STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF WATER RESOURCES

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EARL WARREN, Governor

C. H. PURCELL, Director of Public Works

A. D. EDMONSTON, State Engineer

REPORT ON WATERMASTER SERVICE IN NORTH FORK PIT RIVER WATERMASTER SERVICE AREA
Modoc County, California

1950 SEASON

Sacramento, California
March, 1951

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, hereby submit the within contained report entitled "Report on Watermaster Service in North Fork Pit River Watermaster Service Area, Modoc County, California, 1950 Season".

/s/ L. C. JOPSON
Supervising Hydraulic Engineer

I, Gordon Zander, Principal Hydraulic Engineer, Division of Water Resources, Department of Public Works of the State of California, hereby approve the within contained report entitled "Report on Watermaster Service in North Fork Pit River Watermaster Service Area, Modoc County, California, 1950 Season".

/s/ GORDON ZANDER
Principal 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, hereby approve and adopt the within contained report entitled "Report on Watermaster Service in North Fork Pit River Watermaster Service Area, Modoc County, California, 1950 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 10th day of August, 1951.

DEPARTMENT OF PUBLIC WORKS

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

SEAL

ORGANIZATION

C. H. Purcell . . . . . Director of Public Works

A. D. Edmonston . . . . . State Engineer

P. H. Van Etten . . . . . Assistant State Engineer

Gordon Zander . . . Principal Hydraulic Engineer

This report was prepared under the direction of

L. C. JOPSON
Supervising Hydraulic Engineer

By

DEAN C. BEAUMONT
Junior Civil Engineer

T. R. Merryweather
Administrative Assistant

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INTRODUCTION

The North Fork Pit River Watermaster Service Area as created December 18, 1939, and changed and enlarged on December 13, 1940 includes the water rights on New Pine Creek, Cottonwood Creek, Davis Creek, Linville Creek, Franklin Creek, Joseph Creek, Thoms Creek, Gleason Creek, Shields Creek, Parker Creek, and North Fork of Pit River.

The water rights on New Pine Creek, Cottonwood Creek, Davis Creek and Franklin Creek were determined by separate decrees of the Superior Court, Modoc County and on the other streams by the decree entered by the same court in the North Fork Pit River adjudication proceeding. The titles of the various court cases have been set forth in previous reports.

Watermaster service, as provided in Part 4 of Division 2 of the Water Code, covered the regulation of diversions on all the streams within the service area.

Supervision of diversions during the 1950 season began on April 1 and was terminated on September 30. Dean C. Beaumont, deputy watermaster, was in charge of the distribution of water prior to July 1 and by W. G. Brigance and J. Victor Scammon, also deputy watermasters, each administered portions of the area after July 1 along with other watermaster duties in adjoining service areas. Distribution of the water was under the supervision of P. E. Stephenson, Senior Hydraulic Engineer, throughout the season.

WATER SUPPLY

Precipitation

Table 1 is a tabulation of the actual monthly and seasonal precipitation at the U. S. Weather Bureau Stations in Lakeview, Oregon and Alturas, California. The average total precipitation at the two stations for the seasonal year of 1949-50 was approximately 96 per cent of normal.

The results of precipitation during the winter months as measured by the water content of the snowpack at the Eagle Peak, Blue Lake Ranch and Cedar Pass snow courses on April 1 have been tabulated in Table 2. This data indicates the average snowpack on about April 1, 1950, was approximately 95 per cent of normal for the four courses.

Stream Flow

Measuring stations equipped with water stage recorders were maintained on the various streams within the service area as follows:

New Pine Creek below Schroeder's - rated section.

Cottonwood Creek above Diversions - rated section.

Davis Creek at Old Fish Wheel - rated section.

Linville Creek at Old Power House - 3-foot rectangular weir.

Franklin Creek above Diversions - 4-foot rectangular weir.

Joseph Creek below Couch Creek - rated section.

Thoms Creek at Alturas - Cedarville Highway Crossing - rated section.

Gleason Creek at Jones Ranch - 3-foot rectangular weir.

Parker Creek at Fogarty Ranch - rated section.

Shields Creek below Pepperdine's - 6-foot rectangular weir.

Parker Creek above Highway 395 - rated section.

The records of daily discharge for these stations are presented in Tables 3 to 13, inclusive, submitted at the end of this report.

DISTRIBUTION OF WATER

Distribution on the various streams within the North Fork Pit River Watermaster Service Area was in accordance with the allotments and priorities set forth in the respective decrees determining the rights thereon. The stream flow available for distribution was determined from the measured discharge at the respective measuring stations. A discussion of the results accomplished follows:

New Pine Creek

Sufficient water was available in New Pine Creek to supply all requirements of the users until about July 1. After this date the proration system changed to a priority system of distribution. The average percentages of allotments delivered during July, August and September are set forth in the following tabulation:

Priority	Percentage of Allotments Delivered		
	July	August	September
1st	100	100	100
2nd	100	100	15
3rd	100	10	0
4th	4	0	0

Cottonwood Creek

The available flow of Cottonwood Creek was adequate to fill all irrigation and domestic requirements until the middle of June. Thereafter the flow gradually decreased until only first priority water was available on July 5 and only stockwater was available for the Fleming Ranch on August 1. The flow of the creek was sufficient for this purpose for the remainder of the season.

Davis Creek

The average monthly percentages of allotments delivered from Davis Creek during the 1950 watermaster season are presented in the following tabulation:

Priority	Percentage of Allotments Delivered					
	April	May	June	July	August	September
1st	100	100	100	100	100	100
2nd	100	100	63	21	7	4
3rd	80	0	0	0	0	0
4th	0	92	0	0	0	0

Linville Creek

The flow of Linville Creek provided an average of about 67 per cent of the first priority allotment throughout the 1950 watermaster season.

Franklin Creek

The average percentages of allotments delivered from Franklin Creek during the 1950 watermaster season are set forth in the following tabulation:

Priority	Percentage of Allotments Delivered					
	April	May	June	July	August	September
1st	100	100	100	100	100	100
2nd	100	100	100	100	100	100
3rd	73	89	30	12	7	5
4th	30	10	0	0	0	0

Joseph Creek

The average percentages of allotments delivered from Joseph Creek during the 1950 season are presented in the following tabulation:

Priority	Percentage of Allotments Delivered					
	April	May	June	July	August	September
1st	100	100	100	100	65	20
2nd	100	100	100	60	0	0
3rd	100	100	72	0	0	0
4th	100	100	0	0	0	0

On July 19 water was released from Halls Meadow Reservoir for use on the Carlsburg Ranch. This flow was turned off on July 26.

Thoms Creek

The available flow of Thoms Creek is considerably greater than recorded at the recorder station due to diversion by some first and second priority rights above the station and the occurrence of considerable return flow from irrigation below the station. Accordingly, the record at the station does not reflect the available water supply but merely indicates the flow condition.

The runoff of Thoms Creek was adequate to satisfy all rights until the middle of July. Then the supply began to decrease slowly until about September 10 when water was available for about 90 per cent of the first priority allotments. This flow continued throughout the remainder of the season.

Gleason Creek

The available flow of Gleason Creek from April 1 to May 20 was adequate to satisfy all priority requirements. After the 20th of May the flow of the creek decreased until about July 15 when only first priority rights could be supplied with water. Approximately 50 per cent of the first priority allotment was delivered throughout the remainder of the season.

Parker Creek

The average percentages of allotments delivered from Parker Creek during the 1950 season are presented in the following tabulation:

Priority	Percentage of Allotments Delivered					
	April	May	June	July	August	September
1st	100	100	100	100	100	Approx.100
2nd	100	100	100	100	100	0
3rd	100	100	100	23	14	0
4th	100	100	100	0	0	0

Shields Creek

The average percentages of allotments delivered from Shields Creek during the 1950 Season are set forth in the following tabulation:

Priority	Percentage of Allotments Delivered					
	April	May	June	July	August	September
1st	100	100	100	100	100	100
2nd	100	100	100	25	8	10
3rd	100	100	80	0	0	0
4th	100	90	0	0	0	0

North Fork Pit River

The average percentages of allotments delivered from North Fork Pit River are presented in the following tabulation:

Priority	Percentage of Allotments Delivered					
	April	May	June	July	August	September
1st	100	100	100	84	30	Approx. 35%
2nd	100	100	75	5	0	0
3rd	100	100	0	0	0	0
4th	100	100	0	0	0	0
5th	100	90	0	0	0	0

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 North Fork Pit River Watermaster Service Area, County of Modoc, State of California, for 1950", which have been included in the statement for said watermaster service area for 1951, are listed in the following tabulation:

Tract Number	Name of Water Right Owner Appearing in 1950 Statement	Name of Water Right Owner as Changed in 1951 Statement	Amount of Water c.f.s.
9-6	Anderson, Fred and Anderson, Verna	Arney, Minnie Irene	0.18
9-43, 9-52	Bishop, W. D.	Bishop, C. M.	3.10
9-38	Brainard, W. L.	Brainard, W. L. and Lorper, C. J.	1.95
9-36, 9-37	Briles, Thomas and Briles, Rose	Briles, Rose	0.65
9-40	Brown, C. A.	Brown, Estate of C. A.	2.40
9-58	Brown, J. F. and Brown, G. F.	Hedglin, Gene B. and Hedglin, Anna M.	0.0375
9-86	Cloud, J. H.	Cloud, J. H. and Cloud, E. B.	0.30
9-112	Correa, John	Collis, Randall	2.27
9-113, 9-114	Lawrence, Rollin	Collis, Randall	3.31
9-110	Miller, Ralph and Miller, Ada	Brown, Gerald F. and Brown, Aletha Neff	1.60
9-118, 9-119, 9-121	Heesch, Hans A. and Heesch, Margaret M.	Heesch, Margaret	8.34
9-1	Keller, Sarah M.	Keller, E. Faye	0.43
9-28, 9-29	Miller, Charles L. and Miller, Louise	McDonald, J. T. Jr., and McDonald, Dorothy Reid	1.60
9-104	Morgan, O. D. and Morgan, Lorene	Weber, Herman C. and Weber, John D.	2.25
9-34	Kincaid, Howard and Kincaid, Idella F.	Reed, Godfrey H. and Reed, Edytha M.	0.40

TABLE 1

PRECIPITATION AT ALTURAS, CALIFORNIA,
LAKE VIEW, OREGON
1949-1950

ALTURAS, CALIFORNIA - Elevation 4,460 Feet

Month	Normal Precipitation Inches	1949-1950 Precipitation Inches	Per cent of Normal
October	1.24	0.65	52
November	1.37	1.13	83
December	1.34	0.73	55
January	1.57	2.32	148
February	1.26	0.48	38
March	1.23	2.34	193
April	1.19	0.72	60
May	1.09	.92	85
June	0.67	1.78	265
July	0.33	0	0
August	0.29	0.53	183
September	0.50	0.52	104
Total	12.08	12.12	100

LAKEVIEW, OREGON - Elevation 4,750 Feet

Month	Normal Precipitation Inches	1949-1950 Precipitation Inches	Per cent of Normal
October	0.96	0.93	97
November	1.62	0.80	49
December	1.79	0.52	29
January	1.93	3.01	156
February	1.85	1.08	58
March	1.43	2.79	195
April	1.18	0.58	49
May	1.25	1.52	122
June	.92	0.90	98
July	.00	0.31	100
August	0.25	0.04	16
September	0.64	0.29	45
Total	13.82	12.77	92

Data compiled from records of U. S. Weather Bureau.

TABLE 2

SNOW SURVEY DATA - UPPER PIT RIVER AREA
April 1st Measurement

Year	Water Content of Snow - Inches		
	Eagle Peak Elevation - 7,500	Blue Lake Ranch Elevation - 7,200	Cedar Pass Elevation - 7,200
1941	13.8	8.4	17.9
1942	14.7	11.7	19.3
1943	23.7	15.3	25.8
1944	13.5	8.5	12.3
1945	22.2	15.8	22.4
1946	21.2	16.2	22.9
1947	6.4	5.3	10.3
1948	14.4	10.1	15.7
1949	19.1	16.7	22.0
1950	17.9	11.3	19.1
Computed 60-year Normal	18.7	11.6	20.6
Per cent of Normal	96	97	93

Data compiled from records of California Cooperative Snow Surveys.

TABLE 3

Daily Discharge in Cubic Feet Per Second
NEW PINE CREEK BELOW SCHROEDER'S
April 1 to September 30, 1950

Day	April	May	June	July	August	September
1	17.9	26	55	21	6.8	4.3
2	17.9	23	51	21	6.8	4.3
3	17.9	25	49	21	6.8	4.3
4	17.9	21	42	20	6.8	4.3
5	17.9	20	42	20	6.8	4.3
6	17.9	21	51	20	6.8	4.3
7	17.9	22	45	18.0	6.8	3.6
8	17.9	23	41	17.0	6.8	3.6
9	16.0	24	39	16.0	6.8	3.6
10	16.0	25	38	15.0	6.8	3.6
11	17.1	26	38	13.8	6.8	3.6
12	17.9	35	42	12.9	6.8	2.9
13	20	41	38	12.9	6.8	2.9
14	20	52	34	12.9	7.6	2.9
15	22	52	51	12.9	7.6	2.9
16	25	52	51	13.8	6.8	2.9
17	27	56	38	12.9	6.8	2.9
18	30	58	38	12.9	6.8	3.6
19	33	56	34	12.9	6.8	3.6
20	37	52	33	12.0	6.8	3.6
21	38	56	31	12.9	6.8	3.6
22	35	58	29	12.0	6.8	3.6
23	33	60	28	12.9	6.8	3.6
24	29	60	23	12.0	6.8	3.6
25	29	62	23	11.2	5.8	2.9
26	29	60	22	11.2	5.8	2.9
27	29	60	22	7.6	5.0	2.9
28	29	58	22	8.4	5.0	2.9
29	26	58	22	7.6	5.0	2.9
30	26	60	22	7.6	5.0	2.9
31		58		7.6	4.3	
Total Sec. Ft. Days	727.2	1,360	1,094	429.9	200.7	103.8
Mean Sec. Ft	24	44	36	13.9	6.5	3.5
Total Ac. Ft.	1,440	2,700	2,170	853	398	206

Total for 183-day period - 7,770 acre-feet.

TABLE 4

Daily Discharge in Cubic Feet Per Second
COTTONWOOD CREEK ABOVE ALL DIVERSIONS
April 1 to September 30, 1950

Day	April	May	June	July	August	September
1	17.2	18.8	18.8	4.1	0.7	0.2
2	17.2	19.6	18.8	4.1	.6	.1
3	17.2	20	18.0	4.1	.6	.1
4	17.2	20	18.0	3.6	.6	.1
5	17.2	21	17.2	3.6	.5	.1
6	17.2	21	17.2	3.6	.5	.1
7	17.2	21	18.0	3.1	.5	.1
8	17.2	21	18.0	3.1	.4	.1
9	17.2	21	18.8	2.6	.4	.1
10	17.2	21	18.8	2.1	.4	.1
11	17.2	21	18.0	2.1	.3	.1
12	17.2	21	17.2	2.1	.3	.1
13	17.2	22	16.0	2.1	.4	.1
14	17.2	22	14.0	1.6	.4	.1
15	17.2	22	9.7	1.6	.4	.1
16	17.2	22	9.7	1.6	.4	.1
17	17.2	22	9.7	1.2	.3	.2
18	17.2	22	9.7	1.2	.3	.3
19	17.2	22	9.7	1.2	.3	.3
20	17.2	23	9.7	1.2	.2	.3
21	18.0	23	9.7	1.2	.2	.3
22	18.8	23	9.7	1.2	.2	.3
23	19.6	23	9.2	.9	.2	.3
24	20	24	8.7	.9	.2	.3
25	21	24	8.2	.9	.2	.2
26	21	24	7.2	.9	.2	.2
27	21	23	5.6	.9	.2	.2
28	20	22	5.2	.8	.2	.2
29	19.6	21	4.8	.8	.2	.2
30	18.8	20	4.1	.7	.2	.2
31		18.8		.7	.2	
Total Sec. Ft. Days	541.8	669.2	377.4	59.8	10.7	5.2
Mean Sec. Ft.	18.1	22	12.6	1.9	0.3	0.2
Total Ac. Ft.	1,070	1,330	749	119	21	10

Total for 183-day period-3,300 acre-feet.

TABLE 5

Daily Discharge in Cubic Feet Per Second
DAVIS CREEK AT OLD FISH WHEEL
April 1 to September 30, 1950

Day	April	May	June	July	August	September
1	21	41	41	15.5	7.1	5.1
2	21	39	40	15.1	7.1	5.0
3	21	37	37	14.8	7.1	5.0
4	21	34	31	14.8	6.9	5.0
5	21	40	31	14.4	6.7	5.1
6	21	37	34	14.0	6.6	5.1
7	22	33	32	13.6	6.5	5.5
8	22	30	31	13.3	6.5	5.5
9	23	26	27	12.6	6.3	5.4
10	23	26	26	12.6	6.3	5.4
11	22	27	31	12.3	6.5	5.3
12	22	30	34	11.6	6.0	5.3
13	29	30	31	11.3	6.0	5.2
14	26	37	29	10.9	6.3	5.1
15	23	54	28	10.9	6.3	5.1
16	26	56	26	11.3	5.8	5.1
17	27	57	23	10.9	5.8	5.1
18	30	56	25	10.4	5.8	5.7
19	34	56	26	9.8	5.7	5.8
20	40	54	26	9.2	5.7	5.8
21	51	54	23	8.7	5.6	5.7
22	54	54	23	8.5	5.6	5.5
23	52	55	23	8.2	5.5	5.3
24	48	54	25	8.0	5.5	5.1
25	45	59	23	7.7	5.4	5.1
26	45	56	23	7.5	5.4	5.1
27	44	54	17.6	7.5	5.3	5.1
28	43	51	17.2	7.3	5.3	5.1
29	41	48	16.3	7.3	5.2	5.1
30	40	48	15.9	7.3	5.2	5.1
31		45		7.3	5.1	
Total Sec. Ft. Days	948	1,378	816.0	334.6	186.1	157.8
Mean Sec. Ft.	32	44	27	10.8	6.0	5.3
Total Ac. Ft.	1,880	2,730	1,620	664	369	313

Total for 183-day period - 7,580 acre-feet.

TABLE 6

Daily Discharge in Cubic Feet Per Second
LINVILLE CREEK AT OLD POWER HOUSE
April 1 to September 30, 1950

Day	April	May	June	July	August	September
1	2.5	2.5	2.5	2.4	2.4	2.4
2	2.5	2.5	2.5	2.4	2.4	2.4
3	2.5	2.5	2.5	2.4	2.4	2.4
4	2.5	2.5	2.5	2.4	2.4	2.4
5	2.5	2.8	2.6	2.4	2.4	2.4
6	2.5	2.8	2.5	2.4	2.4	2.4
7	2.5	2.8	2.5	2.4	2.4	2.4
8	2.5	2.8	2.5	2.4	2.4	2.4
9	2.5	2.8	2.5	2.4	2.4	2.4
10	2.5	2.8	2.5	2.4	2.4	2.4
11	2.6	2.8	2.5	2.4	2.4	2.4
12	2.7	2.8	2.4	2.4	2.4	2.4
13	2.7	2.8	2.4	2.4	2.4	2.4
14	2.7	2.8	2.5	2.4	2.4	2.4
15	2.7	2.8	2.5	2.4	2.4	2.4
16	2.8	2.8	2.4	2.4	2.4	2.4
17	2.8	2.8	2.4	2.4	2.4	2.4
18	2.8	2.8	2.4	2.3	2.4	2.4
19	2.8	2.8	2.4	2.3	2.4	2.4
20	2.8	2.8	2.5	2.3	2.4	2.4
21	2.8	2.8	2.5	2.3	2.4	2.4
22	2.8	2.8	2.5	2.3	2.4	2.4
23	2.7	2.8	2.5	2.3	2.4	2.4
24	2.7	2.7	2.5	2.3	2.4	2.4
25	2.6	2.6	2.5	2.3	2.4	2.4
26	2.5	2.6	2.5	2.3	2.4	2.4
27	2.5	2.5	2.5	2.3	2.4	2.4
28	2.5	2.5	2.5	2.3	2.4	2.4
29	2.5	2.5	2.5	2.3	2.4	2.4
30	2.5	2.4	2.5	2.4	2.4	2.4
31		2.4		2.4	2.4	
Total Sec. Ft. Days	78.5	83.4	74.6	73.2	74.4	72.0
Mean Sec. Ft.	2.6	2.7	2.5	2.4	2.4	2.4
Total Ac. Ft.	156	165	148	145	148	143

Total for 183-day period - ,905 acre-feet.

TABLE 7

Daily Discharge in Cubic Feet Per Second
FRANKLIN CREEK ABOVE DIVERSIONS
April 1 to September 30, 1950

Day	April	May	June	July	August	September
1	6.8	7.5	6.0	3.3	2.2	1.8
2	6.8	7.5	5.6	3.2	2.2	1.8
3	6.8	6.8	5.3	3.1	2.3	1.8
4	6.8	6.8	4.9	2.9	2.7	1.6
5	6.8	6.8	4.6	2.9	2.5	1.8
6	6.8	7.0	5.4	2.9	2.3	1.8
7	6.8	7.2	5.4	2.9	2.2	1.8
8	6.8	7.4	5.0	2.9	2.2	2.0
9	6.8	7.5	4.6	2.9	2.2	2.3
10	6.8	8.3	4.2	2.9	2.4	2.0
11	7.2	8.8	4.9	2.8	2.2	2.0
12	7.5	9.2	6.0	2.7	2.2	2.0
13	7.7	10.0	5.3	2.7	2.2	2.0
14	8.0	10.9	4.9	2.6	2.2	2.2
15	8.3	11.8	4.7	2.6	2.2	2.0
16	8.7	13.7	4.7	2.6	2.2	2.2
17	8.8	12.7	4.6	2.5	2.0	2.2
18	9.0	12.0	4.6	2.4	2.2	2.5
19	9.2	11.8	4.3	2.4	2.2	2.3
20	9.2	11.4	4.0	2.4	2.2	2.0
21	9.7	10.9	4.0	2.4	2.0	2.0
22	10.0	10.5	3.8	2.4	2.0	2.0
23	8.7	10.0	3.8	2.4	2.0	2.0
24	8.3	9.2	3.7	2.4	2.0	2.0
25	7.8	8.7	3.8	2.3	1.8	2.0
26	8.3	8.0	4.7	2.3	1.8	2.0
27	8.3	7.5	4.7	2.3	1.8	2.0
28	7.8	7.2	3.8	2.3	1.8	2.0
29	7.7	6.8	3.7	2.3	1.8	2.0
30	7.5	6.4	3.5	2.3	1.8	2.0
31		6.0		2.3	1.8	
Total Sec. Ft. Days	235.7	276.3	138.5	81.3	65.6	60.1
Mean Sec. Ft.	7.9	8.9	4.6	2.6	2.1	2.0
Total Ac. Ft.	468	548	275	161	130	119

Total acre-feet for 183-day period - 1,700.

TABLE 8

Daily Discharge in Cubic Feet Per Second
JOSEPH CREEK BELOW COUCH CREEK
April 1 to September 6, 1950

Day	April	May	June	July	August	September
1	11	21	11	5.5	2.0	0.9
2	12	19	10	5.0	2.0	0.8
3	13	16	10	4.7	2.0	0.8
4	19	17	8.0	4.2	2.4	0.7
5	14	17	6.3	3.8	3.2	0.4
6	14	15	6.3	3.4	2.1	0.3
7	14	18	6.3	3.4	1.9	
8	16	17	7.0	3.5	1.6	
9	18	19	7.0	3.1	1.6	
10	14	17	7.0	2.6	1.5	
11	16	16	7.0	2.8	1.4	
12	17	17	7.0	3.0	1.4	
13	16	17	7.0	2.8	1.4	NO
14	17	17	6.3	2.7	1.4	
15	17	17	6.3	3.3	1.4	
16	17	18	6.1	3.3	1.4	
17	13	19	6.0	3.2	1.3	
18	14	19	5.3	3.0	1.3	
19	14	19	5.3	**7.4	1.3	
20	14	19	5.0	6.6	1.3	
21	16	18	5.0	6.1	1.2	
22	17	17	2.9	6.6	1.2	
23	21	14	2.8	6.6	1.2	
24	20	14	7.5	6.8	1.2	RECORD
25	17	14	8.0	6.6	1.2	
26	17	14	8.1	***6.1	1.2	
27	21	14	7.1	2.7	1.1	
28	19	14	7.0	2.5	1.1	
29	19	14	6.0	2.4	1.0	
30	17	11	6.2	2.2	1.0	
31		11		2.1	1.0	
Total Sec. Ft. Days	484	509	200.8	128.0	46.3	*3.9
Mean Sec. Ft.	16	16.5	6.7	4.1	1.5	*.7
Total Ac. Ft.	960	1,009	398	254	92	*7.7

* 6-day record.
** Halls Meadow Reservoir turned on.
*** Halls Meadow Reservoir turned off

Total for 159-day period - 2,720 acre-feet.

TABLE 9

Daily Discharge in Cubic Feet Per Second
THOMS CREEK AT CEDARVILLE - ALTURAS HIGHWAY CROSSING
April 20 to August 5, 1950

Day	April	May	June	July	August
1		18	7.6	3.7	0.6
2		18	7.4	3.4	0.6
3		17	6.7	3.4	0.5
4		15	6.6	3.3	0.5
5		18	6.1	3.2	0.5
6		18	7.0	3.0	
7		15	7.7	3.0	
8	NO	15	7.4	2.9	
9		18	6.2	2.4	
10		24	5.8	2.8	
11		25	7.4	2.1	
12		25	12	2.3	NO
13		28	11	2.6	
14		35	8.0	2.3	
15		35	7.0	2.3	
16		35	7.0	2.3	
17		35	6.6	2.3	
18	RECORD	30	5.8	2.0	
19		26	5.0	2.0	
20	57	23	4.4	1.9	
21	57	23	4.2	1.9	
22	49	23	4.4	1.8	
23	39	22	4.4	1.6	RECORD
24	30	20	7.4	1.6	
25	28	17	7.4	1.4	
26	27	15	5.0	1.4	
27	27	12	5.0	1.4	
28	20	11	4.4	1.3	
29	17	9.0	4.2	1.2	
30	15	10	4.0	1.2	
31		8.8		0.8	
Total Sec. Ft. Days	*366	643.8	193.1	68.8	**2.7
Mean Sec. Ft.	*33.3	20.7	6.4	2.2	**0.5
Total Ac. Ft.	*726	1,277	383	136	**5.5

* 11-day period
** 5-day period
Total for 108 day period - 2,530 acre-feet.

TABLE 10

Daily Discharge in Cubic Feet Per Second
GLEASON CREEK NEAR JONES RANCH
April 20 to July 13, 1950

Day	April	May	June	July
1		1.9	0.6	0.3
2		1.7	0.6	0.3
3		1.9	0.5	0.3
4		2.1	0.4	0.3
5		2.0	0.3	0.3
6		1.9	0.3	0.3
7		2.0	0.3	0.3
8	NO	1.7	0.3	0.3
9		2.2	0.4	0.3
10		2.7	0.5	0.3
11		2.7	0.5	0.2
12		2.7	0.6	0.2
13		2.7	0.6	0.1
14	RECORD	2.6	0.6	
15		2.3	0.6	
16		2.4	0.6	
17		2.2	0.6	
18		2.1	0.6	NO
19		2.1	0.5	
20	4.1	1.9	0.4	
21	4.0	1.8	0.4	
22	4.0	1.2	0.3	
23	3.6	1.3	0.3	FLOW
24	3.2	1.4	0.5	
25	2.8	1.2	0.5	
26	2.4	1.0	0.5	
27	2.2	1.0	0.3	
28	2.4	1.1	0.3	
29	2.1	0.9	0.3	
30	2.0	0.8	0.3	
31		0.8		
Total Sec. Ft. Days	*35.2	56.3	13.5	**3.5
Mean Sec. Ft.	*3.2	1.8	.4	** .3
Total Ac. Ft.	*69.8	111.6	26.7	** 6.9

* 11-day period
** 13-day period

Total 85-day period - 215 acre-feet.

TABLE 11

Daily Discharge in Cubic Feet Per Second
PARKER CREEK AT FOGGARTY RANCH
April 26 to August 31, 1950

Day	April	May	June	July	August
1		52	26	7.0	4.6
2		53	24	7.0	4.0
3		48	19	7.0	4.0
4		48	17	6.0	4.2
5		47	16	6.0	4.0
6		47	19	5.0	4.0
7		47	24	5.0	4.0
8	NO	46	20	1.0	4.0
9		53	17	0.2	4.0
10		60	17	0.2	3.8
11		54	20	0.2	2.0
12		60	30	0.4	3.6
13		60	26	0.6	3.2
14		60	19	1.0	3.0
15		60	19	1.0	3.0
16		65	19	2.6	2.6
17		65	19	3.0	2.6
18		60	18	4.0	2.4
19	RECORD	55	14	4.6	2.0
20		54	14	4.6	2.0
21		52	14	4.6	2.0
22		53	13	4.6	2.0
23		46	14	4.6	0.2
24		46	28	4.0	0.2
25		44	24	4.0	0.6
26	55	42	17	4.4	1.4
27	65	42	14	4.4	1.4
28	55	39	12	4.0	1.4
29	52	33	11	4.0	1.3
30	50	28	10	4.0	1.2
31		28		4.6	1.3
Total Sec. Ft. Days	*277	1,547	554	113.6	80.0
Mean Sec. Ft.	*45	50	18.5	3.7	2.6
Total Ac. Ft.	*549	3,068	1,099	225.3	159

* 5-day period.

Total for 108 day period - 5,100 acre-feet.

TABLE 12

Daily Discharge in Cubic Feet Per Second
SHIELDS CREEK BELOW PEPPERDINE RANCH
April 6 to September 24, 1950

Day	April	May	June	July	August	September
1	NO	5.2	2.9	2.4	1.4	0.6
2		5.4	2.9	2.4	1.6	0.7
3		5.3	2.5	2.4	1.0	0.7
4	RECORD	5.3	2.5	2.3	1.0	0.7
5		5.5	2.3	2.2	1.4	0.7
6	20	5.7	4.0	2.0	1.3	0.7
7	18	5.8	4.0	1.2	1.0	0.7
8	18	5.9	3.2	1.2	1.4	0.7
9	16	5.9	3.1	1.2	0.8	0.7
10	14	5.3	2.8	1.2	0.7	0.6
11	12	5.5	4.4	1.2	0.6	0.6
12	5	5.9	5.1	1.2	0.6	0.6
13	3.2	5.9	4.0	1.2	0.5	0.8
14	4.0	5.3	3.5	1.2	0.4	0.8
15	4.9	5.9	5.1	1.2	0.5	0.7
16	4.6	5.9	3.5	1.2	0.4	0.9
17	4.9	5.9	3.7	1.2	0.5	1.0
18	5.0	5.5	3.7	1.2	0.6	1.5
19	4.6	5.5	3.2	1.1	0.5	0.8
20	4.2	5.5	3.2	1.2	0.5	0.7
21	4.0	5.1	3.2	1.2	0.6	0.6
22	4.0	4.9	2.9	1.2	0.7	0.8
23	3.9	4.9	4.9	1.2	0.8	1.3
24	3.6	4.6	5.9	1.2	0.8	1.5
25	3.8	4.4	4.0	1.1	0.8	
26	3.2	4.0	3.9	1.2	0.7	
27	4.0	3.7	3.5	1.2	0.7	NO
28	4.9	3.2	2.9	1.2	0.8	
29	5.0	3.2	2.6	1.2	0.8	
30	5.2	3.2	2.6	1.2	0.6	RECORD
31		3.0		1.2	0.4	
Total Sec. Ft. Days	*180	156.3	106.0	43.5	24.4	**19.4
Mean Sec. Ft.	*6.0	5.0	3.5	1.4	0.8	** 0.8
Total Ac. Ft.	*357	310	210	86	48	**38

* 25-day period
** 24-day period

Total for 140-day period - 1,050 acre-feet.

TABLE 13

Daily Discharge in Cubic Feet Per Second
PARKER CREEK ABOVE HIGHWAY 395
April 10 to September 17, 1950

Day	April	May	June	July	August	September
1		31	13	8.8	1.5	0.9
2		33	12	7.0	1.5	0.9
3	NO	30	12	6.6	1.7	1.1
4		31	11	7.0	2.9	1.8
5		31	8.8	6.8	4.0	1.5
6		34	12	6.6	3.8	1.6
7	RECORD	39	20	6.2	3.5	1.9
8		39	20	6.4	3.5	2.1
9		22	15	6.0	3.6	2.4
10	25	31	12	5.0	0.8	2.3
11	28	25	12	4.7	0.7	2.3
12	32	22	24	4.6	0.8	2.5
13	48	24	25	4.5	0.8	1.9
14	39	20	21	3.8	0.6	1.8
15	43	22	17	3.5	0.5	1.7
16	59	31	19	4.2	0.5	1.5
17	72	38	17	4.0	0.4	1.5
18	85	31	17	3.8	0.5	
19	93	25	16	3.5	0.4	NO
20	105	24	15	3.8	0.4	
21	122	24	13	4.1	0.4	
22	117	21	12	3.8	0.3	
23	101	20	12	3.5	0.3	
24	82	15	31	2.9	0.5	RECORD
25	78	11	25	1.9	0.4	
26	73	10	20	1.7	0.5	
27	73	15	17	1.5	0.7	
28	62	30	15	1.5	0.6	
29	43	29	11	1.4	0.8	
30	32	22	10	1.5	0.8	
31		16		1.5	0.7	
Total Sec. Ft. Days	*1,412	796	484.8	132.1	38.4	**29.7
Mean Sec. Ft.	*67.3	25.7	16.1	4.3	1.2	**1.7
Total Ac. Ft.	*2,802.4	1,579	962.2	262.1	76.2	**58.8

* 21-day period
** 17-day period

Total for 161-day period - 5,740 acre-feet.