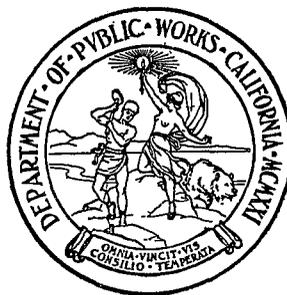


STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF WATER RESOURCES

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EARL WARREN, Governor
C. H. PURCELL, Director of Public Works
EDWARD HYATT, State Engineer

SHACKLEFORD CREEK ADJUDICATION
—
REPORT ON
INVESTIGATION AND WATERMASTER SERVICE
ON
SHACKLEFORD CREEK AND TRIBUTARIES
SISKIYOU COUNTY, CALIFORNIA
1945 SEASON



MARCH 1946

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AGREEMENT FOR TRIAL DISTRIBUTION DURING 1945 SEASON.

Sacramento, California
March 20, 1946

Mr. Gordon Zander
Supervising Hydraulic Engineer
Sacramento, California

Dear Sir:

Herewith is submitted the "Report on Investigation and Water-
master Service on Shackleford Creek and Tributaries, Siskiyou County,
California, 1945 Season".

This report covers the distribution of the waters of Shackleford
Creek and its tributaries during the period from about July 1 to October
1, 1945, in accordance with "Agreement for Trial Distribution During 1945
Season", dated June 26, 1945, entered into by the various claimants who
had filed proofs of claims of water rights in the Shackleford Creek
Adjudication proceeding.

Run-off records, measurements of ditch flows and other pertinent
data on water supply and use of water in the Shackleford Creek Area are
included in the report.

Respectfully submitted,

HARRISON SMITHERUM

Senior Hydraulic Engineer

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
WATERS OF SHACKLEFORD CREEK AND ITS
TRIBUTARIES, IN SISKIYOU COUNTY, CALI-
FORNIA.

I, Gordon Zander, Supervising Hydraulic Engineer, Division of Water Resources, Department of Public Works of the State of California, hereby approve the within contained report entitled "Report on Investigation and Watermaster Service on Shackleford Creek and Tributaries, Siskiyou County, California, 1945 Season".

Dated this 20th day of March, 1946.

GORDON ZANDER

Supervising Hydraulic Engineer

I, Edward Hyatt, State Engineer and Chief of the Division of Water Resources, Department of Public Works, State of California, hereby approve and adopt the within contained report entitled "Report on Investigation and Watermaster Service on Shackleford Creek and Tributaries, Siskiyou County, California, 1945 Season", as a report of the Department in the above entitled proceeding.

WITNESS my hand and the seal of the Department of Public Works of the State of California, this 20th day of March, 1946.

DEPARTMENT OF PUBLIC WORKS

By EDWARD HYATT
State Engineer and Chief of the
Division of Water Resources.

(Seal)

ORGANIZATION

C. H. Purcell	Director of Public Works
Edward Hyatt	State Engineer
Gordon Zander	Supervising Hydraulic Engineer

This report was prepared under the direction of

HARRISON SMITHERUM

Senior Hydraulic Engineer

By

P. E. STEPHENSON

Assistant Hydraulic Engineer

INTRODUCTION

The petition initiating the Shackleford Creek proceeding was filed on January 15, 1944. Following a preliminary investigation in the matter and finding that the facts and conditions warranted the determination requested by the petitioners, the Department granted the petition by order dated June 22, 1944, and thereafter on June 22, 1944, gave notice of said order and of the pendency of the proceeding. The order set September 1, 1944, as the time for commencing the examination of the stream system. Field work on such examination was completed on about November 1, 1944.

The results of the Department's examination of the stream system were compiled in a report entitled "Report on Water Supply and Use of Water on Shackleford Creek and Tributaries, Siskiyou County, California, January, 1945". This report was filed in the proceeding in the office of the Department on January 19, 1945. Copies of the report were also circulated among the various parties interested in the proceeding.

After filing its report in the matter, the Department by order dated January 23, 1945, fixed the time for filing proofs of claims of water rights in the proceeding to expire on May 15, 1945. However, three subsequent orders under date of May 8, June 13 and July 16, 1945, respectively, extended this time to August 15, 1945. During such extended period proofs were filed by all known claimants on the stream system, excepting J. A. Cason.

On June 26, 1945, a conference of the claimants in the proceeding and representatives of the Department was held at Fort Jones, California, to discuss the status of the work and the advisability of continuing the examination of the stream system under a plan of trial distribution for

the remainder of the 1945 irrigation season. This conference resulted in the adoption by the claimants of an "Agreement for Trial Distribution During the 1945 Season".

A copy of the agreement bearing the names of the parties signatory thereto is submitted as an appendix to this report. The names thereon represent all but three of the claimants who finally filed proofs in the proceeding. Of those three, one was a non-resident; one made no diversion of water during the period covered by the agreement; and the third, the United States Indian Service, agreed to cooperate under the terms of the agreement, although it could not be committed by its representatives to the extent of signing. Consequently, insofar as distribution was concerned, adoption of the agreement was unanimous.

Investigation of the stream system and administration of the diversions therefrom under the agreement covered the period from July 1 to October 30, 1945. P. E. Stephenson, Assistant 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 in Shasta Valley.

WATER SUPPLY

Precipitation

Records of precipitation at Yreka and at Etna are presented in Table 1 at the end of this report. A comparison of the precipitation at these two stations for the 5-year period, 1940-41 to 1944-45, indicates that the average seasonal precipitation at Etna is 133 per cent of that at Yreka. Applying this percentage to the 30-year mean seasonal precipitation of 16.26 inches at Yreka, it is deduced that the 30-year mean seasonal precipitation at Etna is about 21.4 inches. The 1944-45 precipitation at Etna was about 88 per cent of this deduced mean, and at Yreka about 91 per cent of the 30-year mean for that station. A further comparison shows that the 1944-45 precipitation at Etna and Yreka was 121 and 125 per cent of the 1943-44 precipitation at the respective stations. Assuming that the precipitation at these two stations is indicative of run-off conditions on the Shackleford Creek watershed, it appears that the water supply for the Shackleford Creek Area during the 1945 season was about 20 per cent greater than for the 1944 season but was somewhat below the normal expectancy.

Stream Flow

Stream flow measuring stations and water stage recorders were maintained for the period from about July 1 to September 30, 1945, on Shackleford Creek below Camp Ditch, below Junction with Mill Creek and below Goodale Ditch and on Mill Creek above Eastlick (Mill Creek) Ditch.

Records of daily discharge at these stations are submitted at the end of this report in Tables 2 to 5, inclusive.

Supplemental to the measuring stations on the streams, and as an aid to distribution, water stage recorders were installed and maintained

on the Ralph Eastlick Ditch, Shackloford Ditch, Howard-Jones Ditch, Camp Ditch, Freitas Ditch, Burton-Meamber Ditch, and Goodale Ditch. Records of daily discharge for these ditches are given in Tables 6 to 12, respectively, submitted at the end of this report.

A tabulation showing the total water supply available in Upper Shackloford Creek above the Camp Ditch is shown in Table 13. A similar record for 1944 is presented in Table 26 of the Report on Water Supply and Use of Water on Shackloford Creek and Tributaries, Siskiyou County, California, January, 1945. A comparison of the records indicates the available flow for the months of July, August and September, 1945, was about 115 per cent of that for the same period in 1944.

DISTRIBUTION OF WATER

The "Agreement for Trial Distribution During the 1945 Season" provided that distribution was to be based upon (1) the proofs of claims of water rights filed in the proceeding and (2) the observations, data, information, measurements and maps made, collected or prepared by the Division in the proceeding. Also, there was provision for deviation from the above requirements if necessary or convenient to accomplish the purpose of the agreement; i.e., to work out a schedule of water rights that might be acceptable to all claimants.

At the time actual administration of the stream system began, all proofs that had any bearing on the distribution for the 1945 season had been filed, excepting three subsequently filed by the Indian Service. Excellent cooperation was extended by the Indian Service, hence the absence of these proofs did not bar distribution as provided for under (1) above. However, due to other factors, distribution during the 1945 season was more nearly in accordance with the rights as they appeared to be generally recognized among the various claimants rather than on the basis of the claims made in the proofs. The main factors contributing to this choice were (a) the many conflicting claims as to priorities set forth in the proofs and (b) many of the ditches were incapable of diverting the amounts of water claimed, because of inadequate diversion and control structures in some cases and of lack of proper ditch maintenance in others.

Distribution by the watermaster commenced on July 1, 1945. Water stage recorders were installed at measuring stations at critical points on the stream system and at weirs on eight of the major ditches. Weirs were also installed on other ditches where practical to do so and intermittent measurements were made thereon. Considerable time was spent

throughout the season in urging claimants to put their diversion works and ditches in shape to divert the amounts of water claimed and to install diversion boxes and measuring devices where necessary.

Upper Shackleford Creek

Cliff and Campbell Lakes and the Ralph Eastlick, Shackleford, Howard-Jones and Camp ditches lie within this area.

There was sufficient water available to meet all demands from Upper Shackleford Creek throughout the month of July. No controversies arose over the use of water and little regulation, other than to observe the amounts of water being diverted, was necessary during the month. The sufficiency of the water supply, however, was largely due to the manner in which Cliff and Campbell Lakes were operated during the season. Otherwise it appears that water would have been available only for the Camp and Shackleford ditches subsequent to about July 15.

The critical period on this section of the stream commenced about August 1. Subsequent thereto the ditches were regulated upon the basis of priorities and amounts of water about as follows:

<u>Name of Ditch</u>	<u>Priority Order</u>	<u>Amount of Water Cubic Feet per Second</u>
Camp	1	2.00
Shackleford	2	7.00
Camp	3	2.00
Ralph Eastlick	4	3.50
Howard-Jones	4	<u>6.00</u>
	Total	20.50

In this trial set up the priorities were fixed as nearly as possible in accordance with the claims set forth in the proofs; recorded transactions pertaining to the Shackleford and Camp ditches; observed past practices; and information as to past practices obtained in conversations with various

claimants and other parties. The total allotment for the Camp Ditch was fixed at 4.0 cubic feet per second upon the basis of the capacity of the ditch in its 1945 condition and the area of 151 acres to be served under the ditch. The Shackelford Ditch allotment was set at about the amount of water being diverted by that ditch on August 1. The allotments for the Ralph Eastlick and Howard-Jones ditches were fixed as the amounts claimed in the respective proofs for those ditches.

Regulation of the several ditches in accordance with the above priorities and allotments resulted in an orderly distribution of the available water supply, however, the inactive operation of the Shackelford Ditch somewhat hampered a conclusive demonstration of the schedule in that more water than was required for downstream diversions continuously passed the Shackelford Ditch head dam without regulation. This permitted delivery of water to the Ralph Eastlick and Howard-Jones Ditches for a longer period than otherwise would have been possible, which in turn caused some disagreement as to the distribution.

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

Cliff and Campbell Lakes (Diversions 1 and 2) are storage reservoirs on the headwaters of Shackelford Creek, are owned by the Shackelford Ditch interests and are normally operated to supply supplemental water for that ditch. However, little or no effort was made on the part of the owner or his lessee to control the storage of water in these reservoirs, its release therefrom or its re-diversion after release. The outlet valve at Campbell Lake remained open during the 1945 season and appearances were that it had not been closed the previous fall. Discharge

from Cliff Lake, also, was continuous throughout the season due to faulty placement of flash boards in the outlet structure. Prior to August 20, the Shackelford Ditch interest made little or no effort to re-divert the water thus released from storage. This method of operation, or rather lack of operation, materially affected the distribution of water to the three other ditches on this section of the stream system during the 1945 season, both as to amounts of water delivered and the periods of use.

On July 15, the natural flow tributary to Cliff and Campbell Lakes was estimated to be 2.0 cubic feet per second and the measured discharge from Campbell Lake was 8.5 cubic feet per second. On August 29, the natural flow entering the lakes was about 0.3 cubic foot per second and the measured flow from Campbell Lake was 2.3 cubic feet per second. On August 30, obstructions in the outlet gate at Cliff Lake were removed so that the storage remaining in that lake would flow down to Campbell Lake. This operation did not materially increase the discharge from the latter. By about September 15 the storage at both lakes was almost entirely gone. From the above measurements it was estimated that approximately 400 acre-feet of water was released from Cliff and Campbell Lakes during the period from July 15 to September 15, 1945.

The Ralph Eastlick Ditch (Diversion 3) headgate was closed on August 20 after the Shackelford Ditch interests tightened their dam. Regulation prior to that date was not necessary because the ditch flow automatically lowered with the decrease in flow of Shackelford Creek in about the proper relation to the Howard-Jones Ditch, which was regulated to supply 4.0 cubic feet per second to the Camp Ditch subsequent to about August 3. The record of discharge for the Ralph Eastlick Ditch is presented in Table 6.

The Shackleford Ditch (Diversion 4) interests allowed their head-dam to remain in a very leaky condition throughout the season and until about August 20 made little effort to divert their natural flow allotment or to re-divert the stored water released from Cliff and Campbell Lakes. Other than to observe the amounts of water being diverted, no regulation was necessary on this ditch. The record of discharge is given in Table 7.

The Howard-Jones Ditch (Diversion 5) was allowed to automatically decrease with the flow of Shackleford Creek until on August 1 the Indian Service demanded more water for its Camp Ditch. Subsequent to that date the ditch was regulated to supply 4.0 cubic feet per second at the head of the Camp Ditch. The headgate was closed on August 20. The record of discharge for the Howard-Jones Ditch is given in Table 8.

The Camp Ditch (Diversion 6) had available at its intake water in excess of the amount being diverted up to and including July 18. On that date the flow in the ditch was 2.8 cubic feet per second and thereafter averaged about 2.9 cubic feet per second up to August 1. On August 1, a representative of the Indian Service requested more water in the Camp Ditch.

Up to that time a proof of claim covering the Camp Ditch had not been filed, therefore, it was necessary to use other data and information available in considering the Indian Service's demand for more water. It appeared that the Camp Ditch had an undisputed first right to 2.00 cubic feet per second of water and that the demand for additional water was based upon a recorded transaction between the original owners of the Shackleford and Camp ditches, whereby the owner of the latter ditch was sold a right to an additional 6.00 cubic feet per second subject to the right of the Shackleford Ditch. However, proofs of claims filed for the Ralph Eastlick and Howard-Jones ditches recognized the prior right of the Camp Ditch to the extent of 2.00 cubic feet per second but claimed prescription as against any right to additional water through said ditch.

The physical facts in the situation were that the Shackelford Ditch was diverting less than its entitlement, both as to natural flow claimed and water being released from storage, therefore, any water turned out of the Ralph Eastlick Ditch would automatically increase the Shackelford Ditch allotment; there was considerable water escaping past the Camp Ditch intake and from the ditch at the old fish wheel; the Camp Ditch would not carry in excess of 4.0 cubic feet per second without overflowing its banks in many places; and the acreage to be served under the Camp Ditch was 151 acres.

The Indian Service was advised to fix their dam and ditch so as to fully utilize the water reaching the intake. Some work was done at the intake but considerable water continued to pass the dam and the leakage at the old fish wheel was never entirely checked. However, on August 3 and up to August 20, the Howard-Jones Ditch was regulated to supply 4.0 cubic feet per second at the intake of the Camp Ditch. On August 20, the Shackelford Ditch interests increased their diversion, and the headgates on the Ralph Eastlick and Howard-Jones ditches were closed on that date. Following this regulation, the discharge at the Camp Ditch weir decreased from 3.5 cubic feet per second on August 21 to 2.3 cubic feet per second on September 26, the average for that period was 2.5 cubic feet per second. During this period, it was not necessary to regulate the Shackelford Ditch, since the leakage through the dam was always sufficient to supply in excess of 2.0 cubic feet per second at the Camp Ditch intake. The record of discharge for the Camp Ditch is shown in Table 9.

Middle Shackelford Creek

The water supply for this section of the stream failed about July 7. Only one ditch received water after July 1. The Hobart Ditch (Diversion 9) was diverting 2.0 cubic feet per second on July 1 and the ditch was dry on July 7. The dam at the head of the Whipple Ditch (Diversion 7) washed out during the winter floods and no attempt was made during the season to replace it.

Lower Shackelford Creek

There are seven ditches diverting from this division of Shackelford Creek. In order downstream, they are the Freitas, Chester, Hammond-Crawford-Lewis, Burton-Meamber, Goodale, Burton West Side and Burton East Side ditches. Of the above, the Chester, Burton-Meamber and Burton West Side ditches were operated in a nearly normal manner; the others diverted only a small portion of the claimed allotments or were entirely inoperative.

The water available for this section of the stream system was not sufficient to supply the claimed allotments. However, because of the manner in which the various ditches were operated there was ample water to meet all demands.

The Freitas Ditch (Diversion 17) diverted only a small portion of the water claimed by the several owners thereof. Above the fish screen, the diversion works and the ditch were in poor condition, while below a growth of watercress and other aquatic plants choked the ditch section. The owners were constantly urged to put the ditch in operating condition but the work was never satisfactorily done until about September 1, when Edward Burton elected to run his Burton-Meamber Ditch water through the Freitas Ditch. A record of discharge from September 7 to 26 is given in Table 10.

The Chester Ditch (Diversion 18) diverted a continuous flow of about 1.3 cubic feet per second throughout the season. Of this amount approximately 0.50 cubic feet per second was delivered to the place of use three-fourths of a mile below the head of the ditch. The acreage served under the ditch is 23.0 acres. Considerable leakage occurred from flumes along the course of the ditch which accounts for the high transportation loss. However, the water thus lost returned directly to the creek above downstream ditches. A weir was installed in the ditch downstream from the fish wheel. Other than to observe the amounts of water being diverted, no regulation was necessary.

The Hammond-Crawford-Lewis Ditch (Diversion 19) was used during the 1945 season only to the extent of conveying water about three-eighths of a mile for the irrigation of 6.9 acres and 11.9 acres on the Chester and Miller properties, respectively. The remaining two and one-half miles of ditch was inoperative due to partial destruction of the ditch by a logging operation in the fall of 1944. Rivallier and Camblin, whose claims to water through the ditch total 8.1 cubic feet per second, elected to forego the diversion of any water rather than repair the ditch. The ditch was regulated to deliver a flow of about 0.50 cubic foot per second to the Chester and Miller properties.

The Burton-Moamber Ditch (Diversion 20) head dam structure and regulating device were inadequate to divert the amounts of water claimed by the several interests in the ditch. On August 3, a two-way division box, equipped with weirs, was constructed in the ditch to divide the water between F. L. Lathrop and Edward and Burnell Burton. A record of the water diverted by the ditch as measured at this division box is presented in Table 11.

On September 1 and subsequent thereto, Edward Burton elected to divert his share of the Burton-Moamber ditch water through the Freitas Ditch.

The Goodale Ditch (Diversion 21) was used to deliver water for the irrigation of 10.6 acres on the Miller property and for stock-watering purposes on that portion of the Rivallier property north and west of the County Road. This use required the diversion of only a small portion of the 4.0 cubic feet per second claimed for this ditch by the above named parties. Due to this limited use little or no regulation was necessary. The record of discharge for the ditch is given in Table 12.

The Burton West Side Ditch (Diversion 22) diverted water for the irrigation of 33.9 acres of the lands of Burnell Burton.

The Burton East Side Ditch (Diversion 23) was not opened during the 1945 season. This ditch and the Burton West Side Ditch are the lowermost diversions from the stream system. The amounts of water available for both ditches during the 1945 season are as shown by the record of discharge for Shackelford Creek below Goodale Ditch, submitted in Table 4.

Upper Mill Creek

The Eastlick (Mill Creek) Ditch and the Couch Ditch are the only diversions from this section of the stream.

The Eastlick (Mill Creek) Ditch (Diversion 11) diverted the entire flow of Mill Creek subsequent to July 1. Controversies arose during August as to the method of dividing the water among the owners of the ditch. In settlement thereof an agreement was reached in September as to the design and location of a division box. This box had not been installed prior to about October 1. The Couch interests did not use the

ditch except for domestic purposes. A record of the flow diverted by the ditch is shown in Table 5.

The Couch Ditch (Diversion 12) was not opened until about July 17. On that date and subsequent thereto the only water available for the ditch was from rising water in the creek channel below the Eastlick (Mill Creek) Ditch head dam. This flow averaged about 0.09 cubic foot per second, all of which was diverted by the ditch and used for the irrigation of a small garden plot and for stock-watering on the Couch property.

Lower Mill Creek

Springs and rising water in the stream channel form the main sources of water for the sustained summer flow of this section of Mill Creek. During the early part of each season additional water is contributed by return flow from irrigation on the Albee, Douglas Eastlick and Davis ranches.

Four ditches derive their supply within this section, namely, in order down stream, Mulloy Spring Ditch (Diversion 13), China Ditch (Diversion 14), Dangel Mill Creek Ditch (Diversion 15), and Denny Bar Ditch (Diversion 16). Due to the nearly constant flow of the stream, constant flows were maintained in these ditches during the irrigation season. As determined from intermittent measurements made during the 1945 season, the average flow of each ditch was as follows: Mulloy Spring Ditch, 1.0 cubic foot per second; China Ditch, 1.2 cubic feet per second; and Dangel Mill Creek Ditch, 0.50 cubic foot per second. The Denny Bar Ditch was not opened during this season. The above amounts were within reasonable limits of the amounts claimed and the acreage irrigated thereunder, therefore no regulation was necessary.

The Hobart West Spring Ditch (Diversion 26) and Hobart East Spring Ditch (Diversion 27) divert from a spring channel tributary to this section of Mill Creek. These ditches normally divert the entire flow available at the heads of the respective ditches, therefore, no regulation was necessary.

USE OF WATER

The uses of water and methods of irrigation in the Shackleford Creek area are described on page 17 of the "Report on Water Supply and Use of Water on Shackleford Creek and Tributaries, Siskiyou County, California, January, 1945". In 1945 there was no material change from the practices therein reported. Subsequent to about July 7 there was no water available for the ditches diverting from Middle Shackleford Creek and very little water for the Eastlick (Mill Creek) Ditch and Couch Ditch from Upper Mill Creek. Otherwise about the same ditches remained inactive in 1945 as in 1944.

A summary of the amounts of water diverted by the various ditches during the period of watermaster service in 1945 is submitted in Table 14.

DUTY OF WATER

A summary showing the duties of water under various of the ditches for comparable periods during the 1945 season is submitted in Table 15. The periods selected cover the time during which there was adequate water available for the respective ditches. The gross diversion in acre-feet shown in the fifth column of the table gives the amounts of water diverted for the given periods. The remainder of the table is self-explanatory.

The average "Net Duty" for the ten ditches is one cubic foot per second to 53 acres of irrigated land, which is comparable to the average "Net Duty" of one cubic foot per second to 49 acres as determined from similar data collected during the 1944 season.

SUMMARY

As deduced from precipitation records the run-off of Shackleford Creek and tributaries during the 1945 season was about 20 per cent greater than for the 1944 season but was somewhat below the normal expectancy. A comparison of stream flow records for Shackleford above diversions for the months of July, August and September indicates the run-off for said period in 1945 was about 115 per cent of that for 1944.

Considerable additional data on stream flows, amounts of water diverted and use of water were obtained during the investigation. However, as was the case during the investigation in 1944, a number of ditches were not operated in 1945. Consequently, data as to transportation losses and duty of water on some of the larger ditches were not obtained.

As to acreage irrigated, methods of irrigation and crops grown there was no material change from that set forth in the Report on Water Supply and Use of Water on Shackleford Creek and Tributaries, Siskiyou County, California, January, 1945".

Additional data on the use of water obtained in 1945 support the finding set forth in the above mentioned report of a net duty of 1.0 cubic foot per second to 50 acres as the requirement for irrigation in the area.

Acute distribution problems were encountered only on Upper Shackleford Creek. The remaining sections of the stream system were either out of water entirely or were adequately supplied. On lower Shackleford Creek, however, the sufficiency of the water supply was principally due to the fact that several of the larger ditches were not in operation. Otherwise it appears that some distribution problems would have been encountered here. On upper Mill Creek a controversy arose

over the division of the water of the Eastlick (Mill Creek) Ditch. In settlement of this problem the ditch owners were advised as to the design and location of a division box to be installed in the ditch.

On Upper Shackelford Creek the critical period as to water supply commenced about August 1. Subsequent to that date the available water supply was distributed on the basis of a trial schedule of allotment.

Due to many factors, such as inadequate diversion facilities, non-operation or inactive operation of several ditches and the numerous conflicts as to priorities, considerable deviation from the claims set forth in the proofs was necessary in distributing the available water. Consequently, distribution was more nearly on the basis of past practices generally recognized among the claimants rather than in accordance with the priorities and amounts of water claimed in the proofs. This method of approach caused some controversies, but in general resulted in an orderly distribution and materially assisted the Department toward a solution of the conflicts encountered.

TABLE 1

PRECIPITATION AT YREKA, SISKIYOU COUNTY - ELEVATION 2625 FEET

Monthly, Seasonal and Average Amounts in Inches

Year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Seasonal
1934-35	1.83	3.09	1.43	2.75	1.16	.19	2.31	.09	.00	.41	.11	.47	13.84
1935-36	1.94	1.57	2.98	7.25	2.24	.23	.55	1.16	.90	.17	.19	.02	19.20
1936-37	T	T	1.19	1.84	2.92	2.37	2.16	.62	2.37	.00	.00	.43	13.90
1937-38	1.97	5.03	4.86	3.51	5.46	4.05	.64	.44	.11	.95	.00	.41	27.43
1938-39	.82	.80	1.38	2.15	1.23	1.51	.42	.45	.04	.35	.00	2.35	11.50
1939-40	.89	.00	6.12	2.36	5.13	3.52	.69	.32	.56	.09	.00	1.71	21.39
1940-41	1.34	.98	4.13	2.85	2.99	1.51	2.07	1.66	.95	.70	.54	.81	20.53
1941-42	1.01	1.84	8.01	1.88	2.65	.33	1.60	3.96	.30	.00	.13	.47	22.18
1942-43	0.34	6.26	5.01	4.22	1.41	1.21	1.07	.66	1.07	.09	.01	.00	21.35
1943-44	2.24	1.17	.85	1.25	1.43	1.44	1.00	.73	.68	.60	.25	.22	11.86
1944-45	0.45	2.86	1.15	.96	2.87	1.53	.69	4.06	.07	.13	.05	T	14.82
30 Year													
Mean	1.11	2.45	2.93	2.27	2.40	1.40	1.04	.92	.64	.36	.17	.57	16.26
5 Year													
Mean	1.08	2.62	3.83	2.23	2.27	1.20	1.29	2.22	.61	.30	.20	.30	18.15

PRECIPITATION AT ETNA, SISKIYOU COUNTY - ELEVATION 2945 FEET

Monthly, Seasonal and Average Amounts in Inches

Year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Seasonal
1940-41	1.73	1.11	6.72	3.13	4.56	2.35	2.57	1.83	.92	1.38	.61	.51	27.42
1941-42	1.21	2.91	9.71	3.46	3.91	.32	1.21	2.81	.20	.00	.00	.13	25.87
1942-43	.52	10.30	7.33	8.17	1.35	1.91	1.61	.61	.59	.40	.00	.00	32.79
1943-44	3.24	1.03	1.03	2.69	1.42	2.50	.79	.62	.70	.89	.25	.22	15.38
1944-45	0.53	5.65	.96	1.02	4.76	1.91	.68	2.68	.04	.12	.39	.00	18.74
5 Year													
Mean	1.45	4.20	5.15	3.69	3.20	1.80	1.37	1.71	.49	.56	.25	.17	24.04

TABLE 2

Daily Discharge in Cubic Feet Per Second
SHACKLEFORD CREEK BELOW CAMP DITCH
July 1 to September 26, 1945

Day	July	August	September
1	10.3	0.3	0.1
2	9.2	.3	.1
3	8.2	.5	.1
4	8.2	.5	.1
5	7.5	.5	.1
6	7.5	.3	.1
7	4.5	.4	.1
8	2.2	.4	.1
9	1.5	.4	.1
10	1.4	.2	.1
11	1.4	.2	.1
12	1.6	.2	.1
13	3.2	.2	.1
14	1.4	.4	.1
15	1.3	.4	.1
16	1.2	.4	.1
17	1.0	.4	.1
18	1.0	.4	.1
19	.6	.3	.1
20	.5	.3	.1
21	.5	.2	.1
22	.5	.1	.1
23	.5	.1	.1
24	.5	.1	.1
25	.5	.1	.1
26	.5	.1	.1
27	.5	.1	
28	.5	.1	
29	.5	.1	
30	.5	.1	
31	.3	.1	
Total			88
Sec.Ft.			day
Days	79.0	8.2	2.6
Mean			
Sec.Ft.	2.6	0.3	0.1
Maximum			
Sec.Ft.	10.3	0.5	0.1
Minimum			
Sec.Ft.	0.3	0.1	0.1
Total			
Acre Ft.	158	16	5

TABLE 3

Daily Discharge in Cubic Feet per Second
SHACKLEFORD CREEK BELOW JUNCTION WITH MILL CREEK
July 3 to September 26, 1945

Day	July	August	September	
1		7.5	4.3	
2		7.5	4.3	
3	13.5	7.2	4.3	
4	13.5	7.2	4.3	
5	13.5	7.2	3.9	
6	13.0	7.2	3.9	
7	13.0	6.9	3.9	
8	12.0	6.3	3.9	
9	11.5	6.3	3.7	
10	11.5	6.0	3.2	
11	11.1	6.0	2.8	
12	11.5	5.7	2.8	
13	12.0	5.7	2.8	
14	11.5	5.4	2.6	
15	11.1	5.4	2.6	
16	11.1	5.7	2.4	
17	11.1	5.4	2.2	
18	10.3	5.4	2.2	
19	10.3	5.4	2.2	
20	10.3	5.1	2.2	
21	10.3	5.1	2.2	
22	9.9	5.1	2.2	
23	9.4	5.1	2.2	
24	8.6	4.8	2.2	
25	8.2	4.8	2.2	
26	7.8	4.8	2.0	
27	7.8	4.3		
28	7.8	4.3		
29	7.8	4.3		
30	7.5	4.3		
31	7.5	4.3		
Total				86
Sec.Ft.				Day
Days	304.4	175.7	77.5	Period
Mean				
Sec.Ft.	10.5	5.7	3.0	6.5
Maximum				
Sec.Ft.	13.5	7.5	4.3	13.5
Minimum				
Sec.Ft.	7.5	4.3	2.0	2.0
Total				
Acre Ft.	604	348	150	1100

TABLE 4

Daily Discharge in Cubic Feet Per Second
SHACKLEFORD CREEK BELOW GOODALE DITCH
July 20 to September 26, 1945

Day	July	August	September	
1		9.7	5.1	
2		9.7	5.1	
3		9.1	5.1	
4		9.1	4.8	
5		9.1	4.8	
6		9.1	4.8	
7		9.1	4.8	
8		9.1	4.8	
9		9.1	4.8	
10		8.6	4.8	
11		8.2	4.0	
12		8.2	3.5	
13		7.8	3.5	
14		7.8	3.5	
15		7.8	3.5	
16		7.8	3.0	
17		7.3	2.5	
18		7.3	2.5	
19		7.3	2.5	
20	14.0	7.3	2.5	
21	13.5	6.8	2.5	
22	13.0	6.8	2.5	
23	13.0	6.8	2.5	
24	12.5	6.4	2.5	
25	12.0	6.4	2.5	
26	11.5	6.4	2.5	
27	11.0	6.0		
28	11.0	6.0		
29	10.0	5.5		
30	9.7	5.1		
31	9.7	5.1		
Total				69
Sec.Ft.				Day
Days	140.9	235.8	94.9	Period:
Mean				
Sec.Ft.	11.7	7.6	3.6	6.8
Maximum				
Sec.Ft.	14.0	9.7	5.1	14.0
Minimum				
Sec.Ft.	9.7	5.1	2.5	2.5
Total				
Acre Ft.	280	468	188	936

TABLE 5

* Daily Discharge in Cubic Feet per Second
MILL CREEK ABOVE EASTLICK (MILL CREEK) DITCH
July 1 to September 26, 1945

Day	July	August	September
1	7.2	2.2	1.1
2	7.2	1.4	1.1
3	6.8	1.4	1.1
4	6.3	1.2	1.0
5	6.0	1.2	1.0
6	6.0	1.4	1.0
7	5.5	1.4	1.0
8	5.3	1.6	1.0
9	4.8	1.6	1.0
10	4.2	1.6	1.0
11	3.9	1.4	1.0
12	3.9	1.4	1.0
13	3.9	1.4	1.0
14	3.7	1.4	1.0
15	3.5	1.2	1.0
16	3.4	1.2	1.0
17	3.4	1.1	1.0
18	3.4	1.1	0.9
19	3.4	1.1	0.9
20	3.2	1.1	0.9
21	3.0	1.1	0.9
22	2.8	1.1	0.9
23	2.8	1.1	0.9
24	2.6	1.1	0.9
25	2.6	1.1	0.9
26	2.5	1.1	0.9
27	2.5	1.1	
28	2.5	1.1	
29	2.5	1.1	
30	2.3	1.1	
31	2.3	1.1	
Total			88
Sec.Ft.			day
Days	123.4	39.5	25.4
Mean			
Sec.Ft.	4.0	1.3	1.0
Maximum			
Sec.Ft.	7.2	2.2	1.1
Minimum			
Sec.Ft.	2.3	1.1	0.9
Total			
Acre Ft.	245	78	50
			373

* Record also represents daily discharge of Eastlick (Mill Creek) Ditch, since the entire flow shown herein was diverted by that ditch.

TABLE 6

Daily Discharge in Cubic Feet Per Second
 RALPH EASTLICK DITCH
 July 3 to September 30, 1945

Day	July	August	September
1		1.6	
2		1.6	
3	2.9	1.6	
4	2.9	1.6	
5	2.9	1.5	
6	2.8	1.5	
7	2.8	1.5	
8	2.7	1.5	
9	2.6	1.5	
10	2.6	1.0	
11	2.6	0.6	
12	2.6	0.6	
13	2.8	0.9	
14	2.6	1.2	
15	2.5	1.2	
16	2.4	1.2	
17	2.4	1.1	
18	2.2	1.0	
19	2.1	0.9	
20	2.1	0.4	
21	2.1		No diversion
22	2.0		
23	1.9		
24	2.0		
25	2.2		
26	2.1	No diversion	
27	2.0		
28	2.0		
29	1.8		
30	1.6		
31	1.6		
Total			49
Sec.Ft.			day
Days	67.8	24.0	Period
Mean			
Sec.Ft.	2.3	1.2	1.9
Maximum			
Sec.Ft.	2.9	1.6	2.9
Minimum			
Sec.Ft.	1.6	0.4	0.4
Total			
Acre Ft.	134	48	182

TABLE 7

Daily Discharge in Cubic Feet Per Second
SHACKLEFORD DITCH
July 1 to September 26, 1945

Day	July	August	Sept.	
1	10.5	7.2	5.4	
2	10.1	7.2	5.4	
3	10.1	6.9	5.4	
4	9.7	6.4	5.4	
5	9.3	6.0	5.4	
6	10.5	6.5	5.4	
7	12.6	5.9	5.2	
8	12.6	5.9	4.7	
9	12.4	5.4	4.6	
10	12.4	5.2	4.2	
11	12.4	5.4	4.2	
12	12.6	5.2	3.9	
13	12.8	5.0	3.4	
14	12.2	4.4	3.0	
15	11.8	4.4	2.8	
16	11.3	4.4	2.8	
17	11.3	4.4	2.8	
18	11.1	4.4	2.8	
19	10.9	4.4	2.6	
20	10.5	5.5	2.6	
21	10.1	6.0	2.4	
22	9.7	6.0	3.0	
23	9.3	5.9	3.0	
24	9.3	5.9	2.8	
25	8.9	5.9	2.8	
26	8.6	5.9	2.8	
27	7.8	5.9		
28	7.1	5.9		
29	7.1	5.4		
30	6.4	5.4		
31	7.1	5.4		
Total				88
Sec.Ft.				Day
Days	318.5	173.7	98.8	Period
Mean				
Sec.Ft.	10.3	5.6	3.8	6.7
Maximum				
Sec.Ft.	12.8	7.2	5.4	12.8
Minimum				
Sec.Ft.	6.4	4.4	2.4	2.4
Total				
Acre Ft.	632	344	196	1170

TABLE 8

Daily Discharge in Cubic Feet Per Second
 HOWARD-JONES DITCH
 July 3 to September 30, 1945

Day	July	August	Sept.
1		2.9	
2		2.9	
3	4.8	2.7	
4	4.8	2.5	
5	4.8	2.5	
6	4.4	2.5	
7	4.0	2.5	
8	3.8	2.5	
9	3.8	2.1	
10	3.8	1.8	
11	3.8	1.8	
12	4.3	1.8	
13	4.3	1.8	
14	3.6	1.8	
15	3.6	1.8	
16	3.9	1.5	
17	3.9	1.5	
18	3.7	1.5	
19	3.7	1.4	
20	3.6	0.7	No diversion
21	3.5		No diversion
22	3.5		No diversion
23	3.5		No diversion
24	3.5		No diversion
25	3.3		No diversion
26	3.3	No diversion	
27	3.2	No diversion	
28	3.2	No diversion	
29	3.0	No diversion	
30	3.0	No diversion	
31	2.9	No diversion	
Total			49
Sec.Ft.			Day
Days	108.5	40.5	Period:
Mean			
Sec.Ft.	3.7	2.0	3.0
Maximum			
Sec.Ft.	4.8	2.9	4.8
Minimum			
Sec.Ft.	2.9	0.7	0.7
Total			
Acre Ft.	215	80	295

TABLE 9

Daily Discharge in Cubic Feet Per Second
CAMP DITCH
July 3 to September 26, 1945

Day	July	August	Sept.	
1		3.1	2.5	
2		3.1	2.5	
3	3.5	3.1	2.5	
4	3.4	3.1	2.4	
5	3.3	3.1	2.4	
6	4.4	3.7	2.4	
7	3.5	3.5	2.4	
8	4.3	3.3	2.4	
9	4.8	3.7	2.4	
10	4.7	3.8	2.4	
11	4.5	4.0	2.4	
12	5.6	4.0	2.4	
13	5.0	3.8	2.4	
14	4.0	3.7	2.4	
15	3.6	3.6	2.3	
16	3.1	3.6	2.3	
17	2.9	3.6	2.3	
18	2.8	3.6	2.3	
19	3.0	3.5	2.3	
20	3.0	3.5	2.3	
21	2.9	3.5	2.3	
22	2.8	3.4	2.3	
23	2.8	3.2	2.3	
24	2.6	3.0	2.3	
25	2.6	3.0	2.3	
26	2.8	3.0	2.3	
27	2.9	2.7		
28	3.0	2.5		
29	3.0	2.5		
30	3.1	2.5		
31	3.1	2.5		
Total				86
Sec.Ft.				Day
Days	101.0	102.2	61.5	Period
Mean				
Sec.Ft.	3.5	3.3	2.4	3.1
Maximum				
Sec.Ft.	5.6	4.0	2.5	5.6
Minimum				
Sec.Ft.	2.6	2.5	2.3	2.3
Total				
Acre Ft.	200	203	122	525

TABLE 10

Daily Discharge in Cubic Feet Per Second
 FREITAS DITCH
 September 7 to 26, 1945

Day	Sept.	
1		
2		
3		
4		
5		
6		
7	1.0	
8	1.2	
9	1.2	
10	1.2	
11	1.2	
12	1.2	
13	1.2	
14	1.1	
15	1.1	
16	1.0	
17	1.0	
18	1.1	
19	1.1	
20	1.1	
21	1.0	
22	1.0	
23	1.0	
24	1.0	
25	1.0	
26	0.9	
27		
28		
29		
30		
31		
Total		20
Sec.Ft.		Day
Days	21.6	Period
Mean		
Sec.Ft.	1.1	1.1
Maximum		
Sec.Ft.	1.2	1.2
Minimum		
Sec.Ft.	0.9	0.9
Total		
Acre Ft.	4.3	4.3

TABLE 11

Daily Discharge in Cubic Feet Per Second
 BURTON-MEAMBER DITCH
 August 4 to September 26, 1945

Day	Aug.	Sept.	
1		3.3	
2		3.2	
3		3.0	
4	4.6	3.0	
5	4.7	3.0	
6	4.7	3.1	
7	4.7	3.2	
8	4.6	3.1	
9	5.1	2.9	
10	5.1	2.0	
11	5.1	1.2	
12	4.9	4.2	
13	5.0	4.0	
14	5.0	3.9	
15	5.0	3.6	
16	4.8	3.0	
17	4.7	2.9	
18	4.7	3.4	
19	4.6	3.4	
20	4.6	3.3	
21	4.5	3.3	
22	4.4	3.3	
23	4.0	3.2	
24	3.9	3.1	
25	3.9	3.0	
26	3.9	3.0	
27	3.7		
28	3.3		
29	3.3		
30	3.4		
31	3.3		
Total			54
Sec.Ft.			Day
Days	123.5	81.6	Period
Mean			
Sec.Ft.	4.4	3.1	3.8
Maximum			
Sec.Ft.	5.1	4.2	5.1
Minimum			
Sec.Ft.	3.3	1.2	1.2
Total			
Acre Ft.	245	162	407

TABLE 12

Daily Discharge in Cubic Feet Per Second
GOODALE DITCH
July 25 to September 18, 1945

Day	July	Aug.	Sept.	
1		2.0	1.0	
2		2.0	0.9	
3		2.2	0.9	
4		1.6	0.9	
5		1.6	0.9	
6		1.6	0.9	
7		1.6	1.0	
8		1.5	1.0	
9		1.1	0.9	
10		1.0	1.0	
11		1.0	1.3	
12		0.9	0.3	
13		0.8	0.3	
14		0.8	0.3	
15		0.9	0.2	
16		1.0	0.4	
17		1.0	0.9	
18		0.9	0.9	
19		0.9		
20		0.9		
21		0.9		
22		0.9		
23		0.8		
24		0.8		
25	1.0	0.7		
26	1.0	0.9		
27	1.0	0.7		
28	1.0	0.5		
29	1.3	0.9		
30	2.0	1.0		
31	2.0	1.0		
Total				56
Sec.Ft.				Day
Days	9.3	34.4	14.0	Period
Mean				
Sec.Ft.	1.3	1.1	0.8	1.0
Maximum				
Sec.Ft.	2.0	2.0	1.3	2.0
Minimum				
Sec.Ft.	1.0	0.5	0.2	0.2
Total				
Acre Ft.	18	68	28	114

TABLE 13

* Daily Discharge in Cubic Feet Per Second
UPPER SHACKLEFORD CREEK ABOVE DIVERSIONS
July 3 to September 26, 1945

Day	July	Aug.	Sept.	
1		15.1	8.0	
2		15.1	8.0	
3	29.5	14.8	8.0	
4	29.0	14.1	7.9	
5	27.8	13.6	7.9	
6	29.6	14.5	7.9	
7	27.4	13.8	7.7	
8	25.6	13.6	7.2	
9	25.1	13.1	7.1	
10	24.9	12.0	6.7	
11	24.7	12.0	6.7	
12	26.7	11.8	6.4	
13	28.1	11.7	5.9	
14	23.8	11.5	5.5	
15	22.8	11.4	5.2	
16	21.9	11.1	5.2	
17	21.5	11.0	5.2	
18	20.8	10.9	5.2	
19	20.3	10.5	5.0	
20	19.7	10.4	5.0	
21	19.1	9.7	4.8	
22	18.5	9.5	5.4	
23	18.0	9.2	5.4	
24	17.9	9.0	5.2	
25	17.5	9.0	5.2	
26	17.3	9.0	5.2	
27	16.4	8.7		
28	15.8	8.5		
29	15.4	8.0		
30	14.6	8.0		
31	15.0	8.0		
Total				86
Sec.Ft.				Day
Days	634.7	348.6	162.9	Period
Mean				
Sec.Ft.	22.0	11.2	6.3	13.3
Maximum				
Sec.Ft.	29.5	15.1	8.0	29.5
Minimum				
Sec.Ft.	14.6	8.0	4.8	4.8
Total				
Acre Ft.	1250	690	320	2260

* Summation of discharges Tables 2, 6, 7, 8 and 9.

TABLE 14

SUMMARY OF AMOUNTS OF WATER DIVERTED
FROM SHACKLEFORD CREEK AND TRIBUTARIES
1945 SEASON

Name of Ditch	Diversion Number	Period of Record	Amount of Water: Acre-Feet
Cliff Lake	1)		
Campbell Lake	2)	July 15 to Sept. 15	*400
Ralph Eastlick	3	July 3 to Sept. 30	182
Shackleford	4	July 1 to Sept. 26	1170
Howard-Jones	5	July 3 to Sept. 30	295
Camp	6	July 3 to Sept. 26	525
Whipple	7	July 1 to Sept. 30	0
Hobart Domestic	8	July 1 to Sept. 30	No Record
Hobart	9	July 7 to Sept. 30	0
Dangel Shackleford	10	July 1 to Sept. 30	0
Eastlick (Mill Creek)	11	July 1 to Sept. 26	373
Couch	12	July 17 to Sept. 18	38
Mulloy Spring	13	July 1 to Sept. 30	182
China	14	July 1 to Sept. 30	218
Dangel Mill Creek	15	July 1 to Sept. 30	91
Denny Bar	16	July 1 to Sept. 30	0
Freitas	17	Sept. 7 to 26	43
Chester	18	July 1 to Sept. 30	238
Hammond-Crawford-Lewis	19	July 10 to Sept. 6	62
Burton-Meamber	20	Aug. 4 to Sept. 26	407
Goodale	21	July 25 to Sept. 18	114
Burton West Side	22	July 1 to Sept. 30	No Record
Burton East Side	23	July 1 to Sept. 30	0

* Water released from storage

TABLE 15

DUTY OF WATER ON AREAS IRRIGATED
FROM SHACKLEFORD CREEK AND TRIBUTARIES
1945 SEASON

Name of Ditch	Diver- sion Number	Period	Area : Irri- gated : Acres	Gross : Diver- sion : Acre Feet	Gross Duty : Ac.Ft. : per acre	Gross Duty : Acres : per c.f.s.	Estimated : Trans- portation : Loss : %	Net : Duty : Acres : per c.f.s.
Ralph Eastlick	3	July 3 to July 31	148	134	.91	64	12	73
Shackleford	4	July 1 to July 31	245	632	2.60	24	45	43
Howard-Jones	5	July 3 to July 31	204	215	1.05	55	13	63
Camp	6	July 3 to July 31	154	200	1.30	44	11	50
Mulloy Spring	13	July 1 to Sept. 30	21	182	8.7	21	11	24
China	14	July 1 to Sept. 30	52	218	4.2	43	26	58
Dangel Mill Creek	15	July 1 to Sept. 30	21	91	4.3	42	35	65
Chester	18	July 1 to Sept. 30	23	238	10.4	18	60	45
Hammond-Crawford-Lewis	19	July 10 to Sept. 6	19	62	3.3	38	15	45
Burton-Meamber	20	Aug. 4 to Sept. 26	158	407	2.6	42	18	51

APPENDIX

AGREEMENT FOR TRIAL DISTRIBUTION DURING

1945 SEASON

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)	AGREEMENT FOR TRIAL
WATERS OF SHACKLEFORD CREEK AND ITS TRIBU-)	DISTRIBUTION DURING
TARIES IN SISKIYOU COUNTY, CALIFORNIA)	1945 SEASON

WHEREAS, the above entitled proceeding is pending before the Division of Water Resources of the Department of Public Works of the State of California, in which the rights in and to the waters, and in and to the use thereof, from Shackleford Creek and its tributaries, of all the parties hereunto subscribed are involved; and

WHEREAS, said Division has completed its investigation of the stream system, conduits diverting therefrom, lands irrigated and irrigable therefrom, etc., and has reduced its observations, data, information and measurements to writing, and has prepared maps from its surveys and observations, all in accordance with the provisions of the Water Code; and

WHEREAS, proofs of claim of water right have been filed with said Division by all claimants of rights in and to the waters of said stream system; and

WHEREAS, it appears from data collected by said Division that it may be possible to work out an allocation of the waters of said stream system among the parties hereto that will be acceptable to all of said parties and afford a basis for settlement of the water rights involved in said proceeding; and

WHEREAS, the parties hereto desire that diversions from said stream system be administered by said Division during the 1945 season as a demonstration of the claims of the various parties, and in order to afford said Division an opportunity to attempt to develop by trial an allocation of the

waters of said stream system among the parties hereto that may be acceptable to said parties as a basis for settlement of the water rights involved in said proceeding;

NOW THEREFORE IT IS HEREBY AGREED by and between each and every party herunto subscribed and among all of said parties, that said Division of Water Resources may undertake to distribute the waters of said Shackelford Creek and its tributaries among the various parties hereunto subscribed as hereinafter set forth, it being understood and agreed that the following plan of distribution and apportionment of water shall be for the period extending from the date hereof to October 1, 1945, only, and subject to such provisions as are hereinafter contained, to wit:

1. Distribution of water on said stream system under this agreement shall be based upon the following:

(a) Proofs of claim of water right filed with said Division in the above entitled proceeding; and/or

(b) Observations, data, information, measurements and maps made, collected or prepared by said Division in the above entitled proceeding.

2. Said Division shall have power and authority to deviate from any plan of distribution which it may administer if in its opinion, any changes are necessary or convenient in order to expedite the accomplishment of the purposes of this agreement.

3. Nothing herein contained shall be, or shall be construed as, an admission by any party that his legal rights or the rights of any other party 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 parties hereto.

4. Said Division may appoint a watermaster to distribute the waters of Shackleford Creek and its tributaries, as herein provided for, during the period from the date hereof to October 1, 1945, and said watermaster shall have power and authority to inspect and regulate the diversions of all the parties hereto in accordance with this agreement, and in the exercise of such authority may enter upon the lands of said parties 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.

5. It is further agreed that in order to meet the costs of such distribution by the watermaster during the 1945 season, the parties hereto will pay to the Division of Water Resources on or before July 15, 1945, the amount of \$263.47, which amount shall be apportioned among the various parties hereto in accordance with the assessments set forth in Schedule A hereunto annexed and made a part hereof.

IN WITNESS WHEREOF, the parties hereto have affixed their hands and seals this 26th day of June, 1945.

<u>R. P. EASTLICK</u>	<u>FORT JONES</u>
<u>JOHN H. HEIDE</u>	<u>FORT JONES</u>
<u>G. J. MULLOY</u>	<u>FORT JONES, CALIF.</u>
<u>ESTATE OF ABBIE C. ALBEE, RALPH ALBEE,</u>	<u>EXECUTOR, WEED, CALIF.</u>
<u>DOUGLAS EASTLICK</u>	<u>FORT JONES</u>
<u>LILLIAN B. MILLER</u>	<u>FORT JONES</u>
<u>L. DENNIS MULLOY</u>	<u>FORT JONES</u>
<u>JULIO PEREIRA</u>	<u>FORT JONES</u>
<u>JACOB DANGEL</u>	<u>FORT JONES</u>
<u>F. L. LATHEROP</u>	<u>FORT JONES</u>

O. D. JORDON AND O. R. JORDON

By O. D. JORDON

W. A. HICKS

ARTHUR L. SODERQUIST

ROBERT A. ENGLISH

JOSEPH RIVALLIER

LENA BUTLER SILVA

ROBERT P. DAVIS

By M. L. Prather

FORT JONES

FORT JONES, CALIF.

FORT JONES, CAL.

SCHEDULE A

APPORTIONMENT OF COST OF TRIAL DISTRIBUTION ON
SHACKLEFORD CREEK AND TRIBUTARIES DURING THE 1945 SEASON

Name of Owner	Acreage Irrigated	Portion of Expense
Estate of Abbie C. Albee	350.5	\$ 35.05
B. M. Burton	91.8	9.18
Edward Burton and Frances Vanarsdell	143.5	14.35
C. B. Camblin	140.8	14.08
J. A. Cason and Roy J. Helm	24.7	2.47
Henry F. Chester	29.9	2.99
Robert L. Couch and Gracia L. Couch	22.0	2.20
Jacob Dangel	109.1	10.91
Robert P. Davis	200.4	20.04
Douglas Eastlick	158.7	15.87
Ralph P. Eastlick	141.3	14.13
Robert A. English	20.6	2.06
William Hicks	3.0	.30
Ralph M. Hobart and Harvey L. Hobart	133.8	13.38
O. R. Jordon and O. D. Jordon	40.0	4.00
F. L. Lathrop	130.7	13.07
Leroy B. Miller	22.5	2.25
Cornelius J. Mulloy and L. Dennis Mulloy	191.1	19.11
Julio Pereira	52.1	5.21
Joseph Rivallier	213.0	21.30
Lena Silva	49.6	4.96
Arthur Sedorquist	10.8	1.08
United States Indian Service	354.8	35.48
Total	2,634.7	\$263.47