

STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES

GOODWIN J. KNIGHT, Governor
HARVEY O. BANKS, Director of Water Resources
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BIDWELL CREEK ADJUDICATION

REPORT ON
WATERMASTER SERVICE ON BIDWELL CREEK

AND

INVESTIGATION OF BIDWELL CREEK STREAM SYSTEM ADJUDICATION

MODOC COUNTY, CALIFORNIA

1956 SEASON

Sacramento, California
March, 1957

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SUBMISSION TO, AND ADOPTION BY
DEPARTMENT OF WATER RESOURCES

I, William R. Gianelli, Principal Hydraulic Engineer and Chief of Water Rights Section, Department of Water Resources of the State of California, approve this "Report on Watermaster Service and Investigation of Bidwell Creek Adjudication, Modoc County, California, 1956 Season".

/s/ W. R. Gianelli

Chief, Water Rights Section

I, Harvey O. Banks, Director of the Department of Water Resources of the State of California, approve and adopt this "Report on Watermaster Service and Investigation of Bidwell Creek Adjudication, Modoc County, California, 1956 Season" as a report of the Department of Water Resources.

WITNESS my hand and the seal of the Department of Water Resources of the State of California, this 27th day of March, 1957.

State of California
Department of Water Resources

/s/ Harvey O. Banks

HARVEY O. BANKS
Director

ORGANIZATION

STATE DEPARTMENT OF WATER RESOURCES

Harvey O. Banks Director of Water Resources
M. J. Shelton Deputy Director of Water Resources

The activity covered by this report is under the

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INTRODUCTION

This is the second report prepared in connection with the adjudication of water rights and distribution of water on the Bidwell Creek stream system in Modoc County, California. A history of the Bidwell Creek adjudication proceeding, up to and including completion of the field investigation for the 1955 irrigation season, is given in the "Report on Water Supply and Use of Water on Bidwell Creek Stream System, Modoc County, California, March 1956". On April 30, 1956, copies of this report were mailed to all known claimants to water on the stream system.

On May 23, 1956, a notice setting May 28 as the date for a meeting to discuss the status of the adjudication proceeding and of the advisability of having watermaster service on the stream system during the 1956 season, was mailed to all known claimants to water from Bidwell Creek. The meeting was held in Fort Bidwell and was attended by a substantial majority of these claimants. A plan for watermaster service, as embodied in an agreement entitled "Agreement for Trial Distribution During 1956 Season" was presented and subsequently signed by claimants to approximately 86 per cent of the water allotments as set forth in the agreement. A copy of this agreement is submitted as Appendix B of this report.

By "Notice of Time Fixed for Filing Proofs of Claims of Water Rights" dated June 11, 1956, the date of October 1, 1956 was fixed as the time prior to which all proofs were to be filed in the adjudication proceeding. Said notice was published for five consecutive weeks from June 21, 1956 through July 19, 1956 and copies of the notice, together with proof of claim forms, were sent by registered mail to all known claimants to water on June 19, 1956.

Representatives of the Department were available in Fort Bidwell for a five-day period from July 16 through July 20 to assist the claimants to water in preparing their proofs of claims in the proceeding.

Distribution of water on the stream system was begun on June 15 and continued throughout the irrigation season to October 1, 1956, under the aforementioned trial distribution agreement.

Change in Organization

In accordance with Chapter 52, Statutes of 1956, on July 5, 1956, the Department of Water Resources succeeded to the duties of watermaster service and distribution of water formerly administered by the Division of Water Resources, Department of Public Works, and the State Water Rights Board succeeded to the duties of adjudication and administration of water rights formerly administered by the Division of Water Resources.

In order to continue the work efficiently, the same personnel continued the watermaster service for the Department of Water Resources and also, under contract with the State Water Rights Board, continued the field investigation for the adjudication proceeding on Bidwell Creek.

Authorization

Pursuant to Section 226 of the Water Code, the Department of Water Resources supervised the distribution of water from Bidwell Creek in accordance with the "Agreement for Trial Distribution During 1956 Season". The agreement was signed in order to afford the Department an opportunity to develop an allocation of water on the stream system that may be acceptable to the parties as a basis for settlement of the water rights involved. Results of the trial distribution are presented in this report.

Concurrent with supervising the trial distribution on Bidwell Creek, the Department, under contract with the State Water Rights Board, continued the investigation necessary for the adjudication of water rights. The investigation for the adjudication of water rights was made in accordance with provisions of Chapter 3, Division 2 of the Water Code.

Organization of Report

The report is presented in three sections as follows: (1) Introduction, (2) Water Supply and Distribution of Water, and (3) Results of 1956 Investigation. Three appendixes follow the text and include: (A) Records of Water Supply and Use of Water; (B) Additional Lands and Points of Diversion; and (C) Agreement for Trial Distribution During 1956 Season. A plate following the appendixes presents Hydrographs of Bidwell Creek Above Bucher Upper Ditch, 1955 and 1956.

WATER SUPPLY AND DISTRIBUTION OF WATER

The above-average winter precipitation provided above-normal soil moisture and the ensuing heavy runoff of water resulted in a condition of favorable water supply throughout a large part of the irrigation season. This condition averted any noticeable shortage of water prior to haying about July 10, and provided a significant flow in Bidwell Creek for irrigation use throughout the entire season. Although this condition was not representative of a normal year, it did provide a longer period in which to observe the water requirements on certain lands and make necessary adjustments in the allotments of flow for the period after July 10.

Precipitation

Records of precipitation at Fort Bidwell, California, are presented in Table A-1 of Appendix A. The heavy precipitation in December and January fully charged the ground with water and left an above-normal snow pack on the watershed tributary to Bidwell Creek. On the Cedar Pass Snow Course which lies approximately 20 miles south of Bidwell Creek, the April 1 snow pack was of 117 per cent of normal. It is believed the snow pack conditions on Cedar Pass Snow Course closely represent the snow pack conditions in the Bidwell Creek watershed. The precipitation during the irrigation season was about normal.

Stream Flow

Automatic water stage recorders were maintained during the 1956 irrigation season at locations as follows:

Bidwell Creek above Bucher Upper Ditch
McConnaughy Upper Ditch at head
McAuliffe Ditch at head
Siebeck Ditch at head
McConnaughy-McAuliffe Ditch above McConnaughy-
McAuliffe split
McAuliffe Branch of McConnaughy-McAuliffe Ditch

Hydrographs of Bidwell Creek above Bucher Upper Ditch for the 1955 and 1956 seasons are presented as Plate 1. These hydrographs reflect the increased water supply available in the 1956 season over the water supply available during the 1955 season. The water supply during the 1955 season is considered more nearly normal for Bidwell Creek.

Distribution of Water

Measurements of the flow in Bidwell Creek and several of the ditches are presented in Tables A-2 to A-8 inclusive of Appendix A.

Due to the above-normal water supply, no regulation of water diverted was required until July 10. The supply dropped below 100 per cent allotments on June 22. However, the condition of high soil moisture made it unnecessary to apply the usual amounts of water required at this time of the season and sufficient water was available to properly irrigate all meadow hay lands until July 10.

On July 10, the diversions were checked and the flow in the McConnaughy-McAuliffe Ditch was increased in accordance with Schedule 2 of the trial distribution agreement. On July 12 the upper ditches were all regulated generally in accordance with Schedule 2 of the trial distribution agreement, with the exception of the Granville Peterson Ditch, which diverted approximately two cubic feet per second from July 12 to July 16. This amount of water was necessary to provide an irrigation head for the lands lying east of Bidwell Creek. On July 16 the entire flow in the Granville Peterson Ditch was diverted through the Granville Peterson Pond and thence directly to the Creek. On August 6, 0.10 cubic foot per second was again diverted down the Granville Peterson Ditch for the remainder of the season.

The amounts of water allotted for lands irrigated from the Peterson-Bucher Ditch and the Bucher Lower Ditch were found insufficient to irrigate these lands as they had been irrigated in the past and were therefore increased. High water washed out the diversion works for the Sweeney Ditch so no water was diverted through the Ditch during the 1956 season. The amount of water in the Siebeck Ditch was also increased above the amount shown in the agreement in order to provide the usual amount of water to the town users on this Ditch, for the Philip Peterson pasture, and for garden, stock water, and limited irrigation on the M. E. Conlan property.

On August 13, the allotment for the McAuliffe Ranch through the McConnaughy-McAuliffe Ditch was diverted through the McAuliffe Ditch, and the

McAuliffe branch of the McConnaughy-McAuliffe Ditch was closed for the remainder of the season. On August 28 the McAuliffe Ditch was closed to allow repairs on the diversion works and remained closed until about the middle of September.

On August 9 it was necessary to regulate the upper ditches closely to provide stock and garden water in the Fee Ditch, Cole-McManus Ditch, and the Ward-Sagehorn Ditch. On August 16 the flow in the Cole-McManus Ditch was 1.28 cubic feet per second. This increased flow in the Cole-McManus Ditch was not in accord with the agreement for trial distribution and required readjustment of the ditches leaving 0.86 cubic foot per second in the Cole-McManus Ditch. The amount of water diverted was gradually reduced to 0.50 cubic foot per second on August 20.

An attempt was made to provide 0.10 cubic foot per second for garden water in the Ward-Sagehorn Ditch throughout the season. However, the condition of the diversion dam made it very difficult to divert the small flow available in the Creek into the Ditch. During the 1956 season it was necessary to provide stock and garden water in the Fee Ditch for Parke and Dodson Ranches. Accretions in the Ditch provided stock and garden water for Fee and O'Callaghan Ranches.

RESULTS OF 1956 INVESTIGATION

The results of the investigation during the 1956 season are presented to supplement the "Report on Water Supply and Use of Water on Bidwell Creek Stream System, Modoc County, California, for the 1955 season". Prior to July 5, the investigation was conducted by the Division of Water Resources of the Department of Public Works. Subsequent to July 5, 1956, the investigation for the adjudication proceeding was conducted by the Department of Water Resources under contract with the State Water Rights Board.

Losses and Accretions in Channels and Ditches

A limited amount of data on losses and accretions was gathered during the 1956 season to supplement data presented in the "Report on Water Supply and Use of Water on Bidwell Creek Stream System, March 1956".

During the spring of 1956 the McAuliffe and Siebeck ditches were realigned to eliminate the two upper crossings of the Ditches as described in the above-named report. This change apparently transferred an area of accretion from the Siebeck Ditch to the McAuliffe Ditch as it was noted that the McAuliffe Ditch had accretions which produced a small flow at the McAuliffe Ranch when the head of the ditch was dry. This change, however, is insignificant except in times of minimum flow.

Estimated measurements of accretions and losses in the McConnaughy Upper Ditch, Fee Ditch and the lower end of the Bidwell Creek channel are presented in the following tabulations:

McCONNAUGHY UPPER DITCH			
Date	Flow at head of ditch,	Flow at McConnaughy Upper Ranch,	Loss,
1956	In cubic feet per second		
August 13	0.30	0.15	0.15
August 20	0.20	0.10	0.10

FEE DITCH				
Date	Flow below Dodson Garden Lateral,	Flow at Fee house,	Flow just above O'Callaghan house,	Total Accretion,
1956	In cubic feet per second			
July 26	0	0.10	1.00	1.00

BIDWELL CREEK BELOW WARD-SAGEHORN-DODSON DITCH				
Date	Flow just below Ward-Sagehorn- Dodson Ditch	Flow at Ward-Dodson property line	Flow at Dodson- O'Callaghan property line	Flow 1,000 ft. above Sagehorn property line
1956	In cubic feet per second			
August 2	0.20	0.20	0.75	1.50

Most of the accretions in the lower Bidwell Creek channel were due to return flow, rather than natural seepage into the channel. During August, 1955, very little water was flowing in this portion of the channel.

The losses in the McConnaughy Upper Ditch for the 1956 season closely approximate the measured losses during the 1955 season. Accretions to the Fee Ditch reflect the condition of rising water, which exists in the lower lands, lying east of Bidwell Creek.

Duty of Water

Observations during the 1956 season indicated that further refinements on the duty of water were necessary. It was found that the lands irrigated from the Peterson-Bucher Ditch, the Sweeney Ditch, and the Granville Peterson Ditch require a duty of one cubic foot per second for 20 acres. This extremely low duty is due not only to the gravelly nature of the soil, but also to the fact that the acreages are so small that ditch losses become very important when added to the water requirements. The land irrigated from the Bucher Lower Ditch has nearly the same characteristics as mentioned above except that it has a small area of rising water. A duty of one cubic foot per second for 30 acres is considered applicable to this land.

The land irrigated from the Siebeck Ditch, with the exception of that portion of the M. E. Conlan property known as the Nelson Field is considered to require a duty of one cubic foot per second for 40 acres.

Observations were made of the adequacy of irrigation of the easterly portion of the McConnaughy Lower Ranch. A continuous record of the water reaching the ranch was obtained for the period from May 18 to September 19, 1956. The observations indicated that the 168 acres of irrigated pasture received adequate, although no excess, water to reasonably irrigate the land. The average flow of 2.1 cubic feet per second during July gives a computed average duty of one cubic foot per second for 80 acres for this area. It is considered that the lands in the westerly portion of the McConnaughy Lower Ranch are similar to the lands under the Siebeck Ditch, which require one cubic foot per second for 40 acres. The lands irrigated from the Cole-McManus Ditch were observed to have no appreciable rising water, and a duty of water of one cubic foot per second for 80 acres is considered applicable to these lands.

A comparison of the average amount of water found necessary to irrigate land served by certain of the above-named ditches, together with the allotments set forth in the agreement for trial distribution for the 1956 season, is presented in the following tabulation.

Name of diversion	Period of record, 1956	Allotment as set forth in agreement	Average diversion, In cubic feet per second
Peterson-Bucher Ditch	8-1 to 9-15	0.45	0.62
Granville Peterson Ditch	7-12 to 7-26	0.20	0.55
Bucher Lower Ditch	7-24 to 8-16	0.19	0.35
Siebeck Ditch (Town Branch)	8-1 to 9-15	0.47	0.70

It should be noted that 2.00 cubic feet per second were diverted through the Granville Peterson Ditch for four days from July 12 to July 16.

This is the irrigation head required to properly irrigate the porous lands served by the ditch. The average rate of diversion, shown above, is less than the irrigation head needed.

Additional Lands and Points of Diversion

Proofs of claim of water rights filed in the proceeding differ in certain respects from information contained in the Division of Water Resources "Report on Water Supply and Use of Water on Bidwell Creek Stream System, Modoc County, California, March, 1956". For purposes of assisting the parties in making such comparison Appendix B of this report contains Table B-1 which presents, where a significant difference occurs, a comparison of irrigated land described in the Division of Water Resources report as against irrigated land claimed in the proofs of claim. Table B-2 describes points of diversion claimed in the proofs of claim which were not described in the Division of Water Resources report.

APPENDIX A

RECORDS OF WATER SUPPLY AND USE OF WATER

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A-5	Daily Mean Discharge of Siebeck Ditch At Head	A-5
A-6	Daily Mean Discharge of McConnaughy-McAuliffe Ditch Above McConnaughy-McAuliffe Split	A-6
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TABLE A-1

MONTHLY AND MEAN PRECIPITATION AT FORT BIDWELL

Month	Precipitation: 1955-1956 In Inches	Mean precipitation: In Inches	1955-1956 precip- itation in per cent of mean
October	0.52	1.03	50
November	2.25	1.87	120
December	6.91	2.36	293
January	4.69	2.94	160
February	1.27	2.13	60
March	0.74	1.91	39
April	0.57	1.32	43
May	1.38	1.16	131
June	0.55	0.92	60
July	0.64	0.25	256
August	0.01	0.19	5
September	0.46	0.49	94
TOTAL	19.99	16.57	121

TABLE A-2

DAILY MEAN DISCHARGE OF BIDWELL CREEK ABOVE BUCHER UPPER DITCH

March 20 to September 19, 1956
In Cubic Feet per Second

Day	March	April	May	June	July	August	September
1	N	53	87	190	41	10.2	7.0
2	O	49	96	170	42	11.0	7.0
3		46	100	160	39	10.2	7.0
4		45	130	150	37	9.9	6.9
5	R	47	140	120	34	9.3	6.9
	E						
6	C	49	130	99	33	9.6	6.9
7	O	55	120	89	31	9.3	6.8
8	R	57	96	87	29	9.0	6.8
9	D	62	89	87	28	8.8	6.8
10		71	91	89	27	8.6	6.7
11		75	89	83	26	8.5	6.7
12		69	77	79	26	8.4	6.7
13		65	69	77	25	8.3	6.7
14		66	63	96	23	8.2	6.7
15		73	66	94	22	8.1	6.6
16		71	81	83	20	8.1	6.6
17		69	66	73	18.7	8.0	6.6
18		77	96	66	18.0	7.9	6.6
19		87	240	69	17.6	7.8	7.2
20	49	110	320	69	16.0	7.7	N
							O
21	52	130	360	62	15.4	7.7	
22	53	170	400	56	14.0	7.6	R
23	60	160	360	53	13.2	7.6	E
24	81	150	300	52	12.6	7.5	C
25	87	130	280	51	12.6	7.5	O
							R
26	81	120	230	49	13.2	7.5	D
27	66	110	170	48	12.6	7.5	
28	63	100	150	47	11.8	7.4	
29	60	89	150	46	11.4	7.4	
30	58	81	160	45	11.0	7.3	
31	57	-	190	-	10.2	7.1	
Mean	64 ^a	85	161	85	22.3	8.4	6.8 ^b
Runoff, in acre-feet	1520	5020	9890	5030	1370	513	256

Total for period - 23,600 acre-feet.

^a12 day period^b19 day period

TABLE A-3

DAILY MEAN DISCHARGE OF McCONNAUGHY UPPER DITCH AT HEAD

July 21 to September 19, 1956
In Cubic Feet per Second

Day	July	August	September
1	N	0.9	0.5
2	O	1.2	0.6
3		1.1	0.6
4		1.0	0.6
5		0.8	0.7
6	R	0.7	0.7
7	E	0.4	0.7
8	C	0.4	0.7
9	O	0.4	0.7
10	R	0.4	0.7
	D		
11		0.4	0.7
12		0.3	0.7
13		0.3	0.7
14		0.4	0.7
15		0.4	0.6
16		0.3	0.6
17		0.2	0.6
18		0.2	0.6
19		0.2	1.0
20		0.2	N
			O
21	1.7	0.2	
22	2.2	0.2	
23	2.1	0.2	R
24	1.6	0.2	E
25	0.8	0.2	C
			O
26	0.8	0.2	R
27	0.8	0.5	D
28	0.8	0.6	
29	0.8	0.6	
30	0.7	0.5	
31	0.6	0.4	
Mean	1.2 ^a	0.45	0.67 ^b
Runoff, in acre-feet	26	28	25

Total for period - 79 acre-feet

^a11 day period^b19 day period

TABLE A-4

DAILY MEAN DISCHARGE OF MCAULIFFE DITCH AT HEAD

July 21 to August 31, 1956
In Cubic Feet per Second

Day	July	August
1	N	1.0
2	O	1.0
3		1.0
4		1.0
5		0.9
6	R	0.6
7	E	0.6
8	C	0.6
9	O	0.6
10	R	0.6
	D	
11		0.6
12		0.6
13		1.3
14		2.1
15		1.9
16		1.6
17		1.7
18		1.7
19		1.7
20		1.7
21	2.2	1.6
22	2.2	1.6
23	2.2	1.5
24	1.6	1.5
25	1.1	1.0
26	1.1	1.0
27	1.1	1.0
28	1.1	0.5
29	1.0	0
30	1.0	0
31	1.0	0
Mean	1.4 ^a	1.1
Runoff, in acre-feet	31	65

Total for period - 96 acre feet

^aall day period

TABLE A-5

DAILY MEAN DISCHARGE OF SLEBECK DITCH AT HEAD

July 21 to September 19, 1956
In Cubic Feet per Second

Day	July	August	September
1	N	1.0	1.4
2	O	1.0	1.4
3		0.9	1.4
4		0.8	1.2
5		0.8	1.1
6	R	0.8	1.1
7	E	1.4	1.0
8	C	2.3	1.0
9	O	2.2	0.9
10	R D	1.7	0.8
11		1.6	0.7
12		1.4	0.7
13		1.2	0.7
14		1.2	0.7
15		1.0	0.7
16		1.0	0.7
17		1.2	0.7
18		1.2	0.7
19		1.2	1.4
20		1.2	N O
21	1.2	1.2	
22	1.2	1.2	
23	1.0	1.2	R
24	1.4	1.2	E
25	1.4	1.4	C
26	1.4	1.4	O
27	1.4	1.4	R
28	1.4	1.5	D
29	1.4	1.6	
30	1.4	1.5	
31	1.2	1.4	
Mean	1.3 ^a	1.3	0.96 ^b
Runoff, in acre-feet	29	80	36

Total for period - 145 acre-feet.

^a11 day period

^b19 day period

TABLE A-6

DAILY MEAN DISCHARGE OF McCONNAUGHY-McAULIFFE DITCH ABOVE
McCONNAUGHY-McAULIFFE SPLIT

May 18, to September 19, 1956

In Cubic Feet per Second

Day	May	June	July	August	September
1	N	4.1	2.6	3.6	1.7
2		3.1	2.9	3.6	1.5
3	O	3.1	2.9	3.4	1.5
4		3.1	2.6	2.9	1.5
5		2.8	5.7	2.8	1.5
6	R	2.3	6.3	3.1	1.5
7		1.7	3.6	3.9	1.5
8	E	2.5	3.6	3.9	1.5
9		3.4	3.1	3.9	1.4
10	C	4.3	3.6	3.7	1.4
11	O	5.1	4.6	3.7	1.4
12		4.8	4.1	3.6	1.2
13	R	5.4	5.1	2.9	0.9
14		7.9	4.1	2.1	0.9
15	D	7.9	2.8	1.8	0.9
16		7.9	3.4	1.6	0.9
17		7.3	4.1	1.8	0.9
18	9.5	6.7	4.1	1.7	0.9
19	9.3	6.7	4.1	1.7	0.9
20	5.9	6.3	4.3	1.5	
21	5.9	5.9	4.3	1.5	N
22	5.5	5.7	4.1	1.5	O
23	3.9	5.5	4.1	1.5	
24	5.9	5.4	4.1	1.7	R
25	7.9	5.7	4.3	1.8	E
26	6.5	5.5	4.3	1.8	C
27	8.6	5.6	4.1	1.8	O
28	9.5	5.0	4.1	1.8	R
29	10.2	4.6	3.9	1.7	D
30	8.6	3.4	3.9	1.7	
31	6.1	-	3.7	1.7	
Mean	7.4 ^a	4.9	4.0	2.4	1.3 ^b
Runoff, in acre- feet	205	293	243	150	47

a 14 day period

b 19 day period

Total for period - 938 acre-feet.

TABLE A-7

DAILY MEAN DISCHARGE OF McAULIFFE BRANCH OF
McCONNAUGHY-McAULIFFE DITCH

May 18, to September 19, 1956

In Cubic Feet per Second

Day	May	June	July	August	September
1	N	2.9	1.4	1.9	0
2		0	1.3	1.9	0
3	O	0	1.2	1.8	0
4		0	1.0	1.6	0
5		0	2.0	1.5	0
6	R	0	2.5	1.4	0
7		0	1.6	1.8	0
8	E	1.2	1.4	1.6	0
9		2.7	1.2	1.7	0
10	C	3.0	1.2	1.6	0
11	O	3.6	1.6	1.6	0
12		2.9	1.8	1.5	0
13	R	3.2	2.3	1.1	0
14		4.5	1.9	0	0
15	D	4.8	1.6	0	0
16		4.9	1.9	0	0
17		4.5	2.2	0	0
18	4.5	3.7	2.3	0	0
19	4.7	3.7	2.5	0	0
20	3.3	3.6	2.5	0	0
21	3.2	3.6	2.5	0	N
22	3.0	3.5	2.2	0	O
23	2.4	3.5	2.0	0	
24	2.7	3.4	1.9	0	R
25	4.2	3.3	1.9	0	E
26	3.5	3.1	2.1	0	C
27	4.9	2.7	2.3	0	O
28	5.5	2.5	2.2	0	R
29	5.6	2.1	2.1	0	D
30	5.6	1.6	2.0	0	
31	4.5	-	2.0	0	
Mean	4.1 ^a	2.6	1.9	0.7	0
Runoff, in acre- feet	114	155	116	42	0

Total for period - 427 acre-feet.

^a 14 day period

TABLE A-8

COMPUTED DAILY MEAN DISCHARGE OF McCONNAUGHY BRANCH OF
McCONNAUGHY-McAULIFFE DITCH

May 18, to September 19, 1956

In Cubic Feet per Second

Day	May	June	July	August	September
1	N	1.2	1.2	1.7	1.7
2		3.1	1.6	1.7	1.5
3	O	3.1	1.7	1.6	1.5
4		3.1	1.6	1.3	1.5
5		2.8	3.7	1.3	1.5
6	R	2.3	3.8	1.7	1.5
7		1.7	2.0	2.1	1.5
8	E	1.3	2.2	2.3	1.5
9		0.7	1.9	2.2	1.4
10	C	1.3	2.4	2.1	1.4
11	O	1.5	3.0	2.1	1.4
12		1.9	2.3	2.1	1.2
13	R	2.2	2.8	1.8	0.9
14		3.4	2.2	2.1	0.9
15	D	3.1	1.2	1.8	0.9
16		3.0	1.5	1.6	0.9
17		2.8	1.9	1.8	0.9
18	5.0	3.0	1.8	1.7	0.9
19	4.6	3.0	1.6	1.7	0.9
20	2.6	2.7	1.8	1.5	
21	2.7	2.3	1.8	1.5	N
22	2.5	2.2	1.9	1.5	O
23	1.5	2.0	2.1	1.5	
24	3.2	2.0	2.2	1.7	R
25	3.7	2.4	2.4	1.8	E
26	3.0	2.4	2.2	1.8	C
27	3.7	2.3	1.8	1.8	O
28	4.0	2.5	1.9	1.8	R
29	4.6	2.5	1.8	1.7	D
30	3.0	1.8	1.9	1.7	
31	1.6	-	1.7	1.7	
Mean	3.3 ^a	2.3	2.1	1.8	1.3 ^b
Runoff, in acre- feet	90	138	127	109	47

Total for period - 511 acre-feet.

^a 14 day period^b 19 day period

TABLE A-9

MISCELLANEOUS MEASUREMENTS ON BIDWELL CREEK
STREAM SYSTEM

Name of diversion	Date of measurement, 1956	Discharge, in cubic feet per second
Peterson-Bucher Ditch	August 9	0.72
	August 20	0.63
	September 4	0.55
Granville Peterson Ditch	July 12	2.00
	July 16	0.00
	August 6	0.10
McConnaughey Upper Ditch	July 10	3.5
	July 19	1.6
McAuliffe Ditch	July 10	5.0
	July 19	2.0
Siebeck Ditch (near head)	July 10	2.5
	July 19	1.5
Town Branch of Siebeck Ditch above Main Street	August 9	1.18
	August 13	0.53
	August 16	0.72
	August 20	0.72
	August 23	0.63
	September 4	0.89
	September 11	0.43
M. E. Conlan Branch of Siebeck Ditch	August 9	0.80
	August 13	0.50
	August 16	0.38
	August 20	0.45
	August 23	0.38
	September 4	0.40
	September 11	0.23
Bucher Lower Ditch	July 24	0.5
	July 30	0.35
	August 16	0.10
Indian Ditch	July 24	0.28
Fee Ditch	July 10	4.7
	July 16	1.92
	July 24	1.2
	July 30	0.7
	August 2	0.94
	August 6	0.84
	August 13	0.2

TABLE A-9

MISCELLANEOUS MEASUREMENTS ON BIDWELL CREEK
 STREAM SYSTEM
 (continued)

Name of diversion	Date of measurement, 1956	Discharge, in cubic feet per second
Cole-McManus Ditch	July 10	2.94
	July 16	3.42
	July 24	1.28
	July 30	0.7
	August 2	0.50
	August 6	0.57
	August 13	0.10
	August 16 A.M.	1.28
	August 16 P.M.	0.86
	August 20	0.50
	August 23	0.71
	September 11	0.2
	Ward Sagehorn Ditch	July 10
July 30		0.10
Ward-Sagehorn-Dodson Ditch	July 10	0.7
	July 16	2.3
	July 30	0.10

APPENDIX B

ADDITIONAL LANDS AND POINTS OF DIVERSION

<u>Table No.</u>		<u>Page</u>
B-1	Comparison Between Irrigated Lands as Described in Engineering Report and as Claimed in Proof of Claim	B-1
B-2	Additional Points of Diversion on Bidwell Creek Stream System	B-9

TABLE B-1

COMPARISON BETWEEN IRRIGATED LANDS AS DESCRIBED IN
ENGINEERING REPORT* AND AS CLAIMED IN PROOFS OF CLAIM

All land is within T46N, R16E, MDB&M except as otherwise noted

	<u>Irrigated</u> As shown in Table A-1 Engineering Report*	<u>Acreeage</u> As shown in Proof of Claim
<u>Baty, Roy R. & Baty, Violet M.</u>		
Block T J, Fort Bidwell	5.1	No proof filed
<u>Bock, Byron N. & Bock, Beda S.</u>		
Block E J, Fort Bidwell	1.7	2.6
Block E C, Fort Bidwell	<u>0.2</u>	<u>0.6</u>
Totals	1.9	3.2
<u>Bray, William A & Bray, Ruby E.</u>		
SE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 6	4.8	8.0
<u>Bucher, Fred E. & Bucher, Mabel</u>		
Block E B, Fort Bidwell	Domestic use	0.7
<u>Bucher, Reuel A. & Bucher, Thelma A.</u>		
Lot 1 Block J, Fort Bidwell (Formerly owned by Leonard, Lee D.)	1.2	0.7
Lot 3 Block J, Fort Bidwell	<u>None shown</u>	<u>1.0</u>
Totals	1.2	1.7
<u>Cambridge, Stella</u>		
Lots 1, 2 of Block C, Fort Bidwell	None shown	All of both lots

B-1

* Report on Water Supply and use of Water on Bidwell Creek Stream System, Modoc County, California, March 1956 by Department of Public Works Division of Water Resources.

TABLE B-1
(Continued)

	<u>Irrigated</u>	<u>Acreage</u>
	As shown in Table A-1 Engineering Report*	As shown in Proof of Claim
<u>Collins, Henry B. & Pollock,</u>		
<u>Ethel Victory</u>		
Lots 1, 2, 3, 4, 13, 14, 15, 16 Block B, Fort Bidwell	None shown	1.0
<u>Doss, Gordon L. & Doss, Fern A.</u>		
Lots 7, 8, 9, 10, 11, 45, 46, 47, 48, 49 Block I, Fort Bidwell	None	0.5
Lots TT and TU, Fort Bidwell	Shown	<u>2.0</u>
Totals		2.5
<u>Fee Ranch, Inc.</u>		
SW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 15	40.0	40.0
NE $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 21	40.0	40.0
NW $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 21	38.0	40.0
NE $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 22	26.0	26.0
SE $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 22	38.0	38.0
SW $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 22	40.0	40.0
NW $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 22	40.0	40.0
NE $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 22	40.0	40.0
NW $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 22	40.0	40.0
NE $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 22	40.0	40.0
SE $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 22	40.0	40.0
SW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 22	40.0	40.0
NW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 22	40.0	40.0
NE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 22	40.0	40.0
SE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 22	40.0	40.0
SW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 22	40.0	40.0
NW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 22	40.0	40.0
NW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 23	40.0	40.0
SW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 23	7.0	7.0
Lots 1, 2, 3 Sec. 27	58.5	<u>51.26</u>
Totals	<u>767.5</u>	762.26

TABLE B-1
(Continued)

	<u>Irrigated</u> As shown in Table A-1 Engineering Report*	<u>Acreage</u> As shown in Proof of Claim
<u>Green, Jewell</u>		
Block T B, Fort Bidwell	1.5	1.5
Block T C, Fort Bidwell	1.2	1.2
Block T I, Fort Bidwell	2.8	2.8
Block T D, Fort Bidwell	None shown	0.1
Totals	5.5	5.6
<u>Hanks, Mattie L.</u>		
Lot 1A Block J, Fort Bidwell	Domestic use	1.0
<u>Hanks, Ora D.</u>		
SE $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 8	Domestic use	No proof filed
<u>Hickerson, Marjorie K.</u>		
Block E I, Fort Bidwell	1.7	2.0
<u>Jefferson, Thomas & Drew, Harvey</u>		
SE $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 8	10.0	9.0
<u>John, Henry C. & John Marcella R.</u>		
Blocks E E and E F, Fort Bidwell	0.8	No proof filed
<u>Kafader, Louis & Kafader, Lillie</u>		
Lot 8 Block J, Fort Bidwell	None shown	0.5
<u>Lowell, Chester G.</u>		
Blocks T M and T Q, Fort Bidwell	None shown	2.09

TABLE B-1
(Continued)

	<u>Irrigated</u> As shown in Table A-1 Engineering Report*	<u>Acreage</u> As shown in Proof of Claim
<u>Mankin, John H. & Mankin, Iva V.</u>		
Block A, Fort Bidwell	None shown	0.8
<u>Martin, John Alfred & Martin, Marion Lucile</u>		
Block E K, Fort Bidwell	0.5	0.6
<u>Mathews, Claude V.</u>		
Lots 1, 2, 3, 4, 5, 6, 50, 51, 52, 53, 54, 55 Block I, Fort Bidwell	None shown	Domestic Use 0.8
Lots 5, 6, 7, 8 Block N, Fort Bidwell		
<u>Mathewson, Edith C.</u>		
Lots 1, 2, 5, 6, 7, 8 Block M, Fort Bidwell	None shown	1.0
<u>McConnaughey, Robert F. & McConnaughey, Doris</u>		
Home Ranch		
NE $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 16	40.0	40.0
SE $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 16	40.0	40.0
SW $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 16	36.5	40.0
NW $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 16	40.0	40.0
SE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 16	40.0	40.0
SW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 16	33.0	30.0
NE $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 16	38.0	40.0
NW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 16	22.0	30.0
Totals	<u>289.5</u>	<u>300.0</u>

TABLE B-1
(Continued)

Irrigated Acreage
As shown in Table A-1 As shown in
Engineering Report* Proof of Claim

McConnaughy, Robert F. and
McConnaughy, Doris (Continued)

North Ranch

NE $\frac{1}{4}$	NE $\frac{1}{4}$	Sec. 9	8.0	10.0
SE $\frac{1}{4}$	NE $\frac{1}{4}$	Sec. 9	40.0	40.0
SW $\frac{1}{4}$	NE $\frac{1}{4}$	Sec. 9	40.0	40.0
NW $\frac{1}{4}$	NE $\frac{1}{4}$	Sec. 9	12.5	10.0
NE $\frac{1}{4}$	SE $\frac{1}{4}$	Sec. 9	40.0	40.0
NW $\frac{1}{4}$	SE $\frac{1}{4}$	Sec. 9	40.0	40.0
SW $\frac{1}{4}$	SE $\frac{1}{4}$	Sec. 10	40.0	40.0
NE $\frac{1}{4}$	SW $\frac{1}{4}$	Sec. 10	29.0	40.0
SE $\frac{1}{4}$	SW $\frac{1}{4}$	Sec. 10	40.0	40.0
NW $\frac{1}{4}$	SW $\frac{1}{4}$	Sec. 10	40.0	40.0
SE $\frac{1}{4}$	NW $\frac{1}{4}$	Sec. 10	9.5	20.0
SW $\frac{1}{4}$	NW $\frac{1}{4}$	Sec. 10	40.0	40.0
Totals			<u>379.0</u>	<u>400.0</u>

Mountain Lands

SE $\frac{1}{4}$	SE $\frac{1}{4}$	Sec. 26, T47N, R15E	None	Partially
SW $\frac{1}{4}$	SE $\frac{1}{4}$	Sec. 26, T47N, R15E		
NE $\frac{1}{4}$	NE $\frac{1}{4}$	Sec. 35, T47N, R15E		
SE $\frac{1}{4}$	NE $\frac{1}{4}$	Sec. 35, T47N, R15E	Shown	Irrigated
SW $\frac{1}{4}$	NE $\frac{1}{4}$	Sec. 27, T47N, R15E	None	Partially
NW $\frac{1}{4}$	NE $\frac{1}{4}$	Sec. 27, T47N, R15E	Shown	Irrigated
SW $\frac{1}{4}$	NE $\frac{1}{4}$	Sec. 6	None	Partially
SE $\frac{1}{4}$	SE $\frac{1}{4}$	Sec. 6		
SW $\frac{1}{4}$	SE $\frac{1}{4}$	Sec. 6		
NW $\frac{1}{4}$	SE $\frac{1}{4}$	Sec. 6	Shown	Irrigated

O'Callaghan, Jerry A. &
O'Callaghan, Maurice

SE $\frac{1}{4}$	NE $\frac{1}{4}$	Sec. 21	40.0	40.0
SW $\frac{1}{4}$	NE $\frac{1}{4}$	Sec. 21	40.0	40.0
NW $\frac{1}{4}$	NE $\frac{1}{4}$	Sec. 21	2.0	4.0
NE $\frac{1}{4}$	SE $\frac{1}{4}$	Sec. 21	40.0	40.0
SE $\frac{1}{4}$	SE $\frac{1}{4}$	Sec. 21	40.0	40.0

TABLE B-1
(Continued)

		<u>Irrigated</u>	<u>Acreage</u>
		As shown in Table A-1 Engineering Report*	As shown in Proof of Claim
<u>O'Callaghan, Jerry A. &</u>			
<u>O'Callaghan, Maurice</u> (Continued)			
SW $\frac{1}{4}$	SE $\frac{1}{4}$ Sec. 21	40.0	40.0
NW $\frac{1}{4}$	SE $\frac{1}{4}$ Sec. 21	40.0	40.0
NE $\frac{1}{4}$	NE $\frac{1}{4}$ Sec. 28	17.0	17.0
NW $\frac{1}{4}$	NE $\frac{1}{4}$ Sec. 28	18.0	18.0
Totals		277.0	279.0
 <u>O'Leary, Hugh A.</u>			
Lot 2 Block J, Fort Bidwell		None shown	Domestic
 <u>Peterson, Ed</u>			
Block E C, Fort Bidwell		2.7	3.9
 <u>Peterson, Granville T. &</u>			
<u>Peterson, Mary D.</u>			
SW $\frac{1}{4}$	NE $\frac{1}{4}$ Sec. 8	7.6	7.6
NW $\frac{1}{4}$	SE $\frac{1}{4}$ Sec. 8	2.4	12.4
SE $\frac{1}{4}$	NW $\frac{1}{4}$ Sec. 8	7.5	8.0
SW $\frac{1}{4}$	SE $\frac{1}{4}$ Sec. 8	None	1.0
NE $\frac{1}{4}$	SW $\frac{1}{4}$ Sec. 8	Shown	2.5
Totals		17.5	31.5
 <u>Peterson, Phillip H. &</u>			
<u>Peterson, Margaret</u>			
NW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 16		17.6	20.0
 <u>Peterson, Ralph &</u>			
<u>Peterson, Georgia</u>			
Block J, Fort Bidwell		Domestic	1.0

TABLE B-1
(Continued)

Irrigated Acreage
As shown in Table A-1 As shown in
Engineering Report* Proof of Claim

Sagehorn, Leo & Sagehorn, Marie

NE $\frac{1}{4}$	NE $\frac{1}{4}$	Sec. 28	23.0	23.0
SE $\frac{1}{4}$	NE $\frac{1}{4}$	Sec. 28	40.0	40.0
SW $\frac{1}{4}$	NE $\frac{1}{4}$	Sec. 28	40.0	40.0
NW $\frac{1}{4}$	NE $\frac{1}{4}$	Sec. 28	22.0	22.0
NE $\frac{1}{4}$	SE $\frac{1}{4}$	Sec. 28	29.5	29.5
NE $\frac{1}{4}$	NW $\frac{1}{4}$	Sec. 28	40.0	40.0
SE $\frac{1}{4}$	NW $\frac{1}{4}$	Sec. 28	39.0	39.0
SW $\frac{1}{4}$	NW $\frac{1}{4}$	Sec. 28	12.0	12.0
NW $\frac{1}{4}$	NW $\frac{1}{4}$	Sec. 28	40.0	40.0
SE $\frac{1}{4}$	SW $\frac{1}{4}$	Sec. 21	40.0	40.0
SW $\frac{1}{4}$	SW $\frac{1}{4}$	Sec. 21	40.0	40.0
SW $\frac{1}{4}$	NE $\frac{1}{4}$	Sec. 27	27.0	27.0
NW $\frac{1}{4}$	NE $\frac{1}{4}$	Sec. 27	17.0	17.0
NW $\frac{1}{4}$	SE $\frac{1}{4}$	Sec. 27	6.6	6.6
NE $\frac{1}{4}$	SW $\frac{1}{4}$	Sec. 27	27.0	27.0
NW $\frac{1}{4}$	SW $\frac{1}{4}$	Sec. 27	33.0	33.0
NE $\frac{1}{4}$	NW $\frac{1}{4}$	Sec. 27	23.0	23.0
SE $\frac{1}{4}$	NW $\frac{1}{4}$	Sec. 27	25.5	25.5
SW $\frac{1}{4}$	NW $\frac{1}{4}$	Sec. 27	32.5	32.5
NW $\frac{1}{4}$	NW $\frac{1}{4}$	Sec. 27	27.5	27.5
SW $\frac{1}{4}$	SE $\frac{1}{4}$	Sec. 22	None Shown	40.0
Totals			584.6	624.6

Schluter, Robert L. &
Schluter, Erma

SW $\frac{1}{4}$	SW $\frac{1}{4}$	Sec. 9	Domestic	0.03
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Sweeney, Estate of William

NE $\frac{1}{4}$	NW $\frac{1}{4}$	Sec. 8	4.7	5.5
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Toney, G. K.

NE $\frac{1}{4}$	SW $\frac{1}{4}$	Sec. 4	21.0	40.0
NE $\frac{1}{4}$	NW $\frac{1}{4}$	Sec. 4	6.0	40.0
SE $\frac{1}{4}$	NW $\frac{1}{4}$	Sec. 4	36.0	40.0
Totals			63.0	120.0

TABLE B-1
(Continued)

	<u>Irrigated</u> As shown in Table A-1 Engineering Report*	<u>Acreage</u> As shown in Proof of Claim
<u>Toney, Maxine L.</u>		
Lots 1, 8 Block N, Fort Bidwell	None shown	0.03
<u>Townsend, C. E.</u>		
SE $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 8	Domestic	3.5
<u>United States in Trust, Indian Service</u>		
Reservation	28.3	95.6
<u>Vaughn, Lewis and Vaughn, Glorie</u>		
Lots 11, 12 Block J, Fort Bidwell	Domestic	3.0
<u>Ward, Nora M.</u>		
NW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 21	40.0	40.0
SW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 21	40.0	40.0
NW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 21	40.0	40.0
NE $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 20	None shown	0.9
Totals	120.0	120.9
<u>Youngman, Clarence</u>		
SW $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 4	27.5	40.0
NW $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 4	6.5	40.0
NW $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 4	30.0	40.0
NE $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 4	None shown	40.0
Totals	64.0	160.0

TABLE B-2

ADDITIONAL POINTS OF DIVERSION
ON BIDWELL CREEK STREAM SYSTEM

Mathews Pump, assigned Division of Water Resources number 15a, located on the East bank of Bidwell Creek S 20° W 500 feet from the E $\frac{1}{4}$ Corner of Section 17, T46N, R16E within the NE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 17, T46N, R16E, MDB&M. A 3/4 horsepower gasoline powered centrifugal pump diverts water from Bidwell Creek for irrigation of lawn and garden on the property of Claude V. Mathews.

Doss Pump, assigned Division of Water Resources number 15b, located on the West bank of Bidwell Creek S14° W 800 feet from the E $\frac{1}{4}$ Corner of Section 17, T46N, R16E within the NE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 17, T46N, R16E, MDB&M. A $\frac{1}{2}$ horsepower electric driven centrifugal pump diverts water from Bidwell Creek for irrigation of lawn and garden on the property of Gordon L. and Fern A. Doss.

Lowell Flume, located on the West bank of Bidwell Creek 910 feet north and 1,240 feet west of the east $\frac{1}{4}$ corner of Section 17, T46N, R16E within the SE $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 17, T46N, R16E, MDB&M.

APPENDIX C

AGREEMENT FOR TRIAL DISTRIBUTION

1956 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 WATER OF BIDWELL CREEK STREAM)
SYSTEM IN MODOC COUNTY, CALIFORNIA)

AGREEMENT FOR TRIAL
DISTRIBUTION DURING
1956 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 Bidwell Creek stream system, of all the parties hereunto subscribed are involved; and

WHEREAS, said Department has nearly completed its investigation of the stream system, conduits diverting therefrom, lands irrigated and irrigable therefrom, and has prepared maps from its surveys and observations, all in accordance with the provisions of the Water Code; and

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

WHEREAS, the parties hereto desire that diversions from the stream system be administered by the Department during the 1956 season in order to afford the Department an opportunity to attempt to develop by trial distribution an allocation of the water of the stream system among the parties hereto that may be acceptable to the parties as a basis for settlement of the water rights involved in the proceeding:

NOW THEREFORE IT IS HEREBY AGREED by and between each and every party hereunto subscribed and among all of the parties, that the Department may distribute the water of Bidwell Creek stream system among the various parties hereunto subscribed, it being understood and agreed that distribution of water shall be for the period extending from the date hereof to September 30, 1956, only, and subject to such provisions as are hereinafter contained, to wit:

1. The Division of Water Resources Map, hereinafter referred to as D. W. R. Map, is the map prepared by the Department of Public Works of the State of California, Division of Water Resources, from its surveys made in 1955, which is entitled "Bidwell Creek Stream System showing Diversions and Irrigated Lands, Modoc County, California", and is included as Plate 2 of the "Report on Water Supply and Use of Water on Bidwell Creek Stream System", March 1956.

2. The rights of W. R. Cole to 1.29 cubic feet per second and E. B. McManus to 0.43 cubic foot per second as set forth in Schedules 1 and 2 are superior to all other rights on the Cole-McManus Ditch. Whenever the flow in the ditch is equal to or less than 1.72 cubic feet per second the water shall be divided three-fourths to the W. R. Cole Ranch and one-fourth to the E. B. McManus Ranch.

3. The L. Sagehorn allotment of 3.36 cubic feet per second in the Fee Ditch (Diversion 15 on the D.W.R. Map) as set forth in Schedule 1 as a second priority right and as set forth in Schedule 2 as a fourth priority right shall be considered satisfied, when the total amount of water reaching that certain collecting ditch on the L. Sagehorn Ranch near the L. J. Fee and L. Sagehorn property line, is equal to or greater than that allotment, and only the deficiency of that allotment reaching said collecting ditch shall be diverted through the Fee Ditch.

4. The rights in and to the water, and in and to the use thereof, from Bidwell Creek stream system as set forth in Schedule 1 shall be for the period from the date hereof to July 9, both dates inclusive in 1956, and the rights set forth in Schedule 2 shall be for the period from July 10 to September 30 both dates inclusive in 1956.

5. Subject to the foregoing provisions, the parties enumerated in Schedules 1 and 2, hereunto annexed and made part hereof, shall be entitled to rights in and to the use of the natural flow of Bidwell Creek Stream System for domestic, stockwatering, and irrigation purposes upon their respective lands involved in said proceeding as shown on the D.W.R. Map, in accordance with the acreage to be supplied, priorities and quantities of water allotted, and through the diversions from the sources named as set forth in Schedules 1 and 2.

6. All allotments set forth in Schedules 1 and 2 which are within the same priority class 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, in accordance with their respective allotments.

7. Although all quantities of water allotted to the claimants for direct application to beneficial use are expressed in terms of continuous flow, nevertheless, nothing herein contained shall be construed as limiting or restricting the right of any claimant to rotate in the use of water or the right of any claimant to divert for limited period of time convenient "irrigation head", and thus apply water to his lands at a greater rate than indicated by the quantity of continuous flow allotted; provided, that this practice of rotation or use of "irrigation heads" shall not impair or infringe

the rights of any other claimant.

8. Nothing herein contained shall, or shall be construed to, prevent any of the claimants herein, who jointly use a ditch for which there is a continuous flow allotment, from employing by agreement a system of rotation in use as among themselves; or prevent any claimant herein who has allotments in two or more ditches, from using all or any portion of the aggregate of such allotments through any of these ditches on all or any portion of his lands; provided the total quantity of water diverted by such claimant at any time shall not exceed the aggregate of such allotments; and provided further such practice of rotation or use of combined allotments shall not impair or infringe the rights of any other claimant hereto.

9. The term "directly apply to beneficial use" means the direct conveyance and application of water diverted to beneficial use without intermediate storage, except such regulation as may be practiced for the purpose of equalizing the flow of water diverted for a convenient irrigation head.

10. The term "natural flow" means such a flow as will naturally occur at any given point in a stream from the runoff of the watershed which it drains, from springs which naturally contribute to the stream from seepage, and from waste and return flow from dams, conduits, and irrigated lands, as distinguished from released stored water.

11. The Department 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 accomplish the purpose of this agreement.

12. 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.

13. The Department may appoint a watermaster to distribute the water of Bidwell Creek stream system, as herein provided for, during the period from the date hereof to October 1, 1956, and the 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 the parties for the purpose of such inspection and regulation, and may establish and maintain such gaging stations and measuring devices in the stream system and diversion conduits as may be necessary or convenient.

14. It is further agreed that in order to meet the costs of such distribution by the watermaster during the 1956 season, the parties hereto will pay to the Division of Water Resources on or before May 15, 1956, the amount of \$675.00, which amount shall be apportioned among the various parties hereto in accordance with the assessments set forth in Schedule 3 hereunto annexed and made a part hereof.

SCHEDULE 1

PRIORITIES AND ALLOTMENTS TO CLAIMANTS
FROM BIDWELL CREEK STREAM SYSTEM
MARCH 15 THROUGH JULY 9

Diversion number as per D.W.R. map	Name of diversion system	Name of Claimant	Irrigated acreage	Allotments in cubic feet per second Priorities			
				1	2	3	Total
1	Toney-Youngman Ditch	G.K. Toney	63.0	1.60			1.60
		C. Youngman	64.0	1.60			1.60
2	Bray Upper Ditch	W.A. Bray	3.8	0.10			0.10
3	Bray Lower Ditch	W.A. Bray	1.0	0.02			0.02
4	Bucher Upper Ditch	C.F. Bucher	159.0		4.71		4.71
5	Peterson- Bucher Ditch	O. Sweeney	1.2	0.05			0.05
		G.T. Peterson	7.5	0.19			0.19
		C.F. Bucher	9.0	0.21			0.21
6	Sweeney Ditch	O. Sweeney	3.5	0.06			0.06
7	Granville Peterson Ditch	G.T. Peterson	10.0	0.20			0.20
8	McConnaughy Upper Ditch	C.E. Townsend Domestic		0.01			0.01
		T. Jefferson & H. Drew	1.0	0.02			0.02
		R.L. Schluter Domestic		0.01			0.01
		R.F. McConnoughy	379.0	4.56	1.42		5.98
9	McAuliffe	T. Jefferson & H. Drew	5.0	0.08			0.08
		F. E. Bucher Domestic		0.01			0.01
		E. Peterson	5.1	0.09			0.09
		Nora McAuliffe	470.0	5.76			5.76
10	Siebeck Ditch	T. Jefferson & H. Drew	0.5	0.01			0.01
		O.D. Hanks Domestic		0.01			0.01
		M.W. Fulcher	26.4	0.44			0.44
		L.E. Godfrey	1.5	0.03			0.03
		O.J. Messner	1.0	0.02			0.02
		H.C. John	0.8	0.01			0.01
		H.C. Miles	0.6	0.01			0.01
		Marjorie Hickerson	1.7	0.03			0.03
J.A. Martin	0.5	0.01			0.01		

SCHEDULE 1

PRIORITIES AND ALLOTMENTS TO CLAIMANTS
 FROM BIDWELL CREEK STREAM SYSTEM
 MARCH 15 THROUGH JULY 9
 (Continued)

Diversion : number as : per D.W.R. : map :	Name : of : diversion : system :	Name : of : Claimant :	Irrigated : acreage :	Allotments			
				: in cubic feet per second			
				: Priorities			
				1	2	3	Total
(continued)	Siebeck Ditch	P.H. Peterson	17.6	0.29			0.29
		B.N. Bock	1.9	0.03			0.03
		E.G. Peterson	2.7	0.05			0.05
		M.E. Conlan	341.0	2.52		2.13	4.65
11	Bucher Lower Ditch	C.F. Bucher	11.5	0.19			0.19
12	Indian Ditch	J. Green	5.5	0.09			0.09
		R.R. Baty	5.1	0.09			0.09
		U.S. Indian Service	27.4	0.46			0.46
13	McConnaughy-McAuliffe Ditch	L.D. Leonard	1.2	0.04			0.04
		R. Peterson	Domestic	0.02			0.02
		L. Vaughn	Domestic	0.02			0.02
		M.L. Hanks	Domestic	0.02			0.02
		S. Peterson	Domestic	0.02			0.02
		R.F. McConnaughy	289.5	2.11	1.89		4.00
		Nora McAuliffe	168.0	1.97			1.97
14	Town Ditch	W.J. Crow	Domestic	0.05			0.05
15	Fee Ditch	C.E. Park	18.5	0.22			0.22
		E.F. Dodson	95.5	1.12			1.12
		L.J. Fee	767.5	5.84	3.19		9.03
		J.&M. O'Callaghan	244.5	2.88			2.88
		L. Sagehorn	285.1		3.36 ^a		3.36
16	MacDonald Pump	J.A. McDonald	Domestic	0.01			0.01
17	Kober Ditch	H. Kober	1.0	0.05			0.05
18	Parke-Dodson-Ward Ditch	C.E. Parke	17.0	0.20			0.20
		E.F. Dodson	18.5	0.22			0.22
		G.G. Ward	30.5	0.36			0.36
19	Cole-McManus Ditch	C.G. Ward	6.0	0.07 ^b			0.07
		E.B. McManus	231.2	2.72 ^b			2.72
		W.R. Cole	109.5	1.29 ^b			1.29
		U.S. Indian Service	0.9	0.01			0.01

SCHEDULE 1

PRIORITIES AND ALLOTMENTS TO CLAIMANTS
 FROM BIDWELL CREEK STREAM SYSTEM
 MARCH 15 THROUGH JULY 9
 (Continued)

Diversion : number as : per D.W.R. : map :	Name : of : diversion : system :	Name : of : Claimant :	Irrigated : acreage :	Allotments in cubic feet per second Priorities			
				1	2	3	Total
20	Ward-Sagehorn Ditch	G.G. Ward L. Sagehorn	42.5 75.0	0.50 0.88			0.50 0.88
21	Ward-Sagehorn- Dodson Ditch	G.G. Ward E.F. Dodson L. Sagehorn	41.0 46.0 72.5	0.48 0.54 0.85			0.48 0.54 0.85
22	O'Callaghan Ditch	J.&M. O'Callaghan	32.5	0.38			0.38
23	Sagehorn Ditch	L. Sagehorn	152.0	0.79	1.00		1.79
25	Bucher Spring	C.F. Bucher T. Jefferson & H. Drew	Supplemental 3.5	0.06			0.06
TOTALS			4377.2	42.52	10.92	6.84	60.28

a See paragraph 3
 b See paragraph 2

SCHEDULE 2

PRIORITIES AND ALLOTMENTS TO CLAIMANTS
FROM BIDWELL CREEK STREAMS SYSTEM
JULY 10 THROUGH SEPTEMBER 30

Diversions number as per D.W.R. map	Name of diversion system	Name of Claimant	Irrigated acreage	Allotments in cubic feet per second					Total
				1	2	3	4	5	
1	Toney-Youngman Ditch	G.K. Toney	63.0	1.60					1.60
		C. Youngman	63.0	1.60					1.60
2	Bray Upper Ditch	W.A. Bray	3.8	0.10					0.10
3	Bray Lower Ditch	W.A. Bray	1.0	0.02					0.02
4	Bucher Upper Ditch	C.F. Bucher	159.0				4.71		4.71
5	Peterson- Bucher Ditch	O. Sweeney	1.2		0.05				0.05
		G.T. Peterson	7.5	0.12	0.07				0.19
		C.F. Bucher	9.0	0.12	0.09				0.21
6	Sweeney Ditch	O. Sweeney	3.5	0.06					0.06
7	Granville- Peterson Ditch	G.T. Peterson	10.0	0.10	0.10				0.20
8	McConnaughy Upper Ditch	C.E. Townsend	Domestic	0.01					0.01
		T. Jefferson & H. Drew	1.0	0.02					0.02
		R.L. Schluter	Domestic	0.01					0.01
		R.F. McConnaughy	379.0	0.21		4.35	1.42		5.98
9	McAuliffe Ditch	T. Jefferson & H. Drew	5.0			0.08			0.08
		F.E. Bucher	Domestic	0.01					0.01
		E. Peterson	5.1	0.01		0.08			0.09
		Nora McAuliffe	470.0	0.23		5.53			5.76
10	Siebeck Ditch	T. Jefferson & H. Drew	0.5			0.01			0.01
		O.D. Hanks	Domestic	0.01					0.01
		M.W. Fulcher	26.4	0.10	0.34				0.44
		L.E. Godfrey	1.5	0.02		0.01			0.03
		O.J. Messner	1.0	0.02					0.02
		H.C. John	0.8	0.01					0.01
		H.C. Miles	0.6	0.01					0.01
		M. Hickerson	1.7	0.02		0.01			0.03
J. A. Martin	0.5	0.01					0.01		

SCHEDULE 2

PRIORITIES AND ALLOTMENTS TO CLAIMANTS
 FROM BIDWELL CREEK STREAMS SYSTEM
 JULY 10 THROUGH SEPTEMBER 30
 (Continued)

Diversions number as per D.W.R. map	Name of diversion system	Name of Claimant	Irrigated acreage	Allotments in cubic feet per second					Total
				Priorities					
				1	2	3	4	5	
	Siebeck Ditch (continued)	P.H. Peterson	17.6	0.20	0.09			0.29	
		B.N. Bock	1.9	0.02	0.01			0.03	
		E.G. Peterson	2.7	0.02	0.03			0.05	
		M.E. Conlan	341.0	0.15		2.37	2.13	4.65	
11	Bucher Lower Ditch	C.F. Bucher	11.5	0.10	0.09			0.19	
12	Indian Ditch	J. Green	5.5	0.03	0.06			0.09	
		R.R. Baty	5.1	0.03	0.06			0.09	
		U.S. Indian Service	27.4	0.20		0.26		0.46	
13	McConnaugh- McAuliffe Ditch	L.D. Leonard	1.2	0.04				0.04	
		R. Peterson	Domestic	0.02				0.02	
		L. Vaughn	Domestic	0.02				0.02	
		M.L. Hanks	Domestic	0.02				0.02	
		S. Peterson	Domestic	0.02				0.02	
		R.F. McConnaughy	289.5	0.28	1.83		1.89	4.00	
		Nora McAuliffe	168.0	0.20	1.77			1.97	
14	Town Ditch	W.&J. Crow	Domestic	0.05				0.05	
15	Fee Ditch	C.E. Park	18.5	0.03		0.19		0.22	
		E.F. Dodson	95.5	0.09		1.03		1.12	
		L.J. Fee	767.5	0.11		5.73	3.19	9.03	
		J.&M. O'Callaghan	244.5	0.07		2.81		2.88	
		L. Sagehorn	285.1				3.36 ^a	3.36	
16	MacDonald Pump	J.A. MacDonald	Domestic	0.01				0.01	
17	Kober Ditch	H. Kober	1.0	0.05				0.05	
18	Parke-Dodson- Ward Ditch	C.E. Parke	17.0			0.20		0.20	
		E.F. Dodson	18.5			0.22		0.22	
		G.G. Ward	30.5			0.36		0.36	
19	Cole-McManus Ditch	G.G. Ward	6.0			0.07		0.07	
		E.B. McManus	231.2	0.06 ^b		2.66 ^b		2.72	
		W.R. Cole	109.5	0.18 ^b		1.11 ^b		1.29	
		U.S. Indian Service	0.9			0.01		0.01	

SCHEDULE 2

PRIORITIES AND ALLOTMENTS TO CLAIMANTS
 FROM BIDWELL CREEK STREAMS SYSTEM
 JULY 10 THROUGH SEPTEMBER 30
 (Continued)

Diversion number as per D.W.R. map	Name of diversion system	Name of Claimant	Irrigated acreage	Allotments in cubic feet per second					Total
				1	2	3	4	5	
20	Ward-Sagehorn Ditch	G.G. Ward	42.5	0.50					0.50
		L. Sagehorn	75.0	0.88					0.88
21	Ward-Sagehorn- Dodson Ditch	G.G. Ward	41.0	0.48					0.48
		E.F. Dodson	46.0	0.54					0.54
		L. Sagehorn	72.5	0.85					0.85
22	O'Callaghan Ditch	J.&M. O'Callaghan	32.5	0.38					0.38
23	Sagehorn Ditch	L. Sagehorn	152.0	0.79	1.00				1.79
25	Bucher Spring	C.F. Bucher	Supplemental						
		T. Jefferson &	3.5	0.06					0.06
		H. Drew							
TOTALS			4377.2	6.42	4.65	31.51	10.86	6.84	60.28

a See paragraph 3
 b See paragraph 2

SCHEDULE 3

APPORTIONMENT OF COST OF WATERMASTER SERVICE
ON BIDWELL CREEK STREAM SYSTEM DURING
1956 SEASON

Name of user	:Continuous flow: : allotment : : in cubic feet : : per second :	Portion of expense
Baty, Roy R. and Baty, Violet M.	.09	\$ 2.44
Bock, Byron N. and Bock, Beda S.	.03	1.83
Bray, William A. and Bray, Ruby E.	.12	2.74
Bucher, Carl F. and Bucher, Montez S.	5.11	53.05
Bucher, Fred E. and Bucher, Mabel	.01	1.63
Cole, W. R. and Cole, Esther	1.29	14.54
Conlan, M. E.	4.65	48.40
Crow, William and Crow, John W.	.05	2.03
Dodson, Elbert F. and Dodson, Barbara H.	1.88	20.49
Fee, Lawrence J.	9.03	92.55
Fulcher, Max W. and Fulcher, Anna	0.44	5.97
Godfrey, Leroy E. and Godfrey, Maxine E.	.03	1.83
Green, Jewell	.09	2.44
Hanks, Mattie L.	.01	1.63
Hanks, Ora D.	.02	1.73
Hickerson, Marjorie K.	.03	1.83
Jefferson, Thomas and Drew, Harvey	.17	3.24
John, Henry C. and John, Marcella R.	.01	1.63
Kober, Henry and Kober, Caroline	.05	2.03
Leonard, Lee D. and Leonard, Beulah	.04	1.93
MacDonald, John A. and MacDonald, Evelyn L.	.01	1.63

APPORTIONMENT OF COST OF WATERMASTER SERVICE
ON BIDWELL CREEK STREAM SYSTEM DURING
1956 SEASON (continued)

Name of user	:Continuous flow: : allotment : : in cubic feet : : per second :	Portion of expense
Martin, John Alfred and Martin, Marion Lucile	.01	\$ 1.63
McAuliffe, Nora	7.73	79.45
McConnaughey, Robert F. and McConnaughey, Doris	9.98	102.13
McManus, Edna Blanche	2.72	28.95
Messner, Oliver J.	.02	1.73
Miles, Harold C.	.01	1.63
O'Callaghan, Jerry A. and O'Callaghan, Maurice	3.26	34.39
Parke, Charles E. and Parke Elma B.	.42	5.77
Peterson, Edward G.	.05	2.03
Peterson, Elbert and Peterson, Dixie	.09	2.44
Peterson, Granville T. and Peterson, Mary D.	.39	5.47
Peterson, Philip H. and Peterson, Margaret	.29	4.46
Peterson, Ralph and Peterson, Georgia	.02	1.73
Peterson, Sadie A. and/or Bucher, Thelma	.02	1.73
Sagehorn, Leo and Sagehorn, Marie Jane	6.88	70.89
Schluter, Robert L.	.01	1.63
Sweeney, Estate of William	.11	2.64
Toney, G. K.	1.60	17.66
Townsend, C. E.	.01	1.63
United States in Trust, Indian Service	.47	6.28
Vaughn, Lewis and Vaughn, Glorie	.02	1.73
Ward, Glen G. and Ward, Nora M.	1.41	15.75
Youngman, Clarence	1.60	17.66
TOTALS	60.28	\$ 675.00

