### WESTERN-SAN BERNARDINO WATERMASTER

**FOR** 

WESTERN MUNICIPAL WATER DISTRICT, et ai

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 1985** 



**AUGUST 1, 1986** 

## 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

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#### August 1, 1986

TO:

Clerk of Superior Court of Riverside County and All Parties

RE:

Watermaster Report for Calendar Year 1985

Gentlemen:

We have the honor of submitting the Annual Report of the Western San Bernardino Watermaster for the Calendar Year 1985.

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.

Accordingly, this report is submitted herewith under date of August 1, 1986, and presents the findings of the Watermaster for Calendar Year 1984 and summarizes the five-year period 1980 through 1984.

During the period 1980 through 1984 total extractions from the San Bernardino Basin Area by each Plaintiff were less than the Adjusted Base Right provided in the Judgment. The Judgment limits such extractions, as to the amount which can be delivered to specific service areas. During the five-year period 1980 through 1984, the City of Riverside exceeded its allowable deliveries to areas outside San Bernardino Valley. However, these excess deliveries are permitted under terms of a December 22, 1981, agreement between San Bernardino Valley and Western which was prepared in accordance with Paragraph VI(b)6 of the Judgment.

Provisions of the Judgment require that Western and San Bernardino Valley provide groundwater replenishment if certain base rights are exceeded. The determination of replenishment obligations for the five-year period 1980 through 1984 indicates that neither Western nor San Bernardino Valley is required to provide additional imported water for replenishment.

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 1985, pursuant to the requirements of the Judgment.

Respectfully submitted,

WESTERN-SAN BERNARDINO WATERMASTER

Donald L. Harriger

Robert I Reiter

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**CALENDAR YEAR 1985** 

**AUGUST 1, 1986** 

Cover Photo: Western Natural Gas Engine Still In Place For Emergency Water Pumping
At Riverside—Highland Water Company

Courtesy of: San Bernardino Valley
Municipal Water District

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CHAPTER I
INTRODUCTION

#### CHAPTER 1

#### 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. Watermaster James C. Hanson resigned as of August 1, 1985, and the Court appointed Robert L. Reiter, who was nominated by SBVMWD to replace Mr. Hanson. Donald L. Harriger was previously appointed pursuant to nomination by the WMWD.

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 1985 includes a description and summary of the work completed during 1985 and also includes 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 1984. The scope of this report for 1985 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 including the safe yield of the San Bernardino Basin Area and the determination of the Adjusted Base Rights of the Plaintiffs. Beginning with the 1972 Report, the Watermaster began the annual accounting in accordance with the Judgment provisions. This report presents the activities of the Watermaster for the calendar year 1985 together with the annual accounting of extractions and deliveries for the calendar year 1984.

### 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, however, 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:

	Watermaster Determination Required by Judgment	Verified for Five Calendar Years Ending with 1963	To Be Determined Annually From and After 1971
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

	Watermaster Determination Required by Judgment	Verified for Five Calendar Years Ending with 1963	To Be Determined Annually From and After 1971
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 plaintiffs 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
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

	Watermaster Determination Required by Judgment	Verified for Five Calendar Years Ending with 1963	To Be Determined Annually From and After 1971
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.	4	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.	5	x

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.

The foregoing initial determinations and verifications required by the Judgment have been completed and were reported in the Annual Report of the Western-San Bernardino Watermaster for Calendar Years 1971 and 1972.

<sup>&</sup>lt;sup>2</sup> Assumed for purposes of Judgment to be 16,000 acre-feet annually, verification not required.

<sup>&</sup>lt;sup>3</sup> Established at 822.04 feet above sea level, based on fall season of 1963.

<sup>4</sup> Revised by Watermaster during preparation of the Annual Report for calendar year 1974.

<sup>5</sup> Average for 5 years ending with 1963 established by Judgment to be 3,916 acres; verification not required.

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, Colton, and Riverside Basin Areas. 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 1984 and are summarized herein. Listings of the verified extractions by each individual owner for the calendar year 1984 are assembled in Report of Watermaster, Volumes 1-1984, 1A-1984, 3-1984, and 4-1984.

#### Distribution of Extractions

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

The distribution of verified extractions from the Colton and Riverside Basin Areas and the distribution of the Plaintiffs' extractions 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 1984 and is summarized herein. Detailed work sheets are assembled in Report of Watermaster, Volume 5–1984.

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

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

The amount of water extracted and delivered under Classification No. 1 was determined initially for the 1959–63 Base Period and was reported in the Report of Watermaster, Volume 6, dated June, 1972. The amount determined for the calendar year 1984 is summarized herein. Detailed work sheets are assembled in the Report of Watermaster, in Volume 6–1984.

The amount of water extracted and delivered under Classification No. 2 was determined for the 1959-63 Base Period and the additional years 1970 and 1971 and was published in the Report of Watermaster, Volume 7, dated February, 1973. The amount determined for the calendar year 1984 is summarized herein. Detailed work sheets are assembled in the Report of Watermaster, Volume 7-1984.

#### Ground Water Level Measurements

Ground water surface elevation data required for three key wells located in the Colton Basin Area and the Riverside Basin Area within San Bernardino County, are currently furnished by the City of Riverside and Western Municipal Water District (WMWD).

These data are shown in both tabular and graphical form for the calendar years 1963 thru 1984 in Volume 8 of previous Watermaster reports. The determination for the calendar year 1985 is shown in the Report of Watermaster, Volume 8–1984.

### Stream Flow and Water Quality Measurements

The program of stream flow measurements conducted by the United States Geological Survey (USGS) in cooperation with the Watermaster has continued to provide basin inflow and stream diversion data.

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 at various locations. These expenses are presented in reports 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.

## Field Inspections

During the verification of the 1984 extractions from the San Bernardino, Colton, and Riverside Basin Areas, many of the pumping facilities installed for extractions of groundwater and diversion of surface water 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 initial verification program in the San Bernardino Basin Area, it was found that many groundwater producers and several diverters of surface water did not file their extractions and diversions with the State Water Resources Control Board. This condition was found to exist in many locations during the current year, which again necessitated inspection trips and contacts with various owners by the Watermasters or their representatives.

## TABLE NO. 1

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

## October 1, 1985 to September 30, 1986

Plunge Creek near East Highland	\$ 7,700
Waterman Canyon at Arrowhead Springs	discontinued
Devil Canyon Creek near San Bernardino	3,500
East Twin Creek near Arrowhead Springs	4,500
City Creek near Highland	3,500
San Timoteo Creek near Loma Linda	3,500
Lytle Creek at Fontana Union Head Gates	
Weir No. 1——Discharge Upper Power House	2,100
Weir No. 2——Infiltration Line	2,100
Weir No. 3——Head Gate Diversion	2,100
Weir No. 4——Breed Line Diversion	2,100
20-ft.WeirReturn to Creek	2,100
Southern California Edison Lower Power House on Lytle Creek	
20-ft.WeirDischarge Lower Power House	2,100
Parshall Flume——Return to Creek from Afterbay	2,100
Fontana Diversion (20-ft. Weir, West)	2,100
SUBTOTAL FOR PARTIES AND WATERMASTER	\$39,500
United States Geological Survey	<b>\$</b> 39,500
TOTAL	\$79,000

## **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 as first, those extractions and diversions for use by other than Plaintiffs and second, those extractions and diversions for use by Plaintiffs.

The total verified extractions by other than Plaintiffs for calendar years 1971 through 1984, together with five—year totals, are shown on Table No. 2. The individual work sheets for the 1984 verifications are included in Report of Watermaster, Volume 1–1984.

The total verified extractions from the San Bernardino Basin Area by Plaintiffs for the calendar years 1971 through 1984 are shown on Table No. 3. The individual work sheets for the 1984 verifications and distribution of extractions by Plaintiffs are included in Report of Watermaster, Volume 1A—1984 and Volume 5— 1984.

For reference, the Adjusted Base Rights of other than Plaintiffs and Plaintiffs are also shown on Tables 2 and 3.

Paragraph VII of the Judgment entitled Water Discharged Across 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 verification of the 16,000 acre—foot amount, and the enforcement of the quality requirements is considered to be the responsibility of the California Regional Water Quality Control Board—Santa Ana Region.

Prior to December, 1972, sewage effluent was discharged across the Bunker Hill Dike via Warm Creek (Plant No. 1) and the Santa Ana River (Plant No. 2). With the completion of the new Water Quality Control Plant at the "E" Street site (Plant

No. 2) the total effluent discharge of the City of San Bernardino Water Quality Control Plant accrues to the Santa Ana River immediately upstream from the "E" Street Bridge. In January, 1973, the Watermaster in cooperation with the USGS began operation of a gaging station on the plant outfall to obtain a continuous record of the quantity and mineral quality of the sewage effluent discharged to the Santa Ana River. This station has been discontinued and Watermaster now relies on the City of San Bernardino for these data.

The discharge to the Santa Ana River upstream from the Bunker Hill Dike has been determined by the Watermaster as shown on the following table:

Calendar	Plant No. 1	Plant No. 2	Total
<u>Year</u>	(Acre-Feet)	(Acre-Feet)	[Acre-Feet]
1971	5,705	8,925	14,630
1972	6,784	9,963	16,747
1973	0	17,640	17,640
1974	0	17,070	17,070
1975	0	16,820	16,820
1976	0	17,530	17,530
1977	0	17,720	17,720
1978	0	18,690	18,690
1979	0	19,350	19,350
1980	0	10,670	20,670
1981	0	21,120	21,120
1982	0	24,493	24,493
1983	0	23,170	23,170
1984	0	21,759	21,759

TABLE NO. 2

# VERIFIED EXTRACTIONS FROM THE SAN BERNARDINO BASIN AREA BY OTHER THAN PLAINTIFFS

(All Values in Acre-Feet)

	Verified	Verified Extractions		
Calendar Year	By Owners Who Have Filed With SWRCB	By Owners Who Have Not Filed With SWRCB	<u>Total</u>	Adjusted Base Right
1971	154,836 <sup>2</sup>	8,350 <sup>2</sup>	163,186 <sup>2</sup>	171,342 <sup>1</sup>
1972	159,628 <sup>2</sup>	7,599 <sup>2</sup>	167,227 <sup>2</sup>	167,238
1973	152,604 <sup>3</sup>	7,177 <sup>3</sup>	159,781 <sup>3</sup>	167,238
1974	153,099 <sup>4</sup>	5,586 <sup>4</sup>	158,685 <sup>4</sup>	167,238
1975	147,199	4,482	151,681	167,238
1976	140,329 <sup>5</sup>	3,988 <sup>5</sup>	144,317 <sup>5</sup>	167,238
1977	139,844	4,967	144,811	167,238
1978	132,439	4,601	137,040	167,238
1979	150,196	4,611	154,807	167,238
1980	153,918 <sup>6</sup>	5,504	159,422 <sup>6</sup>	167,238
1981	167,564	5,075	172,639	167,238
1982	148,250 <sup>7</sup>	4,790	153,040 <sup>7</sup>	167,238
1983	141,027	4,346	145,373	167,238
1984	172,825	5,203	178,028	167,238

Note: See Report of Watermaster, Volume 1.

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

<sup>&</sup>lt;sup>2</sup> Amount corrected during verification of 1973 extractions.

<sup>&</sup>lt;sup>3</sup> Amount corrected during verification of 1974 extractions.

<sup>&</sup>lt;sup>4</sup> Amount corrected during verification of 1975 extractions.

<sup>&</sup>lt;sup>5</sup> Amount corrected during verification of 1977 extractions.

<sup>&</sup>lt;sup>6</sup> Amount corrected during verification of 1981 extractions.

<sup>&</sup>lt;sup>7</sup> Amount corrected during verification of 1983 extractions.

TABLE NO. 2

# VERIFIED EXTRACTIONS FROM THE SAN BERNARDINO BASIN AREA BY OTHER THAN PLAINTIFFS (All Values in Acre—Feet)

	Verifi		Verified Extractions			
_	Five—Year Period	By Owners Who Have Filed With SWRCB	By Owners Who Have Not Filed With SWRCB	Total	Adjusted Base Right	
	1971-75	767,366	33,194	800,560	840,294	
	1972-76	752,859	28,832	781,691	836,190	
	1973-77	733,075	26,200	759,275	836,190	
	1974-78	712,910	23,624	736,534	836,190	
	1975—79	710,007	22,649	732,656	836,190	
	1976-80	716,726	23,671	740,397	836,190	
	1977—81	743,961	24,758	768,719	836,190	
	1978-82	752,367	24,581	776,948	836,190	
	1979-83	760,955	24,326	785,281	836,190	
	198084	783,584	24,918	808,502	836,190	

TABLE NO. 3

Page 1 of 3

VERIFIED EXTRACTIONS FROM THE SAN BERNARDINO BASIN AREA FOR USE BY PLAINTIFFS CLASSIFIED ACCORDING TO SERVICE AREA

(All Values in Acre-Feet)

Plaintiffs

		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.	Regents of the University of California	Total
Total Extractions in San Bernardino Basin Area	Adjusted Base Right <sup>1</sup> 1971 Extractions 1972 Extractions 1973 Extractions 1974 Extractions	52,199 53,882 45,694 43,022 43,367 47,962	4,294 4,012 4,532 3,512 4,088 4,709	7,833 2,902 3,527 2,979 4,504 3,950	536 219 239 239 267 179	64,862 61,015 53,992 49,752 52,226 56,800
Delivery to San Bernardino Basin Area	Adjusted Base Right <sup>1</sup> 1971 Extractions 1972 Extractions 1973 Extractions 1974 Extractions	1,427 98 <sup>2</sup> 85 156 0	00000	00000	00000	1,427 982 85 156 0
Delivery to Colton Basin Area and Riverside Basin Area in San Bernardino County	Adjusted Base Right <sup>1</sup> 1971 Extractions 1972 Extractions 1973 Extractions 1974 Extractions	1,230 669 547 512 550 498	2,449 2,388 2,239 1,751 1,985 2,002	318 383 377 250 246	00000	3,997 3,440 3,163 2,513 2,781 2,668
Delivery to Area Outside San Bernardino Valley	Adjusted Base Right <sup>1</sup> 1971 Extractions 1972 Extractions 1973 Extractions 1974 Extractions	49,542 53,115 <sup>2</sup> 45,062 42,354 42,817 47,464	1,845 1,624 2,293 1,761 2,103 2,707	7,515 2,519 3,150 2,729 4,258 3,782	536 219 239 239 267 179	59,438 57,477 50,744 47,083 49,445 54,132

<sup>&</sup>lt;sup>1</sup> 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.

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<sup>&</sup>lt;sup>2</sup> 1971 amount corrected during verification of 1972 extractions. Note: See Report of Watermaster, Volume 1A and Volume 5.

TABLE NO. 3

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

e-reet) Plaintiffs

		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.	Regents of the University of California	E O L
Total Extractions in San Bernarding	Adjusted Base Right <sup>1</sup>	52,199 51 374	4,294	7,833	536	64,862
Basin Area	1977 Extractions	50,425	3 583	מה לה מה לה מה לה	245	61,531
	1978 Extractions	45,384	1,350	7.54	183	58,889
	1979 Extractions	52,377	3,369	3.930	£	59,759
	1980 Extractions	50,756	3,677	2,333	7	56,773
Delivery to	Adjusted Base Right <sup>1</sup>	1,427	0	0	0	1.427
San Bernardino	1976 Extractions	0	0	0	0	0
Basin Area	1977 Extractions	0,	0	0	0	0
	1978 Extractions 1979 Extractions	046* 0	o c	0 0	00	6462
	1980 Extractions	383	0	o 0	00	383
Delivery to Colton Basin Area and	Adjusted Base Right <sup>1</sup> 1976 Extractions	1,230 523	2,449 2,050	318 182	96	3,997
Riverside Basin Area	1977 Extractions	346	1,820	146	. 0	2,312
In San Bernardino	19/8 Extractions	301 415	1,051	161	0 (	1,513
	1980 Extractions	0	2,060	323	00	2,362-
Delivery to Area Outside	Adjusted Base Right <sup>1</sup> 1976 Extractions	49,542 50,851	1,845	7,515	536 245	59,438
San Bernardino Valley	1977 Extractions	50,653	1,763	4,074	87	56,577
	1979 Extractions	44,437 51,962	299 1.588	2,093 3,764 <sup>3</sup>	183	47,012 <sup>2</sup> 57,307 <sup>3</sup>
	1980 Extractions	50,373	1,617	2,010	<u> </u>	54,007

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> Amount corrected during verification of 1980 extractions.

<sup>&</sup>lt;sup>3</sup> Amount corrected during preparation of report for Calendar Year 1982. Note: See Report of Watermaster, Volume 1A and Volume 5.

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

Plaintiffs

		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.	Regents of the University of California	Total
Total Extractions of San Bernardino	Adjusted Base Right <sup>1</sup> 1981 Extractions	52,199 52,157	4,294	7,833	536 143	64,862 58,996
Basin Area	1982 Extractions 1983 Extractions 1984 Extractions 1985 Extractions	49,599 46,064 58,906	2,795 3,161 4,759	5,710 2,651 5,165	» C C	50,150 51,876 68,830
Delivery to San Bernardino Basin Area	Adjusted Base Right <sup>1</sup> 1981 Extractions 1982 Extractions 1983 Extractions 1984 Extractions 1985 Extractions	1,427 724 162 <sup>2</sup> 335	0000	0000	0000	1,427 724 162 <sup>2</sup> 335 32
Delivery to Colton Basin Area and Riverside Basin Area in San Bernardino County	Adjusted Base Right <sup>1</sup> 1981 Extractions 1982 Extractions 1983 Extractions 1984 Extractions	1,230 0 0 0 0	2,449 2,151 1,775 2,318 2,671	318 358 169 245 233	0000	3,997 2,509 1,944 2,563 2,904
Delivery to Area Outside San Bernardino Valley	Adjusted Base Right <sup>1</sup> 1981 Extractions 1982 Extractions 1983 Extractions 1984 Extractions	49,542 51,433 49,437 <sup>2</sup> 45,729 58,874	1,845 1,453 1,020 843 2,088	7,515 2,734 3,547 2,406 4,932	536 143 0	59,438 55,763 54,052 <sup>2</sup> 48,978 65,894

<sup>&</sup>lt;sup>1</sup> Adjusted Base Right became effective on January 1, 1972; Base Right for Calendar Year 1971 is as shown in Table B-1 of Judgment.

<sup>&</sup>lt;sup>2</sup> Amount corrected during verification of 1983 extractions. Note: See Report of Watermaster, Volume 1A and Volume 5.

## **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 from which the Adjusted Base Rights of Plaintiff exporters were also determined. 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 Adjusted Base Rights of Plaintiffs' extractions from the San Bernardino Basin Area, classified according to service areas and based on the natural safe yield of 232,100 acre—feet per annum have been summarized on the following table for ease of reference. The Adjusted Base Right of other than Plaintiffs was also based on the natural safe yield of the San Bernardino Basin Area and was determined to be 167,238 acre—feet. Such base rights were not effective until January 1, 1972; therefore, the 1971 base rights for both Plaintiffs and other than Plaintiffs are based on the actual average annual extractions from the San Bernardino Basin Area during the five—year base period 1959—63.

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
- 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 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.

# ADJUSTED RIGHTS FOR EXTRACTIONS BY PLAINTIFFS FROM THE SAN BERNARDINO BASIN AREA BASED ON NATURAL SAFE YIELD OF 232,100 ACRE—FEET PER ANNUM <sup>1</sup>

## CLASSIFIED ACCORDING TO SERVICE AREA (All Values in Acre-Feet)

<u>Plaintiffs</u>	Total Extractions in San Bernardino Basin Area	Delivery to San Bernardino Basin Area	Delivery to Colton Basin and Riverside Basin Area in San Bernardino County	Delivery to Areas Outside San Bernardino Valley
City of Riverside (including those rights acquired as successor to the Riverside Water Company and the Gage Canal Company)	52,199 <sup>2</sup>	1,427	1,230	49,542 <sup>2</sup>
,	32,199	1,421	1,230	49,542-
Riverside Highland Water Company	4,294	0	2,449	1,845
Agua Mansa Water Compa and Meeks & Daley Water Company	ny 7,833	0	318	7,515
Regents of the University of California	<u>536</u> ²	0	0	536 <sup>2</sup>
TOTAL	64,862	1,427	3,997	59,438

<sup>&</sup>lt;sup>1</sup> Effective January 1, 1972.

<sup>&</sup>lt;sup>2</sup> The Adjusted Base Rights allocated to the City of Riverside and the Regents of the University of California were established at 52,169 and 566 acre—feet per annum respectively. On the basis of an amended recordation filing for the 1959–63 Base Period, the adjusted right for the Regents of the University of California was reduced to 536 acre—feet,and the City of Riverside adjusted right was increased to 52,199 acre—feet.

## **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 1984 calendar year have been verified by the Watermaster as 1,340 acre-feet and 9,560 acre feet, respectively. The individual work sheets for these determinations are included in Report of Watermaster, Volume 2–1984, Volume 3–1984, and Volume 5–1984 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, respectfully.

## 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 necessitates the verification of these extractions. The individual work sheets for the 1984 verification and distribution of extractions are also included in Report of Watermaster, Volumes 2–1984, 3–1984 and 5–1984.

The extractions from the Colton Basin Area and the Riverside Basin Area in San Bernardino County for the calendar years 1971 through 1984 are summarized in Tables 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)

				Extracte Riverside County		
Extractions for Calendar Years	Total from Basin	Extracted by San Bernardino County Entities	Total	Used in San Bernardino County	Used in Riverside County	Base Right for Use in Riverside County 1
Five—Year Base Period 1959—63 Avg.	11,731 <sup>3</sup>	8,235 <sup>3</sup>	3,496	115	2 204	2 204
			3,490	115	3,381	3,381
1971	11,388 <sup>2</sup>	8,363 <sup>2</sup>	3,025	248	2,777	3,381
1972	10,414	7,532	2,882	271	2,611	3,381
1973	7,844	6,982	862	247	615	3,381
1974	8,906	7,169	1,737	273	1,464	3,381
1975	11,083	6,821	4,262	389	3,873	3,381
1976	11,5584	8,605 <sup>4</sup>	2,953	270	2,683	3,381
1977	8,777	6,061	2,716	447	2,269	3,381
1978	7,663	6,430	1,233	338	895	3,381
1979	7,194	5,224	1,970	288	1,682	3,381
1980	5,681 <sup>5</sup>	5,610 <sup>5</sup>	71	0	71	3,381
1981	6,348	6,175	173	0	173	3,381
1982	6,499	5,450	1,049	68	981	3,381
1983	4,735 <sup>6</sup>	4,603 <sup>6</sup>	132	37	95	3,381
1984	8,987	7,441	1,546	206	1,340	3,381

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

<sup>&</sup>lt;sup>2</sup> Amount corrected during verification of 1972 extractions.

<sup>3</sup> Amount corrected during verification of 1972 and 1973 extractions.

<sup>4</sup> Amount corrected during verification of 1977 extractions.

<sup>5</sup> Amount corrected during verification of 1981 extractions.

<sup>6</sup> Amount corrected during verification of 1984 extractions.

Note: See Report of Watermaster, Volume 2 and Volume 5.

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)

Extracted by

				Riverside County		
Five—Year Period	Total from Basin	Extracted by San Bernardino County Entities	Total	Used in San Bernardino County	Used in Riverside County	Base Right for Use in Riverside County 1
Base Period 1959-63	58,655	41,175	17,480	575	16,905	16,905
1971–75	49,635	36,867	12,768	1,428	11,340	16,905
1972-76	49,805	37,109	12,696	1,450	11,246	16,905
1973-77	48,168	35,638	12,530	1,626	10,904	16,905
1974-78	47,987	35,086	12,901	1,717	11,184	16,905
1975-79	46,275	33,141	13,134	1,732	11,402	16,905
1976-80	40,873	31,930	8,943	1,343	7,600	16,905
1977-81	35,663	29,500	6,163	1,073	5,090	16,905
1978-82	33,385	28,889	4,496	694	3,802	16,905
1979-83	30,457	27,062	3,395	393	3,002	16,905
1980-84	32,250	29,279	2,971	311	2,660	16,905

<sup>&</sup>lt;sup>1</sup> Extractions for use in Riverside County are limited to the verified extractions for the five-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)

Extracted by Riverside County Entities Base Right Extractions for Use in Used in Extracted by Used in for Total Riverside Riverside Calendar from San Bernardino San Bernardino County County 1 County Entities County Years Basin Total Five-Year Base Period 21,085 21,985 9,609 24,120 3,035 1959-63 Avg. 33,729 21,085 2,214 18,108 1971 29,070 8,748 20,322 18,588 21,085 20,185 1,597 1972 28,148 7,963 13,986 21,085 1973 21,809 6,490 15,319 1,333 21,085 1974 21,881 6,899 14,982 1,399 13,583 14,963 21,085 1975 22,701 6,513 16,188 1,225 21,085 1,666 16,141 1976 24,705 6,898 17,807 1977 23,506 7,089 16,417 1,985 14,432 21,085 1978 17,216 6,261 10,955 1,900 9,055 21,085 1979 20,024 7,062 12,962 2,370 10,592 21,085  $5.932^{2}$ 12,601<sup>2</sup> 3,410  $9,191^2$ 21,085 1980 18,533 3,733 13,067 21,085 1981 23,611 6,811 16,800 8,457 3,483<sup>3</sup> 21,085 1982 17,349<sup>3</sup> 5,409 11,940<sup>3</sup> 21,085 1983  $11,904^3$  $5.204^3$  $6,700^3$  $2.925^3$ 3,775 21,085 9,560 1984 17,161 5,648 11,513 1,953

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

<sup>&</sup>lt;sup>2</sup> Amounts corrected during verification of 1981 extractions.

<sup>&</sup>lt;sup>3</sup> Amounts corrected during verification of 1984 extractions.
Note: See Report of Watermaster, Volume 3 and Volume 5.

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)

Extracted by Riverside County Entities Base Right for Use in Total Extracted by Used in Used in Five-Year from San Bernardino San Bernardino Riverside Riverside County Entities County County 1 Period Basin Total County Base Period 1959-63 168,645 48,045 120,600 15,175 105,425 105,425 1971-75 123,609 36,613 86,996 7,768 79,228 105,425 1972-76 119,244 34,763 84,481 7,220 77,261 105,425 1973-77 114,602 33,889 80,713 7,608 73,105 105,425 1974-78 110,009 76,349 8,175 68,174 105,425 33,660 1975-79 74,329 65,183 108,152 33,823 9,146 105,425 1976-80 103,894 33,242 70,742 59,411 11,331 105,425 1977-81 102,890 33,155 69,735 13,398 56,337 105,425 1978-82 96,733 31,475 65,258 14,896 50,362 105,425 1979-83 61,003 45,082 105,425 91,421 30,418 15,921 1980-84 88,558 29,004 59,554 15,504 44,050 105,425

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

#### Minimum Water Surface Elevations

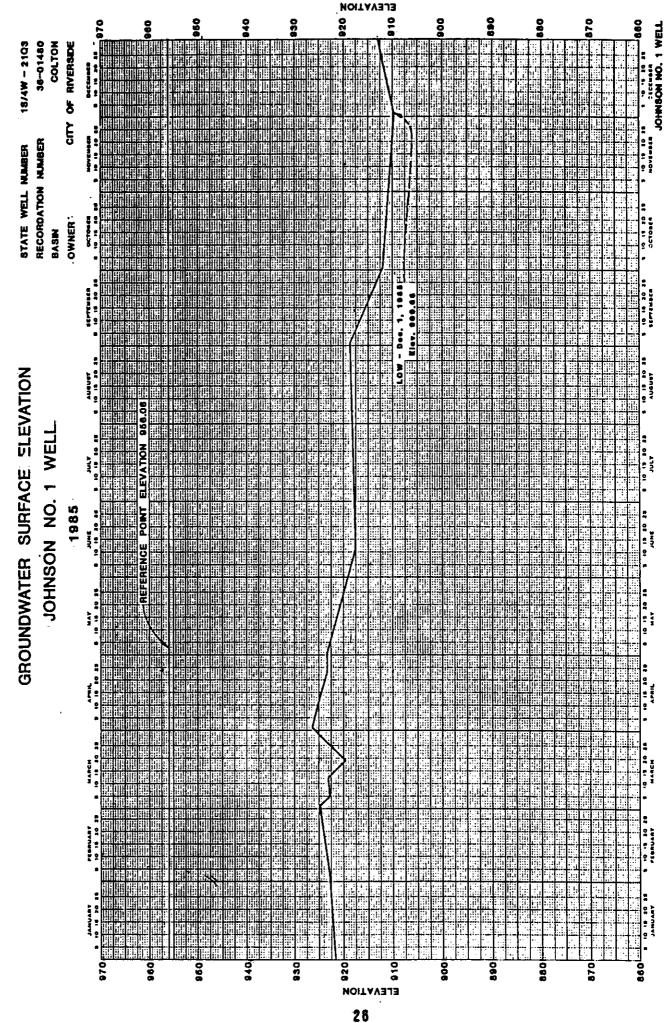
Extractions from the Colton Basin Area and that portion of the Riverside Basin Area within San Bernardino County for use in San Bernardino Valley are not limited, provided that the average static water surface elevation as measured at wells numbered 1S/4W-21Q03, 1S/4W-29H01, and 1S/4W-29Q01 is not less 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.

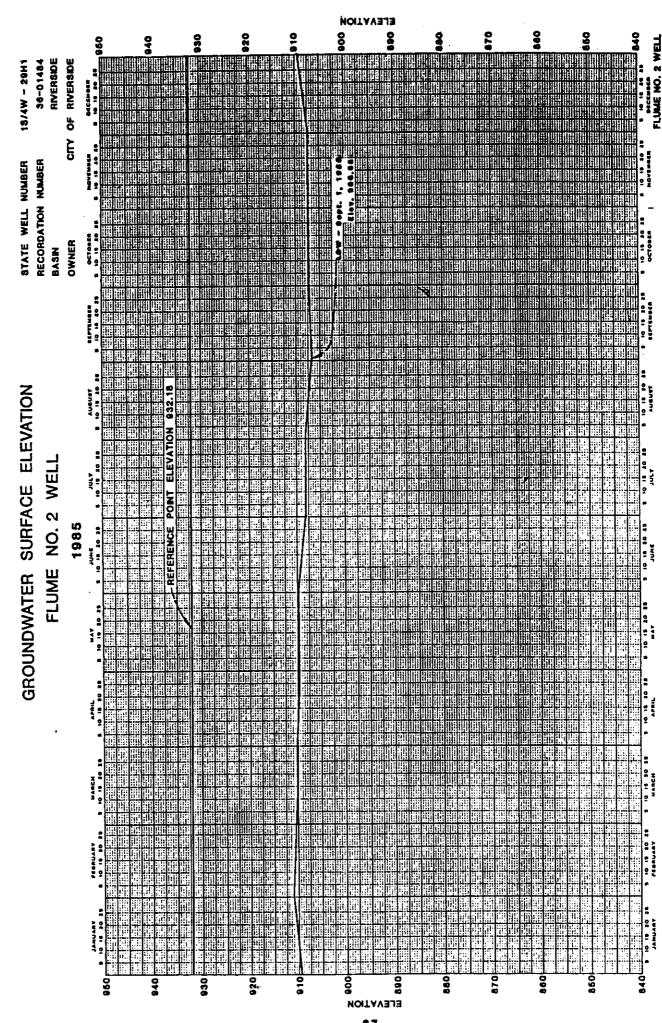
Hydrographs of the 1985 static water surface elevations in the three key wells are shown on Figures 1, 2, and 3 which follow. Data pertinent to the key wells as well as the records of historic water surface measurements are included in Report of Watermaster, Volume 8–1984 entitled *Ground Water Surface Elevations in Wells Numbered 15/4W-21Q03*, 15/4W-29H01, and 15/4W-29Q01 Located Within the Colton Basin Area and Riverside Basin Area in San Bernardino County through December, 1985.

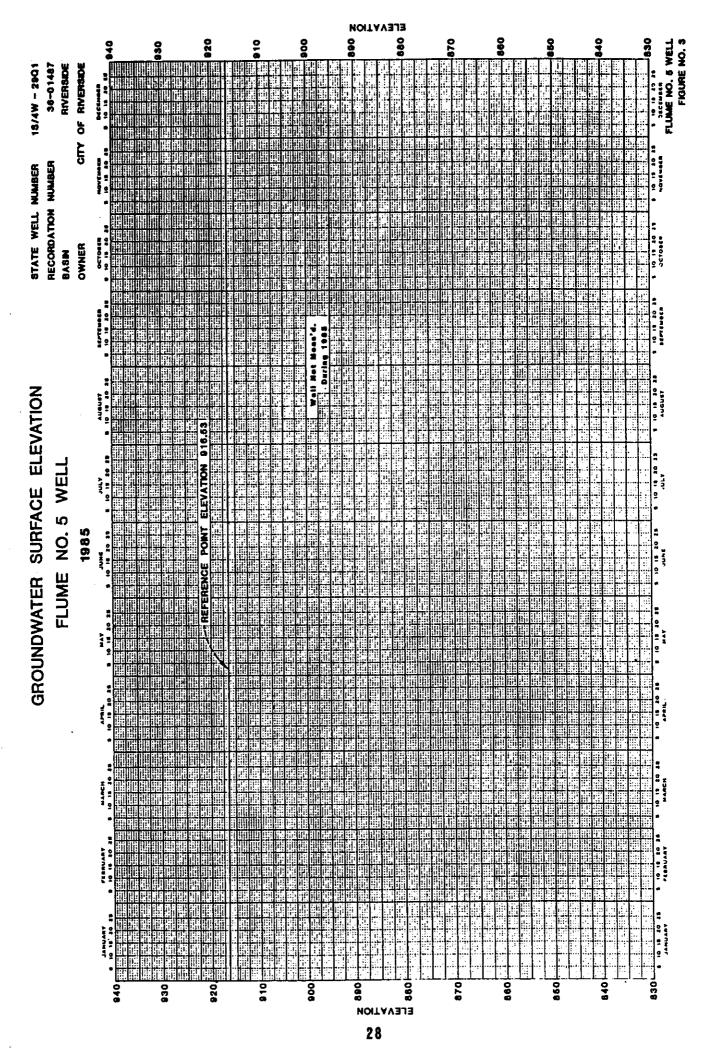
The lowest static water surface elevation measured in each of the three wells during the fall of 1985 is as follows:

Well Number	Date of Measurement	Elevation of Water Surface
1S/4W-21Q03	2/ 1/85	909.66
1S/4W-29H01	9/ 1/85	906.68
1S/4W-29Q01	-	unable to measure
	Average	908.17

Thus, the lowest average fall water surface elevation for the calendar year 1985 is 1.85 feet lower than the 1984 average of 910.02 and 86.13 feet higher than the 1963 average of 822.04.







#### **CHAPTER VI**

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

#### CHAPTER VI

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

#### **Extractions**

The extractions from that portion of the Riverside Basin area in Riverside County which is tributary to the Riverside Narrows for use within Riverside County for the calendar year 1984 have been verified by the Watermaster as 32,440 acre—feet. The individual work sheets are included in Report of Watermaster, Volume 4–1984, 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 ,
Five—Year Base Period 1959—63 Avg.	29,633	29,633
1971	30,942 <sup>1</sup>	29,633
1972	37,804 <sup>2</sup>	29,633
1973	33,094	29,633
1974	38,304 <sup>2</sup>	29,633
1975	28,285	29,633
1976	31,565	29,633
1977	28,226	29,633
1978	24,878 <sup>3</sup>	29,633
1979	25,512	29,633
1980	30,206 <sup>4</sup>	29,633
1981	30,243 <sup>4</sup>	29,633
1982	20,365 <sup>5</sup>	29,633
1983	22,991 <sup>5</sup>	29,633
1984	32,440	29,633

<sup>&</sup>lt;sup>1</sup> Amount corrected during verification of 1972 extractions.

These extractions exceeded the Base Right plus peaking allowance of 20% by 2,244 acre-feet in 1972 and 2,744 acre-feet in 1974.

<sup>&</sup>lt;sup>3</sup> Amount corrected during verification of 1980 extractions.

<sup>&</sup>lt;sup>4</sup> Amount corrected during verification of 1983 extractions.

<sup>5</sup> Amount corrected during verification of 1984 extractions.
Note: See Report of Watermaster, Volume 4.

TABLE NO. 6

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

Five—Year Period	Total Verified Extractions	Base Right for Use in Riverside County
Base Period 1959—63	148,165	148,165
1971-75	168,429	148,165
1972-76	169,052	148,165
1973-77	159,474	148,165
1974-78	151,258	148,165
1975—79	138,466	148,165
1976—80	140,387	148,165
1977-81	139,065	148,165
1978-82	131,204	148,165
1979-83	129,317	148,165
1980-84	136,245	148,165

#### Return Flows

The Judgment provides for additional replenishment by Western if the urbanization of the Riverside Basin 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 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 at the time the Judgment was entered, from which return flow was 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

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

The service areas of the companies listed in Table D-5 were investigated and re-mapped in June, 1985. These maps showing the current irrigated acreage were

compared to the 1968 maps used to determine the acreages shown on Table D-5. This comparison indicated those lands no longer being irrigated and the present use of the converted land. Additional study of these converted lands indicated the date irrigation ceased and the date such lands were connected to a sewage disposal system discharging to the river below Riverside Narrows.

The number of dwelling units connected to the City of Riverside wastewater disposal system and a discharge unit factor of 0.22 acre—feet per year per dwelling unit was used to determine the wastewater discharged to the river from the converted lands. These data have been summarized for the years 1980 through 1984 and are shown on Table No. 7.

TABLE NO. 7

REDUCTION IN RETURN FLOW CONTRIBUTING TO BASE FLOW
AT RIVERSIDE NARROWS
RESULTING FROM CONVERSION OF AGRICULTURAL USES
OF WATER TO DOMESTIC USES CONNECTED TO A SEWAGE SYSTEM DISCHARGING TO THE RIVER BELOW RIVERSIDE NARROWS
(All Values in Acre-Feet)

Calendar Year	Gage Canal	Alta Mesa	East Riverside	Riverside Highland	Total
1980	197	38	178	0	413
1981	197	38	179	0	414
1982	197	38	182	0	417
1983	197	38	205	0	440
1984	197	38	<u>253</u>	0	488
TOTAL 1980-84	985	190	997	0	2,172

Table No. 7 shows that in 1984, the reduction in return flow contributing to Base Flow at Riverside Narrows resulting from the conversion of land from agricultural use to urban uses in the Riverside Basin Area was 488 acre—feet. Western's obligation associated with the land use conversion and resulting replenishment requirements are shown on summary Tables 16 and 18.

#### **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 THE RIVERSIDE NARROWS

The extractions from the San Bernardino, Colton and Riverside Basin Areas which were delivered for use within Western on lands not tributary to the Riverside Narrows during the calendar year 1984 were verified by the Watermaster to be 36,413 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 6–1984, 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,
THE 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)

				Calendar Years			
Entities Within WMWD	Annual 1959–63 Average	1980 Verified Delivery	1981 Verified Delivery	1982 Verified Delivery	1983 Verified Delivery	1984 Verified Delivery	
City of Riverside, including Irrigation Division water extracted by the Gage Canal Company and former Riverside Water Company	23,836	32,485	29,977	23,3741	24,484	28,515	
Meeks & Daley Water Company, Agua Mansa Water Company, and Temescal Water Company, including water received from City of Riverside	13,229	6,210	5,974	4,690	3,299	5,895	
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	2,506	3,146	1,106	817	1,160	
Jurupa Community Services District	531	က	0	0	0	527	
Rubidoux Community Services District	36	254	261	252	276	316	
TOTAL	42,535	41,458	39,358	29,422 <sup>1</sup>	28,876	36,413	

<sup>1</sup> Amounts corrected during verification of 1983 extractions. Note: See Report of Watermaster, Volume 6.

#### **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

#### Deliveries to Chino Basin

The extractions from the Colton and San Bernardino Basin Areas which were delivered for use on lands not within Western nor tributary to the Riverside Narrows (Chino Basin) during the calendar year 1984, were verified by the Watermaster to be 23,072 acre—feet. Said amount is summarized by entity on Table No. 9.

#### 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 indicated that such exports were not made during the five calendar years ending with 1963. The verification of production for the 1984 calendar year indicated that during 1984 San Bernardino Valley Municipal Water District diverted 321 acre—feet of water from Mill Creek and delivered such water to the Yucaipa Basin as shown on Table No. 9. During 1984, no water was exported to the San Timoteo, Oak Glen or Beaumont Basins.

#### **CHAPTER IX**

ANNUAL ACCOUNTING OF EXTRACTIONS DELIVERIES, AND REPLENISHMENT OBLIGATIONS

TABLE NO. 9

WITHIN THE SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT SAN BERNARDINO BASIN AREA AND COLTON BASIN AREA NOR TRIBUTARY TO THE RIVERSIDE NARROWS FOR USE ON LANDS NOT WITHIN WESTERN VERIFIED EXTRACTIONS FROM THE (All Values in Acre-Feet)

				Calendar Years		
Entities	Annual 1959-63 Average	1980 Verified Delivery	1981 Verified Delivery	1982 Verified Delivery	1983 Verified Delivery	1984 Verified Delivery
Fontana Union Water Company	10,1701	22,152	20,564	16,333	21,124 <sup>3</sup>	19,220
West San Bernardino County Water District	1,806	2,442	2,649	2,989	2,951	2,903
City of Rialto	5511	749	727	515	632	949
Subtotal (Delivery to Chino Basin)	12,527	25,343	23,940	19,837	24,707 <sup>3</sup>	23,072
San Bernardino Valley Municipal Water District	0	82	1782	6252	1,5542	3212
Subtotal (Delivery to areas other than Chino Basin)	0	ထ	178	625	1,554	321
TOTAL	12,5271	25,351	24,118	20,462	26,261 <sup>3</sup>	23,393

<sup>1</sup> Amount corrected during verification of 1973 deliveries.

Note: See Report of Watermaster, Volume 7.

<sup>&</sup>lt;sup>2</sup> Water diverted from Mill Creek and delivered to the Yucaipa Regional Park by SBVMWD.

<sup>&</sup>lt;sup>3</sup> Amount corrected during verification of 1984 deliveries.

#### **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 as well as Non-Plaintiffs, and further requires that a determination be made as to that portion of such extractions delivered to each of the service areas tributary to the Riverside Narrows as well as the deliveries to those areas not tributary to the Riverside Narrows. A comparison of the annual extractions and deliveries with the verified five—year Base Period amounts provides the basis for the annual accounting of replenishment obligations, if any, which accrue by reason of production or deliveries in excess of such amounts.

#### Plaintiffs' Extractions from San Bernardino Basin Area

The Judgment specifically defines the Adjusted Base Right of the City of Riverside, Gage Canal Company, Riverside Highland Water Company, Agua Mansa Water Company, Meeks and Daley Water Company and the Regents of University of California to produce water from the San Bernardino Basin Area for use in three specific service areas. These rights, expressed in terms of the five—year total allowable production and the maximum allowable production in any one year, are shown on Tables 10 through 13.

Tables 10 through 13 also show the actual extractions for use by the Plaintiffs in the specific service areas. A comparison of the Plaintiffs' Adjusted Base Rights to actual extractions and deliveries indicates that the City of Riverside exceeded the five—year Base Right to deliver water to areas outside San Bernardino Valley by 6,912 acre—feet during the period 1980 through 84. (See Table 10.) In accordance with Paragraph VI(b)6 of the Judgment, San Bernardino Valley and Western entered into a 10—year agreement on December 22, 1981, which provides for up to 10,000 acre—feet per year of additional extraction and exportation of water from the San Bernardino Basin Area by the City of Riverside. The agreement also sets forth certain payment provisions for such additional extractions and requires certification to the Watermaster that such provisions have been met. The Watermaster has determined that for calendar year 1984, the requirements of the agreement have been met and accordingly the 6,912 acre—feet of extraction and delivery to areas outside

San Bernardino Valley in excess of the Adjusted Base Right by the City of Riverside does not constitute a violation of the provisions of the Judgment. Actual extractions from the San Bernardino Basin Area and deliveries to the specified service areas by all other Plaintiffs during the five—year period 1980 through 1984, were less than their respective Adjusted Base Rights.

#### Non-Plaintiffs' Extractions from San Bernardino Basin Area

The Judgment provides that the Non-Plaintiffs as a group can produce a specific amount of water from the San Bernardino Basin Area without incurring an obligation to replenish the basin with imported water. During the period 1980 through 1984, the Non-Plaintiffs' production did not exceed the Adjusted Base Right. (See Table 17.)

A comparison of Adjusted Base Rights to actual production by Plaintiffs and Non-Plaintiffs for the period 1980 through 1984 is as follows:

	Adjusted Base Right 1980—1984	Actual Extractions	Difference
Plaintiffs	324,310	292,633	31,677
Non—Plaintiffs	836,190	808,502	27,688
TOTAL	1,160,500	1,101,135	59,365

#### Exports to Areas Not Tributary to Riverside Narrows

The Judgment limits the amount of water that can be extracted from the various basins for use on lands that are not tributary to the Riverside Narrows. Western and San Bernardino Valley are responsible for any obligation that may result from excess exports to these nontributary lands located in Riverside County and San Bernardino County, respectively.

Tables 14 and 15 indicate the Base Right and actual export for use on lands in Riverside County and San Bernardino County not tributary to the Riverside Narrows. Table 14 shows that during the period 1980 through 1984 the export by entities within Western was 37,148 acre—feet less than the Base Right.

Table 15 shows that exports from San Bernardino Valley for use in San Bernardino County exceeded the Base Right for the period 1971 through 1984 by 111,198 acre—feet. The obligation of San Bernardino Valley resulting from this excess export is shown on Table 17.

#### Summary of Western's Credits and Obligations

Table 16 summarizes Western's credits and obligations in the Colton and Riverside Basin Areas. The actual extractions in these areas during the five—year period 1980 through 1984 were 87,540 acre—feet less than the total five—year Base Right. This under—extraction results in extraction credits for the five—year period 1980 through 1984 as shown on Table 16.

In addition to extraction credits, Western receives credit for return flows resulting from imported water used in areas that are tributary to the Riverside Narrows. Western's accumulated credit resulting from under—extraction and return of imported water is 89,412 acre—feet.

Since actual extractions have not exceeded the Base Right during the period 1980 through 1984, Western has not incurred an excess extraction obligation. As indicated on Table 14 and as discussed in the previous section, Western has not incurred an obligation due to excess exports to areas not tributary to the Riverside Narrows. However, land conversion from agricultural uses to urban uses within Western during the period 1980 through 1984 has resulted in an obligation of 2,172 acre—feet. (See Table 7.) Therefore, Western's total accumulated obligation during the period 1980 through 1984 is 2,172 acre—feet.

In summary, Table 16 shows that during the five—year period 1980 through 1984 Western's accumulated credits exceeded its accumulated obligation by 87,240 acre—feet.

#### Summary of San Bernardino Valley's Credits and Obligations

Table 17 summarizes San Bernardino Valley's credit and obligations in the San Bernardino, Colton and Riverside Basins. Paragraph VI of the Judgment entitled San Bernardino Basin Area Rights and Replenishment states in part that:

San Bernardino shall also receive credit against any future replenishment obligations for all replenishment which it provides in excess of that required herein, and for any amounts which may be extracted without replenishment obligation, which in fact are not extracted.

The Judgment provides that SBVMWD can carry forward to the current five—year period credits accumulated prior thereto. Obligations incurred by SBVMWD have also been carried forward to the current five—year period. Accordingly the accumulated values shown on Tables 15 and 17 include amounts accumulated prior to 1980.

As indicated previously, the actual extractions from the San Bernardino Basin Area were less than the Base Right during the period 1980 through 1984. Hence, San

Bernardino Valley incurred an extraction credit as shown on Table 17. San Bernardino Valley receives credit for imported water that is used for replenishment in the San Bernardino Basin Area as previously discussed. Accumulated credits for such replenishment and from the under—extraction through 1984 total 306,865 acre—feet.

Since actual extractions exceeded the Base Right in 1981 and in 1984, San Bernardino Valley incurred excess extraction obligations of 5,401 acre—feet and 10,790 acre—feet, respectively, as shown on Table 17. Table 15 shows that the exports from San Bernardino, Colton and Riverside Basin Areas to areas not tributary to the Riverside Narrows exceeded the Base Right for the period 1971 through 1984 by 111,198 acre—feet. The accumulated obligation resulting from the excess extractions in 1981 and 1984 and excess export during the period 1971 through 1984 is 127,389 acre—feet as shown on Table 17.

In summary, Table 17 shows that at the end of the five—year period 1980 through 1984 San Bernardino Valley's accumulated credits exceeded its accumulated obligations by 179,476 acre—feet.

Chapter V indicates that extractions in the Colton Basin Area and Riverside Basin Area in Riverside County for use in San Bernardino Valley are not limited provided that San Bernardino Valley maintains a specified minimum static water surface elevation in these Basins. During the five—year period 1980 through 1984 the actual water surface elevation remained higher than the specified minimum; therefore, no additional water is required for maintenance of these Basins.

#### Replenishment Requirements

Table 18 summarizes the accumulated credits and obligations of both Western and San Bernardino Valley. The credits exceeded the obligations for both parties during the five—year period 1980 through 1984. The Table also indicates that if a net accumulated obligation is incurred by either party, the replenishment required by that party would be reduced by the return flow resulting from any excess extraction. Since the extraction credits exceeded the excess extraction obligations for both parties as shown on Tables 16 and 17, no credit has been allowed for excess extraction return.

In summary, Table 18 shows that neither Western nor San Bernardino Valley is required to provide additional replenishment for obligations incurred during the five—year period 1980 through 1984.

TABLE NO. 10

ANNUAL ACCOUNTING OF EXTRACTIONS FROM THE SAN BERNARDINO BASIN AREA AND 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)

as Valley	Actual <sup>3</sup>	53,115	45,062	42,354	42,817	47,464	50,851	50,653	44,437	51,962	50,373	51,4336	49,437	45,729 <sup>7</sup>	58,874
Delivery to Areas San Bernardino Valley	Maximum Allowable <sup>2</sup>	65,944	64,405	64,405	64,405	64,405	64,405	64,405	64,405	64,405	64,405	64,405	64,405	64,405	64,405
Outside	Adjusted Right <sup>1</sup>	50,7264	49,5425	49,5425	49,5425	49,5425	49,5425	49,5425	49,5425	49,5425	49,5425	49,5425	49,5425	49,5425	49,5425
in and reas ounty	Actual <sup>3</sup>	699	547	512	550	498	523	346	301	415	9	9	  -	9	-0-
Delivery to Colton Basin and Riverside Basin Areas in San Bernardino County	Maximum Allowable <sup>2</sup>	1,638	1,599	1,599	1,599	1,599	1,599	1,599	1,599	1,599	1,599	1,599	1,599	1,599	1,599
Delivery Rive in Sa	Adjusted Right <sup>1</sup>	1,260	1,230	1,230	1,230	1,230	1,230	1,230	1,230	1,230	1,230	1,230	1,230	1,230	1,230
Area	Actual <sup>3</sup>	86	85	156	0	0	0	0	646	0	383	724	162	335	32
Delivery to Bernardino Basin Area	Maximum Allowable <sup>2</sup>	1,901	1,855	1,855	1,855	1,855	1,855	1,855	1,855	1,855	1,855	1,855	1,855	1,855	1,855
San E	Adjusted Right <sup>1</sup>	1,4624	1,427	1,427	1,427	1,427	1,427	1,427	1,427	1,427	1,427	1,427	1,427	1,427	1,427
rom the n Area	Actual <sup>3</sup>	53,882	45,694	43,022	43,367	47,962	51,374	50,999	45,384	52,377	50,756	52,1576	49,599	46,0647	906'85
Verified Extractions from the San Bernardino Basin Area	Maximum Allowable <sup>2</sup>	69,482	62,859	628'29	628'29	62,859	67,859	62,859	62,859	67,859	62,859	62,859	62,859	67,859	67,859
Verified San B	Adjusted Right <sup>1</sup>	53,4484	52,199 <sup>5</sup>	52,199 <sup>5</sup>	52,1995	52,199 <sup>5</sup>	52,1995	52,199 <sup>5</sup>	52,1995	52,1995	52,199 <sup>5</sup>				
	Calendar Year	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> Maximum Allowable for any one year, not to exceed 30% of Adjusted Right.

<sup>3</sup> Actual verified extractions from Table No. 3 of Watermaster Report.

<sup>&</sup>lt;sup>4</sup> 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.

<sup>5</sup> See Footnote 2 of Table on Page 24.

<sup>6</sup> Includes 1,148 acre-feet of additional extraction which is allowable under provisions of the December 22, 1981, Western-San Bernardino agreement prepared in accordance with paragraph VI(b)6 of the Judgment.

includes 76 acre-feet of additional extraction which is allowable under provisions of the December 22, 1981, Western-San Benardino agreement prepared in accordance with paragraph VI (b) 6 of the Judgment. Note: Annual Accounting of Extractions as required in Paragraphs V and VI of the Judgment.

TABLE NO. 10

ANNUAL ACCOUNTING OF EXTRACTIONS FROM THE SAN BERNARDINO BASIN AREA AND 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)

	Verifie	Verified Extractions from the	rom the	ć	Delivery to	:	Deliver Riv	Delivery to Colton Basin and Riverside Basin Areas	in and reas		Delivery to Areas	as Valles
	OSEC	San Dernardino Basin Area	in Area	San	Bernardino Basin Area	ı Area	ñ 5	in san bernardino county	ounty	Ontsine	Outside 34n Bernardino Valley	Valley
Calendar	Adjusted	Maximum		Adjusted	Maximum		Adjusted	Maximum	ļ	Adjusted	Maximum	•
Year	Right <sup>1</sup>	Allowable <sup>2</sup>	Actual <sup>3</sup>	Right <sup>1</sup>	Allowable <sup>2</sup>	Actual <sup>3</sup>	Right <sup>1</sup>	Allowable <sup>2</sup>	Actual <sup>3</sup>	Right <sup>1</sup>	Allowable <sup>2</sup>	Actual <sup>3</sup>
1971–75	262,2444	262,244	233,927	7,170	7,170	339	6,180	6,180	2,776	248,894	248,894	230,735
1972-76	260,995	260,995	231,419	7,135	7,135	241	6,150	6,150	2,630	247,710	247,710	228,548
1973-77	260,995	260,995	236,724	7,135	7,135	156	6,150	6,150	2,429	247,710	247,710	234,139
1974-78	260,995	260,995	239,086	7,135	7,135	646	6,150	6,150	2,218	247,710	247,710	236,222
1975—79	260,995	260,995	248,096	7,135	7,135	646	6,150	6,150	2,083	247,710	247,710	245,367
1976 - 80	250,995	260,995	250,890	7,135	7,135	1,029	6,150	6,150	1,585	247,710	247,710	248,276
1977—81	260,995	260,995	251,673	7,135	7,135	1,753	6,150	6,150	1,062	247,710	247,710	248,858
1978-82	260,995	260,995	249,125 <sup>5</sup>	7,135	7,135	1,915	6,150	6,150	716	247,710	247,710	246,4945
1979—83	260,995	260,995	249,8055	7,135	7,135	1,604	6,150	6,150	415	247,710	247,710	247,7865
198084	260,995	260'092	256,2586	7,135	7,135	1,636	6,150	6,150	-	247,710	247,710	254,6226
Excess												
Extraction												
1980-84		(4,737)*			(5,499)*		9)	(6,150)*			6,912	

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.

<sup>2</sup> Maximum allowable for the five-year period is the same as the five-year-period Adjusted Right.

<sup>3</sup> Actual verified extractions from Table No. 3 of Watermaster Report.

<sup>&</sup>lt;sup>4</sup> Adjusted Right was not effective until January 1, 1972; thus the Adjusted Right for the period 1971-75 is more than the Adjusted Right for subsequent five-year periods.

December 22, 1981, Western-San Bernardino agreement prepared in accordance with paragraph VI (b) 6 of the Judgment. Excludes the 1,148 acre-feet of additional extraction in 1981 which is allowable under provisions of the

Excludes the 1,148 acre-feet of additional extraction in 1981 and the 76 acre-feet of additional extraction in 1983 which are allowable under provisions of the December 22, 1981, Western-San Bernardino agreement prepared in accordance with paragraph VI (b) 6 of the Judgment.

<sup>\*</sup>Parentheses indicate that actual extractions are less than Adjusted Base Right.

TABLE NO. 11

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

Calendar         Adjusted         Adjusted         Delivery to colton         Basin and Riversitien Areas         Cutside Sain Benardino Valley and Rights Areas         Delivery to Areas         Exversible Basin Areas         Outside Sain Benardino Valley and Rights Areas         Colton Basin Areas         Delivery to Areas         Exversible Basin Areas         Outside Sain Benardino Valley and Rights Allowable Sain Areas         Delivery to Areas         Privated Rights Allowable Sain Areas         Delivery to Areas         Outside Sain Benardino Valley         Adjusted Allowable Sain Areas	-															
Adjusted Extractions from the San Actual Sight Actual San Actual San Actual San Actual San Actual San Bernardino Basin Areas         Delivery to Colton Basin and Riverside Basin Areas         Delivery to Colton Basin and Riverside Basin Areas         Courside Basin Areas         <	as Valley	Actual <sup>3</sup>	1,624	2,293	1,761	2,103	2,707	2,469	1,763	299	1,588	1,617	1,453	1,020	843	2,088
Adjusted Sight Acrastions from the San Bernardino Basin Areas         San Bernardino Basin Areas         Delivery to Colton Basin Areas in San Bernardino Basin Areas         Priverside Basin Areas         Pagin Sin Areas         Adjusted Basin Areas         Pagint Areas in San Bernardino Basin Areas in San Bernardino County         Adjusted Basin Areas         Pagint Areas         Adjusted Basin Areas <th< td=""><td>Delivery to Are San Bernardino</td><td>Maximum Allowable<sup>2</sup></td><td>2,457</td><td>2,398</td><td>2,398</td><td>2,398</td><td>2,398</td><td>2,398</td><td>2,398</td><td>2,398</td><td>2,398</td><td>2,398</td><td>2,398</td><td>2,398</td><td>2,398</td><td>2,398</td></th<>	Delivery to Are San Bernardino	Maximum Allowable <sup>2</sup>	2,457	2,398	2,398	2,398	2,398	2,398	2,398	2,398	2,398	2,398	2,398	2,398	2,398	2,398
Adjusted San Bernardino Basin Area San Bernardino Basin Area San Bernardino Basin Area San Bernardino Basin Area         Delivery to Priverside Basin Area in San Bernardino Count (2011)         Delivery to Colton Basin Area in San Bernardino Count (2011)         Priverside Basin Area in San Bernardino Count (2014)         Priverside Basin Area in San Bernardino Count (2014)<	Outside	Adjusted Right <sup>1</sup>	1,8904	1,845	1,845	1,845	1,845	1,845	1,845	1,845	1,845	1,845	1,845	1,845	1,845	1,845
Verified Extractions from the San Bernardino Basin Area         San Bernardino Basin Area         Delivery to Basin Area           Adjusted Maximum Right 4,3994 5,719 4,012 4,294 5,582 4,532 -0.0.         Adjusted Maximum Adjusted Maximum Right 4,3994 5,582 4,088 -0.0.         Adjusted Maximum Adjusted Maximum Adjusted Maximum Adjusted A,294 5,582 4,088 -0.0.         Adjusted Maximum Adjusted Maximum Adjusted B,582 4,709 -0.0.         Adjusted Maximum Adjusted B,582 -0.0.         Adjus	in and reas ounty	Actual <sup>3</sup>	2,388	2,239	1,751	1,985	2,002	2,050	1,820	1,051	1,781	2,060	2,151	1,775	2,318	2,671
Verified Extractions from the San Bernardino Basin Area         San Bernardino Basin Area         Delivery to Basin Area           Adjusted Maximum Right 4,3994 5,719 4,012 4,294 5,582 4,532 -0.0.         Adjusted Maximum Adjusted Maximum Right 4,3994 5,582 4,088 -0.0.         Adjusted Maximum Adjusted Maximum Adjusted Maximum Adjusted A,294 5,582 4,088 -0.0.         Adjusted Maximum Adjusted Maximum Adjusted B,582 4,709 -0.0.         Adjusted Maximum Adjusted B,582 -0.0.         Adjus	y to Colton Bas erside Basin Aı an Bernardino C	Maximum Allowable <sup>2</sup>	3,262	3,184	3,184	3,184	3,184	3,184	3,184	3,184	3,184	3,184	3,184	3,184	3,184	3,184
Verified Extractions from the San Bernardino Basin Area         San Bernardino Basin Area           Adjusted Maximum Right¹         Adjusted Maximum Right³         Ad	Deliver Riv in S	Adjusted Right <sup>1</sup>	2,5094	2,449	2,449	2,449	2,449	2,449	2,449	2,449	2,449	2,449	2,449	2,449	2,449	2,449
Verified Extractions from the San Bernardino Basin Area         San Bernardino Barin Area         Delivery San Bernardino Basin Area           Adjusted Maximum Right <sup>1</sup> Allowable <sup>2</sup> 5,719 4,012 -1- <sup>4</sup> -0-0         Adjusted Maximum Adjusted Maximum Adjusted Maximum Allowable <sup>2</sup> 5,719 4,012 -0-0         -0-         -0-           4,294 5,582 4,532 -0-         5,719 4,012 -0-         -0-         -0-         -0-           4,294 5,582 4,709 -0-         -0-         -0-         -0-         -0-         -0-           4,294 5,582 1,350 -0-         5,582 3,583 -0-         -0-         -0-         -0-         -0-           4,294 5,582 3,604 5,582 3,604 5,582 3,604 5,582 2,795 -0-         4,294 5,582 2,795 -0-         -0-         -0-         -0-           4,294 5,582 3,604 5,582 3,604 5,582 2,795 -0-         -0-         -0-         -0-         -0-           4,294 5,582 3,604 5,582 0,795 -0-         -0-         -0-         -0-         -0-           4,294 5,582 3,604 5,582 0,795 0-0-         -0-         -0-         -0-         -0-           4,294 5,582 0,795 0-0-         -0-         -0-         -0-         -0-         -0-           4,294 5,582 0,795 0-0-         -0-         -0-         -0-         -0-         -0-           4,294 5,582 0,795 0-0-         -0-         -0-         -0-         -0-	Area	Actual <sup>3</sup>	-0-	-0-	-0-	-0-	-0	0	-0-	-0-	-0-	-0-	-0-	10-	-0-	-0-
Verified Extractions from the San Bernardino Basin Area       San Bernardino Basin Area       San Adjusted         Adjusted       Maximum       Adjusted         Right <sup>1</sup> Allowable <sup>2</sup> Actual <sup>3</sup> Right <sup>1</sup> 4,294       5,582       4,532       -0-         4,294       5,582       4,088       -0-         4,294       5,582       4,088       -0-         4,294       5,582       4,519       -0-         4,294       5,582       3,583       -0-         4,294       5,582       3,604       -0-         4,294       5,582       3,604       -0-         4,294       5,582       2,795       -0-         4,294       5,582       3,604       -0-         4,294       5,582       2,795       -0-         4,294       5,582       3,604       -0-         4,294       5,582       2,795       -0-         4,294       5,582       2,795       -0-         4,294       5,582       2,795       -0-         4,294       5,582       2,795       -0-         4,294       5,582       2,795       -0-         4,294       <	Delivery to ernardino Basin	Maximum Allowable <sup>2</sup>	-0	-0-	-0-	-0-	-0-	-0-	9	-0	0	-0-	-0-	-0	-0-	-0-
Verified Extractions from San Bernardino Basin Ar Adjusted Maximum Right <sup>4</sup> Allowable <sup>2</sup> 4,294 5,582 4,294 5,582 4,294 5,582 4,294 5,582 4,294 5,582 4,294 5,582 4,294 5,582 4,294 5,582 4,294 5,582 4,294 5,582 4,294 5,582	_	Adjusted Right <sup>1</sup>	-1-4	9	-0-	0-	-0-	-01	-0-	-0-	10-	-0-	-0-	-0-	-0-	-
A	om the n Area	Actual <sup>3</sup>	4,012	4,532	3,512	4,088	4,709	4,519	3,583	1,350	3,369	3,677	3,604	2,795	3,161	4,759
A	d Extractions fr Sernardino Basi	Maximum Allowable <sup>2</sup>	5,719	5,582	5,582	5,582	5,582	5,582	5,582	5,582	5,582	5,582	5,582	5,582	5,582	5,582
Calendar Year 1971 1972 1973 1974 1975 1976 1980 1981 1982 1983	Verifie San f	Adjusted Right <sup>1</sup>	4,3994	4,294	4,294	4,294	4,294	4,294	4,294	4,294	4,294	4,294	4,294	4,294	4,294	4,294
		Calendar Year	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984

<sup>&</sup>lt;sup>1</sup> 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.

<sup>2</sup> Maximum Allowable for any one year, not to exceed 30% of Adjusted Right.

<sup>3</sup> Actual verified extractions from Table No. 3 of Watermaster Report.

<sup>&</sup>lt;sup>4</sup> 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. 11

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

is Valley	Actual <sup>3</sup>	10,388	11,333	10,803	9,341	8,826	7,736	6,720	5,977	6,521	7,021		
Delivery to Areas Outside San Bernardino Valley	Maximum Allowable <sup>2</sup>	9,270	9,225	9,225	9,225	9,225	9,225	9,225	9,225	9,225	9,225		(2,204)*
Outside	Adjusted Right <sup>1</sup>	9,270	9,225	9,225	9,225	9,225	9,225	9,225	9,225	9,225	9,225		
in and eas ounty	Actual <sup>3</sup>	10,365	10,027	809'6	806'8	8,704	8,762	8,863	8,818	10,085	10,975		
Delivery to Colton Basin and Riverside Basin Areas in San Bernardino County	Maximum Allowable <sup>2</sup>	12,305	12,245	12,245	12,245	12,245	12,245	12,245	12,245	12,245	12,245		(1,270)*
Delivery Rive in Sa	Adjusted Right <sup>1</sup>	12,305	12,245	12,245	12,245	12,245	12,245	12,245	12,245	12,245	12,245		
Area	Actual <sup>3</sup>	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	0-1		
Delivery to Bernardino Basin Area	Maximum Allowable <sup>2</sup>	-0-	9	0	-0	-0-	-0-	<b>-</b>	-0-	-0-	-0-	•	-
San B	Adjusted Right <sup>1</sup>	-0-	-0-	-0-	-0	-0-	-0-	-0-	-0-	-0-	9		
om the n Area	Actual <sup>3</sup>	20,853	21,360	20,411	18,249	17,530	16,498	15,583	14,795	16,606	17,996		,
Verified Extractions from the San Bernardino Basin Area	Maximum Allowable <sup>2</sup>	21,575	21,470	21,470	21,470	21,470	21,470	21,470	21,470	21,470	21,470		(3,474)*
Verified San B	Adjusted Right <sup>1</sup>	21,5754	21,470	21,470	21,470	21,470	21,470	21,470	21,470	21,470	21,470		
	. Calendar Year	1971-75	1972-76	1973-77	1974-78	1975-79	1976-80	1977—81	1978-82	1979-83	1980-84	Extraction	1980~84

<sup>&</sup>lt;sup>1</sup> 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.

<sup>2</sup> Maximum Allowable for the five-year period is the same as the five-year-period Adjusted Right.

<sup>&</sup>lt;sup>3</sup> Actual verified extractions from Table No. 3 of Watermaster Report.

<sup>&</sup>lt;sup>4</sup> Adjusted Right was not effective until January 1, 1972; thus the Adjusted Right for the period 1971-75 is more than the Adjusted Right for subsequent five-year periods.

<sup>\*</sup>Parentheses indicate that actual extractions are less than Adjusted Base Right.

TABLE NO. 12

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

as Valley	Actual <sup>3</sup>	2,519	3,150	2,729	4,258	3,782	5,211	4,074	2,093	3,764	2,010	2,734	3,547	2,406	4,932
Delivery to Areas San Bernardino Valley	Maximum Allowable <sup>2</sup>	10,010	9,770	9,770	9,770	9,770	9,770	9,770	9,770	9,770	9,770	9,770	9,770	9,770	077,6
Outside	Adjusted Right <sup>1</sup>	7,7004	7,515	7,515	7,515	7,515	7,515	7,515	7,515	7,515	7,515	7,515	7,515	7,515	7,515
in and eas ounty	Actual <sup>3</sup>	383	377	250	246	168	182	146	161	166	323	358	169	245	233
Delivery to Colton Basin and Riverside Basin Areas in San Bernardino County	Maximum Allowable <sup>2</sup>	424	413	413	413	413	413	413	413	413	413	413	413	413	413
Delivery Rive in Sa	Adjusted Right <sup>1</sup>	3254	318	318	318	318	318	318	318	318	318	318	318	318	318
to Basin Area	Actual <sup>3</sup>	0-	9	0	-0-	0	0-	0	-0-	0-	10+	-0-	-0-	-0-	-0-
Delivery to Bernardino Basir	Maximum Allowable <sup>2</sup>	-0-	9	-0	0-	-0-	-0-	-0-	-0-	0-	0-	0-	4	0-	-0-
San B	Adjusted Right <sup>1</sup>	<b>*</b> -0-	0	-0-	-0-	-0-	0-	-0	-0-	-0-	-0-	0	-	0	-0-
om the n Area	Actual <sup>3</sup>	2,902	3,527	2,979	4,504	3,950	5,393	4,220	2,254	3,930	2,333	3,092	3,716	2,651	5,165
Verified Extractions from the San Bernardino Basin Area	Maximum Allowable <sup>2</sup>	10,434	10,183	10,183	10,183	10,183	10,183	10,183	10,183	10,183	10,183	10,183	10,183	10,183	10,183
Verifiec San E	Adjusted Right <sup>1</sup>	8,026	7,833	7,833	7,833	7,833	7,833	7,833	7,833	7,833	7,833	7,833	7,833	7,833	7,833
	Calendar Year	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984

<sup>&</sup>lt;sup>1</sup> 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.

<sup>2</sup> Maximum Allowable for any one year, not to exceed 30% of Adjusted Right.

<sup>&</sup>lt;sup>3</sup> Actual verified extractions from Table No. 3 of Watermaster Report.

<sup>&</sup>lt;sup>4</sup> 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.

Actual<sup>3</sup>

19,130 20,054 16,438

19,418

18,924

17,152 14,675 14,148 15,629

14,461

TABLE NO. 12

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

	Verifie San	Verified Extractions from the San Bernardino Basin Area	om the n Area	San	Delivery to San Bernardino Basin Area	Area	Delivery Rive in Sa	Delivery to Colton Basin and Riverside Basin Areas in San Bernardino County	in and reas ounty	Outside	Delivery to Areas Outside San Bernardino Valley	/alley
Calendar Year	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Actual <sup>3</sup>	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Actual <sup>3</sup>	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Actual³	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Actua
1971–75	39,3584	39,358	17,862	, e	-0-	9	1.598	1.598	1.424	37.760	37.760	16.43
1972-76	39,165	39,165	20,353	0-	-0-	0-	1,590	1,590	1,223	37,575	37.575	19.13
1973-77	39,165	39,165	21,046	0-	-0	-01	1,590	1,590	992	37,575	37,575	20.05
1974-78	39,165	39,165	20,321	-0-	9	0-	1,590	1,590	903	37,575	37,575	19.41
1975-79	39,165	39,165	19,747	-0 -	9	0-	1,590	1,590	823	37,575	37,575	18,92
1976-80	39,165	39,165	18,130	0-	0	10-	1,590	1,590	978	37,575	37,575	17,15
1977-81	39,165	39,165	15,829	0-	-0-	101	1,590	1,590	1,154	37,575	37,575	14.67
1978-82	39,165	39,165	15,325	0-	0-	-0-	1,590	1,590	1,177	37,575	37,575	14,14
1979-83	39,165	39,165	15,722	-0-	0-	0	1,590	1,590	1,261	37,575	37,575	14.46
198084	39,165	39,165	16,957	6	-0-	0	1,590	1,590	1,328	37,575	37,575	15,62
					. *							
Excess												
1980-84		(22,208)*			-01			(262)*			(21,946)*	

<sup>&</sup>lt;sup>1</sup> Adjusted Right as determined and reported to the Court in the Annual report of the Western-San Bernardino Watermaster for Calendar Year 1971, Table No. 9, page 27.

<sup>&</sup>lt;sup>2</sup> Maximum Allowable for the five-year period is the same as the five-year-period Adjusted Right.

<sup>&</sup>lt;sup>3</sup> Actual verified extractions from Table No. 3 of Watermaster Report.

<sup>&</sup>lt;sup>4</sup> Adjusted Right was not effective until January 1, 1972; thus the Adjusted Right for the period 1971-75 is more than the Adjusted Right for subsequent five-year periods.

<sup>\*</sup>Parentheses indicate that actual extractions are less than Adjusted Base Right.

TABLE NO. 13

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

						:	£	-			
<u>, e</u>	Verified Extractions from the San Bernardino Basin Area	rom the in Area	San	Delivery to San Bernardino Basin Area	ı Area	Delivery Rive in Sa	Delivery to Colton Basin and Riverside Basin Areas in San Bernardino County	sin and reas county	Outside	Delivery to Areas San Bernardino Valley	is Valley
Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Actual <sup>3</sup>	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Actual <sup>3</sup>	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Actual <sup>3</sup>	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Actui
5814	755	219	<b>7</b> -0-	-0-	-0-	<b>→</b> -0-	-0-	9	5814	755	7
5365	269	239	9	-0-	9	9	-0-	9	5365	269	7
5365	269	239	-	-0-	-0-	0	-0-	6	5365	269	7
5365	<b>269</b> .	267	-0-	-0-	0-	0	-0-	þ	5365	269	2
5365	269	179	-0-	-0-	-0-	-0-	-0-	-	5365	269	
5365	269	245	þ	-0-	-0-	-0-	-0-	01	5365	269	
5365	269	87	-0-	-0-	9	0	-0	9	5365	269	
5365	697	183	9	10-	0-	9	-0-	9	5365	269	
LG.	269	83	9	-0-	-0-	0-	-0-	9	5365	697	
5365	269	7	9	-0-	-0-	0	9-	-0-	5365	169	
5365	269	143	9	-01	수	-01	-0-	-0-	5365	269	
5365	269	84	9	-0-	0	-0-	-0-	占	5365	269	
5365	269	-0-	-6	-0-	0	<del> </del>	-0-	-0-	5365	269	
5365	269	0-	-0-	-0-	-0-	-0-	-01	-0-	5365	769	

179

267

245

183

83

239 239 143 \$

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> Maximum Allowable for any one year, not to exceed 30% of Adjusted Right.
<sup>3</sup> Actual verified extractions from Table No. 3 of Watermaster Report.

<sup>&</sup>lt;sup>4</sup> 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.
<sup>5</sup> See Footnote 2 of Table on Page 24.

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

Actual<sup>3</sup>

1,143 1,169 1,017 777 605 503 464 281 198

TABLE NO. 13

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

	Verifik San	Verified Extractions from the San Bernardino Basin Area	om the n Area	San	Delivery to San Bernardino Basin Area	n Area	Delivery Rive in Sa	Delivery to Colton Basin and Riverside Basin Areas in San Bernardino County	in and reas ounty	Outside	Delivery to Areas Outside San Bernardino Valley	is Valley
Calendar Year	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Actual <sup>3</sup>	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Actual <sup>3</sup>	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Actual <sup>3</sup>	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Actual
1971-75	2,7254	2,725	1,143	9	0	-0-	þ	-0-	0-	2,725	2,725	1,14
1972-76	2,680	2,680	1,169	0-	0-	-0	-0-	-0-	-0-	2,680	2,680	1,169
1973-77	2,680	2,680	1,017	0-	0	-0-	-0-	-0-	-0-	2,680	2,680	1,017
1974-78	2,680	2,680	961	0-	-0-	-0-	-0-	-0-	-0-	2,680	2,680	. 6
1975-79	2,680	2,680	1111	0-	-0-	-0-	-0-	-0-	-0-	2,680	2,680	111
1976 - 80	2,680	2,680	909	01	-0-	-0-	01	-0-	-0-	2,680	2,680	9
1977-81	2,680	2,680	503	-0-	-0-	0	-0-	-0-	0-	2,680	2,680	503
1978-82	2,680	2,680	464	9-	-0-	0-1	-0-	-0-	-0	2,680	2,680	79#
1979-83	2,680	2,680	281	0-	0-	0	-0-	-0-	-0-	2,680	2,680	281
1980-84	2,680	2,680	198	0	4	-	0	0-	-0	2,680	2,680	198
Excess												
Extraction		*(667.6)			•			•			,	
1980-84		(2,482)*			0			-0-			(2,482)*	

<sup>&</sup>lt;sup>1</sup> 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.

<sup>2</sup> Maximum Altowable for the five-year period is the same as the five-year-period Adjusted Right.

<sup>&</sup>lt;sup>4</sup> Adjusted Right was not effective until January 1, 1972; thus the Adjusted Right for the period 1971-75 is more than the Adjusted Right for subsequent five-year periods. <sup>3</sup> Actual verified extractions from Table No. 3 of Watermaster Report.

<sup>\*</sup>Parentheses indicate that actual extractions are less than Adjusted Base Right.

TABLE NO. 14

# ANNUAL ACCOUNTING FOR WESTERN MUNICIPAL WATER DISTRICT EXPORT OF EXTRACTIONS FROM 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

		Cal	endar Years		
	1980	1981	1982	1983	1984
<u>EXPORTS</u>					
Base Right	42,535	42,535	42,535	42,535	42,535
Actual Export <sup>1</sup>	41,458	39,358	29,422	28,876	36,413
ACCUMULATED EXPORT	41,458	80,816	110,238	139,114	175,527
<u>OBLIGATIONS</u>					
Excess Export <sup>2</sup>	(1,077)	(3,177)	(13,113)	(13,659)	(6,122)
ACCUMULATED EXCESS EXPORT	(1,077)	(4,254)	(17,367)	(31,026)	(37,148)

<sup>&</sup>lt;sup>1</sup> See Table 8 of Watermaster Report.

Actual Export minus Base Right, Parentheses indicate that the Actual Export is less than the Base Right.

TABLE NO. 15

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

		Ca	lendar Years		
	1980	1981	1982	1983	1984
<u>EXPORTS</u>					
Base Right	12,527	12,527	12,527	12,527	12,527
Actual Export <sup>1</sup>	25,351	24,118	20,462	26,261	23,393
ACCUMULATED EXPORTS	192,342 <sup>3</sup>	216,460	236,922	263,183	286,576
<u>OBLIGATIONS</u>					
Excess Export <sup>2</sup>	12,824	11,591	7,935	13,734	10,866
ACCUMULATED EXCESS EXPORT	67,072 <sup>3</sup>	78,663	86,598	100,332	111,198

<sup>&</sup>lt;sup>1</sup> See Table 9 of Watermaster Report.

<sup>&</sup>lt;sup>2</sup> Actual Export minus Base Right.

Accumulated values beginning in 1980 include amounts accumulated through 1979.

TABLE NO. 16

# ANNUAL ACCOUNTING FOR WESTERN MUNICIPAL WATER DISTRICT EXTRACTIONS FROM COLTON BASIN AREA AND RIVERSIDE BASIN AREA IN RIVERSIDE AND SAN BERNARDINO COUNTIES FOR USE OUTSIDE SAN BERNARDINO VALLEY

		Cal	endar Years		
	1980	1981	1982	1983	1984
<b>EXTRACTIONS</b>					
Base Right <sup>1</sup>	54,099	54,099	54,099	54,099	54,099
Actual Extractions <sup>1</sup>	39,468	43,483	29,803	26,861	43,340
ACCUMULATED EXTRACTIONS	39,468	82,951	112,754	139,615	182,955
CREDITS					
Extraction <sup>2</sup>	14,631	10,616	24,296	27,238	10,759
Return from imported water	398	458	345	303	368
Total Credits	15,029	11,074	24,641	27,541	11,127
ACCUMULATED CREDITS	15,029	26,103	50,744	78,285	89,412
OBLIGATIONS					
Excess Extractions <sup>3</sup>	0	0	0	0	0
Excess Export <sup>4</sup>	0	0	0	0	0
Land Use Conversion <sup>5</sup>	413	414	417	440	488
Total Obligations	413	414	417	440	488
ACCUMULATED OBLIGATIONS	413	827	1,244	1,684	2,172
NET ACCUMULATED (CREDIT) OR OBLIGATION	(14,616)	(25,276)	(49,500)	(76,601)	(87,240)

<sup>&</sup>lt;sup>1</sup> See Tables 4, 5, and 6.

<sup>&</sup>lt;sup>2</sup> Amounts which may be extracted without replenishment obligation, which in fact are not extracted, Equal to Base Right minus Actual Extraction.

<sup>&</sup>lt;sup>3</sup> Actual Extraction minus Base Right.

See Table 14. Note that Excess Export is shown as zero when Accumulated Export is less than Base Right.

<sup>&</sup>lt;sup>5</sup> See Table 7.

#### TABLE NO. 17

#### ANNUAL ACCOUNTING FOR SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT EXTRACTIONS FROM THE SAN BERNARDINO BASIN AREA

		Ca	lendar Years	i	
	1980	1981	1982	1983	1984
<b>EXTRACTIONS</b>					
Base Right <sup>1</sup>	167,238	167,238	167,238	167,238	167,238
Actual Extractions <sup>1</sup>	159,422	172,639	153,040	145,373	178,028
ACCUMULATED EXTRACTIONS	1,540,957 <sup>5</sup>	1,713,596	1,866,636	2,012,009	2,190,037
CREDITS					
Extraction <sup>2</sup>	7,816	-0-	14,198	21,865	-0-
Replenishment <sup>6</sup>	-0-	15,339 <sup>7</sup>	8,343 <sup>8</sup>	5,896 <sup>9</sup>	385 <sup>10</sup>
Total Credits	7,816	15,339	22,541	27,761	385
ACCUMULATED CREDITS	240,839 <sup>5</sup>	256,178	278,719	306,480	306,865
<u>OBLIGATIONS</u>					
Excess Extractions <sup>3</sup>	-0-	5,401	-0-	-0-	10,790
Excess Export <sup>4</sup>	12,824	11,591	7,935	13,734	10,866
Total Obligations	12,824	16,992	7,935	13,734	21,656
ACCUMULATED OBLIGATIONS NET ACCUMULATED (CREDIT)	67,072	84,064	91,999	105,733	127,389
OR OBLIGATIONS	(173,767) <sup>5</sup>	(172,114)	(186,720)	(200,747)	(179,476)

Amounts which may be extracted without replenishment obligation, which in fact are not extracted. Equal to Base Right minus Actual Extraction.

<sup>&</sup>lt;sup>3</sup> Actual Extraction minus Base Right.

<sup>&</sup>lt;sup>4</sup> See Table 15.

<sup>&</sup>lt;sup>5</sup> Accumulated values beginning in 1980 include amounts accumulated through 1979.

<sup>&</sup>lt;sup>6</sup> Amounts corrected during verification of 1982 extractions.

<sup>&</sup>lt;sup>7</sup> Total import of State Project Water by SBVMWD was 16,021 acre-feet. However, 682 acre-feet of this amount were delivered directly into the North Fork Canal.

<sup>&</sup>lt;sup>8</sup> Total import of State Project Water by SBVMWD was 8,409 acre-feet. However, 66 acre-feet of this amount were delivered directly into the North Fork Canal.

Total import of State Project Water by SBVMWD was 5,994 acre-feet. However, 98 acre-feet of this amount were delivered directly to Southern California Water Company.

Total import of State Project Water by SBVMWD was 5,269 acre-feet. However, 1,413 acre-feet of this amount were delivered directly to Southern California Water Company, North Fork Canal or Redlands Aqueduct, and 3,471 acre-feet were delivered into Colton Basin for replenishment.

#### TABLE NO. 18

## SUMMARY OF REPLENISHMENT OBLIGATIONS WESTERN AND SAN BERNARDINO VALLEY FIVE—YEAR PERIOD 1980 THROUGH 1984 (All Values in Acre—Feet)

#### WESTERN MUNICIPAL WATER DISTRICT

	San Bernardino Basin Area	Colton and Riverside Basins
Accumulated Credits <sup>1</sup>	(See Tables 10-13)	89,412
Accumulated Obligations <sup>1</sup>	<del></del>	2,172
Net Accumulated (Credit) or Obligation	<del></del>	(87,240)
Excess Extraction Return Credit <sup>2</sup>		0
REPLENISHMENT REQUIRED		0

#### SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT

	San Bernardino Basin Area	Colton Basin and Riverside Basin in San Bernardino County
Accumulated Credits <sup>3</sup>	306,865 <sup>4</sup>	3,471
Accumulated Obligations <sup>3</sup>	127,389 <sup>4</sup>	0
Net Accumulated (Credit) or Obligation <sup>3</sup>	(179,476) <sup>4</sup>	(3,471)
Excess Extraction Return Credit <sup>2</sup>	0	
REPLENISHMENT REQUIRED	0	0

<sup>1</sup> Reference Table 16 for Colton and Riverside Basins.

When a net accumulated obligation exists, excess extraction returns are computed as 36% of the excess extraction and are subtracted from the net accumulated obligation to determine the required replenishment.

<sup>&</sup>lt;sup>3</sup> Reference Table 17.

<sup>4</sup> Includes amounts accumulated prior to 1980.