STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF WATER RESOURCES

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EARL WARREN, Governor

FRANK B. DURKEE, Director of Public Works

A. D. EDMONSTON, State Engineer

REPORT ON WATERMASTER SERVICE IN SHASTA RIVER WATERMASTER SERVICE AREA

Siskiyou County, California

1952 SEASON

Sacramento, California
March, 1953

SUBMISSION TO, AND ADOPTION BY
DEPARTMENT OF PUBLIC WORKS

I, L. C. Jopson, Supervising Hydraulic Engineer, Division of Water Resources, Department of Public Works of the State of California, submit this "Report on Watermaster Service in Shasta River Watermaster Service Area, Siskiyou County, California, 1952 Season".

/s/ L. C. JOPSON
Supervising Hydraulic Engineer

I, Harrison Smitherum, Supervising Hydraulic Engineer, Division of Water Resources, Department of Public Works of the State of California, approve this "Report on Watermaster Service in Shasta River Watermaster Service Area, Siskiyou County, California, 1952 Season".

/s/ HARRISON SMITHERUM
Supervising Hydraulic Engineer

I, A. D. Edmonston, State Engineer and Chief of the Division of Water Resources, Department of Public Works of the State of California, approve and adopt this "Report on Watermaster Service in Shasta River Watermaster Service Area, Siskiyou County, California, 1952 Season", as a report of the Department of Public Works.

WITNESS my hand and the seal of the Department of Public Works of the State of California, this 27th day of March, 1953.

DEPARTMENT OF PUBLIC WORKS
STATE OF CALIFORNIA

By /s/ A. D. EDMONSTON
A. D. Edmonston
State Engineer

(SEAL)

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INTRODUCTION

This is the nineteenth annual report on watermaster service in the Shasta River Watermaster Service Area, and covers the period of water distribution in 1952 beginning on April 1 and terminating on September 30.

The service area was created by order of the Division of Water Resources on March 1, 1933, to include, with certain exceptions, all the water rights determined in the decree entered in the Shasta River Adjudication proceeding on December 30, 1932, Superior Court, Siskiyou County, No. 7035. The service area was changed by order of December 30, 1935 to exclude the water rights on Willow Creek and its tributaries. Watermaster service has been provided during each irrigation season since the service area was created and annual reports prepared to show the work accomplished during each season.

The report is presented herein under four headings as follows: Introduction, Water Supply, Distribution of Water, and Changes in Ownership of Lands and Water Rights. Following the text are tables presenting precipitation data at Yreka and water supply records at various locations within the area.

WATER SUPPLY

Precipitation

Data on precipitation, as compiled from observations made by the United States Weather Bureau at Yreka, are presented in Table 1. Precipitation for the period from October 1, 1951 to September 30, 1952 was 139 per cent of the normal.

Snow Surveys

Data on water content of snow at four representative snow courses on or near the Shasta River stream system as set forth in the bulletin "Water Conditions in California as of April 1, 1952" are presented below:

Snow Course	Elevation	Water Content of Snow: 62-year Mean	Water Content of Snow: 1952	Per cent of Mean
Parks Creek	6,500	33.3	57.5	173
Sweetwater	5,500	24.4	30.0	124
Mt. Shasta	8,000	56.0	68.3	122
N. Fk. Sacramento	6,800	23.4	39.1	167

Average water content of the snow pack on April 1, 1952 was about 146 per cent of the combined normal for the courses.

Stream Flow

Stream flow measuring stations equipped with water-stage recorders were maintained during the period of watermaster service on Shasta River above the Edson-Foulke Ireka Ditch, at Edgewood Bridge and near Montague; on Parks Creek above the Duke North Ditch and the 8-foot weir above the Robertson ranch; and on Little Shasta River above the Harp Ditch. Records of discharge at these stations are presented in Tables 2 through 7.

Intermittent measurements were made of the flows of Carrick and Cleland Springs and are recorded in Tables 8 and 9, respectively.

DISTRIBUTION OF WATER

Distribution of water during the 1952 irrigation season was in accordance with the decree entered in the Shasta River Adjudication proceedings and with various agreements and practices developed over the period of watermaster service.

To supplement the water supply records referred to under "Stream Flow" and to maintain close observation of diversions and use, thirteen additional water stage recorders were installed at critical points on streams and diversion conduits as follows:

Beaughan Creek below Long-Bell Mill Pond	(2' - Parshall Flume)
Beaughan Creek above Jackson Ditch	(8' - Rectangular Weir)
Boles Creek below Lower Knox Ditch	(4' - Rectangular Weir)
Carrick Creek at Highway 97	(3' - Rectangular Weir)
Carrick Creek above Upper Jackson Ditch	(4' - Rectangular Weir)
Lake Dwinnell Reservoir in Outlet Tower	
Soule Ditch at Head	(4' - Rectangular Weir)
Waters and Kirsch Ditch at Head	(4' - Rectangular Weir)
Quigley No. 3 Take-out	(4' - Rectangular Weir)
White Mountain Ranch Take-out	(4' - Rectangular Weir)
M.W.C.D. Bypass Canal from Parks Creek	
M.W.C.D. Shasta River Canal - Parshall Flume #1	(10' - Parshall Flume)
Big Springs Lake at B.S.I.D. Pumping Station	

Having a continuous record of discharge at the various stations made possible a high decree of efficiency in distributing the available water supply in the various sections of the stream system. A description of the results obtained in each of the sections into which the stream system naturally divides follows:

Shasta River above Junction with Boles Creek

The available water supply in this section of the stream is the summation of the flow of Shasta River above the Edson-Foulke Yreka Ditch as set forth in Table 2 and the combined discharge of the Hammond-Scott and Dow Eddy

Creek Ditches diverting from Eddy Creek. During the 1952 season, there was ample water to satisfy all irrigation demands until about July 25. Thereafter a shortage of water occurred throughout the section and diversion was reduced below requirements on all ditches. A summary of the distribution for the 1952 season is set forth in the following tabulation.

Month	Average Available Water Supply c.f.s.	Distribution in Per Cent of Allotments		
		Hammond-Scott	Foulke, et al.	Dow
April	158.6	100	100	100
May	156.2	100	100	* 60
June	102.1	100	100	100
July	52.0	56	97	77
August	17.3	45	46	0
September	9.7	49	24	0

* Sufficient water available for diversion but full allotment not diverted.

Shasta River below Junction with Boles Creek and Boles Creek

The water supply in this section was sufficient to satisfy all priorities having direct flow rights, including the Montague Water Conservation District, until about July 21. Thereafter, by eliminating the users below the Mills ranch and distributing the water on an equal and correlative basis, all users down to and including the Mills ranch received an average of 100 per cent of allotments until about August 31. During the period from August 31 to September 11 an average of about 80 per cent of allotments was delivered to all diversions in this area except the Alexander Ditch which received 0.40 cubic foot per second of water for stockwatering purposes only. Subsequent to September 11 an average of 100 per cent of allotments was again delivered to all rights except those of the Montague Water Conservation District.

The daily discharge of Shasta River at Edgewood Bridge, which is water available to the Mills Ranch and the Montague Water Conservation District, is set forth in Table 5.

Shasta River below Lake Dwinnell Reservoir

Watermaster service on this section of the stream system involves the operation of the Montague Water Conservation District's Lake Dwinnell Reservoir during the irrigation season. The watermaster, in cooperation with the district, exercises control over deliveries from the reservoir to the district and to certain natural flow water right owners below the reservoir.

Deliveries to the water right owners below the reservoir are made in accordance with agreements between the district and the several water owners. These agreements specify the amount of water to be released to the respective owners in lieu of their natural flow rights. In general, each agreement sets forth the total acre-feet measured at the heads of the respective ditches, to which the water right owner is entitled and provides that delivery from the reservoir shall be made upon demand of the water user. All releases from the reservoir are subject to the control of the watermaster who regulates the discharge from the reservoir in accordance with the requirements of the district and the requests received from the owners of the "in lieu" rights. Rediversion of the "in lieu" water by the natural flow owners below the reservoir is also regulated. Operation of the reservoir by the watermaster resulted in an orderly release of the water to the advantage of both the district and the "in lieu" owners.

Delivery of water to the district commenced on April 18 and continued throughout the season. Deliveries to the "in lieu" rights were made as requested. There was about 11,350 acre-feet of water remaining in storage on September 30.

Statistical data on the operation of the reservoir during the 1951 season is set forth in the following tabulations:

Date	Storage on Hand Ac. Ft.	Change in Storage Ac. Ft.	Inflow to Reservoir Ac. Ft.	Total Draft Ac. Ft.	Measured Release Ac. Ft.	Seepage and Evaporation Loss Ac. Ft.
April 1	21,010	+ 4,324	10,260	6,036	1,309	4,727
May 1	25,334	+ 3,342	11,610	8,268	2,913	5,355
June 1	28,676	- 480	7,698	8,178	2,280	5,898
July 1	28,196	- 7,354	2,098	9,452	4,172	5,280
Aug. 1	20,842	- 6,822	46	6,868	3,970	2,898
Sept. 1	14,020	- 2,670	0	2,670	1,095	1,575
Sept. 30	11,350					
Total			31,712	41,472	14,739	25,733

DELIVERIES TO OWNERS OF "IN LIEU" RIGHTS

Name of Water Right Owner	Allotment as per agreement Acre-feet	Amount Delivered from Lake Dwinnell Reservoir	
		Acre-feet	Per cent of allotment
Fred Quigley	198	198	100
John Soule	692	240	35
J. E. Kirch			
K. K. Waters and Emily S. Waters	696	672**	98**
John W. Taylor	1,200	1,200	100
Clarence Reed and Margaret R. Reed	596	0*	0*
Total	3,382	2,310	67

* Supplied by seepage from reservoir.
** Does not include water delivered between October 1 and October 12.

SUMMARY OF DELIVERIES
FROM LAKE DWINNELL RESERVOIR

Month	Measured Release acre-feet	Deliveries to "In Lieu" Rights acre-feet	Deliveries to M.W.C.D. Canal acre-feet
April	1,309	301	1,008
May	2,913	425	2,488
June	2,280	382	1,898
July	4,172	429	3,743
August	3,970	369	3,601
Sept.	1,095	407	688
Total	15,739	2,313	13,426

Additional data pertaining to Lake Dwinell Reservoir are contained in Tables 11 and 12.

Beaughan Creek

One measurement was made during the 1952 season at the 8-foot rectangular weir (Long-Bell Upper Weir) located at the head of Beaughan Creek. The results are given below:

Date	Gage Height - feet	Discharge - c.f.s.
7-14-52	0.37	5.90

This amount of water is sufficient to supply approximately 71 per cent of the second priority allotments of 8.28 cubic feet per second. Distribution was made on that basis throughout the 1952 season.

The Long-Bell Lumber Company diverts practically the entire flow of Beaughan Creek, including the downstream users' share of the available water for industrial use at its sawmill. After such use, the downstream users' share of the water, which is equivalent to 65 per cent of the measured

flow at the Long-Bell Upper Weir, is returned to Beaughan Creek below the Long-Bell Mill Pond. During the 1952 season the amount of water returned to the creek under this arrangement was in excess of the requirement at all times. The available water supply in Beaughan Creek below the return from the mill is measured by means of a 2-foot Parshall flume.

Carrick Creek

There was sufficient water available in Carrick Creek during the 1952 season to satisfy all irrigation requirements. The results of intermittent measurements of Carrick Springs are set forth in Table 8.

Parks Creek

Distribution on Parks Creek for the 1952 season was in accordance with the practices followed during past seasons. A summary of the distribution is set forth in the following tabulation:

Month	Measured Water Supply c.f.s.	Distribution in per cent of allotments			
		Lyke	Caledonia	Foulks, et al.	Robertson
April	90.6	100	100	100	100
May	99.3	100	100	100	100
June	66.3	100	100	100	100
July	18.0	100	100	69	48
August	8.2	99	76	29	14
September	5.6	93	1	0	18

Records of the flow available for the above distribution are set forth in Tables 3 and 4.

The records of diversion of the Montague Water Conservation District Bypass Canal to Shasta River are set forth in Table 10.

Big Springs

The water supply of Big Springs during the 1952 season increased from an April average of 33 cubic feet per second to an average of 44 cubic feet per second during August and September.

This supply was sufficient to provide 100 per cent of the Taylor and Louie Brothers allotments throughout the season and to provide the Big Springs Irrigation District with an allotment varying from an average of 73 per cent in April to 92 per cent in August. Records of the diversion by the Big Springs Irrigation District Pumping Plant during the 1952 season are set forth in Table 13.

John W. Taylor started to pump on April 16 and pumped continuously throughout the season. During the season the pump discharged 5.25 cubic feet per second or 70 per cent of his 7.50 cubic feet per second allotment.

Lower Shasta River

During the 1952 season 100 per cent allotments were available for all priorities during the entire season.

A record of the flow available to the water users below the Montague Bridge is presented in Table 6. Records of diversion by the Grenada Irrigation District and the Shasta River Water Association are submitted in Tables 14 and 15, respectively. A summary of these data is set forth in the following tabulation:

Month	Average Diversion Grenada Irrigation District c.f.s.	Average Diversion Shasta River Water Association c.f.s.	Average Available Water Supply Flock, et al. c.f.s.
April	35.8	38.0	161
May	27.0	38.0	113
June	20.8	38.0	147
July	24.2	38.0	56
August	26.5	38.0	52
Sept.	31.8	38.0	76

Little Shasta River

The water supply on this stream was sufficient to satisfy all demands until about July 2. Subsequent to that date and until the end of the season, close regulation was necessary. From September 8 until the end of the irrigation season sufficient water was returned to Little Shasta River from the Russ Connick ditch to satisfy 75 per cent of the fifth priority allotments. A summary of the distribution during the 1952 season is set forth in the following tabulation:

Month	Available Water Supply c.f.s.	Distribution in Per Cent of Priority Allotments						
		1	2	3	4	5	6	7
April	89.4	100	100	100	100	100	100	100
May	77.3	100	100	100	100	100	100	100
June	50.8	100	100	100	100	100	96	58
July	27.0	100	100	100	100	47	0	0
August	22.9	100	100	100	100	25	0	0
Sept.	22.1	100	100	100	100	65	0	0

Records of the discharge of Little Shasta River during the 1952 season are set forth in Table 7.

Records of intermittent measurements of the discharge of Gleland Spring during the 1952 season are presented in Table 9. The estimated average flow for the season was 10.0 cubic feet per second.

CHANGES IN OWNERSHIP OF LANDS AND WATER RIGHTS

The changes in ownership of lands and water rights, which have occurred subsequent to filing "Statement for Shasta River Watermaster Service Area, County of Siskiyou, State of California, for 1952", and which shall be included in the 1953 statement for the service area, are listed in the following tabulation:

Tract No.	Name of Water Right Owner Appearing in 1952 Statement	Name of Water Right Owner to Appear in 1953 Statement	Amount of Water c.f.s.
5-65	Wright, Floyd E. and Wright, Elva Mae	Maxwell, Glenn C.	4.05
5-86	Fleharty, William S. and Fleharty, Bernice W.	Mongini, Frank and Mongini, Anne	2.50
5-108	Mazzini, John J. and Mazzini, Lillian M.	Mazzini, Henry	1.40
5-81	Hock, John M. and Hock, Ann	Vidrickson, H. L. and Vidrickson, Louise C.	0.953
5-12	Jones, Herbert C. and Jones, Orion K.	Edmonds, Alfred C. Edmonds, Viola M.	0.12
5-34	Simpson, Virgil	Shulte, C. L. and Shulte, Effie B.	1.75
5-3	Goose Nest Properties, Inc., a corporation	Soule, John	0.42
5-10	Brown, Ira E. and Brown, Myrtle	Brown, Myrtle and Brown, Estate of, Ira E.	0.54
5-59	Kirch	Anna M. Peterson	

TABLE 1

PRECIPITATION AT YREKA
SISKIYOU COUNTY, CALIFORNIA
1951-52
Elevation 2,536 feet

Month	Normal Precipitation Inches	1951-52 Precipitation Inches
October	1.13	1.92
November	2.44	3.16
December	3.00	6.81
January	2.87	3.85
February	2.43	2.29
March	1.66	1.47
April	1.03	.31
May	1.04	1.14
June	0.61	1.83
July	.37	.11
August	.21	.78
September	.48	.26
Total	17.27	23.93

Compiled from records of the United States Weather Bureau.

TABLE 2

Daily Discharge in Cubic Feet Per Second
SHASTA RIVER ABOVE EDSON-FOULKE YREKA DITCH
April 3 to September 24, 1952

Day	April	May	June	July	August	September
1	NO	122	148	64	35	6.6
2	RECORD	118	130	61	27	6.3
3	105	111	124	60	23	5.2
4	210	103	118	69	20	6.6
5	215	103	126	71	19	7.6
6	220	106	126	60	17	6.5
7	200	133	111	53	19	6.1
8	200	120	118	51	19	5.8
9	166	110	115	56	17	5.8
10	144	110	106	54	16	5.8
11	130	123	99	68	15	5.8
12	133	135	85	57	13	5.8
13	180	120	80	51	14	5.5
14	135	118	84	47	14	4.8
15	120	115	83	45	13	4.8
16	113	110	82	45	13	4.2
17	120	132	80	42	11	3.8
18	126	155	79	42	10	3.8
19	130	180	75	41	9.0	4.8
20	112	156	76	37	8.2	4.5
21	106	133	77	35	7.8	4.2
22	112	146	78	34	7.6	4.2
23	133	160	80	34	7.6	4.0
24	146	180	74	34	8.0	4.0
25	160	200	68	30	8.0	
26	150	180	65	27	7.6	
27	140	200	75	27	6.1	NO
28	134	220	80	25	6.5	
29	130	220	76	25	6.1	RECORD
30	135	184	70	23	6.6	
31		166		23	6.6	
Total Sec. Ft. Days	* 4,105	4,469	2,788	1,391	411.3	**126.5
Mean Sec. Ft.	*146.6	144.2	92.9	44.9	13.1	5.3
Total Ac. Ft.	*8,140	8,862	5,529	2,758	815	**250

* 28-day period.
** 24-day period.

Total for period - 26,354 acre-feet.

TABLE 3

Daily Discharge in Cubic Feet Per Second
PARKS CREEK ABOVE DUKE NORTH DITCH
April 3 to September 24, 1952

Day	April	May	June	July	August	September
1	NO	77	95	27	14.7	5.4
2	RECORD	75	91	26	12.3	5.4
3	45	70	92	26	10.8	5.4
4	67	66	92	26	11.2	5.4
5	100	66	108	26	11.0	5.9
6	138	72	117	24	10.2	5.4
7	138	98	109	22	10.5	5.4
8	105	89	104	22	9.5	5.4
9	88	80	101	22	9.5	5.8
10	71	83	87	20	9.0	5.6
11	71	92	75	26	8.4	7.3
12	77	100	58	22	8.1	7.1
13	85	104	53	21	7.8	6.8
14	75	101	58	19.0	7.8	6.6
15	66	95	55	16.8	7.8	4.7
16	63	90	49	15.4	7.8	5.4
17	70	100	49	15.4	7.5	5.4
18	82	110	50	16.1	7.3	5.4
19	93	120	44	16.4	6.8	5.0
20	83	110	52	15.7	6.2	5.0
21	77	101	56	15.3	6.1	5.0
22	85	106	58	13.4	6.4	4.8
23	98	112	60	12.4	6.7	4.8
24	101	128	52	12.4	6.7	5.0
25	109	131	45	12.4	6.7	
26	112	125	40	11.9	6.7	
27	123	128	36	11.4	6.9	NO
28	120	128	34	11.4	6.9	
29	103	115	36	11.1	5.9	RECORD
30	91	104	32	11.6	5.4	
31		102		11.6	5.4	
Total Sec. Ft. Days	*2,536	3,078	1,988	559.7	254	**133.4
Mean Sec. Ft.	*90.6	99.3	66.3	18.0	8.2	**5.6
Total Ac. Ft.	*5,029	6,104	3,942	1,110	503	**264

* 28-day period.
** 24-day period.

Total for period - 16,952 acre-feet.

TABLE 4

Daily Discharge in Cubic Feet Per Second
PARKS CREEK AT ROBERTSON WEIR
April 1 to September 24, 1952

Day	April	May	June	July	August	September
1			16.0	15.0	5.6	1.1
2			16.0	14.0	5.9	1.3
3	SURPLUS	SURPLUS	16.0	13.0	5.2	1.3
4			16.0	12.0	4.5	1.0
5			16.0	11.0	4.3	1.6
6			16.0	10.5	4.1	2.2
7		16.0	16.0	10.5	3.7	2.4
8		16.0	16.0	10.5	3.1	2.7
9		16.0	16.0	11.4	2.2	2.6
10		16.0	16.0	10.8	2.2	3.3
11		16.0	16.0	11.1	2.1	3.9
12		16.0	16.0	10.5	1.9	3.7
13		16.0	16.0	9.9	1.9	3.7
14		16.0	16.0	9.3	1.7	4.1
15		16.0	16.0	8.7	1.7	4.7
16		16.0	16.0	8.1	1.6	4.5
17	16.0	16.0	16.0	7.5	1.4	4.3
18	16.0	16.0	16.0	6.8	1.4	3.9
19	16.0	16.0	16.0	6.6	1.1	4.1
20	16.0	16.0	16.0	5.6	1.1	3.1
21	16.0	16.0	30.0	4.7	1.1	2.7
22	16.0	16.0	16.0	3.5	1.1	2.6
23	16.0	16.0	16.0	2.9	1.1	2.6
24	16.0	16.0	16.0	2.9	1.3	2.7
25	16.0	16.0	16.0	2.9	1.6	
26	16.0	16.0	16.0	3.0	1.7	
27	16.0	16.0	16.0	3.0	1.6	NO
28		16.0	16.0	3.0	1.1	
29	SURPLUS	16.0	16.0	3.1	1.1	RECORD
30		16.0	16.0	3.1	1.0	
31		16.0		3.1	1.0	
Total Sec. Ft. Days		*400	494	238	70.4	**70.1
Mean Sec. Ft.		*16.0	16.2	7.	2.3	**2.9
Total Ac. Ft.		*793	980	472	140	**139

* 25-day period.
** 24-day period.

Total - May 7 to September 24 - 2,524 acre-feet.

Daily Discharge in Cubic Feet Per Second
SHASTA RIVER AT DUNSMUIR BRIDGE
October 1, 1951 to September 30, 1952

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.
1	28	60	570	112	472	81	150	123	202	69	17.0	6.3
2	30	60	520	101	371	81	148	115	170	67	15.0	7.4
3	31	61	442	96	214	81	150	104	168	65	14.0	6.4
4	30	59	358	88	172	81	162	97	168	52	13.5	8.0
5	33	58	264	92	148	78	212	98	193	58	12.4	4.3
6	35	58	204	90	131	73	252	148	256	49	10.9	6.6
7	36	58	184	85	121	79	248	214	228	43	10.3	7.1
8	35	58	181	72	113	87	197	185	206	41	8.7	8.3
9	35	57	98	84	113	88	168	148	193	45	8.3	9.0
10	35	105	94	88	115	87	155	144	131	40	8.7	10.3
11	34	101	91	86	128	80	153	154	120	39	8.3	8.0
12	35	86	94	84	148	78	182	170	125	34	8.0	8.3
13	34	80	84	79	119	74	248	177	109	45	7.4	9.0
14	35	84	80	90	108	69	193	175	143	40	6.3	10.6
15	35	79	76	82	104	76	135	168	123	36	6.3	10.6
16	36	77	75	79	151	84	128	162	99	34	6.3	10.9
17	36	76	74	79	115	105	147	182	92	28	6.3	10.3
18	36	73	73	81	99	118	163	218	92	29	6.6	10.6
19	37	147	72	85	96	98	172	256	87	29	6.3	10.3
20	37	125	71	87	93	91	158	234	92	35	6.0	10.6
21	65	105	71	91	92	86	146	204	97	28	5.6	10.9
22	63	86	77	93	87	79	151	195	102	12.4	6.3	10.0
23	60	81	84	97	91	96	179	204	109	12.4	6.3	9.6
24	60	81	92	99	88	212	193	240	105	11.3	6.3	9.0
25	60	86	86	104	91	300	204	252	87	11.3	5.6	9.3
26	54	96	358	106	87	284	179	248	77	11.3	5.6	9.3
27	51	154	520	109	89	224	156	260	66	11.3	6.0	10.6
28	52	244	309	98	91	228	158	270	85	11.3	5.6	12.0
29	50	358	212	140	86	193	140	252	84	11.6	3.8	11.6
30	50	492	163	297		179	147	240	71	10.9	4.1	11.3
31	50		134	472		165		222		12.4	4.5	
Total Sec. Ft. Days	1298	3,345	5,711	3,446	3,933	3,715	5,174	5,855	3,882	1,058	246.3	277.0
Mean Sec. Feet	43.2	111.5	184.2	111.1	135.6	119.8	172.5	188.9	129.4	34.1	7.9	9.2
Total Ac. Feet	2574	6,633	11,325	6,833	7,799	7,367	10,260	11,610	7,698	2,098	488	549

Total for period - 75,234 acre-feet.

TABLE 6

DISCHARGE OF SHASTA RIVER AT MONTAGUE BRIDGE
April 10 to September 28, 1953

Mean Daily Discharge in Cubic Feet per Second

Day	April	May	June	July	August	September
1	N	78	385	56	40	45
2	O	81	385	51	40	47
3		81	385	47	50	49
4	R	81	385	44	46	44
5	E	59	385	43	39	45
6	C	61	405	43	59	60
7	O	78	725	36	48	65
8	R	100	810	30	40	58
9	D	131	830	39	33	78
10	119	127	775	22	41	91
11	107	111	660	28	29	80
12	91	101	425	28	40	89
13	97	99	385	37	50	87
14	105	142	345	36	48	85
15	95	171	258	43	64	73
16	72	199	205	56	69	73
17	71	158	210	74	76	80
18	74	208	210	69	64	59
19	76	281	210	66	40	59
20	78	261	183	57	35	76
21	85	335	142	31	36	34
22	93	420	122	33	24	93
23	103	455	93	27	27	99
24	103	600	83	27	28	93
25	101	665	64	22	31	69
26	107	600	59	22	33	103
27	114	610	59	20	48	105
28	140	550	66	27	48	105
29	105	475	69	24	47	NO
30	103	420	66	27	55	RECORD
31	---	400	---	40	58	---
Total Sec. Ft. Days	2,039	8,138	9,384	1,205	1,386	2,044
Mean Sec. Ft.	97	263	313	39	45	73
Total Ac. Ft.	4,043	16,138	18,608	2,390	2,748	4,053

Total for period - 47,980 acre-feet

TABLE 6

Daily Discharge in Cubic Feet Per Second
SHASTA RIVER AT MONTAGUE BRIDGE
April 4 to September 22, 1952

Day	April	May	June	July	August	September
1	NO	140	99	101	65	45
2	RECORD	124	105	145	71	36
3		122	111	140	69	40
4	271	126	107	122	69	50
5	261	126	111	93	69	69
6	266	118	208	74	69	49
7	268	165	227	70	26	50
8	259	233	212	67	26	47
9	256	180	183	59	26	47
10	271	150	185	27	24	51
11	233	124	160	36	22	69
12	165	111	131	48	26	74
13	152	109	138	44	28	62
14	174	95	160	44	31	81
15	137	83	212	46	31	101
16	126	74	183	39	27	81
17	115	74	129	34	36	103
18	115	78	103	28	36	101
19	111	79	103	28	27	101
20	111	117	111	29	24	105
21	110	111	120	26	31	99
22	111	122	129	34	34	107
23	105	124	138	47	34	
24	101	113	147	40	34	
25	78	95	155	44	34	
26	85	93	157	50	122	
27	83	87	160	54	140	NO
28	118	85	155	48	145	
29	126	78	142	36	93	RECORD
30	133	81	127	60	83	
31		97		34	48	
Total Sec. Ft. Days.	4,349	3,514	4,408	1,747	1,600	1,671
Mean Sec. Ft.	161	113	147	56	52	76
Total Ac. Ft.	8,624	6,968	8,741	3,464	3,173	3,314

Total for period - 34,284 acre-feet.

TABLE 7

Daily Discharge in Cubic Feet Per Second
LITTLE SHASTA RIVER ABOVE HARP DITCH
April 5, to September 23, 1952

Day	April	May	June	July	August	September
1	NO	72	64	25	13.4	11.8
2		71	62	24	13.4	11.8
3	RECORD	66	57	24	13.0	11.5
4		62	52	22	13.0	11.5
5	95	62	52	22	13.0	11.5
6	95	62	56	21	13.0	11.5
7	93	76	54	20	12.7	11.5
8	86	80	48	19.0	12.7	11.5
9	82	71	47	18.6	12.7	12.1
10	80	71	45	18.6	12.7	12.7
11	73	67	47	18.6	12.7	12.1
12	78	67	44	19.0	12.7	11.8
13	78	67	41	18.1	12.4	11.5
14	78	67	44	17.2	12.4	11.2
15	78	67	44	16.8	12.4	10.9
16	78	67	41	16.3	12.4	10.6
17	77	67	36	15.9	12.4	10.6
18	78	67	34	15.0	12.4	10.6
19	80	67	34	15.0	12.1	10.6
20	75	67	34	14.6	12.1	10.6
21	73	67	32	14.2	12.1	10.6
22	75	67	30	14.2	12.1	10.6
23	76	67	35	13.8	12.1	10.6
24	76	67	30	13.8	12.1	
25	78	67	29	13.8	12.1	
26	77	67	28	13.8	12.1	
27	82	67	28	13.8	12.1	NO RECORD
28	84	67	29	13.8	12.1	
29	77	67	28	13.4	12.1	
30	73	67	26	13.4	12.1	
31		66		13.4	12.1	
Total Sec. Ft. Days	*2,075	2,099	1,231	532	387	**260
Mean-Sec. Ft.	*79.8	67.7	41.0	17.2	12.5	**11.3
Total Ac. Ft.	*4,115	4,162	2,441	1,055	767	**516

* 26-day period.
** 23-day period.

Total for period - 13,056 acre-feet.

TABLE 8

Intermittent Measurements of Discharge in Cubic Feet Per Second
CARRICK STREAM
April 1 to September 30, 1952

Day	April	May	June	July	August	September
1	6.45	6.19		6.60		
2						
3						
4						
5			6.62	6.57	6.30	6.20
6						
7						
8						
9	6.51					
10		6.31		6.58	6.20	6.20
11						
12			6.62			
13						
14						
15				6.60	6.20	6.30
16						
17	6.61					
18			6.60			
19						
20		6.45		6.50	6.20	6.40
21						
22						
23						
24	6.41		6.61			
25				6.40	6.20	6.40
26						
27		6.66				
28						
29						
30	6.41	6.53	6.61	6.30	6.10	6.40
31						
Total Sec. Ft. Days.	194.8	197.0	198.3	202.2	192.1	188.7
Mean Sec. Ft.	6.49	6.35	6.61	6.52	6.20	6.29
Total Ac. Feet	386	390	393	401	381	374

Total for period - 2,325 acre-feet

Note: Totals and means computed by extending measured flows.

TABLE 2

Intermittent Measurements of Discharge in Cubic Feet Per Second
GIRLAND SPRING
April 1 to September 30, 1952

Day	April	May	June	July	August	September
1						
2						
3						
4						
5				9.81		
6						
7				9.81		
8						10.84
9						
10						
11						
12						
13						
14						
15			9.81		10.20	
16		9.60				
17				9.81		
18						
19						
20						
21						
22						
23						
24	9.60					
25						
26						10.84
27			9.81			
28						
29						
30					10.59	
31						
Total Sec. Ft. Days.	288	298	294	304	322	325
Mean Sec. Feet	9.6	9.6	9.8	9.8	10.4	10.8
Total Ac. Ft.	571	591	583	603	638	644

Total for period = 3,630 acre-feet

Note: Totals and means computed by extending measured flows.

TABLE 10

Daily Discharge in Cubic Feet Per Second
M.W.C.D. PARKS CREEK CANAL AT HEAD
April 1 to July 4, 1952

Day	April	May	June	July	August	September
1	NO	0	60	2	NO	NO
2		10	56	2		
3	FLOW	10	57	2	FLOW	FLOW
4		10	57	2		
5		20	83			
6		20	92			
7		63	84	NO		
8		54	79			
9		45	66	FLOW		
10		48	56			
11		57	40			
12		65	23			
13		69	18			
14		66	23			
15		60	20			
16	10	55	0			
17	35	65	14			
18	47	75	15			
19	68	85	9			
20	58	75	17			
21	42	66	21			
22	49	71	23			
23	63	77	25			
24	66	93	17			
25	74	96	10			
26	77	90	5			
27	88	93	2			
28	0	93	2			
29	0	80	2			
30	0	69	2			
31		67				
Total Sec. Ft. Days	*677	1,857	974	**6		
Mean Sec. Ft.	*45.13	59.9	32.5	**2		
Total Ac. Ft.	*1,342	3,682	1,931	**12		

* 15-day period.
** 4-day period.

Total for period - 6,967 acre-feet.

TABLE 11

Daily Storage on Hand in Acre-Feet
LAKE DWINNELL RESERVOIR
November 10, 1951 to September 30, 1952

Day	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	August	Sept.
1		6,755	14,296	18,616	18,187	21,010	25,334	28,676	28,196	20,842	14,020
2	NO	7,665	14,428	19,630	18,174	21,192	25,306	28,708	28,040	20,709	13,924
3		8,142	14,536	19,903	18,135	21,388	25,212	28,756	27,830	20,592	13,780
4	RECORD	8,250	14,656	19,981	18,122	21,584	25,128	28,788	27,695	20,410	13,612
5		8,364	14,764	19,851	18,109	21,808	25,062	27,470	27,470	20,189	13,480
6		8,487	14,860	19,669	18,070	23,102	25,062	29,156	27,275	20,007	13,360
7		8,668	14,956	19,542	18,044	22,480	25,062	29,508	27,200	19,747	13,234
8		8,820	15,040	19,396	18,070	22,760	25,100	29,684	26,960	19,487	13,157
9		8,924	15,124	19,240	18,070	22,950	25,338	29,882	26,690	19,227	13,047
10	2,170	9,019	15,184	19,084	18,109	23,152	25,400	29,962	26,435	18,967	12,970
11	2,350	9,114	15,232	19,032	18,122	23,292	25,428	29,962	26,285	18,763	12,893
12	2,477	9,210	15,328	18,993	18,122	23,474	25,484	29,962	26,015	18,473	12,805
13	2,610	9,310	15,436	18,902	18,109	23,778	25,592	29,866	25,790	18,226	12,717
14	2,700	9,400	15,544	18,772	18,096	24,078	25,700	29,844	25,565	17,992	12,629
15	2,800	9,470	15,640	18,668	18,109	24,228	25,812	29,850	25,310	18,018	12,552
16	2,880	9,550	15,712	18,674	18,135	24,298	25,878	29,796	25,070	17,550	12,442
17	2,940	9,620	15,784	18,674	18,200	24,392	25,962	29,684	24,785	17,316	12,352
18	3,030	9,700	15,856	18,616	18,304	24,542	26,112	29,540	24,530	17,080	12,255
19	3,115	9,770	15,928	18,505	18,356	24,612	26,314	29,460	24,245	16,888	12,170
20	3,530	9,850	16,012	18,382	18,382	24,664	26,628	29,348	23,975	16,648	12,080
21	3,750	9,900	16,084	18,304	18,382	24,706	26,806	29,340	23,720	16,528	12,000
22	3,894	9,960	16,096	18,226	18,382	24,720	26,928	29,220	23,432	16,288	11,930
23	3,996	10,050	16,216	18,135	18,369	24,800	27,072	29,172	23,180	16,048	11,860
24	4,363	10,180	16,372	18,135	18,447	24,890	27,200	29,108	22,886	15,808	11,770
25	4,695	10,780	16,600	18,135	18,745	25,020	27,406	29,028	22,606	15,568	11,700
26	4,967	10,550	16,840	18,161	19,136	25,170	27,626	28,932	22,340	15,328	11,630
27	5,035	11,180	17,095	18,174	19,604	25,198	27,842	28,804	22,074	15,088	11,560
28	5,182	12,970	17,251	18,187	19,942	25,250	28,100	28,660	21,808	14,896	11,490
29	5,350	13,456	17,433	18,200	20,280	25,484	28,340	28,516	21,528	14,656	11,420
30	5,630	13,852	17,745		20,592	25,456	28,516	28,356	21,262	14,440	11,350
31		14,104	18,070		20,592		28,628		21,024	14,260	

TABLE 12

Daily Release in Cubic Feet Per Second
LAKE DWINNELL RESERVOIR
February 2 to September 30, 1952

Day	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		36	0	59.5	59.2	51.9	46.7	40.6
2	43	36	0	62.4	56.6	51.9	14.2	49.3
3	92	35	0	60.2	52.7	51.9	24.4	42.7
4	151	34	0	51.0	52.8	51.9	52.1	32.8
5	182	34	1.3	41.9	52.8	59.7	62.0	23.6
6	168	32	1.3	41.9	38.8	63.9	68.9	19.7
7	160	25	1.3	41.9	23.6	69.9	76.7	20.8
8	149	25	1.3	41.9	9.4	69.9	75.1	20.8
9	138	25	1.3	42.4	9.4	68.4	75.1	20.1
10	130	25	1.3	38.5	18.2	67.2	75.1	20.1
11	124	25	1.3	31.9	30.1	33.2	75.1	15.1
12	121	25	1.3	38.1	30.1	68.7	75.1	12.6
13	115	25	1.3	38.2	41.0	65.1	74.3	13.8
14	107	25	1.3	38.1	45.9	65.9	74.3	13.8
15	99	25	1.3	38.8	44.6	65.3	73.6	17.3
16	99	25	1.3	38.8	42.8	66.0	63.9	33.8
17	99	26	1.3	38.8	41.5	70.4	62.5	20.3
18	96	28	46.4	38.8	36.2	72.0	62.8	19.8
19	90	28	45.8	38.2	30.6	75.9	61.5	19.8
20	83	29	46.4	52.2	30.6	77.2	60.8	20.3
21	78	29	50.4	52.2	30.6	78.1	60.0	20.3
22	74	29	50.4	51.5	30.6	78.8	66.5	20.3
23	70	29	51.0	51.5	30.6	80.6	67.1	19.8
24	35	29	51.0	51.9	31.6	79.6	72.4	10.9
25	35	27	50.9	51.9	37.9	77.3	75.1	6.3
26	35	35	47.7	51.9	41.6	78.8	79.7	6.0
27	36	0	46.0	55.6	44.6	78.8	69.2	6.0
28	36	0	49.0	58.0	51.9	82.1	68.6	6.0
29	36	0	53.5	59.4	51.9	80.5	70.0	6.0
30		0	55.0	59.9	51.9	79.6	64.8	6.0
31		0		51.9		79.6	54.6	
Total Sec. Ft. Days	2,681	*746	660	1,469	1,150	2,104	2,002	552
Mean Sec. Ft.	*95.7	*24.1	25.4	47.4	38.3	67.9	64.6	18.4
Total Ac. Ft.	*5,316	*1,479	1,309	2,913	2,280	4,172	3,970	1,095

* Water released to maintain a safe operating level in the reservoir.

Total for period - 22,534 acre-feet.

TABLE 13

Daily Discharge in Cubic Feet Per Second
SIX SPRINGS IRRIGATION DISTRICT PUMPING PLANT
April 1 to September 30, 1952

Day	April	May	June	July	August	September
1	0	21.0	25.0	25.5	27.5	27.5
2	27.5	21.0	25.0	26.0	27.5	27.5
3	27.5	21.0	25.0	26.0	27.5	27.5
4	27.5	22.0	25.0	26.0	27.5	27.5
5	27.5	22.0	25.0	26.0	27.5	27.5
6	27.5	22.0	25.0	26.0	27.5	27.5
7	27.5	22.0	25.0	26.0	27.5	27.5
8	27.5	22.0	25.0	26.0	27.5	27.5
9	22.0	23.0	25.0	26.0	27.5	27.5
10	22.0	23.0	25.0	26.0	27.5	27.5
11	22.0	23.0	25.0	26.0	27.5	27.5
12	22.0	23.0	25.0	26.0	27.5	0
13	22.0	23.0	25.0	26.0	27.5	0
14	21.0	23.0	25.0	26.5	27.5	0
15	21.0	23.0	25.0	26.5	27.5	0
16	21.0	24.0	25.0	26.5	27.5	0
17	21.0	24.0	25.0	26.5	27.5	0
18	21.0	24.0	25.0	26.5	27.5	0
19	18.0	24.0	25.0	26.5	27.5	0
20	18.0	24.0	25.0	26.5	27.5	0
21	18.0	25.0	0	27.0	27.5	0
22	18.0	25.0	0	27.0	27.5	0
23	19.0	25.0	0	27.0	27.5	0
24	19.0	25.0	0	27.0	27.5	0
25	19.0	25.0	25.5	27.0	27.5	27.5
26	19.0	25.0	25.5	27.0	27.5	27.5
27	20.0	25.0	25.5	27.5	27.5	27.5
28	20.0	25.0	25.5	27.5	27.5	27.5
29	20.0	25.0	25.5	27.5	27.5	27.5
30	20.0	25.0	25.5	27.5	27.5	27.5
31		25.0	25.5	27.5	27.5	
Total Sec. Ft. Days	*635.5	729.0	653.0	822.5	867.5	462.4
Mean Sec. Ft.	*21.9	23.5	21.8	26.5	27.5	15.4
Total Ac. Ft.	*1260	1,445	1,295	1,631	1,690	917

* 29-day period.

Total for period - 8,238 acre-feet.

TABLE 14

Daily Discharge in Cubic Feet Per Second
GRENADA IRRIGATION DISTRICT PUMPING PLANT
April 10 to September 20, 1952

Day	April	May	June	July	August	September
1	20	38	0	0	38	38
2		38	0	0	38	38
3	PUMPING	38	0	0	38	38
4		38	0	0	3.5	38
5		38	0	0	0	38
6		38	0	0	0	38
7		38	0	38	38	38
8		38	0	38	38	38
9		38	20	38	38	38
10	11	38	38	38	38	38
11	38	38	38	38	38	38
12	38	38	38	38	38	38
13	38	38	38	38	38	38
14	38	38	38	38	38	38
15	38	38	38	38	38	22
16	38	34	38	38	38	22
17	38	34	38	38	38	17
18	38	34	38	38	38	17
19	38	22	38	38	38	17
20	38	22	38	38	34	14
21	38	22	38	38	34	
22	38	22	38	38	17.0	NO
23	38	34	22	38	17.0	
24	20	34	22	38	17.0	PUMPING
25	38	34	22	38	17.0	
26	38	8.0	22	38	0	
27	38	0	22	38	0	
28	38	0	0	0	0	
29	38	0	0	0	38	
30	20	0	0	0	38	
31		0		0	0	
Total Sec. Ft. Days	*752	836	624	798	823	**625
Mean Sec. Ft.	*35.8	27.0	20.8	24.2	26.5	*31.3
Total Ac. Feet	*1,493	1,658	1,237	1,582	1,632	**1,259

* 21-day period
** 20-day period

Total for period - 8,861 acre-feet.

TABLE 15

Daily Discharge in Cubic Feet Per Second
SHASTA RIVER WATER ASSOCIATION PUMPING PLANT
April 1 to September 30, 1952

Day	April	May	June	July	August	September
1	38.0	38.0	38.0	38.0	38.0	38.0
2	38.0	38.0	38.0	38.0	38.0	38.0
3	38.0	38.0	38.0	38.0	38.0	38.0
4	38.0	38.0	38.0	38.0	38.0	38.0
5	38.0	38.0	38.0	38.0	38.0	38.0
6	38.0	38.0	38.0	38.0	38.0	38.0
7	38.0	38.0	38.0	38.0	38.0	38.0
8	38.0	38.0	38.0	38.0	38.0	38.0
9	38.0	38.0	38.0	38.0	38.0	38.0
10	38.0	38.0	38.0	38.0	38.0	38.0
11	38.0	38.0	38.0	38.0	38.0	38.0
12	38.0	38.0	38.0	38.0	38.0	38.0
13	38.0	38.0	38.0	38.0	38.0	38.0
14	38.0	38.0	38.0	38.0	38.0	38.0
15	38.0	38.0	38.0	38.0	38.0	38.0
16	38.0	38.0	38.0	38.0	38.0	38.0
17	38.0	38.0	38.0	38.0	38.0	38.0
18	38.0	38.0	38.0	38.0	38.0	38.0
19	38.0	38.0	38.0	38.0	38.0	38.0
20	38.0	38.0	38.0	38.0	38.0	38.0
21	38.0	38.0	38.0	38.0	38.0	38.0
22	38.0	38.0	38.0	38.0	38.0	38.0
23	38.0	38.0	38.0	38.0	38.0	38.0
24	38.0	38.0	38.0	38.0	38.0	38.0
25	38.0	38.0	38.0	38.0	38.0	38.0
26	38.0	38.0	38.0	38.0	38.0	38.0
27	38.0	38.0	38.0	38.0	38.0	38.0
28	38.0	38.0	38.0	38.0	38.0	38.0
29	38.0	38.0	38.0	38.0	38.0	38.0
30	38.0	38.0	38.0	38.0	38.0	38.0
31		38.0		38.0	38.0	
Total Sec. Ft. Days	1,124	1,162	1,124	1,162	1,162	1,124
Mean Sec. Ft.	38	38	38	38	38	38
Total Ac. Ft.	2,228	2,304	2,228	2,304	2,304	2,228

Total for period - 13,597 acre-feet.

TABLE 1

PRECIPITATION AT YREKA
SISKIYOU COUNTY, CALIFORNIA
1952-53

In Inches

Month	Mean precipitation	1952-53 precipitation
October	1.13	0.34
November	2.44	1.32
December	3.00	7.58
January	2.88	5.55
February	2.36	1.23
March	1.65	2.29
April	1.01	0.72
May	1.03	2.82
June	0.64	1.23
July	0.36	0.00
August	0.26	0.21
September	0.48	0.02
TOTALS	17.24	23.31

TABLE 2

DISCHARGE OF SHASTA RIVER ABOVE EDSON-FOULKE YREKA DITCH
April 1 to September 28, 1953

Mean Daily Discharge in Cubic Feet per Second

Day	April	May	June	July	August	September
1	76	109	105	92	46	14.1
2	78	114	110	95	40	14.6
3	84	122	104	106	39	14.6
4	84	64	101	95	39	14.6
5	86	92	104	94	38	14.6
6	86	115	146	96	37	14.6
7	84	118	158	96	36	14.6
8	84	113	126	90	35	14.6
9	78	103	122	84	33	14.6
10	78	84	104	84	31	14.6
11	76	73	90	84	33	14.6
12	68	70	79	84	31	14.6
13	63	88	79	84	31	14.6
14	63	94	79	84	31	14.6
15	63	92	77	80	28	14.6
16	68	111	95	77	26	14.6
17	68	94	115	75	24	14.6
18	69	88	133	68	21	14.6
19	84	155	123	64	19.5	14.6
20	86	138	107	58	18.0	14.6
21	95	165	107	55	18.0	14.6
22	162	203	99	54	16.4	14.6
23	136	207	123	54	16.4	14.6
24	142	134	130	53	15.7	14.6
25	134	119	127	52	15.7	14.6
26	179	118	97	56	24	14.1
27	254	107	99	56	21	14.1
28	169	101	101	54	19.5	14.1
29	160	103	97	51	18.0	NO
30	109	110	97	51	16.1	RECORD
31	—	135	—	50	15.1	—
Total Sec. Ft. Days	3,066	3,539	3,234	2,276	832.4	406.8
Mean Sec. Ft.	102.2	114.1	107.8	73	26.9	14.5
Total Ac. Ft.	6,080	7,018	6,413	4,513	1,651	807

Total for period - 26,482 acre-feet.

TABLE 3

DISCHARGE OF PARKS CREEK ABOVE EDSON-FOULKE YREKA DITCH

November 6, 1952 to September 30, 1953

Mean Daily Discharge in Cubic Feet Per Second

Day	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1		9.9	10.2	29	17.9	28	63	79	53	8.5	5.2
2	No	8.2	10.6	30	16.8	30	47	82	54	8.2	4.9
3	Record	7.4	9.9	50	16.8	34	50	81	56	9.2	4.4
4		7.7	9.9	53	16.4	37	84	87	53	9.2	4.2
5		8.8	9.9	47	16.8	41	84	86	54	8.5	3.9
6	3.3	9.9	9.9	54	16.8	41	105	84	53	7.9	3.6
7	5.7	14.6	13.3	59	17.4	37	90	118	53	7.9	3.6
8	5.4	10.2	48	53	19.6	34	70	109	44	8.2	3.4
9	5.7	9.2	198	44	22	30	57	87	40	7.4	3.3
10	5.7	16.4	87	38	26	28	49	81	37	6.8	3.2
11	6.0	15.5	103	34	21	26	45	75	35	6.5	3.2
12	6.8	12.4	184	32	21	24	45	82	34	6.0	3.2
13	8.2	11.0	142	30	20	23	51	79	30	7.9	3.2
14	8.8	10.6	76	28	19.1	22	64	86	28	7.7	3.3
15	7.9	9.9	51	27	18.5	22	62	97	26	6.0	2.8
16	7.4	9.5	42	26	18.5	25	64	105	25	6.2	2.8
17	6.8	9.2	57	24	17.4	24	81	120	22	6.2	2.6
18	7.4	9.2	168	22	16.8	25	87	114	21	6.2	2.7
19	7.7	9.2	151	21	19.1	30	126	100	18	5.7	2.7
20	7.4	9.2	182	19.6	17.9	39	105	90	17	5.2	2.8
21	7.1	8.5	92	19.1	17.9	54	98	86	15	5.2	3.0
22	6.5	8.5	64	19.1	18.5	75	90	87	14	5.4	2.8
23	6.5	8.2	57	18.5	23.2	107	76	81	12	5.4	2.7
24	6.8	8.2	45	17.4	31	92	79	75	12	5.4	2.7
25	7.1	8.2	40	16.8	32	100	68	72	12	5.2	2.6
26	6.5	8.2	35	16.8	30	126	62	65	9.5	5.7	2.7
27	6.5	8.5	32	17.4	30	126	59	65	10.6	5.7	2.7
28	6.2	8.5	30	18.5	32	92	54	62	9.9	5.7	2.8
29	6.2	9.5	28		30	75	63	62	9.9	6.5	2.8
30	6.2	14.6	27		28	59	70	59	9.9	6.0	2.6
31	--	11.7	27		28	--	82	--	9.5	5.0	--
Mean	6.6	10.0	65.6	30.8	21.8	50.2	71.9	85.2	28.3	6.7	3.2
Total Ac. Ft.	329	616	4,033	1,714	1,341	2,986	4,422	5,069	1,740	410	191

Total for period - 22,851 acre-feet

TABLE 4

DISCHARGE OF PARKS CREEK AT ROBERTSON WEIR
April 1 to September 30, 1953

Mean Daily Discharge in Cubic Feet per Second

Day	April	May	June	July	August	September
1	16.0	16.0		16.0	4.7	2.9
2	16.0	16.0		16.0	4.9	3.1
3	16.0	16.0		16.0	4.9	3.1
4	16.0	16.0	S	16.0	4.3	3.1
5	16.0	16.0		16.0	4.3	3.1
6	16.0	16.0	U	16.0	3.7	3.1
7	16.0	16.0		16.0	3.5	2.9
8	16.0	16.0	R	16.0	3.5	2.9
9	16.0	16.0		16.0	3.5	3.1
10	16.0	16.0		16.0	3.3	3.1
11	16.0	16.0	P	16.0	3.3	2.9
12	16.0	16.0		16.0	3.3	3.1
13	16.0	16.0	L	16.0	2.7	3.1
14	16.0	16.0		16.0	3.3	3.1
15	16.0	16.0	U	16.0	2.9	3.1
16	16.0	16.0		14.2	2.9	2.9
17	16.0	16.0	S	13.8	3.3	2.9
18	16.0	16.0		12.0	3.3	3.1
19	16.0	16.0		10.3	3.1	2.9
20	16.0	16.0	16.0	8.9	3.1	3.1
21	16.0	16.0	16.0	7.6	3.1	2.9
22	16.0	16.0	16.0	8.1	3.1	2.9
23	16.0	16.0	16.0	7.9	3.1	3.1
24	16.0	16.0	16.0	7.9	2.9	3.1
25	16.0	16.0	16.0	7.9	2.4	3.1
26	16.0	16.0	16.0	7.9	2.0	3.1
27	16.0	16.0	16.0	7.9	2.0	2.9
28	16.0	16.0	16.0	7.1	2.5	2.9
29	16.0	16.0	16.0	6.4	2.9	2.9
30	16.0	16.0	16.0	6.1	3.3	3.1
31	—	SURPLUS	—	5.2	3.3	—
Total Sec. Ft. Days	480.0	480.0(a)	176.0(b)	379.2	102.4	90.6
Mean Sec. Ft.	16.0	16.0(a)	16.0(b)	12.2	3.3	3.0
Total Ac. Ft.	952	952 (a)	349 (b)	752	203	180

(a) 30-day period
(b) 11-day period

TABLE 5

DISCHARGE OF SHASTA RIVER AT EDGEWOOD BRIDGE

October 1, 1952 to September 30, 1953

Mean Daily Discharge in Cubic Feet Per Second

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1	9.2	20	156	88	89	59	82	132	115	82	9.7	10.8
2	9.7	21	77	89	91	53	81	121	120	86	9.2	11.3
3	9.7	22	52	84	121	58	87	132	114	89	8.7	9.7
4	8.7	22	52	75	124	54	97	104	111	95	8.7	9.2
5	10.2	21	112	66	118	53	110	136	114	100	8.7	9.7
6	10.2	20	58	67	128	53	115	180	156	93	7.1	9.2
7	10.2	19.8	217	164	152	56	99	168	168	83	7.1	9.2
8	10.2	20	153	313	147	57	93	143	136	82	7.1	9.7
9	10.2	21	114	743	115	56	86	120	132	73	7.1	7.1
10	9.2	19.2	241	328	104	160	75	93	114	55	6.6	6.6
11	9.2	18.6	192	365	96	105	68	78	100	53	7.1	6.3
12	9.2	22	127	524	88	112	62	75	89	55	7.6	6.0
13	9.2	49	92	430	83	87	56	79	89	55	9.2	6.3
14	8.7	58	77	258	81	78	53	118	89	55	9.2	6.6
15	9.2	46	78	188	77	74	41	104	87	52	8.2	6.6
16	9.2	45	69	161	74	87	46	135	105	46	7.6	8.2
17	9.2	39	63	194	72	75	45	135	125	40	9.2	8.2
18	19.2	34	58	285	70	62	43	155	143	33	8.2	8.7
19	18.6	30	60	316	64	108	52	241	133	34	7.6	8.7
20	19.2	30	64	456	62	93	67	203	117	31	7.1	9.7
21	19.2	28	59	252	61	87	115	223	104	30	6.6	12.3
22	19.2	28	56	186	60	89	197	153	96	29	6.6	11.8
23	16.8	28	49	158	58	86	205	243	120	28	7.1	12.3
24	16.8	26	46	136	57	118	179	173	127	26	7.1	12.3
25	18.6	25	49	120	56	117	194	147	124	27	6.6	11.8
26	18.0	25	68	107	56	95	265	140	117	27	6.6	11.8
27	18.6	26	110	100	56	89	340	128	111	23	7.1	12.3
28	19.8	23	110	96	58	103	221	125	103	20	8.7	12.8
29	19.2	24	104	92		99	195	136	95	14.3	10.2	12.3
30	19.8	26	211	88		89	128	150	92	11.3	11.3	10.8
31	19.8	—	104	88		83		145	—	10.8	10.8	—
Mean	13.7	27.9	99.2	213.4	86.4	83.7	116.6	142.4	114.8	49.3	8.5	9.6
Total Ac. Ft.	841	1,659	6,098	13,122	4,795	5,146	6,935	8,755	6,833	3,031	495	572

Total for period - 58,282 acre-feet.

TABLE 6

DISCHARGE OF SHASTA RIVER AT MONTAGUE BRIDGE
April 10 to September 28, 1953

Mean Daily Discharge in Cubic Feet per Second

Day	April	May	June	July	August	September
1	N	78	385	56	40	45
2	O	81	385	51	40	47
3		81	385	47	50	49
4	R	81	385	44	46	44
5	E	59	385	43	39	45
6	C	61	405	43	59	60
7	O	78	725	36	48	65
8	R	100	810	30	40	58
9	D	131	830	39	33	78
10	119	127	775	22	41	91
11	107	111	660	28	29	80
12	91	101	425	28	40	89
13	97	99	385	37	50	87
14	105	142	345	36	48	85
15	95	171	258	43	64	73
16	72	199	205	56	69	73
17	71	158	210	74	76	80
18	74	208	210	69	64	59
19	76	281	210	66	40	59
20	78	261	183	57	35	76
21	85	335	142	31	36	34
22	93	420	122	33	24	93
23	103	455	93	27	27	99
24	103	600	83	27	28	93
25	101	665	64	22	31	69
26	107	600	59	22	33	103
27	114	610	59	20	48	105
28	140	550	66	27	48	105
29	105	475	69	24	47	NO
30	103	420	66	27	55	RECORD
31	—	400	—	40	58	—
Total Sec. Ft. Days	2,039	8,138	9,384	1,205	1,386	2,044
Mean Sec. Ft.	97	263	313	39	45	73
Total Ac. Ft.	4,043	16,138	18,608	2,390	2,748	4,053

Total for period - 47,980 acre-feet

TABLE 7

DISCHARGE OF LITTLE SHASTA RIVER ABOVE HARP DITCH
April 1 to September 30, 1953

Mean Daily Discharge in Cubic Feet per Second

Day	April	May	June	July	August	September
1	38	49	92	38	12.8	9.3
2	41	45	92	37	12.4	9.0
3	46	47	85	33	13.3	9.0
4	49	56	81	33	12.8	9.0
5	50	62	80	32	12.8	8.7
6	46	63	101	30	12.4	8.7
7	38	59	103	29	12.0	8.7
8	35	55	89	28	12.0	8.6
9	31	51	86	26	11.2	8.4
10	28	48	81	25	11.6	7.5
11	27	51	78	24	10.5	7.5
12	25	53	81	23	10.5	7.7
13	27	53	77	22	10.5	7.7
14	26	58	73	22	11.2	7.5
15	26	53	72	21	10.5	7.8
16	26	54	72	20	10.5	7.8
17	27	53	70	19.4	10.2	7.5
18	27	67	69	18.9	9.6	7.5
19	30	168	68	18.4	9.3	7.2
20	41	97	63	17.9	9.9	7.5
21	53	103	59	17.4	10.2	7.8
22	67	92	56	15.9	10.2	7.8
23	67	142	55	15.9	10.2	7.8
24	62	136	53	15.9	10.2	7.8
25	64	115	51	15.9	9.9	7.5
26	78	116	49	14.9	10.2	7.5
27	101	111	46	14.5	9.9	7.5
28	82	140	44	14.1	9.6	7.5
29	68	111	44	13.7	10.8	7.5
30	54	106	41	13.3	10.2	7.5
31	—	100	—	12.8	9.9	—
Total Sec. Ft. Days	1,380	2,515	2,111	681.9	337.3	238.8
Mean Sec. Ft.	46.0	81.1	70.4	22.0	10.9	8.0
Total Ac. Ft.	2,737	4,987	4,186	1,352	668	474

Total for period - 14,404 acre-feet

TABLE 8

DISCHARGE OF CARRICK SPRINGS
April 1 to September 30, 1953

Intermittant Measurements of Discharge in Cubic Feet per Second

Day	April	May	June	July	August	September
1						
2						
3						
4						6.25
5			6.62			
6						
7						
8						
9						
10		6.31			6.30	
11						
12						
13				6.51		
14	6.61					6.25
15						
16						
17						
18						
19						
20						
21						
22					6.28	
23						
24						
25		6.55		6.40	6.30	
26						
27						
28						
29	6.66		6.35			
30						
31						

TABLE 9

DISCHARGE OF CLELAND SPRING
April 1 to September 30, 1953

Intermittant Measurements of Discharge in Cubic Feet per Second

Day	April	May	June	July	August	September
1						
2						
3						
4						
5						
6						
7						
8	10.7					
9						
10				10.1		10.6
11						
12						
13						
14					10.2	
15						
16		10.2				
17						
18						
19						
20			10.25			
21						
22						
23						
24	10.6					
25				10.1		
26						
27						
28						
29						
30					10.2	
31						

TABLE 10

DISCHARGE OF MONTAGUE WATER CONSERVATION DISTRICT PARKS CREEK CANAL

October 1, 1952 to September 20, 1953

Mean Daily Discharge in Cubic Feet Per Second

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1		1.1	3.0	9.2	0	0	7.7	24	2.2	20		
2	No	.9	11.0	8.2	0	0	8.4	18.0	2.1	19.8	No	No
3		.9	6.0	7.0	.2	0	12.2	18.0	2.1	19.3		
4	Flow	.8	7.0	6.6	1.5	0	17.6	28.8	2.1	20	Flow	Flow
5		.9	20	3.4	1.1	0	22	51	2.0	19.3		
6		1.1	21	.2	1.3	0	23	69	2.1	16.4		
7		1.5	41	1.7	1.8	0	19.8	62	1.5	14.2		
8		2.5	22	5.0	1.6	0	18.0	45	1.3	12.6		
9		3.8	18	74	1.0	0	14.6	32	1.3	4.5		
10		5.7	42	6.8	.2	1.0	12.2	24	1.2	1.3		
11		7.4	20	1.9	0	.4	9.5	18.0	1.3	1.2		
12	No	8.2	12	2.1	0	.5	7.9	16.0	1.3	1.2		
13		.4	8.9	1.8	0	.3	6.8	23	1.2	1.2		
14	Flow	1.1	7.4	1.1	0	.3	5.0	40	1.2	1.1		
15		2.3	6.8	1.0	0	.2	5.9	30	1.2	1.1		
16		2.7	6.2	1.0	0	.1	7.7	39	1.2	.8		
17	No	3.4	5.3	1.0	0	0	8.2	46	1.2	0		
18		3.3	5.0	3.0	0	0	7.4	54	1.1	0		
19	Flow	3.4	5.3	6.0	0	.3	10.6	93	1.0	0		
20		3.8	5.7	8.0	0	.5	16.0	69	.9	0		
21		4.0	5.7	3.3	0	.4	28	62	.8	0		
22	No	3.6	5.0	2.0	0	.4	60	44	.8	0		
23		3.4	4.1	1.3	0	.3	77	63	32	0		
24	Flow	3.1	4.1	1.1	0	.3	68	43	43	0		
25		3.0	4.1	.7	0	.2	74	36	39	0		
26		2.7	7.7	.2	0	.2	101	33	36	0		
27		2.7	17.6	.1	0	.1	104	28	33	0		
28		2.7	13.2	.1	0	11.9	66	30	29	0		
29	.4	2.9	23.9	.1		9.0	47	38	25	0		
30	1.2	3.5	24.9	.1		7.7	33	47	23	0		
31	1.6	—	9.7	.1		0.6	—	13.9	—	0		
Mean	0.1	28.9	127.0	5.1	.3	1.1	30.0	39.9	9.7	5.0		
Total Ac. Ft.	6.3	172	780	314	17.2	69	1782	2454	577	305	0	0

Total for period - 6,476 acre-feet.

TABLE 11

STORAGE IN IMINNELL RESERVOIR

October 1, 1952 to September 30, 1953

Daily Storage on Hand in Acre-Feet

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1	11,380	10,520	11,240	17,840	24,350	24,900	25,640	27,530	30,050	29,090	21,670	14,210
2	11,350	10,500	11,540	17,940	24,300	24,810	25,710	27,470	30,140	28,900	21,350	14,060
3	11,310	10,480	11,680	18,070	24,570	24,830	25,790	27,390	30,110	28,640	21,040	13,890
4	11,260	10,470	11,800	18,260	24,720	24,840	25,880	27,380	30,110	28,530	20,760	13,750
5	11,220	10,460	11,970	18,360	24,870	24,860	26,000	27,380	30,130	28,320	20,540	13,590
6	11,180	10,450	12,050	18,430	25,020	24,870	26,100	27,440	30,200	28,160	20,280	13,430
7	11,140	10,450	12,728	18,670	25,110	24,890	26,210	27,530	30,240	27,860	20,020	13,290
8	11,090	10,450	13,290	19,070	25,260	24,900	26,300	27,600	30,140	27,670	19,760	13,130
9	11,040	10,450	13,540	20,150	25,320	24,980	26,370	27,660	30,030	27,410	19,500	13,020
10	11,000	10,460	13,970	21,390	25,320	25,140	26,420	27,630	29,910	27,160	19,330	12,900
11	10,970	10,470	14,560	21,930	25,310	25,470	26,460	27,590	29,870	26,940	19,140	12,800
12	10,940	10,470	14,900	22,740	25,250	25,590	26,480	27,500	29,840	26,550	18,980	12,730
13	10,916	10,480	15,090	23,240	25,320	25,500	26,490	27,440	29,880	26,370	18,790	12,670
14	10,880	10,600	15,220	23,310	25,290	25,370	26,490	27,380	29,910	26,010	18,620	12,610
15	10,860	10,650	15,320	23,180	25,200	25,230	26,480	27,380	29,930	25,750	18,400	12,530
16	10,800	10,700	15,420	23,040	25,130	25,080	26,450	27,440	29,950	25,460	18,150	12,450
17	10,760	10,740	15,510	23,040	25,070	25,040	26,420	27,510	29,960	25,200	17,970	12,360
18	10,750	10,770	15,590	23,110	24,990	25,010	26,390	27,540	30,030	24,740	17,690	12,230
19	10,730	10,800	15,640	23,490	24,870	24,930	26,340	27,620	30,060	24,620	17,370	12,180
20	10,710	10,820	15,760	23,810	24,780	24,980	26,310	27,890	30,060	24,440	17,070	12,100
21	10,690	10,840	15,860	23,900	24,770	24,890	26,250	28,130	30,060	24,080	16,810	12,030
22	10,680	10,860	15,920	23,940	24,740	24,930	26,270	28,260	30,030	23,820	16,610	11,960
23	10,650	10,880	15,960	23,910	24,720	24,980	26,450	28,900	29,960	23,570	16,350	11,870
24	10,640	10,900		23,870	24,680	25,050	26,570	29,010	29,930	23,330	16,010	11,790
25	10,630	10,910		23,870	24,690	25,220	26,640	29,090	29,930	23,120	15,760	11,720
26	10,610	10,930		23,820	24,700	25,140	26,850	29,270	29,870	23,000	15,540	11,640
27	10,700	10,940		23,870	24,720	25,070	27,050	29,410	29,780	22,720	15,140	11,550
28	10,590	10,950	16,780	23,970	24,740	25,190	27,350	29,540	29,640	22,510	14,980	11,460
29	10,570	10,960	16,950	24,080		25,320	27,480	29,650	29,540	22,270	14,740	11,410
30	10,550	10,970	17,410	24,180		25,440	27,570	29,780	29,300	22,020	14,540	11,330
31	10,540		17,670	24,270		25,520	———	29,930	———	21,810	14,360	———

TABLE 12

RELEASES FROM DWINNELL RESERVOIR

January 1 to September 30, 1953

Mean Daily Release in Cubic Feet Per Second

Day	January	February	March	April	May	June	July	August	September
1	0	0	0	0	67	2.0	92	34	57
2	0	0	0	0	58	33 (a)	93	77	54
3	0	0	0	0	46	77 (a)	97	76	47
4	0	0	0	0	42	45 (a)	99	77	46
5	0	0	0	0	41	45 (a)	100	80	47
6	0	12	0	0	59	88 (a)	104	81	47
7	0	30	0	0	58	184 (a)	99	84	47
8	0	36	0	0	51	259 (a)	101	84	42
9	0	42	0	0	47	229 (a)	102	68	39
10	0	49	0	0	41	139 (a)	109	48	34
11	0	49	0	0	42	85 (a)	108	48	21
12	78	48	45	0	47	36 (a)	108	48	13
13	240	49	90	0	49	0	110	48	17
14	236	48	89	0	49	0	111	48	16
15	195	48	89	0	49	5.0	111	49	14
16	62	48	69	0	51	5.0	111	55	17
17	62	48	29	0	53	5.0	108	59	21
18	62	48	52	0	55	11.1	106	81	21
19	118	48	73	12	51	20	85	87	22
20	254	33	73	37	51	24	84	87	22
21	125	18	47	46	47	26	82	91	22
22	126	18	22	58	46	27	79	92	22
23	125	18	22	59	25	38	71	92	22
24	191	7.0	22	61	3.6	38	70	88	22
25	66	0	53	66	2.0	45	61	86	22
26	49	0	84	72	2.0	47	52	86	22
27	0	0	42	71	2.0	53	58	81	22
28	0	0	0	70	2.0	61	60	63	24
29	0		0	70	2.0	70	60	56	21
30	0		0	68	2.0	86	68	59	17
31	0		0		2.0	—	41	57	—
Mean	64.	25	29	23	37	60	88	70	29
Total Ac.Ft.	3944 (a)	1382 (a)	1787 (a)	1368	2266	3556	5433	4303	1705

Total for period - 25,744 acre-feet.

(a) Discharges through the siphon spillway computed by using the formula $Q = 0.6A\sqrt{2gh}$

TABLE 13

DISCHARGE OF BIG SPRINGS IRRIGATION DISTRICT PUMPING PLANT
April 1 to September 30, 1953

Mean Daily Discharge in Cubic Feet Per Second

Day	April	May	June	July	August	September
1	0	17.5	0	27.0	27.0	27.0
2	0	17.5	0	27.0	27.0	27.0
3	0	17.5	0	27.0	27.0	27.0
4	0	18.5	0	27.0	27.0	27.0
5	0	18.5	0	27.0	27.0	27.0
6	0	20.0	0	27.0	27.0	27.0
7	17.0	20.0	0	27.0	27.0	27.0
8	17.0	20.0	0	27.0	27.0	27.0
9	17.0	20.0	0	27.0	27.0	27.0
10	17.0	20.0	0	27.0	27.0	27.0
11	18.0	20.0	0	27.0	27.0	27.0
12	23.5	20.0	0	27.0	27.0	27.0
13	17.0	20.0	0	27.0	27.0	27.0
14	17.0	20.0	0	27.0	27.0	27.0
15	17.0	20.0	6.8	27.0	27.0	27.0
16	17.0	26.0	27.0	27.0	27.0	27.0
17	17.0	26.0	27.0	27.0	27.0	27.0
18	23.5	26.0	27.0	27.0	27.0	27.0
19	17.2	26.0	27.0	27.0	27.0	27.0
20	17.2	2.2	27.0	27.0	27.0	27.0
21	17.2	0	27.0	27.0	27.0	27.0
22	17.2	0	27.0	27.0	27.0	27.0
23	17.2	0	27.0	27.0	27.0	27.0
24	18.0	0	27.0	27.0	27.0	27.0
25	18.0	0	27.0	27.0	27.0	27.0
26	18.0	0	27.0	27.0	27.0	27.0
27	18.0	0	27.0	27.0	27.0	27.0
28	18.5	0	27.0	27.0	27.0	27.0
29	18.5	0	27.0	27.0	27.0	27.0
30	17.5	0	27.0	27.0	27.0	27.0
31	—	0	—	27.0	27.0	—
Total Sec. Ft. Days	430.5	325.7	411.8	837.0	837.0	810.0
Mean Sec. Ft.	14.4	12.8	13.7	27.0	27.0	27.0
Total Ac. Ft.	854	785	817	1660	1660	1606

Total for period—7,382 acre-feet.

TABLE 14

DISCHARGE OF GRENADA IRRIGATION DISTRICT PUMPING PLANT
April 1 to September 30, 1953

Mean Daily Discharge in Cubic Feet Per Second

Day	April	May	June	July	August	September
1	0	34	6	38	38	38
2	0	34	0	38	38	38
3	0	34	0	38	33	38
4	0	28	0	38	38	38
5	0	34	0	38	25	38
6	0	34	0	38	38	38
7	0	15	0	38	38	38
8	0	0	0	38	36	38
9	0	0	0	38	36	38
10	0	0	0	38	38	38
11	23	0	0	36	30	22
12	22	0	0	38	21	22
13	22	0	0	38	0	22
14	22	0	0	38	0	22
15	22	22	0	38	0	22
16	38	22	0	38	4	22
17	38	22	0	0	21	22
18	38	22	0	0	38	22
19	38	22	0	0	38	22
20	38	22	0	0	38	22
21	38	20	21	34	38	22
22	38	18	21	34	38	0
23	38	20	21	38	38	0
24	36	0	22	38	38	22
25	38	0	22	38	38	22
26	38	0	38	38	38	0
27	38	0	38	38	38	0
28	38	0	38	38	38	0
29	38	0	38	88	38	0
30	34	0	38	38	38	0
31	—	0	—	38	38	—
Total Sec. Ft. days	675	403	303	1016	966	666
Mean Sec. Ft.	22.5	13.0	10.1	32.8	31.2	22.2
Total Ac.Ft.	1338	799	601	2015	1916	1321

Total for period—7,990 acre-feet.

TABLE 15

DISCHARGE SHASTA RIVER WATER ASSOCIATION PUMPS
April 1 to September 30, 1953

Mean Daily Discharge in Cubic Feet Per Second

Day	April	May	June	July	August	September
1	9	42	0	42	42	42
2	13	42	0	42	42	42
3	13	42	0	42	42	42
4	13	42	25	42	42	42
5	13	42	37	42	42	42
6	28	42	17	42	42	42
7	42	42	0	42	42	42
8	42	42	0	42	42	42
9	42	42	0	42	42	42
10	42	42	0	42	42	42
11	42	42	0	42	42	42
12	42	42	0	42	42	42
13	42	42	0	42	42	42
14	42	42	0	42	42	42
15	42	42	20	42	42	42
16	42	42	42	42	42	42
17	42	38	42	42	42	42
18	42	29	42	42	42	42
19	42	29	42	42	42	42
20	42	20	42	42	42	42
21	27	0	42	42	42	42
22	13	0	42	42	42	42
23	8	0	42	42	42	42
24	0	0	42	42	42	42
25	0	0	42	42	42	42
26	0	0	42	42	42	37
27	36	0	42	42	42	29
28	42	0	42	42	42	29
29	42	0	42	42	42	16
30	42	0	42	42	42	13
31	—	0	—	42	42	—
Total Sec. Ft. Days	879	788	729	1302	1302	1174
Mean Sec. Ft.	29.3	25.4	24.3	42.0	42.0	39.1
Total Ac. Ft.	1,743	1,563	1,446	2,582	2,582	2,328

Total for period--12,244 acre-feet.