STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF WATER RESOURCES

EARL WARREN, Governor

C. H. PURCELL, Director of Public Works

A. D. EDMONSTON, State Engineer

SEIAD CREEK ADJUDICATION

REPORT ON WATERMASTER SERVICE

ON

SEIAD CREEK STREAM SYSTEM

SISKIYOU COUNTY, CALIFORNIA

1949 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 on Seiad Creek Stream System, Siskiyou County, California, 1949 Season".

/s/ L. C. JOPSON
Supervising Hydraulic Engineer

I, Gordon Zander, Principal Hydraulic Engineer, Division of Water Resources, Department of Public Works of State of California, hereby approve the within contained "Report on Watermaster Service on Seiad Creek Stream System, Siskiyou County, California, 1949 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 on Seiad Creek Stream System, Siskiyou County, California, 1949 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 day of

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

PAUL E. STEPHENSON
Senior Hydraulic Engineer

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INTRODUCTION

The petition initiating the Seiad Creek Adjudication proceeding dated November 25, 1946, was filed with the Department of Public Works of the State of California, Division of Water Resources, State Engineer on December 23, 1946. Subsequent steps in the proceeding up to and including the 1948 irrigation season are set forth in "Report on Water Supply and Use of Water on Seiad Creek Stream System, Siskiyou County, California, November, 1947" and "Report on Investigation and Watermaster Service on Seiad Creek Stream System, Siskiyou County, California 1948 Season", on file in the proceeding in the office of the Department, Sacramento, California.

On April 21, 1949, at 2:00 P. M., a conference of the claimants in the proceeding and representatives of the Department was held in Seiad Valley, California, to discuss the advisability of watermaster service on the stream system during the 1949 season. The conference resulted in the adoption of "Agreement for Watermaster Service During 1949 Season". A copy of this agreement bearing the names of the claimants signatory thereto is submitted as an appendix to this report.

Administration of the diversions under the 1949 agreement covered the period from June 28 to September 30, 1949. Paul E. Stephenson, Senior Hydraulic Engineer, was designated by the Department as Watermaster and served in that capacity in conjunction with his duties as watermaster in the Shasta River Watermaster Service Area and the Shackleford Creek Adjudication proceeding.

WATER SUPPLY

Precipitation

Records of precipitation at Happy Camp are presented in Table 1 of this report. According to these data the precipitation occurring during the winter season from October 1 to March 31, was about 85 per cent of the 31-year mean for these months at this station and during the dry weather season from April 1 to September 30 it was about 65 per cent of the mean for those months. The precipitation for the entire season was about 83 per cent of the seasonal mean. The latter figure compares with 111 per cent in 1948 and 98 per cent in 1947.

Stream Flow

A stream flow measuring station was maintained on Seiad Creek above all diversions for the period from July 1 to September 30, 1949. Records of daily discharge at this station are submitted at the end of this report in Table 2.

A four foot weir was maintained on Canyon Creek at the inlet of the culvert under the Seiad Creek Road to measure the contribution of Canyon Creek to the flow of Seiad Creek. Intermittent observations were made throughout the 1949 season.

A summary of the records obtained at these measuring stations together with observations made of Darky Creek at County Road Crossing are set forth in Table 3. This table presents a record of the total water supply available for the area.

Supplemental to the above stations as an aid in distributing the available flow, weirs were maintained in all ditches and intermittent observations and measurements were made thereon. The records of discharge for these ditches are submitted in Table 4.

DISTRIBUTION OF WATER

The "Agreement for Watermaster Service During 1949 Season" provided that distribution was to be based on Schedules 1 and 2 which were attached to and made a part of the agreement. The agreement also provided for deviation from the above schedules if necessary or convenient to accomplish the purpose of the agreement; i.e., to work out an allocation of the waters of Seiad Creek which would afford a basis, acceptable to all claimants, for the determination of all water rights involved in the proceeding.

Regulation of the several ditches, in accordance with the amounts of water and priorities set forth in Schedules 1 and 2 of the 1949 agreement, resulted in an orderly distribution of the available water supply. Restricted use by the Arroyo Seco Gold Dredging Company and Yreka Gold Dredging Company permitted delivery to all other priorities of sufficient amounts of water to satisfy their demands throughout the season.

A statement of the conditions encountered and of the regulation of the various ditches follows:

Upper Chace Ditch (Diversion 2) This ditch was regulated in accordance with the amount set forth in paragraph 4 of the 1949 agreement, which right is restricted to the period from April 1 to July 31 of each year by the terms of License 3038 heretofore issued upon Application 10630.

Lower Chace Ditch (Diversion 3) Water was diverted through this ditch throughout the 1949 season for stock-watering purposes only.

Upper Rainey Ditch (Diversion 4) This ditch was used by the owner thereof to divert his entire allotment set forth in Schedule 1, except at

times when water was used through Diversion 9 for the irrigation of 4.0 acres of alfalfa. Subsequent to July 15 the inadequacy of the diversion works limited the amount diverted to less than the amount set forth in Schedule 1.

Upper Lowden Ditch (Diversion 5) This ditch was not opened during the 1949 season.

Upper South Rainey Ditch (Diversion 5a) This ditch was not opened during the 1949 season.

Middle Rainey Ditch (Diversion 6) This ditch was not opened during the 1949 season.

Canyon Creek Ditch (Diversion 7) Subsequent to July 1 the flow available at the intake of this ditch was sufficient to permit diversion of only a portion of the allotment set forth in Schedule 3. The ditch was dry after about July 15, although there was some flow passing the diversion works at all times.

Robinson Pump (Diversion 8) This pump was not operated during the 1949 season.

Priddy Pump (Diversion 8a) This pump was operated throughout the season in accordance with the terms of the 1949 agreement.

Lower Rainey Ditch (Diversion 9) Sufficient water was available for this ditch to satisfy full rights of Burstad and Shadburne as set forth in Schedule 2 of the 1949 Agreement prior to about August 1. Subsequent to that date diversion through the ditch was regulated in accordance with the supply available.

Grant Lowden Ditch (Diversion 10) This ditch was regulated to supply the domestic requirements of six cabins on the Arroyo Seco Gold

Dredging Company and Yreka Gold Dredging Company property. There was sufficient flow at the point of diversion to supply these requirements throughout this season.

Smith Ditch (Diversion 11) This ditch was not opened until about July 20 when the dam was replaced. Subsequent to that date water for garden use by the Arroyo Seco Gold Dredging Company et al., was diverted through this ditch in addition to the Smith Allotment.

Lower Lowden Ditch (Diversion 12) Water was diverted through this ditch for a short period in July prior to completion of the Smith Dam (Diversion 11). Subsequent to this time water for garden use was diverted through Diversion 11, to the point where the Smith Ditch crosses the Lower Lowden Ditch and thence through the Lower Lowden Ditch to the Lowden homestead on the south side of the State Highway.

Subsequent to about September 1, waterwas not required for the above use.

SUMMARY

Distribution problems during the 1949 season were of minor importance and were caused mainly by inadequate diversion structures. Shortage of water during the season would have been serious if the Arroyo Seco Gold Dredging Company and Yreka Gold Dredging Company had made use of their full allotments set forth in Schedule 1. The portion of their right over and above the demands for domestic purposes was allocated to other water right owners upstream.

The water right owners cooperated at all times with the watermaster in the regulation of the various ditches in accordance with the terms of the 1949 Agreement. Satisfactory results were obtained throughout the season.

TABLE 1

PRECIPITATION - HAPPY CAMP, SISKIYOU COUNTY
Elevation 1,132 Feet

Year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Seasonal
1928-29	2.92	6.39	10.59	4.26	1.95	2.64	4.14	0.40	1.38	T	.00	.00	34.67
1929-30	1.14	.00	9.40	9.84	8.10	1.00	2.23	1.10	.24	.00	.00	1.03	34.08
1930-31	.90	5.79	3.64	9.05	3.19	6.34	1.94	.33	1.74	.00	.00	.37	33.29
1931-32	4.29	6.15	15.30	5.38	2.23	5.59	3.83	1.77	.19	T	.00	.00	44.73
1932-33	1.33	9.58	7.67	12.33	5.05	9.54	.14	6.40	.88	.00	.43	.43	53.78
1933-34	3.46	.38	13.75	7.60	2.77	3.22	1.65	1.50	.97	.00	.30	.47	36.07
1934-35	6.42	12.26	5.89	8.82	3.05	5.96	4.82	.10	T	.46	.39	.75	48.92
1935-36	3.40	1.95	9.08	18.64	8.10	1.59	1.20	2.86	1.23	.16	T	T	48.21
1936-37	.00	.00	6.40	6.02	9.66	6.35	5.52	.96	1.76	.53	.00	.22	37.42
1937-38	4.27	19.02	10.07	10.80	20.18	17.67	2.77	.07	.00	.00	.00	.38	85.23
1938-39	2.50	5.63	5.20	7.60	7.02	5.77	T	2.40	.82	.21	.00	.15	37.30
1939-40	1.42	.30	16.51	10.64	20.03	9.38	1.30	2.04	.90	.00	.00	3.23	65.75
1940-41	5.09	3.57	15.62	12.93	6.60	2.28	5.35	3.21	1.24	1.92	.30	1.20	59.31
1941-42	1.30	5.58	18.02	6.85	9.12	1.33	4.50	5.89	.13	.00	.05	.87	53.64
1942-43	.73	18.09	16.31	11.78	3.08	5.44	3.67	1.25	1.10	.00	.00	.00	61.45
1943-44	7.53	5.02	1.69	6.53	4.00	3.91	2.61	1.28	1.81	1.92	.41	.10	36.81
1944-45	2.62	12.81	6.08	5.36	10.86	8.55	2.00	4.48	.19	.20	.01	.44	53.60
1945-46	4.42	18.69	18.02	7.17	9.11	4.04	.30	1.18	.49	.57	.00	1.16	65.15
1946-47	3.14	10.78	3.73	5.14	4.34	9.84	.98	.20	3.72	2.10	.22	.34	44.53
1947-48	9.40	1.86	2.24	14.11	7.28	5.43	8.96	2.50	1.97	.88	.02	.67	55.32
1948-49	1.38	6.01	10.39	1.50	8.32	5.88	.49	3.19	.12	.01	.00	.42	37.71
31 Year Mean	2.97	6.90	8.87	7.87	7.18	5.29	2.74	1.70	.86	.39	.13	.68	45.58

TABLE 2

Daily Discharge in Cubic Feet per Second
SEIAD CREEK ABOVE DIVERSIONS
JULY 1 TO SEPTEMBER 30, 1949

Day	July	August	September
1	7.2	2.2	0.8
2	6.8	2.2	.8
3	6.4	2.2	.8
4	6.4	2.0	.8
5	6.0	2.0	.8
6	5.8	2.0	.8
7	5.4	1.8	.8
8	5.0	1.8	.8
9	4.8	1.8	.8
10	4.6	1.6	.8
11	4.4	1.6	.8
12	4.0	1.4	.8
13	4.0	1.4	.8
14	3.6	1.2	.8
15	3.6	1.0	.8
16	3.6	1.0	.8
17	3.6	1.0	.8
18	3.0	1.0	.8
19	2.2	1.0	.8
20	2.2	1.0	.8
21	2.2	1.0	.8
22	2.2	1.0	.8
23	2.2	1.0	.8
24	2.2	1.0	.8
25	2.2	1.0	.8
26	2.2	1.0	.8
27	2.2	1.0	.8
28	2.2	1.0	.8
29	2.2	1.0	.8
30	2.2	1.0	.8
31	2.2	1.0	
Total Sec. Feet Days	116.8	42.2	24.0
Mean Sec. Feet	3.8	1.4	0.8
Total Acre Feet	232	84	48

Discharge during 92-day period - 363 acre-feet.

TABLE 3

SUMMARY OF
Discharge in Cubic Feet per Second
SEIAD CREEK AND TRIBUTARIES
JUNE 28 TO SEPTEMBER 19, 1949

Date	INFLOW				OUTFLOW
	Seiad Creek above all Diversions	Canyon Creek 4' Weir	Darky Creek*	Total Water Supply	Seiad Creek below all Diversions
June 28	7.2	1.1	.1	8.4	6.0
July 12	4.0	.6	.1	4.7	3.0
19	2.2	.4	0	2.6	0
21	2.2	.3	0	2.5	0
Aug. 1	2.2	.2	0	2.4	0
15	1.0	.2	0	1.2	0
25	1.0	.2	0	1.2	0
Sept. 5	0.8	.1	0	.9	0
12	0.8	.1	0	.9	0
19	0.8	.1	0	.9	0

* Estimated

TABLE 4

Discharge in Cubic Feet per Second
of
DIVERSIONS FROM SEIAD CREEK AND TRIBUTARIES

JUNE 28 TO SEPTEMBER 19, 1949

DATE	Upper Chace Ditch	Lower Chace Ditch	Upper Rainey Ditch	Upper Lowden Ditch	Middle Rainey Ditch	Canyon Creek Ditch	Lower Rainey Ditch	Grant Lowden Ditch	Smith Ditch	Lower Lowden Ditch	Total Diversions
June 28	.4	.1	.5	0	0	0	.7	1.7	0	0	3.4
July 12	.3	.1	.4	0	0	.2	.7	.7	0	0	2.4
19	.3	.1	.4	0	0	.2	.7	.7	0	.0	2.4
21	.3	.1	.4	0	0	.1	.6	.6	.4	0	2.5
Aug. 1	.3	0	.3	0	0	.1	.6	.5	.4	0	2.2
15	.3	0	.3	0	0	0	.6	.4	.3	0	1.9
25	.3	0	.3	0	0	0	.6	.3	.2	0	1.7
Sept. 5	.3	0	.3	0	0	0	.6	.3	.1	0	1.9
12	.3	0	.3	0	0	0	.5	.2	.1	0	1.4
19	.3	0	.3	0	0	0	.5	.2	.1	0	1.4

A P P E N D I X

BEFORE THE DEPARTMENT OF PUBLIC WORKS
OF THE STATE OF CALIFORNIA
DIVISION OF WATER RESOURCES
STATE ENGINEER

IN THE MATTER OF THE DETERMINATION OF THE RIGHTS OF THE VARIOUS CLAIMANTS TO THE WATER OF SEIAD CREEK STREAM SYSTEM IN SISKIYOU COUNTY, CALIFORNIA	)	AGREEMENT FOR WATERMASTER SERVICE DURING 1949 SEASON

WHEREAS, the above entitled proceeding is pending before the Department of Public Works of the State of California, Division of Water Resources, State Engineer, in which the rights in and to the water, and in and to the use thereof, from Seiad Creek Stream System, of all the claimants hereunto subscribed are involved; and

WHEREAS, said Department has completed the investigation of said stream system; all proofs of claims of water rights have been filed; an abstract of said proofs of claims has been prepared and served on all claimants; contests of two of said proofs of claims have been filed by claimants in the proceeding; and hearing of said contests has been continued to April 22, 1949, pending negotiations by the claimants involved, all in accordance with the provisions of the Water Code, and

WHEREAS, the parties hereunto subscribed desire continuation of distribution of the water of said stream system by a watermaster under State supervision during the 1949 season.

NOW THEREFORE IT IS HEREBY AGREED by and between each and every claimant hereunto subscribed and among all of said claimants, that said Department under authority conferred by Section 226 of the Water Code, may undertake to distribute the waters of said Seiad Creek Stream System, among the various claimants hereunto subscribed, as hereinafter set forth, it being understood and agreed that the distribution and apportionment of water under

this agreement shall be for the period extending from the date hereof to October 1, 1949, only, and subject to such provisions as are hereinafter contained, to wit:

1. The rights in and to the water, and in and to the use thereof, from the Seiad Creek Stream System, divides into two groups, namely; Seiad Creek Group and Canyon Creek Group and all rights in each group are independent of all rights in the other group.

2. Subject to the foregoing rights and provisions, the various claimants enumerated in Schedules 1 and 2, hereunto annexed and made a part hereof shall be entitled to rights in and to the use of the natural flows of Seiad Creek and Canyon Creek during the period from the date hereof to September 30, both dates inclusive, in 1949, for domestic, stockwatering and irrigation purposes upon their respective lands involved in said proceeding as shown on the Division of Water Resources Map, in accordance with the acreages to be supplied, priorities and quantities of water allotted, and through the diversions from the sources named as set forth in said Schedules 1 and 2. All allotments set forth in said Schedules 1 and 2 which are within the same priority class and within the same group are equal in priority and correlative in right and at all times when the water supply available for rights within a priority class is inadequate to supply all rights and allotments within said class, then during the continuance of such shortage, the owners of such allotments shall prorate the available water supply, if any, in excess of the quantity required for prior rights, or rotate in the use thereof, in accordance with their respective allotments in that class.

3. The points of measurement of all allotments of water hereinbefore provided shall be at or near the respective points of diversion from Seiad Creek and its tributaries.

4. Subject to the foregoing rights and provisions, Walter W. Robinson shall be entitled to divert from the flow of Seiad Creek through the Upper Chace Ditch (designated on Division of Water Resources Map, as Diversion 2) as follows:

0.30 cubic foot per second

during the period from April 1 to July 31 of each year for irrigation purposes on 13.8 acres of his land in Section 32, T. 47 N., R. 11 W., M.D.B.&M. and in Section 5. T. 46 N., R. 11 W., M.D.B.&M.

5. Nothing herein contained shall be, or shall be construed as, an admission by any claimant that his legal rights or the rights of any other claimant are as herein provided; and the distribution of water in accordance with this agreement shall not in any manner prejudice the rights which are now claimed or may hereafter be asserted by any of the claimants hereunto subscribed.

6. Said Department may appoint a watermaster to distribute the water of Seiad Creek stream system, as herein provided for, during the 1949 season, and said watermaster shall have power and authority to inspect and regulate the diversions of all the claimants hereunto subscribed in accordance with this agreement, and in the exercise of such authority may enter upon the lands of said claimants for the purpose of such inspection and regulation, and may establish and maintain such gaging stations and measuring devices in said stream system and diversion conduits as may be necessary or convenient. The several ditch owners shall furnish the necessary labor and material for the construction and installation of diversion works, headgates and measuring devices for their respective ditches.

7. It is further agreed that in order to meet the costs of such distribution by the watermaster during the 1949 season, the claimants hereunto subscribed will pay to the Department on or before June 1, 1949, the

amount of $100.00, which amount shall be apportioned among the various claimants hereto in accordance with the apportionments set forth in Schedule 3 hereunto annexed and made a part hereof.

IN WITNESS WHEREOF, the parties hereto have affixed their hands and seals this 21st day of April, 1949.

Name	Address	Date
W. R. Shadburne	Seiad Valley	April 21, 1949
Frank E. Smith	Seiad Valley	April 21, 1949
Marshall E. Burstad	Hamburg, California	April 21, 1949
Glenn S. Robinson	Seiad Valley	May 12, 1949
R. G. Priddy	Seiad Valley	May 12, 1949
Yreka Gold Dredging Co. per G.A.T.	Mills Bldg., San Francisco	May 13, 1949
Arroyo Seco Gold Dredging Co. per G.A.T.	Mills Bldg., San Francisco	May 13, 1949

SCHEDULE 1

PRIORITIES AND ALLOTMENTS TO CLAIMANTS
FROM SEIAD CREEK

Claimant	Acreage to be Supplied	Diversion Number as per D.W.R. Map	Priority Class and Allotment In Cubic Feet per Second				Total
			1	2	3	4	
Walter W. Robinson	14.9	3				0.30	0.30
Marshall E. Burstad	58.2	4, 5a, 5, 6 or 9		1.20			1.20
R. G. and Blanche A. Priddy	2.6	4		0.06			0.06
Arroyo Seco Gold Dredging Co. and Yreka Gold Dredging Co.	136.1	5 or 12	0.70	0.76	1.24		2.70
W. R. Shadburne	23.3	9 or 10				0.60	0.60
Arroyo Seco Gold Dredging Co. and Yreka Gold Dredging Co.	45.4	10		0.50	0.40		0.90
Frank E. Smith	4.4	11				0.10	0.10
Total	284.9		0.70	2.52	1.64	1.00	5.86

SCHEDULE 2

PRIORITIES AND ALLOTMENTS TO CLAIMANTS
FROM CANYON CREEK

Claimant	Acreage to be Supplied	Diversion Number as per D.W.R. Map	Priority Class and Allotment In Cubic Feet per Second		Total
			1	2	
Marshall E. Burstad	22.8	7		0.50	0.50
Glenn S. Robinson	Domestic	8	0.06		0.06
R. G. and Blanche A. Priddy	Domestic	8a	0.10		0.10
Total	22.8		0.16	0.50	0.66

SCHEDULE 3

APPORTIONMENT OF COST OF WATERMASTER SERVICE ON
SEIAD CREEK STREAM SYSTEM DURING 1949 SEASON

Name of Claimant	Amount of Water (Cubic Feet per Second)	Portion of Expense
Arroyo Seco Gold Dredging Co. and Yreka Gold Dredging Co.	3.60	$ 47.45
Marshall E. Burstad	1.70	23.16
R. G. and Blanche A. Priddy	0.16	3.47
Glenn S. Robinson	0.06	2.20
Walter W. Robinson	0.82	11.91
W. R. Shadburne	0.60	9.10
Frank E. and Margaret Smith	0.10	2.71
Total	7.04	$100.00