STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

REPORTS OF THE
DIVISION OF WATER RESOURCES
EDWARD HYATT, STATE ENGINEER

REPORT ON WATER MASTER SERVICE ON NEW PINE CREEK MODOC COUNTY, CALIFORNIA FOR THE SEASON OF 1940

By
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Water Master Assistant

Sacramento, California
March 1941

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SACRAMENTO

DIVISION OF WATER RESOURCES
401 PUBLIC WORKS BUILDING

March 1, 1941

Mr. Harold Conkling
Deputy State Engineer
Sacramento, California

Attention: Mr. Gordon Zander, Supervising Hydraulic Engineer

Dear Sir:

There is submitted herewith a report covering the water master service on New Pine Creek in Modoc County, California, for the 1940 season.

The report describes the methods and practices followed in the distribution of the waters of New Pine Creek under the provisions of the decree in the case of Edward E. Keller, et al., v. Anna Jensen, et al., and presents the results obtained under this distribution.

Respectfully submitted,

Water Master Assistant

INTRODUCTION

Water master service was conducted in the New Pine Creek Water Master District during the 1940 season under the provisions of Section 37 and 37a of the Water Commission Act. The decree in the case of Edward Keller, et al., vs. Anna Jensen, et al., entered on June 14, 1932, was used as the basis of water distribution.

The field work was commenced on April 3, 1940, by J. Victor Scammon. Mr. A. S. Wheeler and Mr. J. W. McPartland also acted as water masters during portions of the season which terminated on September 26, 1940.

DISCUSSION OF RESULTS

In Table 1 is presented a monthly and seasonal record of the precipitation at Lakeview, Oregon. The mean precipitation for the station from 1884 to 1940 is shown as well as a tabulation of the precipitation in 1939-1940 in per cent of the total mean precipitation. The seasonal precipitation in 1939-1940 was 119.5 per cent of the total mean.

Table 2 is a daily record of the flow in cubic feet per second of New Pine Creek at the register station below the Schroeder Ranch.

Table 3 is a tabulation of the estimated flow in cubic feet per second of New Pine Creek above all diversions. This table is a summation of the daily discharge in Table 2 and the estimated combined diversions by the Schroeder Ranch. Plate 1 is a graphical presentation of the water supply

as given in Table 3.

Table 4 is a tabulation of the per cent of allotments delivered to each priority class during the periods indicated. The per cent of total allotments delivered and surplus over deliveries are also shown in the table. Some of the surplus water found its way directly down the creek channel into Goose Lake. Considerable water also drained from the lower irrigated land into the lake.

In Table 4 the special uses on the Cook and Butler ranches were not included except that the allotments are taken from the surplus shown. According to the decree, Walter Butler is allowed 0.40 cubic foot per second for six days in each of the periods, April 1st to May 20th and May 20th to June 20th. C. J. Cook is allowed .72 cubic foot per second under the same conditions. Both users diverted at the same time and rotated in the use of water during the 1940 season.

It will be seen from Table 4 that more than 100 per cent allotments were diverted by the users during the period of surplus water from April 13th to June 10th. After June 10th some shortage occurred which was not serious.

Water was available for all first priority rights subsequent to July 1st, but due to the flour mill beginning to operate on September 6th, no further water was received by the California Ditch. There was some second priority water available between July 1st and August 19th and a small amount of third priority water for a few days under the July 1st schedule. Rotation was not resorted to on the California Ditch in 1940.

The Green Lower Ditch and the Reid lateral therefrom were cleaned early in the season, facilitating the delivery of water to the ranches served. A new division box was installed in the Robnett-Heryford Ditch to permit a closer regulation of the division between the Robnett and Heryford Ranches.

A new tap from the Robnett-Heryford Ditch was used for the first time

in 1940 by Ernest Robnett to irrigate a small newly developed yard around his house located in Fractional SW¼ of SE¼ in Section 24, T. 41 South, R. 20 East, W. B. & M. The rate of diversion necessary to adequately irrigate the one acre yard is about 0.10 to 0.20 cubic foot per second for periods of about one hour twice a week. As this new tap is above where the water in the ditch is divided between the Robnett and the Heryford ranches, the flow to the Heryford Ranch was compensated by changing the proportions of the Robnett-Heryford division box to make the Robnett side about four inches narrower whenever the new tap was open.

The runoff of New Pine Creek in 1940 has been plotted as a hydrograph on the plate at the end of this report. The runoff in 1932 has also been plotted.

VIOLATIONS OF DECREE AND CONTROVERSIES

No violations of the decree or controversies of any importance occurred during the 1940 season.

RECOMMENDATIONS

It is recommended that the structure in New Pine Creek used to divert water into the Green Lower Ditch be replaced and also a new headgate for the Green Lower Ditch be added to the structure.

The recommendations made in the 1933 water master report have never been installed and are necessary to facilitate the regulation and distribution of the waters of the creek.

TABLES

TABLE 1

MONTHLY PRECIPITATION DATA AT LAKEVIEW, OREGON

Season	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Seasonal
1930-1931	0.85	.29	1.02	.07	.38	1.10	1.39	.22	.19	.89	T	T	6.40
1931-1932	.26	1.32	.96	1.60	1.26	.39	1.89	2.33	1.17	.98	T	.02	12.18
1932-1933	.00	.44	.39	1.01	1.53	.70	1.04	.96	1.36	.59	0.27	T	8.29
1933-1934	.24	1.48	.01	1.14	1.31	1.60	1.50	1.06	1.81	1.20	0.00	T	11.35
1934-1935	.60	.97	3.09	1.35	1.63	1.16	1.38	3.36	0.99	0.33	0.34	0.00	15.20
1935-1936	T	.95	.56	1.73	4.30	2.78	.78	1.06	1.15	0.52	0.00	0.16	13.99
1936-1937	.35	T	.00	.59	1.10	2.78	1.74	1.57	0.41	1.53	.04	.00	10.11
1937-1938	0.17	2.31	2.69	3.92	1.42	2.61	3.02	0.92	0.67	0.32	0.66	0.10	18.81
1938-1939	0.66	1.47	1.70	0.66	0.98	1.00	1.02	0.17	0.78	0.53	0.47	0.08	9.52
1939-1940	1.00	0.95	0.05	3.41	1.92	3.34	2.45	0.86	0.42	0.36	0.11	T	14.87
Mean 1884-1940	.58	.89	1.60	1.51	1.65	1.57	1.26	.98	1.05	.72	.35	.26	12.42
1939-1940 in per cent of total mean	8.1	7.6	0.3	27.4	15.4	26.9	19.7	6.9	3.4	2.9	0.9	0	119.5

TABLE 4

AVERAGE WATER DELIVERIES ON NEW PINE CREEK
COMPARED WITH ALLOTMENTS - 1940 SEASON

10 Day Period	Per Cent of Allotment Delivered					Average flow above diversions. c.f.s.	Surplus*
	1st Priority	2nd Priority	3rd Priority	4th Priority	Total		
4/3 to 4/12	88				88	19.4	0
4/13 " 4/21	144				144	31.9	0
4/22 " 5/1	147				147	32.6	0
5/2 " 5/11	200				200	47.2	2.8
5/12 " 5/21	200	No Allotments			200	64.5	20.1
5/22 " 5/31	176				176	39.1	0
6/1 " 6/10	106				106	23.5	0
6/11 " 6/20	72				72	15.9	0
6/21 " 6/30	54				54	11.9	0
7/1 " 7/10	100	100	29	0	38	8.4	0
7/11 " 7/20	100	92	0	0	29	6.4	0
7/21 " 7/30	100	52	0	0	22	4.9	0
7/31 " 8/9	100	29	0	0	18	4.0	0
8/10 " 8/19	100	10	0	0	15	3.3	0
8/20 " 8/29	100	0	0	0	13	2.9	0
8/30 " 9/8	92	0	0	0	12	2.7	0
9/9 " 9/18	100	0	0	0	14	3.1	0
9/19 " 9/26	89	0	0	0	12	2.6	0

Priorities: April 8th to June 30th - 1st - 22.18 c.f.s.
July 1st to September 26th - 1st - 2.92 c.f.s.
2nd - 3.81 c.f.s.
3rd - 5.84 c.f.s.
4th - 9.61 c.f.s.

* Surplus over 200% of 1st Priority

OWNERSHIP OF LANDS AND WATER RIGHTS
IN NEW PINE CREEK WATER MASTER DISTRICT
OCTOBER 1, 1940

Owner at Time of Decree (June 14, 1932)	Intermediate Possessors	Year of Change	Water Right Cubic Feet per Second	Present Owner	Address of Present Owner
Walter and Anna Butler	none		0.06	Walter Butler and Anna Butler	New Pine Creek, Oregon
California Public Service Company	none		0.18	California Public Service Company	Lakeview, Oregon
Delbert and Clara Cloud	none		.62	Delbert Cloud and Clara Cloud	New Pine Creek, Oregon
Elsie Converse	none		.33	Elsie Converse	New Pine Creek, Oregon
C. J. and Mattie E. Cook	none		.14	C. J. Cook and Mattie E. Cook	New Pine Creek, Oregon
Mae E. and Ellis E. Crom	Henry Wendt	1935	.02	Henry Wendt	837 Polk Street Eugene, Oregon
J. G. and Ethel D. Cundiff	none		.57	J. G. Cundiff and Ethel D. Cundiff	New Pine Creek, Oregon
Earle M. Hindle	none		.08	Earle M. Hindle	New Pine Creek, Oregon
F. M. and Cora Green	none		10.49	F. M. Green and Cora Green	New Pine Creek, Oregon

Owner at Time of Decree (June 14, 1932)	Intermediate Possessors	Year of Change	Water Right Cubic Feet per Second	Present Owner	Address of Present Owner
George H. and Flora Hamersly	none		.33	Flora Hamersly and Estate of George H. Hamersly	New Pine Creek, Oregon
J. D. and Delia Heryford	Estate of J. D. Heryford - Mrs. A. J. Ousley, J. W. and Lee Heryford, heirs	1940	2.03	Estate of J. D. Heryford (c/o Chas. H. Combs, Attorney at Law)	Lakeview, Oregon
Edward Keller, Sarah M. Keller, Richard M. Keller and Edna Faye Keller	Richard Keller, et al. Richard and Sarah M. Keller	1936 1937	.43	Richard Keller and Sarah M. Keller	New Pine Creek, Oregon
Clay and Ellen Lawson	none		.30	Clay Lawson and Ellen Lawson	New Pine Creek, Oregon
B. E. and Elizabeth A. McCrary	none		.15	B. E. McCrary and Elizabeth A. McCrary	New Pine Creek, Oregon
George W. and Sadie Perkins	none		1.33	George W. Perkins and Sadie Perkins	New Pine Creek, Oregon
Evert and Lillian B. Reid	none		.64	Evert Reid and Lillian B. Reid	New Pine Creek, Oregon
A. C. and Frances Robnett	Estate of A. C. and Frances Robnett	1939	1.86	Estate of A. C. Robnett and Frances Robnett	New Pine Creek, Oregon
Ernest and Myra Robnett	none		.66	Ernest Robnett and Myra Robnett	New Pine Creek, Oregon

Owner at Time of Decree (June 14, 1932)	Intermediate Possessors	Year of Change	Water Right Cubic Feet per Second	Present Owner	Address of Present Owner
Anna Schroeder	none		.23	Anna Schroeder	New Pine Creek, Oregon
Pearl and Effie Steward	none		.55	Pearl Steward and Effie Steward	New Pine Creek, Oregon
Amelia Taylor, Cecil A. Taylor, W. E. Butler, Lillian B. Reid and Hilda M. Barry	W. E. Butler, Thelma Butler and Amelia Taylor	1937	.99	W. E. Butler and Thelma Butler	New Pine Creek, Oregon
	W. E. and Thelma Butler	1940			
Clara Vernon	none		.76	Clara Vernon	New Pine Creek, Oregon