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WESTERN-SAN BERNARDINO WATERMASTER

FOR

WESTERN MUNICIPAL WATER DISTRICT, et al

vs.

EAST SAN BERNARDINO COUNTY WATER DISTRICT, et al

CASE NO. 78426 - COUNTY OF RIVERSIDE

ANNUAL REPORT

OF THE

WESTERN-SAN BERNARDINO WATERMASTER

FOR

CALENDAR YEAR 1972

SEPTEMBER 1, 1973

WESTERN-SAN BERNARDINO WATERMASTER

FOR
WESTERN MUNICIPAL WATER DISTRICT, ET AL
VS.
EAST SAN BERNARDINO COUNTY WATER DISTRICT, ET AL
CASE NO. 78426 - COUNTY OF RIVERSIDE

WATERMASTER
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ALBERT A. WEBB

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TO: Clerk of Superior Court of Riverside County
and All Parties

RE: Watermaster Report for Calendar Year 1972

Gentlemen:

We have the honor of submitting the Annual Report of the Western-San Bernardino Watermaster for the calendar year 1972.

The provisions of Paragraph III and Paragraphs V through XII of the Judgment in Case No. 78426, entered April 17, 1969, became effective from and after January 1, 1971. The Judgment requires that the Watermaster report to the Court and to each Party in writing not more than seven months after the end of each year, or within such other time as the Court may fix, on each determination made by said Watermaster pursuant to the Judgment and such other items as the Parties may mutually request or the Watermaster may deem to be appropriate. The Watermaster required additional time in order to complete this Annual Report and requested a 30-day extension of time in which to file the Annual Report, which was granted by the Court.

Accordingly, this report is submitted herewith under date of September 1, 1973, and summarizes the findings of the Watermaster as required by the Judgment, including the correct figures for Paragraph X of the Judgment, which relates to export from the San Bernardino Valley for use in areas not within Western nor tributary to Riverside Narrows, which could not be completed in time for inclusion in the Report for the Calendar Year 1971, which was filed on September 1, 1972.

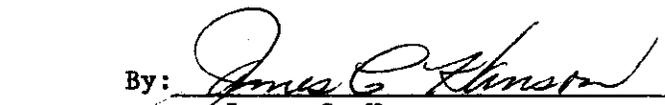
The work required by Paragraph X of the Judgment was completed during February 1973 as Volume 7 of the Watermaster Report for the year of 1971 and filed with the Court by letter of February 20, 1973. The verified average annual extractions for the 5-year Base Period ending in 1963, as shown in Volume 7, are included in this report, together with the current annual extractions verified for the year of 1971.

We, and each of us, hereby certify that this is a true and correct Report of the Watermaster work performed by us and under our supervision during 1972, pursuant to the requirements of the Judgment.

Respectfully submitted,

WESTERN-SAN BERNARDINO WATERMASTER

By:


James C. Hanson


Albert A. Webb

TABLE OF CONTENTS

Letter of Transmittal

CHAPTER I-INTRODUCTION

Scope of Report 1
History of Litigation 2
Summary of Judgment No. 78426 4

CHAPTER II-WATERMASTER ACTIVITIES

Ground Water Extractions 8
Distribution of Extractions 8
Ground Water Level Measurements 9
Stream Flow and Water Quality Measurements 10
Field Inspections 11

**CHAPTER III-EXTRACTIONS FROM THE SAN BERNARDINO
BASIN AREA 13**

**CHAPTER IV-NATURAL SAFE YIELD OF THE SAN BERNARDINO
BASIN AREA AND ADJUSTED BASE RIGHTS OF PLAINTIFF
EXPORTERS 16**

**CHAPTER V-EXTRACTIONS FROM COLTON BASIN AREA AND
RIVERSIDE BASIN AREA IN SAN BERNARDINO COUNTY**

**For Use Outside San Bernardino Valley Municipal Water
District 17**
For Use Within San Bernardino Valley Municipal Water District 17
Minimum Water Surface Elevations 20

**CHAPTER VI-EXTRACTIONS FROM THE PORTION OF
RIVERSIDE BASIN AREA IN RIVERSIDE COUNTY WHICH IS
TRIBUTARY TO RIVERSIDE NARROWS**

Extractions 21
Return Flows 22

**CHAPTER VII-EXTRACTIONS FROM THE SAN BERNARDINO
BASIN AREA, COLTON BASIN AREA AND THE RIVERSIDE
BASIN AREA FOR USE WITHIN WESTERN ON LANDS THAT ARE
NOT TRIBUTARY TO THE RIVERSIDE NARROWS 24**

**CHAPTER VIII-VERIFICATION OF EXTRACTIONS FROM THE
SAN BERNARDINO BASIN AREA AND COLTON BASIN AREA
WITHIN THE SAN BERNARDINO VALLEY MUNICIPAL WATER
DISTRICT FOR USE ON LANDS NOT WITHIN WESTERN NOR
TRIBUTARY TO THE RIVERSIDE NARROWS**

Deliveries to Chino Basin 26

Deliveries to Areas Other Than Chino Basin 28

**CHAPTER IX-ANNUAL ACCOUNTING OF EXTRACTIONS,
DELIVERIES, AND REPLENISHMENT OBLIGATIONS 29**

LIST OF TABLES

No.	Title	Page
1	Costs to the Parties for USGS Surface Water Measurements Used by Western-San Bernardino Watermaster - July 1, 1972 to June 30, 1973	12
2	Verified Extractions from the San Bernardino Basin Area for Use by Plaintiffs Classified According to Service Area	14
3	Verified Extractions from the San Bernardino Basin Area by Others Than Plaintiffs Excluding Those Extractions Which are Less than 25 Acre-Feet Per Year	15
4	Verified Extractions from Colton Basin Area by San Bernardino and Riverside County Entities for Use Within Each County	18
5	Verified Extractions from Riverside Basin Area in San Bernardino County by San Bernardino and Riverside County Entities for Use Within Each County	19
6	Verified Extractions from the Riverside Basin Area in Riverside County for Use in Riverside County	21
7	Irrigated Acreage in Riverside Basin Area in Riverside County Presently Tributary to Riverside Narrows Which Upon Conversion to Urban Uses Requiring Sewage Disposal Through the Riverside Treatment Plant Will be Discharged to the River Below Riverside Narrows for Calendar Year 1973	23
8	Verified Extractions From the San Bernardino Basin Area, Colton Basin Area and the Riverside Basin Area for Use Within Western on Lands that are not Tributary to the Riverside Narrows	25
9	Verified Average Annual Extractions From the San Bernardino Basin Area and Colton Basin Area Within the San Bernardino Valley Municipal Water District for Use on Lands not Within Western nor Tributary to the Riverside Narrows for the Five-Calendar Years Ending with 1963	28
10	Annual Accounting of Extractions from the San Bernardino Basin Area and the Deliveries to Each Service Area by the City of Riverside (Including Those Rights Acquired as Successor to the Riverside Water Company and The Gage Canal Company)	31

**LIST OF TABLES
(Continued)**

No.	Title	Page
11	Annual Accounting of Extractions from the San Bernardino Basin Area and the Deliveries to Each Service Area by Riverside Highland Water Company	32
12	Annual Accounting of Extractions from the San Bernardino Basin Area and the Deliveries to Each Service Area by Agua Mansa Water Company and Meeks & Daley Water Company	33
13	Annual Accounting of Extractions from the San Bernardino Basin Area and the Deliveries to Each Service Area by The Regents of University of California	34
14	Annual Accounting for San Bernardino Valley Municipal Water District Extractions from the San Bernardino Basin Area for Calendar Year 1971	35
15	Annual Accounting for Western Municipal Water District - Extractions from Colton Basin Area for Use Outside San Bernardino Valley for Calendar Year 1971	36
16	Annual Accounting for Western Municipal Water District - Extractions from Riverside Basin Area in San Bernardino County for Use Outside San Bernardino Valley for Calendar Year 1971	37
17	Annual Accounting for Western Municipal Water District - Extractions from Riverside Basin Area in Riverside County for Calendar Year 1971	38
18	Annual Accounting for Western Municipal Water District - Extractions from San Bernardino Basin Area, Colton Basin Area, and Riverside Basin Area for use Within Western on Lands that are not Tributary to Riverside Narrows for Calendar Year 1971	39
19	Annual Accounting for San Bernardino Valley Municipal Water District - Extractions from San Bernardino Basin Area and Colton Basin Area for use on Lands Not Within Western nor Tributary to Riverside Narrows for Calendar Year 1971	40
20	Summary of Annual Accounting San Bernardino Valley Municipal Water District & Western Municipal Water District Accumulated Credits and Obligations for Calendar Year 1971	41

FIGURES

No.	Title	Following Page
1	Ground Water Surface Elevation Johnson No. 1 Well	20
2	Ground Water Surface Elevation Flume No. 2 Well	20
3	Ground Water Surface Elevation Flume No. 5 Well	20

CHAPTER I
INTRODUCTION

CHAPTER I INTRODUCTION

Provisions of the physical solution set forth in the Judgment in Case No. 78426, Western Municipal Water District of Riverside County, et al., vs. East San Bernardino County Water District, et al., entered April 17, 1969, in the Superior Court of the State of California in and for the County of Riverside, established the entitlements and obligations of the two major water districts overlying the San Bernardino, Riverside, and Colton ground water basins, namely San Bernardino Valley Municipal Water District (SBVMWD) and Western Municipal Water District of Riverside County (WMWD).

The Court appointed a Watermaster, composed of two persons, to administer and enforce the provisions of the Judgment and to report annually to the Court and the parties.

The provisions of the Judgment became effective January 1, 1971, however, progress reports were filed with the Court for the calendar years 1969, 1970, and 1971 reporting on the progress of verifications and initial determinations required by the Judgment. The recordation filings obtained from the State Water Resources Control Board and required for determination of annual extractions from the various basins are not available to the Watermaster until seven or eight months after the end of the calendar year for which the filings are made. This report for the calendar year of 1972 will include a description and summary of the verification work completed during 1972 and will also include the annual accounting of extractions from the San Bernardino, Colton, and Riverside Basin areas and the distribution of such extractions to the various service areas for the calendar year 1971. The scope of this report for 1972 and a history of the litigation leading to the physical solution settling the case are set forth in some detail in succeeding paragraphs.

Scope of Report

Paragraph XIII(e) of the Judgment requires the Watermaster to report to the Court and each Party not more than seven months after the end of each year.

The Annual Reports of the Western-San Bernardino Watermaster for the calendar years 1969 thru 1971 reported on the verifications and initial determinations required

by the Judgment which had been completed including the safe yield of the San Bernardino Basin Area and the determination of the Adjusted Base Rights of the Plaintiffs. This report presents the activities of the Watermaster for the calendar year 1972 together with the annual accounting of extractions and deliveries for the calendar year 1971.

History of Litigation

Before the turn of the century, the various water service organizations diverting surface water from the Santa Ana River and pumping from the underground water basins supplied by the underflow of the Santa Ana River and its tributaries have from time to time engaged in litigation over water rights within the San Bernardino, Riverside, and Orange County areas.

On October 18, 1963, the Orange County Water District (OCWD) filed suit against the City of Chino and others, seeking an adjudication of water rights against more than 2,500 water users in the Santa Ana River Watershed tributary to Prado Dam. Included among the defendants were the Chino Basin Municipal Water District (CBMWD), Western Municipal Water District of Riverside County (WMWD), and San Bernardino Valley Municipal Water District (SBVMWD). Thirteen cross complaints were filed in 1968, which extended the adjudication to more than 1,500 water users in the area downstream from Prado Dam, which included OCWD. Thus, some 4,000 parties were involved in the suit, including the three upper districts and OCWD.

With a case of this magnitude, it became obvious that every effort should be made to arrive at an equitable settlement and a physical solution in order to obviate the enormous expense and unwieldy litigation which would be involved if the case were brought to trial.

Attorneys and engineers representing the four major districts and a large number of the defendants worked diligently in order to effect a settlement and some type of physical solution which would prove acceptable to all parties.

As a result, in May of 1968, an outline of a proposal for settlement of the case was prepared and a committee, composed of attorneys and engineers for the parties, commenced preparation of the settlement documents.

In June, 1968, the Court held a hearing on the motions which it had received requesting a preliminary injunction and an order of reference. The plaintiff OCWD,

however, was concerned with the necessity of bringing the case to trial within the statutory period, and therefore, on July 15, 1968, submitted a motion to set the complaint in the case for trial. On October 15, 1968, the trial was commenced and adjourned after a half day of testimony on behalf of the plaintiff.

Shortly thereafter, the parties filed settlement documents with the Court, including a stipulation for Judgment, and on April 17, 1969, the Court entered the stipulated Judgment, thus terminating the many years of controversy over water rights along the Santa Ana River involving the issues and parties included in the case of Orange County Water District vs. City of Chino, et al.

During the settlement negotiations, it became apparent that the San Bernardino Valley entities would participate only in a part of the Orange County settlement, in the belief that they had no responsibility for the waters of the Santa Ana River downstream from the point of rising water at Riverside Narrows. Therefore, the settlement of the OCWD action established an obligation of SBVMWD for the delivery of 15,250 acre-feet of Base Flow annually at the Riverside Narrows, subject to adjustment for quality.

As a result of the Orange County settlement, it became apparent that a second settlement would be necessary between the Riverside and San Bernardino entities who diverted water from the Santa Ana River surface and ground water sources supplied by the Santa Ana River and tributaries above the Riverside Narrows.

For some time, increasing withdrawals from ground water resources above Bunker Hill Dike (San Jacinto Fault), which supplied in large part the water requirements of San Bernardino and Redlands as well as the Riverside exporters, had been the cause of concern to the exporters in Riverside County. As a result, on March 1, 1963, a suit was filed by WMWD and others, seeking a general adjudication of water rights within the San Bernardino Basin Area. This suit preceded the filing of the Orange County suit, and it was decided that this suit could well be used as a vehicle for a physical settlement between Riverside and San Bernardino interests.

Following extensive negotiations between Riverside and San Bernardino interests, a physical settlement was completed and documents delineating the settlement were entered in the Superior Court of the State of California in and for the County of Riverside on April 17, 1969, being Judgment No. 78426.

Summary of Judgment No. 78426

The physical solution as agreed upon and as set forth in the Judgment states that all instructions and orders of the Court are to be administered and enforced by a Watermaster consisting of a committee of two persons, one of whom shall be nominated by SBVMWD and the other by WMWD and appointed by the Court.

The Judgment directed the Watermaster to make certain initial determinations and to verify the amounts of water diverted and pumped from streams and ground water basins embraced by the Judgment where such amounts had been assumed for purposes of the Judgment. Upon completion of the verifications and initial determinations compliance with the Judgment requires an annual accounting of the ground and surface water production within the various basins in order that the Watermaster may properly report to the Court the comparisons of the year-by-year operations with the verified entitlements and an accounting as to the replenishment obligations or credits indicated by such comparison. The items verified or determined initially and to be reported on annually are as follows:

<u>Watermaster Determination Required by Judgment</u>	<u>Verified for 5 Calendar Years Ending with 1963</u>	<u>To be Determined Annually from And after 1971</u>
1. Total actual average annual extractions from the San Bernardino Basin Area by entities other than plaintiffs for use within San Bernardino County.	X	X
2. The natural safe yield of the San Bernardino Basin Area based upon the cultural conditions equivalent to those existing during the five-calendar year period ending with 1963.	1	1

<u>Watermaster Determination Required by Judgment</u>	<u>Verified for 5 Calendar Years Ending with 1963</u>	<u>To be Determined Annually from And after 1971</u>
3. The annual "adjusted right" of each Exporter (Plaintiff) to extract water from the San Bernardino Basin Area based upon the percentage of the natural safe yield determined by the methods used in Table B-2 of the Judgment.	X	
4. The annual production by plaintiff's for comparison with adjusted right determined in item 3 next preceding.		X
5. Annual discharge from the City of San Bernardino Water Quality Control Plant to the river as to quantity and quality.	2	X
6. Average annual extractions from the Colton Basin Area for use outside San Bernardino Valley.	X	X
7. Average annual extractions from the Riverside Basin Area within San Bernardino County for use outside San Bernardino Valley.	X	X
8. The average static water levels within the Colton Basin and Riverside Basin within San Bernardino County as determined by the three wells listed in Judgment.	3	X

	<u>Watermaster Determination Required by Judgment</u>	<u>Verified for 5 Calendar Years Ending with 1963</u>	<u>To be Determined Annually from And after 1971</u>
9.	The average annual extractions from that portion of the Riverside Basin Area in Riverside County which are tributary to the Riverside Narrows for use in Riverside County.	X	X
10.	Annual amounts of water extracted for use within Western from the San Bernardino Basin and the area downstream therefrom to the Riverside Narrows which have been exported for use outside the area tributary to the Riverside Narrows.	X	X
11.	Annual amount of water extracted for use within San Bernardino County from the San Bernardino Basin Area and Colton Basin Area for use on lands which are not tributary to the Riverside Narrows.	X	X
12.	Reduction in return flow now contributing to base flows at Riverside Narrows which results from conversion of agriculture using water within Western to domestic or other uses connected to sewage or waste disposal system, the effluent from which is not tributary to the rising water at Riverside Narrows.	4	X

¹ Determined initially by supplemental order of the court to be 232,100 acre-feet per annum. Such amount is subject to the continuing jurisdiction of the court.

² Assumed for purposes of Judgment to be 16,000 acre-feet annually, verification not required.

³ Established at 822.04 feet above sea level, based on fall season of 1963.

⁴ Average for 5 years ending with 1963 established by Judgment to be 3,916 acres, verification not required.

With the exception of Item 11 the foregoing initial determinations and verifications required by Judgment have been completed and were reported in the Annual Report of the Western-San Bernardino Watermaster for calendar year 1971. The verification described in Item 11 has been completed and is reported herein.

CHAPTER II
WATERMASTER ACTIVITIES

CHAPTER II WATERMASTER ACTIVITIES

The Watermaster activities have included principally the collection, tabulation, and analysis of data, the maintenance of records, and the preparation of the annual report which presents the determinations and findings of the Watermaster as required by the Judgment.

Ground Water Extractions

The most important data required for implementing the provisions of the Judgment are the annual tabulations of the ground water extractions and surface water diversions made within the San Bernardino Basin Area, Colton Basin Area, and Riverside Basin Area. These extractions and diversions were initially determined and verified for the 1959-63 Base Period and were assembled and summarized in the Watermaster Report on Verification of Extractions, Volume 1 consisting of three parts, Volumes 2, 3, and 4 for the San Bernardino Basin Area, Colton Basin Area, Riverside Basin Area in San Bernardino County, and Riverside Basin Area in Riverside County, respectively. A program has been established for obtaining and tabulating annual notices of groundwater extractions and surface diversions filed with the State Water Resources Control Board. These data are verified by the Watermaster and provide the basis for the annual accounting of extractions as required by the Judgment. Such extractions have been determined for the calendar year 1971 and are summarized herein. Listings of the verified extraction by individual owner for the calendar year 1971 are assembled in Report of Watermaster, Volumes 1-1971, 1A-1971, 2-1971, 3-1971, and 4-1971.

Distribution of Extractions

In addition to the annual accounting of the extractions from each Basin, the administration of the Judgment provisions also requires a determination of the distribution of such extractions as to service area.

The distribution of verified extractions from the Colton and Riverside Basin Areas and the distribution of the plaintiffs' extraction from the San Bernardino Basin Area were determined initially for the 1959-63 Base Period, and were reported in Report

of Watermaster, Volume 5, entitled *Distribution of Extractions*. Such distribution has been determined for the calendar year 1971 and is summarized herein. Detailed work sheets are assembled in Report of Watermaster, Volume 5 - 1971.

The Watermaster is also required to determine the amounts of water extracted from the various Basin Areas and delivered to areas not tributary to Riverside Narrows. Such amounts fall into two classifications, described as follows:

- 1) Extractions for use within Western from the San Bernardino Basin Area, Colton Basin Area, and Riverside Basin Area for use on lands not tributary to Riverside Narrows.
- 2) Extractions from the San Bernardino Basin Area and Colton Basin Area within the San Bernardino Valley Municipal Water District for use on land not within Western nor tributary to Riverside Narrows.

The amounts of water extracted and delivered under Classification No. 1 were determined initially for the 1959-63 Base Period and were reported in the Report of the Watermaster in Volume 6. Such amounts were also determined for the years 1964 through 1970 and were included in Volume 6 for information and planning purposes. The amounts determined for the calendar year 1971 are summarized herein. Detailed work sheets are assembled in the Report of the Watermaster in Volume 6 - 1971.

The amounts of water extracted and delivered under Classification No. 2 for the 1959-63 Base Period were not determined initially in time for inclusion within the Annual Report of the Watermaster for the calendar year 1971, for reasons described in detail in Chapter VIII of said report.

The determination of the water extracted and delivered under Classification No. 2 has been completed for the 1959-63 Base Period and the additional years 1970 and 1971 and was published in the Report of the Watermaster, Volume 7, dated February, 1973, which was filed with the Court by letter dated February 20, 1973. The contents of Volume 7, as filed with the Court in February, 1973, will be summarized and included herein.

Ground Water Level Measurements

Ground water surface elevation data for the Colton Basin Area and the Riverside Basin Area within San Bernardino County, required by the Judgment, are furnished by the City of Riverside on a monthly basis. Pursuant to a request by the Watermaster, the

three key wells listed in the Judgment are also being measured by the USGS under a cooperative agreement with San Bernardino Valley Municipal Water District. These measurements will supplement the data received from the City of Riverside.

Stream Flow and Water Quality Measurements

The program of stream flow measurements conducted by the United States Geological Survey (USGS) has proven indispensable, and the regular program of this agency has been augmented by the establishment of additional surface water gaging stations and water quality monitors on a cooperative basis. These cooperative programs have been entered into for the extension of the USGS stream gaging activities and include the installation of six new gaging stations in the San Bernardino Basin Area for the measurement of surface diversions and stream flow.

For many years, the State of California has been a major cooperating agency with the USGS in the maintenance of surface water gaging stations. In recent years, the State has found it necessary to withdraw its financial support for certain stations, and the Western-San Bernardino Watermaster through its supporting Districts has substituted as the cooperating organization with the USGS in financing the continuation of existing stations including discharge of East Twin Creek near Arrowhead Springs and the discharge of Devil Canyon Creek near San Bernardino.

In the future as the State of California finds it necessary to withdraw financial support, it may be expected that the Western-San Bernardino Watermaster will continue to expand its cooperative program with the USGS.

The Western-San Bernardino Watermaster participates with the Santa Ana River Watermaster in part of the expense of the cooperative program with the USGS on surface water gages and water quality monitors in various locations. These expenses have been previously presented in a report filed by the Santa Ana River Watermaster. The costs incurred for stream flow data collected and analyzed by the USGS on behalf of the Western-San Bernardino Watermaster are set forth in Table No. 1.

In addition to the foregoing, the Watermaster purchased a flow meter for installation on Fontana Union Water Co. Well No. 27 which delivers water into the Fontana Power House forebay and into the Fontana Union Breed line.

Field Inspections

During the verification of the 1971 extractions from the Colton Basin Area, Riverside Basin Area in San Bernardino County, and Riverside Basin Area within Riverside County, many of the pumping facilities installed for extractions of ground water and surface diversions were visited by the Watermaster or his representatives. Contact was made with many of the smaller extractors to review their methods of computing production for annual reports filed with the State Water Resources Control Board.

During the original verification program in the San Bernardino Basin Area, it was discovered that many ground water extractors and several divertors of surface water did not file their extractions and diversions with the State Water Resources Control Board. This same condition was found to exist in many locations during the current year, which necessitated inspection trips and contacts with various owners by the Watermasters or their representatives.

Numerous trips were also made with representatives of the USGS in determining the location of additional stream gaging stations requested by the Western-San Bernardino Watermaster.

TABLE NO. 1

COSTS TO THE PARTIES FOR USGS
SURFACE WATER MEASUREMENTS USED BY
WESTERN-SAN BERNARDINO WATERMASTER

July 1, 1972 to June 30, 1973

<u>Meeks & Daley Water Co. Near Colton</u>	\$ 840
<u>Plunge Creek Near East Highland</u>	1,950
<u>Santa Ana River Diversion Near Mentone</u>	735
<u>Waterman Canyon at Arrowhead Springs</u>	945
<u>Devil Canyon Creek Near San Bernardino</u>	1,050
<u>East Twin Creek Near Arrowhead Springs</u>	1,050
<u>Greenspot Weir</u>	270
<u>Crafton Canal</u>	270
<u>Lytle Creek at Fontana Union Head Gates</u>	
Weir No. 1 - Discharge Upper Power House	100
Weir No. 2 - Infiltration Line	270
Weir No. 3 - Headgate Diversion	270
Weir No. 4 - Breed Line Diversion	270
Parshall Flume - Return to Creek	270
20 Ft. Weir - Return to Creek	270
<u>Southern California Edison Lower Power House on Lytle Creek</u>	
20 Ft. Weir - Discharge Lower Power House	270
Parshall Flume - Return to Creek from Afterbay	750
<u>Total for Parties and Watermaster</u>	<u>\$ 9,580</u>
United States Geological Survey	<u>9,580</u>
TOTAL	\$19,160

CHAPTER III
EXTRACTIONS FROM THE
SAN BERNARDINO BASIN AREA

CHAPTER III
EXTRACTIONS FROM THE
SAN BERNARDINO BASIN AREA

The extractions from the San Bernardino Basin Area have been classified in the Judgment as 1) those extractions and diversions for use by the Plaintiffs, and 2) those extractions and diversions for use by other than Plaintiffs.

The total verified extractions from the San Bernardino Basin Area for the calendar year 1971 by Plaintiffs are shown on Table No. 2. The verified extractions by other than Plaintiffs are shown on Table No. 3. For reference, the adjusted base right of the Plaintiffs and Non-Plaintiffs are also shown on Tables No. 2 and No. 3.

Paragraph VII of the Judgment entitled *Water Discharged Across the Bunker Hill Dike* recites as follows:

San Bernardino Valley shall keep in force an agreement with the City of San Bernardino that the present annual quantity of municipal sewage effluent discharged across Bunker Hill Dike, assumed for all purposes herein to be 16,000 acre-feet annually, shall be committed to the discharge of the downstream obligations imposed on San Bernardino Valley under this Judgment or under the Orange County Judgment, and that such effluent shall comply with the requirements of the Santa Ana River Basin Regional Water Quality Control Board in effect December 31, 1968.

The Judgment does not charge the Watermaster with the verification of the 16,000 acre-feet amount, and the enforcement of the quality requirements are the responsibility of the Santa Ana River Basin Regional Water Quality Control Board.

The annual discharges of the City of San Bernardino Water Quality Control Plants to the Santa Ana River and Warm Creek immediately upstream from the Bunker Hill Dike, have been determined by the Watermaster for the calendar years 1970 and 1971 as follows:

	Acre-Feet	
	1970	1971
PLANT NO. 1 (Warm Creek) -	4,377	5,705
PLANT NO. 2 (Santa Ana River) -	9,865	8,925
TOTAL	14,242	14,630

TABLE NO. 2

VERIFIED EXTRACTATIONS FROM THE SAN BERNARDINO BASIN AREA
FOR USE BY PLAINTIFFS CLASSIFIED ACCORDING TO SERVICE AREA
(All Values in Acre-Feet)

	PLAINTIFF						Total
	City of Riverside (Including those rights acquired as successor to the Riverside Water Company and the Gage Canal Company)	Riverside Highland Water Company	Agua Mansa Water Company and Meeks & Daley Water Co.	The Regents of the University of California			
Total Extractions in San Bernardino Basin Area	Adjusted Base Right ¹ / ₁ 1971 Extractions	52,199 53,882	4,294 4,012	7,833 2,902	536 219		64,862 61,015
Delivery to San Bernardino Basin Area Basin Area	Adjusted Base Right ¹ / ₁ 1971 Extractions	1,427 697	0 0	0 0	0 0		1,427 697
Delivery to Colton Basin Area & Riverside Basin Area in San Bernardino County	Adjusted Base Right ¹ / ₁ 1971 Extractions	1,230 669	2,449 2,388	318 383	0 0		3,997 3,440
Delivery to Area Outside San Bernardino Valley	Adjusted Base Right ¹ / ₁ 1971 Extractions	49,542 52,516	1,845 1,624	7,515 2,519	536 219		59,438 56,878

¹ Adjusted Base Right became effective on January 1, 1972; Base Right for Calendar Year 1971 is as shown in Table B-1 of the Judgment.

TABLE NO. 3

VERIFIED EXTRACTIONS FROM THE SAN BERNARDINO
 BASIN AREA BY OTHER THAN PLAINTIFFS EXCLUDING
 THOSE EXTRACTIONS WHICH ARE LESS THAN 25 ACRE FEET PER YEAR
 (All Values in Acre-Feet)

VERIFIED EXTRACTIONS				
Calendar Year	By Owners Who Have Filed With SWRCB	By Owners Who Have Not Filed With SWRCB	Total	Adjusted Base Right
1971	157,021	8,275	165,296	171,342
1972				167,238
1973				
1974				
1975				
Total for Years 1971-75				
1976				
1977				
1978				
1979				
1980				
Total for Years 1976-80				

Adjusted Base Right not effective until January 1, 1972; therefore, 1971 Base Right is as verified for five-year Base Period 1959-63.

CHAPTER IV

**NATURAL SAFE YIELD OF THE
SAN BERNARDINO BASIN AREA AND ADJUSTED BASE
RIGHTS OF PLAINTIFF EXPORTERS**

CHAPTER IV
NATURAL SAFE YIELD OF THE
SAN BERNARDINO BASIN AREA
AND ADJUSTED BASE RIGHTS
OF PLAINTIFF EXPORTERS

The Watermaster has determined the natural safe yield of the water supply accruing to the San Bernardino Basin Area at 232,100 acre-feet per annum and the adjusted base rights of plaintiff exporters. Such determination of safe yield and adjusted base rights of plaintiff exporters was set forth in detail in Report of Watermaster, Volume 9, entitled *Determination of Natural Safe Yield of the San Bernardino Basin Area and Adjusted Base Rights of Plaintiff Exporters*.

The Judgment provides for continuing jurisdiction of the Court in the following matters:

- 1) The hydrologic condition of any one or all of the separate basins described in this Judgment in order to determine from time to time the safe yield of the San Bernardino Basin Area, and
- 2) The adjusted rights of the Plaintiffs as required to comply with the provisions hereof with respect to changes in the natural safe yield of the San Bernardino Basin Area. If such changes occur, the Court shall adjudge that the adjusted rights and replenishment obligations of each party shall be changed proportionately to the respective base rights.

In order to provide a basis for future determination of safe yield, the Watermaster maintains a continuing program of collecting and analyzing current hydrologic data pertinent to the annual water supply to, and utilization of water from, the San Bernardino Basin Area.

Such data will be summarized and reported from time to time in subsequent supplemental reports of the Watermaster.

CHAPTER V

**EXTRACTIONS FROM COLTON BASIN AREA
AND RIVERSIDE BASIN AREA IN SAN BERNARDINO COUNTY**

CHAPTER V

EXTRACTIONS FROM THE COLTON BASIN AREA AND RIVERSIDE BASIN AREA IN SAN BERNARDINO COUNTY

For Use Outside San Bernardino Valley Municipal Water District

The extractions from the Colton Basin Area and that portion of the Riverside Basin Area within San Bernardino County for use outside San Bernardino Valley during the 1971 calendar year have been verified by the Watermaster as 2,777 acre-feet and 18,108 acre-feet, respectively. The individual work sheets for these determinations are included in Report of Watermaster, Volume 2-1971, Volume 3-1971, and Volume 5-1971 entitled *Verified Extractions From Colton Basin Area, Verified Extractions From Riverside Basin Area Within San Bernardino County and Distribution of Extractions From the San Bernardino Basin Area, Colton Basin Area, and Riverside Basin Area for Use Outside the San Bernardino Valley Municipal Water District, respectively.*

For Use Within San Bernardino Valley Municipal Water District

Provided minimum water surface elevations within the Colton Basin and that portion of Riverside Basin Area within San Bernardino County are maintained by San Bernardino Valley Municipal Water District, extractions from the Colton Basin Area and that portion of the Riverside Basin Area within San Bernardino County for use within San Bernardino Valley are not limited and therefore verification of such amounts are not specifically required by the Judgment. However, proper allocation of the total extractions from these areas for use on areas outside San Bernardino Valley necessitated the verification of these extractions. The individual work sheets for the 1971 verification and distribution of extractions are also included in Report of Watermaster, Volumes 2-1971, 3-1971 and 5-1971.

The extractions from the Colton Basin Area and the Riverside Basin Area in San Bernardino County for the calendar year 1971 are summarized in Tables No. 4 and 5 following.

TABLE NO. 4

VERIFIED EXTRACTIONS FROM COLTON BASIN AREA
 BY SAN BERNARDINO AND RIVERSIDE COUNTY
 ENTITIES FOR USE WITHIN EACH COUNTY
 (All Values in Acre-Feet)

Extractions for Calendar Years	Total From Basin	Extracted by San Bernardino County Entities	Extracted by Riverside County Entities		Base Right for Use in Riverside County ¹
			Total	Used in San Bernardino County	
5-Year Base Period 1959-63	11,529	8,033	3,496	115	3,381
1971	11,217	8,192	3,025	248	3,381
1972					3,381
1973					3,381
1974					3,381
1975					3,381
Total for Years 1971-75					16,905
1976					
1977					
1978					
1979					
1980					
Total for Years 1976-80					

¹

Extractions for use in Riverside County are limited to the verified extractions for the 5-year Base Period 1959-63.

TABLE NO. 5

VERIFIED EXTRACTIONS FROM RIVERSIDE BASIN AREA
 IN SAN BERNARDINO COUNTY BY SAN BERNARDINO AND
 RIVERSIDE COUNTY ENTITIES FOR USE WITHIN EACH COUNTY
 (All Values in Acre-Feet)

Extractions for Calendar Years	Total From Basin	Extracted by San Bernardino County Entities	Extracted by Riverside County Entities		Base Right for Use in Riverside County
			Total	Used in San Bernardino County	
5-Year Base Period 1959-63	33,729	9,609	24,120	3,035	21,085
1971	29,070	8,748	20,322	2,214	21,085
1972					21,085
1973					21,085
1974					21,085
1975					21,085
Total for Years 1971-75					105,425
1976					
1977					
1978					
1979					
1980					
Total for Years 1976-80					

¹ Extractions for use in Riverside County are limited to the verified extractions for the 5-year Base Period 1959-63.

Minimum Water Surface Elevations

Extractions from the Colton Basin Area and that portion of the Riverside Basin Area within San Bernardino County for use in San Bernardino Valley are not limited, provided that the average static water surface elevation as measured at wells numbered 1S/4W-21Q3, 1S/4W-29H1, and 1S/4W-29Q1 is not less than 822.04 feet, as set forth in the Judgment. This elevation is determined each year by averaging the lowest static water level occurring in each of the three wells at or near the same time of the year.

Hydrographs of the historic static and pumping water surface elevations in the three key wells are shown on Figures 1, 2, and 3 which follow. Data pertinent to the key wells as well as the records of historic water surface measurements are included in Report of Watermaster, Volume 8-1971 entitled *Ground Water Surface Elevations in Wells Numbered 1S/4W-21Q3, 1S/4W-29H1, and 1S/4W-29Q1 Located Within the Colton Basin Area and Riverside Basin Area in San Bernardino County Through December, 1972.*

For the year of 1972, measurements taken at the low points of the three wells were as follows:

<u>Well Number</u>	<u>Date of Measurement</u>	<u>Elevation of Water Surface</u>
1S/4W-21Q3	11/20/72	888.46
1S/4W-29H1	11/27/72	860.58
1S/4W-29Q1	11/20/72	850.52
TOTAL		<hr/> 2599.56
Average		866.52

Thus, the lowest average measurement for the year of 1972 is 2.57 feet below the 1971 average of 869.09 and 44.48 feet above the 1963 average of 822.04.

CHAPTER VI

**EXTRACTIONS FROM THAT PORTION OF
RIVERSIDE BASIN AREA IN RIVERSIDE COUNTY
WHICH IS TRIBUTARY TO RIVERSIDE NARROWS**

CHAPTER VI

EXTRACTIONS FROM THAT PORTION OF RIVERSIDE BASIN AREA IN RIVERSIDE COUNTY WHICH IS TRIBUTARY TO RIVERSIDE NARROWS

Extractions

The extractions from that portion of the Riverside Basin area in Riverside County which are tributary to Riverside Narrows for use within Riverside County for the calendar year 1971 have been verified by the Watermaster as 31,337 acre-feet. The individual work sheets are included in Report of Watermaster, Volume 4-1971, entitled *Verified Extractions from Riverside Basin Area Within Riverside County* and are summarized in Table No. 6 following.

TABLE NO. 6

VERIFIED EXTRACTIONS FROM THE RIVERSIDE BASIN AREA IN RIVERSIDE COUNTY FOR USE IN RIVERSIDE COUNTY (All Values in Acre-Feet)

Calendar Year	Total Verified Extractions	Base Right for Use in Riverside County
5-Year Base Period 1959-63	29,633	29,633
1971	31,337	29,633
1972		29,633
1973		29,633
1974		29,633
1975		29,633
Total for Years 1971-75		148,165

Return Flows

The Judgment provides for additional replenishment by Western if the urbanization of the Riverside Basin Area results in a diminution of the return flow accruing from the extractions described above and which would have otherwise accrued to the rising water at Riverside Narrows. The extent of such diminution is determined by the permanent reduction in the irrigated areas within the various water service organizations delivering water to the area as compared to the areas served at the time the Judgment was entered. To the extent that such reduction causes an increase in the urban uses requiring sewage disposal through the Riverside Treatment Plant, the effluent from which bypasses the Riverside Narrows, Western may, from time to time, be required to provide replenishment. Such irrigated acreages in the Riverside Basin Area in Riverside County from which return flow is presently tributary to Riverside Narrows are set forth in Table D-5 of Appendix "D" of the Judgment and are as follows:

APPENDIX D

TABLE D-5

**IRRIGATED ACREAGE IN RIVERSIDE BASIN AREA
IN RIVERSIDE COUNTY PRESENTLY TRIBUTARY TO
RIVERSIDE NARROWS WHICH UPON CONVERSION
TO URBAN USES REQUIRING SEWAGE DISPOSAL
THROUGH THE RIVERSIDE TREATMENT PLANT WILL
BE DISCHARGED TO THE RIVER BELOW
RIVERSIDE NARROWS**

<u>Entity Serving Acreage</u>	<u>Acres</u>
Gage Canal	1,752
Alta Mesa Water Company	65
East Riverside Water Company	926
Riverside Highland Water Company	1,173
TOTAL	<hr/> 3,916

An examination of the service areas of the companies listed in Table D-5 was made in August of 1973. For purposes of this report, the acreages determined by this examination are considered to be the acreages served at the end of 1973 calendar year, and are as shown in Table No. 7.

TABLE NO. 7

**IRRIGATED ACREAGE IN RIVERSIDE BASIN AREA
IN RIVERSIDE COUNTY PRESENTLY TRIBUTARY TO
RIVERSIDE NARROWS WHICH UPON CONVERSION
TO URBAN USES REQUIRING SEWAGE DISPOSAL
THROUGH THE RIVERSIDE TREATMENT PLANT WILL
BE DISCHARGED TO THE RIVER BELOW
RIVERSIDE NARROWS FOR CALENDAR YEAR 1973**

<u>Entity Service Acreage</u>	<u>Acres</u>
Gage Canal Company	1,493
Alta Mesa Water Company	0
East Riverside Water Company	704
Riverside Highland Water Company	<u>1,173</u>
TOTAL	3,370

Comparison of the foregoing amounts with Table D-5 indicates that 546 acres have been removed from irrigated agriculture since 1969. The total acreage upon which irrigation has been discontinued represents areas where trees have been removed and the land permitted to lie fallow, areas covered by dead trees as a result of lack of water, and areas upon which subdivisions are in various stages of progress.

Of the total 546 acres removed from irrigated agriculture between 1969 and 1973, 480 acres have been developed and connected to the City of Riverside Sewage Treatment Plant.

Due to the relatively small area which has been removed from irrigated agriculture, to date, and since the replenishment obligations of both parties accrue for the most part on a five-calendar year basis beginning with 1971, the Watermaster has elected to defer such replenishment as may result under this provision until 1976.

CHAPTER VII

**EXTRACTIONS FROM THE SAN BERNARDINO BASIN AREA,
COLTON BASIN AREA AND RIVERSIDE BASIN AREA
FOR USE WITHIN WESTERN ON LANDS THAT ARE NOT
TRIBUTARY TO THE RIVERSIDE NARROWS**

CHAPTER VII

EXTRACTIONS FROM THE SAN BERNARDINO BASIN AREA, COLTON BASIN AREA AND RIVERSIDE BASIN AREA FOR USE WITHIN WESTERN ON LANDS THAT ARE NOT TRIBUTARY TO RIVERSIDE NARROWS

The extractions from the San Bernardino, Colton and Riverside Basin Areas for the calendar year 1971 which were delivered for use within Western on lands not tributary to the Riverside Narrows are verified by the Watermaster to be 41,622 acre-feet. Said amount is summarized by entity on Table No. 8.

The detailed work sheets for this determination are contained in Report of Watermaster, Volume 6-1971, entitled *Verified Extractions from the San Bernardino Basin Area, Colton Basin Area, and Riverside Basin Area for Use Within Western on Lands Not Tributary to the Riverside Narrows.*

TABLE NO. 8

VERIFIED EXTRACTIONS
 FROM THE SAN BERNARDINO BASIN AREA,
 COLTON BASIN AREA AND THE RIVERSIDE BASIN AREA
 FOR USE WITHIN WESTERN ON LANDS THAT ARE NOT TRIBUTARY
 TO THE RIVERSIDE NARROWS

(All Values in Acre-Feet)

Entities Within WMWD	Annual Base Right	CALENDAR YEAR				
		1971 Verified Delivery	1972 Verified Delivery	1973 Verified Delivery	1974 Verified Delivery	1975 Verified Delivery
City of Riverside, including Irrigation Division water extracted by The Gage Canal Company and former Riverside Water Company	23,836	26,616				
Meeks & Daley Water Company, Agua Mansa Water Company, and Temescal Water Company, including water received from City of Riverside	13,229	8,195				
Extractions delivered by West Riverside Canal received from Twin Buttes Water Company, La Sierra Water Company, Agua Mansa Water Company, Salazar Water Company, West Riverside 350 Inch Water Company, and Jurupa Water Company	4,903	5,952				
Rubidoux Community Services District	531	794				
Jurupa Hills Water Company	36	65				
TOTAL	42,535	41,622				

CHAPTER VIII

**VERIFICATION OF EXTRACTIONS FROM THE
SAN BERNARDINO BASIN AREA AND COLTON BASIN AREA
WITHIN THE SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT
FOR USE ON LANDS NOT WITHIN WESTERN
NOR TRIBUTARY TO THE RIVERSIDE NARROWS**

CHAPTER VIII

VERIFICATION OF EXTRACTIONS FROM THE SAN BERNARDINO BASIN AREA AND COLTON BASIN AREA WITHIN THE SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT FOR USE ON LANDS NOT WITHIN WESTERN NOR TRIBUTARY TO THE RIVERSIDE NARROWS

Paragraph X of the Judgment, entitled *Replenishment to Offset New Exports of Water to Areas Not Tributary to Riverside Narrows*, recites as follows:

San Bernardino Valley shall be obligated to provide replenishment for any increase over the exports from San Bernardino Valley for use in any area not within Western nor tributary to Riverside Narrows as set forth in Table C-2 of Appendix "C", such amounts being subject to correction by the Watermaster . . .

For reference, Table C-2 of Appendix "C" is shown on the following page. The unverified amounts set forth in Table C-2 pertain solely to those extractions from the San Bernardino and Colton Basin Areas within the San Bernardino Valley Municipal Water District for use on lands not within Western nor tributary to the Riverside Narrows. Such nontributary lands are situated within the Chino Basin.

VERIFICATION

Deliveries to Chino Basin

The entities delivering water to the Chino Basin include Fontana Union Water Company, West San Bernardino County Water District, and the City of Rialto. Such deliveries are made up in large part by surface diversions from Lytle Creek. Difficulties were encountered in the verification of surface diversions and ground water extractions from Lytle Creek which preclude the allocation of said diversion to the various entities with any reasonable degree of certainty. For this reason the determination of deliveries to Chino Basin requires the Watermaster to rely heavily on the unpublished records of deliveries to the various service areas as furnished by the respective water service agencies.

APPENDIX C

TABLE C-2
(From Judgment)

EXTRACTIONS FOR USE WITHIN SAN BERNARDINO COUNTY
FROM
SAN BERNARDINO BASIN AREA AND COLTON BASIN AREA
FOR USE ON LANDS NOT TRIBUTARY TO
RIVERSIDE NARROWS FOR AVERAGE OF
FIVE-YEAR PERIOD ENDING WITH 1963
(All Values in Acre-Feet)

<u>Entity</u>	<u>San Bernardino Basin Area</u>	<u>Colton Basin Area</u>	<u>Total</u>
Fontana Union Water Company	14,272	365	14,637
West San Bernardino County Water District	2,961	947	3,908
City of Rialto			700
TOTAL			19,245

The total average annual extraction from the Colton and San Bernardino Basin areas for the five-calendar years ending with 1963 and which were delivered to lands not within Western nor tributary to the Riverside Narrows (Chino Basin) are verified by the Watermaster to be 13,490 acre feet, as shown in Volume 7 of the Report of Watermaster, dated February, 1973. Said amount is summarized by entity on Table No. 9, together with the verified amounts for the calendar year 1971.

TABLE NO. 9

**VERIFIED AVERAGE ANNUAL EXTRACTIONS FROM THE
SAN BERNARDINO BASIN AREA AND COLTON BASIN AREA
WITHIN THE SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT
FOR USE ON LANDS NOT WITHIN WESTERN
NOR TRIBUTARY TO THE RIVERSIDE NARROWS FOR THE
FIVE-CALENDAR YEARS ENDING WITH 1963
(All Values in Acre-Feet)**

<u>Entity</u>	<u>1959-63 Average</u>	<u>1971</u>
Fontana Union Water Company	10,903	15,116
West San Bernardino County Water District	1,806	1,260
City of Rialto	781	905
TOTAL	13,490	17,281

Deliveries to Areas Other Than Chino Basin

Paragraph X of the Judgment also provides for replenishment by San Bernardino Valley to the extent exports are made from the San Bernardino Basin Area for use in the Yucaipa, San Timoteo, Oak Glen, and Beaumont Basins.

The results of the verification of the base period production from the San Bernardino Basin Area indicates that such exports were not made during the five-calendar years ending with 1963. The verification of production for the 1971 calendar year indicated that such exports were not made during 1971.

CHAPTER IX

**ANNUAL ACCOUNTING OF EXTRACTIONS
DELIVERIES, AND REPLENISHMENT OBLIGATIONS**

CHAPTER IX

ANNUAL ACCOUNTING OF EXTRACTIONS, DELIVERIES, AND REPLENISHMENT OBLIGATIONS

The Judgment requires the annual determination of extractions from the San Bernardino, Colton, and Riverside Basin Areas by Plaintiffs and other than Plaintiffs. It is further required that the annual deliveries of said extractions by both Plaintiffs and other than Plaintiffs shall be determined in those areas not tributary to the Riverside Narrows and the annual deliveries made by Plaintiffs within San Bernardino, Colton, and Riverside Basin Areas. A comparison of the annual extractions and deliveries with the verified five-year Base Period Rights provides the basis for the annual accounting of replenishment obligations, if any, which accrue by reason of production or deliveries made in excess of the Base Rights.

The tables which follow represent a summarization of the work papers of the Watermaster and present the comparison of the extractions and deliveries for the calendar year of 1971 with the Base Rights, from which the required replenishment has been tabulated.

<u>Table Number</u>	<u>Title</u>
10	Annual Accounting of Extractions from the San Bernardino Basin Area and the Deliveries to Each Service Area by the City of Riverside (Including Those Rights Acquired as Successor to the Riverside Water Company and The Gage Canal Company)
11	Annual Accounting of Extractions from the San Bernardino Basin Area and the Deliveries to Each Service Area by Riverside Highland Water Company
12	Annual Accounting of Extractions from the San Bernardino Basin Area and the Deliveries to Each Service Area by Agua Mansa Water Company and Meeks & Daley Water Company
13	Annual Accounting of Extractions from the San Bernardino Basin Area and the Deliveries to Each Service Area by The Regents of University of California
14	Annual Accounting for San Bernardino Valley Municipal Water District - Extractions from the San Bernardino Basin Area for Calendar Year 1971
15	Annual Accounting for Western Municipal Water District - Extractions from Colton Basin Area for use Outside San Bernardino Valley for Calendar Year 1971

<u>Table Number</u>	<u>Title</u>
16	Annual Accounting for Western Municipal Water District - Extractions from Riverside Basin Area in San Bernardino County for use Outside San Bernardino Valley for Calendar Year 1971
17	Annual Accounting for Western Municipal Water District - Extractions from Riverside Basin Area in Riverside County for Calendar Year 1971
18	Annual Accounting for Western Municipal Water District - Extractions from San Bernardino Basin Area, Colton Basin Area, and Riverside Basin Area for use Within Western on Lands that are not Tributary to Riverside Narrows for Calendar Year 1971
19	Annual Accounting for San Bernardino Valley Municipal Water District - Extractions from San Bernardino Basin Area and Colton Basin Area for use on Lands Not Within Western nor Tributary to Riverside Narrows for Calendar Year 1971
20	Summary of Annual Accounting - San Bernardino Valley Municipal Water District & Western Municipal Water District Accumulated Credits and Obligations for Calendar Year 1971

TABLE NO. 10

**ANNUAL ACCOUNTING
OF**

**EXTRACTIONS FROM THE SAN BERNARDINO BASIN AREA
AND THE DELIVERIES TO EACH SERVICE AREA BY THE CITY
OF RIVERSIDE (INCLUDING THOSE RIGHTS ACQUIRED AS SUCCESSOR TO THE
RIVERSIDE WATER COMPANY AND THE GAGE CANAL COMPANY)
(All Quantities in Acre Feet)**

Calendar Year	Verified Extractions from the San Bernardino Basin Area			Delivery to San Bernardino Basin Area			Delivery to Colton Basin Area & Riverside Basin Area in San Bernardino County			Delivery to Areas Outside San Bernardino Valley		
	Adjusted Right (1)	Maximum Allowable (2)	Actual (3)	Adjusted Right (1)	Maximum Allowable (2)	Actual (3)	Adjusted Right (1)	Maximum Allowable (2)	Actual (3)	Adjusted Right (1)	Maximum Allowable (2)	Actual (3)
1971	53,448(4)	69,482	53,882	1,462(4)	1,901	697	1,260(4)	1,638	669	50,726(4)	65,944	52,516
1972	52,199(5)	67,859		1,427	1,855		1,230	1,599		49,542(5)	64,405	
1973	52,199(5)	67,859		1,427	1,855		1,230	1,599		49,542(5)	64,405	
1974	52,199(5)	67,859		1,427	1,855		1,230	1,599		49,542(5)	64,405	
1975	52,199(5)	67,859		1,427	1,855		1,230	1,599		49,542(5)	64,405	
Total for Years 1971-75	262,244	262,244		7,170	7,170		6,180	6,180		248,894	248,894	
Excess Extract. from 1971-75												
1976												
1977												
1978												
1979												
1980												
Total for Years 1976-80												
Excess Extract. from 1976-80												

(1) Adjusted Right as determined and reported to the Court in the Annual Report of the Western-San Bernardino Watermaster for Calendar Year 1971 in Table No. 9, page 27.
 (2) Maximum Allowable for any one year, not to exceed 30% of Adjusted Right.
 (3) Actual verified extractions from Watermaster Report, Volume 1A-1971, Table No. 3.
 (4) Adjusted Right was not effective until January 1, 1972; thus the Adjusted Right for 1971 is as shown in Appendix B, Table B-1 of the Judgment.
 (5) In the reaccounting, the amount of water allocated to the Regents of the University of California was established to be 550 acre feet during the five-year Base Period, instead of 581 acre feet shown on Table B-1, with the remainder allocated to the City of Riverside.
 Note: Annual Accounting of Extractions as required in Paragraphs V and VI of the Judgment.

TABLE NO. 11
ANNUAL ACCOUNTING

OF
EXTRACTIONS FROM THE SAN BERNARDINO BASIN AREA
AND THE DELIVERIES TO EACH SERVICE AREA BY
RIVERSIDE HIGHLAND WATER COMPANY
(All Quantities in Acre Feet)

Calendar Year	Verified Extractions from the San Bernardino Basin Area			Delivery to San Bernardino Basin Area			Delivery to Colton Basin Area & Riverside Basin Area in San Bernardino County			Delivery to Areas Outside San Bernardino Valley		
	Adjusted Right (1)	Maximum Allowable (2)	Actual (3)	Adjusted Right (1)	Maximum Allowable (2)	Actual (3)	Adjusted Right (1)	Maximum Allowable (2)	Actual (3)	Adjusted Right (1)	Maximum Allowable (2)	Actual (3)
1971 (4)	4,399 (4)	5,719	4,012	-0- (4)	-0-	-0-	2,509 (4)	3,262	2,388	1,890 (4)	2,457	1,624
1972	4,294	5,582		-0-	-0-		2,449	3,184		1,845	2,398	
1973	4,294	5,582		-0-	-0-		2,449	3,184		1,845	2,398	
1974	4,294	5,582		-0-	-0-		2,449	3,184		1,845	2,398	
1975	4,294	5,582		-0-	-0-		2,449	3,184		1,845	2,398	
Total for Years 1971-75	21,575	21,575		-0-	-0-		12,305	12,305		9,270	9,270	
Excess Extract. from 1971-75												
1976												
1977												
1978												
1979												
1980												
Total for Years 1976-80												
Excess Extract. from 1976-80												

(1) Adjusted Right as determined and reported to the Court in the Annual Report of the Western-San Bernardino Watermaster for Calendar Year 1971 in Table No. 9, page 27.

(2) Maximum Allowable for any one year, not to exceed 30% of Adjusted Right.

(3) Actual verified extractions from Watermaster Report, Volume 1A-1971, Table No. 3.

(4) Adjusted Right was not effective until January 1, 1972; thus the Adjusted Right for 1971 is as shown in Appendix B, Table B-1 of the Judgment.

Note: Annual Accounting of Extractions as required in Paragraphs V and VI of the Judgment.

TABLE NO. 12
ANNUAL ACCOUNTING

OF
EXTRACTIONS FROM THE SAN BERNARDINO BASIN AREA
AND THE DELIVERIES TO EACH SERVICE AREA BY
AGUA MANSA WATER COMPANY AND HECKS & DALEY WATER COMPANY
(All Quantities in Acre Feet)

Calendar Year	Verified Extractions from the San Bernardino Basin Area			Delivery to San Bernardino Basin Area			Delivery to Colton Basin Area & Riverside Basin Area in San Bernardino County			Delivery to Areas Outside San Bernardino Valley		
	Adjusted Right (1)	Maximum Allowable (2)	Actual (3)	Adjusted Right (1)	Maximum Allowable (2)	Actual (3)	Adjusted Right (1)	Maximum Allowable (2)	Actual (3)	Adjusted Right (1)	Maximum Allowable (2)	Actual (3)
1971 (4)	8,026(4)	10,434	2,902	-0-(4)	-0-	-0-	326(4)	424	383	7,700(4)	10,010	2,519
1972	7,833	10,183		-0-	-0-	-0-	318	413		7,515	9,770	
1973	7,833	10,183		-0-	-0-	-0-	318	413		7,515	9,770	
1974	7,833	10,183		-0-	-0-	-0-	318	413		7,515	9,770	
1975	7,833	10,183		-0-	-0-	-0-	318	413		7,515	9,770	
Total for Years 1971-75	39,358	39,358		-0-	-0-	-0-	1,598	1,598		37,760	37,760	
Excess Extract. from 1971-75												
1976												
1977												
1978												
1979												
1980												
Total for Years 1976-80												
Excess Extract. from 1976-80												

(1) Adjusted Right as determined and reported to the Court in the Annual Report of the Western-San Bernardino Watermaster for Calendar Year 1971 in Table No. 9, page 27.

(2) Maximum Allowable for any one year, not to exceed 30% of Adjusted Right.

(3) Actual verified extractions from Watermaster Report, Volume 1A-1971, Table No. 3.

(4) Adjusted Right was not effective until January 1, 1972; thus the Adjusted Right for 1971 is as shown in Appendix B, Table B-1 of the Judgment.

Note: Annual Accounting of Extractions as required in Paragraphs V and VI of the Judgment.

TABLE NO. 13
ANNUAL ACCOUNTING

OF
EXTRACTIONS FROM THE SAN BERNARDINO BASIN AREA
AND THE DELIVERIES TO EACH SERVICE AREA BY
THE REGENTS OF UNIVERSITY OF CALIFORNIA
(All quantities in Acre Feet)

Calendar Year	Verified Extractions from the San Bernardino Basin Area			Delivery to San Bernardino Basin Area			Delivery to Colton Basin Area & Riverside Basin Area in San Bernardino County			Delivery to Areas Outside San Bernardino Valley		
	Adjusted Right (1)	Maximum Allowable (2)	Actual (3)	Adjusted Right (1)	Maximum Allowable (2)	Actual (3)	Adjusted Right (1)	Maximum Allowable (2)	Actual (3)	Adjusted Right (1)	Maximum Allowable (2)	Actual (3)
1971 (4)	581(4)	755	219	-0-(4)	-0-	-0-	-0-(4)	-0-	-0-	581(4)	755	219
1972	536(5)	697		-0-	-0-		-0-	-0-		536(5)	697	
1973	536(5)	697		-0-	-0-		-0-	-0-		536(5)	697	
1974	536(5)	697		-0-	-0-		-0-	-0-		536(5)	697	
1975	536(5)	697		-0-	-0-		-0-	-0-		536(5)	697	
Total for Years 1971-75	2,725	2,725		-0-	-0-		-0-	-0-		2,725	2,725	
Excess Extract. from 1971-75												
1976												
1977												
1978												
1979												
1980												
Total for Years 1976-80												
Excess Extract. from 1976-80												

(1) Adjusted Right as determined and reported to the Court in the Annual Report of the Western-San Bernardino Watermaster for Calendar Year 1971 in Table No. 9, page 27.

(2) Maximum Allowable for any one year, not to exceed 30% of Adjusted Right.

(3) Actual verified extractions from Watermaster Report, Volume 1A-1971, Table No. 3.

(4) Adjusted Right was not effective until January 1, 1972; thus the Adjusted Right for 1971 is as shown in Appendix B, Table B-1 of the Judgment.

(5) In the reaccounting, the amount of water allocated to The Regents of the University of California was established to be 550 acre feet during the five-year Base Period, instead of 581 acre feet shown on Table B-1, with the remainder allocated to the City of Riverside.

Note: Annual Accounting of Extractions as required in Paragraphs V and VI of the Judgment.

TABLE NO. 14
 ANNUAL ACCOUNTING
 FOR
 SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT
 EXTRACTIONS FROM THE SAN BERNARDINO BASIN AREA
 FOR CALENDAR YEAR 1971
 (All Values in Acre-Feet)

Verified Extractions

Base Right for Year		171,342
Actual Extractions for Year		165,296
Excess Extractions for Year		(6,046) ^{L1}
Accumulated Extractions		165,296

Replenishment Credits

Return from Excess Extractions	0	
New Conservation	0	
Extraction Credit ^{L1}	6,046	
Actual Replenishment for Year	0	
Total Credits for Year	0	6,046
Accumulated Credits		6,046

Replenishment Obligations

Obligation for Year		0
Accumulated Obligation		0
Replenishment Required in Following Year		0

^{L1} Extractions which may be extracted without replenishment obligation, which in fact are not used.

Note: Annual Accounting of Extractions as required in Paragraphs V and VI of the Judgment.

TABLE NO. 15
 ANNUAL ACCOUNTING
 FOR
 WESTERN MUNICIPAL WATER DISTRICT
 EXTRACTIONS FROM COLTON BASIN AREA FOR USE
 OUTSIDE SAN BERNARDINO VALLEY FOR CALENDAR YEAR 1971
 (All Values in Acre-Feet)

Verified Extractions

Base Right for Year	3,381	
Peaking Allowance @ 20%	<u>676</u>	
Allowable Extractions for Year		4,057
Actual Extractions for Year		2,777
Excess Extractions for Year		(604) ⁴
Accumulated Extractions		2,777

Replenishment Credits

Extraction Credit ⁴	604	
Return from Excess Extractions	0	
Actual Replenishment for Year	<u>0</u>	
Total Credits for Year		604
Accumulated Credits		604

Replenishment Obligations

Obligation for Year		0
Accumulated Obligation		0
Replenishment Required in Following Year		0

⁴ Extractions which may be extracted without replenishment obligation, which in fact are not used.

Note: Annual Accounting of Extractions as required in Paragraph VIII of the Judgment.

TABLE NO. 16
 ANNUAL ACCOUNTING
 FOR
 WESTERN MUNICIPAL WATER DISTRICT
 EXTRACTIONS FROM RIVERSIDE BASIN AREA
 IN SAN BERNARDINO COUNTY FOR USE OUTSIDE
 SAN BERNARDINO VALLEY FOR CALENDAR YEAR 1971
 (All Values in Acre-Feet)

Verified Extractions

Base Right for Year	21,085	
Peaking Allowance @ 20%	<u>4,217</u>	
Allowable Extractions for Year		25,302
Actual Extractions for Year		18,108
Excess Extractions for Year		(2,977) ^{L1}
Accumulated Extractions		18,108

Replenishment Credits

Extraction Credit ^{L1}	2,977	
Return from Excess Extractions	0	
Actual Replenishment for Year	<u>0</u>	
Total Credits for Year		2,977
Accumulated Credits		2,977

Replenishment Obligations

Obligation for Year		0
Accumulated Obligation		0
Replenishment Required in Following Year		0

^{L1} Extractions which may be extracted without replenishment obligation, which in fact are not used.

Note: Annual Accounting of Extractions as required in Paragraph VIII of the Judgment.

TABLE NO. 17
 ANNUAL ACCOUNTING
 FOR
 WESTERN MUNICIPAL WATER DISTRICT
 EXTRACTIONS FROM RIVERSIDE BASIN
 AREA IN RIVERSIDE COUNTY
 FOR CALENDAR YEAR 1971
 (All Values in Acre-Feet)

Verified Extractions

Base Right for Year	29,633	
Peaking Allowance @ 20%	<u>5,927</u>	
Allowable Extractions for Year		35,560
Actual Extractions for Year		31,337
Excess Extractions for Year		1,704
Accumulated Extractions		31,337

Replenishment Credits

Extraction Credit ^{L1}	0	
Return from Excess Extraction	0 ^{L2}	
Return from Import Water	331	
Actual Replenishment for Year	<u>0</u>	
Total Credits for Year		331
Accumulated Credits		331

Replenishment Obligations

Obligation for Year		1,704
Accumulated Obligation		1,704
Replenishment Required in Following Year		0

^{L1} Extractions which may be extracted without replenishment obligation, which in fact are not used.

^{L2} Credit will be determined for the five-year period ending in 1975.

Note: Annual Accounting of Extractions as required in Paragraph IX of the Judgment.

TABLE NO. 18
ANNUAL ACCOUNTING
FOR
WESTERN MUNICIPAL WATER DISTRICT

EXTRACTIONS FROM SAN BERNARDINO BASIN AREA,
COLTON BASIN AREA, AND RIVERSIDE BASIN AREA FOR
USE WITHIN WESTERN ON LANDS THAT ARE NOT TRIBUTARY
TO RIVERSIDE NARROWS FOR CALENDAR YEAR 1971
(All Values in Acre-Feet)

Verified Extractions

Base Right for Year	42,535
Actual Extractions for Year	41,622
Accumulated Extractions	41,622

Replenishment Obligations

Obligation for Year	0
Accumulated Obligation	0

Note: Annual Accounting of Extractions as required in Paragraph X of the Judgment.

TABLE NO. 19
ANNUAL ACCOUNTING
FOR
SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT
EXTRACTIONS FROM SAN BERNARDINO BASIN AREA
AND COLTON BASIN AREA FOR USE ON LANDS
NOT WITHIN WESTERN NOR TRIBUTARY TO RIVERSIDE NARROWS
FOR CALENDAR YEAR 1971
(All Values in Acre-Feet)

Verified Extractions

Base Right for Year	13,490
Actual Extractions for Year	17,281
Accumulated Extractions	17,281

Replenishment Credits

Actual Replenishment for Year	0
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Replenishment Obligations

Obligation for Year	3,791
Accumulated Obligation	3,791

4

Paragraph XI(d) of the Judgment states that the replenishment obligations shall not apply during such time as the amounts of water in the ground water resources of such area are found by Order of the Court to be sufficient to satisfy the obligations which San Bernardino Valley may have to Plaintiffs under this Judgment, and if the Court further finds by Order that during such times any such increases in exports would not adversely affect Plaintiffs in the future.

Note: Annual Accounting of Extractions as required in Paragraph X of the Judgment.

TABLE NO. 20

SUMMARY OF ANNUAL ACCOUNTING
 SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT
 AND
 WESTERN MUNICIPAL WATER DISTRICT
 ACCUMULATED CREDITS AND OBLIGATIONS
 FOR CALENDAR YEAR 1971
 (All Values in Acre-Feet)

	San Bernardino Basin Area	Colton Basin Area	Riverside Basin Area in San Bernardino County	Riverside Basin Area in Riverside County	Total for All Basins
<u>San Bernardino Valley Municipal Water District</u>					
Accumulated Credits	6,046	0	0	0	6,046
Accumulated Obligation	3,791	0	0	0	3,791
Replenishment Required in Following Year	0	0	0	0	0
<u>Western Municipal Water District</u>					
Accumulated Credits	0	604	2,977	331	3,912
Accumulated Obligation	0	0	0	1,704	1,704
Replenishment Required in Following Year	0	0	0	0	0