEK
WASH

PERCOLATION MEASUREMENTS

January 12, 19 34

Time	Location	Disch. in sec. Ft.	Length of reach in ft.	Aver. width of reach in ft.	Area in sq. ft.	Area in acres	Loss in reach in sec. ft.	Loss in Sec. Ft. per acre wetted area	Remarks
9:50 A. M.	Foothill Blvd- (San Gabriel R.)	137.89							
10:35 A.M.	El Monte Ave (San Gabriel R.) Est	2.0					116.68		
11:10 A.M.	Lower Azusa Rd. (Rio Hondo)	19.21							
	Total flow	21.21							

SAN GABRIEL River
Creek
Wash

PERCOLATION MEASUREMENTS

January 24, 19 33

Time	Location	Disch. in Sec. Ft.	Length of Reach	Aver. Width of Reach	Area in Sq. Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec. Ft. Per Acre Wetted Area	Remarks
8:30 AM	600' Above Foothill Blvd.	87.65							
9:45 AM	Above Split	78.83	3400	54.7	185980	4.27	-8.82	2.07	
9:45 AM	Below Split	27.47	7600	26.0	197600	4.54	-2.84	.63	
11:00 AM	Gladstone Power Line	24.63	8800	32.0	281600	6.46	-1.81	.28	
12:15 PM	E. W. Line	22.82	6200	34.8	215760	4.95	-7.90	1.60	
1:30 PM	Lower Azusa Rd.	14.92	6100	26.0	158600	3.64	-14.92	4.10	
3:00 PM	End of Percolation	0.00							
						23.86	-36.29	1.52	

351

SAN GABRIEL RIVER River
Creek
Wash

PERCOLATION MEASUREMENTS

January 23, 19 33

Time	Location	Disch. in Sec. Ft.	Length of Reach	Aver. Width of Reach	Area in Sq. Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec. Ft. Per Acre Wetted Area	Remarks
9:20 AM	0+00 at Mouth of Rogers Creek	114.0							
	Inflow above 25+00	1.6							
	Total	115.6	2500'	72	180000	4.1	-16.4	4.0	
10:30 AM	25+00	99.2							
	52+40 Power Line x River		3070'	80	245600	5.6	+8.8		
12:00 M	55+70	108.0							
		88.7	2500'	64	160,000	3.7	-19.3	5.21	
2:15 PM	80+00		2600'	76	197600	4.55	+3.5		
3:20 PM	106+00	92.2							

SAN GABRIEL River
Creek
Wash

PERCOLATION MEASUREMENTS

January 26, 19 33

Time	Location	Disch. in Sec. Ft.	Length of Reach	Aver. Width of Reach	Area in Sq. Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec. Ft. Per Acre Wetted Area	Remarks
8:47 AM	Sta. 3+00 = 300' below Foothill Blvd.	30.72	2200	21	46200	1.06	-8.06	7.61	
10:00 AM	Sta. 25+00 = Santa Fe R.R. Bridge	22.66							
	Rio Hondo Outflow	13.23							
10:00 AM	Sta. 25+00 Minus Rio Hondo Outflow	9.43							
2:25 PM	Sta. 55+00	4.96	3000	19	57000	1.31	-4.47	3.41	
3:30 PM	Sta. 93+00	4.04	3800	28	106400	2.45	-9.92	.38	
4:00 PM	Sta. 123+00	4.37	3000	25	75000	1.71	+3.33		
4:30 PM	Sta. 178+00	0.72	5500	24	132000	3.03	-3.65	1.21	
	Sta. 193+00	0.0	1500	8	12000	.275	-0.72	2.62	

352

PERCOLATION MEASUREMENTS

SAN GABRIEL River
Creek
Wash
January 27, 19 33

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
10:30 AM	Sta. 3+00 (300' below Foothill Blvd.)	11.43	2500	28	70000	1.60	-6.02	3.76	
11:10 AM	Sta. 28+00 below Santa Fe R.R. Rio Hondo Outflow	5.41 -2.36							
	Sta. 26+00 Minus Rio Hondo Outflow	3.03	2000	18	36000	.826	-1.72	2.08	
12:15 PM	Sta. 48+00	1.31	3500	11	38500	.884	-0.48	0.54	
2:30 PM	Sta. 83+00	0.83	4500	15	67500	1.55	-0.01	.006	
4:30 PM	Sta. 128+00	0.82	2000	10	20000	.459	0.82	1.78	
5:00 PM	Sta. 148+00	0.0							

PERCOLATION MEASUREMENTS

SAN GABRIEL River
Creek
Wash
February 1, 19 33

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
9:30 AM	Beverly Blvd. Bridge = Station 0+00 250' above Beverly Blvd. Bridge	23.01	2850	66.3	188950	4.338	-4.16	.96	
10:42 AM	Santa Fe R. R. Bridge = Station 3+00 Station 26+0	18.85							
	Whittier Blvd. Bridge = Station 35+63		1800	40.3	72540	1.665	-7.96	4.78	
11:35 AM	Station 44+0	10.89	2390	30.6	73134	1.679	-7.85	4.31	
12:25 PM	Station 67+90 Dunlap Crossing = Sta. 74+100	3.64	2640	21.5	56760	1.303	-2.72	2.09	
1:00 PM	Station 94+30 Power line across River, Station 108+60	0.92	1770	9.1	16107	.370	- .92	2.49	
1:50 PM	Station 112+0	0.00							
						9.355	-23.01	2.46	

PERCOLATION MEASUREMENTS

SAN GABRIEL River
Creek
Wash
January 28, 19 33

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
11:45 AM	Sta. 3+0 - 300' below Foothill Blvd.	12.65	2300	25	57500	1.32	-5.35	4.06	
	Sta. 26+00 Santa Fe R. R.	7.28							
	Sta. 27+00 Rio Hondo Outflow	-2.76							
	Sta. 26+00 Minus Rio Hondo Outflow	4.52	2400	17	40800	.935	-1.94	2.08	
	Sta. 50+00	2.58	5000	13	65000	1.49	-0.33	.22	
	Sta. 100+00	2.25	5000	18	90000	2.07	-0.26	.13	
5:45 PM	Sta. 150+00 - 1000' below Arrow Highway	1.99							

PERCOLATION MEASUREMENTS

SAN GABRIEL River
Creek
Wash
February 2, 19 33

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
9:30 AM	Sta. 0+0 Below Committee of 9 Div. Tunnel-Mouth of Cn.	58.8	2500	52	130000	2.98	-3.79	1.27	
11:00 AM	Sta. 23+40 Inflow-Rogers Cr.	4.20							
	Total	63.0							
11:30 AM	Sta. 25+00	59.21							
	Sta. 51+00 Pipe Line Inflow	1.88							
	Total	61.09	4100	65	266500	6.12	-7.26	1.19	
1:40 PM	Sta. 66+00	53.83	2900	72	208800	4.79	-9.15	1.9	
2:50 PM	Sta. 95+00	44.68							
	Sta. 144+00 Fish Creek Inflow	.75							
	Total	45.43	5000	72	360000	8.26	-8.45	1.03	
3:55 PM	Sta. 145+00 - 100' Above P. E. RR.	36.98	2700	50	135000	3.10	-6.04	1.95	
5:05 PM	Sta. 172+00 - 300' Below Foothill Blvd.	30.94							
						25.25	34.69	1.37	

353

PERCOLATION MEASUREMENTS

SAN GABRIEL River
Creek
Wash

February 3, 19 33

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
9:05 AM	Sta. 0+0 below Committee of 9 Tunnel Diversion	48.95							
10:15 AM	Sta. 23+40 Rogers Creek Inflow	3.35							
	Sta. 0+0 Plus Rogers Creek	52.30	2500				-2.45		
10:45 AM	Sta. 25+0	49.85							
11:45 AM	Sta. 51+0 Pipeline over flow Inflow	1.86							
	Sta. 25+0 Plus Pipeline Inflow	51.71	4100				-4.01		
12:35 PM	Sta. 66+0	47.70							
			2900				-11.90		
1:45 PM	Sta. 95+0	35.80							
			5000				-8.58		
2:50 PM	Sta. 145+0	26.92							
			2700				-8.16		
3:35 PM	Sta. 172+0 - Foothill Blvd.	18.76							

PERCOLATION MEASUREMENTS

SAN GABRIEL River
Creek
Wash

FEBRUARY 23, 19 33

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
9:34 AM	Foothill Blvd. Sta. 3+00	13.36							
10:05 AM	Sta. 0+40, Outflow (Rio Hondo)	1.74	2875	45	129375	2.97	-3.57	1.20	
10:20 AM	S.G. Overflow-Sta. 32+25 (To Rio Hondo)	1.12							
10:35 AM	Sta. 31+75	6.93	2560	24	61440	1.41	-.77	.55	
11:00 AM	Sta. 57+35	6.16	2705	15	40575	.93	-.92	.99	
11:30 AM	Sta. 84+40	5.24	4810	24	115440	2.65	-.62	.83	
12:36 PM	Sta. 132+50	4.62	3150	19	59850	1.37	-2.46	1.80	
2:25 PM	Sta. 164+00	2.16	2600	19	49400	1.13	-.78	.69	
3:15 PM	Sta. 190+90	1.38	5300	8.75	46385	1.06	-1.38	1.30	
4:10 PM	Sta. 243+00	0.0							

PERCOLATION MEASUREMENTS

SAN GABRIEL River
Creek
Wash

FEBRUARY 21, 19 33

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
	Foothill Blvd.-Gaging Sta. Gable 3+00	61.31							
11:03 AM	Rio Hondo at Santa Fe Br. Sta. 28+00	25.37							
12:05 PM	Sta. 31+75 - San Gabriel	26.77							
11:28 AM	Outflow into Rio Hondo Sta. 32+25	4.85							
	Remaining Flow in San Gabriel River	21.92	2560	28	71680	1.65	+2.17		
1:22 PM	Sta. 57+35	24.09	2705	20	54100	1.24	-1.75	1.4	
2:20 PM	Sta. 84+40	22.34	4085	40	163400	3.75	-.01	.003	
3:50 PM	Sta. 125+25	22.33	585	17	9945	.228	-10.49	46.0	
4:12 PM	Sta. 131+10	11.84	3290	33	108570	2.5	+8.82		
5:15 PM	Sta. 164+00	20.66							

PERCOLATION MEASUREMENTS

SAN GABRIEL River
Creek
Wash

February 24, 19 33

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
9:00 AM	Sta. 0+00 - Channels #1 & #2	18.95							
	Inflow from Rogers Creek, at Sta. 23+40. Est.-	.50							
10:00 AM	Sta. 36+50 Inflow from Pipe Line at Est.-	23.83						+4.38	
		1.60							
10:45 AM		19.71							
12:20 PM	A Creek at	5.65							
12:35 PM	P. E. ...	17.89						-7.47	
1:45 PM	Foothill Blvd & Br.-Sta. 172+00 (Sta. 3+00 of previous measurements)	15.37						-2.52	

PERCOLATION MEASUREMENTS

San Gabriel River
Creek
Wash

January 2, 1934

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
1:45 P.M.	350' above Beverly Blvd.	61.21							
2:17 P.M.	50' below Whittier Blvd.	45.95	3900	60	234,000	5.37	15.26	2.84	
3:05 P.M.	100' above Dunlap Cross Rd.	31.84	3700	58	214,600	4.93	14.11	2.86	
3:30 P.M.	50' above Santa Fe	17.06	8150	42	342,300	7.86	14.78	1.86	
3:55 P.M.	Telegraph Rd	4.99	6850	20	137,000	3.15	12.07	3.83	
4:25 P.M.	200' below Easy St	2.67	6200	6	37,200	.85	0	0	
						23.51	58.54	2.49	

Note: Gradually falling stage of river. Mean widths estimated from those of Slaughter made 1/3/34.

PERCOLATION MEASUREMENTS

San Gabriel RIVER
CREEK
WASH

January 4, 1934

Time	Location	disch in sec. ft.	Length of reach in ft.	aver. width of reach in ft.	area in sq.ft.	area in acres	Loss in reach in sec.ft.	Loss in Sec.Ft. per acre wetted area	Remarks
9:07 A.M.	500' above Santa heading	42.38							
9:50 A.M.	350' above Beverly Blvd.	33.56	3050	60	183,000	4.20	8.82	2.10	
10:18 A.M.	65' below Whittier Blvd.	20.29	3950	60	237,000	5.44	13.27	2.44	
11:00 A.M.	100' above Dunlap Crossing Rd.	11.26	3700	55	203,500	4.67	9.03	1.93	
11:25 A.M.	At Santa Fe R.R. Bridge	.87	8150	30	244,500	5.61	10.39	1.85	
12:00 Noon	Between Santa Fe & Telegraph Rd.	0	3000	10	30,000	.69	.87	1.26	
						20.61	42.38	2.06	
	Average widths estimated from Slaughter's measurement of 1/3/34								

PERCOLATION MEASUREMENTS

San Gabriel River
Creek
Wash

January 3, 1934

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
12:40 P.M.	350' Above Beverly Blvd.	39.09							
1:20 P.M.	50' Below Whittier Blvd.	29.38	3963	60	237780	5.46	9.76	1.79	
1:30 P.M.	Banta Ditch	0.01	3737	57.5	214877	4.93	13.97	2.83	
2:10 P.M.	60' Above Dunlap King Road	15.37		30			14.70		
2:35 P.M.	30' Above Santa Fe R.R. E. of River	.67		10			0.67		
3:00 P.M.	500' Above Telegraph Road	0							
	Length of reach taken from former measurements.								

PERCOLATION MEASUREMENTS

San Gabriel River
Creek
Wash

January 5, 1934

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
9:15 A.M.	Mouth of Canyon U-8	213.56							
11:30 A.M.	Diversion Tunnel to San Gabriel Spreading Grounds Rogers Cr at San Gabriel Est	13.69							
12:20 P.M.	Feothill Blvd.	141.50					63.37		

PERCOLATION MEASUREMENTS

San Gabriel RIVER
CREEK
WASH

January 10, 1934

Time	Location	disch in sec. ft.	Length of reach in ft.	aver. width of reach in ft.	area in sq.ft.	area in acres	Loss in reach in sec.ft.	Loss in Sec.Ft. per acre wetted area	Remarks
9:35 A.M.	Mouth of Canyon (0+00) U.S.G.S. Recorder Station	214.62							
10:00 A.M.	Diversion Tunnel-Open(Outflow)	15.29							
		199.33	2000	91.4	182,600	4.20	-13.10	-3.12	
11:10 A.M.	Sta. 20+00 (Road Crossing 2000' below recorder Station)	186.23							

355

PERCOLATION MEASUREMENTS

San Gabriel River
Creek
Reach
January 16, 1934

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
9:40 A.M.	Sta. 186+00(Foothill Blvd Bridge)	150.31							
11:00 A.M.	Sta. 209+00(Santa Fe R.R. Bridge)	149.90	2300	56.7	130,450	2.99	.41	.14	
STREAM SPLITS AT THIS POINT(GREATER PART OF FLOW ENTERS RIO HONDO)									
11:20 A.M.	Sta. 211+00(200' below Santa Fe R.R.)	1.36	3300	13.3	44,000	1.01	.10	.10	
1:10 P.M.	Sta. 244+00-3500' below Santa Fe R.R.	1.26	3720	12.2	45,360	1.04	.29	.28	
2:25 P.M.	Sta. 292+00-7220' below Santa Fe R.R.	.97	1530	14.1	21,555	.49	.42	.86	
2:45 P.M.	Sta. 296+50-8750' below Santa Fe R.R. Inflow from Rio Hondo	.55 .06	4619	14.5	67,196	1.54	.19	.012	
4:55 P.M.	Sta. 342+69-13,669' below Santa Fe R.R.-Near Arrow Hwy	.42							

PERCOLATION MEASUREMENTS

San Gabriel River
Creek
Reach
January 27, 1934

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
7:20 A.M.	Sta. 186+00(Foothill Blvd.Br)	141.13							
8:35 A.M.	Sta. 211+00(Outflow to Rio Hondo)200' below Santa Fe R.R. Bridge	133.85	2500	61.2	153,000	3.51	6.62	1.89	
8:25 A.M.	Remaining flow in San Gab.R	.66							
	Total Flow	134.51							
San Gabriel River dry, down to the point of inflow of the West branch at the Rio Hondo at Station 378+50 (Below Arrow Highway)									
1:20 P.M.	Sta. 378+50(Inflow from Rio Hondo)	36.42	3516	35.4	124,600	2.86	4.20	1.47	
2:00 P.M.	Sta. 413+66-7306' below Arrow Highway	32.22	3534	51.8	182,915	4.20	2.30	.55	
2:45 P.M.	Sta. 449+00-10840' below Arrow Highway	29.92	4400	46.4	204,300	4.69	13.64	2.91	
3:55 P.M.	Sta. 493+00(El Monte Ave.Br.)	16.28							

PERCOLATION MEASUREMENTS

San Gabriel River
Creek
Reach
January 17, 1934

Time	Location	Disch. in Sec.Ft.	Length of Reach	Aver. Width of Reach	Area in Sq.Ft.	Area in Acres	Loss in Reach in Sec. Ft.	Loss in Sec.Ft. Per Acre Wetted Area	Remarks
10:15 A.M.	Sta. 342+69-15669' Below Foothill Blvd Bridge (Near Arrow Hwy.)	.40							
11:15 A.M.	Sta. 380+00-19,400' Below Foothill Boulevard	.07	3731	9.8	36,572	.84	.33	.39	
11:05 A.M.	Inflow from Rio Hondo	17.72							
	Total Flow	17.79	470	31.8	14,920	.34	.99	2.91	
12:10 P.M.	Sta. 384+70-19,870' Below Foothill Blvd.	16.8							
11:50 A.M.	Inflow from Rio Hondo	.67							
	Total Flow	17.47	2896	28.6	83,036	1.91	3.73	1.95	
1:35 P.M.	Sta. 413+66-22,766' Below Foothill Blvd.	13.74	3534	40.0	141,472	3.25	3.5	1.08	
2:35 P.M.	Sta. 449+00-26,300' Below Foothill Blvd.	10.24	4400	39.5	173,700	3.99	1.77	.44	
3:50 P.M.	Sta. 493+00-(El Monte Blvd Bridge)	8.47							

PERCOLATION MEASUREMENTS

San Gabriel RIVER
Reach
January 30, 1934

Time	Location	disch in sec. ft.	Length of reach in ft.	aver. width of reach in ft.	area in sq.ft.	area in acres	Loss in reach in sec.ft.	Loss in Sec.Ft. per acre wetted area	Remarks
7:05 A.M.	Sta. 186+00-Foothill Blvd.	179.70	2500	67.4	168,500	3.87	12.21	3.16	
8:45 A.M.	Sta. 211+00 Rio Hondo Split-200' below Santa Fe R.R. Bridge	164.55							
	San Gab R at Sta. 211+00	2.94							
	Total at Split	167.49							
10:15 A.M.	Sta. 378+50-3790' below Arrow Hwy-Inflow	44.20							
10:25 A.M.	Sta. 378+50-3790' below Arrow Hwy-Inflow	.73							
	Total Flow(SanGab R)	44.93	7050	48.1	338,825	7.78	4.30	.55	
11:45 A.M.	Sta 449+00-10840' Below Arrow Hwy	40.63	4400	59.5	261,700	6.01	11.27	1.87	
1:30 P.M.	Sta 493+00(El Monte Ave. Bridge)	29.36							

RIVER
CREEK
WASH

PERCOLATION MEASUREMENTS

San Gabriel

March 23, 1934

Time	Location	disch in sec. ft.	Length of reach in ft.	aver. width of reach in ft.	area in sq. ft.	area in acres	Loss in reach in sec. ft.	Loss in Sec. Ft. per acre wetter area	Remarks
10:30 A.M.	Sta. 11+00-200' below Asusa-Duarte Tunnel Diversions	9.16	2600				1.13		
11:35 A.M.	Sta. 37+00-2600' below Asusa-Duarte Tunnel Diversions	8.03							
11:45 A.M.	Sta. 62+00-Inflow from Duarte Ditch Overflow	.10 8.13							
12:01 P.M.	Sta. 64+00-5300' below Asusa Tunnel Diver- sion	5.33	2700				2.60		
12:15 P.M.	7950' below Asusa- Duarte Tunnel Diver- sion (Sta. 90+50) Inflow from Pasadena Pipe Line.	.44							
12:35 P.M.	Sta. 64+00 plus Sta. 90+50 Inflow	5.77	2900				2.85		
	Sta. 93+00-8200' below Asusa-Duarte Tunnel Bank Seepage (Sta. 100 +00) Est. 0.05	2.92	1300				0.31		

RIVER
CREEK
WASH

PERCOLATION MEASUREMENTS

San Gabriel

March 23, 1934

Time	Location	disch in sec. ft.	Length of reach in ft.	aver. width of reach in ft.	area in sq. ft.	area in acres	Loss in reach in sec. ft.	Loss in Sec. Ft. per acre wetter area	Remarks
1:05 P.M.	Sta. 106+00-9500' be- low Asusa Duarte Tunnel Diversions	2.61	1400				0.61		
1:30 P.M.	Sta. 120+00-10,900' below Asusa Duarte Tunnel Diversions	2.00							
1:50 P.M.	Sta. 152+00-Rising Water inflow from Fish Cr-2900' above Foothill Blvd.	1.28							
2:00 P.M.	Sta. 120+00 Plus 152+00	3.28							
2:30 P.M.	Sta. 153+00-2800' above Foothill Blvd	2.32	2600				1.64		
3:30 P.M.	Sta. 179+00-200' above Foothill Blvd.	0.68							

RIVER
CREEK
WASH

PERCOLATION MEASUREMENTS

San Dimas

March 7, 1934

Time	Location	disch in sec. ft.	Length of reach in ft.	aver. width of reach in ft.	area in sq. ft.	area in acres	Loss in reach in sec. ft.	Loss in Sec. Ft. per acre wetter area	Remarks
12:30 P.M.	1/4mi. above Grand Ave	3.37	4300	8.3	35690	.82	2.58	3.15	
1:30 P.M.	Ben Lomond Ave	.79	1700	4.6	7820	.18	.79	4.39	
2:00 P.M.	1700' below Ben Lomond Ave	.00							
3:45 P.M.	200' below U.S.G.S. Sta. at Mouth of Can.	.92	1800	7.5	13500	.31	.44	1.42	
4:15 P.M.	At Gravel Pit 1/4mi. below Mouth of Can.	.48							.48cfs flowing into Gravel Pit Approx 150'x200'