

Original  
by Paul Art

STATE OF CALIFORNIA  
THE RESOURCES AGENCY OF CALIFORNIA  
DEPARTMENT OF WATER RESOURCES  
NORTHERN BRANCH

REPORT ON  
NECESSITY FOR WATERMASTER SERVICE  
ON  
DIGGER CREEK  
IN  
SHASTA AND TEHAMA COUNTIES

OFFICE REPORT

MAY 1964

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STATE OF CALIFORNIA  
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DEPARTMENT OF WATER RESOURCES  
NORTHERN BRANCH

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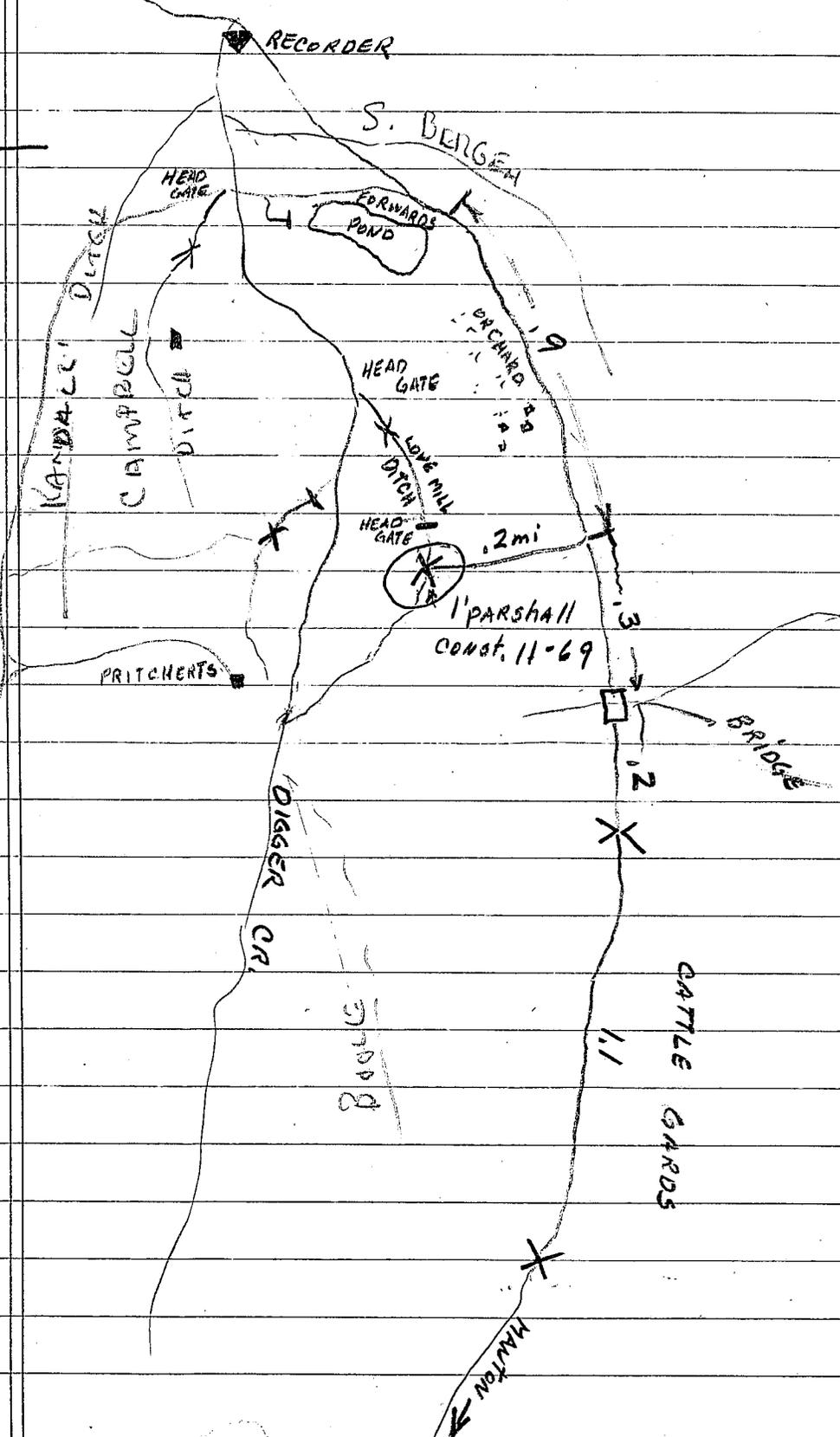
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# DIGGER CR

Location of Parshall Lower Love Mill Branch



## SUMMARY

A request for watermaster service on Digger Creek, Shasta and Tehama Counties, was submitted to the Department of Water Resources by Forward Brothers Properties, on July 15, 1963. Section 4050 of the Water Code provides that when such a request is received, the department may, if necessity exists, establish a watermaster service area, and appoint a watermaster to police the water rights of the area.

The necessity for watermaster service on Digger Creek has been investigated. As a result, it is concluded that the service is necessary and justified, and should begin not later than July 1, 1964.

The investigation was confined to those factors that were required to evaluate the need for watermaster service. It consisted of a survey of the physical features of the area and stream system, a review of past litigation and disputes between water users, and an evaluation of water supply, water rights, and diversion practices.

Digger Creek rises in the mountains west of Lassen National Park and flows in a westerly direction to its confluence with North Fork Battle Creek near Manton, about 30 miles northeast of Red Bluff. The general location of the proposed service area is shown on Plate 1.

There are four court decrees on Digger Creek, dating back to 1899. These decrees define water rights amounting to approximately 23 cubic feet per second, for 34 water right owners, having 11 points of diversion for irrigation of approximately 1,955 acres. The diverted water is used principally for irrigation of permanent pasture, with some irrigation of alfalfa, small apple orchards, and domestic use. The proposed service area is shown on Plate 1. The water supply is sufficient to supply allotments in normal water years, if properly

distributed, but is not adequate in dry years.

In 1960 a short water supply precipitated a contempt action in the Superior Court of Tehama County by a number of the "lower" water users of the proposed service area, against Forward Brothers Properties, the largest "upper" user. The complaint charged contempt of court in violation of the provisions of the decree in the case of Herrick v Forward, No. 4570, Superior Court, Tehama County, February 24, 1927. The court was also asked to reopen the case to enable the court to further interpret and enforce the decree, and to adjudicate additional water rights questions.

The court denied the petition on both points and found no practical way to assure an equitable distribution of the water. The action accomplished little in the way of a solution. There have been certain physical changes in the diversion systems since various decrees defining water rights on the creek were issued, and many of the structures and measuring devices are inadequate. Furthermore, the 1927 decree recommends that weirs be placed in the creek channel itself. This is not a suitable or usual practice for measuring stream diversions.

Once assigned to the area, a watermaster would make practical interpretations of the court decrees, to assure equitable distribution of water. The watermaster would periodically determine available water supply, compute water rights, and notify water right owners of their entitlements. He would also design and supervise construction of the necessary control and measurement structures. He would check and regulate flows being diverted at critical points, and resolve any disputes between users.

Creation of a watermaster service area on Digger Creek, and appointment of a watermaster to police the diversions, appears to be the only feasible solution to the problem.

## INTRODUCTION

The Department of Water Resources has received a written request, dated July 15, 1963, for the creation of a watermaster service area and the appointment of a watermaster for Digger Creek in Shasta and Tehama Counties. The location of the proposed service area is shown on Plate 1. The request was made by Forward Brothers Properties, and was accompanied with copies of the court decrees pertaining to the water rights on Digger Creek. Since the decrees define the water rights in question, they provide a basis for the creation of a watermaster service area, in accordance with Water Code Section 4027(b). These decrees also document the ownership by Forward Brothers Properties of at least 15 percent of the conduits entitled to divert water from Digger Creek, which is required by Section 4050 of the Water Code of those requesting appointment of a watermaster.

Following receipt of the request, the Chief Engineer, authorized this investigation under Water Code Section 4050. The scope of the investigation was confined to that required to determine the necessity for watermaster service. The investigation included a study of the physical features of the area and stream, a review of past and current disputes between water users, an evaluation of available water supply, and a survey of diversion points and irrigation practices in relation to decreed water rights.

## DESCRIPTION OF THE AREA

Digger Creek forms a portion of the boundary line between Shasta County on the north and Tehama County on the south. It drains an area of approximately 45 square miles on the west slope of the mountains west of Lassen National Park, and flows in a westerly direction through the town of Manton to its confluence with the North Fork Battle Creek. Manton is the only community in the area and is located about 30 miles northeast of Red Bluff. The proposed Digger Creek Watermaster Service Area is shown on Plate 1. This plate shows present diversions, ditches, and land ownership.

The crops irrigated from Digger Creek consist of permanent pasture, alfalfa, a few small apple orchards and vegetable gardens. The irrigated lands vary in elevation from 2,000 feet to 3,500 feet, and the growing season extends from April to October. The upper portion of the watershed is heavily timbered and generally steeply sloped, whereas the lower area consists of brush and oak covered foothills. The total length of the watershed is approximately 17 miles, with irrigation confined to the lower, or western, one-half.

The three "upper" users irrigate lands adjoining the stream and all runoff water returns to Digger Creek. A 2-mile stretch of non-irrigated land lies between the "upper" and "lower" users. The "lower" users are located within a continuous 3-mile length of stream and within a 5-square mile area. Very little, if any, runoff from the "lower" users returns to the creek. The community of Manton is located near the western boundary of this irrigated land.

## WATER SUPPLY

### Precipitation

Precipitation in the area is typical of Northern California, occurring principally in winter months. Snowmelt contributes to the early runoff but the summer streamflow is primarily from springs and rising water.

The average monthly precipitation near Manton is shown in Table 1, page 7 with records for 1959-60. Although during January through May 1960, precipitation was over 100 percent of mean in all but one of these months, it was during the summer of 1960 that Digger Creek had one of its driest years. From this it is concluded that water supply and distribution problems in the area will be difficult to predict from precipitation data prior to the irrigation season.

### Streamflow

Flow measurements were made October 15, 1963, at various locations in Digger Creek and in all diversion ditches. The flows are shown schematically on Figure 1, page 8. The flow in Digger Creek above all diversions was 15.7 cubic feet per second, and the total amount being diverted into diversion ditches was 15.2 cubic feet per second. However, the flow in Digger Creek channel below the last point of diversion was 8.8 cubic feet per second. These measurements indicate that in a year of normal precipitation the return flow from irrigated land and spring accretions more than offset transpiration, evaporation, and other channel losses. The bulk of this accretion occurred above the Boole ditch. It would be necessary to obtain flow measurements during a dry season to determine if accretions offset channel loss under all conditions.

In a normal year there appears to be sufficient flow in

Digger Creek, if properly regulated, to satisfy present water allotments through the entire irrigation season. However, serious deficiencies may occur in dry years.

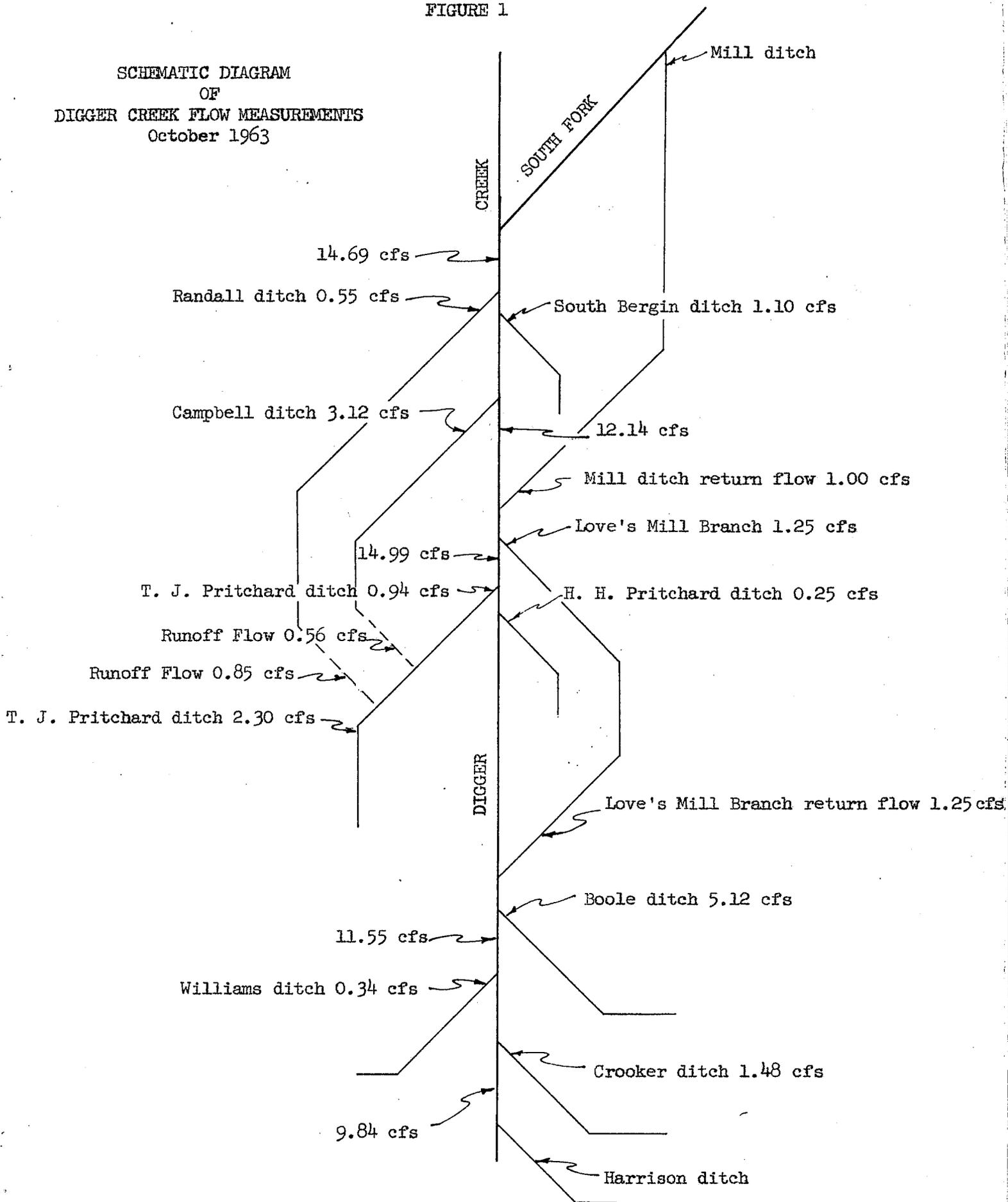
TABLE 1

## MONTHLY AND MEAN PRECIPITATION NEAR MANTON

Month	Mean Precipitation Inches	Precipitation 1959-60 Inches	1959-60 Precipitation in Percent of Mean..
October	2.48	0.31	13
November	4.06	0	0
December	3.83	1.55	40
January	4.91	5.87	119
February	6.93	7.45	107
March	4.51	4.99	110
April	3.66	3.34	91
May	2.35	2.44	104
June	1.19	0.55	46
July	0.20	0.11	55
August	0.29	0	0
September	0.70	0.19	27
Total	35.11	26.80	76

FIGURE 1

SCHMATIC DIAGRAM  
OF  
DIGGER CREEK FLOW MEASUREMENTS  
October 1963



## WATER RIGHTS

### History of Legal Proceedings

The water users of Digger Creek have taken their water disputes into the Superior Court of Tehama County on at least six occasions. The latest court action, reflects the major problems on the stream involving disputes between the upper and lower water users.

The first case, Gransbury v Edwards, No. 2213, Superior Court, Tehama County, August 12, 1899, resulted in a judgement now commonly known as the Gransbury decree. This decree established the rights of most of the lower users to use certain diversion ditches, and established the amount each ditch was entitled to divert based on 600 inches (12 cubic feet per second) of water. The decree, however, did not define the interests of the individuals on each ditch among themselves, and it did not include all of the Digger Creek water users.

50 inches = 1 cfs

The next water right litigation on Digger Creek was in the case of Wells v Pritchard, No. 3214, Superior Court, Tehama County, May 27, 1913. In that case the lower users who had their rights determined in the Gransbury decree, sued to enjoin upstream diversions of H. N. Pritchard, T. J. Pritchard, and L. A. Bergin, predecessors in interest of R. N. Pritchard and Forward Brothers Properties. The decree determined the water rights to the Pritchard property, and also the rights in two diversion ditches which are now a part of the Forward Brothers Properties diversion system.

The third court case was Harrison et al v Kaler et al, No. 3327, Superior Court, Tehama County, October 16, 1917 which modified the Gransbury decree. It awarded an interest in the original 600 inches of water in the Gransbury decree to a group of users who had been excluded in the original decree. This water was to be used in the

Harrison ditch; which is downstream from the other users. It allotted 40 inches of water from July 1 to October 1, and 70 inches of water from October 1 to July 1, to the Harrison ditch senior to the Crooker ditch which is immediately upstream from the Harrison ditch. There is no record available defining the water rights of the individual users in Crooker ditch after their allotment had been defined as junior to the amount awarded to the Harrison ditch.

The fourth court action was a proceeding filed in 1920 by the Harrison Ditch users charging contempt of the Harrison v Kaler decree by the Crooker Ditch users. The plaintiffs were sustained by the court which determined that the right of the Harrison Ditch was absolute and not correlative with respect to the Crooker Ditch.

The fifth court action was Herrick v Forward, No. 4570, Superior Court, Tehama County, February 24, 1927. The decree in that case recapitulated the rights of the lower users to the original 600 inches and the rights in the Pritchard and Bergin diversions and determined the remaining rights of Forward Brothers Properties.

The decree, in adjudicating the upper users water rights, failed to specifically explain the correlation between upper and lower users rights during periods of low flows. This was a major cause of further controversy.

In 1960 a serious shortage of water developed which gave rise to the sixth court action, a proceeding in contempt for alleged violation of the decree entered in Herrick v Forward. The lower users initiated the proceeding against the uppermost user (Forward Brothers Properties) by filing in the Superior Court of Tehama County an affidavit alleging through violation of the decree by Forward Brothers Properties and requested the court to reopen the decree in Herrick v Forward for

further evidence, adjudication and determinations. The complainants charged the respondent with diverting from Digger Creek amounts of water greatly in excess of the amount to which they were entitled, and also wilfully and wrongfully diverting water having a decreed non-consumptive use right and using it for consumptive irrigation. Mr. R. Pritchard, also an upper user, was not named in the suit as the lower users felt he was actually using less than his full allotment of water.

At the conclusion of the proceeding on May 3, 1962 the motion to reopen the 1927 decree in Herrick v Forward for further evidence, adjudications and determinations was denied. The court found respondents not guilty of contempt. An important interpretation brought out in the court's opinion was that the rights of the two upper users are absolute and not correlative to the lower users.

A second opinion of the court, dated August 1, 1962, declared any further use of water for consumptive purposes through a penstock owned by Forward Brothers Properties, which diversion was originally decreed for non-consumptive purposes only, or failure to maintain weirs in the "creek", as well as in the diversion ditches, was in violation of the decree. However, the judge also stated that this ruling was an interpretation of the 1927 decree, and that it was not the intent of the court to determine what rights, if any, had been changed through use or prescription since 1927. Such matters therefore require continuing administration and interpretation as conditions require.

As previously stated, it was the ruling of the court that weirs be installed in the creek at each diversion point, as well as in each diversion ditch. This is not a practical method to regulate and measure flows, since it would not control the amount of water diverted.

Should watermaster service be established on Digger Creek, other means of regulation and measurement would be devised by the watermaster.

#### Present Controversy

The controversy that caused the 1960 litigation is not settled. On July 15, 1963 a Digger Creek Water Users Committee served notice on Forward Brothers Properties that they must comply with the terms of the court actions. Forward Brothers Properties answered by letter dated August 23, 1963 referring to their request to the Department of Water Resources for watermaster service. The field investigation by watermaster personnel was then started to determine if the necessity for watermaster service did exist. No further action by the various parties has been initiated toward each other since the start of this investigation.

During the course of the investigation, the water users were interviewed concerning their water rights, methods of diverting their allotments, availability of water during past irrigation seasons, and problems that have caused disputes among the water users in the past years. Discussions in considerable detail were held between watermaster personnel and representatives of Forward Brothers Properties, who were the defendants in the 1960 complaint and principals on one side of the current controversy; and with Richard Wright of the Digger Creek Water Users Committee who was one of the plaintiffs and has been active on the other side of the controversy. Most of the other water rights owners were also interviewed. A public meeting was held on November 6, 1963 at the Manton Schoolhouse, to explain watermaster service and further discuss the problems.

The basic problem stems from the shortage of water experienced by the lower users, and their opinion that the upper users have been

diverting more than their decreed water right. Attempts to resolve the controversy through court action have been both expensive and ineffective. The problem is compounded by the lack of adequate measurement and control structures at points of diversion. Furthermore, there are portions of the decrees which require professional interpretation.

### Present Water Rights

The present water rights defined in the four decrees are not clearly set forth in some aspects. The place of use in most of the water rights has been defined only in a general way in the decrees which leaves some questions unanswered. Much of the land that has a water right is not now irrigated.

The Gransbury Decree in 1899 did not define the interests of the various owners of each ditch among themselves and in fact expressly reserved any such determination from the decree. The 1927 Herrick v Forward decree described the place of use for some of the water covered by the Gransbury Decree, but still left the individual rights unclear. It has been necessary for the parties to enter into agreements to define their interests within the ditches.

The latest court action in 1960 determined that the miner's inch used in the Wells v Pritchard Decree was the statute miner's inch (40 miner's inches = 1 cfs) while the other rights were defined as inches of water under a four inch pressure (50 inches = 1 cfs).

The present maximum water rights allotments from Digger Creek, exclusive of surplus rights, as tabulated during this investigation, are shown in Table 2. This table is based on the best information available and answers the above questions sufficiently to provide the data necessary for the efficient administration of a watermaster service area.

TABLE 2

## MAXIMUM WATER RIGHT ALLOTMENTS FROM DIGGER CREEK

Tract	Decree Owner	Present Owner (1964)	Diversion Name and Number	Approximate land presently irrigated (in acres)	Land apparently having decreed water right (in acres)	Water Right (in cfs)
1	A. T. Forward	Forward Bros. Prop.	Randall or Wilson No. 2			0.4
			South Bergin No. 3			1.25
			North Bergin now in Campbell No. 4			0.5
			Campbell No. 4			3.5
			Love's Mill Branch No. 5			2.0
			FORWARD BROS. TOTAL	261	586	7.65
2	W. E. Wright	Mabel Wright	T. J. Pritchard No. 6			0.5
3	E. G. Pritchard	Earl Pritchard	T. J. Pritchard No. 6			0.375
4	E. G. Pritchard	R. N. Pritchard	T. J. Pritchard No. 6			2.25
			DIVERSION NO. 6 TOTAL	118	320	3.125
4	E. G. Pritchard	R. Pritchard	H. H. Pritchard No. 7			0.45
			DIVERSION NO. 7 TOTAL	5	10	0.45
5	Annie Randolph	C. Battles	Boole Ditch No. 8			0.25
10	A. T. Forward	George Robertson	Boole Ditch No. 8			2.80

Handwritten notes and calculations on the right side of the table:

- 3.5 } 2.0
- 2.0 } 1.0
- 3.5 } 3.82 1/2

-41-

TABLE 2 (contd.)

MAXIMUM WATER RIGHT ALLOTMENTS FROM DIGGER CREEK

Tract	Decree Owner	Present Owner (1964)	Diversion Name and Number	Approximate land presently irrigated (in acres)	Land apparently having decreed water right (in acres)	Water Right (in cfs)
11	N. M. Graham	Joel B. Mayes	Boole Ditch No. 8			0.25
12	A. T. Forward	Bud R. Alexander	Boole Ditch No. 8			0.17
13	A. T. Forward	George Bigot	Boole Ditch No. 8			0.08
14	S. Graham	J. C. Wilcox	Boole Ditch No. 8			0.75
15	S. Graham	R. W. Graham, et al	Boole Ditch No. 8			0.75
16	B. F. Driver	<del>Harold B. Wright</del>	Boole Ditch No. 8			1.05
19	M. Nielson	James A. Smith	Boole Ditch No. 8			0.01
21	M. Nielson	Rayco Invest. Co.	Boole Ditch No. 8			1.34
22	E. R. Carlson	D. McLean	Boole Ditch No. 8			0.113
23	E. R. Carlson	Calark Corp.	Boole Ditch No. 8			0.112
24	E. R. Carlson	Leroy Schweder	Boole Ditch No. 8			0.112
DIVERSION NO. 8 TOTAL				93	594	7.90
6	F. Williams	Peter Van Sicklen	Williams No. 9			1.0
7	F. Williams	L. Hartman	Williams No. 9			0.015

-15-

1.34  
 .113  
 .112  
 .031  
 .030  
 -----  
 1.626

TABLE 2 (contd.)

MAXIMUM WATER RIGHT ALLOTMENTS FROM DIGGER CREEK

Tract	Decree Owner	Present Owner (1964)	Diversion Name and Number	Approximate land presently irrigated (in acres)	Land apparently having decreed water right (in acres)	Water Right (in cfs)
8	F. Williams	L. Wilson	Williams No. 9			0.0425
9	F. Williams	G. P. Isgar	Williams No. 9			0.0425
			DIVERSION NO. 9 TOTAL	37	86	1.10
25	R. Ellis	E. Crisp	Crooker No. 10			0.003
26	R. Ellis	M. Eldridge	Crooker No. 10			0.001
27	Manton School	School	Crooker No. 10			0.055
28	I. T. Crenshaw	H. Anderson	Crooker No. 10			0.224
29	M. Middleton	H. Robbins	Crooker No. 10			0.110
30	J. Arnol	R. Diehl	Crooker No. 10			0.109
31	<del>J. Arnol</del>	<del>R. Diehl</del>	<del>Crooker No. 10</del>			<del>0.108</del>
32	G. F. Boring	L. O'Shea	Crooker No. 10			0.061
33	A. Herrick	S. Elder	Crooker No. 10			0.010
34	A. Herrick - A. Norman	R. Harris	Crooker No. 10			1.152

*Diehl retained water  
right to Tract 30*

*217*

-16-

TABLE 2 (contd.)

## MAXIMUM WATER RIGHT ALLOTMENTS FROM DIGGER CREEK

Tract	Decree Owner	Present Owner (1964)	Diversion Name and Number	Approximate land presently irrigated (in acres)	Land apparently having decreed water right (in acres)	Water Right (in cfs)
22	G. Boring	D. McLean	Crooker No. 10			0.031
23	G. Boring	Calark Corp.	Crooker No. 10			0.030
35 None	J. Meyer	P.G.&E.	Crooker No. 10			<u>0.306</u>
DIVERSION NO. 10 TOTAL				100	229	2.20
-17- 17	C. Harrison	R. Rogers	Harrison No. 11			0.03
18	C. Harrison	L. Taylor	Harrison No. 11			0.47
20	A. De' La Montanya	A. Hennessy	Harrison No. 11			<u>0.30</u>
DIVERSION NO. 11 TOTAL				10	130	0.80
GRAND TOTAL				624	1995	23.225

Note: Forward Bros. Properties also has a non-consumptive use right of 7.0 cfs through Mill Ditch (Diversion No. 1).

## DIVERSION SYSTEMS

A detailed survey was made of all diversion and control structures in the proposed Digger Creek Service Area. These are described below. In general it was found that flow measurement practices presently employed are highly inadequate.

At the time of the 1927 decree in Herrick v Forward, 15 diversion conduits were being used. Since that time the Edward, Graham and Forward ditches have been abandoned and the water rights transferred to the Boole ditch. The North Bergin ditch is also no longer used and the water right transferred to the Campbell ditch. There are now 11 points of diversion being used.

Many structures originally installed to control and measure flows have deteriorated, or have been washed out during high winter flows, and have not been replaced. In general, the diversion dams now being used on Digger Creek are simple rock, brush or log obstructions which raise the water level high enough to put the desired flow into a ditch. Only two diversion dams are of rock and concrete construction, one being at the head of the Boole ditch and the other at the Harrison ditch. The Boole ditch dam has a vertical sliding gate to control flow into the ditch, the only other control of this type is on the Crooker ditch which has a small wooden structure with a sliding gate at the head of the ditch. Adjustments in the amount diverted at the remaining diversion dams are made by removing or adding available material to the dam.

To measure the amount of flow diverted, Forward Bros. Properties installed wooden rectangular weirs in four diversion ditches and in one return flow conduit. Also, flow meters were placed in two pipe lines. The Boole ditch users have attempted to construct an automatic division as a component of their diversion dam. Measurements would be

necessary to determine the efficiency of this control. The remaining five diversion ditches have no installed structures to measure diverted flows.

Diversion 1 is the Mill ditch used by Forward Bros. Properties, diverting from the South Fork of Digger Creek. The diversion is located within the SE 1/4, SE 1/4, Sec. 24, T30N, R2E, MDB&M being at a point which bears N 45° W, approximately 1150 feet from the SE corner of said Section 24. The ditch is approximately 1 mile in length and terminates at the inlet to a penstock. The penstock is in excess of 1,300 feet long with a fall of about 350 feet. The right to divert water through the Mill ditch, as decreed, was for the purpose of generating power to operate a saw mill, and to carry sawdust from the mill to collecting ponds.

In 1958, the saw mill was destroyed by fire and has never been rebuilt. Some time after the mill was destroyed, two 4-inch pipes were connected to the penstock and are now being used to supply domestic water to homes and summer cabins and have also been used in conjunction with a sprinkler system to irrigate. A flow meter has been installed in each of the 4-inch pipes. The conveyance loss in the upper portion of the ditch leading to the penstock is relatively large, but nearly all of this loss returns directly to Digger Creek. The lower portion of this ditch has very little loss.

The water right decreed through the penstock for use to carry sawdust from the mill is now being used to maintain four stocked fish ponds. Any excess water entering the penstock is returned directly to Digger Creek above the Campbell Ditch through a concrete tailrace.

Diversion 2 is the Randall ditch used by Forward Bros. Properties. The diversion is located within the NW 1/4, NE 1/4, Sec. 26, T30N, R2E, MDB&M, being at a point which bears S 84° 30' W, approximately 1600

feet from the NE corner of said Section 26.

Randall ditch diverts on the north side of Digger Creek with a rock and log dam which has no control gate. A 1-foot wooden rectangular weir combined with an excess flow spillback was installed in the ditch in 1960. The capacity of the ditch is about 0.75 cubic feet per second and is one mile in length. Any runoff or unused water from Randall ditch is picked up in the Campbell ditch and reapplied to Forward Bros. Land.

Diversion 3 is the South Bergin ditch used by Forward Bros. Properties. The diversion is located within the NW 1/4, NE 1/4, Sec. 26, T30N, R2E, MDB&M, being at a point which bears S 79° 20' W, approximately 1800 feet from the NE corner of said Section 26.

The South Bergin ditch diverts from the south side of Digger Creek by means of a rock and gravel diversion dam without a control gate. Five hundred feet from the diversion point a measuring device has been installed, it consists of a spillback to the creek and a flashboard in the ditch to form an orifice which gives a measurement in miner's inches. Capacity of the ditch is about 2 cubic feet per second, and it is about 0.6 mile long. It is used by Forward Brothers to irrigate a small apple orchard, and all runoff returns directly to Digger Creek.

Diversion 4 is the Campbell ditch which is used by Forward Bros. Properties. The diversion is located within the NW 1/4, NE 1/4 Section 26, T30N, R2E, MDB&M, being at a point which bears S 76° 30' W, approximately 2400 feet from the NE corner of said Section 26.

The Campbell ditch is the main diversion used by Forward Brothers for irrigation. It diverts from the north side of Digger Creek by means of a rock and boulder dam. There is no control gate, but a 4-foot wooden rectangular weir with a spillback to the creek has been

installed in the ditch 200 feet from the diversion point. Capacity of the ditch is about 8 cubic feet per second, and it is a mile long. This ditch irrigates Forward Brothers land lying between the county road and Digger Creek. Some runoff from this land returns to Digger Creek, but a greater amount of this runoff drains into the north Pritchard ditch or flows directly on to Wright and Pritchard land.

Diversion 5 is the Love Mill ditch or branch which is used by Forward Bros. Properties. The diversion is located within the NE 1/4, NE 1/4 Section 27, T30N, R2E, MDB&M and being at a point which bears approximately S 58° 30' W, approximately 600 feet from the NE corner of said Section 27.

The upper portion of this diversion system appears to be a ditch which carries water to the Love Mill Branch of the Creek and thence to Digger Creek. The entire system is however, generally considered to be a branch of the Creek for distribution purposes.

Love Mill branch or ditch diverts from the south side of Digger Creek with a gravel and brush diversion dam. There is no control gate or measuring device at the point of diversion. Four irrigation ditches or laterals divert from Love Mill branch or ditch and each of these diversions has a wooden rectangular weir. Surplus water in Love Mill branch or ditch returns directly to Digger Creek entering the creek about 100 feet above the Boole ditch. The capacity of the system is about 3 cubic feet per second at the upper end and is 1-3/4 miles in length from the point of diversion to its point of return to Digger Creek.

A parcel of property in Section 28, T30N, R2E, adjacent to Love Mill Branch has been subdivided and several cabins erected. The residents of these cabins are now using the water in Love Mill Branch

for their domestic needs.

Diversion 6 is the Thomas J. Pritchard ditch which is now used by R. N. Pritchard and M. Wright. The diversion is located within the NW 1/4, NE 1/4 Sec. 27, T30N, R2E, MDB&M and being at a point which bears S 74° 30' W, approximately 1700 feet from the NE corner of said Section 27.

The T. J. Pritchard ditch diverts from the north side of Digger Creek with a gravel diversion dam. There is neither a control gate or measuring device in the ditch. The capacity of the ditch is about 3.5 cubic feet per second but this amount is not normally diverted because of the inadequate diversion dam. However, runoff from Forward Brothers irrigated pasture flows into the Pritchard ditch and substantially increases the flow. The ditch is 1.2 miles in length, irrigating land that has a gentle slope towards Digger Creek and being contiguous to the creek.

Diversion 7 is the H. H. Pritchard ditch which is now used by R. N. Pritchard. The diversion is located within the NW 1/4, NW 1/4, Sec. 27, T 30N, R2E, MDB&M and being at a point which bears S 85° 45' W, approximately 4800 feet from the NE corner of said Section 27.

The H. H. Pritchard ditch diverts from the south side of Digger Creek using a rock and gravel dam without control gate or measuring device. The capacity of the ditch is about 1 cubic foot per second. The ditch is 0.3 mile long, supplying water for domestic use and a limited amount of irrigation. The irrigated land is adjacent to and slopes toward Digger Creek.

Diversion 8 is the Boole ditch used by an organized group of 15 water right holders. The diversion is located within the SE 1/4, SW 1/4, Sec. 21, T30N, R2E, MDB&M, and being at a point which bears

N 83° E, approximately 1700 feet from the SW corner of said Section 21.

The Boole ditch diverts from the south side of Digger Creek using a low concrete and log dam. A wooden, vertical sliding gate controls the flow into the diversion ditch. There is no measuring device in the ditch, but a proportionate split was incorporated as a component of the dam. About 200 feet down the ditch from the point of diversion a spillback has been installed. The spillback diverts excess flow directly back to Digger Creek, however, there is no measuring device in the ditch to determine the flow to the users. The ditch is approximately 5.7 miles long and has a maximum capacity of about 10 cubic feet per second. There is no return flow from the land irrigated by the Boole ditch.

The Boole ditch users organized the Boole Ditch Users Committee in order to provide a coordinated program of ditch maintenance. The individual users are assessed for the cost of ditch maintenance proportionate to their water rights. The water rights as now exist in the Boole ditch deviate from the decreed water rights. Water rights originally decreed to the Edward ditch, Graham ditch and Forward ditch have been transferred to the Boole ditch, and as an outgrowth of this, place of use differs from the decreed rights. These changes have been in effect for many years, and have always been acceptable to all users concerned.

Diversion 9 is the Williams ditch in which four users have defined water rights. The diversion is located within the NE 1/4, SW 1/4, Sec. 19 T30N, R2E, MDB&M and being at a point which bears N 47° E, approximately 2200 feet from the SW corner of said Section 19.

The Williams ditch diverts on the north side of Digger Creek from a rock and gravel dam without a control gate or a measuring device

at the diversion. The capacity of the ditch is about 1.5 cubic feet per second and is 1.3 miles in length.

The ditch has a water right for 1.10 cubic feet per second with 1 cubic foot per second of this being used for irrigation by one user, and the remaining 0.1 cubic foot per second being for domestic use among three users. These three domestic users have signed an agreement defining their proportionment of the 0.1 cubic foot per second.

Diversion 10 is the Crooker ditch used by ten individuals and the Manton School. The diversion is located within the NE 1/4, SW 1/4, Sec. 23, T30N, R1E, MDB&M, and being at a point which bears N 35° 15' E, approximately 2800 feet from the SW corner of said Section 23.

The Crooker ditch diverts from the south side of Digger Creek using a rock and gravel dam, and a wooden sliding gate to control the flow. There is no measuring device in the ditch. The capacity of the ditch is about 3.5 cubic feet per second, and is three miles long.

The users of the Crooker ditch are not organized, and as a result there is no coordinated effort made to clean and maintain the ditch. The 1899 Gransbury decree established the water right in Crooker ditch at 150 inches. However, the 1927 decree in Herrick v Forward awarded a portion of this water to the Harrison ditch which had not been considered in the Gransbury decree. The court decrees did not establish the individual water rights to the Crooker ditch allotment, and a recorded agreement establishing these rights cannot be found. The only evidence found which defined the individual rights was a billing, undated but having the 1899 decreed property owners names, which defined the individual water right for the purpose of proportioning the cost of maintenance that had been done on Crooker ditch. These rights were based on the 150 inches as granted in the Gransbury decree.

The Pacific Gas & Electric sold a parcel of land on the Crooker Ditch but retained the water right. They have made no use of the water but it has apparently been used by other owners of the ditch.

Diversion 11 is the Harrison ditch in which three users have water rights. The diversion is located within the SW 1/4, NW 1/4, Sec. 23, T30N, R1E, MDB&M, and being at a point which bears N 14° 15' E, approximately 3200 feet from the SW corner of said Section 23.

The Harrison ditch diverts from the south side of Digger Creek using a concrete, and rock and mortar diversion dam without a control gate or measuring device. The capacity of the ditch is about 2.0 cubic feet per second and is 1 mile in length.

The individual water rights of the Harrison ditch users have not been defined in the court decrees. However, an agreement among the three users on the ditch has established an explicit right to each user.

## CONCLUSIONS

As a result of the foregoing investigation of the request for watermaster service on Digger Creek, it is determined that (1) water supply of Digger Creek is insufficient to fulfill decreed water rights, in years of below normal runoff, (2) certain diversion practices described in the decrees are in some respects not practical, (3) many of the existing water measurement and control structures have deteriorated or are otherwise inadequate, and (4) proper regulation of certain diversions requires knowledge of the available water supply, as well as of the amounts being diverted at other points. It was further found that attempts by the water right owners to resolve these problems through court action have been ineffective.

Creation of a state watermaster service area on Digger Creek appears to be the only feasible solution to the problem. Once assigned to the area, a watermaster would make practical interpretations of the court decrees, to assure equitable distribution of water. He would periodically determine available water supply, compute water rights, and notify water right owners of their entitlements. He would design and supervise construction of the necessary control and measurement structures. He would check and regulate flows being diverted at critical points, and resolve any disputes between users.

It is concluded that watermaster service for the proposed Digger Creek Service Area is justified and necessary, and that the service should be provided no later than July 1, 1964. The legal requirements for the creation of watermaster service area and for appointment of a watermaster are satisfied.

Digger Rule  
oversized

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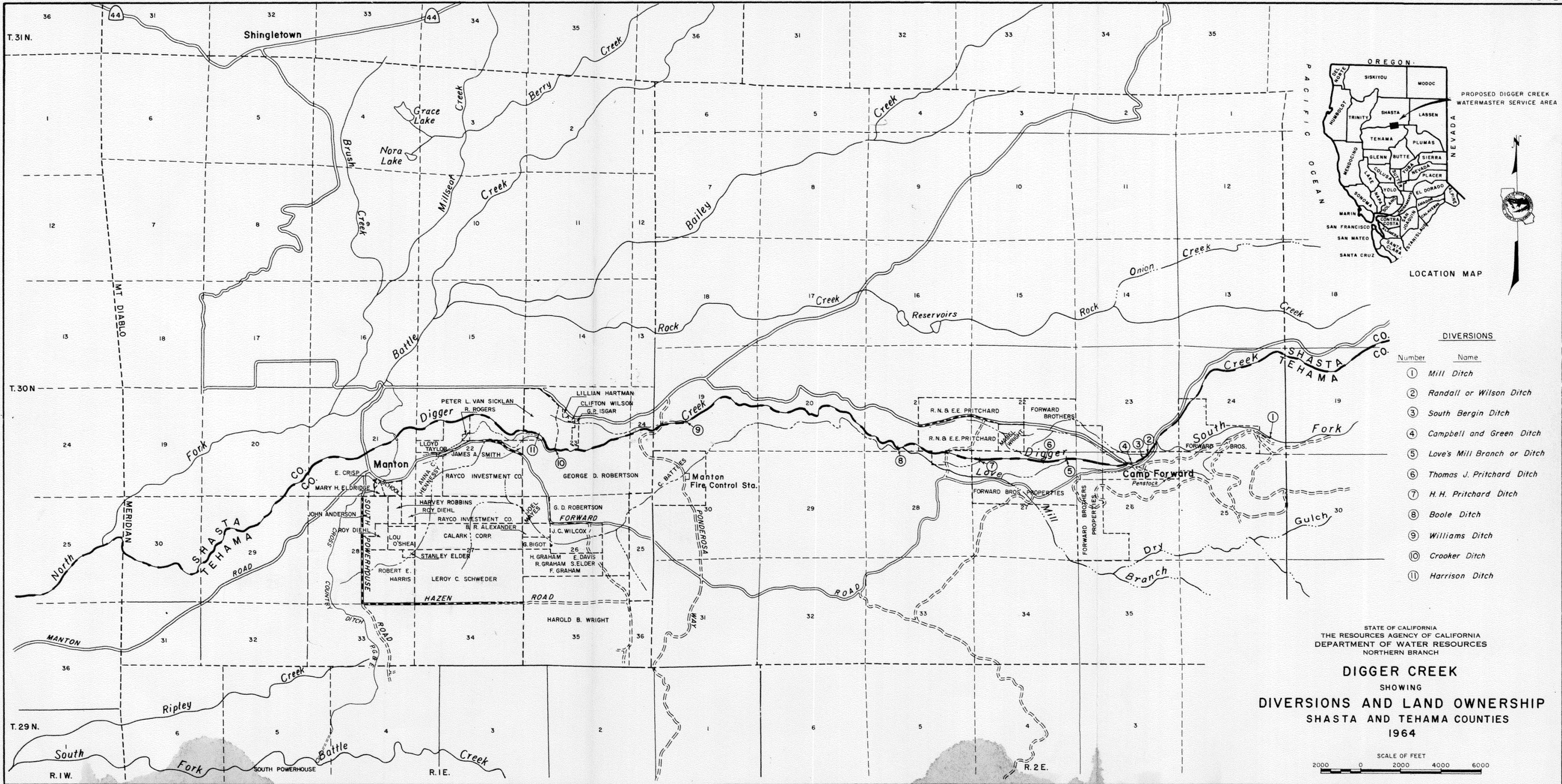
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PROPOSED DIGGER CREEK WATERMASTER SERVICE AREA

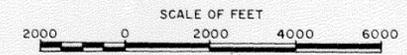
LOCATION MAP

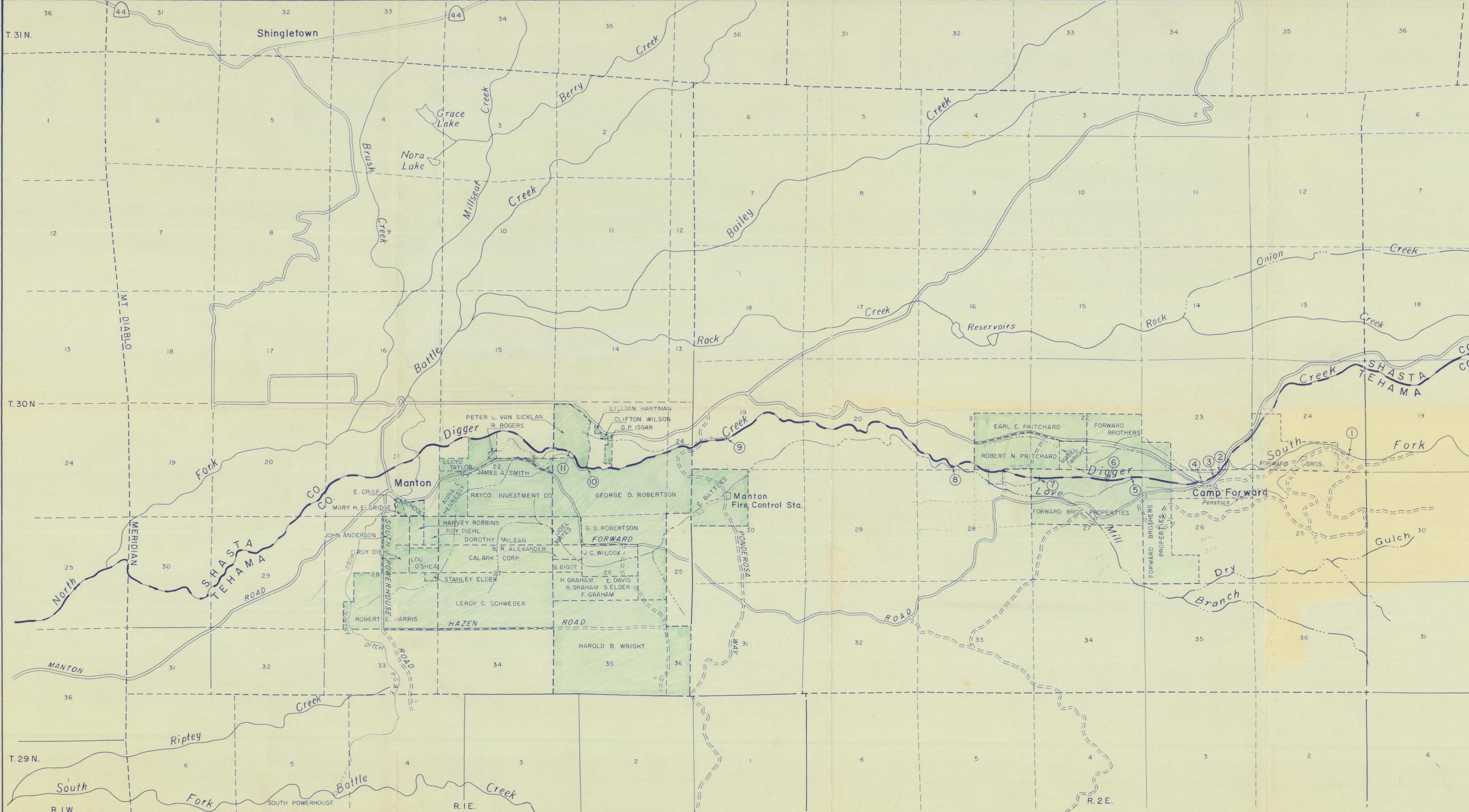
DIVERSIONS

Number	Name
①	Mill Ditch
②	Randall or Wilson Ditch
③	South Bergin Ditch
④	Campbell and Green Ditch
⑤	Love's Mill Branch or Ditch
⑥	Thomas J. Pritchard Ditch
⑦	H. H. Pritchard Ditch
⑧	Boole Ditch
⑨	Williams Ditch
⑩	Croaker Ditch
⑪	Harrison Ditch

STATE OF CALIFORNIA  
 THE RESOURCES AGENCY OF CALIFORNIA  
 DEPARTMENT OF WATER RESOURCES  
 NORTHERN BRANCH

**DIGGER CREEK**  
 SHOWING  
**DIVERSIONS AND LAND OWNERSHIP**  
 SHASTA AND TEHAMA COUNTIES  
 1964





**DIVERSIONS**

Number	Name
①	Mill Ditch
②	Randall or Wilson Ditch
③	South Bergin Ditch
④	Campbell and Green Ditch
⑤	Love's Mill Branch or Ditch
⑥	Thomas J. Pritchard Ditch
⑦	H. H. Pritchard Ditch
⑧	Boole Ditch
⑨	Williams Ditch
⑩	Crooker Ditch
⑪	Harrison Ditch

