

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF WATER RESOURCES

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GOODWIN J. KNIGHT, Governor

FRANK B. DURKIE, Director of Public Works

A. D. EDMONSTON, State Engineer

REPORT ON
WATERMASTER SERVICE
IN
SHACKLEFORD CREEK WATERMASTER SERVICE AREA
Siskiyou County, California
1953 SEASON

Sacramento, California
March, 1954

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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 Shackleford Creek Watermaster Service Area, Siskiyou County, California, 1953 Season".

/s/ L. C. JOYSON
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 Shackleford Creek Watermaster Service Area, Siskiyou County, California, 1953 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 Shackleford Creek Watermaster Service Area, Siskiyou County, California, 1953 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 30th day of March, 1954.

DEPARTMENT OF PUBLIC WORKS
STATE OF CALIFORNIA

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

(SEAL)

ORGANIZATION

Frank B. Durkee Director of Public Works
A. D. Edmonston State Engineer
Harvey O. Banks Assistant State Engineer

This report was prepared under the direction of

L. C. Jopson
Principal Hydraulic Engineer

By

O. L. Abbott
Associate Hydraulic Engineer
and Watermaster

T. R. Merryweather
Administrative Officer

INTRODUCTION

This is the third annual report on watermaster service in the Shackleford Creek Watermaster Service Area and covers the period beginning July 1 and terminating September 30, 1953.

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, 1952 to September 30, 1953, are presented in Table 1. Annual precipitation for the period from October 1, 1952 to September 30, 1953 was 130 per cent of the normal.

Stream Flow

Stream flow gaging stations equipped with automatic water stage recorders were operated on Shackleford Creek above all diversions, and at Shackleford Creek above Freitas ditch. A stream flow gaging station equipped only with a staff gage was maintained on Mill Creek above all diversions. Intermittent observations were made of the discharge at the last named station. The discharges at these stations are set forth in Tables 2, 3, and 4, respectively. Additional recorders were maintained during a portion of the irrigation season on the Camp ditch and on the Ralph Eastlick ditch to aid in the distribution of water.

The inflow and outflow of Cliff and Campbell Lakes were measured on August 13, 1953. These measurements indicated the outflow to be two cubic feet per second in excess of the inflow. No water was released during the 1953 season from Cliff and Campbell Lakes for re-diversion through the Shackleford ditch.

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 10 with an increasing shortage thereafter until the end of the season. Between August 21 and September 30 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 end of the season. The mean daily discharge of Shackleford Creek above all diversions is set forth in Table 2.

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

Month	Distribution in per cent of allotments						
	Priorities						
	1	2	3	4	5	6	7
July	100	Sufficient to satisfy all demands					
August	100	100	94	98	52	45	33
September	100	100	11	43	0	0	0

Lower Shackleford Creek Group

The daily discharge in cubic feet per second of Shackleford Creek above the Freitas ditch is set forth in Table 3. The water available at this station is a measure of the water available to Lower Shackleford Creek group.

The flow in Lower Shackleford Creek was sufficient to supply all demands throughout the season because the irrigation demands of the water users during the latter part of the season were less than the allotments

as set forth in the decree.

Upper Mill Creek Group

The water in Upper Mill Creek was distributed in accordance with Schedule 5 of the Shackelford Creek decree. Sufficient water was available to supply all priorities through July 15, 1953.

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. A record of intermittent measurements of the discharge of Mill Creek above all diversions is set forth in Table 4. A summary of the distribution of water in per cent of allotments is shown in the following tabulation:

Month	Distribution in per cent of allotments:		
	Priorities		
	1	2	3
July	100	86	33
August	100	42	0
September	100	20	0

Lower Mill Creek Group

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

CHANGES IN OWNERSHIP OF LANDS AND WATER RIGHTS

No change in ownership of lands and water rights has occurred subsequent to filing "Statement for Shackelford Creek Watermaster Service Area, County of Siskiyou, State of California, for 1953".

TABLE 1

MONTHLY PRECIPITATION FORT JONES, SISKIYOU COUNTY, CALIFORNIA

1952-53

In Inches

Month	Normal Precipitation	Precipitation 1952-53
October	2.15	0.33
November	2.74	1.79
December	3.48	8.49
January	3.73	6.67
February	2.07	1.21
March	1.79	2.43
April	.96	0.78
May	1.38	3.40
June	.74	0.72
July	.44	0.00
August	.42	0.22
September	.21	0.02
TOTALS	20.09	26.06

TABLE 2

DISCHARGE OF SHACKLEFORD CREEK ABOVE ALL DIVERSIONS

July 1 to September 30, 1953

Mean Daily Discharge in Cubic Feet Per Second

Day	July	August	September
1	161	41	21
2	176	42	21
3	187	42	19.4
4	195	38	18.8
5	195	37	18.8
6	191	36	17.8
7	182	35	17.3
8	165	33	16.8
9	154	32	15.8
10	152	29	14.8
11	146	27	15.3
12	145	26	14.3
13	137	26	14.3
14	130	27	12.9
15	117	24	12.5
16	110	23	12.1
17	109	23	12.1
18	108	24	11.2
19	98	21	10.8
20	91	21	10.8
21	82	21	11.6
22	81	19	10.8
23	72	19	10.8
24	65	19	9.9
25	64	19	9.5
26	55	33	9.2
27	52	26	9.2
28	48	25	9.2
29	47	31	9.1
30	44	24	9.1
31	42	23	--
Total Sec.			
Ft. Days	3,601	866	368.4
Mean			
Sec. Ft.	116.1	27.9	12.3
Total			
Ac. Ft.	7,141	1,717	730

Total for period - 9,588 acre-feet

TABLE 3

DISCHARGE OF SHACKLEFORD CREEK ABOVE FREITAS DITCH

July 16 to September 28, 1953

Mean Daily Discharge In Cubic Feet Per Second

Day	July	August	September
1	N	32	15.8
2		31	15.0
3	O	31	14.0
4		30	14.0
5	R	30	14.0
6		30	13.4
7	E	29	13.4
8		28	14.0
9	C	27	13.4
10		26	14.0
11	O	25	14.0
12		24	13.4
13	R	23	12.6
14		22	9.9
15	D	21	9.9
16	81	21	9.9
17	76	20	9.9
18	72	19.3	9.9
19	68	19.3	9.9
20	62	18.2	9.2
21	58	17.4	9.2
22	53	17.4	9.9
23	47	16.6	9.9
24	43	16.6	9.2
25	38	15.8	9.2
26	36	16.6	9.2
27	34	15.8	8.6
28	34	15.8	8.0
29	33	16.6	NO RECORD
30	33	17.4	--
31	32	15.8	
Total Sec.			
Ft. Days	800	688.6	322.8
Mean			
Sec. Ft.	50	22.2	11.5
Total			
Ac. Ft.	1586	1365	640

Total for period - 3591 acre-feet

TABLE 4

DISCHARGE OF MILL CREEK ABOVE ALL DIVERSIONS

July 1 to September 30, 1953

Intermittent Measurements of Discharge In Cubic Feet Per Second

Day	July	August	September
1			
2			
3			2.3
4			
5			
6		5.7	
7			2.2
8			
9			
10			
11			
12			
13			
14		4.5	1.8
15			
16	10.0		
17			
18			
19			
20			1.7
21			
22			
23			
24		2.9	
25			
26			
27	6.7		1.4
28			
29			
30			
31		2.3	