STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF WATER RESOURCES

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REPORT ON WATERMASTER SERVICE IN SHASTA RIVER WATERMASTER SERVICE AREA SISKIYOU COUNTY, CALIFORNIA 1954 SEASON

Sacramento, California
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SUBMISSION TO, AND ADOPTION BY
DEPARTMENT OF PUBLIC WORKS

I, L. C. Jopson, Principal 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, 1954 Season".

/s/ L. C. Jopson
Principal Hydraulic Engineer

I, Harvey O. Banks, Assistant State 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, 1954 Season".

/s/ Harvey O. Banks
Assistant State 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, 1954 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 20th day of January, 1955.

DEPARTMENT OF PUBLIC WORKS
STATE OF CALIFORNIA

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

(SEAL)

ORGANIZATION

STATE DEPARTMENT OF PUBLIC WORKS
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INTRODUCTION

This is the twenty first annual report on watermaster service in the Shasta River Watermaster Service Area, and covers the period of water distribution in 1954 beginning April 1 and terminating 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 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 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 and snow survey data indicated that the water supply for the 1954 irrigation season would be well above normal. However, actual water supply available was near normal in most of the service area. Rainfall during the irrigation season was not as beneficial as the precipitation data indicates. Storms were very localized and their occurrence was such that they did not materially reduce irrigation demands. Stream flows were slightly above normal after June 1 except for Little Shasta River which was well below normal.

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, 1953, to September 30, 1954, was 123 per cent of the mean.

Snow Surveys

Data on water content of snow pack at five representative snow courses in or near the Shasta River stream system as set forth in the bulletin "Water Conditions in California, April 1, 1954" are presented below:

Snow course	Elevation in feet	Water content of snow in inches		Per cent of mean
		50-year computed mean	1954	
Parks Creek	6,500	33.7	41.6	124
Sweetwater	5,500	14.4	19.0	132
Mt. Shasta	8,000	52.6	57.5	109
N. Fk. Sacramento	6,800	22.7	25.7	113
Little Shasta	6,200	26.4	23.5	89

Average water content of the snow pack of the five snow courses on April 1 was about 112 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 Yreka ditch, at Edgewood Bridge, and near Montague; on Parks Creek above the Edson-Foulke Yreka ditch, and the 8-foot weir above the Robertson ranch; and on Little Shasta River above the Harp ditch. The stream flow measuring stations on Little Shasta River above Harp ditch and Parks Creek above Edson-Foulke Yreka ditch were maintained in cooperation with the Division of Water Resources Klamath River Basin Investigation. The stream flow measuring station of Shasta River at Edgewood Bridge was maintained in cooperation with the Montague Water Conservation District and the Division of Water Resources Klamath River Basin Investigation. Records of discharge at the 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 1954 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, eleven additional water stage recorders were installed at critical points on streams and diversion conduits as follows:

Station	Type of control
Beaughan Creek below Long-Bell mill pond	2 feet - parshall flume
Beaughan Creek above Jackson ditch	8 feet - rectangular weir
Carrick Creek at Highway 97	3 feet - rectangular weir
Dwinnell reservoir in oulet tower	
Soule ditch at head	4 feet - rectangular weir
Waters and Petersen ditch at head	3 feet - rectangular weir
Quigley No. 3 headgate	4 feet - rectangular weir
White Mountain ranch headgate	4 feet - rectangular weir
Montague Water Conservation District bypass canal from Parks Creek	rated section
Montague Water Conservation District Shasta River canal at head	10 feet - parshall flume
Big Springs Lake at Big Spring Irrigation District pumping plant	

The water stage recorders located at Dwinnell Reservoir outlet tower and at the head of Montague Water Conservation District canal were operated in cooperation with the above named District. The water stage recorder located on Montague Water Conservation District bypass canal from Parks Creek was operated in cooperation with the above named District and the Division of Water Resources Klamath River Basin Investigation. The recorder located on Beaughan Creek below Long-Bell mill pond was operated in cooperation with Long-Bell Lumber Company. A description of results obtained in each of the sections into which the stream system naturally divides follows:

Shasta River Above Junction With Boles Creek

During the 1954 season there was sufficient water to satisfy all irrigation demands until about July 8. Thereafter, a shortage of water

occurred throughout the section, and diversion 3 (Durney Mill ditch) on Shasta River, diversions 11 and 13 (Dow Eddy and Hammond Eddy Lower ditches) on Eddy Creek were shut off. All other diversions were regulated to their decreed allotments subsequent to July 8. A summary of distribution for the 1954 season is set forth in the following tabulation:

Month	Distribution in per cent of allotments		
	Hammond-Scott	Foulke, et al.	Dow
April	Sufficient to satisfy all demands		
May	Sufficient to satisfy all demands		
June	Sufficient to satisfy all demands		
July	100	66	26
August	82	24	0
September	61	17	0

Boles Creek and Shasta River Below Junction With 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 June 19. Thereafter, by eliminating the rights of the Montague Water Conservation District and distributing the water on anequal and correlative basis, all users down to and including the Mills ranch received an average of 100 per cent of allotments until July 7. Between July 7 and July 26 service was reduced to 50 per cent of allotments on diversions above Edgewood Bridge. After July 26 the water supply was sufficient to satisfy all priorities having direct flow rights excepting Montague Water Conservation District.

During the period from July 31 to August 19 the Alexander ditch received 0.40 cubic foot per second for stockwatering purposes only.

The daily mean discharge of Shasta River at Edgewood Bridge, which represents the amount of water available to the Mills ranch and the Montague Water Conservation District, is presented in Table 5.

Dwinnell Reservoir and Shasta River Below Dwinnell Reservoir

Watermaster service on this section of the stream system involves operation of the Montague Water Conservation District's 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 water right owners below the reservoir are made in accordance with agreements between the District and the several water right 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 amount of water in 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 of water to the water right owners below the reservoir are subject to control of the watermaster, who also regulates releases from the reservoir in accordance with requirements of the Montague Water Conservation District. Rediversion of the water to natural flow water right owners below the reservoir is also regulated.

Delivery of water to Montague Water Conservation District commenced on April 17 and continued throughout the season. Deliveries to water right owners below the reservoir were made as requested. There was about 5,450 acre-feet of water remaining in storage on September 30. Daily releases from

Dwinnell Reservoir, as shown in Table 12, are the summation of deliveries to natural flow water right owners below the reservoir, deliveries to the Fred Quigley ranch as measured by the Montague Water Conservation District, and the discharge through the 10-foot parshall flume near the head of the Montague Water Conservation District canal.

The amount of water diverted from Parks Creek to Shasta River for storage in Dwinnell Reservoir is presented in Table 10.

Statistical data on reservoir operation during the 1954 season are set forth in the following tabulation:

MONTHLY SUMMARY OF OPERATION OF DWINNELL RESERVOIR

In Acre-Feet

Date	Storage on hand	Change in storage	(a) Inflow to reservoir	Total draft	Measured release	(b) Seepage and evaporation loss
April 1	24,900					
		250	7,740	7,490	2,500	4,990
May 1	25,150					
		-1,250	7,560	8,810	2,900	5,910
June 1	23,900					
		-4,300	2,320	6,620	2,560	4,060
July 1	19,600					
		-7,600	360	7,960	4,370	3,590
Aug. 1	12,000					
		-5,400	730	6,130	3,630	2,500
Sept. 1	6,600					
		-1,150	920	2,070	1,428	642
Sept. 30	5,450					
TOTALS			19,630	39,080	17,388	21,692

(a) Not adjusted for consumptive use on Mills ranch.

(b) Not adjusted for possible inflow from Carrick Creek or precipitation.

DELIVERIES TO NATURAL FLOW WATER
RIGHT OWNERS BELOW DWINNELL RESERVOIR

Name of water right owner	Allotment as per agreement, in acre-feet	Amount delivered from Dwinnell Reservoir	
		Acre-feet	Per cent of allotment
Fred Quigley	198	198	100
John Soule	692	692	100
Anna K. Peterson, K. K. Waters, and Emily S. Waters	696	696	100
John W. Taylor	1,200	1,200	100
Clarence Reed and Margaret R. Reed	596	0 (a)	0
TOTALS	3,382	2,786	82

(a) Supplied by seepage from reservoir

SUMMARY OF DELIVERIES
FROM DWINNELL RESERVOIR

In Acre-Feet

Month	Measured release	Deliveries to natural flow rights	Deliveries to M.W.C.D. canal
April	2,500	195	2,305
May	2,900	391	2,509
June	2,560	566	1,994
July	4,370	550	3,820
August	3,630	550	3,080
September	1,430	534	896
TOTALS	17,390	2,786	14,604

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

Beaughan Creek

One measurement was made during the 1954 season at the 8-foot rectangular weir (Long-Bell upper weir) located at the head of Beaughan Creek. Results are given below:

Date	Gate height - feet	Discharge - cubic feet per second
5/27/54	0.35	5.42

This amount of water is sufficient to supply approximately 65 per cent of second priority allotments of 8.28 cubic feet per second. Distribution was made on that basis throughout the 1954 season.

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 Long-Bell mill pond. During the 1954 season the average amount of water returned to the creek under this arrangement was in excess of the requirement at all times. Available water supply in Beaughan Creek below the return from the mill pond is measured by means of a 2-foot parshall flume.

Carrick Creek

There was sufficient water available in Carrick Creek during the 1954 season to satisfy all irrigation requirements. Results of intermittent measurements of Carrick Springs are presented in Table 8.

Parks Creek

Distribution on Parks Creek for the 1954 season was in accordance with practices followed during past seasons. A summary of the distribution is presented in the following tabulation:

Month	Distribution in per cent of allotments			
	Duke	Caldonia	Foulke, et al.	Robertson
April	Sufficient to supply all demands			
May	Sufficient to supply all demands			
June	100	100	100	81
July	100	100	43	12
August	100	63	1	5
September	100	0	0	9

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

Records of diversion of the Montague Water Conservation District bypass canal to Shasta River are presented in Table 10.

Big Springs

Water supply of Big Springs during the 1954 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 Big Springs Irrigation District with an allotment varying from an average of 63 per cent

in April to 87 per cent in August. Records of diversion by Big Springs Irrigation District during the 1954 season are presented in Table 13.

The John W. Taylor pump discharged 5.25 cubic feet per second or 70 per cent of his 7.50 cubic feet per second allotment until July 20. A new pump was installed, and for the balance of the season the pump discharged the full allotment of 7.50 cubic feet per second. The new pump was not operated continuously due to mechanical difficulties.

Lower Shasta River

During the 1954 season 100 per cent of allotments were available for all priorities except for the period from July 5 through July 18. During this period Grenada Irrigation District was regulated to 34 cubic feet per second.

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

	Average diversion Grenada Irrigation District	Average diversion Shasta River Water Association	Average available water supply Flock, et al.
	In cubic feet per second		
April	21.4	33.4	57
May	34.7	42.0	56
June	10.7	42.0	95
July	27.3	42.0	18
August	23.2	36.6	43
September	19.4	29.7	75

Little Shasta River

Water supply on this stream was sufficient to satisfy all demands until about June 23. Subsequent to that date and until the end of the season close regulation was necessary. From September 1 until the end of the irrigation season sufficient water was intermittently returned to Little Shasta River from the Russ Connick ditch to satisfy varying percentages of the fifth priority allotments. A summary of distribution during the 1954 season is presented in the following tabulation:

Month	Distribution in per cent of priority allotments						
	1	2	3	4	5	6	7
April	Sufficient to supply all demands						
May	Sufficient to supply all demands						
June	100	100	100	100	90	0	0
July	100	100	100	100	49	0	0
Aug.	100	100	100	100	41	0	0
Sept.	100	100	100	100	46	0	0

The discharge record of Little Shasta River during the 1954 season is presented in Table 7.

Records of intermittent measurements of the discharge of Cleland Spring during the 1954 season are presented in Table 9.

CHANGES IN OWNERSHIP OF LANDS AND WATER RIGHTS

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 1954", and which shall be included in the 1955 statement for the service area, are listed in the following tabulation:

Tract number	Name of water right owner appearing in 1954 statement	Name of water right owner to appear in 1955 statement	Amount of water, cubic feet per second
5-87	Frank R. Day	C. A. Ray, Charlotte Ray, Kenneth L. Ray, and Geraldine Ray	5.30
5-15	Anthony F. Duart and Anna Duart	Frank R. Day and Margaret S. Day	3.24
5-51	Raymond Hufford and Betty Lee Hufford	Samuel J. Root and Edith W. Root	1.98
5-34	C. L. Shults and Ettie B. Shults	F. A. Roberts and Joy M. Roberts	1.75

TABLE 1

PRECIPITATION AT YREKA
SISKIYOU COUNTY, CALIFORNIA
1953-1954

In Inches

Month	Normal precipitation	1953-1954 precipitation
October	1.23	1.06
November	2.39	3.24
December	2.93	1.88
January	2,88	7.89
February	2.36	1.52
March	1.65	1.55
April	1.01	1.24
May	1.03	0.06
June	0.64	1.83
July	0.36	0
August	0.26	0.84
September	0.48	0.15
TOTALS	17.22	21.26

TABLE 2

DAILY MEAN DISCHARGE OF SHASTA RIVER ABOVE EDSON-FOULKE YREKA DITCH

April 8 to September 27, 1954

In Cubic Feet per Second

Day	April	May	June	July	August	September
1		69	59	48	26	38
2		66	60	43	25	19.0
3	No	75	60	40	24	12.5
4		92	63	40	23	12.0
5	Record	122	64	40	24	11.7
6		130	57	40	23	11.0
7		145	53	40	22	10.5
8	92	188	92	40	22	8.8
9	155	155	68	44	22	8.8
10	114	126	64	38	19.0	9.5
11	121	131	63	32	18.0	11.2
12	118	125	67	30	10.0	12.6
13	83	120	67	31	5.8	12.0
14	61	133	67	35	6.2	13.6
15	65	135	61	37	6.4	14.5
16	135	118	71	36	5.8	13.6
17	200	156	71	33	4.0	14.0
18	220	171	67	31	10.5	13.6
19	190	200	65	30	11.2	13.0
20	135	175	61	30	11.2	14.5
21	118	225	57	29	11.0	10.7
22	118	87	54	29	10.5	12.0
23	118	66	65	27	10.5	13.0
24	118	59	65	27	8.8	11.0
25	118	52	70	27	9.5	10.7
26	118	63	70	30	11.0	10.2
27	140	74	65	29	47	10.0
28	135	68	52	29	116	No
29	110	65	50	28	65	Record
30	95	61	49	26	55	
31	---	60	---	25	51	
Mean	96	110	63	34	19	13.0
Runoff, in acre-feet	5,700	6,740	3,800	2,100	1,150	700

Total for period - 20,190 acre-feet

TABLE 3

DAILY MEAN DISCHARGE OF PARKS CREEK ABOVE EDSON-FOULKE YREKA DITCH

October 1, 1953 to September 27, 1954

In Cubic Feet per Second

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	August	September
1	2.8	7.4	19	12.0	22	26	21	58	29	11.7	2.9	6.5
2	3.0	8.8	19	11.7	22	26	22	58	26	10.2	2.9	5.7
3	2.7	8.2	20	11.7	24	24	25	68	24	9.5	2.9	5.0
4	2.7	7.7	21	11.7	25	24	57	82	23	9.5	3.0	4.3
5	2.6	7.7	19	11.7	25	25	70	92	25	9.2	3.2	3.6
6	2.6	7.7	19	11.7	24	27	52	99	22	8.8	3.1	2.9
7	2.5	7.4	18	12.0	24	29	44	112	21	8.5	2.7	2.2
8	2.5	7.4	17	11.3	25	62	40	122	30	8.5	2.7	2.2
9	3.2	7.1	19	11.7	26	151	36	105	34	7.7	2.7	2.1
10	7.9	23	17	11.3	26	100	34	90	30	7.1	2.7	2.0
11	7.1	22	16	11.3	27	60	35	87	27	6.8	2.6	2.3
12	6.2	24	16	10.6	82	46	40	82	50	6.8	2.6	2.1
13	6.0	19	15	10.2	54	38	81	78	37	6.8	2.5	2.1
14	6.0	52	16	10.2	37	35	82	86	32	6.0	2.5	2.3
15	6.0	23	16	11.3	31	34	84	87	36	5.2	2.6	2.8
16	6.0	21	16	52	28	33	100	90	28	5.2	2.5	2.5
17	6.2	18	16	50	32	28	131	95	26	4.9	2.5	2.4
18	21	15	16	20	28	27	144	100	21	4.4	2.5	2.4
19	11	15	19	16.4	26	26	129	103	17.4	4.1	2.5	2.6
20	10	14	24	14.6	25	24	107	92	16.8	4.4	2.6	2.7
21	9.2	14	19	13.7	26	23	101	72	17.4	4.1	2.7	2.6
22	8.5	28	16	13.3	26	22	105	57	16.4	3.9	2.7	2.6
23	8.2	96	15	13.7	27	22	112	52	16.8	3.6	2.5	2.6
24	8.2	100	15	13.3	28	21	120	50	15.9	3.4	2.6	2.5
25	7.9	56	14	12.4	30	21	111	45	15.0	3.4	2.6	2.5
26	7.9	41	14	12.4	30	21	103	40	15.0	3.3	3.0	2.3
27	7.9	34	15	14.6	28	21	100	36	14.2	3.2	3.2	2.3
28	7.7	28	14	21	27	21	94	34	13.7	3.2	11.3	No
29	7.4	23	14	34	—	21	82	34	12.4	3.2	8.8	Record
30	7.4	21	13	31	—	21	668	32	12.4	3.1	6.8	
31	7.4	—	13	25	—	21	—	31	—	3.1	6.5	
Mean	6.6	25	17	21	30	35	78	73	23	5.9	3.4	2.9
Runoff, in ac.ft.	410	1,500	1,030	1,290	1,670	2,150	4,640	4,490	1,370	360	210	160

Total for period - 19,280 acre-feet

TABLE 4

DAILY MEAN DISCHARGE OF PARKS CREEK AT ROBERTSON WEIR

April 1 to September 30, 1954

In Cubic Feet per Second

Day	April	May	June	July	August	September
			M			
1		24	O	9.6	1.0	4.3
2	S	24		7.7	1.0	4.1
3		24	R	7.0	1.0	3.9
4	U	25	E	6.2	1.0	3.9
5		26	C	5.3	1.0	3.7
	K		O			
6		22	R	5.0	1.0	3.3
7	P	21	D	4.0	1.0	2.2
8		21	26.0	3.1	1.0	2.2
9	L	23	26.0	2.4	1.0	2.2
10		24	20.8	1.9	1.0	2.4
	U					
11		23	19.4	2.2	1.0	2.4
12	S	23	29.9	2.2	1.0	2.6
13		23	24.8	2.2	1.0	2.6
14		25	17.7	2.2	1.0	2.6
15		23	17.0	2.2	1.0	2.9
16		23	16.0	1.5	0.9	3.3
17		23	15.0	1.5	0.9	3.3
18		22	12.8	1.5	0.9	3.5
19		22	11.0	1.4	0.9	3.9
20		22	9.0	0.8	0.9	3.7
21		22	7.7	0.8	0.9	2.9
22			6.2	0.8	0.9	2.9
23		N	6.7	0.8	0.9	2.9
24		O	7.2	0.8	0.8	2.4
25			8.5	0.8	0.8	2.4
		R				
26		E	8.5	0.8	0.8	2.4
27		C	9.9	0.8	0.9	2.4
28		O	10.1	0.8	2.4	2.4
29		R	10.7	0.8	2.4	2.4
30	24.1	D	10.1	0.8	2.4	2.4
31	—		—	0.8	2.4	—
Mean	24.1	23.0	12.3	2.6	1.1	2.9
Runoff, in acre-feet	48 (a)	960 (b)	560 (c)	157	70	175

(a) 1-day period
(b) 21-day period
(c) 23-day period

Total for period -1,970 acre-feet

TABLE 5

DAILY MEAN DISCHARGE OF SHASTA RIVER AT EDGEWOOD BRIDGE

October 1, 1953 to September 30, 1954

In Cubic Feet per Second

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	August	September
1	11	22	84	44	104	84	76	95	25	11.5	7.6	15.3
2	11	25	82	46	95	82	79	84	21	10.0	7.1	13.8
3	12	25	89	51	91	79	100	91	23	9.5	7.6	14.3
4	12	25	107	50	87	76	161	110	34	8.3	9.2	14.8
5	12	26	86	45	83	77	175	133	45	7.1	10.2	15.3
6	11	28	92	46	79	81	133	156	40	7.1	8.7	14.3
7	8.7	28	84	62	77	87	110	155	35	5.1	8.2	13.3
8	9.2	27	78	48	77	239	103	189	104	6.0	8.2	13.3
9	9.2	27	78	46	77	476	97	188	79	4.5	8.2	13.3
10	22	95	76	45	77	269	89	163	58	5.1	7.6	12.3
11	23	87	71	45	95	168	87	142	47	3.9	8.7	16.3
12	21	105	69	43	707	148	87	135	74	3.4	9.2	17.4
13	20	204	67	41	360	128	100	143	72	3.6	8.2	18.0
14	20	446	64	41	201	114	112	152	57	3.6	917	14.3
15	20	160	59	55	152	104	104	152	54	3.9	12.8	15.8
16	19	145	59	433	147	124	115	152	53	3.6	11.8	15.8
17	19	120	57	427	278	110	135	164	44	4.2	11.8	16.3
18	46	97	59	153	161	101	147	182	36	4.2	10.8	17.4
19	37	92	76	118	128	104	168	194	31	4.5	10.2	18.0
20	28	95	96	95	117	110	125	190	28	5.4	8.7	16.8
21	26	87	76	84	114	108	130	180	27	4.2	9.2	14.3
22	24	108	67	101	107	99	171	172	22	3.9	8.7	15.3
23	24	278	63	118	100	95	171	86	23	3.4	8.2	16.3
24	24	325	61	83	99	91	173	77	26	3.4	7.1	17.4
25	24	207	57	69	97	88	177	70	25	5.7	6.6	16.8
26	23	160	56	63	96	88	170	58	25	6.0	9.2	16.3
27	22	133	61	77	89	91	173	48	25	7.1	10.8	15.8
28	22	114	57	150	88	78	171	45	19.0	8.7	59	15.3
29	22	103	54	245	—	78	142	41	14.0	7.6	28	14.8
30	22	92	51	166	—	77	117	36	13.0	7.6	18.0	14.3
31	22	—	51	120	—	76	—	34	—	7.6	15.8	—
Mean	20	116	70	104	142	121	130	123	39	5.8	11.8	15.4
Runoff, in ac.ft.	1,240	6,910	4,340	6,190	7,890	7,440	7,740	7,560	2,320	360	730	920

Total for period - 53,640 acre-feet

TABLE 6

DAILY MEAN DISCHARGE OF SHASTA RIVER AT MONTAGUE BRIDGE

April 15 to September 27, 1954

In Cubic Feet per Second

Day	April	May	June	July	August	September
1	N	107	66	16	15	68
2	O	105	55	10	15	56
3		107	56	9	8	56
4		107	58	9	16	39
5	R	78	79	13	14	26
	E					
6	C	61	87	15	14	31
7	O	60	85	16	14	31
8	R	50	97	16	14	29
9	D	53	120	17	19	19
10		54	136	10	16	21
11		54	163	16	17	30
12		58	250	21	12	67
13		52	275	19	14	78
14		54	270	19	22	85
15	134	52	210	16	30	89
16	120	50	171	13	30	91
17	111	51	129	10	44	97
18	122	47	107	16	37	100
19	136	38	91	17	40	102
20	124	35	69	16	50	110
21	109	35	69	20	41	110
22	113	33	54	28	39	112
23	85	32	17	30	61	113
24	78	35	15	33	65	113
25	78	47	27	35	82	113
26	78	38	27	39	91	113
27	87	40	26	26	81	113
28	120	37	26	17	103	NO
29	111	45	10	14	107	RECORD
30	107	54	15	11	108	
31	—	78	—	12	81	—
Mean	57	56	78	17.7	43	75
Runoff, in acre-feet	3,400	3,460	4,680	1,100	2,600	4,000

Total for period - 19,240 acre-feet

TABLE 7

DAILY MEAN DISCHARGE OF LITTLE SHASTA RIVER ABOVE HARP DITCH

October 1, 1953 to September 30, 1954

In Cubic Feet per Second

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	August	September
1	7.8	6.5	9.3	R	28	30	29	54	22	10.8	7.0	6.0
2	7.5	7.5	12	E	41	28	29	55	21	10.8	6.7	5.7
3	7.2	7.0	38	C	43	26	33	54	20	10.2	6.7	6.0
4	6.5	6.7	32	O	43	28	55	53	20	9.9	6.7	6.0
5	6.2	6.5	20	R	39	30	67	51	23	9.6	6.5	6.0
6	6.5	6.7	17	D	38	32	56	50	22	9.3	6.5	5.7
7	6.5	6.7	15		39	33	46	49	20	9.3	6.5	5.7
8	6.2	6.5	22	N	39	38	45	48	25	8.7	6.5	5.7
9	6.5	6.5	42	O	37	113	34	47	22	8.7	6.5	5.5
10	10	7.2	31	T	34	81	42	45	20	8.7	6.5	6.0
11	7.8	7.8	22		37	59	43	43	18.9	8.4	6.5	6.5
12	7.2	11	18	A	43	48	46	43	24	8.4	6.5	6.0
13	7.0	8.7	19	V	39	43	64	40	20	8.4	6.5	5.7
14	7.0	9.0	20	A	43	39	63	39	18.9	8.4	7.0	5.7
15	6.7	8.4	21	I	37	38	59	40	21	8.4	7.0	6.5
16	6.7	8.7	22	L	34	36	64	38	18.9	8.0	6.5	6.2
17	7.0	9.0	21	A	27	36	69	45	16.9	8.0	6.5	6.0
18	14	6.0	22	B	26	35	70	36	16.4	7.8	6.2	5.7
19	9.9	7.0	43	L	25	37	69	35	15.9	7.2	6.5	5.5
20	8.0	7.0	54	E**	40	35	65	33	14.9	7.2	6.5	5.5
21	7.8	7.5	28		37	33	64	33	14.1	7.2	6.2	5.2
22	7.5	12	19	11.6	36	33	63	31	13.7	7.2	6.0	5.2
23	7.5	136	15	10.2	36	36	63	29	13.3	7.0	6.0	5.2
24	7.2	90	14	12.4	38	36	63	28	12.8	7.0	5.7	5.2
25	7.0	28	12	12.8	38	31	62	27	12.4	7.0	5.5	5.2
26	7.0	17	13	19.9	37	31	59	26	12.0	7.0	7.0	5.2
27	7.0	14	15	13.7	31	31	74	25	13.3	7.0	6.5	5.2
28	6.7	11	12	24	31	31	74	25	12.0	7.0	7.2	5.2
29	6.5	9.9	10	52	—	30	63	25	11.6	6.7	6.5	5.2
30	6.5	9.6	9.9	43	—	28	57	24	11.6	7.2	6.0	5.2
31	6.5	—	11	31	—	28	—	23	—	7.2	6.7	5.2
Mean	7.4	16.2	21	*23.0	36	56	56	38	17.6	8.2	6.5	5.6
Runoff, in ac. ft.	450	960	1,310	1,415	2,000	2,400	3,330	2,340	1,050	500	400	340

* 10 day period

** Complete record will be published in Klamath River Basin Investigation report.

Total for period - 16,495 acre-feet.

TABLE 8

DISCHARGE OF CARRICK SPRINGS

April 1 to September 30, 1954

Intermittent Measurements of Discharge in Cubic Feet per Second

Day	April	May	June	July	August	September
1						6.86
2						
3						
4					6.86	
5						
6						
7						
8						
9						
10						6.86
11					7.02	
12						
13						
14				7.09		
15		7.24				
16						
17						
18					6.94	
19						
20						
21				6.74		
22						
23			7.00			
24						
25					6.86	
26						
27						
28				6.74		
29						
30			6.50			
31	—		—			—

TABLE 9

DISCHARGE OF CLELAND SPRING

April 1 to September 30,1954

Intermittent Measurement of Discharge in Cubic Feet per Second

Day	April	May	June	July	August	September
1						11.46
2						
3						
4					10.91	
5						
6						
7				10.49		
8						
9						
10						11.46
11					11.46	
12						
13						
14				10.91		
15						
16						
17			12.5			
18					11.35	
19						
20						
21				10.91		
22						
23			10.54			11.98
24						
25		10.81			11.46	
26						
27						
28						
29						
30			10.11			
31	—					

TABLE 10

DAILY MEAN DISCHARGE OF MONTAGUE WATER CONSERVATION DISTRICT PARKS GREEK CANAL

October 1, 1953 to September 30, 1954

In Cubic Feet per Second

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	August	September
1			22	4.6	0.8	0.1	0	25	0.6			
2		N	22	4.6	0.6	0.1	0	23	0			
3		O	23	6.1	0.2	0	0	29	0			
4			27	4.6	0.2	0	0	55	0			
5		F	21	4.3	0.2	0	0.2	49	0.7			
6		L	21	4.4	0.2	0	0.2	58	1.5			
7		O	21	5.5	0.2	0.2	0.2	62	0.2			
8	N	W	20	4.3	0.2	0.3	0.2	70	10.1	N	N	N
9			20	4.4	0.1	0.4	0.1	60	7.7			
10	O	0.2	19	4.6	0.1	0.3	0.1	48	5.3	O	O	O
11		0.1	18	4.3	0.1	0.2	0.1	46	2.9			
12		0.1	18	4.1	2.9	0.2	0.1	41	0.5			
13	F	0.4	17	3.6	3.3	0.2	0.2	39	0.4	F	F	F
14		18	14	3.5	0.6	0.1	0.2	46	6.1			
15	L	25	8.6	4.3	0.4	0.1	0.2	48	6.1	L	L	L
16		24	8.4	43	0.6	0.1	012	46	5.0			
17	O	20	7.8	53	1.4	0.1	0.2	52	3.0	O	O	O
18		14	7.8	17.6	0.6	0	0.2	53				
19	W	13	9.1	13.0	0.4	0	0.3	59		W	W	W
20		13	13.0	9.8	0.4	0.1	0.2	52				
21		12	9.4	9.4	0.3	0	4.1	36	N			
22		21	7.6	10.1	0.3	0	63	24	O			
23		79	7.3	0.4	0.1	0	66	17.6				
24		102	6.8	0.3	0.1	0	66	14.4	F			
25		61	6.1	0.1	0.1	0	66	11.6	L			
26		46	5.9	0.1	0.1	0	66	8.1	O			
27		37	6.8	0.4	0.2	0	55	5.0	W			
28		30	6.1	3.5	0.1	0	52	3.5				
29		26	5.7	1.3	—	0	41	2.5				
30		24	5.0	0.7	—	0	32	1.2				
31		—	4.6	0.4	—	0	—	0.8	—			
Mean	0	18.9	13.2	7.4	0.5	*	17.1	34	1.7	0	0	0
Discharge in ac. ft.		1,122	811	455	300		1,020	2,090	100	0	0	0

* Flow considered negligible

Total for period -5,628 acre-feet

TABLE 11

DAILY MEAN STORAGE IN DWINNELL RESERVOIR

October 1, 1953 to September 30, 1954

In Acre-Feet

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	August	September
1	11,200	10,750	16,500	19,100	24,200	24,600	24,900	25,150	23,900	19,600	12,000	6,600
2	11,150	10,800	16,600	19,200	24,200	24,550	24,950	25,150	23,700	19,250	11,800	6,450
3	11,100	10,800	16,700	19,200	24,300	24,400	24,950	25,100	23,400	18,900	11,600	6,350
4	11,100	10,850	16,900	19,300	24,400	24,350	24,950	25,100	23,180	18,700	11,350	6,300
5	11,100	10,850	17,000	19,300	24,500	24,500	25,100	24,900	23,100	18,450	11,150	6,250
6	10,800	10,850	17,200	19,400	24,500	24,600	25,250	24,900	22,950	18,200	10,950	6,200
7	10,750	10,900	17,300	19,400	24,500	24,700	25,250	25,000	22,850	17,850	10,750	6,150
8	10,700	10,900	17,400	19,500	24,500	24,750	25,250	25,100	22,850	17,600	10,550	6,100
9	10,700	10,900	17,400	19,500	24,500	24,900	25,250	25,250	22,850	17,300	10,350	6,050
10	10,600	10,950	17,500	19,600	24,500	24,900	25,250	25,300	22,800	17,150	10,150	6,000
11	10,600	11,200	17,700	19,600	24,600	24,900	25,250	25,350	22,700	16,800	9,950	5,950
12	10,600	11,300	17,800	19,600	25,700	24,800	25,250	25,350	22,600	16,500	9,750	5,900
13	10,550	11,600	17,900	19,700	25,800	24,800	25,250	25,350	22,600	16,300	9,550	5,850
14	10,500	12,530	18,000	19,800	25,700	24,700	25,250	25,300	22,600	16,100	9,350	5,800
15	10,450	12,860	18,100	19,900	25,450	24,650	25,250	25,250	22,600	15,850	9,150	5,800
16	10,450	13,100	18,200	20,500	25,200	24,650	25,250	25,200	22,550	15,650	8,950	5,750
17	10,400	13,400	18,200	21,200	24,900	24,600	25,300	25,200	22,500	15,400	8,800	5,700
18	10,450	13,600	18,300	21,700	24,600	24,600	25,400	25,150	22,450	15,100	8,650	5,700
19	10,550	13,800	18,400	22,200	24,500	24,550	25,400	25,150	22,350	14,900	8,450	5,650
20	10,600	13,900	18,500	22,300	24,500	24,500	25,400	25,150	22,200	14,600	8,250	5,600
21	10,600	14,000	18,600	22,400	24,550	24,500	25,350	25,150	22,050	14,400	8,050	5,500
22	10,650	14,200	18,600	22,500	24,600	24,500	25,250	25,150	22,000	14,300	7,900	5,450
23	10,650	14,400	18,700	22,700	24,700	24,500	25,250	25,100	21,650	14,000	7,700	5,400
24	10,700	14,900	18,700	23,000	24,700	24,500	25,250	25,100	21,400	13,800	7,500	5,400
25	10,700	15,400	18,800	23,000	24,700	24,600	25,250	25,100	21,050	13,500	7,350	5,350
26	10,700	15,700	18,800	23,100	24,700	24,600	25,250	24,950	20,800	13,300	7,150	5,350
27	10,700	15,900	18,900	23,300	24,650	24,600	25,200	24,850	20,550	13,050	7,050	5,350
28	10,700	16,000	18,900	23,600	24,650	24,650	25,200	24,650	20,250	12,850	6,950	5,300
29	10,750	16,200	19,000	24,000	—	24,700	25,200	24,500	20,050	12,650	6,900	5,300
30	10,750	16,400	19,100	24,200	—	24,800	25,200	24,350	19,750	12,400	6,850	5,300
31	10,750	—	19,100	24,200	—	24,800	—	24,100	—	12,200	6,700	—

TABLE 12

DAILY MEAN RELEASES FROM DWINNELL RESERVOIR

October 1, 1953 to September 30, 1954

In Cubic Feet per Second

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	August	September
1					97	53	0	28	39	84	66	32
2					48	40	0	28	40	84	65	30
3	N	N	N	N	0	40	20	28	40	84	64	26
4					0	21	31	29	40	84	64	17
5	O	O	O	O	16	0	40	31	39	87	64	117
6					32	0	50	30	36	80	64	17
7					32	0	50	43	36	79	65	17
8	R	R	R	R	32	69	50	36	28	75	66	17
9					32	218	50	37	33	74	64	14
10	E	E	E	E	32	298	41	56	34	73	64	9
11					32	214	26	62	34	72	65	6
12	L	L	L	L	225	118	26	63	34	72	69	6
13					431	96	26	73	22	72	69	7
14	E	E	E	E	280	96	24	72	15	71	69	8
15					135	96	22	72	12	71	67	9
16	A	A	A	A	175	96	22	75	12	71	67	10
17					249	74	16	75	14	71	67	10
18	S	S	S	S	204	55	33	75	14	72	67	9
19					156	55	39	75	14	73	66	13
20	E	E	E	E	50	50	47	72	22	71	66	18
21					50	48	60	69	36	71	65	18
22					17	48	62	64	51	0	63	18
23					36	65	65	46	64	64	62	18
24					62	31	71	41	78	72	60	11
25					67	21	71	28	84	72	69	0
26					75	21	71	9	84	72	39	0
27					75	21	71	9	84	72	36	0
28					75	8	64	24	84	72	29	0
29				*48	—	0	72	30	84	70	27	0
30				97	—	0	32	33	84	66	25	0
31				97	—	0	—	36	—	66	32	—
Mean				** 81	101	62	42	47	43	71	59	12
Releases, in acre-feet				480	5,600	3,800	2,500	2,900	2,560	4,370	3,630	714

* 10,590 acre-feet spill from January 29 to April 17, 1954.
taken from Montague Water Conservation District records.

** 3 day period.

Total for period -26,550 acre-feet

TABLE 13

DAILY MEAN DISCHARGE OF BIG SPRINGS IRRIGATION DISTRICT PUMPING PLANT

April 1 to September 30, 1954

In Cubic Feet per Second

Day	April	May	June	July	August	September
1	21.3	17.0	22.5	25.0	25.0	25.8
2	21.3	17.0	22.5	25.0	25.0	25.8
3	21.3	18.5	22.5	25.0	25.0	25.8
4	21.3	18.5	22.5	25.0	25.0	25.8
5	21.3	18.5	22.5	25.0	25.0	25.8
6	21.3	18.5	22.5	25.0	25.0	25.8
7	22.0	18.5	22.8	25.0	25.0	25.8
8	22.0	18.5	22.8	25.0	25.0	25.8
9	22.0	18.5	0	25.0	25.0	25.8
10	22.0	18.5	0	25.0	25.0	25.8
11	22.0	18.5	0	25.0	25.0	0
12	22.0	18.5	0	25.0	25.0	0
13	17.0	18.5	0	25.0	25.0	0
14	17.0	18.5	0	25.0	25.0	0
15	17.0	18.5	0	25.0	25.0	0
16	17.0	18.5	0	25.0	25.0	0
17	17.0	18.5	0	25.0	25.0	0
18	17.0	19.5	22.7	25.0	25.0	0
19	17.0	19.5	22.7	25.0	25.0	0
20	17.0	19.5	25.0	25.0	0	0
21	17.0	19.5	25.0	25.0	0	26.0
22	17.0	19.5	25.0	25.0	0	26.0
23	17.0	20.5	25.0	25.0	0	26.0
24	17.0	20.5	25.0	25.0	0	26.0
25	17.0	21.0	25.0	25.0	0	0
26	17.0	21.0	25.0	25.0	0	0
27	17.0	22.5	25.0	25.0	0	0
28	17.0	22.5	25.0	25.0	0	0
29	17.0	22.5	25.0	25.0	25.8	0
30	17.0	22.5	25.0	25.0	25.8	0
31	---	22.5	---	25.0	25.8	0
Mean	18.9	19.5	16.7	25.0	17.8	11.7
Discharge in acre-feet	1,122	1,197	995	1,536	1,093	717

Total for period - 6,660 acre-feet

TABLE 14

DAILY MEAN DISCHARGE OF GRENADA IRRIGATION DISTRICT PUMPING PLANT

April 1 to September 30, 1954

In Cubic Feet per Second

Day	April	May	June	July	August	September
1	0	34	17	38	34	22
2	0	34	17	38	34	22
3	0	34	0	38	34	22
4	0	34	0	38	34	38
5	0	34	0	34	34	38
6	0	38	0	34	34	38
7	0	38	0	34	34	34
8	0	38	0	34	34	34
9	0	38	0	38	34	34
10	0	38	0	38	34	34
11	0	34	0	34	34	34
12	0	24	0	34	34	34
13	22	34	0	34	34	34
14	22	34	0	36	34	34
15	38	34	0	34	34	34
16	38	38	0	34	22	34
17	38	38	0	34	17	17
18	38	38	0	34	19	17
19	38	38	0	22	22	17
20	38	38	0	22	22	13
21	38	34	0	0	0	0
22	38	34	0	0	22	0
23	38	34	34	0	0	0
24	38	34	34	0	0	0
25	38	34	34	0	0	0
26	38	34	34	0	11	0
27	38	34	38	17	0	0
28	38	34	38	38	22	0
29	34	34	38	38	22	0
30	34	34	38	38	14	0
31	—	17	—	34	17	—
Mean	21.4	34.7	10.7	27.3	23.2	19.4
Discharge, in acre-feet	1,280	2,330	640	1,680	1,430	1,160

Total for period - 8,520 acre-feet

TABLE 15

DAILY MEAN DISCHARGE OF SHASTA RIVER WATER ASSOCIATION PUMPS

April 1 to September 30, 1954

In Cubic Feet per Second

Day	April	May	June	July	August	September
1	5	42	42	42	42	37
2	5	42	42	42	42	37
3	5	42	42	42	42	42
4	5	42	42	42	42	42
6	5	42	42	42	42	42
7	5	42	42	42	42	42
8	42	42	42	42	42	42
9	42	42	42	42	42	42
10	42	42	42	42	42	42
11	42	42	42	42	42	42
12	42	42	42	42	42	42
13	42	42	42	42	42	42
14	42	42	42	42	42	42
15	42	42	42	42	42	42
16	42	42	42	42	42	42
17	42	42	42	42	42	42
18	42	42	42	42	42	42
19	42	42	42	42	42	42
20	42	42	42	42	42	37
21	42	42	42	42	42	37
22	42	42	42	42	42	37
23	42	42	42	42	42	0
24	42	42	42	42	42	0
25	42	42	42	42	42	0
26	42	42	42	42	42	0
27	42	42	42	42	42	0
28	42	42	42	42	37	0
29	42	42	42	42	37	0
30	42	42	42	42	37	0
31	—	42	—	42	37	—
Mean	33.4	42.0	42.0	42.0	36.6	29.7
Discharge, in acre-feet	1,990	2,582	2,500	2,582	2,251	1,770

Total for period - 13,675 acre-feet

Entered 12-6-54 G.E.K

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF WATER RESOURCES

FORM 500

Must be 1953

Daily discharge, in second feet, of SHASTA RIVER AT EDGEWOOD, for the year ending September 30, 1954

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	11	22	84									
2	11	25	82									
3	12	25	89									
4	12	25	107									
5	12	26	86									
6	11	28	92									
7	8.7	28	84									
8	9.2	27	78									
9	9.2	27	78									
10	22	95	76									
11	23	87	71									
12	21	105	69									
13	20	204	67									
14	20	e446	64									
15	20	160	59									
16	19	145	59									
17	19	120	57									
18	46	97	59									
19	37	92	76									
20	28	95	96									
21	26	87	76									
22	24	108	67									
23	24	278	63									
24	24	325	61									
25	24	207	57									
26	23	160	56									
27	22	133	61									
28	22	114	57									
29	22	103	54									
30	22	92	51									
31	22		51									
Total Sec. Ft. Days	626.1	3486	2187									
Mean Sec. Ft.	20.2	116	70.5									
Max. Sec. Ft.												
Min. Sec. Ft.												
Total Ac. Ft.	1242	6914	4338									

Remarks

Comp. by e = estimated

Ck. by

Date

Year Period

Entered 12-6-54
A.E.R

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF WATER RESOURCES

FORM 500

must be 1953

Daily discharge, in second feet, of PARKS CREEK ABOVE DUKE NORTH DITCH, for the year ending September 30, 1954

Day	October	November	December	January	February	March	April	May	June	July	August	September	Remarks
1	2.8	7.4	19										
2	3.0	8.8	19										
3	2.7	8.2	20										
4	2.7	7.7	21										
5	2.6	7.7	19										
6	2.6	7.7	19										
7	2.5	7.4	18										
8	2.5	7.4	17										
9	3.2	7.1	19										
10	7.9	23	17										
11	7.1	22	16										
12	6.2	24	16										
13	6.0	19	15										
14	6.0	52	16										
15	6.0	23	16										
16	6.0	21	16										
17	6.2	18	16										
18	21	15	16										
19	11	15	19										
20	10	14	24										
21	9.2	14	19										
22	8.5	28	16										
23	8.2	96	15										
24	8.2	100	15										
25	7.9	56	14										
26	7.9	41	14										
27	7.9	34	15										
28	7.7	28	14										
29	7.4	23	14										
30	7.4	21	13										
31	7.4		13										
Total Sec. Ft. Days	205.7	756.4	520										Year Period
Mean Sec. Ft.	6.6	25.2	16.8										
Max. Sec. Ft.	21	100	24										
Min. Sec. Ft.	2.5	7.1	13										
Total Ac. Ft.	408	1500	1031										

Comp. by
Ck. by
Date

Entered 12-6-54
G.E.K.

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF WATER RESOURCES

10-46 1M SPO
FORM 500

must be 1953

Daily discharge, in second feet, of LITTLE SHASTA RIVER ABOVE HARP DITCH, for the year ending September 30, 19~~4~~54

Day	October	November	December	January	February	March	April	May	June	July	August	September	Remarks
1	7.8	6.5	9.3										
2	7.5	7.5	12										
3	7.2	7.0	38										
4	6.5	6.7	32										
5	6.2	6.5	20										
6	6.5	6.7	17										
7	6.5	6.7	15										
8	6.2	6.5	22										
9	6.5	6.5	42										
10	10	7.2	31										
11	7.8	7.8	22										
12	7.2	11	18										
13	7.0	8.7	19										
14	7.0	9.0	20										
15	6.7	8.4	21										
16	6.7	8.7	22										
17	7.0	9.0	21										
18	14	6.0	22										
19	e 9.9	7.0	43										
20	e 8.0	7.0	54										
21	e 7.8	7.5	28										
22	7.5	12	19										
23	7.5	136	15										
24	7.2	90	14										
25	7.0	28	12										
26	7.0	17	13										
27	7.0	14	15										
28	6.7	11	12										
29	6.5	9.9	10										
30	6.5	9.6	9.9										
31	6.5		11										
Total Sec. Ft. Days	229.4	485.4	659.2										Year Period
Mean Sec. Ft.	7.4	16.2	21.3										
Max. Sec. Ft.	14	136	54										
Min. Sec. Ft.	6.2	6.0	9.3										
Total Ac. Ft.	455	963	1308										

e = estimated

Comp. by

Ck. by

Date