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 SHACKELFORD CREEK 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 Shackleford Creek 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 Shackleford Creek 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 Shackleford Creek 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)

ORGANIZATION

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This report was prepared under the direction of

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TABLE OF CONTENTS

	Page
INTRODUCTION	1
WATER SUPPLY	1
Precipitation	1
Stream Flow	1
DISTRIBUTION OF WATER	2
Upper Shacklaford Creek	3
Lower Shacklaford Creek	4
Upper Mill Creek	4
Lower Mill Creek	4
CHANGES IN OWNERSHIP OF LANDS AND WATER RIGHTS	5

TABLES

1. PRECIPITATION AT FT. JONES, SISKIYOU COUNTY, CALIFORNIA, 1951-52 Elevation 2,747 Feet.

2. Daily Releases in Cubic Feet Per Second from CAMPBELL LAKE, July 1 to September 30, 1952.

3. Daily Discharge in Cubic Feet Per Second, SHACKLEFORD CREEK ABOVE ALL DIVERSIONS, July 1 to September 23, 1952.

4. Daily Discharge in Cubic Feet Per Second, HURTON-MEANDER DITCH, July 8 to September 30, 1952.

5. Daily Discharge in Cubic Feet Per Second, MILL CREEK ABOVE ALL DIVERSIONS, July 1 to September 23, 1952.

INTRODUCTION

This is the second annual report on watermaster service in the Shackleford Creek Watermaster Service Area and covers the period beginning on July 1 and terminating on September 30.

The service area was created by order of the Division of Water Resources on November 6, 1950 to include, with certain exceptions, all the water rights determined in the decree entered in the Shackleford Creek Adjudication proceeding on April 30, 1950, Superior Court, Siskiyou County, No. 13775. Watermaster service has been provided during each irrigation season since the service area was created and annual reports have been 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 Fort Jones and water supply records at various locations within the area.

WATER SUPPLY

Precipitation

Data on precipitation at Fort Jones, as compiled from records of the United States Weather Bureau for the period from October 1, 1951 to September 30, 1952, are presented in Table 1. Annual precipitation for the period from October 1, 1951 to September 30, 1952 was 128 per cent of the normal.

Stream Flow

Automatic water stage recorders were operated on Shackleford Creek above all diversions and at the measuring devices on the various ditches in the Upper Shackleford Creek area from the first week in July until September 30. As losses and accretions below the Shackleford Creek gaging station varied from day to day the

total water supply available for diversion in this area was taken as the sum of the readings on the various ditches.

An automatic water stage recorder was installed at the weir on the Eastlick Mill Creek ditch to provide a record of flow conditions on Upper Mill Creek area. The location of the recorder stations are as follows:

Shackleford Creek, above all diversions	(Rated section)
Ralph Eastlick ditch	(3 foot weir)
Shackleford ditch	(5 foot weir)
Howard-Jones ditch	(3 foot weir))
Camp ditch	(3 foot weir)
Burton Meamber ditch	(3 foot weir)
Eastlick ditch (Mill Creek)	(2 foot weir)

The daily discharges of Shackleford Creek above all diversions, and the Burton-Meamber ditch are set forth in Tables 3 and 4, respectively. The daily discharge of Mill Creek above all diversions as shown in Table 5 is the summation of the water in Eastlick ditch plus the flow of the stream passing the diversion dam of the Eastlick ditch.

Intermittent discharge observations were made on Shackleford Creek below its confluence with Mill Creek. Weirs were maintained in the ditches as required for regulation. The inflow and outflow at Cliff and Campbell Lakes were measured on August 27, 1952. These measurements indicated the outflow to be about 1.5 cubic feet per second in excess of the inflow. Release of the stored water in Cliff and Campbell Lakes for re-diversion through the Shackleford ditch was commenced on September 6.

DISTRIBUTION OF WATER

The water rights in the Shackleford Creek Watermaster Service Area are grouped in four divisions in the Shackleford Creek decree. The divisions and the schedules defining the water rights therein are as follows:

Upper Shackleford Creek Group	(Schedule 3)
Lower Shackleford Creek Group	(Schedule 4)
Upper Mill Creek Group	(Schedule 5)
Lower Mill Creek Group	(Schedule 6)

Distribution of the water supply and use of water in each of these divisions is described below:

Upper Shackleford Creek

A surplus of water over allotments was available on Shackleford Creek until August 7 with an increasing shortage thereafter until the end of the season. Between August 7 and September 23 only partial use (about 2.00 cubic feet per second) was made of the first and third priority rights in the Camp Ditch which allowed use to continue under fourth priority rights until the later date. On September 23 the Camp Dam was repaired and the entire amount to which the ditch was entitled was diverted. Thereafter no water was available for the fourth priority rights.

Stored water from Campbell Lake was released into the stream from September 6 to September 30 for re-diversion through the Shackleford Ditch.

A summary of the distribution of water in per cent of allotments follows:

Month	Priorities						
	1	2	3	4	5	6	7
July	100	100	100	100	100	100	100
August	100	100	76	83	41	32	7
September	100	100	25	29	0	0	0

Lower Shackleford Creek Group

The flow in Lower Shackleford Creek was sufficient to supply all demands throughout the season because of return flow from Mill Creek and Upper Shackleford Creek. The return flow from Mill Creek increased during September subsequent to the release of storage from Campbell Lake for irrigation purposes on the Dunaway ranch.

The daily discharge in cubic feet per second of the Burton Neamber ditch is set forth in Table 4.

Upper Mill Creek Group

The water in Upper Mill Creek was distributed in accordance with Schedule 5 of the Shackleford Creek decree. Sufficient water was available to supply all priorities through July 10, 1952.

Subsequent to that date the flow of the stream gradually decreased until at the end of the season water was available for 14 per cent of the second priority allotments. The daily discharge of Mill Creek above all diversions is set forth in Table 5. A summary of the distribution is set forth in the following tabulation:

Month	First Priority	Second Priority	Third Priority
July	100	05	32
August	100	41	0
September	100	19	0

Lower Mill Creek Group

The available water supply in the Lower Mill Creek area was sufficient to satisfy all priorities throughout the season.

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 Shackleford Creek Watermaster Service Area, County of Siskiyou, State of California, for 1952" and which shall be included in the statement for said watermaster service area for 1953, are listed in the following table:

Tract	Name of water right owners appearing in 1952 statement	Name of water right owner to appear in 1953 statement	Amount of water c.f.s.
14-21	Lathrop, F. L. and Lathrop, Georgina C.	Pearson, Casey and Pearson, Alice K.	4.65
14-1 14-14	Blake, Ralph D. and Blake, Clara G.	Dunaway, Osmer E. and Dunaway, Margaret L.	12.43
14-17	Davis, Robert P. and Davis, Margaret W.	Kohler, John A.	4.50
14-11	Soderquist, Arthur L. and Soderquist, Mildred J.	Baker, Thaddeus A. and Baker, Mary Anita	2.69

TABLE 1

PRECIPITATION FT. JONES, SISKIYOU COUNTY, CALIFORNIA

1951-52

Elevation 2,747 feet

Month	Normal Precipitation Inches	Precipitation 1951-52 Inches
October	2.48	3.92
November	5.70	8.09
December	8.20	12.39
January	2.96	4.88
February	3.44	2.83
March	2.64	1.84
April	1.26	.81
May	1.46	.86
June	.86	1.74
July	.36	.83
August	.20	.01
September	.48	.37
Total	30.04	38 .57

Compiled from records of the United States Weather Bureau.

TABLE 2

Daily Releases in Cubic Feet Per Second from
CAMPBELL LAKE
July 1 to September 30, 1952

Day	May	June	July	August	September
1	NO RELEASES		NO RELEASES		0
2		NO RELEASES		NO RELEASES	0
3					0
4					0
5					0
6					4.2
7					4.2
8					4.2
9					4.2
10					4.1
11					4.1
12					4.0
13					4.0
14					4.0
15					4.0
16					4.0
17					3.9
18					3.9
19					3.9
20					3.9
21					3.8
22					3.8
23					3.8
24					3.8
25					3.7
26					3.7
27					3.7
28					3.7
29					3.6
30					3.6
31					
Total Sec. Ft. Days					97.8
Mean Sec. Ft.					3.3
Total Ac. Ft.					194

Total for period = 194 acre-feet.

TABLE 3

Daily Discharge in Cubic Feet Per Second
SHACKLEFORD CREEK ABOVE ALL DIVERSIONS
July 1 to September 23, 1952

Day	May	June	July	August	September
1	NO	NO	100	39	11.0
2			90	38	11.0
3	RECORD	RECORD	90	35	11.0
4			89	35	11.5
5			90	33	11.0
6			92	32	13.5**
7			92	30	15.0
8			92	28	15.0
9			87	27	16.5
10			87	25	16.5
11			83	24	14.5
12			80	23	13.0
13			77	21	13.5
14			74	20	13.5
15			71	20	13.0
16			70	18.5	13.0
17			66	17.0	12.5
18			64	16.5	12.5
19			59	15.0	12.5
20			55	14.5	12.5
21			53	14.0	12.5
22			51	13.5	12.5
23			48	13.5	12.5
24			44	13.0	
25			43	13.0	
26			43	12.5	NO
27			41	12.5	RECORD
28			40	12.0	
29			43	12.0	
30			42	11.5	
31			40	11.0	
Total Sec. Ft. Days			2,100	650	300*
Mean Sec. Ft.			67.7	21.0	13.0*
Total			4,164	1,289	595*

*23 -day period
**Rise due to release from Campbell Lake

Total for period - 6,048 acre-feet.

TABLE 4

Daily Discharge in Cubic Feet Per Second
HUNTON MEADOWS DITCH
July 6 to September 30, 1952

Day	May	June	July	August	September
1	NO	NO	NO	2.5	5.8
2			RECORD	2.5	5.8
3	RECORD	RECORD		2.5	5.6
4				2.4	5.6
5				2.4	5.6
6				3.5	5.3
7				3.4	5.3
8			.70	3.4	5.3
9			.70	3.5	5.3
10			.70	3.5	5.3
11			.70	3.5	5.1
12			1.0	3.5	5.1
13			1.0	3.4	5.1
14			1.0	3.5	5.1
15			1.0	3.4	5.1
16			1.1	3.5	5.0
17			1.2	3.5	5.0
18			1.2	3.4	5.0
19			1.2	3.5	5.0
20			1.2	3.5	5.0
21			1.2	3.4	5.0
22			1.2	3.3	5.0
23			1.2	3.5	5.0
24			1.2	3.5	5.0
25			1.1	3.5	5.0
26			1.1	3.5	5.0
27			1.1	5.8	5.0
28			1.1	5.8	5.0
29			2.0	5.8	5.0
30			2.0	5.8	5.0
31			2.0	5.8	
Total Sec. Ft. Days			* 27.9	114.0	155.4
Mean Sec. Ft.			* 1.2	3.7	5.2
Total Ac. Ft.			* 55	226	308

* 24 day period

Total for period - 589 acre-feet

TABLE 5

Daily Discharge in Cubic Feet Per Second
MILL CREEK ABOVE ALL DIVERSIONS
July 1 to September 23, 1952

Day	May	June	July	August	September
1	NO	NO	12.0	6.4	2.2
2			12.0	6.3	2.2
3	RECORD	RECORD	11.5	6.0	2.2
4			11.0	5.8	2.2
5			11.0	5.7	2.2
6			11.0	5.6	2.2
7			11.0	5.5	2.2
8			11.0	5.4	2.2
9			10.7	5.3	2.2
10			10.7	5.0	2.1
11			10.3	4.9	2.0
12			10.0	4.6	1.9
13			9.7	4.5	1.9
14			9.4	4.4	1.9
15			9.1	4.4	1.8
16			9.0	4.1	1.8
17			8.6	4.0	1.7
18			8.4	3.8	1.7
19			7.9	3.6	1.6
20			7.5	3.4	1.5
21			7.3	3.2	1.5
22			7.2	3.0	1.5
23			6.9	2.9	1.4
24			6.8	2.7	
25			6.7	2.5	NO
26			6.7	2.5	RECORD
27			6.6	2.4	
28			6.6	2.4	
29			6.5	2.3	
30			6.5	2.2	
31			6.5	2.2	
Total sec. Ft. Days			276.1	127.0	* 44.2
Mean Sec. Ft.			8.9	4.1	* 1.9
Total Ac. Ft.			548	252	* 87.6

* 23 day period

Total for 85-day period - 887 acre-feet