

MOJAVE BASIN AREA WATERMASTER

**CONSUMPTIVE WATER USE STUDY AND
UPDATE OF PRODUCTION SAFE YIELD
CALCULATIONS FOR THE
MOJAVE BASIN AREA**

February 16, 2000

Prepared by

**ALBERT A. WEBB ASSOCIATES
Consulting Civil Engineers
Riverside, California**

ACKNOWLEDGMENTS

Albert A. Webb Associates acknowledges with thanks the information and advice provided by various individuals during the preparation of this report. In particular they are:

Mojave Water Agency

Mr. Norman T. Caouette, Interim General Manager

Ms. Valerie L. Wiegenstein,
Watermaster Services Coordinator

Mr. Jeffrey D. Ruesch, Hydrologic Technician

Mojave Basin Area Watermaster's Engineer

Mr. James C. Hanson, P.E.

Mr. Robert C. Wagner, P.E.

February 16, 2000

Mr. Norman T. Caouette, Interim Executive Officer
Mojave Basin Area Watermaster
22450 Headquarters Drive.
P.O. Box 1089
Apple Valley, CA 92307

Dear Mr. Caouette:

Albert A. Webb Associates is pleased to submit our report on the consumptive water use and update of production safe yield calculations for the Mojave Basin Area. The enclosed report consists of the following:

- Executive Summary "Consumptive Water Use and Update of Production Safe Yield Calculation".
- Technical Memorandum No. 1 "Evaluation of Underflow of Values Used in Table C-1 of the Mojave Basin Area Adjudication".
- Technical Memorandum No. 2 "Surface Water Hydrological Inventory for the Mojave River Basin".
- Technical Memorandum No. 3 "1996-97 Consumptive Water Use".

The enclosed body of work is to be incorporated into the determination by the Watermaster's Engineer of Production Safe Yield as required by the Judgement. Our findings presented in the enclosed Executive Summary indicate that Production Safe Yield for each of the five subareas is as follows:

Alto	69,862 acre-feet
Centro	33,375 acre-feet
Baja	20,679 acre-feet
Este	7,156 acre-feet
Oeste	4,052 acre-feet


Mr. Norman Caouette
Mojave Water Agency
February 16, 2000
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At the Watermaster meeting on January 26, 2000, the Watermaster's Engineer presented a preliminary recommendation for Free Production Allowance based on our findings. The Engineer's recommendation for a further reduction in Free Production Allowance (FPA) equal to 5 percent of the aggregate subarea FPA for each subarea is supported by our findings.

Thank you for giving us the opportunity to be of service to the Mojave Basin Area Watermaster.

Sincerely,

ALBERT A. WEBB ASSOCIATES


Sam I. Gershon
Vice President



SIG:ah
Encls.

MOJAVE BASIN AREA ADJUDICATION

EXECUTIVE SUMMARY

CONSUMPTIVE WATER USE STUDY AND UPDATE OF PRODUCTION SAFE YIELD CALCULATIONS

February 15, 2000

Prepared by:

**Albert A. Webb Associates
On Behalf Of The Mojave Basin Area Watermaster**

Introduction

The Mojave Basin Area Watermaster retained Albert A. Webb Associates to conduct a consumptive water use study and update production safe yield calculations consistent with the requirements of the Judgement for the Mojave River Basin Adjudication.

Scope of Work

The scope of work included the following:

1. Review existing data to determine:
 - The average annual surface flow across the Helendale Fault during the base period 1930-31 through 1989-90;
 - The average annual surface flow across the Waterman Fault during the base period 1930-31 through 1989-90;
 - The average annual ungaged inflow during the base period 1930-31 through 1989-90; and
 - The deep percolation of precipitation during the base period 1930-31 through 1989-90.

2. Develop consumptive use estimates for agricultural and urban water production for each of the five subareas, as shown on Table C-1¹ to the Judgement. This included all water production annually reported to and verified by the Mojave Water Agency for minimal producers and appellants to the Judgement within the adjudicated boundary but not bound. The consumptive use estimates were predicated on the hydrologic conditions for water year 1996-97.
3. Update the sample production safe yield calculations contained in Table C-1.

Water Supply

A review was made of the surface water inflow (gaged and ungaged), subsurface inflow into the basin, deep percolation of precipitation, and imports.

Surface Water Inflow

The surface water inflow into the Alto Subarea was increased from 65,000 to 65,500 acre-feet per year to reflect the reported data for 1930-31 through 1989-90. .

A change was made in the ungaged outflow from the Alto Subarea and inflow to the Centro Basin. Ungaged outflow from Alto Subarea was reduced from 37,300 to 34,700 acre-feet to reflect 1996-97 cultural conditions. Slight modifications were also made to the ungaged inflow to Alto and Baja Subareas to reflect a 1996 U. S. Geological Survey Water-Resources Investigations Report.

Table 1 reflects the results of our review and required revisions to the gaged and ungaged inflow and outflow for the respective subareas.

Subsurface Inflow

Based on 1996-97 cultural conditions, a review was made of the subsurface inflow at the various boundaries of the subareas. Based on recent water level data, the subsurface inflow into the Alto Subarea was increased from 1000 to 1175 acre-feet per year. The balance of the subsurface inflow values reported in Table C-1 was acceptable.

Changes were made to the subsurface outflow from the Este and Oeste Subareas (Table 1). The subsurface outflow from the Este Subarea was increased from 200 to 825 acre-feet per year. The subsurface outflow from the Oeste Subarea was reduced from 800 to 350 acre-feet per year. The balance of the subsurface flow values was acceptable.

¹ See Appendix A for a copy of Table C-1.

Deep Percolation of Precipitation

Deep percolation of precipitation included in Table C-1 was analyzed in detail. This analysis included a review of USGS Publications and discussions with their staff. As a result, we concluded that it was appropriate to utilize the reported Table C-1 data for Deep Percolation of Precipitation in Table 1.

TABLE 1
MOJAVE BASIN AREA ADJUDICATION
SUBAREA HYDROLOGICAL INVENTORY BASED ON
LONG TERM AVERAGE NATURAL WATER SUPPLY AND OUTFLOW
AND 1996-97 IMPORTS AND CONSUMPTIVE USE
 (ALL AMOUNTS IN ACRE-FEET)

WATER SUPPLY	<u>Este</u>	<u>Oeste</u>	<u>Alto</u>	<u>Centro</u>	<u>Baja</u>	<u>Basin Totals</u>
Surface Water Inflow						
Gaged	0	0	65,500	0	0	65,500
Ungaged	1,700	1,500	3,600	34,700 ¹	14,400 ²	7,200 ³
Subsurface Inflow	0	0	1,175	2,000	1,200	0 ⁴
Deep Percolation of Precipitation	0	0	3,500	0	100	3,600
Imports						
Lake Arrowhead CSD	0	0	1,620	0	0	1,620
Big Bear Area RWA	2,630	0	0	0	0	2,630
TOTAL	4,330	1,500	75,395	36,700	15,700	80,550
CONSUMPTIVE USE AND OUTFLOW						
Surface Water Inflow ^{Outflow}						
Gaged	0	0	0	0	8,200	8,200
Ungaged	0	0	34,700 ¹	14,000 ⁵	0	0
Subsurface Outflow	825	350	2,000	1,200	0	0
Consumptive use						
Agriculture	3,900	2,300	7,900	13,000	20,800	47,900
Urban ⁶	2,200	1,300	40,700	8,500	7,900	60,600
Phreatophytes	0	0	11,000	3,000	2,000	16,000 ⁷
Exports	0	0	0	0	0	0
TOTAL	6,925	3,950	96,300	39,700	38,900	132,700
Surplus / (Deficit)	(2,595)	(2,450)	(20,905)	(3,000)	(23,200)	(52,150)
Total Estimated Production (Current Year) ⁸	9,751	6,502	90,767	36,375	43,879	187,274
PRODUCTION SAFE YIELD (Current Year)⁹	7,156	4,052	69,862	33,375	20,679	135,124

¹ Estimated from reported flows at USGS gaging station, Mojave River at Victorville Narrows.

² Includes 14,000 acre-feet of Mojave River surface flow across the Waterman Fault estimated from reported flows at USGS gaging station, Mojave River at Barstow, and 400 acre-feet of local surface inflow from Kane Wash and Boom Creek.

³ Represents the sum of Este (1,700 ac.ft.), Oeste (1,500 ac.ft.), Alto (3,600 ac.ft.) and Baja (400 ac.ft. from Kane Wash and Boom Creek).

⁴ Inter subarea subsurface flows do not accrue to the total basin water supply.

⁵ From reported flows at USGS gaging station, Mojave River at Barstow.

⁶ Includes consumptive use of "Minimals Pool".

⁷ From USGS Water-Resources Investigation Report 96-4241 "Riparian Vegetation and Its Water Use During 1995 Along the Mojave River, Southern California" 1996.

⁸ Based on data in "Fourth Annual Report of the Mojave Basin Area Watermaster, Water Year 1996-97" April 1, 1998. Included in the production values are the estimated minimal producer's water use by Subarea.

⁹ For 1996-97 Water Year. Imported State Water Project water purchased by MWA (4,501 acre-feet) is not reflected in the above table.

Imported Water

Lake Arrowhead CSD and Big Bear Area RWA imported water values (1996-97) were obtained from MWA and utilized in Table 1. Both of these imports were greater than their 1990 values reported in Table C-1.

Consumptive Water Use

Consumptive water use was determined for irrigated agriculture, urban water use, and riparian habitat (phreatophytes).

Irrigated Agriculture

Agricultural consumptive water use estimates were based on 1996-97 hydrologic conditions. Acreage determinations for agricultural crops and recreational activities (lakes and golf courses) were based on 1997 color infrared aerial photographs provided by MWA. Acreage was determined for each agricultural crop and recreational land use type within each subarea.

The approach to determine consumptive use for agriculture crops was based on each producer's acreage and crop type. The unit consumptive water use for each crop type within each subarea was based on data provided by the United States Department of Agriculture². Table 1 shows the agricultural consumptive water use within each subarea. The total consumptive water use for agriculture decreased significantly from 76,500 acre-feet to 47,900 acre-feet for the 1996-97 water year.

Urban Water Use

Consumptive urban water use was based on reported production from the Watermaster's Fourth Annual Report of the Mojave Area Watermaster for Water Year 1996-97. The production values for each urban water use was multiplied by a percentage factor to determine urban consumptive water use. Table 1 shows the consumptive urban water use within each subarea. Consumptive urban water use slightly increased from 58,600 acre-feet (Table C-1) to 60,600 acre-feet (Table 1).

Phreatophytes

Consumptive water use by phreatophytes was based on U. S. Geological Survey Water-Resources Investigations Report 96-4241, "Riparian Vegetation and Its Water use During 1995 Along the Mojave River, Southern California."³ Based on our review of the

² Unit consumptive use of applied water for pistachios was developed by Albert A. Webb Associates based on current cultural practices.

³ Prepared in cooperation with the Mojave Water Agency and the California Department of Fish and Game.

report, we decided that this consumptive use study in 1995 was representative of the 1996-97 riparian habitat. The utilization of this 1995 consumptive use data for riparian habitat (16,000 acre-feet per year) was significantly greater than what was previously used (7500 acre-feet) in 1990.

Water Use Deficit

A comparison between the water supply and consumptive use and outflow still shows a deficit within each subarea and for the total basin. However, the basin deficit has decreased from 72,200 acre-feet (Table C-1) to 52,150 acre-feet per year (Table 1). All of the subareas deficits have decreased between 1990 and 1996-97.

Total Estimated Production

The total estimated production for the Basin was 187,300 acre-feet for 1996-97. This is a 35,700 acre-feet decrease from the 1990 production noted in Table C-1. The 1996-97 groundwater production for 1996-97 for each subarea was also less than what was reported in 1990.

Production Safe Yield

The production safe yield for water year 1996-97 was 135,100 acre-feet compared to 150,800 reported in Table C-1 for 1990.

Imported Water Supply

In 1996-97, the Mojave Water Agency purchased and released 4501 acre-feet of State Water Project Water into the Mojave River within the Alto Subarea.

Findings and Conclusions

Our findings presented in Table 1 indicate that Production Safe Yield for each of the Five Subareas is as follows:

Alto	69,862 acre-feet
Centro	33,375 acre-feet
Baja	20,679 acre-feet
Este	7,156 acre-feet
Oeste	4,052 acre-feet

At the Watermaster meeting on January 26, 2000, the Watermaster Engineer presented a preliminary recommendation for Free Production Allowance based on our findings. The Engineer's recommendation for a further reduction in Free Production Allowance (FPA) equal to 5 percent of the aggregate subarea FPA for each subarea is supported by our findings.

Prepared by:

ALBERT A. WEBB ASSOCIATES


Sam I. Gershon, Vice President



APPENDIX A

TABLE C-1
Mojave Basin Area Adjudication
Subarea Hydrological Inventory Based On
Long-Term Average Natural Water Supply and Outflow
and Current Year Imports and Consumptive Use
(All Amounts in Acre-Feet)

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Long-Term Average Natural Water Supply and Outflow
and Current Year Imports and Consumptive Use
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WATER SUPPLY	<u>Este</u>	<u>Oeste</u>	<u>Alto</u>	<u>Centro</u>	<u>Baja</u>	<u>Basin Totals</u>
Surface Water Inflow						
Gaged	0	0	65,000	0	0	65,000
Ungaged	1,700	1,500	3,000	37,300 ¹	14,300 ²	6,500 ³
Subsurface Inflow	0	0	1,000	2,000	1,200	0 ⁴
Deep Percolation of Precipitation	0	0	3,500	0	100	3,600
Imports						
Lake Arrowhead CSD	0	0	1,500	0	0	1,500
Big Bear ARWWA	2,000	0	0	0	0	2,000
TOTAL	<u>3,700</u>	<u>1,500</u>	<u>74,000</u>	<u>39,300</u>	<u>15,600</u>	<u>78,600</u>
CONSUMPTIVE USE AND OUTFLOW						
Surface Water Outflow						
Gaged	0	0	0	0	8,200	8,200
Ungaged	0	0	37,300 ¹	14,000 ⁵	0	0
Subsurface Outflow	200	800	2,000	1,200	0	0
Consumptive Use						
Agriculture	6,800	2,900	16,300	20,300	30,200	76,500
Urban	1,900	1,200	36,300	9,500	9,700	58,600
Phreatophytes	0	0	5,100	900	1,500	7,500 ⁶
Exports	0	0	0	0	0	0
TOTAL	<u>8,900</u>	<u>4,900</u>	<u>97,000</u>	<u>45,900</u>	<u>49,600</u>	<u>150,800</u>
Surplus / (Deficit)	(5,200)	(3,400)	(23,000)	(6,600)	(34,000)	(72,200)
Total Estimated Production (Current Year) ⁷	<u>15,700</u>	<u>7,600</u>	<u>98,900</u>	<u>46,500</u>	<u>54,300</u>	<u>223,000</u>
PRODUCTION SAFE YIELD (Current Year)	10,500	4,200	75,900	39,900	20,300	150,800

¹ Estimated from reported flows at USGS gaging station, Mojave River at Victorville Narrows.

² Includes 14,000 acre-feet of Mojave River surface flow across the Waterman Fault estimated from reported flows at USGS gaging station, Mojave River at Barstow and 300 acre-feet of local surface inflow from Kane Wash.

³ Represents the sum of Este (1,700 af), Oeste (1,500 af), Alto (3,000 af) and Baja (300 af from Kane Wash).









⁴ Inter subarea subsurface flows do not accrue to the total basin water supply.

⁵ Estimated from reported flows at USGS gaging station, Mojave River at Barstow.

⁶ Estimated by Bookman-Edmonston.

⁷ For purposes of this Table, the current year is 1990.

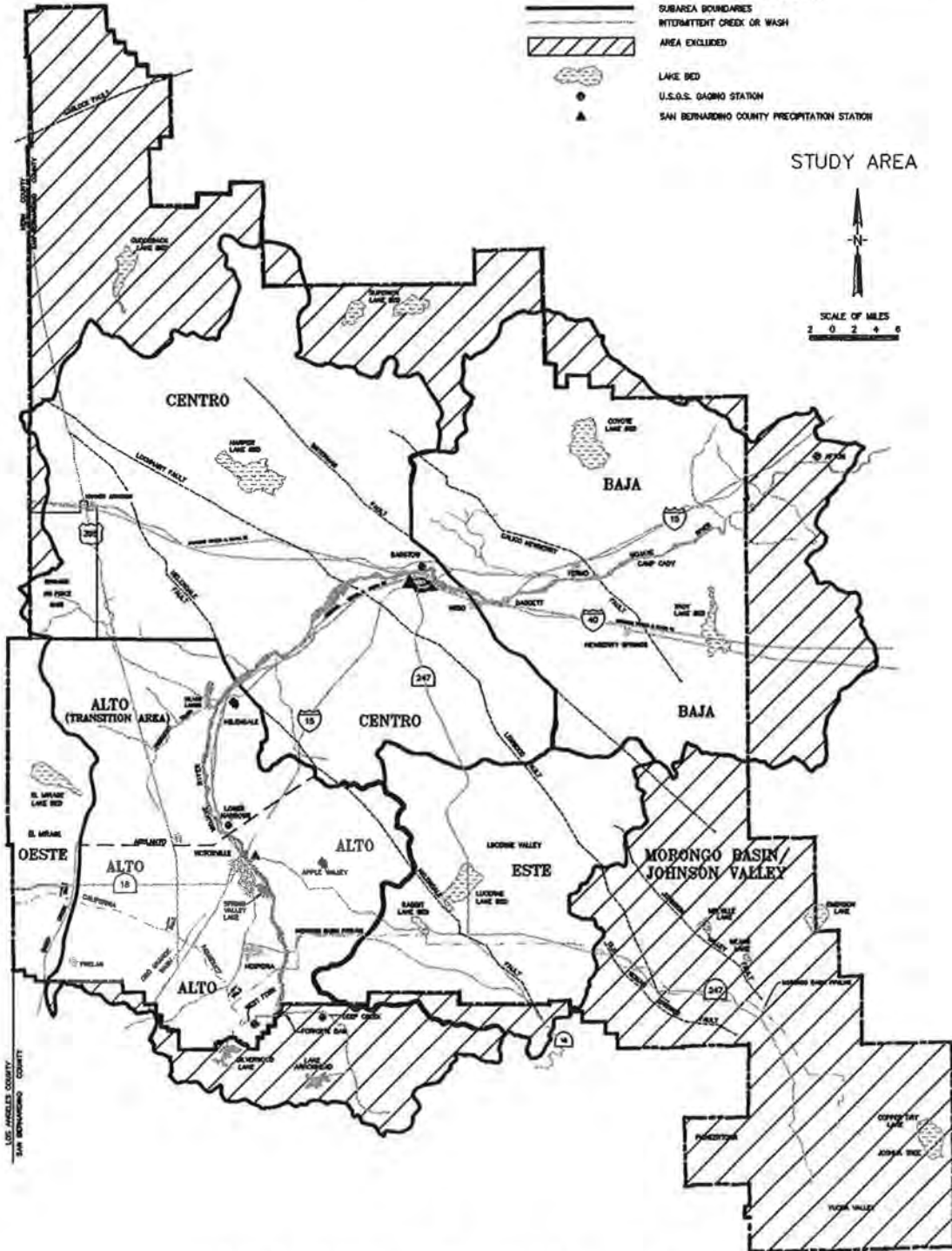
LEGEND

-  MOJAVE WATER AGENCY BOUNDARY
-  MOJAVE RIVER WATERSHED BOUNDARY
-  SUBAREA BOUNDARIES
-  INTERMITTENT CREEK OR WASH
-  AREA EXCLUDED
-  LAKE BED
-  U.S.O.S. GAUGING STATION
-  SAN BERNARDINO COUNTY PRECIPITATION STATION

STUDY AREA



SCALE OF MILES
2 0 2 4 6



MOJAVE BASIN AREA

Section 1

Section 1

MOJAVE BASIN AREA ADJUDICATION
TECHNICAL MEMORANDUM NO. 1
EVALUATION OF UNDERFLOW VALUES USED IN TABLE C-1
OF THE MOJAVE BASIN AREA ADJUDICATION

February 14, 2000

Prepared by:

Ernest M. Weber for
Albert A. Webb Associates
On Behalf Of The Mojave Basin Area Watermaster

Introduction

I have reviewed the information presented in "Mojave Basin Area Adjudication – Components of Table C-1", James C. Hanson November 16, 1994; "Historic & Present Conditions – Upper Mojave River Basin", John Murk Engineering, Inc. and LeRoy Crandall & Associates, 8/85; "California Department of Water Resources (DWR) Bulletin No. 84 Mojave River Ground Water Basins Investigation", August 1967, and telephone consultation with Sam I. Gershon, Albert A. Webb Associates, and Robert C. Wagner, Principal, Wagner & Bonsignore, 11/30/99. The study area and subareas discussed herein is shown on Plate 1.

Based on the above information, an evaluation was made of the subsurface flow between the five subareas as well as exterior boundaries as presented in Table C-1 (Appendix A). Pursuant to the Request for Proposal, the evaluation was based on existing information available at the time of the adjudication, and on information obtained from the USGS and others through 1998. The purpose of the study was to update Table C-1 to reflect the effect of cultural conditions on the long term subsurface flow between subareas.

Subsequent to the initial review of the data in Table C-1, an evaluation was made of the subsurface groundwater flow at the various boundaries, based on current cultural conditions.

Evaluation Of Table C-1

Oeste Subarea

The Oeste Subarea (Plate 1) was considered to have no subsurface inflow along its Western boundary. There was no information presented in the Mojave Basin area adjudication work papers as to how that determination was made. The Oeste Subarea

was not a part of the DWR's study reported in Bulletin No. 84. The eastern boundary of Oeste was the basin boundary for the DWR investigation. Based on DWR and USGS water level data, a groundwater mound exists along the western boundary of the Mojave Water Agency. Therefore, it is appropriate to consider the western boundary of the Oeste Subarea as a "no subsurface flow boundary".

The subsurface outflow from Oeste Subarea to the Alto Subarea, as presented in Table C-1 is 800 ac.-ft./yr. The Oeste-Alto boundary is equivalent to DWR's Upper Mojave western boundary. The estimated subsurface inflow during Bulletin No. 84's base period (1936-37 through 1960-61) was 850 ac.-ft./yr. The 800 ac.-ft./yr. estimated for the Mojave Basin Area Adjudication for the base period (1930-31 through 1989-90) was appropriate.

Este Subarea

There is no subsurface inflow into the Este Subarea across the southern exterior boundary noted in Table C-1. Based on data available at the time of adjudication, it is appropriate to consider this a "no subsurface flow boundary".

Outflow from Este Subarea into the Alto Subarea was determined to be 200 ac.-ft./yr. Estimated values for subsurface flows ranged from 500 ac.-ft./yr. by the USGS to 100 ac.-ft./yr. by DWR in Bulletin No. 84. The value of 200 ac.-ft./yr. was a reasonable value for the base period used in the adjudication.

Alto Subarea

Subsurface inflow to the Alto Subarea is from both Oeste and Este Subareas. The subsurface inflow shown in Table C-1 was determined to be 1000 ac.-ft./yr. (800 ac.-ft./yr. from Oeste and 200 ac.-ft./yr. from Este).

DWR Bulletin No. 84 determined that subsurface inflow to the Upper Mojave Basin (roughly equivalent to the Alto Subarea) was 950 ac.-ft./yr. This value represented subsurface inflow across DWR's Upper Mojave Basin's western boundary and from Lucerne Valley. Considering variations in boundaries and base period, 1000 ac.-ft./yr. was an appropriate value used for the adjudication.

Subsurface outflow from Alto Subarea to Centro Subarea was estimated at 2000 ac.-ft./yr. Since there does not appear to be any additional information beyond that used by DWR that is significantly different, it was appropriate to use 2000 ac.-ft./yr for the Mojave Adjudication.

Centro Subarea

Subsurface outflow from the Alto Subarea is subsurface inflow into the Centro Subarea. The value of 2000 ac.-ft./yr. is appropriate to use for subsurface inflow into the Centro subarea.

Subsurface outflow from Centro Subarea to Baja Subarea is across the Waterman Fault, a barrier to groundwater flow not identified by DWR as the boundary between the Middle and Lower Mojave Basins. Subsequent to Bulletin No. 84, additional studies indicated that the Waterman fault acts as a barrier to groundwater flow. It was designated in the Mojave Adjudication as the boundary between the Centro and Baja Subareas, which was a reasonable assumption.

DWR estimated the underflow between the Middle and Lower Basins to be 2000 ac.-ft./yr. The estimated boundary flow at the Waterman fault used in the adjudication between Centro and Baja Subareas is 1200 ac.-ft./yr.

Based on an inspection of Bulletin No. 84 maps, it appears that the alluvial section through the Waterman Fault, which underflow occurs, is smaller than that at the boundary used by DWR. It is my opinion that the underflow at the Centro-Baja Subarea boundary as determined by the USGS and James C. Hanson, Engineer to the Water Master, of 1200 ac.-ft./yr. was a reasonable and an appropriate value to use.

Baja Subarea

The subsurface inflow to the Subarea as described above is 1200 ac.-ft./yr. The lower boundary for the Baja Subarea is at the MWA District boundary (Plate 1). The recent alluvial channel at this location appears to be very narrow and probably thin. It is reasonable to assume that because of the constriction, any underflow would become surface flow. The assumption of no subsurface flow at this boundary is appropriate.

It is my professional opinion that the subsurface flows as presented in Table C-1, which are based on the information and data available at the time of the adjudication, constitute reasonable and appropriate values.

Subsequent Evaluation Based On Current Cultural Conditions

Subsequent to the initial evaluation and following discussions with the Water Master's Engineer, an evaluation of underflow was made between the following: (1) Este and Alto Subareas, (2) Oeste Subarea and the Alto Subarea south of the Transition Zone boundary, and (3) between the Alto Subarea and the Transition Zone. This

determination was based on 1996-97 cultural conditions (preliminary USGS 1998¹ water level data and transmissivity values presented in the USGS Open File Report, "Hydrologic Analysis of Mojave River Basin California Using Electric Analog Model", William F. Hardt, August 18, 1971. The underflow determination was based on a form of Darcy's Law, $Q=TWI$. T = hydraulic conductivity of the aquifer material times the aquifers saturated thickness in gallons per day per foot of aquifer width. W = width of the aquifer in feet. I = the hydraulic gradient across the boundary in question. Q = the flow crossing the boundary in gallons per day.

*T = k * b*
W = width
I = hydraulic gradient

Subsurface Flow Este Subarea to Alto Subarea

Subsurface flow from the Este Subarea to the Alto Subarea was calculated by using average transmissivity across the boundary and preliminary 1998 water level data (USGS). The calculated subsurface flow ranges from a high of 1385 ac.-ft./yr. to a minimum of 545 ac.-ft./yr. based on the distribution of transmissivity values presented in the USGS Open File Report. It is recommended that the average transmissivity is the appropriate value to use, resulting in a subsurface flow of 825 ac.-ft./yr.

Subsurface Flow from the Alto Subarea to the Transition Zone

A determination of the subsurface flow was made using the existing boundary (Plate 1), USGS's 1998 preliminary water level data, and transmissivity data from the USGS's Open File Report. The boundary was divided into three segments:

- Segment 1 – West of the Lower Narrows to Highway 393, four miles.
- Segment 2 – Highway 395 West 5 miles along the Transition Zone, 5.25 miles.
- Segment 3 – West end of Segment 2 to the Oeste Boundary, 3 miles.

The subsurface flows are:

Segment 1	2300 ac.-ft./yr.
Segment 2	1600 ac.-ft./yr.
Segment 3	<u>690 ac.-ft./yr.</u>
Total flow to the Transition Zone:	4590 ac.-ft./yr.

¹ The 1998 water level measurements were used rather than 1996 water level data because it provided the best representative data in the lower aquifer in the Oeste Subarea.

Subsurface Flow Oeste to Transition Zone

Based on the preliminary 1998 water level data representing both the deep and the perched aquifer, there appears to be a groundwater divide between the Oeste Subarea and the Transition Zone; hence, there is little appreciable flow between Oeste Subarea and the Transition Zone.

Subsurface Flow Oeste to Alto South of Transition Zone Boundary

The boundary between Oeste and Alto Subareas is roughly along Sheep Creek where a groundwater mound exists. No flow occurs across this boundary except in the northern two mile segment of the boundary south of the Alto-Transition Zone boundary.

The flow width was adjusted to account for the flat angle of flow across the boundary. Based on the 1998 water level data and transmissivity from the 1971 Open File USGS Report. The subsurface flow from Oeste to Alto was estimated to be 350 ac.-ft./yr..

A comparison of the flows presented in Table C-1 with those estimated under current conditions is presented in Table 1.

TABLE 1
MOJAVE BASIN AREA
COMPARISON OF SUBSURFACE FLOWS
TABLE C-1 VERSUS CURRENT CONDITIONS

BOUNDARY	TABLE C-1 Acre-Feet per Year	1996 CULTURAL CONDITIONS¹ Acre-Feet Per Year
Oeste to Alto	800	350
Oeste to Transition (Perched G.W. Table)	No estimate	No appreciable flow
Transition to Oeste (Deep Zone)	No estimate	No appreciable flow
Alto to Transition	No estimate	4590
Este to Alto	200	825
Alto to Centro	2000	Accepted Table C-1 ²
Centro to Baja	1200	Accepted Table C-1 ²
Subsurface Outflow from Baja	0	Accepted Table C-1 ²

¹ Based on 1998 preliminary water level data USGS.

² There is insufficient new information available to provide reasonable estimated refinements to the subsurface flows presented in Table C-1.

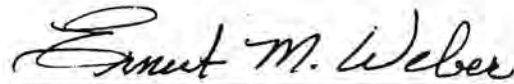
Conclusions

The amount of subsurface flow as presented in Table 1 should be used as representing current cultural conditions. The subsurface flow from Este to Alto is 825 ac.-ft./yr. Subsurface flow from Alto Subarea to Transition Zone is estimated to be 4590 ac.-ft./yr. Flow between the Oeste Subarea and the Transition Zone in both the perched zone and the deeper aquifer is not appreciable and should be considered zero under current (1998) water level conditions.

Subsurface flow from Oeste Subarea to Alto Subarea south of the Transition Zone boundary is 350 ac.-ft./yr. Under current cultural conditions and should be used in place of the 800 ac.-ft./yr. presented in Table C-1.

The USGS is currently developing and verifying a groundwater model of the Mojave River Basin. When published the findings presented in this study should be reviewed and analyzed, and where appropriate update the items of water supply and use under most current conditions.

Prepared by:



Ernest M. Weber
Consulting Hydrogeologist



APPENDIX A

TABLE C-1
Mojave Basin Area Adjudication
Subarea Hydrological Inventory Based On
Long-Term Average Natural Water Supply and Outflow
and Current Year Imports and Consumptive Use
(All Amounts in Acre-Feet)

TABLE C-1
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Subarea Hydrological Inventory Based On
Long-Term Average Natural Water Supply and Outflow
and Current Year Imports and Consumptive Use
(All Amounts in Acre-Feet)

WATER SUPPLY	<u>Este</u>	<u>Oeste</u>	<u>Alto</u>	<u>Centro</u>	<u>Baja</u>	<u>Basin Totals</u>
Surface Water Inflow						
Gaged	0	0	65,000	0	0	65,000
Ungaged	1,700	1,500	3,000	37,300 ¹	14,300 ²	6,500 ³
Subsurface Inflow	0	0	1,000	2,000	1,200	0 ⁴
Deep Percolation of Precipitation	0	0	3,500	0	100	3,600
Imports						
Lake Arrowhead CSD	0	0	1,500	0	0	1,500
Big Bear ARWWA	2,000	0	0	0	0	2,000
TOTAL	<u>3,700</u>	<u>1,500</u>	<u>74,000</u>	<u>39,300</u>	<u>15,600</u>	<u>78,600</u>
CONSUMPTIVE USE AND OUTFLOW						
Surface Water Outflow						
Gaged	0	0	0	0	8,200	8,200
Ungaged	0	0	37,300 ¹	14,000 ⁵	0	0
Subsurface Outflow	200	800	2,000	1,200	0	0
Consumptive Use						
Agriculture	6,800	2,900	16,300	20,300	30,200	76,500
Urban	1,900	1,200	36,300	9,500	9,700	58,600
Phreatophytes	0	0	5,100	900	1,500	7,500 ⁶
Exports	0	0	0	0	0	0
TOTAL	<u>8,900</u>	<u>4,900</u>	<u>97,000</u>	<u>45,900</u>	<u>49,600</u>	<u>150,800</u>
Surplus / (Deficit)	(5,200)	(3,400)	(23,000)	(6,600)	(34,000)	(72,200)
Total Estimated Production (Current Year) ⁷	<u>15,700</u>	<u>7,600</u>	<u>98,900</u>	<u>46,500</u>	<u>54,300</u>	<u>223,000</u>
PRODUCTION SAFE YIELD (Current Year)	10,500	4,200	75,900	39,900	20,300	150,800

¹ Estimated from reported flows at USGS gaging station, Mojave River at Victorville Narrows.

² Includes 14,000 acre-feet of Mojave River surface flow across the Waterman Fault estimated from reported flows at USGS gaging station, Mojave River at Barstow and 300 acre-feet of local surface inflow from Kane Wash.

³ Represents the sum of Este (1,700 af), Oeste (1,500 af), Alto (3,000 af) and Baja (300 af from Kane Wash).

⁴ Inter subarea subsurface flows do not accrue to the total basin water supply.

⁵ Estimated from reported flows at USGS gaging station, Mojave River at Barstow.

⁶ Estimated by Bookman-Edmonston.

⁷ For purposes of this Table, the current year is 1990.

EXPLANATION
UNDERFLOW IN ACRE FEET/YR

- 200 → TABLE C-1
- 825 → 1996-97 CULTURAL CONDITIONS

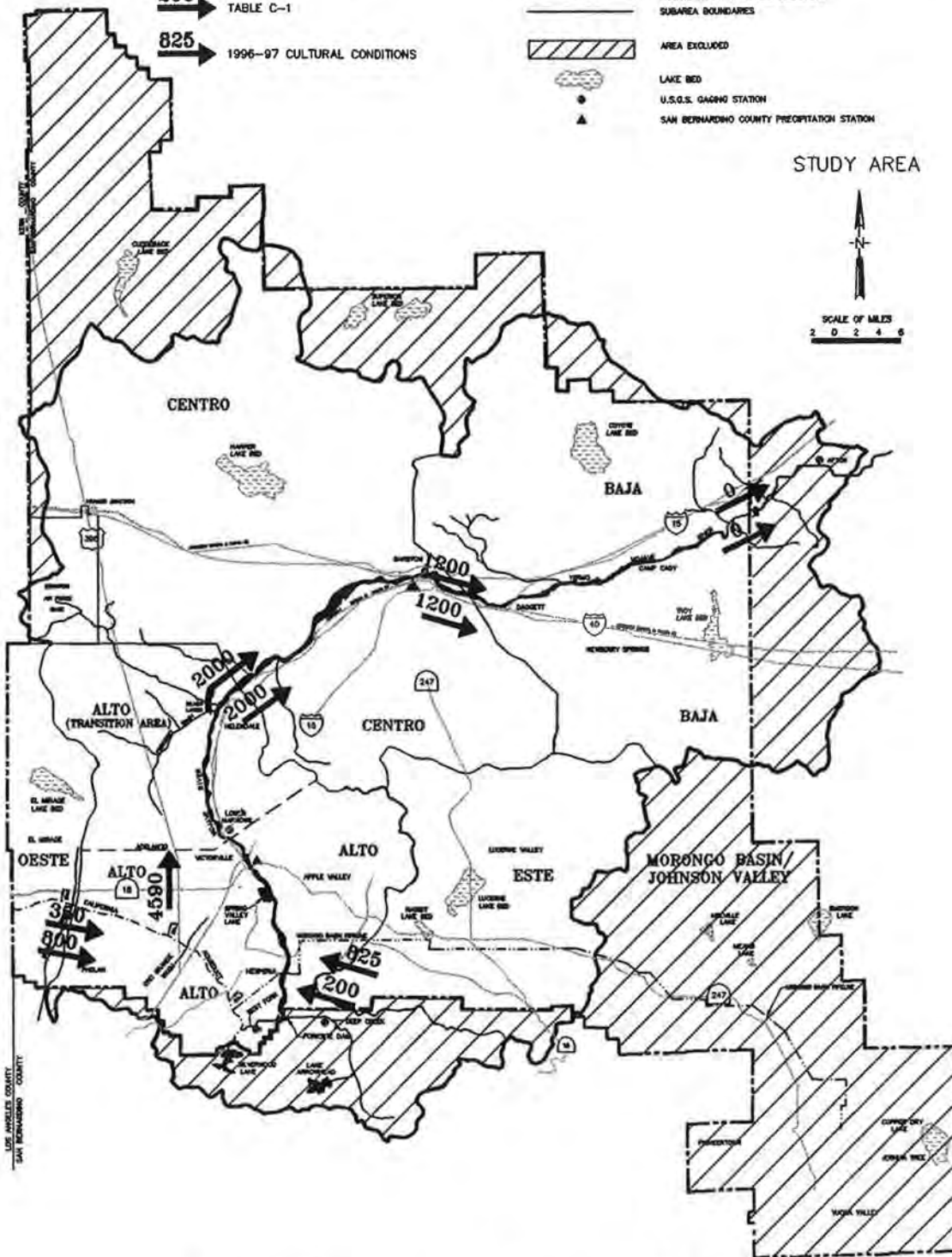
LEGEND

- MOJAVE WATER AGENCY BOUNDARY
- MOJAVE RIVER WATERSHED BOUNDARY
- SUBAREA BOUNDARIES
- ▨ AREA EXCLUDED
- ☁ LAKE BED
- U.S.G.S. GAGING STATION
- ▲ SAN BERNARDINO COUNTY PRECIPITATION STATION

STUDY AREA



SCALE OF MILES
2 0 2 4 6



MOJAVE BASIN AREA

Section 2

Section 2

**MOJAVE BASIN AREA ADJUDICATION
TECHNICAL MEMORANDUM NO. 2**

**SURFACE WATER HYDROLOGICAL INVENTORY FOR
THE MOJAVE RIVER BASIN**

February 16, 2000

Prepared by:

**Albert A. Webb Associates
On Behalf Of The Mojave Basin Area Watermaster**

Introduction

The surface water components of the Mojave River Basin (Plate 1) as outlined in the attached (Appendix A) Table C-1 of the Mojave Basin Area Adjudication include gaged and ungaged streamflow and wastewater effluent. Streamflow is comprised of base flow and storm flow. In order to analyze the components of Table C-1, data were collected and reviewed from various sources. These sources included the work papers from the Mojave Basin Area Adjudication, streamflow data from the U.S. Geological Survey (USGS), and various reports prepared by outside engineers and agencies. Since most streamflow data were collected at gaging stations not located at the subarea boundaries, calculations were required to determine the surface water flow at each subarea boundary. The methodology used to calculate the surface water flow at each subarea boundary consisted of regression analysis, water balance, and reported values. For each type of analysis, the base period for streamflow data was for 1930-31 through 1989-90. Pursuant to the Request for Proposal, the evaluation was based on existing information obtained from the USGS and others through the 1996-97 water year. Consideration was also given to consumptive use and cultural changes within a given subarea.

Este Subarea

The Este Subarea (Plate 1) is an ungaged watershed. Based upon discussions with the USGS and the Mojave Water Agency (MWA), no streamflow data are available for analysis. In reviewing the published reports on the Mojave River Basin, two literary references were found. In reports published by Beeby¹ and Bookman-Edmonston Engineering, Inc.², the ungaged inflow to the Este Subarea is reported at 1,700 acre-feet.

¹ Memorandum from R.G. Beeby on Preliminary Estimate of Water Supplies and Utilization - - Mojave River Basin, 1992.

² "Regional Water Management Plan", Bookman-Edmonston Engineering, Inc., June 1994.

However, there are no calculations to support this published value. Since there appears to be no available data to analyze for the surface water inflow into the Este Subarea, we recommend that the surface water inflow for the Este Subarea remains at 1,700 acre-feet. Based upon the watershed boundary of the Este Subarea, there is no surface water outflow for the subarea.

Oeste Subarea

The Oeste Subarea (Plate 1) is an ungaged watershed. In reviewing the published reports on the Mojave River Basin, two references were found. In reports published by Beeby¹ and Bookman-Edmonston Engineering, Inc.², the ungaged inflow to the Oeste Subarea was reported as 1,500 acre-feet. However, there are no calculations to support this published value. Based upon discussions with the USGS and the MWA Water Master's Engineer, no streamflow data are available for analysis. Since there appears to be no available data to analyze for the surface water inflow into the Oeste Subarea, we recommend that the surface water inflow for the Oeste Subarea remain at 1,500 acre-feet. Based upon the watershed boundary of the Oeste Subarea, there is no surface water outflow for the subarea.

Alto Subarea

The Alto Subarea (Plate 1) has several gaging stations. The inflow to the Alto Subarea is measured as a combination of the measured flows from the Deep Creek Gaging Station and the West Fork Gaging Station. Based upon a review of the streamflow data from the USGS for those two gaging stations from 1930-31 through 1989-90, the average annual streamflow for this period is 65,538 acre-feet (Table 1). Therefore, we recommend that the gaged surface water inflow for the Alto Subarea is established as 65,500 acre-feet.

In addition to the gaged inflow into the Alto Subarea, there are also several components of ungaged inflow that should be taken into account when determining the outflow from the Alto Subarea. These components include the consumptive use within the Las Flores Ranch, ungaged surface water inflow from tributary streams, and wastewater imports. For the purpose of this analysis, the ungaged surface water inflow shown (as shown in Table C-1), will comprise the consumptive use within the Las Flores Ranch and the ungaged surface water inflow from tributary streams.

Ungaged Inflow

The consumptive water use for irrigated crops and lakes within the Las Flores Ranch has been determined to be 1,472 acre-feet for water year 1996-97. The methodology used to determine this consumptive use value is discussed in a separate technical memorandum on land use and consumption water use for water year 1996-97.

ibid 1 & 2

TABLE 1
DEEP CREEK NEAR HESPERIA, CA
AND WEST FORK MOJAVE RIVER NEAR HESPERIA, CA
(U.S.G.S. GAGING STATION NO. – DEEP CREEK 10260500)
(U.S.G.S. GAGING STATION NO. – WEST FORK 10261000)
COMBINED ANNUAL DISCHARGE
In Acre-Feet

Water Year	Total
1930-31	15,431
31-32	99,283
32-33	22,429
33-34	16,114
34-35	57,544
1935-36	24,098
36-37	169,120
37-38	218,195
38-39	40,494
39-40	31,159
1940-41	161,108
41-42	26,019
42-43	149,890
43-44	86,762
44-45	70,747
1945-46	54,464
46-47	50,277
47-48	13,626
48-49	22,988
49-50	12,418
1950-51	2,219
51-52	102,948
52-53	8,817
53-54	54,394
54-55	17,873
1955-56	16,234
56-57	22,076
57-58	148,917
58-59	18,351
59-60	8,772
1960-61	4,483
61-62	67,235
62-63	5,636
63-64	10,902
64-65	21,444

TABLE 1 (Continued)

Water Year	Total
1965-66	116,246
66-67	128,072
67-68	24,618
68-69	341,487
69-70	17,102
1970-71	20,445
71-72	23,281*
72-73	64,375*
73-74	27,180*
74-75	16,842
1975-76	2,3686
76-77	11,714
77-78	362,630
78-79	112,217
79-80	307,155
1980-81	16,082
81-82	57,781
82-83	262,174
83-84	29,323
84-85	24,560
1985-86	45,957
86-87	10,799
87-88	17,363
88-89	10,922
89-90	7,789

60 YEAR TOTAL: 3,932,267

60 YEAR AVERAGE: 65,538

REFERENCE: United States Geological Survey Water Supply Papers

DRAINAGE AREA: 204 Square Miles

PERIOD OF RECORD: Water Year 1904-05 through 1921-22 and 1929-30 through 1989-90

* No record at West Fork Mojave River. Values are for Mojave River below Mojave Forks Reservoir U.S.G.S. Gaging Station No. 10261100.

To determine the ungaged surface water inflow from tributary streams for the Alto Subarea, a review of the USGS documentation on the Mojave River Basin was conducted. Based upon the USGS report³ on ground water and surface water for the Mojave River, the ungaged surface water inflow from tributary streams into the Alto Subarea was estimated at 2,090 acre-feet. Therefore, we recommend that the ungaged surface water inflow from tributary streams for the Alto Subarea be established at 3,562 acre-feet.

Alto Subarea Outflow at the Helendale Fault

In order to determine the outflow from the Alto Subarea at the Helendale Fault, an accounting of water inflow and outflow between the stream gage at the Lower Narrows and the Helendale Fault is needed. As stated earlier, there are several gaging stations within the Alto Subarea. The USGS stream gage station at the Lower Narrows is the furthest downstream gage within the Alto Subarea. Therefore, the water inflow and outflow in the area between the Lower Narrows and the Helendale Fault, the area known as the "Transition Zone" (Plate 1), was determined in order to calculate the flow across the Helendale Fault. The components of flow within the Transition Zone include gaged storm water inflow, gaged base inflow, subsurface water inflow, ungaged surface water inflow, wastewater effluent inflow, consumptive use within the Transition Zone, subsurface outflow, and Phreatophyte losses within the Transition Zone.

The stream gage at the Lower Narrows measures all surface water introduced and removed from the Alto Subarea above the Lower Narrows. This includes gaged and ungaged streams above the Lower Narrows, wastewater effluent inflow, and consumptive uses above the Lower Narrows. However, there have been significant land use changes in the Alto Subarea within the base period of 1930-31 through 1989-90. The concern is that the change in the culture of the subarea will have a direct effect on the surface water flow at the Helendale Fault. In order to determine if there was any validity to this concern, a review of the records for sewer permits issued was conducted. The issuance of sewer permits was used as a baseline to represent growth within the subarea. In addition, a double mass graphical analysis was prepared to compare combined storm flow across the Forks Gaging Station and the storm flow across the Lower Narrows Gaging Station. The double mass graphical analysis is a plot of the accumulated storm flows for the Lower Narrows over the base period versus the accumulated storm flows for the Forks over the base period. This analysis was prepared to see if there was a graphical representation in the change of surface water flow over time.

Based upon the records of the USGS for the Forks and Lower Narrows and the work papers from the Mojave Basin Area Adjudication, the storm flow and accumulated storm flow at each location were tabulated. These tabulations are shown in Table 2. The graphical comparison of the accumulated storm flow at the Forks and at the Lower

³"Ground-Water and Surface-Water Relations Along the Mojave River, Southern California," U.S. Geological survey, 1996.

Table 2
MOJAVE RIVER BASIN
Gaging Station Storm Flow Data

WATER YEAR	Forks Storm Flow (Acre-Feet)	Lower Narrows Storm Flow (Acre-Feet)	Accumulated Forks (Ac.-Ft.)	Accumulated Lower Narrows (Ac.-Ft.)
1930-31	15430.8	211	15,431	211
31-32	99282.7	60632	114,714	60,843
32-33	22428.8	211	137,142	61,054
33-34	16113.5	1787	153,256	62,841
34-35	57544	13051	210,800	75,892
1935-36	24098	291	234,898	76,183
36-37	169119.8	127990	404,018	204,173
37-38	218195.3	163101	622,213	367,274
38-39	40494.2	3929	662,707	371,203
39-40	31158.6	1411	693,866	372,614
1940-41	161107.6	115056	854,973	487,670
41-42	26018.5	707	880,992	488,377
42-43	149889.6	103636	1,030,881	592,013
43-44	86761.6	52498	1,117,643	644,511
44-45	70747.3	31377	1,188,390	675,888
1945-46	54464.2	21108	1,242,855	696,996
46-47	50277	13446	1,293,132	710,442
47-48	13626.1	0	1,306,758	710,442
48-49	22988.2	0	1,329,746	710,442
49-50	12418	0	1,342,164	710,442
1950-51	2219	0	1,344,383	710,442
51-52	102948	44038	1,447,331	754,480
52-53	8816.8	0	1,456,148	754,480
53-54	54393.6	8983	1,510,541	763,463
54-55	17873.4	0	1,528,415	763,463
1955-56	16234	976	1,544,649	764,439
56-57	22076	644	1,566,725	765,083
57-58	148916.9	77552	1,715,642	842,635
58-59	18351	975	1,733,993	843,610
59-60	8772	0	1,742,765	843,610
1960-61	4483.3	1309	1,747,248	844,919
61-62	67235.1	10011	1,814,483	854,930
62-63	5636	583	1,820,119	855,513
63-64	10902.1	252	1,831,021	855,765
64-65	21444	854	1,852,465	856,619
1965-66	116246	34940	1,968,711	891,559
66-67	128072.4	56605	2,096,783	948,164
67-68	24618	169	2,121,401	948,333
68-69	341487.3	267385	2,462,889	1,215,718
69-70	17102.4	0	2,479,991	1,215,718

Table 2 (continued)

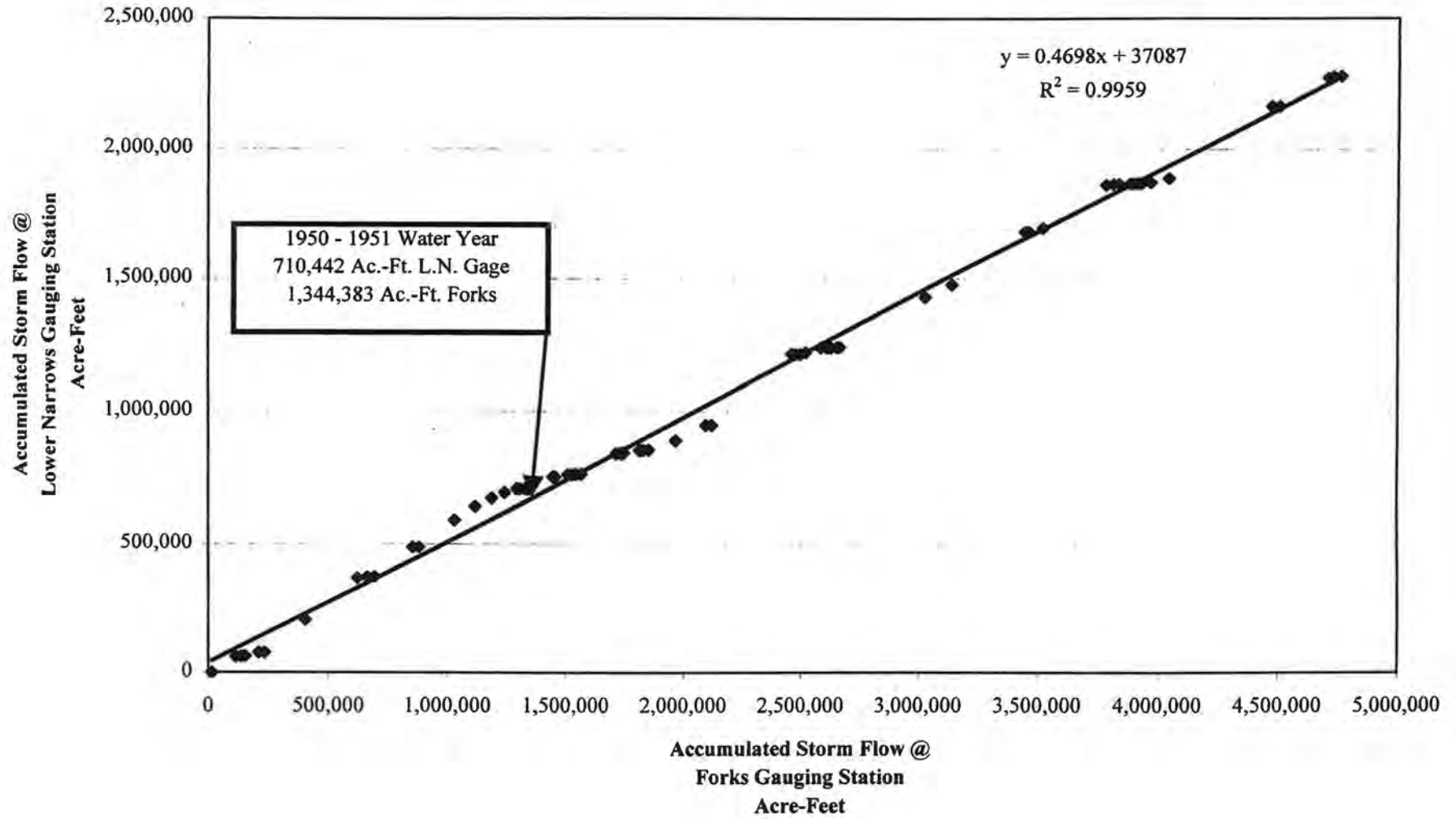
WATER YEAR	Forks Storm Flow (Acre-Feet)	Lower Narrows Storm Flow (Acre-Feet)	Accumulated Forks (Ac.-Ft.)	Accumulated Lower Narrows (Ac.-Ft.)
1970-71	20445.3	0	2,500,436	1,215,718
71-72	23281	6861	2,523,717	1,222,579
72-73	64375	16619	2,588,092	1,239,198
73-74	27180	459	2,615,272	1,239,657
74-75	16842	0	2,632,114	1,239,657
1975-76	23686	1432	2,655,800	1,241,089
76-77	11714.3	664	2,667,515	1,241,753
77-78	362630	187615	3,030,145	1,429,368
78-79	112217	47830	3,142,362	1,477,198
79-80	307155.3	205336	3,449,517	1,682,534
1980-81	16082	0	3,465,599	1,682,534
81-82	57781	14929	3,523,380	1,697,463
82-83	262174	164955	3,785,554	1,862,418
83-84	29323	2708	3,814,877	1,865,126
84-85	24560	895	3,839,437	1,866,021
1985-86	45957	2174	3,885,394	1,868,195
86-87	10799	277	3,896,193	1,868,472
87-88	17363	865	3,913,556	1,869,337
88-89	10922.1	0	3,924,478	1,869,337
89-90	7789.36	891	3,932,267	1,870,228
90-91	37590	2245	3,969,857	1,872,473
91-92	75550	15324	4,045,407	1,887,797
92-93	428515	275839	4,473,922	2,163,636
93-94	31679	147	4,505,601	2,163,783
94-95	201190	105807	4,706,791	2,269,590
95-96	21400	4624	4,728,191	2,274,214
96-97	31712	1572	4,759,903	2,275,786

60 YEAR AVERAGE ANNUAL STORM FLOW

38,963

(Base period for Average Annual Storm Flow was taken from the 1930-31 water year through the 1989-90 water year with only 48 years of measured storm flow in this period used to calculate the average, eg. 1,870,228 acre-feet divided by 48 years.)

Figure 1
Accumulated Storm Flows Lower Narrows Vs. Forks (1930 - 1997)



Narrows (1930-31 through 1996-97) is shown in Figure 1. Based upon a review of the graphical data, a change in the relationship between the storm flow at the Forks and at the Lower Narrows occurred around 1950 (1.3million acre-feet, Forks versus 0.7 million acre-feet, Lower Narrows). The increase in permit activity after 1950 and the start of overdraft within the Alto Subarea support this estimate.

In order to determine the effects of the changes in the culture within the subarea, the same double mass (Figure 2) graphical analysis was used for the accumulated storm flows between 1930-31 and 1949-50, and from 1949-50 through 1996-97 (Figure 3). In each analysis, a linear regression was calculated to determine the slope of the trendline. For storm flows between 1930-31 and 1949-50 (Figure 2), the slope of the trendline is 0.5647. For the storm flows between 1949-50 and 1996-97 (Figure 3), the slope of the trendline is 0.4761. The flatter slope for the time period 1949-50 through 1996-97 represents a decrease in surface water across the Lower Narrows when compared to a given flow across the Forks prior to 1950. In order to determine the effect of this decrease of surface water across the Lower Narrows, the percent change in the slope of the two trendlines was calculated. Based upon this calculation, there is a 15.7 percent decrease in flow across the Lower Narrows for a given flow across the Forks prior to 1949-50. Therefore, the 60 year average annual storm flow of 38,963 acre-feet⁴ (1930-31 through 1989-90) across the Lower Narrows was reduced by 15.7 percent to 32,846 acre-feet, to account for cultural changes that have occurred since 1949-50 water year in order to determine the surface water flow across the Helendale Fault.

Since this Safe Yield determination was based on the 1996-97 cultural conditions, the gaged base flow at the Lower Narrows in 1996-97 was calculated and used in determining the flow across the Helendale Fault. The 1996-97 base flow across the Lower Narrows was calculated as 6,639 acre-feet.

The subsurface inflow components into the Transition Zone include 4,600 acre-feet from the Alto Subarea above the Lower Narrows and little or no flow from the Oeste Subarea for 1996-97 cultural conditions. The subsurface flow (4,600 acre-feet) was calculated for 1996-97 cultural conditions by Ernest M. Weber. Mr. Weber also determined that there was little or no subsurface flow from the Oeste Subarea into the Transition Zone.

The ungedaged surface water inflow was determined using the USGS information previously discussed. Based upon further review of the documentation, it was determined that only 320 acre-feet of the 2,090 acre-feet ungedaged surface water inflow to the Alto Subarea is tributary to the Transition Zone in 1996-97 water year. In reviewing the wastewater inflow to the Alto Subarea and the Transition Zone, it was determined that the Victor Valley Wastewater Reclamation Authority discharged 8,705 acre-feet to the Transition Zone.

⁴Average annual flow is based upon only 48 years of measured storm flow, Table 2.

Figure 2
Storm Flow Double Mass Graph
Lower Narrows Vs. Forks (1930-1950)

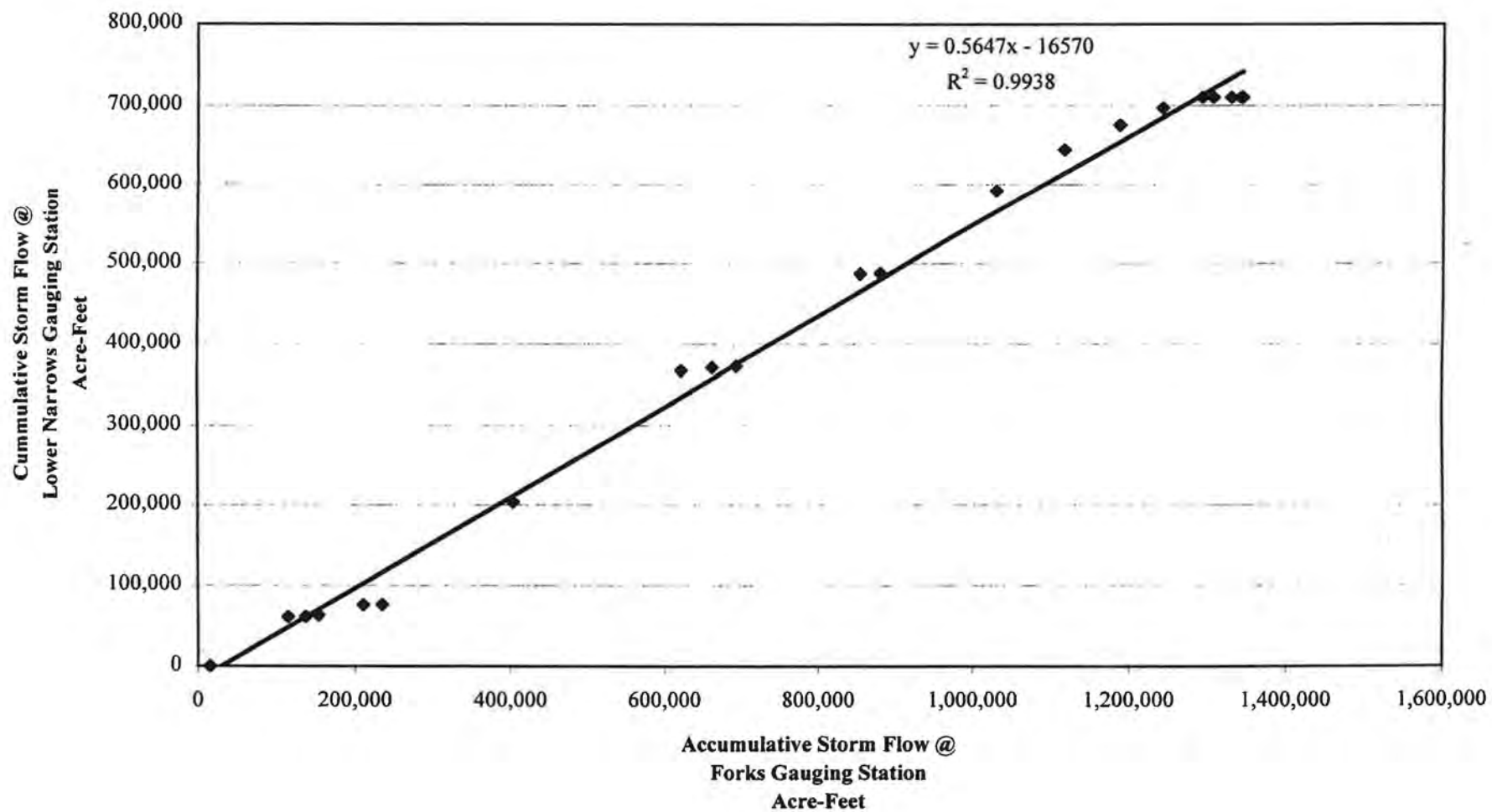
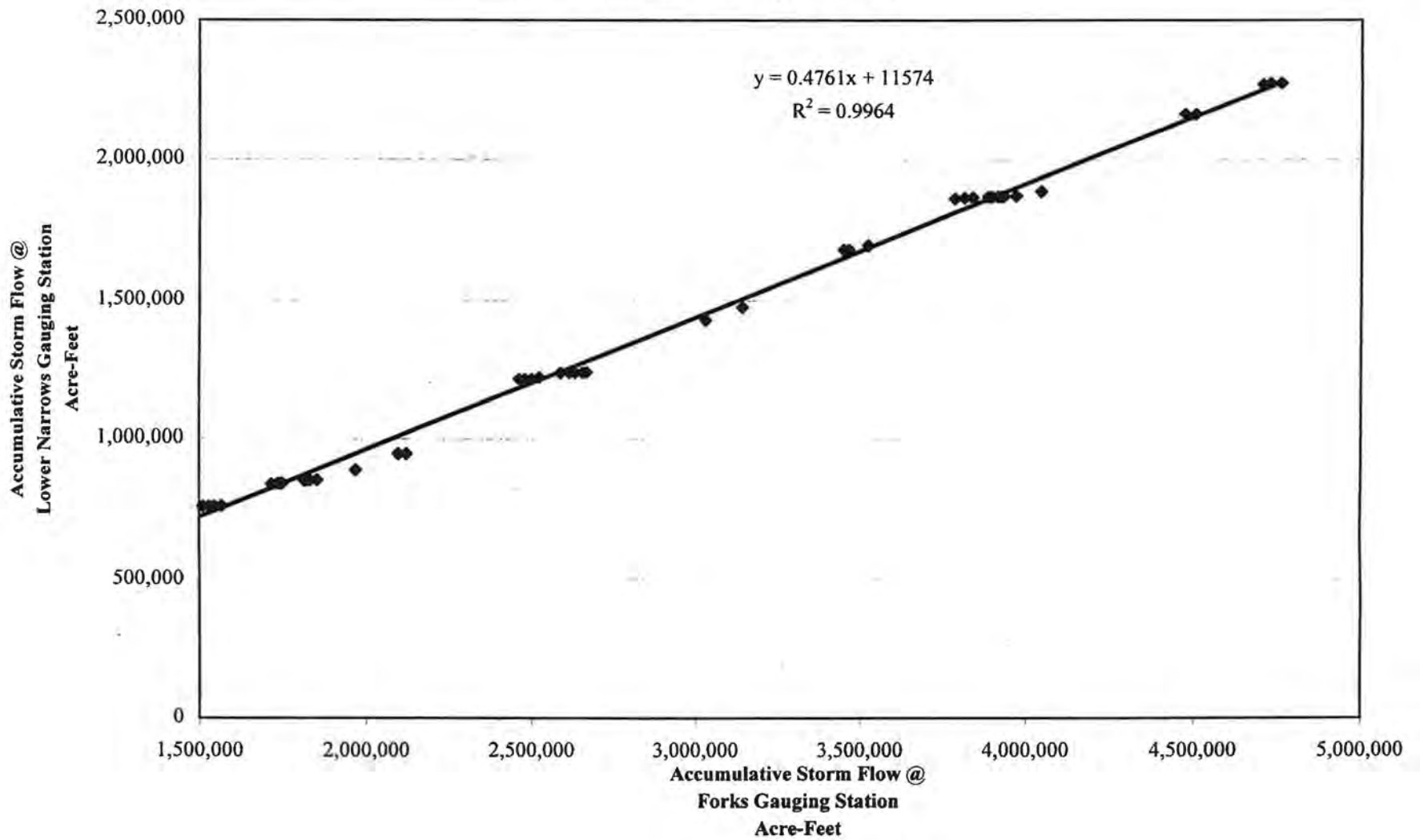


Figure 3
Storm Flow Double Mass Graph
Lower Narrows Vs. Forks (1950-1997)



Components for consumptive use (10,390 acre-feet), subsurface outflow (2,000 acre-feet), and Phreatophyte losses (6,000 acre-feet)⁵ are discussed in a separate technical memorandum on landuse and consumptive water use for water year 1996-97. Table 3 shows the accounting for the various components of flow within the Transition Zone.

The net result of this accounting is that the estimated flow across the Helendale Fault is 34,720 acre-feet. Therefore, we recommend that the ungaged surface water outflow for the Alto Subarea and inflow into the Centro Subarea be established at 34,720 acre-feet.

Centro Subarea

The Centro Subarea has a primary gaging station located in Barstow. Since the inflow to the Centro Subarea at the Helendale Fault was previously determined to be 34,720 acre-feet, the outflow of the Centro Subarea at the Waterman Fault was needed. The work papers for the Mojave Basin Area Adjudication included a regression analysis to interpolate the flow across the Waterman Fault using the stream gage data from the gages at Barstow and at Afton. The results of this analysis⁶ correlated with the work prepared by Hardt⁷ in 1971. After reviewing this work, we have concluded that this analysis is sufficient pending any new data. Based upon this analysis, the surface water flow across the Waterman Fault from the stream gage data at Barstow is 14,000 acre-feet. Furthermore, local surface water flow from ungaged streams between Barstow and Waterman Fault adds an additional 400 acre-feet based upon information derived from Groundwater and Wells, Inc.⁸ and USGS⁹ regarding Kane Wash and Boom Creek respectively. Therefore, we recommend that the ungaged surface water outflow from the Centro and inflow to the Baja Subarea be established at 14,400 acre-feet.

Baja Subarea

The Baja Subarea has a primary gaging station located six miles downstream of the Baja Subarea boundary at Afton. Since the inflow to the Baja Subarea at the Waterman Fault was previously determined to be 14,400 acre-feet, the outflow of the Baja Subarea at the MWA boundary below Camp Cady was needed.

Based upon USGS stream gage data from Afton, the average annual flow at Afton is 8,200 acre-feet. The assumption that the flow across the MWA boundary is the same as the flow across the Afton gage was based upon the assumption that there is little or no

⁵U.S. Geological Survey Water-Resources Investigation Report 96-4241 "Riparian Vegetation and its Water Use During 1995 Along the Mojave River, Southern California" prepared in cooperation with the Mojave Water Agency and the California Department of Fish and Game.

⁶"Preliminary Report on Analysis of the Flow of the Mojave River at Afton, CA San Bernardino County, California," James C. Hanson, 1993.

⁷"Hydrologic Analysis of Mojave River Basin, California, Using Electric Analog Model," Hardt, U.S. Geological Survey, 1971.

⁸Memorandum from R. Barto, Ground Water and Wells Inc., on Baja Recharge, 1992.


⁹"Ground-Water and Surface-Water Relations Along the Mojave River, Southern California," U.S. Geological Survey, 1996.

subsurface flow in the zone between the MWA boundary and the Afton gage. It is also assumed that the ungedaged surface water from tributary streams is offset by the evapo-transpiration loss in the zone between the MWA boundary and Afton. In order to check the validity of these assumptions, a meeting was held with the USGS to discuss available information. Based upon USGS well data in this zone, little or no ground water occurs in this zone, which supports this assumption.

The USGS could not verify the evapo-transpiration loss within the zone between the MWA boundary and Afton. However, based upon the USGS⁹, the ungedaged surface water inflow from tributary streams within the zone is only 230 acre-feet. Since the amount of ungedaged surface water inflow within the zone is minimal and there is support for the assumption that there is little or no subsurface flow in the zone, we recommend that the surface water outflow from the Baja Subarea at the MWA boundary be established at 8,200 acre-feet

Prepared by

ALBERT A. WEBB ASSOCIATES



Scott R. Hildebrandt, Senior Civil Engineer



⁹ ibid

APPENDIX A

TABLE C-1
Mojave Basin Area Adjudication
Subarea Hydrological Inventory Based On
Long-Term Average Natural Water Supply and Outflow
and Current Year Imports and Consumptive Use
(All Amounts in Acre-Feet)

TABLE C-1
Mojave Basin Area Adjudication
Subarea Hydrological Inventory Based On
Long-Term Average Natural Water Supply and Outflow
and Current Year Imports and Consumptive Use
(All Amounts in Acre-Feet)

WATER SUPPLY	<u>Este</u>	<u>Oeste</u>	<u>Alto</u>	<u>Centro</u>	<u>Baja</u>	<u>Basin Totals</u>
Surface Water Inflow						
Gaged	0	0	65,000	0	0	65,000
Ungaged	1,700	1,500	3,000	37,300 ¹	14,300 ²	6,500 ³
Subsurface Inflow	0	0	1,000	2,000	1,200	0 ⁴
Deep Percolation of Precipitation	0	0	3,500	0	100	3,600
Imports						
Lake Arrowhead CSD	0	0	1,500	0	0	1,500
Big Bear ARWWA	2,000	0	0	0	0	2,000
TOTAL	<u>3,700</u>	<u>1,500</u>	<u>74,000</u>	<u>39,300</u>	<u>15,600</u>	<u>78,600</u>
CONSUMPTIVE USE AND OUTFLOW						
Surface Water Outflow						
Gaged	0	0	0	0	8,200	8,200
Ungaged	0	0	37,300 ¹	14,000 ⁵	0	0
Subsurface Outflow	200	800	2,000	1,200	0	0
Consumptive Use						
Agriculture	6,800	2,900	16,300	20,300	30,200	76,500
Urban	1,900	1,200	36,300	9,500	9,700	58,600
Phreatophytes	0	0	5,100	900	1,500	7,500 ⁶
Exports	0	0	0	0	0	0
TOTAL	<u>8,900</u>	<u>4,900</u>	<u>97,000</u>	<u>45,900</u>	<u>49,600</u>	<u>150,800</u>
Surplus / (Deficit)	(5,200)	(3,400)	(23,000)	(6,600)	(34,000)	(72,200)
Total Estimated Production (Current Year) ⁷	<u>15,700</u>	<u>7,600</u>	<u>98,900</u>	<u>46,500</u>	<u>54,300</u>	<u>223,000</u>
PRODUCTION SAFE YIELD (Current Year)	10,500	4,200	75,900	39,900	20,300	150,800

¹ Estimated from reported flows at USGS gaging station, Mojave River at Victorville Narrows.

² Includes 14,000 acre-feet of Mojave River surface flow across the Waterman Fault estimated from reported flows at USGS gaging station, Mojave River at Barstow and 300 acre-feet of local surface inflow from Kane Wash.

³ Represents the sum of Este (1,700 af), Oeste (1,500 af), Alto (3,000 af) and Baja (300 af from Kane Wash).








⁴ Inter subarea subsurface flows do not accrue to the total basin water supply.

⁵ Estimated from reported flows at USGS gaging station, Mojave River at Barstow.

⁶ Estimated by Bookman-Edmonston.

⁷ For purposes of this Table, the current year is 1990.

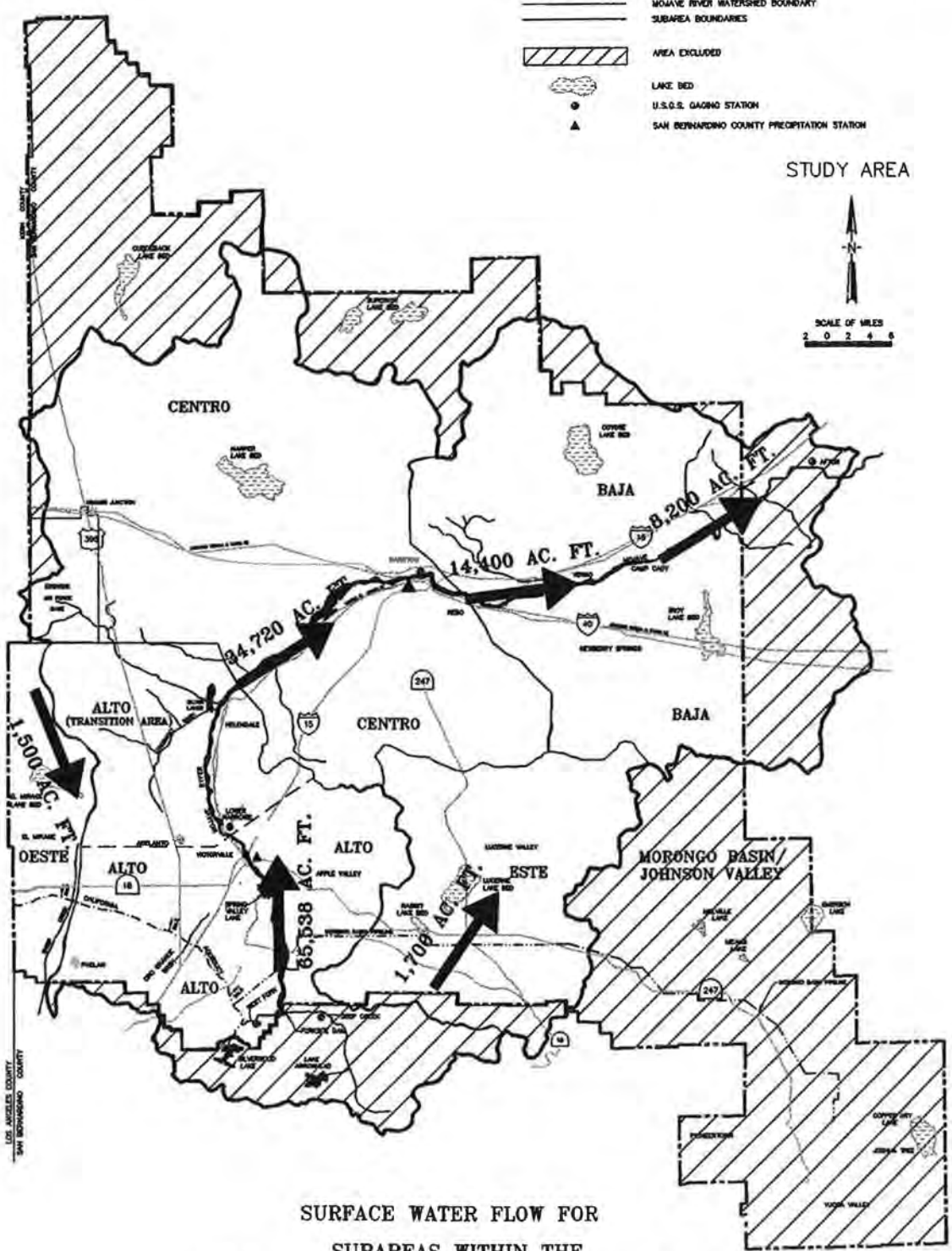
LEGEND

-  MOJAVE WATER AGENCY BOUNDARY
-  MOJAVE RIVER WATERSHED BOUNDARY
-  SUBAREA BOUNDARIES
-  AREA EXCLUDED
-  LAKE BED
-  U.S.G.S. GAGING STATION
-  SAN BERNARDINO COUNTY PRECIPITATION STATION

STUDY AREA



SCALE OF MILES
2 0 2 4 6



SURFACE WATER FLOW FOR
SUBAREAS WITHIN THE
MOJAVE BASIN AREA

Section 3

Section 3

MOJAVE BASIN AREA ADJUDICATION

TECHNICAL MEMORANDUM NO. 3

1996-97 CONSUMPTIVE WATER USE

February 16, 2000

By: Albert A. Webb Associates

On Behalf of the Mojave Basin Area Watermaster

Introduction

The purpose of this technical memorandum is to present the findings of the Consumptive Water Use¹ Study for the Mojave River Basin Area for water year 1996-97 (Plate 1).

Consumptive water use of applied water for all lands (except domestic, municipal, and industrial water) was ascertained by determining the acreage of each land use and then multiplying it by the applicable unit consumptive water use value. The unit consumptive use of applied water for agricultural crops (except for pistachios) utilized in this study was based on data from the United States Department of Agriculture's Natural Resources Conservation Service. Annual free water surface evaporation rates were obtained from the U.S. Geological Survey's (USGS) Water Resources Investigations Report 96-4241 (1996). "Riparian Vegetation and its Water Use During 1995 Along The Mojave River, Southern California."

Consumptive water use for domestic, municipal, and industrial land uses was determined based on a percentage of the 1996-97 verified groundwater production for each of these land uses. After due deliberation, a percentage factor was applied to the verified annual groundwater production (1996-97) to determine consumptive water use for these land use types. The percentage factors were those previously utilized in the Mojave Basin Area Adjudication Study.

¹ "Consumptive Use of Water – Water consumed by vegetative growth in transpiration and building plant tissue, and water evaporated from adjacent soil, from water surface, and from foliage. It also includes water similarly consumed and evaporated by urban and nonvegetative types of land use." California Department of Water Resources Bulletin No. 101 "Desert Acres of Southern California Land and Water Use Survey, 1958" January 1963.

Study Area

The study area is the Adjudicated Mojave River Basin in the Mojave Desert of Southern California, County of San Bernardino (Plate 1). Specifically, the study area includes five subareas of the Mojave Basin Area, which are identified as Este, Oeste, Alto, Centro, and Baja in the Judgement After Trial January 10, 1996.

Scope of Study

The scope of the study included a detailed analysis of agricultural and recreational land uses in each of the five subareas. The land use type and acreage were based on the 1997 (June-August) color infrared aerial photographs (1 to 24,000 scale) provided by MWA. The land use analysis was limited to determining the acreage allocated to agricultural areas and recreational land uses (recreational lakes and golf courses) for identified producers. The consumptive use of applied water (excluding domestic, municipal, and industrial) was determined by multiplying the net irrigated acreage of each producer by the appropriate unit consumptive use of applied water.

Consumptive water use for residential, commercial, municipal, and industrial land uses was based on a percentage of the 1996-97 verified groundwater production rather than land use interpretations and water use factors.

Consumptive Water Use

A review of Table C-1 (Appendix A) shows that consumptive water use was determined for three general classes of land use: agriculture, urban, and phreatophytes. Calculating the consumptive use for all of the verified producers in the 4000 square mile Mojave River Basin is a considerable task. Hence, a Geographical Information System (GIS)² was developed for the Mojave River Basin as a tool to efficiently manage the data developed for this study. A discussion on the GIS system is presented in Appendix B.

Land Use Categories

Land uses in the Mojave Basin were divided into ten main categories by MWA. They included the following land uses: agriculture, aquaculture, dairy, domestic, golf courses, industrial, municipal, parks, recreational lakes, and no use (Table 1). The land use categories were further divided into more specific sub-categories for determining exact consumptive water use (columns "Water Sub 1" and "Water Sub 2") of Table 1. The land use categories are noted for each producer in water year 1996-97 (Appendix C).

² A GIS is a computerized database management system designed to accept, organize, statistically analyze and display spatial data. It ties tabular databases to the data's geographic location for analysis.

Net Irrigated Acreage

Gross irrigated acreage was determined based on photographic interpretations of 1997 color infrared photographs provided by MWA (discussed in Appendix B). No attempt was made to delete nonwater service areas interspersed in the gross irrigated area. The California Department of Water Resources definition³ "included nonwater service area" as "Public highways and roads, farm access roads, canals, drainage ditches, and other inclusions not devoted to crop production, including idle and abandoned land."

To determine net acreage values for irrigated agriculture, parks, and golf courses, the gross acreage values were reduced by a percentage factor based on Bulletin No. 101. Gross irrigated agriculture was reduced by 5 percent, and parks and golf courses acreage was reduced by 15 percent. The net irrigated acreage for each verified producer is reported in Appendix C. A summary of the 1996-97 estimate of net irrigated acreage by land use type within each subarea is presented in Table 2.

³ Bulletin No. 101 "Desert Areas of Southeastern California Land and Water Use Survey, 1958" January 1963.

TABLE 1
MOJAVE WATER AGENCY
LAND USE CATEGORIES

WATER USE	WATER SUB 1	WATER SUB 2
Agriculture	Alfalfa	Apricots
Aquaculture	Commercial	Apples
Dairy	Domestic	Barley
Domestic	Grain	Cattle
Golf Course	Livestock	Dairy
Industrial	Mobile Home Park	Domestic
Municipal	Municipal	Horses
Parks	Orchard	Peaches
Recreational Lakes	Pasture	Pistachios
No Use	Recreational Lake	Pomegranates
	Row Crops	Poultry
	Sod	Ostriches
		Recreational Lake Sudan

Each producer had one or more land uses designations (Table 1) assigned to it.

TABLE 2

MOJAVE BASIN AREA ADJUDICATION
 1996-97 ESTIMATES OF NET IRRIGATED AGRICULTURAL ACREAGE BY TYPE OF USE
 (ALL VALUES IN ACRES)

<u>SUBAREA</u>	<u>UNCLASSIFIED AGRICULTURAL</u>	<u>ALFALFA</u>	<u>GRAIN</u>	<u>LIVESTOCK</u>	<u>ORCHARD</u>	<u>PASTURE</u>	<u>ROW CROPS</u>	<u>SOD</u>	<u>TOTALS</u>
ALTO		1,627	197	60		722			2,607
BAJA	69	4,489	503	148	488			3	5,704
CENTRO		3,191	88		51	20			3,350
ESTE		985	1	37	71		56		1,150
OESTE		508			5				513
TOTALS	69	10,800	790	245	619	743	56	3	13,324

Verifying the Land Use Database

Land use acreage determined in this investigation for 1997 was compared to the 1989 acreage inventory performed by James C. Hanson (Engineer to the Watermaster). Differences in irrigated acreage were investigated. They were found to be a result of land use and ownership changes, boundary misinterpretations, and changes in irrigated area with time. The differences in acreage between 1989 and 1997 were either corrected or justified.

Other differences in the database were a result of contradictory land use types. For example, a specific owner's land use might have been defined as "domestic" with an "alfalfa" sub-category. Conflicting land use designations were tagged and the photos re-investigated to obtain the correct land use.

Recreational lakes in the database were compared to MWA's recreational lake inventory acreage. Any differences in lake surface area were examined and adjusted to correctly represent the 1997 land use condition.

Unit Consumptive Use of Applied Water

The unit value of consumptive use of applied water for each crop type found in the study area, excluding pistachios, was obtained from the United States Department of Agriculture's Natural Resources Conservation Services. (Appendix "D".) For pistachios, a different unit value of consumptive use was established to more accurately represent the drip irrigation practices in the Mojave Basin. This number was based on the assumption that one pistachio tree requires 15 gallons of water per week. There are approximately 150 trees per acre and 20 weeks of irrigation per year. Therefore, a unit value of consumptive use of 1 acre-foot per acre was utilized.

For this study consumptive use of precipitation was considered to be insignificant because of minimal rainfall.

Consumptive Water Use of Agricultural Crops

Consumptive water use of applied water for agricultural crops was determined by multiplying the net irrigated acreage (Appendix C) by the appropriate unit consumptive use factor (Appendix D). If the consumptive use of applied water was found to be greater than the MWA verified annual production, it was assumed that the consumptive use was

65 percent of production⁴. If the consumptive use was equal to or less than 65 percent of production, the consumptive use value was used. Consumptive water use by dairies and other animal husbandry activities was determined to be 50 percent of the allocated verified annual production. Table 3 presents a summary of consumptive water use by subarea for irrigated crops, livestock, and dairies.

⁴ Harry F. Blaney in his paper "Climate as an Index of Irrigation Needs" in the U.S. Department of Agriculture "The Yearbook of Agriculture 1955 Water", states that "irrigation efficiency is the percentage of irrigation water that is available for consumptive use by crops. He further elaborates: "Generally not more than 60 percent of the water delivered at the upper end of the farm is made available for the consumptive use of the crops. The balance is either lost in conveyance to the field, on the field itself through deep percolation, or through surface runoff from the field. Irrigation efficiencies must therefore be taken into account in estimating the irrigation water requirement of the crop. Efficiencies for different soil conditions and irrigation distribution systems range from 40 to 70 percent." For this study when the calculated consumptive use is greater than 65 percent of production, we defaulted to 65 percent.

TABLE 3

MOJAVE BASIN AREA ADJUDICATION
 1996-97 ESTIMATES OF AGRICULTURAL CONSUMPTIVE USE BY TYPE OF USE
 (ALL VALUES IN ACRE-FEET)

SUBAREA	UNCLSSFD. AGRICULTURE	ALFALFA	GRAIN	LIVESTOCK	ORCHARD	PASTURE	ROW CROPS	SOD	DAIRY	TOTALS ¹
ALTO		5,323	164	10	100	2,270			50	7,917
BAJA	28	19,581	590	67	526			11	39	20,842
CENTRO		12,303	91		63	16			540	13,014
ESTE		3,708	1	0	110		80			3,899
OESTE		2,053			5				209	2,267
TOTALS ¹	28	42,968	847	77	804	2,286	80	11	838	47,938

¹Due to rounding off of numbers, sums of individual items may not equal total.

Urban Consumptive Use

Consumptive use of applied urban water use (municipal and domestic use) was determined by multiplying verified production by 50 percent. Industrial water use was assumed to be totally consumed. These two assumptions were previously utilized by the Watermaster's engineer to calculate consumptive use for urban and industrial water use. They were reviewed and found valid for this study.

Consumptive use of parks and golf courses was determined by multiplying the net irrigated acreage shown in Appendix C by the appropriate unit consumptive use factor (Appendix D).

Consumptive water use of recreational lakes was determined by multiplying the recreational lake surface area (Appendix C) by an evaporation rate. The annual free water surface evaporation rate used was 5.6 feet in the Alto Subarea, and 6.7 feet in the Centro and Baja Subareas. The evaporation rate was based on U.S. Geological Survey's Water - Resources Investigations Report 96-4241⁵.

Consumptive water use for each verified producer is shown in Appendix C. Table 4 shows a summary of the consumptive use for 1996-97 of all the verified producers by subarea by various land use classes.

⁵ Riparian Vegetation and its Water Use During 1995 Along the Mojave River, Southern California" 1996.

TABLE 4
MOJAVE BASIN AREA ADJUDICATION
1996-97 ESTIMATES OF CONSUMPTIVE USE BY TYPE OF USE
(ALL VALUES IN ACRE-FEET)

SUBAREA	AGRI-CULTURE	DAIRY	AQUA-CULTURE	DOMESTIC	GOLF COURSE	INDUSTRIAL	MUNICIPAL	PARKS	RECREATIONAL LAKES ¹	TOTALS ¹
ALTO	7,867	50	27	265	1,827	3,154	31,133	28	3,196	47,546
BAJA	20,803	39	93	479		3,044	456		2,673	27,585
CENTRO	12,474	540		192	170	1,751	5,623		10	20,758
ESTE	3,899			117		1,277	370			5,662
OESTE	2,058	209		9		8	1,125		1	3,409
TOTALS¹	47,100	838	120	1,060	1,997	9,234	38,705	28	5,880	104,962

¹Due to rounding off of numbers, sums of individual items may not equal total.

Consumptive Use of Minimal Producer

Within the Mojave River Basin Adjudication Area there are a number of minimal producers⁶. The minimal producer generally uses about 1 acre-foot per year, which is similar to what a single family residence would use. Therefore, consumptive use was assumed to be equal to 50 percent of production.

TABLE 5
MOJAVE RIVER BASIN AREA
CONSUMPTIVE USE OF MINIMAL PRODUCER IN ACRE-FEET

SUBAREA	EST. TOTAL PRODUCTION BY MINIMAL PRODUCER	CONSUMPTIVE USE
Alto	2,104	1,052
Centro	1,553	776.5
Baja	2,228	1,114
Este	954	477
Oeste	238	119
TOTAL:	7,077	3,538.5

⁶ Minimal Producer: Any person whose Base Annual Production, as verified by MWA is not greater than ten (10) acre-feet. A person designated as a Minimal Producer whose Annual Production exceeds ten (10) acre-feet in any Year following the date of entry of Judgment is no longer a Minimal Producer.

Consumptive Water Use of Phreatophytes

Consumptive water use for phreatophytes was based on the U.S. Geological Survey Water Resources Investigations Report 96-4241. This study was prepared in cooperation with the Mojave Water Agency and the California Department of Fish and Game.

TABLE 6
ESTIMATED CONSUMPTIVE USE OF
GROUND WATER AND SURFACE WATER BY
RIPARIAN VEGETATION ALONG THE MOJAVE
RIVER DURING 1995
IN ACRE-FEET

AREA OR SUBAREA	ANNUAL CONSUMPTIVE USE
ALTO SUBAREA Upstream from Lower Narrows	5,000
Transition zone	6,000
CENTRO SUBAREA	3,000
BAJA SUBAREA	2,000
AFTON AREA	600

Consumptive Water Use By Subarea

Consumptive water use for agriculture (including dairies), urban (including minimal producers), and phreatophytes for each subarea is shown in Table 7. Urban consumptive water use includes all other consumptive water use noted on Table 4 and that for minimal producers (Table 5).

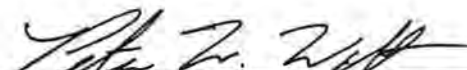
A comparison of the consumptive water use values in Table 7 with that of Table C-1 (Appendix A) shows significant changes between 1996-97 and 1990 in agricultural and phreatophytes. In water year 1996-97, the total consumptive water use for agriculture was 47,900 acre-feet compared to 76,500 in 1990. This is a 37.6 percent reduction in seven years. Consumptive use of phreatophytes in 1996-97 was estimated by the USGS at 16,000 acre-feet compared to 7500 acre-feet in 1990.

Urban consumptive use in 1996-97 was 60,600 acre-feet, which is 2000 acre-feet greater than the 1990 value.

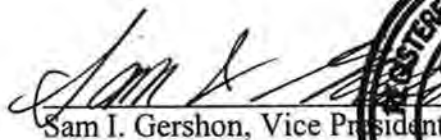
The total consumptive water use for the five subareas decreased from 142,600 in 1990, to 124,500 in the 1996-97 water year.

Prepared by:

ALBERT A. WEBB ASSOCIATES



Peter Wilt, GIS Specialist



Sam I. Gershon, Vice President



TABLE 7
Mojave Basin Area Adjudication
1996-97 Total Consumptive Use By Subareas
(All Amounts in Acre-Feet)

CONSUMPTIVE WATER USE

	<u>Este</u>	<u>Oeste</u>	<u>Alto</u>	<u>Centro</u>	<u>Baja</u>	<u>Basin Totals</u>
Agriculture	3,900	2,300	7,900	13,000	20,800	47,900
Urban ¹	2,200	1,300	40,700	8,500	7,900	60,600
Phreatophytes ²	0	0	11,000	3,000	2,000	16,000
TOTAL³:	6,100	3,600	59,600	24,500	30,700	124,500

¹ Includes consumptive use of "Minimals Producers".

² From USGS Water-Resources Investigation Report 96-4241 "Riparian Vegetation and Its Water Use During 1995 Along the Mojave River, Southern California" 1996.

³ Due to rounding off of individual numbers, the sums of individual items may not equal the total.

APPENDIX A

TABLE C-1

**MOJAVE BASIN AREA ADJUDICATION
SUBAREA HYDROLOGICAL INVENTORY
BASED ON LONG-TERM AVERAGE NATURAL WATER SUPPLY AND
OUTFLOW AND CURRENT YEAR IMPORTS AND CONSUMPTIVE USE**

TABLE C-1
Mojave Basin Area Adjudication
Subarea Hydrological Inventory Based On
Long-Term Average Natural Water Supply and Outflow
and Current Year Imports and Consumptive Use
(All Amounts in Acre-Feet)

WATER SUPPLY	<u>Este</u>	<u>Oeste</u>	<u>Alto</u>	<u>Centro</u>	<u>Baja</u>	<u>Basin Totals</u>
Surface Water Inflow						
Gaged	0	0	65,000	0	0	65,000
Ungaged	1,700	1,500	3,000	37,300 ¹	14,300 ²	6,500 ³
Subsurface Inflow	0	0	1,000	2,000	1,200	0 ⁴
Deep Percolation of Precipitation	0	0	3,500	0	100	3,600
Imports						
Lake Arrowhead CSD	0	0	1,500	0	0	1,500
Big Bear ARWWA	2,000	0	0	0	0	2,000
TOTAL	<u>3,700</u>	<u>1,500</u>	<u>74,000</u>	<u>39,300</u>	<u>15,600</u>	<u>78,600</u>
CONSUMPTIVE USE AND OUTFLOW						
Surface Water Outflow						
Gaged	0	0	0	0	8,200	8,200
Ungaged	0	0	37,300 ¹	14,000 ⁵	0	0
Subsurface Outflow	200	800	2,000	1,200	0	0
Consumptive Use						
Agriculture	6,800	2,900	16,300	20,300	30,200	76,500
Urban	1,900	1,200	36,300	9,500	9,700	58,600
Phreatophytes	0	0	5,100	900	1,500	7,500 ⁶
Exports	0	0	0	0	0	0
TOTAL	<u>8,900</u>	<u>4,900</u>	<u>97,000</u>	<u>45,900</u>	<u>49,600</u>	<u>150,800</u>
Surplus / (Deficit)	(5,200)	(3,400)	(23,000)	(6,600)	(34,000)	(72,200)
Total Estimated Production (Current Year) ⁷	<u>15,700</u>	<u>7,600</u>	<u>98,900</u>	<u>46,500</u>	<u>54,300</u>	<u>223,000</u>
PRODUCTION SAFE YIELD (Current Year)	10,500	4,200	75,900	39,900	20,300	150,800

¹ Estimated from reported flows at USGS gaging station, Mojave River at Victorville Narrows.

² Includes 14,000 acre-feet of Mojave River surface flow across the Waterman Fault estimated from reported flows at USGS gaging station, Mojave River at Barstow and 300 acre-feet of local surface inflow from Kane Wash.

³ Represents the sum of Este (1,700 af), Oeste (1,500 af), Alto (3,000 af) and Baja (300 af from Kane Wash).

⁴ Inter subarea subsurface flows do not accrue to the total basin water supply.

⁵ Estimated from reported flows at USGS gaging station, Mojave River at Barstow.

⁶ Estimated by Bookman-Edmonston.

⁷ For purposes of this Table, the current year is 1990.

APPENDIX B

DESCRIPTION OF THE
GEOGRAPHICAL INFORMATION SYSTEM

APPENDIX B

DESCRIPTION OF THE

GEOGRAPHICAL INFORMATION SYSTEM

A Geographical Information System (GIS) was developed for Mojave to combine information from many different sources. The computerized base map for this project is made up of different types of GIS layers and databases acquired from the County of San Bernardino, the USGS, MWA, and coverage created in-house. The County of San Bernardino provided parcel data, Township, Range, Sections, and the county boundary data sets. All of these data were provided in the State Plane, 1983 North American Datum Projection. As a result, all of the GIS data created using this base map are also in the NAD 83 Projection. The parcel data coverage contains boundaries of individual parcels in the County. The parcels are linked to a database containing assessor's parcel numbers, which can be used to obtain ownership information about the parcel. The Township, Range, and Section coverage shows the location of the entire State Plane sections in the County, connected to a database with the Section number and its corresponding Township and Range information. Finally, the County also provided a coverage portraying San Bernardino County's boundary.

Digital USGS 7.5 quadrangles in raster format were transformed into the NAD 83 projection and added to the base map. These are the standard 1 to 24,000 scale USGS quadrangles, where the topography of the terrain are outlined by contour lines and cultural features, such as lakes and roads, are represented using map symbols in a computerized format.

Mojave Water Agency provided a Microsoft Access database containing all of the Basin's landowners, photographs, land use designation, and well numbers based on Township, Range, and Section number. This database is linked to the final GIS land use coverage.

A layer containing the boundary of each photograph was created in-house by digitizing the location of each photo onto the USGS data. The five subarea boundaries were also digitized from hard copy maps to complete the base map. All were integrated and overlaid in *Arc/View GIS* software to support the entering of the land use data.

The Mojave Basin Area groundwater producers and ownership boundaries were identified by MWA on the aerial photographs in pen. These boundaries were digitally drafted onto the computer base map by hand-tracing the photographs with a computer mouse. This created a new polygon GIS land use coverage. A polygon is a way to

represent geographic information in a GIS. It is a multi-sided closed figure, with a boundary enclosing an analogous area, in this case, an area of land. The corresponding ownership information was recorded into the coverage's database. By interpreting the photos, the ownership polygons were then spatially divided to correctly represent the boundaries of the specific land use categories. Each one of the coverage's polygons was coded with MWA's land use identification codes (Table 1). *Arc/View* was used to compute gross agricultural or recreational acreage for each verified producer. The computed net irrigated acreage for each agricultural and/or recreational producer was added to the final database (Appendix "C").

APPENDIX "C"

**MOJAVE BASIN AREA WATERMASTER
VERIFIED PRODUCTION BY OWNER AND FACILITY
FOR 1996-97 WATER YEAR
INCLUDING GENERAL LAND USES FOR 1997**

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
ABBOND, EDWARD & GRACE 04N/03W-06Q03	0434-033-35	14-11	Domestic	4.83			5 5
			RECAP:		Domestic	2.5	5.0
ABBOTT, LEONARD C. 07N/05W-36H01 07N/05W-36H02	0469-011-18 0469-011-18	10-06	Agriculture - Pasture	42.49	3.44	146.2	7 63 70
			RECAP:		Domestic Agriculture - Pasture	3.5 41.0	7.0 63.0
ADELANTO, CITY OF 05N/05W-04A01 05N/05W-18Q01 05N/05W-18Q02 06N/04W-30K07 06N/04W-30N04 06N/04W-30N07 06N/04W-30N08 06N/04W-30N09 TRA/NSF-ER	3128-221-01 3103-081-01 3103-081-01 0472-171-25 0468-261-64 0468-261-64 0468-261-63 0468-261-63	N/A					0 371 229 1,990 0 653 0 0 ---
			RECAP:		Municipal	1,621.5	3,243 3,243.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
ADELANTO, CITY OF - GEORGE A F B		N/A	Municipal	54.30			
	06N/04W-30G01	0468-261-04					111
	06N/04W-30G02	0468-261-04					0
	06N/04W-30G03	0468-261-04					136
	06N/04W-30K03	0472-171-25					196
	06N/04W-30K04	0472-171-25					306
	06N/04W-30K05	0472-171-25					74
	06N/04W-30P05	0472-171-26					106
	06N/04W-30Q06	0472-171-25					224
							1,153
			RECAP:		Municipal	576.5	1,153.0
AGCON, INC.		09-02	Industrial	117.23			
	07N/04W-19K07	0470-052-25					---
	07N/04W-19Q01	0470-052-22					0
	07N/04W-19Q02	0470-052-22					0
	07N/04W-19Q03	0470-052-07					0
	07N/04W-19Q04	0470-052-02					116
	07N/04W-19Q08	0470-052-02					8
							124
			RECAP:		Industrial	124.0	124.0
APPLE VALLEY COUNTRY CLUB		13-12	Golf Course	102.93	3.12	321.1	
	05N/03W-18R03	0442-101-03					554
							554
			RECAP:		Golf Course	321.1	554.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
APPLE VALLEY DEVELOPMENT 05N/03W-30C01	0444-101-54	13-12	Agriculture - Alfalfa	64.60	4.04	261	386
							386
			RECAP:		Agriculture - Alfalfa	250.9	386.0
APPLE VALLEY FOOTHILL COUNTY WATER DISTRICT 04N/03W-11D01 04N/03W-11D02	0434-511-01 0434-511-01	N/A					1 117
							118
			RECAP:		Municipal	59.0	118.0
APPLE VALLEY HEIGHTS COUNTY WATER DISTRICT 04N/03W-15C02 04N/03W-15C03	0438-043-07 0438-043-07	N/A					52 81
							133
			RECAP:		Municipal	66.5	133.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
APPLE VALLEY RANCHOS WATER COMPANY		N/A					
	04N/03W-04G01	0434-446-05					0
	04N/03W-04G02	0434-446-05					2,382
	04N/03W-09E01	0434-353-09					919
	05N/03W-03E01	0437-302-08					0
	05N/03W-03E02	0437-306-22					765
	05N/03W-04B02	0440-012-55					978
	05N/03W-04C02	0440-012-08					0
	05N/03W-04C03	0440-012-09					0
	05N/03W-22G01	0437-671-36					0
	05N/03W-27E01	0439-033-11					89
	05N/03W-28C01	0445-041-02					597
	05N/03W-28L01	0445-041-03					1,894
	05N/03W-30L01	0444-101-31					487
	05N/03W-30Q01	0444-101-29					762
	05N/03W-33B01	0445-211-06					178
	05N/03W-33N01	0445-161-13					0
	05N/04W-12N03	0473-069-01					291
	05N/04W-13E05	0479-073-35					526
	05N/04W-13M04	0479-073-29					760
	05N/04W-13N04	0479-073-37					1,801
	05N/04W-13P01	0479-072-07					647
	05N/04W-23A02	0444-233-01					1,118
	06N/04W-34E02	0472-061-22					30
							14,224
			RECAP:		Municipal	7,112.0	14,224.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
APPLE VALLEY RECREATION & PARKS		15-11 & 14-10	Parks	6.63	3.12	20.7	
	04N/03W-10N01	0434-254-07					34
	05N/03W-25Q02	0439-333-09					9
							43
			RECAP:		Parks	20.7	43.0
APPLE VALLEY VIEW MUTUAL WATER COMPANY		N/A					
	05N/02W-06N01	0436-231-30					18
	05N/02W-06N03	0436-231-30					18
	05N/02W-06N04	0436-231-30					6
							42
			RECAP:		Municipal	21.0	42.0
APPLE VALLEY, TOWN OF		N/A	Municipal	1.94			
	05N/04W-11N04	0473-141-60					42
							42
			RECAP:		Municipal	21.0	42.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
BALDY MESA WATER DISTRICT		14-14	Municipal	0.46			
	04N/05W-01C03	3072-211-01					---
	04N/05W-01D01	3072-211-04					666
	04N/05W-01E01	3072-221-14					647
	04N/05W-01G01	3072-231-02					193
	05N/05W-35C03	3095-011-05					26
	05N/05W-35G01	3095-091-83					704
	05N/05W-35P02	3095-012-10					623
	05N/06W-36R01	3097-631-02					171
							3,030
			RECAP:		Municipal	1,515.0	3,030.0
BASS TRUST, NEWTON T.		13-12 & 14-12	Agriculture - Grain	35.45	0.89	31.6	
			Agriculture - Livestock - Ostriches	46.87			
	05N/03W-31E02	0444-121-03					0
	05N/03W-31E03	0444-121-03					1
	05N/04W-13E03	0479-073-04					1
	05N/04W-13F01	0479-072-05					0
	05N/04W-13F02	0479-072-05					1
	05N/04W-13P02	0479-072-01					79
							82
			RECAP:		Agriculture - Grain	31.6	79.0
					Agriculture - Livestock - Ostriches	1.0	2.0
					Domestic	0.5	1.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
BASTIANON, REMO E. 03N/03W-07F06	0433-121-42	16-18	Domestic	10.98			3 <hr/> 3
			RECAP:		Domestic	1.5	3.0
BASURA FAMILY TRUST 04N/03W-18R06	0438-012-52	15-11	Domestic	3.72			6 <hr/> 6
			RECAP:		Domestic	3.0	6.0
BEEBE, ROBERT W. & DOROTHY K. 04N/04W-13K03	0411-191-57	15-12	No Use	15.61	0.00	0	0 <hr/> 0
			RECAP:		No Use	0.0	0.0
BEINSCHROTH FAMILY TRUST 04N/03W-08P01 04N/03W-08P02	0434-201-21 0434-201-21	15-11	Agriculture - Alfalfa	120.39	4.04	486.4	1 <hr/> 570 <hr/> 571
			RECAP:		Domestic Agriculture - Alfalfa	0.5 370.5	1.0 570.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
BEINSCHROTH, A. J.		13-12	Agriculture - Alfalfa	12.74	4.04	51.5	
			Recreational Lakes	0.06	5.60	0.3	
05N/04W-24F02	0444-011-13						4
05N/04W-24F03	0444-011-07						52
							56
			RECAP:		Domestic	0.5	1.0
					Agriculture - Alfalfa	33.8	52.0
					Recreational Lakes	0.3	3.0
BOYCE, KENNETH & WILLA		14-11	Agriculture - Alfalfa	15.64	4.04	63.2	
04N/03W-06F02	0434-021-28						59
							59
			RECAP:		Domestic	0.5	1.0
					Agriculture - Alfalfa	37.7	58.0
BROWN, BOBBY G. & VALERIA R.		08A-05	Agriculture - Grain	6.85	0.89	6.1	
08N/04W-31R03	0467-014-05						8
							8
			RECAP:		Domestic	0.5	1.0
					Agriculture - Grain	4.6	7.0
BURNS, ANNIE L.		14-10	No Use	11.85	0.00	0	
04N/03W-02R02	0434-073-49						0
							0
			RECAP:		No Use	0.0	0.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997**

**ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO- PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
CDFG - MOJAVE NARROWS REGIONAL PARK		13-13	Agriculture - Pasture	128.39	3.44	441.7	
			Recreational Lakes	35.71	5.60	200	
05N/04W-14P04	0479-131-06						---
05N/04W-23C01	0479-131-02						---
05N/04W-23C02	0479-131-02						160
05N/04W-23C03	0479-131-02						---
05N/04W-23C04	0479-131-02						---
05N/04W-23G01	0479-131-02						448
05N/04W-23G02	0479-131-02						122
05N/04W-25GD01							1,433
							2,163
			RECAP:		Agriculture - Pasture	441.7	730.0
					Recreational Lakes	200.0	1,433.0
CDFG - MOJAVE RIVER FISH HATCHERY		14-12	Aquaculture	4.81	5.60	26.9	
			No Use	11.43	0.00	0	
05N/04W-35H04	0482-022-05						---
05N/04W-35H05	0482-022-05						---
05N/04W-35J01	0482-022-05						---
05N/04W-35J02	0482-022-05						---
05N/04W-35J03	0482-022-05						---
							8,456
							(20) *
			RECAP:		Aquaculture	26.9	8,456.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
CLARK, KENNETH R. 04N/03W-17E05		15-11	No Use	19.68	0.00	0	0 0
			RECAP:		No Use	0.0	0.0
CRAMER, MARGARET MUIR 05N/04W-13M01	0479-073-07	13-12	No Use	39.11	0.00	0	0 0
			RECAP:		No Use	0.0	0.0
CUNNINGHAM, WILLIAM E. & GLORIA M. 04N/03W-06H04	0434-032-21	14-11	Domestic	4.69			9 9
			RECAP:		Domestic	4.5	9.0
DEXTER, CLAIR F. 06N/04W-19K03 06N/04W-19K04 06N/04W-19K05	0468-251-16 0468-251-16 0468-251-16	11-06	Agriculture - Alfalfa No Use	24.67 6.49	4.04 0.00	99.7 0	14 10 158 182
			RECAP:		Domestic Agriculture - Orchard No Use	0.5 99.7 0.0	1.0 181.0 0.0

**MOJAVE BASIN AREA WATERMASTER
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 INCLUDING GENERAL LAND USES FOR 1997**

**ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
<hr/>							
DEXTER, J. P.		14-12	Domestic	10.32			
05N/04W-36H01	0444-121-19						6
							<u>6</u>
			RECAP:		Domestic	3.0	6.0
<hr/>							
DIBERNARDO, JOHN		10-06	Domestic	52.67			
07N/04W-31E01	0469-041-04						--
07N/04W-31E03	0469-041-04						--
07N/04W-31E06	0469-041-04						--
							<u>2</u>
			RECAP:		Domestic	1.0	2.0
<hr/>							
DOLCH, ROBERT & JUDY		12-13	Domestic - Mobile Home Park	23.41			
05N/04W-10C01	0473-181-11						0
05N/04W-10F02	0473-181-15						39
05N/04W-10F05	0473-181-15						21
05N/04W-10F06	0473-181-11						0
05N/04W-10F08	0473-181-15						32
							<u>92</u>
			RECAP:		Domestic	46.0	92.0
<hr/>							
DOMBROWSKI, MICHAEL W. & SUSAN M.		17-21	Domestic	170.10			
03N/05W-26E03	0357-321-15						6
							<u>6</u>
			RECAP:		Domestic	3.0	6.0
<hr/>							

**MOJAVE BASIN AREA WATERMASTER
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 ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
DOWSE, PHILIP 03N/05W-24D01	0357-091-26	17-20	Domestic	86.24			3 <hr/> 3
			RECAP:		Domestic	1.5	3.0
EVENSON, EDWIN H. & JOYCELAINE C. 07N/05W-36K01 07N/05W-36K04	0469-011-49 0469-011-49	10-06	Agriculture - Grain	26.50	0.89	23.6	33 1 <hr/> 34
			RECAP:		Domestic Agriculture - Grain	0.5 21.5	1.0 33.0
FISCHER, ELMER G. & BEVERLY C. 03N/05W-14N01 03N/05W-14N02	0405-182-31 0405-182-32	17-20	Domestic	28.32			0 1 <hr/> 1
			RECAP:		Domestic	0.5	1.0
FISHER, DOLORES, DR. 03N/05W-12G01 03N/05W-12G02 03N/05W-12K03	0405-401-05 0405-401-05 0405-401-16	16-20	Domestic	58.17			-- -- -- <hr/> 25
			RECAP:		Domestic	12.5	25.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997**

**ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
<hr/>							
FISHER, JEROME		09-02	Agriculture - Grain	37.99	0.89	33.8	
07N/04W-19E01	0470-041-01						2
07N/04W-19E02	0470-041-01						58
07N/04W-19E03	0470-041-01						0
07N/05W-24H02	0470-011-07						2
07N/05W-24H03	0470-011-07						0
							62
			RECAP:		Domestic	2.0	4.0
					Agriculture - Grain	33.8	58.0
<hr/>							
FITZWATER, R. E.		09-02	Agriculture - Alfalfa	36.35	4.04	146.8	
07N/04W-18L01	0470-021-21						1
07N/04W-18L03	0470-021-21						2
07N/04W-18L04	0470-021-21						165
							168
			RECAP:		Agriculture - Alfalfa	109.2	168.0
<hr/>							
GREEN ACRES ESTATES		12-10	Domestic	2.69			
05N/03W-12F02	0437-352-08						12
							12
			RECAP:		Domestic	6.0	12.0
<hr/>							
GRUBE, ROBERT L.		N/A					
04N/03W-18H15	0438-021-15						0
							0
			RECAP:		No Use	0.0	0.0
<hr/>							

**MOJAVE BASIN AREA WATERMASTER
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OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
GULBRANSON, MERLIN		11-06	Agriculture - Alfalfa	13.24	4.04	53.5	
06N/04W-19R03	0468-251-21						---
06N/04W-19R04	0468-251-21						133
							133
			RECAP:		Agriculture - Alfalfa	53.5	133.0
HAMILTON TRUST, DON & RUTH M.		15-11	Agriculture - Alfalfa	4.33	4.04	17.5	
			Domestic	4.75			
04N/03W-19G01	0438-164-29						0
04N/03W-19G07	0438-164-29						38
							38
			RECAP:		Agriculture - Alfalfa	17.5	37.0
					Domestic	0.5	1.0
HAMILTON, DOUG & CHERYL		15-11	Domestic	26.11			
04N/03W-19J02	0438-165-04						14
							14
			RECAP:		Domestic	7.0	14.0
HAMILTON, ET AL.		15-11	Agriculture - Alfalfa	15.61	4.04	63.1	
04N/03W-19H03	0438-164-34						0
04N/03W-19H05	0438-164-34						129
							129
			RECAP:		Agriculture - Alfalfa	63.1	129.0

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 ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
HELENDALE SCHOOL DISTRICT		08A-05	Domestic - Commercial	6.69			
	08N/04W-32E08	0467-081-16					14
	08N/04W-32E09	0467-081-16					0
							14
			RECAP:		Domestic	7.0	14.0
HESPERIA GOLF AND COUNTRY CLUB		15-12	Golf Course	113.87	3.12	355.3	
	04N/04W-26C01	0398-251-28					578
							578
			RECAP:		Golf Course	355.3	578.0

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 ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION	
HESPERIA WATER DISTRICT		N/A						
	03N/04W-02C01	0397-012-05					1,382	
	04N/04W-08G02	0414-091-15					1,705	
	04N/04W-08G03	0414-091-10					0	
	04N/04W-08N01	0408-221-02					180	
	04N/04W-15F01	0410-031-04					529	
	04N/04W-24G01	0411-421-17					0	
	04N/04W-24G02	0411-421-17					0	
	04N/04W-24P02	0411-376-12					2,740	
	04N/04W-26Q01	0398-227-18					0	
	04N/04W-26Q02	0398-227-18					2,503	
	04N/04W-28C01	0413-222-26					1,185	
	04N/04W-28H01	0410-231-01					0	
	04N/04W-29F02	0412-021-27					1,588	
	04N/04W-29J01	0412-041-26					586	
	04N/04W-32R02	0412-172-08					1,204	
	04N/04W-36G03	0398-354-04					0	
	04N/04W-36Q01	0398-031-34					40	
	04N/04W-36Q02	0398-031-34					79	
	04N/04W-36R01	0398-031-35					525	
	04N/05W-13J01	0405-271-17					353	
							14,599	
					RECAP:	Municipal	7,299.5	14,599.0
HI-GRADE MATERIALS COMPANY		14-12	Industrial	33.11				
	04N/04W-03A01	0415-011-05					20	
	07N/04W-30E01	0469-266-01					0	
							20	
					RECAP:	Industrial	20.0	20.0

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 ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
HODGE, STANLEY W.		13-13	Recreational Lakes	2.84	5.60	15.9	
			Domestic	1.45			
05N/04W-14C01	0479-011-12						61
							61
			RECAP:		Recreational Lakes	15.9	60.0
					Domestic	0.5	1.0
HOLWAY, ROBERT C.		10-06	Agriculture - Alfalfa	7.94	4.04	32.1	
			Domestic	2.26			
			No Use	8.39	0.00	0	
07N/05W-25J08	0469-011-60						1
07N/05W-25J09	0469-011-60						49
							50
			RECAP:		Agriculture - Alfalfa	31.9	49.0
					Domestic	0.5	1.0
					No Use	0.0	0.0
HRUBIK, THOMAS A.		14-11	Domestic	368.58			
04N/03W-05M01	0434-042-32						0
04N/03W-05N01	0434-042-32						0
04N/03W-05N02	0434-042-32						0
05N/03W-30N04	0444-791-29						0
05N/03W-31Q02	0444-121-07						0
05N/03W-31Q03	0444-121-07						0
05N/03W-31R02	0444-121-06						0
05N/03W-31R03	0444-121-06						6
							6
			RECAP:		Domestic	3.0	6.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997**

**ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

**CONSUMPTIVE
 WATER USE
 IN
 ACRE-FEET
 (65% OF
 PRODUCTION
 FOR SOME
 CASES**

**VERIFIED
 ANNUAL
 1997
 PRODUCTION**

**NET WATER
 REQUIREMENT
 IN
 ACRE-FEET**

**NET
 ACREAGE**

**GENERAL LAND USE
 (1997)**

**AERIAL PHOTO
 PLATE NO.
 (1997)**

**ASSESSORS
 PARCEL
 NUMBER**

**OWNER
 TOWNSHIP/RANGE/SEC/WELL**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES	VERIFIED ANNUAL 1997 PRODUCTION
INDUSTRIAL ASPHALT		11-06	Industrial	65.21			
06N/04W-07D07	0468-091-16						60
06N/04W-18C02	0468-141-04						48
							108
			RECAP:		Industrial	108.0	108.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
JESS RANCH WATER COMPANY		14-12	Recreational Lakes	27.89	5.60	156.2	
			Golf Course - Municipal	102.75	3.12	320.6	
			Municipal	131.49			
			No Use	393.04	0.00	0	
04N/03W-06E01	0434-661-06						0
04N/03W-06E02	0434-661-06						0
04N/03W-06E04	0434-021-52						390
04N/03W-06L01	0434-671-01						0
04N/03W-06L02	0434-671-01						2,049
04N/03W-06L03	0434-671-01						0
04N/03W-06LD01	0434-671-01						632
04N/03W-06N01	0434-671-07						0
04N/03W-06N02	0434-681-12						0
04N/03W-06N03	0434-681-12						274
04N/03W-06P01	0434-671-01						0
04N/03W-06P04	0434-671-01						0
04N/03W-06Q01	0434-033-21						0
04N/03W-07C01	0434-681-06						0
04N/03W-07D01	0434-681-02						0
04N/03W-07E01	0434-681-13						0
04N/03W-07K02	0434-201-52						0
04N/03W-07K03	0434-201-52						0
04N/03W-07M01	0434-681-13						0
04N/03W-07M02	0434-681-13						0
04N/03W-07N01	0434-201-53						0
04N/03W-07P03	0434-201-53						0
04N/03W-18E01	0438-012-41						0
04N/03W-18E02	0438-012-41						0
04N/04W-01A01	0434-541-07						0
04N/04W-01A02	0434-541-07						5
04N/04W-01F01	0434-531-03						0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
04N/04W-01R01	0434-531-05						0
							2,718
							(1511) *
			RECAP:		Recreational Lakes	156.2	1,417.0
					Golf Course	320.6	632.0
					Municipal	334.5	669.0
					No Use	0.0	0.0
JOHNSON, LARRY & CARLEAN		15-11	Agriculture - Alfalfa	8.41	4.04	34	
04N/03W-30H04	0433-014-28						47
							47
			RECAP:		Domestic	0.5	1.0
					Agriculture - Alfalfa	29.9	46.0
JOHNSON, RONALD		15-11	Agriculture - Alfalfa	4.09	4.04	16.5	
04N/03W-18J01	0438-012-38						35
							35
			RECAP:		Domestic	0.5	1.0
					Agriculture - Alfalfa	16.5	34.0
JOHNSTON, HARRIET & JOHNSTON, LAWRENCE W.		15-12	Agriculture - Alfalfa	12.79	4.04	51.7	
			No Use	11.61	0.00	0	
04N/03W-30C01	0433-014-03						56
							56
			RECAP:		Domestic	2.5	5.0
					Agriculture - Alfalfa	33.2	51.0
					No Use	0.0	0.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
<hr/>							
KEEL, AL J. & BARBARA		10-06	Domestic	20.02			
07N/05W-36B01	0469-011-77						4
07N/05W-36B03	0469-011-77						--
TRA/NSF-ER							--
							4
			RECAP:		Domestic	2.0	4.0
<hr/>							
KEMPER CAMPBELL RANCH		13-13	Agriculture - Pasture	66.78	3.44	229.7	
			Recreational Lakes	4.39	5.60	24.6	
			Domestic	31.23			
05N/04W-15C02	0480-011-14						18
05N/04W-15G01	0480-011-14						0
05N/04W-15K01	0480-011-31						0
05N/04W-15KS01							263
							281
			RECAP:		Agriculture - Pasture	155.0	238.4
					Recreational Lakes	18.0	24.6
					Domestic	9.0	18.0
<hr/>							
LAKE ARROWHEAD COMMUNITY SERVICES DISTRICT		16-18	Domestic	280.55			
03N/04W-01B01	0397-013-04						0
03N/04W-01K06	0397-013-17						0
03N/04W-01K08	0397-013-19						2
							2
			RECAP:		Domestic	1.0	2.0
<hr/>							

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
LAWSON, ERNEST & BARBARA 04N/03W-20N07	0438-163-30	15-11	Domestic	7.94			3 3
			RECAP:		Domestic	1.5	3.0
LEE, JON 04N/04W-13K01 04N/04W-13K02 04N/04W-13K04	0411-191-40 0411-191-40 0411-191-40	15-12	Domestic	29.77			0 6 10 16
			RECAP:		Domestic	8.0	16.0
LENHERT, RONALD & TONI 04N/03W-17M01 04N/03W-17M02 04N/03W-17M03 04N/03W-17M04	0438-012-63 0438-012-63 0438-012-61 0438-012-60	15-11	Domestic	20.73			-- -- -- -- 9
			RECAP:		Domestic	4.5	9.0
LEWIS HOMES OF CALIFORNIA 04N/03W-17N01 04N/03W-17N02 04N/03W-20B01 04N/03W-20E01 04N/03W-20G01	0438-012-59 0438-012-59 0438-163-31 0438-163-01 0438-163-20	15-11	No Use	271.16	0.00	0	0 0 0 0 0 0
			RECAP:		No Use	0.0	0.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
LONGMAN, JACK		15-11	Domestic	18.12			
04N/03W-18A03	0438-021-05						1
04N/03W-18A07	0438-021-05						1
							2
			RECAP:		Domestic	1.0	2.0
LOUNSBURY, J. PETER & CAROLYN		10-06	Agriculture - Alfalfa	21.66	4.04	87.5	
06N/05W-01H03	0468-021-18						0
06N/05W-01H04	0468-021-18						87
06N/05W-01H13	0468-021-18						0
06N/05W-01H14	0468-021-18						—
06N/05W-01J03	0468-021-12						27
							114
			RECAP:		Domestic	13.5	27.0
					Agriculture - Alfalfa	56.5	87.0
LOW, ROBERT		15-11	No Use	58.42	0.00	0	
04N/03W-18K02	0438-012-39						0
							0
			RECAP:		No Use	0.0	0.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
LUCKEY, MANLEY J.		15-11/12	Agriculture - Alfalfa	58.05	4.04	234.5	
			Agriculture - Grain	14.91	0.89	13.3	
04N/03W-19N01	0411-191-59						207
04N/03W-30E01	0398-031-24						291
04N/03W-30E04	0398-031-25						0
							498
			RECAP:		Agriculture - Alfalfa	234.0	472.0
					Agriculture - Grain	13.3	26.0
LUTH, KEN		09-02	Agriculture - Livestock	12.79			
			No Use	20.31	0.00	0	
07N/04W-19P06	0470-051-06						18
							18
			RECAP:		Agriculture - Livestock	9.0	18.0
					No Use	0.0	0.0
M. L. J. CORPORATION		09-02	Agriculture - Alfalfa	40.28	4.04	162.7	
			No Use	17.19	0.00	0	
07N/04W-18P01	0470-021-09						273
							273
			RECAP:		Domestic	0.5	1.0
					Agriculture - Alfalfa	162.7	272.0
					No Use	0.0	0.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
MARIANA RANCHOS COUNTY WATER DISTRICT		N/A					
	04N/03W-21D01	0438-153-05					129
	04N/03W-21E01	0438-154-19					89
							218
			RECAP:		Municipal	109.0	218.0
MCCALL, REX		09-02	Agriculture - Alfalfa	8.70	4.04	35.2	
	07N/05W-24J02	0470-011-36					0
	07N/05W-24J03	0470-011-36					22
							22
			RECAP:		Domestic Agriculture - Alfalfa	1.0 13.0	2.0 20.0
MCINNIS, WILLIAM S.		15-11	Domestic	4.48			
	04N/03W-30A03	0433-014-19					4
	04N/03W-30A09	0433-014-19					0
							4
			RECAP:		Domestic	2.0	4.0
MITCHELL, ROBIN & JUDITH		12-10	Recreational Lakes Domestic	3.58 14.89	5.60	20	
	05N/03W-11E02	0437-341-69					---
	05N/03W-11E04	0437-341-69					---
	05N/03W-11E05	0437-341-69					---
							31
			RECAP:		Recreational Lakes Domestic	20.0 0.5	30.0 1.0

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 ALTO SUBAREA
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OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
MURPHY, BERNARD H. 03N/04W-12Q05	0397-191-24	17-18	Domestic	1.89			1 1
RECAP:					Domestic	0.5	1.0
MURPHY, KENNETH - SCOGGINS, RON 04N/03W-17L04	0438-012-29	15-11	Domestic	1.20			4 4
RECAP:					Domestic	2.0	4.0
NAVAJO MUTUAL WATER COMPANY 05N/03W-10D01 05N/03W-10D02	0437-503-19 0437-503-19	N/A					64 0 64
RECAP:					Municipal	32.0	64.0
NUNN, DONALD & PEARL 05N/03W-24E04 05N/03W-24E05 05N/03W-24E06	0439-281-35 0439-281-35 0439-281-35	13-10	Domestic	30.19			0 12 0 12
RECAP:					Domestic	6.0	12.0

**MOJAVE BASIN AREA WATERMASTER
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 INCLUDING GENERAL LAND USES FOR 1997
 ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
O'BRYANT, ROBERT C. & BARBARA		15-11	Agriculture - Alfalfa	16.30	4.04	65.9	
04N/03W-17D04	0438-012-04						95
04N/03W-17D06	0438-012-04						2
							97
			RECAP:		Domestic	1.0	2.0
					Agriculture - Alfalfa	61.8	95.0
ORMSBY, HARRY G.		10-06	Agriculture - Alfalfa	37.49	4.04	151.4	
07N/05W-36B02	0469-011-76						246
							246
			RECAP:		Domestic	0.5	1.0
					Agriculture - Alfalfa	151.4	245.0
PACHECO, ALEJANDRO		10-06	Agriculture - Alfalfa	23.79	4.04	96.1	
07N/05W-25G04	0469-011-64						---
07N/05W-25G09	0469-011-64						125
							125
			RECAP:		Agriculture - Alfalfa	81.3	125.0
PALISADES RANCH		09-02	Agriculture - Alfalfa	106.18	4.04	429	
			No Use	37.37	0.00	0	
07N/05W-24B01	0470-011-04						400
07N/05W-24G01	0470-011-06						185
07N/05W-24P05	0470-011-30						0
							585
			RECAP:		Domestic	0.5	1.0
					Agriculture - Alfalfa	379.6	584.0
					No Use	0.0	0.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997**

**ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

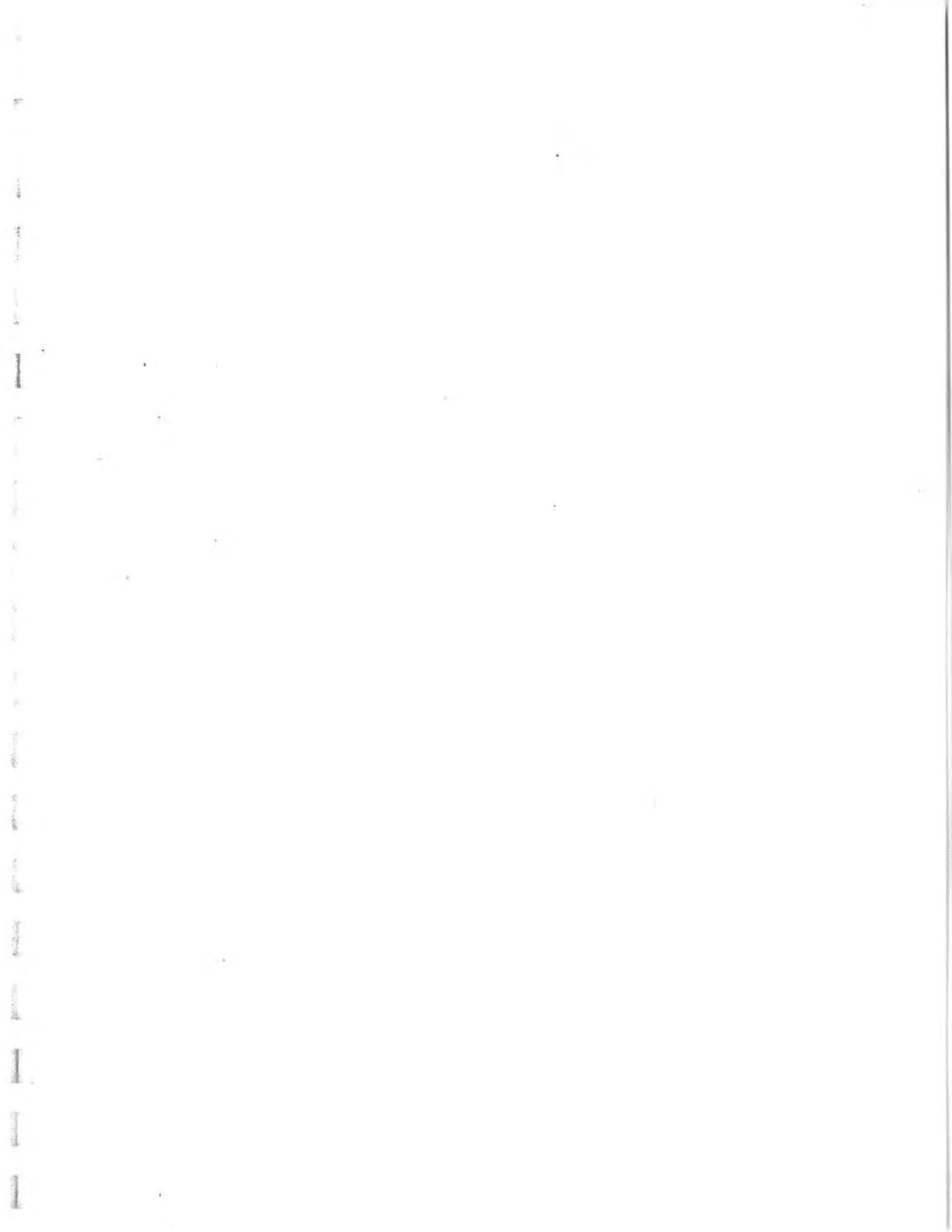
OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
PARKER REVOCABLE TRUST, D. E. & G. J. 05N/03W-19P03	0444-671-14	13-12	Agriculture - Alfalfa	3.30	4.04	13.3	24
RECAP:			Agriculture - Alfalfa			13.3	24.0
PEARL, ALICE 07N/04W-06J02	0467-111-20	08A-05	Agriculture - Pasture	12.20	3.44	42	36
RECAP:			Domestic			0.5	1.0
RECAP:			Agriculture - Pasture			22.8	35.0
PEARSON, DERYL B. - NORWEST MORTGAGE 04N/03W-31A01 04N/03W-31A02	0433-061-47 0433-061-47	16-18	Domestic	3.55			0 0
RECAP:			Domestic			0.0	0.0
PERRY, THOMAS A. 05N/04W-13L01	0479-072-11	13-12	Agriculture - Alfalfa	3.10	4.04	12.5	29
RECAP:			Agriculture - Alfalfa			12.5	29.0

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 ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
PETTIS FAMILY TRUST		14-11	Agriculture - Alfalfa	16.90	4.04	68.3	
04N/03W-06B01	0434-032-11						0
04N/03W-06B08	0434-032-11						110
							110
			RECAP:		Domestic	0.5	1.0
					Agriculture - Alfalfa	68.3	109.0
PHENIX PROPERTIES LTD.		12-10	No Use	71.09	0.00	0	
06N/03W-34E01							0
06N/03W-34F01							0
							0
			RECAP:		No Use	0.0	0.0
PITTMAN, LEROY W.		10-06	Domestic	24.57			
06N/05W-01A02	0468-021-09						---
06N/05W-01A05	0468-021-09						---
06N/05W-01B02	0468-021-09						---
06N/05W-01B03	0468-021-09						---
							7
			RECAP:		Domestic	3.5	7.0
POLICH, LEE & DONNA		14-11	Domestic	15.42			
04N/03W-06J02	0434-033-14						0
04N/03W-06J06	0434-033-08						11
							11
			RECAP:		Domestic	5.5	11.0

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 ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
RANCHERITOS MUTUAL WATER COMPANY		N/A					
	04N/03W-09G01						51
	04N/03W-10D03						14
	04N/03W-17J01						66
	04N/03W-17J04						---
							131
			RECAP:		Municipal	65.5	131.0



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OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
RANCHO LAS FLORES LTD. PARTNERSHIP		17-20 & 18A-03	Agriculture - Pasture	379.29	3.44	1304.7	
			Recreational Lakes	29.91	5.60	167.5	
02N/04W-05ED01	0341-071-05						0
03N/04W-20P01	0357-161-08						0
03N/04W-21N01	0357-171-14						0
03N/04W-22K01	0357-171-17						0
03N/04W-26B01	0357-191-06						0
03N/04W-26B02	0357-191-06						0
03N/04W-26JS01	0357-191-14						2
03N/04W-26JS02	0357-191-14						0
03N/04W-26KD01	0357-191-13						0
03N/04W-26QD01	0357-191-03						239
03N/04W-27C01	0357-201-02						0
03N/04W-27G01	0357-201-02						0
03N/04W-28C01	0357-171-15						0
03N/04W-28G01	0357-201-05						0
03N/04W-28J01	0357-201-05						0
03N/04W-28MD01	0357-201-05						13
03N/04W-28P01	0357-201-05						36
03N/04W-28P02	0357-201-05						0
03N/04W-29L01	0357-211-28						0
03N/04W-29M01	0357-211-39						0
03N/04W-30D01	0357-211-38						0
03N/04W-30E01	0357-211-05						0
03N/04W-31A01	0357-221-37						0
03N/04W-31AD01	0357-221-37						0
03N/04W-31B02	0357-221-36						0
03N/04W-32AD01	0357-221-39						2,083
03N/04W-32C01	0357-221-30						0
03N/04W-32D01	0357-221-30						0
03N/04W-32D02	0357-221-30						61

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
03N/04W-33FS01	0357-231-30						0
03N/05W-25J01	0357-132-03						0
							2,434
			RECAP:		Agriculture - Pasture	1,304.7	2,099.0
					Recreational Lakes	167.5	335.0
REED, DELBERT E. & LINDA		15-11	Agriculture - Alfalfa	16.93	4.04	68.4	
04N/03W-17E02	0438-012-22						90
04N/03W-17E03	0438-012-22						6
04N/03W-17E04	0438-012-22						8
							104
			RECAP:		Domestic	7.0	14.0
					Agriculture - Alfalfa	58.5	90.0
RIM PROPERTIES, A GENERAL PARTNERSHIP TRANSF-ER		N/A					---

			RECAP:		No Use	0.0	0.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
RIVERSIDE CEMENT COMPANY - ORO GRANDE PLANT		11-06	Agriculture - Alfalfa	136.46	4.04	551.3	
	06N/04W-18F05	0468-151-01	Industrial	256.37			99
	06N/04W-18L03	0468-171-12					0
	06N/04W-18N01	0468-161-04					0
	06N/04W-19C09	0468-211-30					0
	06N/04W-19C10	0468-211-30					607
	06N/04W-19E01	0468-161-04					519
	06N/04W-30J01	0472-171-20					114
	06N/04W-30J02	0472-171-20					172
	06N/04W-30J03	0472-171-20					375
	06N/04W-30J04	0472-171-20					184
							2,070
			RECAP:		Agriculture - Alfalfa	337.4	519.0
					Industrial	1,511.0	1,551.0
ROBINSON, JIMMY F.		12-14	No Use	47.66	0.00	0	
	06N/04W-30C08	0468-261-48					0
	06N/04W-30E02	0468-261-49					0
							0
			RECAP:		No Use	0.0	0.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
ROGERS, ROY - ORO GRANDE RANCH		10-06	Domestic	57.36			
	07N/04W-31N03	0469-051-01					---
	07N/05W-36R01	0469-011-36					---
	07N/05W-36R04	0469-011-36					---
	07N/05W-36R05	0469-011-36					---
	07N/05W-36R07	0469-011-36					---
							1
			RECAP:		Domestic	0.5	1.0
RUDMAN, ROBERT T.		14-11	Agriculture - Alfalfa	36.75	4.04	148.5	
	04N/03W-06G01	0434-032-16					6
	04N/03W-06G02	0434-032-16					0
	04N/03W-06G03	0434-032-16					213
							219
			RECAP:		Domestic Agriculture - Alfalfa	3.0 138.4	6.0 213.0
RUE RANCH		18A-03	Domestic	97.13			
	03N/04W-31C01	0357-221-06					0
	03N/04W-31C02	0357-221-16					1
	03N/04W-31C04	0357-221-06					1
	03N/04W-31D01	0357-221-16					0
	03N/04W-31D03	0357-221-16					0
	03N/04W-31D04	0357-221-16					1
							3
			RECAP:		Domestic	1.5	3.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
SAN BERNARDINO COUNTY SERVICE AREA 42		11-06					
	06N/04W-19B11	0468-292-01					---
	06N/04W-29M06	0468-281-02					111
	06N/04W-29M09	0468-281-02					19
	06N/04W-29M10	0468-281-02					25
							155
			RECAP:		Municipal	77.5	155.0
SAN BERNARDINO COUNTY SERVICE AREA 64		14-12	Municipal	12.66			
	04N/04W-03K02	0415-263-13					948
	05N/04W-26R02	0481-051-04					450
	05N/04W-35A04	0482-022-02					412
	05N/04W-36G01	0444-352-01					919
	05N/04W-36Q04	0444-421-04					675
							3,404
			RECAP:		Municipal	1,702.0	3,404.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
SAN BERNARDINO COUNTY SERVICE AREA 70C		08A-05	Municipal	474.79			
	07N/04W-06E04	0467-741-09					280
	07N/04W-06E06	0467-702-04					496
	07N/04W-06M06	0467-121-27					0
	07N/04W-06M07	0467-121-26					311
	08N/04W-29D03	0467-021-32					2
	08N/04W-31A01	0467-013-03					216
	08N/04W-31G01	0467-593-05					265
	08N/04W-31G02	0467-013-03					160
	08N/04W-31P02	0467-294-12					265
							1,995
			RECAP:		Municipal	997.5	1,995.0
SAN BERNARDINO COUNTY SERVICE AREA 70J		N/A					
	04N/05W-36B01	0405-371-41					421
	04N/05W-36R02	0405-381-58					335
	04N/05W-36R04	0405-381-71					471
							1,227
			RECAP:		Municipal	613.5	1,227.0
SAN BERNARDINO COUNTY SERVICE AREA 70L		N/A					
	04N/06W-04D01	0403-261-35					243
	04N/06W-04D02	0403-261-35					393
							636
			RECAP:		Municipal	318.0	636.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
SAN FILIPPO, JOSEPH & SHELLEY 03N/03W-06P10		16-17	No Use	9.17	0.00	0	1 <hr/> 1
RECAP:					Domestic	0.5	1.0
SILVER LAKES ASSOCIATION		08A-05	Recreational Lakes Golf Course	265.37 172.57	5.60 3.12	1486.1 538.4	
07N/04W-06E01	0467-121-24						763
07N/04W-06M05	0467-121-28						0
07N/04W-06M08	0467-121-28						0
07N/04W-06M09	0467-121-28						586
07N/04W-06N01	0467-121-19						465
08N/04W-30P01	0467-012-07						217
08N/04W-31E01	0467-012-12						550
08N/04W-31P03	0467-293-08						791 <hr/> 3,372
RECAP:					Recreational Lakes Golf Course	1,486.1 538.2	2,544.0 828.0
SIMMONS, JACK H. & ETHUN, CLAUDIA		11-06	Agriculture - Alfalfa No Use	27.91 5.94	4.04 0.00	112.8 0	
06N/04W-19K02	0468-251-14						127 <hr/> 127
RECAP:					Domestic Agriculture - Alfalfa No Use	0.5 81.9 0.0	1.0 126.0 0.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
SON OF CADUCEUS		14-11	Agriculture - Alfalfa	174.01	4.04	703	
	05N/03W-31B01	0444-121-05					0
	05N/03W-31D02	0444-121-04					504
	05N/03W-31H01	0444-121-05					618
	05N/03W-31N01	0444-121-08					0
							1,122
RECAP:					Agriculture - Alfalfa	703.0	1,122.0
SOUTHDOWN, INC.		12-13 & 11-01	Industrial	278.37			
	05N/04W-04B01	0478-011-01					0
	05N/04W-04B04	0478-011-01					100
	05N/04W-04B05	0478-011-01					---
	05N/04W-04G01	0478-011-01					28
	05N/04W-04G02	0478-011-01					0
	05N/04W-04G03	0478-011-01					1,155
	06N/02W-17F01	0463-151-01					44
	06N/02W-17G01	0463-151-01					44
	06N/04W-33K01	0472-061-46					0
	06N/04W-33L03	0472-061-46					0
	06N/04W-33N01	0472-061-17					0
	06N/04W-33N02	0472-061-17					0
	06N/04W-33N03	0472-061-17					0
	06N/04W-33N06	0472-061-17					20
	06N/04W-33P01	0472-061-46					0
	06N/04W-33P02	0472-061-46					0
							1,391
RECAP:					Industrial	1,391.0	1,391.0

**MOJAVE BASIN AREA WATERMASTER
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 INCLUDING GENERAL LAND USES FOR 1997
 ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
SOUTHERN CALIFORNIA WATER COMPANY		N/A					
	04N/03W-09N01	0434-221-02					0
	04N/03W-09Q01	0434-236-01					118
	04N/03W-09Q03	0434-236-02					375
	05N/03W-26E01	0439-053-06					0
	05N/03W-34N02	0439-171-14					162
	05N/03W-35F01	0439-132-08					0
	06N/03W-34J03	0437-213-36					178
	06N/03W-34K01	0437-213-16					12
	06N/03W-34K02	0437-213-16					83
							928
			RECAP:		Municipal	464.0	928.0

**MOJAVE BASIN AREA WATERMASTER
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 INCLUDING GENERAL LAND USES FOR 1997
 ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
SPRING VALLEY LAKE ASSOCIATION		13-12	Recreational Lakes	195.51	5.60	1094.9	
05N/04W-23M01	0480-164-01						0
05N/04W-23M02	0480-164-01						33
05N/04W-23R01	0480-241-01						60
05N/04W-23R02	0480-242-03						97
05N/04W-25E04	0481-121-12						58
05N/04W-25E05	0481-101-07						145
05N/04W-26C01	0481-272-10						11
05N/04W-26C02	0481-273-08						109
05N/04W-26F02	0481-312-11						42
05N/04W-26F03	0481-344-01						26
05N/04W-26F04	0481-344-01						---
05N/04W-26G04	0481-411-03						161
05N/04W-26G05	0481-321-42						60
05N/04W-26H01	0481-092-10						60
05N/04W-26J03	0481-131-43						140
05N/04W-26KD01	0481-411-03						952
							1,954
			RECAP:		Recreational Lakes	1,094.9	1,954.0
SPRING VALLEY LAKE COUNTRY CLUB		14-12	Golf Course Municipal	106.29 998.53	3.12	331.6	
05N/04W-35H06	0482-022-02						449
05N/04W-35HD07	0482-022-05						---
							449
			RECAP:		Golf Course	291.9	449.0

**MOJAVE BASIN AREA WATERMASTER
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 INCLUDING GENERAL LAND USES FOR 1997
 ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
STORM, RANDALL 04N/03W-18J03	0438-012-33	15-11	Domestic	10.53			7 <hr/> 7
			RECAP:		Domestic	3.5	7.0
SUDMEIER, GLENN W. 03N/05W-36B02 03N/05W-36B04 03N/05W-36BD01	0357-141-03 0357-141-03 0357-141-02	18A-03	Domestic	16.79			1 5 1 <hr/> 7
			RECAP:		Domestic	3.5	7.0
SUMMIT VALLEY RANCH 03N/04W-09B01 03N/05W-26F01 03N/05W-26F02 03N/05W-26K01 03N/05W-26L01 03N/05W-26R01 03N/05W-35A01 03N/05W-35A02	 0397-052-13 0357-321-17 0357-321-17 0357-331-02 0357-331-02 0357-331-02 0357-141-05 0357-141-05	17-20	Recreational Lakes Domestic No Use	1.24 687.62 953.17	5.60 0.00	6.9 0	0 0 0 6 0 6 0 19 <hr/> 31
			RECAP:		Recreational Lakes Domestic	6.9 3.0	25.0 6.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
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 ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
TAYLOR, ALLEN C. - HAYMAKER RANCH 06N/03W-34G04		12-10	No Use	121.45	0.00	0	0
RECAP:					No Use	0.0	0.0
THOMAS FARMS		07A-04	Domestic	75.81			
08N/04W-20L01	0466-181-24						0
08N/04W-20L02	0466-181-24						0
08N/04W-20P01	0466-181-24						4
08N/04W-20P02	0466-181-24						0
08N/04W-20P03	0466-181-24						0
RECAP:					Domestic	2.0	4.0
THOMPSON, JAMES A.		14-10	Agriculture - Alfalfa	36.91	4.04	149.1	
			Agriculture - Grain	18.90	0.89	16.8	
04N/03W-02P02	0434-072-66						117
04N/03W-11B01	0434-133-01						188
04N/03W-11C01	0434-511-10						8
RECAP:					Domestic	4.0	8.0
					Agriculture - Alfalfa	149.1	273.0
					Agriculture - Grain	16.8	32.0

**MOJAVE BASIN AREA WATERMASTER
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 INCLUDING GENERAL LAND USES FOR 1997
 ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
THOMPSON, RODGER		15-11	Agriculture - Alfalfa	10.29	4.04	41.6	
04N/03W-20N05	0438-163-26						0
04N/03W-20N08	0438-163-13						33
04N/03W-20N09	0438-163-26						20
							53
			RECAP:		Domestic	0.5	1.0
					Agriculture - Alfalfa	33.8	52.0
THRASHER, GARY		10-06	Agriculture - Alfalfa	48.79	4.04	197.1	
07N/05W-25K09	0469-011-08						2
07N/05W-25K10	0469-011-33						201
							203
			RECAP:		Domestic	1.0	2.0
					Agriculture - Alfalfa	130.6	201.0
THUNDERBIRD COUNTY WATER DISTRICT		13-09	Municipal	410.95			
05N/02W-18A01	0436-192-37						20
05N/02W-18A02	0436-192-37						93
05N/02W-18A03	0436-192-37						14
							127
			RECAP:		Municipal	63.5	127.0
TRANSAMERICA FIN'L SVC - SPEARS, LARRY B. & ERLINDA		13-10	No Use	33.89	0.00	0	
05N/03W-11N02	0437-052-55						0
							0
			RECAP:		No Use	0.0	0.0

**MOJAVE BASIN AREA WATERMASTER
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 INCLUDING GENERAL LAND USES FOR 1997
 ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
VAIL, JOSEPH B. & PAULA E.		12-13	Domestic	64.32			
06N/04W-31B01							0
06N/04W-31BS01	0472-161-47						0
06N/04W-33R01	0472-061-28						1
							1
			RECAP:		Domestic	0.5	1.0
VAN BURGER, CARL		11-06					
06N/04W-18F07	0468-151-11						0
							0
			RECAP:		No Use	0.0	0.0
VAN LEEUWEN FAMILY TRUST		10-06	Agriculture - Alfalfa	54.28	4.04	219.3	
07N/05W-25Q01	0469-011-58						0
07N/05W-25Q02	0469-011-58						200
07N/05W-25R03	0469-011-58						0
07N/05W-25R04	0469-011-58						42
							242
			RECAP:		Agriculture - Alfalfa	157.3	242.0
VANNI, MIKE		14-10	Domestic - Mobile Home Park	16.47			
05N/03W-35P01	0439-392-36						---
05N/03W-35P02	0439-392-36						---
							46
			RECAP:		Domestic	23.0	46.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
VICTOR VALLEY COMMUNITY COLLEGE DISTRICT		14-12	Recreational Lakes Municipal	5.15 21.14	5.60	28.8	
05N/04W-35R01	0482-022-06						160
05N/04W-35R03	0482-022-06						---
05N/04W-36E01	0482-022-06						0
05N/04W-36N01	0482-022-06						76
05N/04W-36N03	0482-022-06						0
05N/04W-36N04	0482-022-06						0
							236
			RECAP:		Recreational Lakes Municipal	28.8 118.0	76.0 160.0
VICTOR VALLEY MEMORIAL PARK		13-13	Municipal	12.80			
05N/04W-10P01	0473-183-03						---

			RECAP:		Municipal	0.0	0.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
VICTOR VALLEY WATER DISTRICT		N/A					
04N/05W-02H01	3072-101-01						32
05N/04W-06R01	0395-055-02						440
05N/04W-08B02	0395-166-07						790
05N/04W-08N01	0395-181-16						846
05N/04W-08Q01	0395-122-07						638
05N/04W-09G03	0478-061-26						0
05N/04W-09G04	0478-061-26						627
05N/04W-09K01	0478-084-18						178
05N/04W-09N01	0478-144-10						0
05N/04W-09R01	0478-105-07						0
05N/04W-10N01	0478-391-04						0
05N/04W-10N04	0478-391-04						0
05N/04W-16M01	0477-201-33						0
05N/04W-19J01	0396-052-11						764
05N/04W-20B01	0396-192-08						909
05N/04W-20J02	0396-243-05						471
05N/04W-27D08	0481-012-10						1,009
05N/04W-30A01	0475-252-21						1,157
05N/04W-30E02	0475-266-23						1,356
05N/04W-30K02	0475-295-18						1,170
05N/04W-30M01	0475-286-02						284
05N/04W-30M02	0475-283-11						490
05N/04W-33H02	0475-212-46						1,629
05N/04W-34N01	0482-322-08						1,042
05N/05W-14P01	0455-331-31						621
05N/05W-23K01	0394-101-52						310
05N/05W-24R01	0394-153-10						0
05N/05W-25K02	3094-541-56						1,004
06N/04W-34M10	0472-181-20						124
06N/04W-34M12	0472-181-20						1

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**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
TRA/NSF-ER							---
							15,892
RECAP:					Municipal	7,946.0	15,892.0
VICTORVILLE, CITY OF							
		12-13	Parks	3.48	3.12	10.8	
05N/04W-20H02	0396-242-01						---
05N/04W-20P01	0396-112-03						---
05N/04W-21M03	0477-261-17						---
06N/04W-34M08	0472-181-69						11
							11
RECAP:					Parks	7.2	11.0
VOGLER, ALBERT H.							
		15-12	Agriculture - Grain	18.23	0.89	16.2	
04N/04W-25F01	0398-031-47						33
							33
RECAP:					Agriculture - Grain	16.2	33.0
VOGLER, ET AL.							
		15-12	Agriculture - Grain	30.44	0.89	27.1	
04N/03W-30D03	0398-031-21						30
							30
RECAP:					Agriculture - Grain	19.5	30.0

**MOJAVE BASIN AREA WATERMASTER
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 INCLUDING GENERAL LAND USES FOR 1997**

**ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
<hr/>							
WACKEEN, CAESAR		07A-04	Agriculture - Alfalfa	269.51	4.04	1088.8	
08N/04W-19J01	0466-181-01						---
08N/04W-19L01	0466-181-05						---
08N/04W-19R01	0466-181-02						---
08N/04W-20M01	0466-181-26						---
08N/04W-20N02	0466-181-25						---
08N/04W-20N03	0466-181-25						---
							1,390
			RECAP:		Domestic	1.0	2.0
					Agriculture - Alfalfa	902.2	1,388.0
<hr/>							
WAKULA, JOHN & HELEN		10-06	Domestic	45.75			
07N/05W-25G08	0469-011-04						0
07N/05W-25H03	0469-011-04						0
							0
			RECAP:		Domestic	0.0	0.0
<hr/>							
WARD, KEN & BARBARA		18A-03	Agriculture - Pasture	10.46	3.44	36	
03N/05W-25Q01	0357-132-16						33
03N/05W-25Q02	0357-132-16						0
							33
			RECAP:		Domestic	0.5	1.0
					Agriculture - Pasture	20.8	32.0
<hr/>							

**MOJAVE BASIN AREA WATERMASTER
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 INCLUDING GENERAL LAND USES FOR 1997
 ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
WEBER, DAVE		17-20	Domestic	85.93			
03N/05W-14A01	0405-182-01						0
03N/05W-14A02	0405-182-01						8
							8
			RECAP:		Domestic	4.0	8.0
WELLS FARGO BANK, N.A.		14-11	Agriculture - Pasture	82.55	3.44	284	
05N/03W-30E02	0444-101-04						433
05N/03W-30N05	0444-101-04						9
05N/03W-30N06	0444-101-04						0
							442
			RECAP:		Agriculture - Pasture	284.0	442.0
WEST, CAROLYN & SMITH, RICHARD		08A-05	Domestic	24.00			
07N/04W-06G05	0467-111-02						3
07N/04W-06G06	0467-111-02						0
07N/04W-06G07	0467-111-02						0
07N/04W-06G09	0467-111-02						---
							3
			RECAP:		Domestic	1.5	3.0
WEST, HOWARD & SUZY		10-06	No Use	16.45	0.00	0	
06N/05W-01J02	0468-021-17						0
							0
			RECAP:		No Use	0.0	0.0

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 INCLUDING GENERAL LAND USES FOR 1997
 ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
WESTERN WATER COMPANY		08A-05 & 09-02	Agriculture - Alfalfa	138.98	4.04	561.5	
			Recreational Lakes	0.32	5.60	1.8	
			Dairy	11.26			
			Domestic	128.33			
03N/03W-07M04	0433-121-16						3
07N/04W-06K01	0467-111-01						---
07N/04W-06K02	0467-111-01						---
07N/04W-06Q01	0467-111-01						---
07N/04W-06Q02	0467-111-01						---
07N/04W-07F01	0467-141-18						---
07N/04W-07G01	0467-141-18						---
07N/04W-07K01	0467-141-18						---
07N/04W-07L01	0467-141-18						---
07N/04W-07N01	0467-131-09						---
07N/04W-07P01	0467-131-09						---
07N/04W-07P02	0467-131-09						---
07N/04W-18C01	0470-021-04						4
07N/04W-19N01	0470-051-01						0
07N/04W-19N03	0470-051-01						11
TRA/NSF-ER							---
							659
			RECAP:				
					Domestic	9.0	18.0
					Dairy	50.0	101.0
					Agriculture - Alfalfa	348.4	536.0
					Recreational Lakes	1.8	4.0

**MOJAVE BASIN AREA WATERMASTER
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 ALTO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
WHITTINGHAM, RICHARD V.		18A-02	Domestic	12.83			
03N/04W-33H05	0357-231-10						0
03N/04W-33H06	0357-231-10						0
03N/04W-33HS04	0357-231-10						1
							<u>1</u>
			RECAP:		Domestic	0.5	1.0
WIENER, MELVIN & MARIAM S.		14-10	Domestic - Mobile Home Park	8.93			
04N/03W-02D02	0434-082-02						26
							<u>26</u>
			RECAP:		Domestic	13.0	26.0
WYATT FAMILY TRUST		13-12	Agriculture - Grain	8.11	0.89	7.2	
05N/03W-19P01	0444-671-09						19
							<u>19</u>
			RECAP:		Agriculture - Grain	7.2	19.0
YEAGER CONSTRUCTION COMPANY, INC., E. L.		09-02					
07N/04W-18L02	0470-021-20						0
							<u>0</u>
			RECAP:				

**MOJAVE BASIN AREA WATERMASTER
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 INCLUDING GENERAL LAND USES FOR 1997
 BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
AKE, CHARLES J. & MARJORIE M.		05-05	Recreational Lakes	0.54	6.70	3.6	
	09N/03E-18B04	0532-011-23	Domestic	1.95			20
							20
			RECAP:		Recreational Lakes	3.6	19.0
					Domestic	0.5	1.0
ALTA POWER GENERATION, L.L.C.		05-08					
	09N/01E-13H02	0516-341-08					1,107
	09N/01E-13K02	0516-341-08					277
	09N/01E-14K03	0516-331-01					767
	09N/01E-15N03	0516-301-03					0
	09N/01E-23C01	0516-272-06					163
	09N/01E-23D01	0516-272-06					0
	09N/01E-23D02	0516-272-06					107
	09N/01E-23D04	0516-272-06					0
	09N/01E-23D06	0516-272-06					77
	09N/01E-23E04	0516-272-06					0
	09N/01E-23G01	0516-272-06					0
							2,498
			RECAP:		Industrial	2,498.0	2,498.0
ANGERER, ROBERT J. & PEGGY		06-04	Domestic	10.05			
	08N/03E-03K05	0528-121-38					7
	08N/03E-03K08	0528-121-38					0
							7
			RECAP:		Domestic	3.5	7.0

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 BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO- PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
ARGUELLES, ALFREDO		05-03	Agriculture - Alfalfa	58.62	5.25	307.8	
09N/03E-24A01	0531-141-02						418
09N/03E-24H01	0531-141-02						0
							418
			RECAP:		Domestic	0.5	1.0
					Agriculture - Alfalfa	271.0	417.0
ARTZ, RICHARD & GLORIA		06-04	Aquaculture	6.78	6.70	45.4	
08N/03E-03G01	0528-081-48						---
08N/03E-03G04	0528-081-56						---
							823
							(71) *
			RECAP:		Domestic	0.5	1.0
					Aquaculture	45.4	822.0
ATCHISON, TOPEKA, SANTA FE RAILWAY COMPANY		06-04	Industrial	26.07			
09N/03E-33E01	0531-061-23						80
							80
			RECAP:		Industrial	80.0	80.0
BAGLEY, ROY		05-05	Recreational Lakes	0.45	6.70	3	
			Domestic	18.03			
09N/03E-19E03	0531-341-77						16
							16
			RECAP:		Recreational Lakes	3.0	15.0
					Domestic	0.5	1.0

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 BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
BAKER, GEORGE B. & GLORIA L.		05-05	Recreational Lakes	2.29	6.70	15.3	
			Domestic	7.69			
09N/03E-19Q03	0531-341-43						---
09N/03E-19Q04	0531-341-43						---
							13
			RECAP:		Recreational Lakes	12.0	12.0
					Domestic	0.5	1.0
BALDERRAMA, ALFRED & LINDA		07-03	Domestic	51.41			
08N/04E-07E01	0529-121-05						---
08N/04E-07E03	0529-121-05						---
							8
			RECAP:		Domestic	4.0	8.0
BALL, DAVID P.		03-04	Recreational Lakes	1.88	6.70	12.6	
			Domestic	8.17			
10N/03E-23L01	0539-171-02						69
							69
			RECAP:		Recreational Lakes	12.6	68.0
					Domestic	0.5	1.0
BARAK, RICHARD		02-09	Agriculture - Orchard - Pistachios	36.88	1.00	36.9	
			No Use	115.51	0.00	0	
11N/03E-32E01	0540-111-10						0
11N/03E-32E02	0540-111-10						46
							46
			RECAP:		Agriculture - Orchard - Pistachios	29.9	46.0

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OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
BARBER, JAMES B.		05-05	Recreational Lakes	1.42	6.70	9.5	
			Domestic	8.79			
09N/03E-19Q02	0531-341-45						94
							94
			RECAP:		Recreational Lakes	9.5	85.0
					Domestic	4.5	9.0
BARSTOW CALICO K O A		04-09	Domestic - Commercial	13.11			
09N/01E-05H03	0516-101-22						14
							14
			RECAP:		Domestic	7.0	14.0
BAUR, KARL & RITA		05-06	Recreational Lakes	0.72	6.70	4.8	
			Domestic	2.88			
09N/02E-11R07	0515-171-47						13
09N/02E-11R08	0515-171-48						4
							17
			RECAP:		Recreational Lakes	4.8	16.0
					Domestic	0.5	1.0
BEDINGFIELD, LYNDELL & CHARLENE		06-05	Recreational Lakes	1.71	6.70	11.5	
			Domestic	17.96			
09N/03E-30D03	0531-341-30						34
							34
			RECAP:		Recreational Lakes	11.5	33.0
					Domestic	0.5	1.0

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OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
BENTON, PHILIP G.		04-04	Recreational Lakes	1.82	6.70	12.2	
09N/03E-02E01	0532-191-29		Domestic	7.53			4
							4
			RECAP:		Recreational Lakes	3.0	3.0
					Domestic	0.5	1.0
BORGOGNO REVOCABLE LIVING TRUST		05-07	Agriculture - Alfalfa	116.92	5.25	613.8	
09N/02E-17H01	0515-041-25		Agriculture - Grain	113.90	1.18	134.4	604
09N/02E-17J01	0515-041-25						520
09N/02E-17Q01	0515-041-25						0
							1,124
			RECAP:		Agriculture - Alfalfa	599.3	922.0
					Agriculture - Grain	131.3	202.0
BOWMAN, EDWIN L.		05-03	Agriculture - Orchard - Pistachios	0.51	1.00	0.5	
09N/03E-12L01	0532-171-55		Recreational Lakes	1.25	6.70	8.4	14
			Domestic	3.20			14
			RECAP:		Agriculture - Orchard - Pistachios	0.5	1.0
					Recreational Lakes	8.4	12.0
					Domestic	0.5	1.0

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OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
BROWN, RONALD A.		05-03	Agriculture - Alfalfa	121.44	5.25	637.6	
09N/03E-14J01	0532-141-03						283
09N/03E-14Q01	0532-141-03						274
							557
			RECAP:		Agriculture - Alfalfa	362.0	557.0
BROWY, ORVILLE & LOUISE		04-04	Recreational Lakes	3.12	6.70	20.9	
			Domestic	16.44			
09N/03E-03G01	0532-061-28						216
							216
							(28) *
			RECAP:		Recreational Lakes	20.9	204.0
					Domestic	6.0	12.0
BRUINS, NICHOLAS		04-04	Domestic	5.27			
10N/03E-35P01	0533-042-09						0
10N/03E-35P02	0533-042-09						4
10N/03E-35P03	0533-042-09						4
10N/03E-35P04	0533-042-09						0
							8
			RECAP:		Domestic	4.0	8.0
CALICO JUNCTION		N/A					
TRANSF-ER							—
							—
			RECAP:		No Use	0.0	0.0

**MOJAVE BASIN AREA WATERMASTER
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 BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
CALICO LAKES HOMEOWNERS ASSOCIATION		04-07	Recreational Lakes	24.30	6.70	162.8	
			Domestic	6.17			
09N/02E-05F01	0538-251-19						75
09N/02E-05F02	0538-251-19						1,255
							1,330
							(177) *
			RECAP:		Recreational Lakes	162.8	1,321.0
					Domestic	4.5	9.0
CALIFORNIA DEPARTMENT OF TRANSPORTATION		07-01	Domestic - Commercial	5.71			
08N/04E-12M03	0529-191-36						3
							3
			RECAP:		Domestic	1.5	3.0
CAMPBELL, M. A. & DIANNE		05-02	Recreational Lakes	3.49	6.70	23.4	
			Domestic	37.56			
09N/04E-20A01	0530-022-08						---
09N/04E-20A02	0530-022-08						---
							19
			RECAP:		Recreational Lakes	18.0	18.0
					Domestic	0.5	1.0
CARTER, JOHN THOMAS		05-04	Agriculture - Grain	112.96	1.18	133.3	
			Domestic	156.08			
09N/03E-17A02	0532-011-17						313
							313
			RECAP:		Agriculture - Grain	133.3	312.0
					Domestic	0.5	1.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
CDFG - CAMP CADY		04-03	Aquaculture	0.90	6.70	6	
			No Use	39.74	0.00	0	
10N/03E-25B01	0533-091-01						---
10N/03E-25B02	0533-091-01						---
10N/03E-25B03	0533-091-01						---
							12
							(9) *
			RECAP:		Aquaculture	6.0	12.0
CHANG, TIMOTHY & JANE		05-03	No Use	24.90	0.00	0	
09N/03E-24C03	0531-151-05						0
							0
							0.0
							0.0
CHANNELL, KATHRYNE J.		05-05	Domestic	18.80			
09N/02E-24R01	0515-141-13						1
09N/02E-24R02	0515-141-13						0
							1
							1.0
CHEYENNE LAKE, INC.		05-05	Recreational Lakes	12.95	6.70	86.8	
			Domestic	13.06			
09N/03E-08K04	0532-021-72						17
09N/03E-08K05	0532-021-72						441
							458
							(121) *
			RECAP:		Recreational Lakes	86.8	441.0
					Domestic	8.5	17.0

**MOJAVE BASIN AREA WATERMASTER
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 INCLUDING GENERAL LAND USES FOR 1997**

**BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
CHIAO MEI DEVELOPMENT 09N/03E-26D01	0531-191-02	06-04	No Use	277.04	0.00	0	0
				RECAP:	No Use	0.0	0.0
CHO BROTHERS RANCH 09N/03E-10K01 09N/03E-10Q01 09N/03E-10R01	0532-081-03 0532-081-03 0532-081-03	05-04	Agriculture	67.73			0 0 28 28
				RECAP:	Agriculture - Orchard - Apricots	14.0	28.0
CHUANG, MARSHAL 09N/03E-35K01	0531-111-33	06-04	Recreational Lakes Domestic	2.30 129.19	6.70	15.4	78 78
				RECAP:	Recreational Lakes Domestic	15.4 0.5	77.0 1.0
CLINE, VIVIAN D. 09N/03E-03M02	0532-071-29	04-04	Agriculture - Orchard - Pistachios Recreational Lakes Domestic	2.35 1.36 6.09	1.00 6.70	2.3 9.1	20 20
				RECAP:	Agriculture - Orchard - Pistachios Recreational Lakes Domestic	2.3 9.1 0.5	4.0 15.0 1.0

**MOJAVE BASIN AREA WATERMASTER
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 INCLUDING GENERAL LAND USES FOR 1997**

**BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
CONNER, WILLIAM H.		04-03	Recreational Lakes	1.59	6.70	10.7	
			Domestic	3.21			
10N/03E-36H01	0533-043-51						26
							26
			RECAP:		Recreational Lakes	10.7	25.0
					Domestic	0.5	1.0
COOL WATER RANCH		05-08	Domestic	95.79			
09N/01E-15N01	0516-301-03						0
09N/01E-15N02	0516-301-03						10
09N/01E-15N06	0516-301-02						0
09N/01E-15N07	0516-301-02						15
09N/01E-15NP01							---
							25
			RECAP:		Domestic	12.5	25.0
CROSS, FRANCIS & BEVERLY		NONE					
12N/02E-33E01	0518-231-22						2
							2
			RECAP:		Domestic	1.0	2.0

**MOJAVE BASIN AREA WATERMASTER
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 INCLUDING GENERAL LAND USES FOR 1997
 BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
CRYSTAL LAKES PROPERTY OWNERS ASSOCIATION		04-05	Recreational Lakes Domestic	55.91 97.57	6.70	374.6	
	10N/03E-30L01	0539-311-30					646
	10N/03E-30L02	0539-311-31					1,057
	10N/03E-30P01	0539-301-12					120
	10N/03E-30P02	0539-301-31					373
							2,196
							(446) *
			RECAP:		Recreational Lakes	374.6	2,145.0
					Domestic	25.5	51.0
					No Use	0.0	0.0
DAGGETT COMMUNITY SERVICES DISTRICT		N/A					
	09N/01E-16P01	0516-181-02					0
	09N/01E-17H01	0516-061-03					244
	09N/01E-17H02	0516-061-03					17
	09N/01E-21F01	0516-252-06					0
	09N/01E-21F02	0516-252-06					3
							264
			RECAP:		Municipal	132.0	264.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997**

**BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
DAGGETT LEASING CORPORATION		05-07	Industrial	493.91			
	09N/01E-13K01						12
	09N/01E-13Q09						102
	09N/01E-24A02						39
	09N/01E-24G02						224
	TRA/NSF-ER						---
							377
			RECAP:		Industrial	377.0	377.0
DALJO CORPORATION		06-03	Agriculture - Orchard - Pistachios	10.50	1.00	10.5	
			No Use	18.10	0.00	0	
	09N/04E-31J01	0530-012-46					17
							17
			RECAP:	Agriculture - Orchard - Pistachios		10.5	17.0
DAVIS, RONALD & DONNA		06-06	Agriculture - Orchard - Pistachios	3.38	1.00	3.4	
			Recreational Lakes	1.14	6.70	7.6	
			Domestic	3.04			
	09N/02E-27E02	0521-071-20					15
	09N/02E-27E04	0521-071-19					0
							15
			RECAP:	Agriculture - Orchard - Pistachios		3.3	5.0
					Recreational Lakes	7.6	9.0
					Domestic	0.5	1.0

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 BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
DE JONG, ALAN L.		05-04 & 06-04	Agriculture - Alfalfa	140.85	5.25	739.4	
			Agriculture - Grain	46.30	1.18	54.6	
			Domestic	193.57			
09N/03E-09L01	0532-102-05						707
09N/03E-34H01	0531-091-09						278
09N/03E-35D01	0531-101-14						0
09N/03E-35D02	0531-101-15						---
09N/03E-35D03	0531-101-15						---
09N/03E-35D04	0531-101-15						90
09N/03E-35D05	0531-101-14						---
							1,075
			RECAP:		Agriculture - Alfalfa	643.5	990.0
					Agriculture - Grain	54.6	84.0
					Domestic	0.5	1.0
DENNISON, QUENTIN D. - CLEGG, FRIZELL & JOKE		05-04	Recreational Lakes	0.93	6.70	6.2	
			Domestic	9.00			
09N/03E-10L01	0532-091-67						---
09N/03E-10L03	0532-091-67						---
							3
			RECAP:		Recreational Lakes	2.0	2.0
					Domestic	0.5	1.0

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**BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
DESERT LAKES CORPORATION - LAKE DOLORES		03-05	Agriculture	0.94			
			Recreational Lakes	25.50	6.70	170.9	
			No Use	240.79	0.00	0	
10N/03E-20D01	0539-031-02						261
10N/03E-20E01	0539-031-02						438
							699
							(159) *
			RECAP:				
					Agriculture	2.9	5.0
					Recreational Lakes	170.9	694.0
DICK VAN DAM DAIRY		05-07	Agriculture - Alfalfa	684.67	5.25	3594.5	
09N/02E-18F03	0515-051-25						944
09N/02E-18H02	0515-051-35						950
09N/02E-18H04	0515-051-35						---
09N/02E-19E01	0515-021-03						1,463
09N/02E-19L01	0515-011-14						1,197
							4,554
			RECAP:		Agriculture - Alfalfa	2,960.1	4,554.0
DOCIMO, ALLEN & KATHRYN		05-02	Recreational Lakes	10.45	6.70	70	
09N/04E-19C01	0530-061-07						308
							308
							(109) *
			RECAP:		Recreational Lakes	70.0	308.0

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**BAJA SUBAREA
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OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
DOCIMO, DONALD P. & PATRICIA J. 09N/02E-14N06	0515-162-12	05-06	Domestic	19.72			1 <hr/> 1
			RECAP:		Domestic	0.5	1.0
DONALDSON, JERRY & BEVERLY 09N/03E-20H01	0531-231-84	05-04	Domestic	20.04			4 <hr/> 4
			RECAP:		Domestic	2.0	4.0
DOWELL, LEONARD 09N/03E-01H01	0532-211-17	04-03	No Use	9.53	0.00	0	0 <hr/> 0
			RECAP:		No Use	0.0	0.0
EVKHANIAN, JAMES H. & PHYLLIS 09N/04E-06L01 09N/04E-06L02 09N/04E-06L03	0530-152-10 0530-152-10 0530-152-10	05-03	Domestic	19.77			--- --- --- <hr/> 11
			RECAP:		Domestic	5.5	11.0
FAWCETT, EDWARD C. 09N/02E-12P03	0515-183-08	05-05	No Use	2.19	0.00	0	0 <hr/> 0
			RECAP:		No Use	0.0	0.0

**MOJAVE BASIN AREA WATERMASTER
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 INCLUDING GENERAL LAND USES FOR 1997**

**BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
FELIX, ALAN E. & CAROL L.		05-03	Recreational Lakes	2.02	6.70	13.5	
			Domestic	14.10			
09N/04E-18K01	0530-071-13						---
09N/04E-18K02	0530-071-13						35
							35
			RECAP:		Recreational Lakes	13.5	34.0
					Domestic	0.5	1.0
FERRO, DENNIS & NORMA		05-02	Domestic	15.29			
09N/04E-20H01	0530-022-12						1
							1
			RECAP:		Domestic	0.5	1.0
FUNDAMENTAL CHRISTIAN ENDEAVORS, INC.		03-03 & 04-03	Recreational Lakes	10.61	6.70	71.1	
			Domestic	17.04			
			No Use	71.36	0.00	0	
10N/03E-36N02	0533-043-60						4
10N/04E-18R02	0541-011-05						---
10N/04E-20C01	0541-031-07						42
10N/04E-20C02	0541-031-07						24
10N/04E-20C03	0541-031-07						137
							207
							(140) *
			RECAP:		Recreational Lakes	71.1	137.0
					Domestic	35.0	70.0
					No Use	0.0	0.0

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 BAJA SUBAREA
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OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
GARCIA, DANIEL 09N/02E-23J01	0515-151-23	05-05	Agriculture - Orchard - Pistachios	6.31	1.00	6.3	20 20
			RECAP:		Domestic	0.5	1.0
				Agriculture - Orchard - Pistachios		6.3	19.0
GILBERT, HERBERT & BERNICE 09N/03E-21D02	0531-231-66	05-04	Agriculture - Orchard - Pistachios	9.67	1.00	9.7	13 13
			RECAP:		Domestic	0.5	1.0
				Agriculture - Orchard - Pistachios		7.8	12.0
GOLD, HAROLD 09N/03E-27R01	0531-201-05	06-04	Agriculture - Alfalfa Agriculture - Orchard	27.89 1.98	5.25 3.42	146.4 6.8	231 231
			RECAP:		Agriculture - Alfalfa	141.1	217.0
					Agriculture - Orchard	6.8	14.0
GRAVES, CHESTER B. 09N/03E-24B01 09N/03E-24G03	0531-141-26 0531-141-26	05-03	Agriculture - Orchard - Pistachios	11.55	1.00	11.6	10 0 10
			RECAP:		Agriculture - Orchard - Pistachios	6.5	10.0

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**BAJA SUBAREA
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OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
<hr/>							
GRAY, GEORGE F. & BETTY E.		06-03	Agriculture - Orchard - Apricots	9.27	3.42	31.7	
09N/03E-36E01	0531-121-34						29
09N/03E-36E03	0531-121-27						13
							42
			RECAP:	Agriculture - Orchard - Apricots		27.3	42.0
<hr/>							
HAIGH, WHILLDYN & MARGARET		06-04	No Use	19.09	0.00	0	
09N/03E-26H03	0531-181-35						0
09N/03E-26H04	0531-181-36						0
							0
			RECAP:		No Use	0.0	0.0
<hr/>							
HARALIK, BESS & ROBERT		05-04	Domestic	39.72			
09N/03E-22R02	0531-171-13						0
09N/03E-22R03	0531-171-13						1
							1
			RECAP:		Domestic	0.5	1.0
<hr/>							
HARDESTY, LESLIE E. & BECKY J.		05-03	Agriculture - Orchard - Pistachios	7.18	1.00	7.2	
			Recreational Lakes	0.43	6.70	2.9	
			No Use	0.72	0.00	0	
09N/04E-05N01	0530-152-55						4
09N/04E-05N02	0530-152-55						28
							32
			RECAP:		Domestic	2.0	4.0
				Agriculture - Orchard - Pistachios		7.2	11.0
				Recreational Lakes		2.9	17.0
					No Use	0.0	0.0

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 BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
HARESON, NICHOLAS & MARY		06-06	Agriculture - Orchard - Pistachios	5.04	1.00	5	
			No Use	2.94	0.00	0	
09N/02E-27C02	0521-061-20						10
							10
			RECAP:		Agriculture - Orchard - Pistachios	5.0	10.0
HARTER, JOE & SUE		05-06/07	Agriculture - Alfalfa	146.53	5.25	769.3	
			No Use	82.61	0.00	0	
09N/02E-07Q01	0515-051-14						519
09N/02E-09R02	0515-092-07						1
09N/02E-22E02	0515-121-12						722
09N/02E-22E04	0515-121-11						1
							1,243
			RECAP:		Agriculture - Alfalfa	769.3	1,241.0
					No Use	0.0	0.0
					Domestic	1.0	2.0
HARTLEY, LONNIE		05-09	Recreational Lakes	0.27	6.70	1.8	
			Domestic	2.94			
09N/01E-09M03	0516-131-06						17
							17
			RECAP:		Recreational Lakes	1.8	2.0
					Domestic	7.5	15.0
HARVEY, FRANK		04-06	Domestic	9.63			
09N/02E-03F01	0538-181-10						2
							2
			RECAP:		Domestic	1.0	2.0

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OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
HENDLEY, RICK & BARBARA 09N/02E-06E01	0538-031-09	04-07	Domestic	15.30			6 <hr/> 6
			RECAP:		Domestic	3.0	6.0
HICKMAN, ALEX & DEBE 10N/04E-31Q02 10N/04E-31Q03	0533-051-03 0533-051-03	04-03	Recreational Lakes Domestic	0.92 19.12	6.70	6.2	6 1 <hr/> 7
			RECAP:		Recreational Lakes	6.0	6.0
					Domestic	0.5	1.0
HIETT, HARRY J. & CLARICE M. 09N/01E-22B03 09N/01E-22B04	0516-272-24 0516-272-24	05-08	Agriculture - Orchard No Use	1.79 21.06	3.42 0.00	6.1 0	21 0 <hr/> 21
			RECAP:		Agriculture - Orchard	6.1	20.0
					No Use	0.0	0.0
					Domestic	0.5	1.0

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**BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
HILARIDES, FRANK		04-04	Agriculture - Alfalfa	106.73	5.25	560.3	
			No Use	217.47	0.00	0	
10N/03E-27A01	0539-161-12						0
10N/03E-27G01	0539-161-07						2
10N/03E-27K01	0539-151-10						763
10N/03E-27Q01	0539-151-10						0
							765
			RECAP:		Agriculture - Alfalfa	496.0	763.0
					No Use	0.0	0.0
					Domestic	1.0	2.0
HO, TING-SENG & AH-GIT TRA/NSF-ER		N/A					--
							--
			RECAP:		No Use	0.0	0.0
HOLLISTER, ROBERT H. & RUTH M.		06-04	Recreational Lakes	1.42	6.70	9.5	
			Domestic	3.72			
08N/03E-03F08	0528-081-08						19
							19
			RECAP:		Recreational Lakes	9.5	18.0
					Domestic	0.5	1.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
<hr/>							
HONG, PAUL B. & MAY		06-03 & 07-03	Domestic	65.69			
08N/04E-06H01	0529-141-16						0
08N/04E-07C03	0529-121-12						1
08N/04E-07D04	0529-121-11						0
08N/04E-07F02	0529-121-04						0
							1
			RECAP:		Domestic	0.5	1.0
<hr/>							
HORTON'S CHILDREN'S TRUST		06-03	Recreational Lakes	20.49	6.70	137.3	
			No Use	19.79	0.00	0	
09N/03E-25Q01	0531-141-30						3
09N/03E-25Q02	0531-141-30						322
09N/03E-25Q05	0531-141-30						5
09N/03E-25Q06	0531-141-30						0
							330
							(141)*
			RECAP:		Recreational Lakes	137.3	330.0
					No Use	0.0	0.0
<hr/>							
HORTON, JOHN, M.D.		06-03	Agriculture - Orchard - Pistachios	28.53	1.00	28.5	
			No Use	9.92	0.00	0	
09N/03E-25K02	0531-141-31						90
							90
			RECAP:		Agriculture - Orchard - Pistachios	28.5	90.0
					No Use	0.0	0.0
<hr/>							

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
HUBBARD, ESTER & MIZUNO, ARLEAN		04-03	Domestic	2.25			
09N/03E-01G01	0532-211-08		No Use	1.90	0.00	0	0
							0
			RECAP:		No Use	0.0	0.0
HUNT, RALPH M. & LILLIAN F.		04-06	Domestic	8.62			
09N/02E-03B01	0538-181-03						2
09N/02E-03B02	0538-181-03						0
09N/02E-03B03	0538-181-03						2
			RECAP:		Domestic	1.0	2.0
HUTCHISON, WILLIAM O.		05-04 & 05-06	Agriculture - Alfalfa	135.12	5.25	709.4	
			No Use	169.16	0.00	0	
09N/02E-10E01	0515-101-53						1
09N/03E-22L01	0531-171-01						897
			RECAP:		Agriculture - Alfalfa	583.0	897.0
					No Use	0.0	0.0
					Domestic	0.5	1.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

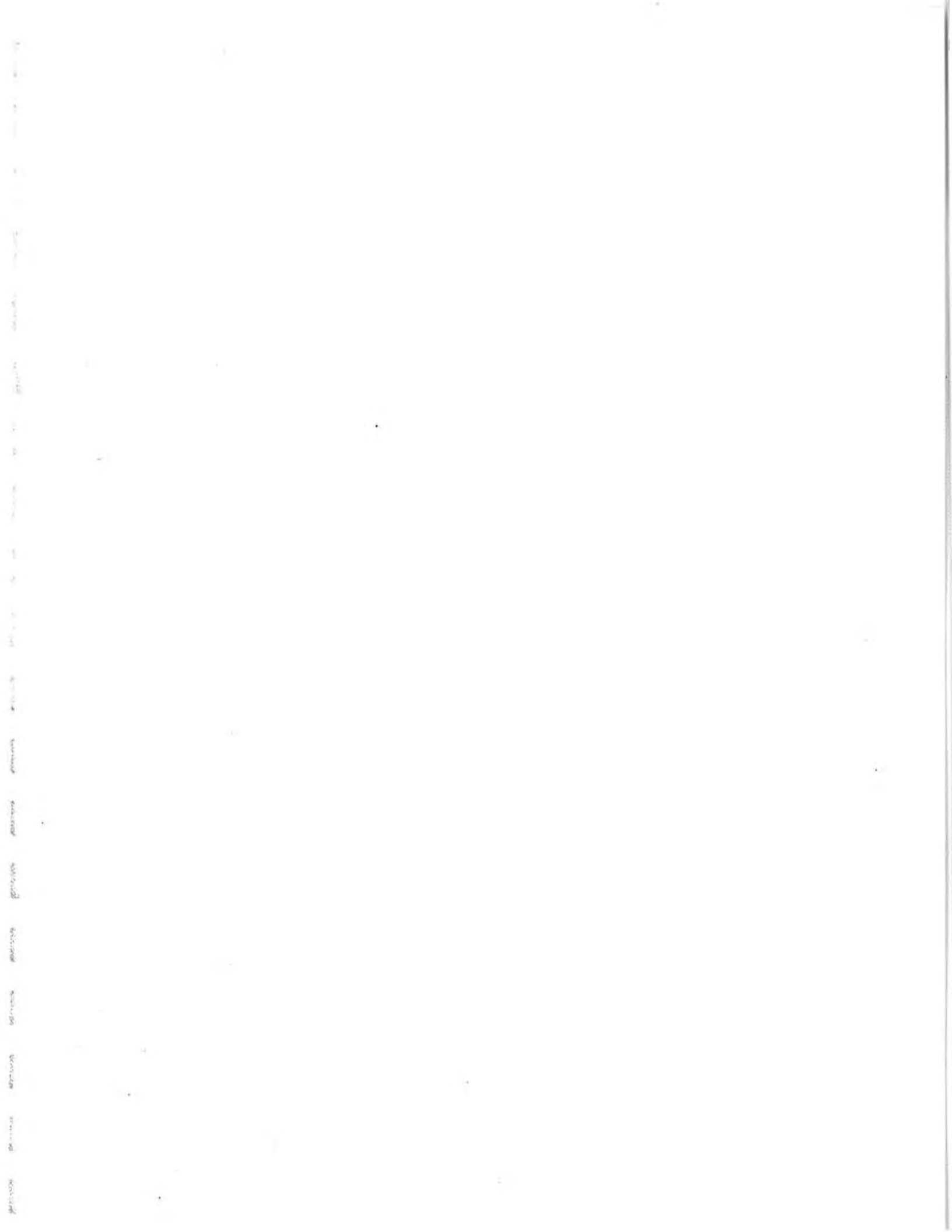
OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
HYATT, JAMES & BRENDA		06-03	Recreational Lakes	2.24	6.70	15	
			Domestic	35.17			
09N/03E-35H01	0531-111-11						---
09N/03E-35H02	0531-111-13						---
09N/03E-35H03	0531-111-15						---
							15
			RECAP:		Recreational Lakes	14.0	14.0
					Domestic	0.5	1.0
IRVIN, BERTRAND W.		05-03	Recreational Lakes	0.78	6.70	5.2	
			Domestic	21.47			
09N/04E-06K05	0530-152-27						5
							5
			RECAP:		Recreational Lakes	4.0	4.0
					Domestic	0.5	1.0
J. V. A. AIR, INC.		04-08	Domestic - Mobile Home Park	8.52			
10N/01E-35N03	0537-121-06						---
10N/01E-35P02	0537-121-17						---
							49
			RECAP:		Domestic	24.5	49.0
JACKSON, RAY		06-04	Domestic	38.68			
08N/03E-03M01	0528-121-25						---
08N/03E-03M02	0528-121-25						---
							17
			RECAP:		Domestic	8.5	17.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
JOHNSON, JAMES R. & ELLEN		06-03	Agriculture - Alfalfa	32.15	5.25	168.8	
			Recreational Lakes	0.34	6.70	2.3	
			No Use	60.45	0.00	0	
09N/03E-25R04	0531-141-23						11
09N/03E-25R05	0531-141-23						0
09N/04E-30P01	0530-031-07						54
09N/04E-30P02	0530-031-07						---
							65
			RECAP:		Agriculture - Alfalfa	35.1	54.0
					No Use	0.0	0.0
					Domestic	0.5	1.0
					Recreational Lakes	2.3	10.0
KAPLAN, ABRAHAM M.		04-03	Agriculture - Alfalfa	58.62	5.25	307.8	
			No Use	108.63	0.00	0	
09N/03E-01M01	0532-181-19						---
09N/03E-01N01	0532-181-19						---
							490
			RECAP:		Agriculture - Alfalfa	307.8	490.0
					No Use	0.0	0.0

**MOJAVE BASIN AREA WATERMASTER
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 INCLUDING GENERAL LAND USES FOR 1997
 BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
KASNER, ROBERT		05-05 & 05-06	Agriculture - Alfalfa	225.13	5.25	1181.9	
			No Use	469.22	0.00	0	
09N/02E-13R01	0515-163-37						0
09N/02E-15B01	0515-111-11						0
09N/02E-23C01	0515-151-29						795
09N/02E-23L01	0515-151-04						440
09N/03E-08N03	0532-021-69						0
09N/04E-05D01	0530-152-36						0
							1,235
			RECAP:		Agriculture - Alfalfa	802.8	1,235.0
					No Use	0.0	0.0
KATCHER, AUGUST M. & MARCELINE		06-03	Agriculture - Orchard - Pistachios	4.84	1.00	4.8	
			Recreational Lakes	0.40	6.70	2.7	
09N/03E-36K01	0531-131-51						20
							20
			RECAP:		Agriculture - Orchard - Pistachios	4.8	14.0
					Recreational Lakes	2.7	5.0
					Domestic	0.5	1.0
KEMP, ROBERT & ROSE		06-03	Domestic	4.74			
08N/04E-06L02	0529-132-18						1
							1
			RECAP:		Domestic	0.5	1.0



**MOJAVE BASIN AREA WATERMASTER
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 INCLUDING GENERAL LAND USES FOR 1997
 BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
KIEL, MARY		05-06	Recreational Lakes	5.56	6.70	37.3	
09N/02E-11Q01	0515-171-66						116
09N/02E-11Q06	0515-171-66						1
09N/02E-11Q07	0515-171-66						1
							<u>118</u>
							(34) *
			RECAP:		Recreational Lakes	37.3	109.0
					Domestic	4.5	9.0
KIM, JOON HO		05-05	Agriculture - Alfalfa	112.96	5.25	593	
			No Use	39.92	0.00	0	
09N/03E-07J01	0532-021-56						807
							<u>807</u>
			RECAP:		Agriculture - Alfalfa	524.5	807.0
					No Use	0.0	0.0
KOSHAREK, JOHN & JOANN		05-03	Recreational Lakes	1.28	6.70	8.6	
			Domestic	8.95			
09N/03E-23H02	0531-161-09						46
							<u>46</u>
			RECAP:		Recreational Lakes	8.6	45.0
					Domestic	0.5	1.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997 '
 BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES	VERIFIED ANNUAL 1997 PRODUCTION
LAKE JODIE PROPERTY OWNERS ASSOCIATION		04-04	Recreational Lakes	28.52	6.70	191.1	
			Domestic	125.30			
			No Use	1.14	0.00	0	
09N/03E-04A03	0532-262-Z						0
09N/03E-04A07	0532-262-Z						96
09N/03E-04A11	0532-262-Z						99
09N/03E-04A12	0532-262-Z						117
09N/03E-04A13	0532-262-Z						127
							439
							(322) *
			RECAP:		Recreational Lakes	191.1	313.0
					Domestic	63.0	126.0
LAKE WAIKIKI		05-02	Recreational Lakes	14.96	6.70	100.2	
			No Use	25.17	0.00	0	
09N/04E-08E05	0530-251-16						400
							400
							(98) *
			RECAP:		Recreational Lakes	100.2	400.0
					No Use	0.0	0.0

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 BAJA SUBAREA
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OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
LAKE WAINANI OWNERS ASSOCIATION		05-03	Recreational Lakes	23.27	6.70	155.9	
			No Use	74.66	0.00	0	
09N/04E-18D01	0530-261-14						463
09N/04E-18D02	0530-261-17						212
09N/04E-18E05	0530-261-01						109
09N/04E-18E07	0530-261-01						119
							903
							(202)*
			RECAP:		Recreational Lakes	155.9	876.0
					No Use	0.0	0.0
					Domestic	13.5	27.0
LANGLEY, MICHAEL R. & SHARON		02-09	Domestic	81.83			
11N/03E-20L01	0540-121-16						2
							2
			RECAP:		Domestic	1.0	2.0
LAWRENCE, WILLIAM W.		05-04	Domestic	17.71			
09N/03E-16N01	0532-102-27						1
							1
			RECAP:		Domestic	0.5	1.0

**MOJAVE BASIN AREA WATERMASTER
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 INCLUDING GENERAL LAND USES FOR 1997
 BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
LEE, MOONYOUNG & OKHEA		05-04	Aquaculture	1.41	6.70	9.4	
			No Use	8.37	0.00	0	
09N/03E-22D01	0531-171-44						---
09N/03E-22D02	0531-171-45						---
							164
							(42) *
			RECAP:		Aquaculture	9.4	161.0
					No Use	0.0	0.0
					Domestic	1.5	3.0
LEE, VIN JANG T., PHD.		06-05	Agriculture - Alfalfa	86.44	5.25	453.8	
			No Use	124.65	0.00	0	
09N/02E-25M01	0521-091-02						530
09N/02E-25M02	0521-091-02						0
09N/02E-25M03	0521-091-02						0
09N/02E-25M04	0521-091-02						0
							530
			RECAP:		Agriculture - Alfalfa	344.5	530.0
					No Use	0.0	0.0

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 INCLUDING GENERAL LAND USES FOR 1997
 BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
LESHIN, CONNIE & SOL		05-06	Agriculture - Alfalfa	187.82	5.25	986.1	
			No Use	62.95	0.00	0	
09N/02E-21H01	0515-131-13						952
09N/02E-21H02	0515-131-13						---
09N/02E-21H03	0515-131-13						---
09N/02E-21J01	0515-131-12						351
							<u>1,303</u>
			RECAP:		Agriculture - Alfalfa	847.0	1,303.0
					No Use	0.0	0.0
LESHIN, SOL		05-06	Agriculture - Alfalfa	225.91	5.25	1186	
			No Use	78.82	0.00	0	
09N/02E-15Q01	0515-111-08						997
09N/02E-15R03	0515-111-09						270
							<u>1,267</u>
			RECAP:		Agriculture - Alfalfa	823.5	1,267.0
					No Use	0.0	0.0
LEVINE, LESLIE, DR.		05-03 & 07-03	Agriculture - Alfalfa	200.30	5.25	1051.6	
			No Use	155.57	0.00	0	
08N/04E-07N01	0529-091-01						787
09N/03E-13Q02	0532-151-06						671
							<u>1,458</u>
			RECAP:		Agriculture - Alfalfa	947.7	1,458.0
					No Use	0.0	0.0

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 BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION	
LIANG, YUAN - I & TZU - MEI CHEN 09N/03E-17D01 TRA/NSF-ER	0532-011-44	05-05	Agriculture - Orchard - Pistachios	70.53	1.00	70.5	39 ---	
RECAP:						Agriculture	25.4	39.0
LONG, BALLARD 09N/03E-36B04	0531-131-34	06-03	No Use	19.93	0.00	0	0 0	
RECAP:						No Use	0.0	0.0
M BIRD CONSTRUCTION 10N/02E-32Q01	0538-161-27	04-07	Domestic	7.79			1 1	
RECAP:						Domestic	0.5	1.0
MAHJOUBI, AFSAR S. 09N/03E-26P02	0531-191-08	06-04	Domestic	38.09			54 54	
RECAP:						Domestic	27.0	54.0
MALIN, LILY 09N/04E-06J01	0530-152-44	05-03	Domestic	14.65			1 1	
RECAP:						Domestic	0.5	1.0

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 BAJA SUBAREA
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OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
MALONEY, JANICE		05-05	Recreational Lakes	0.47	6.70	3.1	
			Domestic	73.86			
09N/02E-24D01	0515-151-13						7
09N/02E-24D02	0515-151-13						0
							7
			RECAP:		Recreational Lakes	3.1	6.0
					Domestic	0.5	1.0
MANNING, SHARON S.		05-07	Recreational Lakes	2.79	6.70	18.7	
			Domestic	16.61			
09N/02E-07P01	0515-051-29						45
							45
			RECAP:		Recreational Lakes	18.7	44.0
					Domestic	0.5	1.0
MARCROFT, JAMES A. & JOAN		04-04	Recreational Lakes	0.70	6.70	4.7	
			Domestic	7.52			
09N/03E-02E02	0532-191-27						---
09N/03E-02E03	0532-191-27						---
							32
			RECAP:		Recreational Lakes	4.7	31.0
					Domestic	0.5	1.0

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**BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
MARSHALL, CHARLES		06-03	Recreational Lakes	0.52	6.70	3.5	
			Domestic	39.18			
09N/03E-26K02	0531-181-11						11
							11
			RECAP:		Recreational Lakes	3.5	10.0
					Domestic	0.5	1.0
MARTIN, MICHAEL D. & ARLENE D.		04-03	Agriculture - Orchard - Pistachios	15.00	1.00	15	
09N/04E-05B01	0530-152-37						35
							35
			RECAP:		Agriculture - Orchard - Pistachios	15.0	35.0
MAYBERRY, DONALD J. & SANDRA D.		05-06	Recreational Lakes	3.23	6.70	21.6	
			Domestic	7.13			
09N/02E-10L01	0515-101-44						15
							15
			RECAP:		Recreational Lakes	14.0	14.0
					Domestic	0.5	1.0
MILBRAT, IRVING H.		05-03	Recreational Lakes	0.84	6.70	5.6	
			Domestic	9.10			
09N/04E-06M02	0530-152-07						27
							27
			RECAP:		Recreational Lakes	5.6	26.0
					Domestic	0.5	1.0

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**BAJA SUBAREA
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OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
<hr/>							
MITCHELL, CHARLOTTE		04-06	Domestic	108.43			
09N/02E-03C02	0538-181-21						0
09N/02E-03F02	0538-181-09						1
09N/02E-03K03	0515-101-22						0
09N/02E-03K04	0515-101-22						0
							<hr/> 1
			RECAP:		Domestic	0.5	1.0
<hr/>							
MITCHELL, JAMES L. & CHERYL A.		04-06	Domestic	79.72			
09N/02E-03L04	0515-101-68						0
09N/02E-03M01	0515-101-68						1
09N/02E-03M02	0515-101-68						0
							<hr/> 1
			RECAP:		Domestic	0.5	1.0
<hr/>							
MIZRAHIE, ET AL.		05-04	Agriculture - Livestock - Ostriches	82.73			
09N/03E-08E03	0532-021-08						1
09N/03E-14E01	0532-131-03						0
09N/03E-14E02	0532-131-03						18
							<hr/> 19
			RECAP:	Agriculture - Livestock - Ostriches		9.0	18.0
					Domestic	0.5	1.0
<hr/>							
MORRIS, JULIA V.		05-05	Domestic	37.65			
09N/03E-18Q01	0532-011-06						1
09N/03E-18Q03	0532-011-06						5
							<hr/> 6
			RECAP:		Domestic	3.0	6.0
<hr/>							

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
MULLIGAN, ROBERT & INEZ 09N/04E-07E01	0530-141-25	05-03	Agriculture - Orchard - Pistachios	9.26	1.00	9.3	30
							30
			RECAP:	Agriculture - Orchard - Pistachios		9.3	29.0
					Domestic	0.5	1.0
NEW SPRINGS LIMITED PARTNERSHIP 10N/03E-14L01 10N/03E-14L02 10N/03E-23C01 10N/03E-23K01 10N/03E-23Q01	0539-201-09 0539-201-09 0539-171-01 0539-191-22 0539-191-23	03-04	No Use	601.33	0.00	0	0 0 0 0 0
							0
			RECAP:		No Use	0.0	0.0
NEWBERRY COMMUNITY SERVICE DISTRICT 08N/03E-04J02 08N/03E-04J03	0528-061-03 0528-061-02	06-04	Domestic - Commercial	9.21			12 4
							16
			RECAP:		Domestic	8.0	16.0
NU VIEW DEVELOPMENT, INC. 09N/02E-08N02	0515-061-02	05-06	Agriculture - Alfalfa	119.22	5.25	625.9	732
							732
			RECAP:	Agriculture - Alfalfa		475.8	732.0

**MOJAVE BASIN AREA WATERMASTER
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 BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
O'KEEFE, SARAH-LEE & JOKE E.		06-04	Recreational Lakes	1.65	6.70	11.1	
09N/03E-29Q05	0531-331-02		Domestic	8.64			16
							16
			RECAP:		Recreational Lakes	11.1	15.0
					Domestic	0.5	1.0
O. F. D. L., INC.		05-05	Recreational Lakes	16.28	6.70	109.1	
09N/03E-19N01	0531-341-85		No Use	17.38	0.00	0	0
09N/03E-19N02	0531-341-85						211
09N/03E-19N03	0531-341-85						28
							239
							(136) *
			RECAP:		Recreational Lakes	109.1	211.0
					No Use	0.0	0.0
					Domestic	14.0	28.0
P & H ENGINEERING & DEVELOPMENT CORPORATION		03-05	No Use	152.52	0.00	0	
10N/03E-22D02	0539-131-02						0
							0
			RECAP:		No Use	0.0	0.0

**MOJAVE BASIN AREA WATERMASTER
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 BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
PARKER, GEORGE R.		06-03	Agriculture - Alfalfa	10.02	5.25	52.6	
			Recreational Lakes	2.97	6.70	19.9	
			No Use	66.94	0.00	0	
09N/04E-31H01	0530-012-21						22
09N/04E-32D01	0530-012-24						1
09N/04E-32E01	0530-012-26						60
							83
			RECAP:		Agriculture - Alfalfa	39.0	60.0
					Recreational Lakes	19.9	22.0
					Domestic	0.5	1.0
					No Use	0.0	0.0
PATHFINDER INVESTORS		05-03	Agriculture - Grain	114.73	1.18	135.4	
			No Use	162.75	0.00	0	
09N/03E-14B01	0532-141-01						0
09N/03E-14G01	0532-141-04						0
09N/03E-14H01	0532-141-05						209
							209
			RECAP:		Agriculture - Grain	135.4	209.0
					No Use	0.0	0.0

**MOJAVE BASIN AREA WATERMASTER
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 BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
PAYAN, PAUL & FELMA		03-05	Agriculture - Orchard - Pistachios	24.81	1.00	24.8	
			No Use	31.12	0.00	0	
10N/03E-15Q02	0539-111-59						---
10N/03E-15Q03	0539-111-58						---
10N/03E-15R01	0539-111-61						---
							28
			RECAP:				
			Agriculture - Orchard - Pistachios			17.5	27.0
			No Use			0.0	0.0
			Domestic			0.5	1.0
PERKO, BERT K.		02-09	Agriculture - Orchard - Pistachios	41.15	1.00	41.2	
			No Use	34.39	0.00	0	
11N/03E-29C01	0540-111-27						14
11N/03E-29F01	0540-111-30						14
							28
			RECAP:				
			Agriculture - Orchard - Pistachios			17.5	27.0
			Domestic			0.5	1.0
PITTS, JOE & STELLA		05-05	Recreational Lakes	0.46	6.70	3.1	
			Domestic	4.36			
09N/03E-08P02	0532-021-40						26
09N/03E-08P03	0532-021-40						0
							26
			RECAP:				
			Recreational Lakes			3.1	25.0
			Domestic			0.5	1.0

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 BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
POLAND, JOHN R. & KATHLEEN A.		06-03	Recreational Lakes Domestic	6.46 20.25	6.70	43.3	
08N/04E-06J01	0529-141-27						73
08N/04E-11C01	0529-171-41						4
							77
			RECAP:		Recreational Lakes	43.3	73.0
					Domestic	2.0	4.0
PRICE, DONALD & RUTH		05-08	Agriculture - Orchard - Pistachios No Use	1.85 13.23	1.00 0.00	1.9 0	
09N/01E-22B05	0516-272-13						14
							14
			RECAP:		Agriculture - Orchard - Pistachios	1.9	13.0
					No Use	0.0	0.0
					Domestic	0.5	1.0
PURCIO, THOMAS F. & PATRICIA A.		04-03	Recreational Lakes Domestic	0.98 3.96	6.70	6.6	
09N/03E-01B01	0532-201-07						---
09N/03E-01B02	0532-201-07						---
							25
			RECAP:		Recreational Lakes	6.6	24.0
					Domestic	0.5	1.0

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 BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
RANDOLPH, JOAN E.		05-06	Agriculture - Orchard - Pistachios	8.64	1.00	8.6	
			No Use	11.27	0.00	0	
09N/02E-14N07	0515-162-11						30
09N/02E-14N08	0515-162-11						0
							30
			RECAP:		Agriculture - Orchard - Pistachios	8.6	29.0
					Domestic	0.5	1.0
REEVES, RICHARD		06-03	Agriculture - Alfalfa	30.80	5.25	161.7	
			Recreational Lakes	0.22	6.70	1.5	
			No Use	9.40	0.00	0	
09N/04E-32M01	0530-012-45						37
09N/04E-32M02	0530-012-45						145
09N/04E-32M03	0530-012-44						0
							182
			RECAP:		Agriculture - Alfalfa	94.3	145.0
					Recreational Lakes	1.5	36.0
					No Use	0.0	0.0
					Domestic	0.5	1.0
REYNOLDS, ARDEN & MARY		05-02	Recreational Lakes	2.04	6.70	13.7	
			No Use	59.78	0.00	0	
09N/04E-21R01	0530-201-19						---
09N/04E-21R02	0530-201-19						---
							13
			RECAP:		Recreational Lakes	12.0	12.0
					Domestic	0.5	1.0

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 BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
RICE, HENRY C. & DIANA		06-03	Recreational Lakes	2.04	6.70	13.7	
			Domestic	37.12			
09N/04E-31E01	0530-012-03						19
							19
			RECAP:		Recreational Lakes	13.7	18.0
					Domestic	0.5	1.0
RICE, MARY		05-02	Recreational Lakes	13.84	6.70	92.7	
			No Use	23.37	0.00	0	
09N/04E-18A01	0530-101-04						0
09N/04E-18A02	0530-101-04						258
09N/04E-18A03	0530-101-04						1
							259
							(92) *
			RECAP:		Recreational Lakes	92.7	258.0
					No Use	0.0	0.0
					Domestic	0.5	1.0
RIEGER FAMILY TRUST, WALTER M.		05-05	Agriculture - Orchard	5.46	3.42	18.7	
			Recreational Lakes	0.89	6.70	6	
			Domestic	2.78			
09N/02E-13A03	0515-163-11						15
							15
			RECAP:		Agriculture - Orchard	5.8	9.0
					Recreational Lakes	5.0	5.0
					Domestic	0.5	1.0

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OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
RIKUO CORPORATION		05-04	No Use	311.04	0.00	0	
09N/03E-09A01	0532-102-02						0
09N/03E-09F01	0532-102-01						0
							0
			RECAP:		No Use	0.0	0.0
ROSSI, JAMES L. & NAOMI I.		05-05	Agriculture - Alfalfa	73.08	5.25	383.7	
09N/03E-18M04	0532-011-62						2
09N/03E-18M05	0532-011-62						586
							588
			RECAP:		Agriculture - Alfalfa Domestic	380.9 1.0	586.0 2.0
RUBENDALL, GERALD L.		06-06	Recreational Lakes Domestic	2.13 5.16	6.70	14.3	
09N/02E-27F02	0521-071-09						7
09N/02E-27F06	0521-071-08						1
							8
			RECAP:		Recreational Lakes Domestic	7.0 0.5	7.0 1.0
SAN BERNARDINO CO BARSTOW - DAGGETT AIRPORT		05-16	Municipal	304.40			
09N/02E-20G01	0515-041-03						154
09N/02E-20G03	0515-041-03						---
09N/02E-20K01	0515-041-03						0
09N/02E-20K02	0515-041-03						40
							194
			RECAP:		Municipal	97.0	194.0

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OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
<hr/>							
SANTUCCI, ANTONIO & WILSA		06-03	Recreational Lakes	0.60	6.70	4	
			Domestic	6.16			
08N/03E-01A03	0528-201-08						--
08N/03E-01A04	0528-201-08						--
							26
			RECAP:		Recreational Lakes	4.0	25.0
					Domestic	0.5	1.0
<hr/>							
SHEPPARD, THOMAS & GLORIA		05-03	Domestic	79.86			
09N/03E-24D03	0531-151-01						0
09N/03E-24E02	0531-151-13						15
09N/03E-24E03	0531-151-13						0
							15
			RECAP:		Domestic	7.5	15.0
<hr/>							
SHORT, CHARLES & MARGARET		05-04	Recreational Lakes	2.39	6.70	16	
			Domestic	17.54			
09N/03E-10B01	0532-081-25						24
							24
			RECAP:		Recreational Lakes	16.0	23.0
					Domestic	0.5	1.0
<hr/>							
SHORT, JAMES B.		05-04	Aquaculture	5.57	6.70	37.3	
			No Use	52.82	0.00	0	
09N/03E-10C01	0532-091-19						26
							26
			RECAP:		Aquaculture	25.0	25.0
					Domestic	0.5	1.0
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**BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
SMITH, WILLIAM E. & PATRICIA A.		05-03	Aquaculture	0.71	6.70	4.8	
			No Use	25.08	0.00	0	
09N/04E-18R01	0530-071-05						0
09N/04E-18R02	0530-071-05						5
							5
							(5)*
			RECAP:				
					Aquaculture	4.0	4.0
					Domestic	0.5	1.0
SNYDER, KRYL K. & ROUTH, RICHARD J.		04-04	Recreational Lakes	0.79	6.70	5.3	
			Domestic	10.79			
10N/03E-28N01	0539-141-18						20
10N/03E-28N03	0539-141-18						1
							21
			RECAP:				
					Recreational Lakes	5.3	20.0
					Domestic	0.5	1.0
SOUTHERN CALIFORNIA EDISON COMPANY - AGRICULTURE		05-07 & 05-08	Agriculture - Alfalfa	729.86	5.25	3831.7	
09N/01E-13C01	0516-341-07						1,159
09N/01E-13P02	0516-341-08						432
09N/01E-14K02	0516-331-01						1,246
09N/01E-14K04	0516-331-01						455
09N/01E-15Q01	0516-301-08						594
09N/01E-24M01	0516-341-05						1,104
09N/02E-19M03	0515-011-21						---
							4,990
			RECAP:				
					Agriculture - Alfalfa	3,243.5	4,990.0

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OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
SOUTHERN CALIFORNIA GAS COMPANY		07-03	Industrial	5.05			
	08N/04E-18K02	0529-071-19					16
	08N/04E-18Q02	0529-071-16					32
							48
			RECAP:		Industrial	48.0	48.0
ST. ANTONY COPTIC ORTHODOX MONASTERY		02-09, 02-10 & 05-05	Recreational Lakes Domestic	0:77 79.74	6.70	5.2	
	09N/02E-12R11	0515-193-05					10
	10N/03E-06G01	0539-081-25					0
	11N/03E-29B01	0540-111-25					10
	11N/03E-29C02	0540-111-24					0
	11N/03E-30J01	0540-111-34					0
	11N/03E-30J02	0540-111-34					11
	11N/03E-30K01	0540-111-18					177
	11N/03E-30K02	0540-111-19					48
	11N/03E-30K03	0540-111-18					0
	11N/03E-30Q01	0540-111-21					0
							256
			RECAP:		Recreational Lakes Domestic	5.2 34.0	188.0 68.0

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OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
STEIMLE, ALLEN B.		02-09	Agriculture - Orchard - Pistachios	45.40	1.00	45.4	
			No Use	755.13	0.00	0	
11N/03E-29J02	0540-111-36						15
11N/03E-29P01	0540-111-39						10
11N/03E-29Q01	0540-111-38						10
11N/03E-32J01	0540-111-45						0
11N/03E-32R01	0540-111-46						2
11N/03E-33M01	0540-111-48						0
11N/03E-33N01	0540-111-47						11
							48
			RECAP:	Agriculture - Orchard - Pistachios		31.2	48.0
SUGA, TAKEAKI		04-03	No Use	25.28	0.00	0	
09N/03E-01F01	0532-181-15						0
							0
			RECAP:		No Use	0.0	0.0
SUNDOWN LAKES, INC.		05-05	Recreational Lakes	25.28	6.70	169.4	
			No Use	29.52	0.00	0	
09N/03E-08K02	0532-021-71						569
09N/03E-08K03	0532-021-71						28
09N/03E-08Q01	0532-021-71						119
							716
							(168) *
			RECAP:		Recreational Lakes	169.4	716.0
					No Use	0.0	0.0

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**BAJA SUBAREA
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OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
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TAPIE, RAYMOND L., SR.		05-02	Aquaculture	0.48	6.70	3.2	
			No Use	8.72	0.00	0	
09N/04E-08N01	0530-121-01						---
09N/04E-08N02	0530-121-02						---
							20
							(5) *
			RECAP:		Aquaculture	3.2	18.0
					Domestic	1.0	2.0
<hr/>							
TAYLOR, TOM		03-04	Domestic	119.62			
10N/03E-14J01	0539-201-12						0
10N/03E-14J02	0539-201-12						2
10N/03E-14K01	0539-201-12						0
							2
			RECAP:		Domestic	1.0	2.0
<hr/>							
THAYER, SHARON		04-04	Recreational Lakes	5.56	6.70	37.3	
			No Use	23.96	0.00	0	
09N/03E-03G02	0532-061-27						---
09N/03E-03G04	0532-061-27						---
09N/03E-03H02	0532-061-16						---
09N/03E-03H03	0532-061-16						---
							98
							(58) *
			RECAP:		Recreational Lakes	37.3	89.0
					Domestic	4.5	9.0
<hr/>							

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
THE 160 NEWBERRY RANCH CALIFORNIA, LTD.		06-04	Agriculture - Alfalfa	121.61	5.25	638.4	
			No Use	171.10	0.00	0	
	09N/03E-28J02	0531-212-54					725
	09N/03E-28R02	0531-212-54					0
	09N/03E-28R03	0531-212-54					254
							979
			RECAP:		Agriculture - Alfalfa	635.7	978.0
					No Use	0.0	0.0
					Domestic	0.5	1.0
TORRADO, JESUS & AIDA		04-03	Agriculture - Orchard - Pistachios	4.99	1.00	5	
			Recreational Lakes	1.27	6.70	8.5	
			No Use	15.59	0.00	0	
	10N/04E-31M01	0533-051-34					30
	10N/04E-31M02	0533-051-34					17
							47
			RECAP:		Agriculture - Orchard - Pistachios	5.0	9.0
					Recreational Lakes	8.5	37.0
					No Use	0.0	0.0
					Domestic	0.5	1.0

**MOJAVE BASIN AREA WATERMASTER
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 INCLUDING GENERAL LAND USES FOR 1997
 BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
TRIPLE H PARTNERSHIP		06-03 & 07-03	Agriculture - Alfalfa	114.73	5.25	602.3	
			Agriculture - Livestock - Poultry	46.92			
			Agriculture - Orchard	4.10	3.42	14	
			Recreational Lakes	2.35	6.70	15.7	
			No Use	155.17	0.00	0	
08N/03E-12R01	0528-141-09						1,073
09N/03E-25D01	0531-141-27						151
							1,224
			RECAP:				
			Agriculture - Alfalfa			602.0	1,073.0
			Agriculture - Livestock - Poultry			35.0	70.0
			Agriculture - Orchard			14.0	22.0
			Recreational Lakes			15.7	59.0
			No Use			0.0	0.0
UNION PACIFIC RAILROAD COMPANY		05-07	Domestic - Commercial	129.61			
09N/01E-01L01	0537-192-01						---
09N/01E-01L02	0537-192-01						---
09N/01E-01M01	0537-192-01						---
09N/01E-02P03	0537-071-13						---
09N/01E-02R01	0537-071-08						---
09N/01E-15C02	0516-311-02						---
10N/03E-15P01	0539-111-21						---
							97
			RECAP:				
			Domestic			48.5	97.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997**

**BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
<hr/>							
VAN BASTELAAR, ALPHONSE		04-04	Agriculture - Orchard - Pistachios	45.13	1.00	45.1	
			No Use	39.10	0.00	0	
09N/03E-03N04	0532-371-17						19
09N/03E-04J02	0532-071-35						29
09N/03E-04R03	0532-071-38						19
							67
			RECAP:	Agriculture - Orchard - Pistachios		42.9	66.0
					No Use	0.0	0.0
					Domestic	0.5	1.0
<hr/>							
VAN DIEST, CORNELIUS		05-03 & 06-04	Agriculture - Alfalfa	118.66	5.25	623	
			No Use	164.67	0.00	0	
09N/03E-11K02	0532-171-02						468
09N/03E-27M01	0531-201-01						0
							468
			RECAP:	Agriculture - Alfalfa		304.2	468.0
					No Use	0.0	0.0
<hr/>							
VAN LEEUWEN, JOHN		05-05	Agriculture - Alfalfa	112.96	5.25	593	
			Dairy	37.54			
			No Use	39.52	0.00	0	
09N/03E-17L01	0532-011-58						805
09N/03E-17N03	0532-011-57						77
							882
			RECAP:	Agriculture - Alfalfa		517.0	805.0
					Dairy	38.5	77.0
					No Use	0.0	0.0
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**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

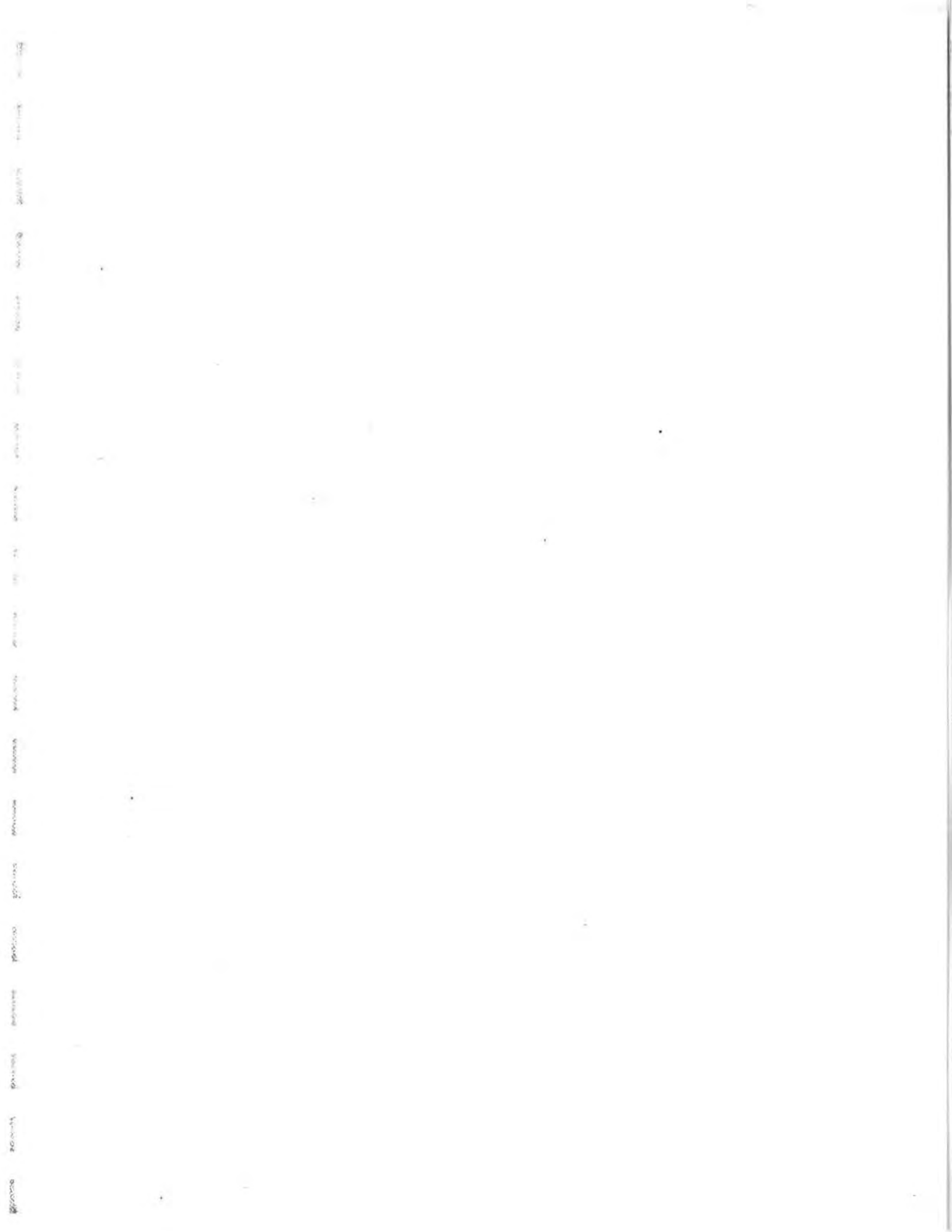
OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
VANDER DUSSEN TRUST, AGNES & EDWARD		05-06	Agriculture - Alfalfa	225.91	5.25	1186	
			No Use	91.19	0.00	0	
09N/02E-16N01	0515-111-13						1,010
09N/02E-16R01	0515-111-13						672
							<u>1,682</u>
			RECAP:		Agriculture - Alfalfa	1,093.3	1,682.0
					No Use	0.0	0.0
VAUGHT, ROBERT E. & KAREN M.		05-03	Recreational Lakes	2.50	6.70	16.8	
			Domestic	5.86			
09N/03E-13M02	0532-151-18						27
							<u>27</u>
			RECAP:		Recreational Lakes	16.8	26.0
					Domestic	0.5	1.0
VERNOLA, PAT		04-04 & 06-04	Agriculture - Alfalfa	68.93	5.25	361.9	
			Agriculture - Grain	114.73	1.18	135.4	
			No Use	208.89	0.00	0	
09N/03E-27Q03	0531-201-06						280
09N/03E-27Q04	0531-201-06						2
10N/03E-35H02	0533-042-27						333
10N/03E-35J01	0533-042-25						229
							<u>844</u>
			RECAP:		Agriculture - Alfalfa	361.9	615.0
					Agriculture - Grain	135.4	229.0
					No Use	0.0	0.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION	
WARD, ERNEST & LAURA 09N/03E-03C04	0532-061-63	04-04	No Use	9.05	0.00	0	0 0	
RECAP:						No Use	0.0	0.0
WARD, ET AL. 10N/03E-16Q04	0539-111-29	03-05	Agriculture - Orchard - Pistachios No Use	14.44 4.74	1.00 0.00	14.4 0	19 19	
RECAP:						Agriculture - Orchard - Pistachios	12.4	19.0
						No Use	0.0	0.0
WARD, RONNY H. 09N/03E-33Q01 09N/03E-33Q02 09N/03E-33Q03 09N/03E-33R01 09N/04E-06K03 09N/04E-06K06	0531-072-02 0531-072-02 0531-072-02 0531-072-02 0530-152-24 0530-152-24	05-03 & 06-04	Agriculture - Orchard - Pistachios Recreational Lakes No Use	14.12 0.17 35.23	1.00 6.70 0.00	14.1 1.1 0	2 0 51 3 0 0	
RECAP:						Agriculture - Orchard - Pistachios	14.1	22.0
						Recreational Lakes	1.1	33.0
						Domestic	0.5	1.0
						No Use	0.0	0.0

**MOJAVE BASIN AREA WATERMASTER
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 INCLUDING GENERAL LAND USES FOR 1997
 BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
WEBER, F. R. & JUNELL 09N/04E-20D02	0530-022-03	05-02	No Use	39.06	0.00	0	1 1
			RECAP:		Domestic	0.5	1.0
WEBSTER, THOMAS M. & PATRICIA J. 09N/03E-34D07 09N/03E-34D08	0531-082-02 0531-082-02	06-04	Recreational Lakes Domestic	0.45 4.35	6.70	3	5 0 5
			RECAP:		Recreational Lakes Domestic	3.0 0.5	4.0 1.0
WEIDKNECHT, ARTHUR J. & PEGGY A. 08N/03E-12E02 08N/03E-12F01	0528-151-37 0528-151-25	07-03	Domestic	50.01			0 1 1
			RECAP:		Domestic	0.5	1.0
WESTERN HERITAGE, INC. 09N/02E-05B01	0538-171-08	04-07	Agriculture - Alfalfa	94.96	5.25	498.6	577 577
			RECAP:		Agriculture - Alfalfa	375.0	577.0



**MOJAVE BASIN AREA WATERMASTER
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 INCLUDING GENERAL LAND USES FOR 1997
 BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
WESTERN HORIZON ASSOCIATES, INC.		05-03	Agriculture - Orchard - Apricots	47.95	3.42	164	
			No Use	98.79	0.00	0	
09N/03E-13B01	0532-161-05						0
09N/03E-13B02	0532-161-05						172
09N/03E-13H01	0532-161-06						293
							465
			RECAP:		Agriculture - Orchard - Apricots	164.0	465.0
WESTERN ROCK PRODUCTS		06-05	Industrial	30.02			
09N/03E-32D01	0531-031-02						41
							41
			RECAP:		Industrial	41.0	41.0
WET SET, INC.		05-05	Recreational Lakes	14.09	6.70	94.4	
			No Use	24.87	0.00	0	
09N/03E-20B02	0531-231-45						37
09N/03E-20B03	0531-231-45						23
09N/03E-20B04	0531-231-45						---
09N/03E-20G01	0531-231-36						380
							440
							(129) *
			RECAP:		Recreational Lakes	94.4	406.0
					No Use	0.0	0.0
					Domestic	17.0	34.0

**MOJAVE BASIN AREA WATERMASTER
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 BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
WITTE, E. DANIEL & MARCIA		06-05	Domestic	25.00			
09N/02E-36C02	0521-101-21						---
09N/02E-36C03	0521-101-21						---
09N/02E-36C04	0521-101-20						---
							25
			RECAP:		Domestic	12.5	25.0
WLSR, INC.		05-05	Recreational Lakes	20.28	6.70	135.9	
			No Use	15.79	0.00	0	
09N/03E-19A01	0531-341-80						0
09N/03E-19A02	0531-341-80						130
09N/03E-19A03	0531-341-80						0
09N/03E-19A04	0531-341-80						358
09N/03E-19H01	0531-341-80						3
							491
							(133) *
			RECAP:		Recreational Lakes	135.9	491.0
					No Use	0.0	0.0
WOO, CHEN		05-04	Agriculture - Livestock - Poultry	18.85			
09N/03E-14D01	0532-131-01						0
09N/03E-14D02	0532-131-01						47
							47
			RECAP:		Agriculture - Livestock - Poultry	23.0	46.0
					Domestic	0.5	1.0

**MOJAVE BASIN AREA WATERMASTER
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 BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
WORSEY, JOSEPH A. & REVAE		05-03	Recreational Lakes	1.37	6.70	9.2	
			Domestic	3.60			
09N/03E-13N01	0532-151-28						0
09N/03E-13N03	0532-151-28						15
							15
			RECAP:		Recreational Lakes	9.2	14.0
					Domestic	0.5	1.0
YARD, WILLIAM & BETTY		03-04	Recreational Lakes	0.15	6.70	1	
			Domestic	66.90			
10N/03E-04F02	0539-091-28						14
							14
			RECAP:		Recreational Lakes	1.0	13.0
					Domestic	0.5	1.0
YERMO WATER COMPANY		04-07 & 04-08	Municipal	224.84			
09N/01E-01A01	0537-151-16						---
09N/01E-01C01	0537-262-02						---
09N/01E-01C02	0537-261-37						---
09N/01E-02B01	0537-091-12						---
09N/01E-02B05	0537-091-12						---
09N/02E-06C01	0538-073-08						---
09N/02E-06D01	0538-041-01						---
10N/02E-31N05	0538-081-68						---
							453
			RECAP:		Municipal	226.5	453.0

**MOJAVE BASIN AREA WATERMASTER
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 INCLUDING GENERAL LAND USES FOR 1997
 BAJA SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
YOUNG, KEITH O. - DESERT TURF		06-04	Agriculture - Sod	2.77	4.04	11.2	
			No Use	55.16	0.00	0	
09N/03E-26L06	0531-191-07						53
							53
			RECAP:		Agriculture - Sod	11.2	53.0
					No Use	0.0	0.0

**MOJAVE BASIN AREA WATERMASTER
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 CENTRO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
AGUAYO, JEANETTE L.		04-14	Domestic	75.75			
10N/03W-23M01	0495-041-24						---
10N/03W-23M02	0495-041-21						---
10N/03W-23M04	0495-041-24						---
							4
			RECAP:		Domestic	2.0	4.0
ARROWHEAD SERVICE CORPORATION		04-11	Agriculture - Alfalfa	33.71	4.70	158.4	
10N/01W-32F01	0425-051-01						201
10N/01W-32F12	0425-051-01						0
							201
			RECAP:		Agriculture - Alfalfa	130.6	201.0
ATCHISON, TOPEKA, SANTA FE RAILWAY COMPANY		N/A					
09N/02W-02M01	0427-371-29						0
							0
			RECAP:		No Use	0.0	0.0
AVDEEF, THOMAS & LUCILLE		04-11	Domestic - Mobile Home Park	7.25			
09N/01W-04G06	0424-081-91						9
09N/01W-04G08	0424-081-91						17
09N/01W-04G09	0424-081-91						0
09N/01W-04G10	0424-081-91						---
							26
			RECAP:		Domestic	13.0	26.0

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OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
BANK OF AMERICA, NT & SA		02A-4/5	Agriculture - Alfalfa	544.75	4.70	2560.3	
			No Use	251.44	0.00	0	
11N/04W-29J01	0490-131-06						350
11N/04W-29P01	0490-131-07						0
11N/04W-30B01	0490-121-42						530
11N/04W-30D01	0490-121-42						0
11N/04W-30E01	0490-121-42						0
11N/04W-30M01	0490-121-42						0
11N/04W-30N06	0490-121-42						0
11N/04W-30N07	0490-121-42						0
11N/04W-30P02	0490-121-42						0
11N/04W-30Q03	0490-121-42						0
11N/04W-33B02	0490-161-11						530
11N/04W-33C02	0490-161-10						530
11N/04W-33G04	0490-161-11						530
11N/04W-33J01	0490-161-12						690
							3,160
			RECAP:		Agriculture - Alfalfa	2,054.0	3,160.0
BEST, BYRON L.		04-13	Industrial	20.86			
10N/02W-33H01	0497-071-07						18
10N/02W-33K07							0
							18
			RECAP:		Industrial	18.0	18.0

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OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
BROMMER, MARVIN 10N/02W-31G01	0497-192-02	04-13	No Use	72.89	0.00	0	0 0
RECAP:					No Use	0.0	0.0
BURNS, RITA J. & PAMELA E. 10N/03W-34N07	0494-031-58	04-15	No Use	4.56	0.00	0	0 0
RECAP:					No Use	0.0	0.0
CHOI, YONG IL & JOUNG AE 09N/03W-15A01 09N/03W-15A02 09N/03W-15A03	0421-011-79 0421-011-79 0421-011-79	05-14	No Use	72.09	0.00	0	0 0 0 0
RECAP:					No Use	0.0	0.0
CHRISTISON, JOEL 09N/03W-21J04 09N/03W-21J05	0420-071-13 0420-071-13	05-15	Agriculture - Orchard - Pistachios No Use	39.19 17.26	1.00 0.00	39.2 0	-- -- 75
RECAP:					Agriculture - Orchard - Pistachios No Use	39.2 0.0	75.0 0.0

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 CENTRO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
CONTRATTO, ROBERT & ERSULA		06-15	Agriculture - Alfalfa	9.73	4.70	45.7	
			No Use	26.11	0.00	0	
09N/03W-27E07	0421-032-02						100
09N/03W-27E09	0421-032-43						0
09N/03W-27M02	0421-032-43						100
09N/03W-27M05	0421-032-43						5
							205
			RECAP:				
					Agriculture - Alfalfa	45.7	200.0
					No Use	0.0	0.0
					Domestic	2.5	5.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 CENTRO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
DE VRIES, NEIL		07A-03 & 07A-04	Agriculture - Alfalfa	440.64	4.70	2071	
			Dairy	93.61			
			No Use	160.04	0.00	0	
08N/04W-11K01	0466-041-01						---
08N/04W-11Q01	0466-041-01						---
08N/04W-11Q02	0466-041-01						---
08N/04W-12J01	0466-041-23						---
08N/04W-12J02	0466-041-23						---
08N/04W-12K01	0466-041-23						---
08N/04W-12K02	0466-041-23						---
08N/04W-12L01	0466-041-17						---
08N/04W-12L02	0466-041-17						---
08N/04W-12L03	0466-041-17						---
08N/04W-12L04	0466-041-17						---
08N/04W-12P01	0466-041-17						---
08N/04W-12Q01	0466-041-23						---
08N/04W-12Q02	0466-041-23						---
08N/04W-14B01	0466-101-06						---
08N/04W-14B02	0466-101-06						---
08N/04W-14B03	0466-101-06						---
08N/04W-14B04	0466-101-06						---
08N/04W-14H01	0466-101-07						---
08N/04W-14H02	0466-101-07						---
08N/04W-15E01	0466-091-15						---
08N/04W-15E02	0466-091-15						---
08N/04W-15G01	0466-091-17						---
08N/04W-15G02	0466-091-17						---
08N/04W-15G03	0466-091-17						---
08N/04W-15M01	0466-091-26						---
08N/04W-15M03	0466-091-26						---

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**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 CENTRO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
RECAP:					Agriculture - Alfalfa	1,881.1	2,894.0
					Dairy	168.0	336.0
					No Use	0.0	0.0
DURAN, FRANK T. 08N/04W-14M01	0466-121-25	07A-03	No Use	19.14	0.00	0	0
RECAP:					No Use	0.0	0.0
FRIEND, JOSEPH & DEBORAH 09N/01W-10B03 09N/01W-10B04	0424-161-60 0424-161-60	05-10	Agriculture - Alfalfa Domestic	2.26 5.35	4.70	10.6	11 15 26
RECAP:					Agriculture - Alfalfa	10.6	25.0
					Domestic	0.5	1.0
GAINES, JACK & MARY 10N/01W-33P07	0424-071-84	04-11	Recreational Lakes Domestic	1.51 16.25	6.70	10.1	30 30
RECAP:					Recreational Lakes	10.1	29.0
					Domestic	0.5	1.0

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 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
GESIRIECH, WAYNE D. 09N/03W-01F01	0488-121-28	04-14	Agriculture - Alfalfa	9.60	4.70	45.1	71
							71
			RECAP:		Agriculture - Alfalfa	45.1	70.0
					Domestic	0.5	1.0
GORMAN, VIRGIL 10N/03W-23K01	0495-041-05	04-14	Agriculture - Alfalfa No Use	29.61 41.34	4.70 0.00	139.2 0	102
							102
			RECAP:		Agriculture - Alfalfa	66.3	102.0
					No Use	0.0	0.0
GORMAN, VIRGIL (AZTEC) 10N/03W-23Q01 10N/03W-23Q02 10N/03W-23Q03 10N/03W-23Q04	0495-041-14 0495-041-14 0495-041-14 0495-041-14	04-14	Agriculture - Alfalfa No Use	19.11 19.58	4.70 0.00	89.8 0	71 117 3 0
							191
			RECAP:		Agriculture - Alfalfa	89.8	191.0
GRIEDER, RAYMOND H. & DORISANNE 11N/04W-31J03	0490-121-37	02A-05	Domestic	19.12			26
							26
			RECAP:		Domestic	13.0	26.0

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 CENTRO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
GRILL, NICHOLAS P. & MILLIE D.		05-14	Domestic	35.58			
09N/03W-03Q04	0488-091-08						0
09N/03W-03R03	0488-101-07						2
09N/03W-03R04	0488-101-10						0
							2
			RECAP:		Domestic	1.0	2.0
GUTIERREZ, JOSE & GLORIA		04-14	Domestic	18.00			
10N/02W-30N05	0497-211-02						2
							2
			RECAP:		Domestic	1.0	2.0
HANIFY, MICHAEL D., DBA - WHITE BEAR RANCH		04-13	Domestic	12.78			
10N/02W-32E01	0497-231-01						1
10N/02W-32E02	0497-231-01						0
10N/02W-32E03	0497-231-01						9
							10
			RECAP:		Domestic	5.0	10.0
HARE, THOMAS R. & HELEN P.		04-14	No Use	19.67	0.00	0	
09N/02W-06E07	0497-081-15						---
							0
			RECAP:		No Use	0.0	0.0

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 CENTRO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
HARMSSEN, JAMES & RUTH ANN, DBA: HARMSSEN FAMILY DAIRY		04-14	Agriculture - Alfalfa	111.58	4.70	524.4	
			No Use	170.97	0.00	0	
10N/02W-31Q02	0497-031-09						1,030
							1,030
			RECAP:		Agriculture - Alfalfa	524.4	1,030.0
					No Use	0.0	0.0
HARPER LAKE COMPANY VIII		01A-05 & 02A-05	Industrial	1,624.91			
11N/04W-19E01	0490-101-56						8
11N/04W-19E02	0490-101-56						565
11N/04W-19J01	0490-101-56						330
11N/04W-19Q02	0490-101-56						240
11N/05W-24L01	0490-223-32						0
11N/05W-24P02	0490-223-32						0
11N/05W-24Q02	0490-223-32						0
							1,143
			RECAP:		Industrial	1,143.0	1,143.0
HI DESERT MUTUAL WATER COMPANY		N/A					
09N/03W-24Q01	0421-071-46						13
09N/03W-25C02	0421-191-14						18
09N/03W-25C03	0421-191-13						0
							31
			RECAP:		Municipal	15.5	31.0

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 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
HILEMAN, KATHERINE		06-15	Agriculture - Orchard	3.25	3.07	10	
			Domestic	1.49			
09N/03W-34B03	0421-041-33						---
09N/03W-34B05	0421-041-40						---
09N/03W-34B06	0421-041-40						---
							17
			RECAP:		Agriculture - Orchard	10.0	16.0
					Domestic	0.5	1.0
HILL, MELVIN		04-13	Agriculture - Alfalfa	32.09	4.70	150.8	
			Domestic	147.50			
			No Use	33.28	0.00	0	
09N/02W-04D01	0497-121-28						0
09N/02W-04D02	0497-121-28						22
09N/02W-05A01	0497-101-05						0
09N/02W-05A02	0497-101-05						72
10N/02W-33N01	0497-071-40						147
							241
			RECAP:		Agriculture - Alfalfa	95.6	147.0
					Domestic	47.0	94.0
					No Use	0.0	0.0

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 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
HOWARD, NORMAN N.		04-12	Agriculture - Alfalfa	6.36	4.70	29.9	
			No Use	59.77	0.00	0	
10N/02W-36J08	0426-271-67						0
10N/02W-36J09	0426-271-58						0
10N/02W-36J10	0426-271-15						0
10N/02W-36J12	0426-271-27						0
10N/02W-36P06	0426-271-09						53
							53
			RECAP:		Agriculture - Alfalfa	29.9	53.0
					No Use	0.0	0.0
HOY, MIKE		05-14	Agriculture - Alfalfa	82.01	4.70	385.5	
			No Use	19.31	0.00	0	
09N/03W-22D01	0421-021-08						400
09N/03W-22F01	0421-021-08						289
							689
			RECAP:		Agriculture - Alfalfa	385.5	689.0
					No Use	0.0	0.0
JONES, KENNETH & JOETTE		04-12	Domestic	0.86			
			No Use	14.48	0.00	0	
10N/02W-36K12	0426-271-59						2
10N/02W-36K13	0426-271-59						0
							2
			RECAP:		Domestic	1.0	2.0
					No Use	0.0	0.0

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 CENTRO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
JORDAN, RAYMOND		05-10	Agriculture - Alfalfa	7.97	4.70	37.5	
			No Use	25.54	0.00	0	
09N/01W-09A03	0424-081-18						0
09N/01W-10C01	0424-161-48						0
09N/01W-10C03	0424-161-48						1
09N/01W-10C04	0424-161-48						0
09N/01W-10D02	0424-161-03						185
09N/01W-10D03	0424-161-03						0
09N/01W-10D06	0424-161-03						---
09N/01W-10D07	0424-161-03						---
							186
			RECAP:		Agriculture - Alfalfa	37.5	185.0
					No Use	0.0	0.0
					Domestic	0.5	1.0
JUSTICE, CHRIS		04-11	Domestic	87.92			
09N/01W-04C06	0424-081-01						0
09N/01W-04C07	0424-081-01						0
09N/01W-04D01	0424-081-01						0
09N/01W-04D02	0424-081-01						0
09N/01W-04F01	0424-081-01						1
09N/01W-04F02	0424-081-01						6
10N/01W-32J05	0425-091-40						1
							8
			RECAP:		Domestic	4.0	8.0

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OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
<hr/>							
KING, GENEVIEVE E.		06-15	Domestic	19.83			
09N/03W-27L03	0421-032-20						1
09N/03W-27L05	0421-032-20						0
09N/03W-27L06	0421-032-20						0
09N/03W-27L07	0421-032-19						0
							<hr/> 1
			RECAP:		Domestic	0.5	1.0
<hr/>							
LEE, ET AL., SEPOONG & WOO POONG		04-13	Domestic	11.96			
10N/02W-33F09	0497-071-44						6
							<hr/> 6
			RECAP:		Domestic	3.0	6.0
<hr/>							
LEYERLY, GENEVA		04-15	Dairy	75.51			
10N/03W-27P03	0494-041-14						---
10N/03W-27P04	0494-041-14						---
							<hr/> 65
			RECAP:		Dairy	32.5	65.0
<hr/>							
LEYERLY, RICHARD		04-14	Agriculture - Alfalfa	141.97	4.70	667.2	
10N/02W-31P01	0497-031-04						729
							<hr/> 729
			RECAP:		Agriculture - Alfalfa	473.9	729.0
<hr/>							

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 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
LITTLE, DON & MUSTAFA, ED		04-14	Domestic	60.91			
10N/03W-34A02	0494-201-35						---
10N/03W-34A03	0494-201-35						0
10N/03W-34A04	0494-201-35						0
10N/03W-34A05	0494-201-35						0
10N/03W-34A07	0494-201-35						0
10N/03W-34B01	0494-201-35						0
10N/03W-34B03	0494-201-35						3
							3
			RECAP:		Domestic	1.5	3.0
MARTIN, LENDELL		05-13	No Use	8.55	0.00	0	
09N/02W-17G01	0422-081-12						0
							0
			RECAP:		No Use	0.0	0.0
MCCOLLUM, CHARLES L.		07A-03	Domestic	41.53			
08N/04W-15A04	0466-091-18						0
08N/04W-15A05	0466-091-18						0
08N/04W-15A07	0466-091-18						0
08N/04W-15A08	0466-091-18						1
							1
			RECAP:		Domestic	0.5	1.0

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OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
MEAD, G. C.		05-10	Agriculture - Alfalfa	9.57	4.70	45	
			No Use	7.59	0.00	0	
09N/01W-03N06	0424-051-24						0
09N/01W-03N07	0424-051-16						---
09N/01W-03N08	0424-051-16						53
09N/01W-04R01	0424-081-10						0
							53
			RECAP:		Agriculture - Alfalfa	33.8	52.0
					No Use	0.0	0.0
					Domestic	0.5	1.0
MEYERS, LONNIE		04-14	Domestic	9.99			
09N/03W-02M02	0488-112-27						8
							8
			RECAP:		Domestic	4.0	8.0
MOST, MILTON & JENNIE		02A-05	No Use	39.92	0.00	0	
11N/04W-32D03	0490-171-09						0
							0
			RECAP:		No Use	0.0	0.0

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OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
NELSON, MILDRED L.		04-14	Domestic	38.50			
	10N/03W-26M04	0494-221-47					---
	10N/03W-26N02	0494-221-11					---
	10N/03W-26N04	0494-221-11					---
	10N/03W-26N05	0494-221-11					---
	10N/03W-26N06	0494-221-11					---
	10N/03W-26N07	0494-221-18					---
	10N/03W-26N08	0494-221-11					---
							2
			RECAP:		Domestic	1.0	2.0
NEWBERRY SPRINGS COMPANY		N/A					
	09N/02W-07N01	0497-131-46					0
	09N/02W-07N02	0497-131-46					0
	09N/02W-07Q02	0497-131-14					0
	09N/03W-13B01	0488-131-10					0
	09N/03W-13F01	0488-131-10					0
							0
			RECAP:		No Use	0.0	0.0
OHAI, REYNOLDS & DOROTHY		02A-02	Domestic	333.08			
	11N/03W-33G01	0489-193-12					0
	11N/03W-33G02	0489-193-12					0
	11N/03W-33H03	0489-193-12					1
							1
			RECAP:		Domestic	0.5	1.0

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OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
OROPEZA, JOSE M. & CONCEPCION		06-15	Agriculture - Orchard	2.66	3.07	8.2	
			No Use	83.07	0.00	0	
09N/03W-28A02	0420-082-04						--
09N/03W-28A03	0420-082-04						--
							16
			RECAP:		Agriculture - Orchard	8.2	15.0
					Domestic	0.5	1.0
					No Use	0.0	0.0
OSTERKAMP, GEROLD		07A-04	Agriculture - Alfalfa	24.03	4.70	113	
			Dairy	36.27			
			No Use	7.63	0.00	0	
08N/04W-15C01	0466-091-16						--
08N/04W-15F03	0466-091-16						--
08N/04W-15F04	0466-091-16						--
							151
			RECAP:		Agriculture - Alfalfa	11.1	17.0
					Dairy	67.0	134.0
					No Use	0.0	0.0

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OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
OWL ROCK PRODUCTS COMPANY		05-10	Industrial	221.86			
09N/01W-10P01	0424-153-12						57
09N/01W-10P03	0424-153-01						11
09N/01W-10P04	0424-153-01						370
09N/01W-15A01	0424-141-13						5
09N/01W-15B01	0424-141-13						8
09N/01W-15C01	0424-141-13						5
							456
			RECAP:		Industrial	456.0	456.0

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 CENTRO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
P G & E		04-14	Agriculture - Alfalfa	102.59	4.70	482.2	
			Industrial	518.72			
			No Use	21.95	0.00	0	
09N/03W-02A01	0488-112-52						0
09N/03W-02A02	0488-112-52						3
09N/03W-02A04	0488-112-52						0
09N/03W-02A05	0488-112-52						0
09N/03W-02A06	0488-112-52						0
09N/03W-02A07	0488-112-52						0
09N/03W-02B02	0488-112-52						2
09N/03W-02B03	0488-112-52						2
09N/03W-02B04	0488-112-52						3
09N/03W-02B06	0488-112-52						0
09N/03W-02B07	0488-112-52						0
09N/03W-02B08	0488-112-52						13
09N/03W-02G01	0488-112-52						0
09N/03W-02G02	0488-112-52						0
09N/03W-02G03	0488-112-52						3
09N/03W-02H01	0488-112-52						0
09N/03W-02H02	0488-112-52						0
09N/03W-02H03	0488-112-52						3
09N/03W-02H05	0488-112-52						0
09N/03W-02J01	0488-112-32						1
09N/03W-02J02	0488-112-32						2
09N/03W-02J03	0488-112-32						3
09N/03W-02K01	0488-112-52						0
09N/03W-02K03	0488-112-32						110
10N/03W-26K03	0494-221-51						61
10N/03W-26L03	0494-221-51						0
10N/03W-26L08	0494-221-51						61
10N/03W-26L11	0494-221-51						34

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 CENTRO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
10N/03W-26L12	0494-221-51						0
10N/03W-26M02	0494-221-51						43
10N/03W-26P01	0494-221-51						0
10N/03W-26P02	0494-221-51						0
10N/03W-26P03	0494-221-51						0
10N/03W-26P04	0494-221-51						148
10N/03W-26P07	0494-221-51						42
10N/03W-26P08	0494-221-51						0
10N/03W-26P14	0494-221-51						0
10N/03W-26P15	0494-221-51						0
10N/03W-26Q01	0494-221-51						181
10N/03W-26Q05	0494-221-51						0
10N/03W-35C01	0494-251-15						0
10N/03W-35F01	0494-251-15						0
10N/03W-35F04	0494-251-15						0
10N/03W-35F05	0494-251-15						0
10N/03W-35J01	0494-261-23						76
10N/03W-35J02	0494-261-24						0
10N/03W-35J03	0494-261-25						0
10N/03W-35J04	0494-261-56						0
10N/03W-35J05	0494-261-56						0
10N/03W-35J06	0494-261-17						0
10N/03W-35J07	0494-261-17						0
10N/03W-35J08	0494-261-55						0
10N/03W-35J09	0494-261-25						0
10N/03W-35J11	0494-261-23						0
10N/03W-35J12	0494-261-57						29
10N/03W-35J13	0494-261-57						6
10N/03W-35J14	0494-261-57						38
10N/03W-35J15	0494-261-57						21
10N/03W-35K02	0494-261-56						0
10N/03W-35K03	0494-261-56						1

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 CENTRO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
10N/03W-35K05	0494-261-56						0
10N/03W-35K06	0494-261-56						55
10N/03W-35K07	0494-261-57						8
10N/03W-35K08	0494-261-57						10
10N/03W-35K09	0494-261-57						32
10N/03W-35Q01	0494-261-56						0
10N/03W-35Q03	0494-261-56						0
10N/03W-35Q04	0494-261-56						1
10N/03W-35Q05	0494-261-56						9
10N/03W-35Q09	0494-261-56						0
10N/03W-35Q10	0494-261-56						3
10N/03W-35Q11	0494-261-56						1
10N/03W-35Q12	0494-261-56						0
10N/03W-35Q13	0494-261-57						26
10N/03W-35R01	0494-261-32						0
10N/03W-35R02	0494-261-32						0
10N/03W-35R04	0494-261-32						0
10N/03W-35R07	0494-261-32						0
10N/03W-35R08	0494-261-32						0
10N/03W-35R09	0494-261-32						2
10N/03W-35R10	0494-261-32						3
10N/03W-35R11	0494-261-32						3
10N/03W-36M01	0494-021-21						0
10N/03W-36M02	0494-021-21						0
10N/03W-36M03	0494-021-21						0
10N/03W-36M04	0494-021-21						0
10N/03W-36M05	0494-021-21						0
10N/03W-36M06	0494-021-21						0
							1,039

**MOJAVE BASIN AREA WATERMASTER
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 INCLUDING GENERAL LAND USES FOR 1997
 CENTRO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
RECAP:					Agriculture - Alfalfa	588.3	905.0
					Industrial	134.0	134.0
POHL, ANDREAS & CATHLYN 09N/01W-03Q01	0424-051-37	05-10	Domestic	2.78			10
RECAP:					Domestic	5.0	10.0
RAMIREZ, JAIME & ALICIA 09N/02W-06H01	0497-081-44	04-13	Domestic	10.26			1
RECAP:					Domestic	0.5	1.0
REDDY, BOMMI V. & KARUNA V. 09N/01W-10B02 09N/01W-10B05	0424-161-06 0424-161-06	05-10	Domestic	10.31			6 0 6
RECAP:					Domestic	3.0	6.0
REES, MICHAEL J. & SUE A. 08N/04W-10G01 08N/04W-15R03	0466-061-07 0466-091-21	07A-04	Agriculture - Pasture	20.42	4.01	81.9	26 0 26
RECAP:					Agriculture - Pasture	16.3	25.0
					Domestic	0.5	1.0

**MOJAVE BASIN AREA WATERMASTER
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 INCLUDING GENERAL LAND USES FOR 1997
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 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
ROWLAND, JAMES & HELEN		05-10	Domestic	3.95			
09N/01W-10R02	0424-201-04						0
09N/01W-10R03	0424-201-28						9
							9
			RECAP:		Domestic	4.5	9.0
ROZELL, JAMES ROBERT		04-11	Domestic	9.95			
10N/01W-31J01	0426-071-09						19
10N/01W-31J02	0426-071-09						0
							19
			RECAP:		Domestic	9.5	19.0
RUISCH, DALE W.		04-14	Agriculture - Grain	88.44	1.03	91.1	
			Dairy	15.15			
			No Use	26.94	0.00	0	
09N/02W-06C04	0497-081-02						299
09N/02W-06C05	0497-081-02						1
09N/02W-06C06	0497-081-02						98
09N/02W-06E10	0497-081-20						5
09N/02W-06F01	0497-081-12						2
							405
			RECAP:		Agriculture - Grain	91.1	299.0
					Dairy	49.0	98.0
					Domestic	4.0	8.0
					No Use	0.0	0.0

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OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
SHIRKEY, ALAN G. & MARY E.		03-15	Domestic	56.81			
	10N/03W-14D01	0495-023-06					---
	10N/03W-14E01	0495-023-06					---
	10N/03W-14E02	0495-023-06					---
	10N/03W-14E03	0495-023-06					---
	10N/03W-14E04	0495-023-06					---
	10N/03W-14E05	0495-023-06					---
	10N/03W-14E06	0495-023-06					---
							2
			RECAP:		Domestic	1.0	2.0
SMITH, ROBERT A.		04-13	Agriculture - Alfalfa	0.92	4.70	4.3	
			No Use	15.70	0.00	0	
	09N/02W-06B01	0497-081-41					28
	09N/02W-06B06	0497-081-39					---
							28
			RECAP:		Agriculture - Alfalfa	4.3	7.0
					No Use	0.0	0.0
					Domestic	10.5	21.0

**MOJAVE BASIN AREA WATERMASTER
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 INCLUDING GENERAL LAND USES FOR 1997
 CENTRO SUBAREA
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OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
SOPPELAND, WAYNE		04-13 & 05-14	Agriculture - Alfalfa	66.36	4.70	311.9	
			Domestic	101.94			
	09N/02W-05B01	0497-101-09					0
	09N/02W-05B02	0497-101-09					0
	09N/02W-05B03	0497-101-14					0
	09N/02W-05F01	0497-101-14					0
	09N/02W-05G01	0497-101-14					35
	09N/03W-23E01	0421-021-19					320
							355
			RECAP:				
					Agriculture - Alfalfa	208.0	320.0
					Domestic	17.5	35.0

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OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
SOUTHERN CALIFORNIA WATER COMPANY		05-11 & 05-12	Municipal	4,159.94			
	09N/02W-01F01	0427-011-37					297
	09N/02W-01F02	0427-011-37					55
	09N/02W-01F03	0427-011-37					1
	09N/02W-01F04	0427-011-37					188
	09N/02W-01F06	0427-011-37					487
	09N/02W-01F07	0427-011-37					944
	09N/02W-01F08	0427-011-37					1,656
	09N/02W-01M07	0427-011-37					1,284
	09N/02W-01M08	0427-011-37					679
	09N/02W-01M09	0427-011-37					151
	09N/02W-01M10	0427-011-37					96
	09N/02W-01M11	0427-011-37					194
	09N/02W-05Q02	0497-113-10					0
	09N/02W-05Q04	0497-113-10					0
	09N/02W-05Q05	0497-113-10					0
	09N/02W-05R03	0497-113-06					1
	09N/02W-05R04	0497-113-06					0
	09N/02W-05R05	0497-113-06					0
	09N/02W-06H02	0497-081-51					1,231
	09N/02W-06H03	0497-081-51					240
	09N/02W-10A02	0427-062-27					0
	09N/02W-10A03	0427-062-27					0
	10N/01W-31L06	0426-082-46					353
	10N/01W-31L07	0426-082-46					793
	10N/01W-31L18	0426-082-46					7
	10N/01W-31LD01	0426-082-46					0
	10N/01W-31Q02	0426-061-08					790
	10N/01W-33P05	0424-071-40					1,732
	TRA/NSF-ER						---
	TRA/NSF-ER						---

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 CENTRO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
							11,179
RECAP:							11,179.0
SPINK, WALTHALL		04-11	Agriculture - Orchard - Pistachios	5.97	1.00	6	
10N/01W-33M01	0424-071-65						29
10N/01W-33M05	0424-071-66						0
							29
RECAP:							29.0
SUN 'N SKY COUNTRY CLUB		05-13	Golf Course	46.87	3.62	169.7	
			Municipal	12.43			
09N/02W-19G01	0421-281-25						---
09N/02W-19G02	0421-281-25						---
09N/02W-19K01	0421-281-25						---
09N/02W-19L02	0421-082-06						---
09N/02W-19P01	0421-281-25						---
09N/02W-19P02	0421-082-06						---
							337
RECAP:							302.0
RECAP:							35.0

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 CENTRO SUBAREA
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OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
TALLAKSON, WILLIAM V. & ELIZABETH A.		04-15	Domestic - Mobile Home Park	15.91			
	10N/03W-30K02	0494-181-37					---
	10N/03W-30Q04	0494-181-37					---
	10N/03W-30Q06	0494-181-37					---
	10N/03W-30Q07	0494-181-37					---
	10N/03W-30Q08	0494-181-37					---
							15
			RECAP:		Domestic	7.5	15.0
TILLEMA, HAROLD		02A-05	Agriculture - Alfalfa	119.43	4.70	561.3	
			No Use	164.07	0.00	0	
	11N/04W-32A02	0490-161-09					748
							748
			RECAP:		Agriculture - Alfalfa No Use	486.2 0.0	748.0 0.0
TRAN, ANTHONY & HY, THAP A.		03-15	Domestic	58.69			
	10N/03W-23H06	0495-031-05					0
	10N/03W-23H07	0495-031-05					2
							2
			RECAP:		Domestic	1.0	2.0
UMAIR MANAGEMENT CORPORATION		04-13	Domestic	40.19			
	09N/02W-06G01	0497-081-09					---
	09N/02W-06G02	0497-081-09					---
	09N/02W-06G03	0497-081-09					---
							41
			RECAP:		Domestic	20.5	41.0

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 CENTRO SUBAREA
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OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
VAN DAM, ELDERT & SUSAN		04-13	Dairy	78.18			
	09N/02W-03D03	0497-121-41					5
	09N/02W-03D05	0497-121-41					104
	09N/02W-03D06	0497-121-41					103
							<u>212</u>
			RECAP:		Dairy	106.0	212.0
VAN LEEUWEN, JOHN		06-14	Agriculture - Alfalfa	326.16	4.70	1533	
			No Use	75.13	0.00	0	
	09N/03W-22J02	0421-021-38					0
	09N/03W-22J03	0421-021-38					211
	09N/03W-22Q01	0421-021-04					502
	09N/03W-22R02	0421-021-03					0
	09N/03W-22R03	0421-021-03					436
	09N/03W-23N01	0421-021-37					49
	09N/03W-23N02	0421-021-36					413
	09N/03W-27A01	0421-032-38					0
							<u>1,611</u>
			RECAP:		Agriculture - Alfalfa	1,047.2	1,611.0
					No Use	0.0	0.0

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 CENTRO SUBAREA
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OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
VAN VLIET, HENDRIKA		04-14/15	Agriculture - Alfalfa	96.21	4.70	452.2	
			Dairy	63.63			
			No Use	32.23	0.00	0	
10N/03W-26C01	0494-211-01						0
10N/03W-26F08	0494-211-01						343
10N/03W-26F09	0494-211-01						148
10N/03W-26F11	0494-211-01						60
10N/03W-26F12	0494-211-01						0
10N/03W-26F13	0494-211-01						148
10N/03W-26F14	0494-211-01						81
10N/03W-26F15	0494-211-01						---
10N/03W-26F16	0494-211-01						---
10N/03W-27M01	0494-041-23						---
10N/03W-27M02	0494-041-23						0
10N/03W-27M03	0494-041-23						5
10N/03W-35Q02	0494-261-57						0
							785
			RECAP:		Agriculture - Alfalfa	423.1	651.0
					Dairy	67.0	134.0
					No Use	0.0	0.0
VANHOY, LUTHER C. & ROBERTA L.		03-16	Domestic	41.19			
10N/03W-04J01	0495-112-24						5
10N/03W-04J02	0495-112-24						0
							5
			RECAP:		Domestic	2.5	5.0

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OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
VERNOLA, PAT		04-14	Agriculture - Alfalfa	747.50	4.70	3513.2	
09N/03W-01C01	0488-121-20						---
09N/03W-01E02	0488-121-20						---
09N/03W-01F02	0488-121-20						---
09N/03W-01J03	0488-121-21						---
09N/03W-01Q01	0488-121-21						---
09N/03W-01Q03	0488-121-21						---
10N/03W-35A01	0494-251-04						---
10N/03W-36F02	0494-241-04						---
10N/03W-36P05	0494-021-08						---
10N/03W-36Q01	0494-021-07						---
10N/03W-36Q02	0494-021-07						---
							4,522
			RECAP:		Agriculture - Alfalfa	2,939.3	4,522.0
YANG, YOUNG MO		04-14	No Use	66.51	0.00	0	
10N/03W-26G01	0494-211-11						0
10N/03W-26G02	0494-211-11						0
10N/03W-26G03	0494-211-11						0
10N/03W-26K02	0494-221-15						0
							0
			RECAP:		No Use	0.0	0.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 CENTRO SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
YKEMA TRUST		04-13	Agriculture - Alfalfa	226.41	4.70	1064.1	
			Dairy	56.73			
			No Use	3.28	0.00	0	
10N/02W-32P01	0497-221-02						325
10N/03W-36J03	0494-021-03						105
10N/03W-36J04	0494-021-03						0
10N/03W-36K02	0494-021-03						138
10N/03W-36R03	0494-021-11						91
10N/03W-36R06	0494-021-11						506
							1,165
			RECAP:		Agriculture - Alfalfa	691.6	1,064.0
					No Use	0.0	0.0
					Dairy	50.5	101.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 ESTE SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
ABSHIRE, DAVID V. 05N/01E-33N02	0452-121-25	14-05	Domestic	20.35			21 21
			RECAP:		Domestic	10.5	21.0
ANDERSON, ROSS C. & BETTY J. 04N/01W-15E05 04N/01W-15E08	0451-261-26 0451-261-26	15-06	Domestic	4.89			--- --- 29
			RECAP:		Domestic	14.5	29.0
BAR H MUTUAL WATER COMPANY 04N/01E-10G01 04N/01E-10G02 04N/01E-10G03	0449-291-23 0449-291-23 0449-291-23	N/A					36 0 18 54
			RECAP:		Municipal	27.0	54.0
BELL, CHUCK 04N/01E-09C01 04N/01E-09D04	0449-063-03 0449-063-01	14-05	Agriculture - Alfalfa No Use	69.53 7.74	4.04 0.00	280.9 0	470 8 478
			RECAP:		Agriculture - Alfalfa No Use Domestic	280.9 0.0 4.0	470.0 0.0 8.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997**

**ESTE SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
BURNS, BOBBY J. & EVELYN J.		14-05	Agriculture - Alfalfa	163.50	4.04	660.5	
05N/01E-29Q02	0452-112-24						603
05N/01E-29Q03	0452-112-24						1
05N/01E-32B02	0452-121-12						0
05N/01E-32G02	0452-121-12						584
							1,188
			RECAP:		Agriculture - Alfalfa Domestic	660.5 0.5	1,187.0 1.0
CAMPBELL FAMILY TRUST		14-05	No Use	129.93	0.00	0	
04N/01E-05G02	0450-024-21						0
							0
			RECAP:		No Use	0.0	0.0
CASA COLINA FOUNDATION		14-05	Domestic	19.92			
04N/01E-05G01	0450-024-20						8
04N/01E-05G03	0450-024-20						4
							12
			RECAP:		Domestic	6.0	12.0
CENTER WATER COMPANY		15-06	Municipal	1.25			
04N/01W-11R03	0450-292-21						0
04N/01W-14A06	0450-371-23						4
04N/01W-14A07	0450-371-23						5
04N/01W-14A08	0450-371-23						21
							30
			RECAP:		Municipal	15.0	30.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 ESTE SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
CLUB VIEW PARTNERS		14-05	Agriculture - Alfalfa	105.18	4.04	424.9	
			No Use	96.88	0.00	0	
	04N/01E-06L01	0450-022-48					0
	05N/01E-31F01	0452-051-03					435
	05N/01E-31N02	0452-051-11					297
							732
			RECAP:		Agriculture - Alfalfa	424.9	732.0
					No Use	0.0	0.0
CROSS, LAWRENCE E. & SHARON I.		14-05	Agriculture - Alfalfa	3.03	4.04	12.2	
	05N/01E-32K02	0452-121-60					20
	05N/01E-32K03	0452-121-60					---
							20
			RECAP:		Agriculture - Alfalfa	12.2	19.0
					Domestic	0.5	1.0
CRYSTAL HILLS WATER COMPANY		16-11	Industrial	102.12			
	03N/01W-01R01	0446-033-29					0
	03N/01W-01R02	0446-033-29					1
	03N/01W-12A01	0446-041-54					0
							1
			RECAP:		Industrial	1.0	1.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 ESTE SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
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DAHLQUIST, GEORGE R.		14-05	Agriculture - Alfalfa	74.57	4.04	301.3	
			No Use	2.37	0.00	0	
04N/01W-12H01	0450-051-07						398
04N/01W-12H02	0450-051-07						1
							399
			RECAP:		Agriculture - Alfalfa	258.7	398.0
					No Use	0.0	0.0
					Domestic	0.5	1.0
<hr/>							
DELPDANG, ROBERT H.		15-06	Agriculture - Alfalfa	7.26	4.04	29.3	
			Agriculture - Livestock - Cattle	2.31			
04N/01W-23C10	0450-171-06						---
04N/01W-23C11	0450-171-06						---
							58
			RECAP:		Agriculture - Alfalfa	29.3	57.0
					Agriculture - Livestock - Cattle	0.0	0.0
					Domestic	0.5	1.0
<hr/>							
DESERT DAWN MUTUAL WATER COMPANY		N/A					
04N/01W-16J01	0451-221-17						16
04N/01W-16J02	0451-221-17						0
							16
			RECAP:		Municipal	8.0	16.0
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**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997**

**ESTE SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
DESERT SPRINGS MUTUAL WATER COMPANY		N/A					
	04N/01E-16F01	0449-201-08					0
	04N/01E-16F02	0449-201-08					58
	04N/01E-16F03	0449-201-08					1
							59
			RECAP:		Municipal	29.5	59.0
FREDERICK TRUST, KENNETH A.		12-05	No Use	441.22	0.00	0	
	06N/01W-36H01	0453-091-31					0
	06N/01W-36H02	0453-091-31					0
							0
			RECAP:		No Use	0.0	0.0
GAETA, TRINIDAD		15-04	Agriculture - Alfalfa	66.65	4.04	269.3	
	04N/01E-11H01	0449-032-10					0
	04N/01E-11H02	0449-032-10					215
	04N/01E-12M02	0449-034-02					85
	04N/01E-12N03	0449-034-04					132
	04N/01E-12N04	0449-034-04					0
							432
			RECAP:		Agriculture - Alfalfa Domestic	269.3 1.0	430.0 2.0
GAYJIKIAN, SAMUEL & HAZEL		13-05	Domestic	31.21			
	05N/01E-20N01	0452-381-03					0
	05N/01E-20N03	0452-381-03					2
							2
			RECAP:		Domestic	1.0	2.0

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 INCLUDING GENERAL LAND USES FOR 1997
 ESTE SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
<hr/>							
GUBLER, HANS		14-04	Domestic	18.63			
04N/01E-03P01	0449-014-41						0
04N/01E-03P02	0449-014-41						1
04N/01E-03P03	0449-014-41						0
							1
			RECAP:		Domestic	0.5	1.0
<hr/>							
HAL-DOR LTD.		15-05	Agriculture - Grain	1.49	0.89	1.3	
			Agriculture - Livestock - Poultry	34.29			
			No Use	6.64	0.00	0	
04N/01E-09N01	0449-064-02						15
							15
			RECAP:		Agriculture - Grain	1.3	15.0
					No Use	0.0	0.0
<hr/>							
HANDLEY, DON R. & MARY ANN		14-07	Domestic	87.13			
05N/01W-31J01	0464-111-28						---
05N/01W-32M01	0464-151-01						---
05N/01W-32M02	0464-151-01						---
							18
			RECAP:		Domestic	9.0	18.0
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**MOJAVE BASIN AREA WATERMASTER
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 INCLUDING GENERAL LAND USES FOR 1997
 ESTE SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
HART, MERRILL W.		14-05	Agriculture - Alfalfa	13.59	4.04	54.9	
			Agriculture - Orchard	7.13	2.62	18.7	
05N/01E-32H01	0452-121-42						91
05N/01E-32H02	0452-121-42						1
							92
			RECAP:		Agriculture - Alfalfa	44.2	68.0
					Agriculture - Orchard	14.9	23.0
					Domestic	0.5	1.0
HERT, SCOTT		14-05	Agriculture - Alfalfa	38.22	4.04	154.4	
05N/01E-32C01	0452-312-10						4
05N/01E-32L01	0452-121-08						2
05N/01E-32L02	0452-121-08						258
							264
			RECAP:		Agriculture - Alfalfa	154.4	258.0
					Domestic	3.0	6.0
HI-GRADE MATERIALS COMPANY		15-05	Industrial	94.91			
04N/01E-30D01	0449-111-26						278
							278
			RECAP:		Industrial	278.0	278.0
HITCHIN LUCERNE, INC.		15-06	Domestic - Commercial	5.29			
04N/01W-13D01	0450-141-54						24
							24
			RECAP:		Domestic	12.0	24.0

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OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
JAMS RANCH 04N/02E-17J02	0449-563-20	15-03	Agriculture - Orchard - Pistachios	26.86	1.00	26.9	27 27
			RECAP:	Agriculture - Orchard - Pistachios		17.5	27.0
JUBILEE MUTUAL WATER COMPANY 04N/01E-15P01 04N/01E-15P02 04N/01E-21A01 04N/01E-21C01	0449-071-22 0449-071-22 0449-104-56 0449-103-06	N/A					91 51 6 0 148
			RECAP:		Municipal	74.0	148.0
JUNIPER RIVIERA COUNTY WATER DISTRICT 04N/02W-21F01 04N/02W-22E01	0435-283-09 0435-391-03	N/A					5 49 54
			RECAP:		Municipal	27.0	54.0
KIM, JU SANG 04N/01W-14L05	0450-162-33	15-06	Domestic	9.84			5 5
			RECAP:		Domestic	2.5	5.0

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 ESTE SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
LEE, DOO HWAN 05N/01E-33E03	0452-121-36	14-05	No Use	22.27	0.00	0	0 0
			RECAP:		No Use	0.0	0.0
LOPEZ, BALTAZAR 05N/01E-31L01 05N/01E-31L02 05N/01E-31M03	0452-051-55 0452-051-55 0452-051-55	14-05	Agriculture - Alfalfa	31.35	4.04	126.7	1 0 0 1
			RECAP:		Domestic	0.5	1.0
LUA, ANTONIO 05N/01E-29N04	0452-112-20	14-05	No Use	70.23	0.00	0	0 0
			RECAP:		No Use	0.0	0.0
LUCERNE VALLEY MUTUAL WATER COMPANY 04N/01W-23K01 04N/01W-23K02	0450-191-08 0450-191-51	N/A					31 20 51
			RECAP:		Municipal	25.5	51.0

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 ESTE SUBAREA
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OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
LUCERNE VALLEY PARTNERS		14-05	Domestic	322.38			
	04N/01E-06A01	0450-022-14					0
	04N/01E-06H01	0450-022-14					0
	04N/01E-06H02	0450-022-14					2
	04N/01E-06H03	0450-022-14					0
	05N/01E-31Q01	0452-051-09					0
							<u>2</u>
			RECAP:		Domestic	1.0	2.0
LUCERNE VISTA MUTUAL WATER COMPANY		15-06	Municipal	28.44			
	04N/01W-13A01	0450-224-09					0
	04N/01W-13K01	0450-224-09					10
	04N/01W-13K02	0450-224-09					11
							<u>21</u>
			RECAP:		Municipal	10.5	21.0

**MOJAVE BASIN AREA WATERMASTER
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 ESTE SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
MITSUBISHI CEMENT CORPORATION		17-10	Industrial	324.02			
	03N/01E-10J01	0447-021-07					211
	03N/01E-10J02	0447-021-07					0
	03N/01E-10R01	0447-111-10					561
	03N/01E-11P01	0447-111-02					150
	04N/01E-10A01	0449-062-08					0
	04N/01E-10F01	0449-063-19					0
	04N/01E-10H02	0449-062-04					31
	04N/01E-10J01	0449-062-06					0
	04N/01E-10L01	0449-064-39					0
	04N/01E-10R01	0449-062-07					2
							955
			RECAP:		Industrial	955.0	955.0
MONACO INVESTMENT COMPANY		14-05	No Use	32.83	0.00	0	
	04N/01E-06F01	0450-022-05					0
							0
							0
							0
			RECAP:		No Use	0.0	0.0
MOSS, LAWRENCE W. & HELEN J.		15-03	Domestic - Mobile Home Park	17.33			
			No Use	8.74	0.00	0	
	04N/01E-13H01	0449-084-17					37
							37
							37
							37
			RECAP:		Domestic	18.5	37.0
					No Use	0.0	0.0

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 ESTE SUBAREA
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OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
OMYA CALIFORNIA, INC.		16-12	Industrial	108.49			
03N/01W-01D01	0446-033-06						9
03N/01W-14A01	0446-121-01						1
							10
			RECAP:		Industrial	10.0	10.0
PARK, HEA JA & JEONG IL		14-04	No Use	46.78	0.00	0	
05N/01E-34N01	0452-132-50						0
05N/01E-34N02	0452-132-50						0
05N/01E-34N04	0452-132-50						0
							0
			RECAP:		No Use	0.0	0.0
PEREZ, EVA		14-05	No Use	39.07	0.00	0	
05N/01E-31P01	0452-051-10						0
							0
			RECAP:		No Use	0.0	0.0
PETTIGREW, DAN		14-05	Agriculture - Alfalfa	150.16	4.04	606.6	
05N/01E-29R01	0452-112-25						593
05N/01E-29R02	0452-112-25						1
05N/01E-31A04	0452-051-04						519
05N/01E-31A05	0452-051-04						1
							1,114
			RECAP:		Agriculture - Alfalfa Domestic	606.6 1.0	1,112.0 2.0

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OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
PETTIGREW, HOWARD L.		13-05 & 14-05	Agriculture - Alfalfa	182.05	4.04	735.5	
			No Use	8.78	0.00	0	
05N/01E-30H01	0452-062-23						270
05N/01E-30R02	0452-062-24						724
							994
			RECAP:		Agriculture - Alfalfa	646.1	994.0
					No Use	0.0	0.0
REED, MIKE		15-03	Agriculture - Alfalfa	9.12	4.04	36.8	
04N/01E-13R02	0449-084-34						67
							67
			RECAP:		Agriculture - Alfalfa	36.8	66.0
					Domestic	0.5	1.0
ROGERS, ROY		14-06	No Use	927.59	0.00	0	
04N/01W-02A01	0450-011-15						0
04N/01W-02B01	0450-011-15						0
04N/01W-02F01	0450-011-14						0
04N/01W-02H01	0450-011-15						0
04N/01W-02J01	0450-011-08						0
04N/01W-03H01	0451-022-13						0
							0
			RECAP:		No Use	0.0	0.0

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 ESTE SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
SAN BERNARDINO COUNTY SERVICE AREA 29		14-05 & 15-06	Municipal	23.66			
04N/01E-05Q01	0450-025-34						4
04N/01E-05Q04	0450-025-34						0
04N/01W-13C02	0450-141-51						39
04N/01W-14B03	0450-371-29						8
							51
			RECAP:		Municipal	25.5	51.0
SEALS, ELIZABETH A.		15-06	Domestic	4.98			
04N/01W-14F03	0450-153-56						17
							17
			RECAP:		Domestic	8.5	17.0
SEALS, WILLIAM & TIBBETT, VICKI SEALS TRA/NSF-ER		15-06	No Use	5.05	0.00	0	

			RECAP:		No Use	0.0	0.0
SON'S RANCH		14-05 & 15-04	Agriculture - Orchard - Apples	36.68	2.62	96.1	
			No Use	10.54	0.00	0	
04N/01E-13E01	0449-083-03						---
05N/01E-33D01	0452-121-14						---
							119
			RECAP:	Agriculture - Orchard - Apples		77.3	119.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997**

**ESTE SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
SOUTHERN CALIFORNIA WATER COMPANY		15-08	Municipal	7.09			
	04N/01W-21J01	0451-531-13					13
	04N/01W-26C01	0450-241-13					18
	04N/01W-26J01	0450-272-18					117
	04N/02W-09Q01	0435-081-34					22
	04N/02W-16C01	0435-112-07					0
							170
			RECAP:		Municipal	85.0	170.0
SPECIALTY MINERALS, INC.		16-11	Industrial	322.12			
	03N/01E-07J03	0446-061-01					5
	03N/01E-07J04	0446-061-01					1
	03N/01E-07K01	0446-061-01					3
	03N/01E-07L01	0446-061-01					2
	03N/01E-07L02	0446-061-01					14
	03N/01E-07Q04	0446-061-01					5
							30
			RECAP:		Industrial	30.0	30.0
SPILLMAN, JAMES R. & NANCY J.		14-05	Domestic	83.43			
	05N/01E-32R01	0452-121-05					---
	05N/01E-32R03	0452-121-05					---
							20
			RECAP:		Domestic	10.0	20.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 ESTE SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
STEWART WATER COMPANY		15-04	Municipal	140.04			
04N/01E-11Q04	0449-043-07						--
04N/01E-11Q05	0449-044-03						--
							41
			RECAP:		Municipal	20.5	41.0
STRINGER, W. EDWARD		14-05	Agriculture - Alfalfa	70.39	4.04	284.4	
04N/01E-06C01	0450-022-01						447
							447
			RECAP:		Agriculture - Alfalfa	284.4	446.0
					Domestic	0.5	1.0
THE CUSHENBURY TRUST, C/O SPECIALTY MINERALS, INC.		16-11	Industrial	4.04			
03N/01E-07RS02	0446-061-01						3
							3
			RECAP:		Industrial	3.0	3.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 ESTE SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
TURNER, LOYD & CAROL, C/O BENTON-TURNER, INC.		17-12	Domestic	0.85			
	03N/01W-12D01	0446-041-16					---
	03N/01W-12F01	0446-041-46					---
	03N/01W-12F02	0446-041-46					---
	03N/01W-12F03	0446-041-46					---
	03N/01W-12H05	0446-041-55					---
	03N/01W-12J01	0446-041-26					---
	03N/01W-12J02	0446-041-26					---
	03N/01W-12J03	0446-041-26					---
	03N/01W-12J04	0446-041-26					---
	03N/01W-12J05	0446-041-26					---
	03N/01W-12J06	0446-041-26					---
	03N/01W-12L01	0446-041-24					---
	03N/01W-13G01	0446-121-07					---
	03N/01W-13G02	0446-121-07					---
							18
			RECAP:		Domestic	9.0	18.0
VISOSKY, JOSEPH F., JR.		14-05	No Use	158.77	0.00	0	
	04N/01W-01E02	0450-011-20					0
	04N/01W-01F01	0450-011-20					0
							0
			RECAP:		No Use	0.0	0.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 ESTE SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
WEISER, SIDNEY & RAQUEL		14-04	Agriculture - Row Crops	56.30			
			No Use	19.74	0.00	0	
	05N/01E-33B02	0452-121-18					50
	05N/01E-33G03	0452-121-18					0
	05N/01E-33G04	0452-121-18					0
	05N/01E-33G05	0452-121-18					—
	05N/01E-33G06	0452-121-18					78
							128
			RECAP:		Agriculture - Row Crops	79.9	127.0
					Domestic	0.5	1.0
WILLOW WELLS MUTUAL WATER COMPANY		N/A					
	04N/01W-19C01	0451-093-03					23
	04N/01W-19C02	0451-093-03					21
							44
			RECAP:		Municipal	22.0	44.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 ESTE SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
WILSHIRE ROAD PARTNERS		14-05	No Use	800.09	0.00	0	
04N/01W-01G01	0450-011-05						0
04N/01W-01H01	0450-011-05						0
04N/01W-01H02	0450-011-05						0
04N/01W-01M01	0450-011-17						0
04N/01W-01P04	0450-011-17						0
04N/01W-01P05	0450-011-17						0
04N/01W-01Q01	0450-011-24						0
04N/01W-01Q02	0450-011-24						0
04N/01W-01R01	0450-011-23						0
04N/01W-01R03	0450-011-23						0
05N/01W-36P01	0452-051-18						0
05N/01W-36R01	0452-051-18						0
							0
			RECAP:		No Use	0.0	0.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 OESTE SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
AEROCHEM, INC.		11-11	Industrial	160.44			
06N/07W-23A01	0457-112-02						0
06N/07W-23A10	0457-112-02						8
06N/07W-23A12	0457-112-02						---
							8
			RECAP:		Industrial	8.0	8.0
BROWN, SUE & DOUG		11-11	Domestic	4.19			
06N/07W-16R06	0457-251-34						---
06N/07W-16R07	0457-251-34						---
							1
			RECAP:		Domestic	0.5	1.0
CHAMISAL MUTUAL WATER COMPANY		11-11	Municipal	2.52			
06N/07W-17Q05	0457-081-15						48
06N/07W-17Q06	0457-081-15						24
							72
			RECAP:		Municipal	36.0	72.0
DOSSEY, D. A.		12-20	Domestic	5.11			
06N/07W-29P02	3200-121-03						4
							4
			RECAP:		Domestic	2.0	4.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 OESTE SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
HETTINGA, HEIN & ELLEN		11-11	Dairy	236.55			
	06N/07W-14N01	0457-102-01					81
	06N/07W-14N02	0457-102-01					74
	06N/07W-15Q02	0457-271-04					1
	06N/07W-15R01	0457-271-04					20
							176
			RECAP:		Dairy	87.5	175.0
					Domestic	0.5	1.0
MEADOWBROOK DAIRY		11-11 & 12-19	Agriculture - Alfalfa	293.21	4.04	1184.6	
			Dairy	84.03			
			No Use	75.26	0.00	0	
	06N/07W-14K01	0457-102-05					864
	06N/07W-14Q02	0457-102-05					4
	06N/07W-23F01	0457-112-01					1,036
	06N/07W-26J01	0457-161-10					187
	06N/07W-26J02	0457-161-10					56
							2,147
			RECAP:		Agriculture - Alfalfa	1,184.6	1,900.0
					Dairy	121.5	243.0
					Domestic	2.0	4.0
					No Use	0.0	0.0

**MOJAVE BASIN AREA WATERMASTER
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 INCLUDING GENERAL LAND USES FOR 1997
 OESTE SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
MORANO, AMERICO & LANA		11-11	Agriculture - Orchard - Peaches	4.83	2.62	12.6	
06N/07W-21P02	0457-241-43						0
06N/07W-21P03	0457-241-52						8
							8
			RECAP:	Agriculture - Orchard - Peaches		4.6	7.0
					Domestic	0.5	1.0
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SAN BERNARDINO COUNTY SERVICE AREA 70G		N/A					
04N/07W-33J02	0400-411-34						44
04N/07W-33J04	0400-411-40						28
							72
			RECAP:		Municipal	36.0	72.0
<hr/>							
SAN BERNARDINO COUNTY SERVICE AREA 70L		N/A					
05N/07W-23A01	3101-351-11						354
05N/07W-24D03	3101-381-12						151
05N/07W-24D04	3101-381-12						246
05N/07W-24D07	3101-381-03						352
05N/07W-30D01	0402-154-01						379
05N/07W-30D02	0402-154-01						85
05N/07W-31J03	0402-363-15						244
05N/07W-31J04	0402-363-15						294
05N/07W-36E01	0402-282-22						0
							2,105
			RECAP:		Municipal	1,052.5	2,105.0

**MOJAVE BASIN AREA WATERMASTER
 VERIFIED PRODUCTION BY OWNER AND FACILITY FOR 1996-97 WATER YEAR
 INCLUDING GENERAL LAND USES FOR 1997
 OESTE SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
THORESON, ROBERT F. & KATHLEEN		12-19	Domestic	85.18			
06N/07W-27B01	3200-431-01						1
06N/07W-27K01	3200-451-01						1
							2
			RECAP:		Domestic	1.0	2.0
TROEGER FAMILY TRUST, RICHARD H.		16-26	Recreational Lakes Domestic	0.25 160.04	5.60	1.4	
04N/07W-32C01	0400-181-02						1
04N/07W-32F01	0400-181-02						3
04N/07W-32F02	0400-181-02						0
04N/07W-32FS01	0400-181-02						12
							16
			RECAP:		Domestic Recreational Lakes	2.0 1.4	4.0 12.0
VAN DAM BROTHERS		11-11	Agriculture - Alfalfa	215.00	4.04	868.6	
06N/07W-11R01	0457-041-19						0
06N/07W-14A01	0457-102-04						587
06N/07W-14B03	0457-102-03						327
06N/07W-14C01	0457-102-02						739
							1,653
			RECAP:		Agriculture - Alfalfa	868.6	1,653.0

**MOJAVE BASIN AREA WATERMASTER
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 OESTE SUBAREA
 (AMOUNTS IN ACRE-FEET)**

OWNER TOWNSHIP/RANGE/SEC/WELL	ASSESSORS PARCEL NUMBER	AERIAL PHOTO PLATE NO. (1997)	GENERAL LAND USE (1997)	NET ACREAGE	NET WATER REQUIREMENT IN ACRE-FEET	CONSUMPTIVE WATER USE IN ACRE-FEET (65% OF PRODUCTION FOR SOME CASES)	VERIFIED ANNUAL 1997 PRODUCTION
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APPENDIX "D"

**MOJAVE BASIN AREA ADJUDICATION
*ESTIMATED YEARLY NET WATER REQUIREMENTS FOR
VARIOUS CROPS
USDA SOIL CONSERVATION SERVICE
(ALL VALUES IN ACRE-FEET PER ACRE)**

APPENDIX D
MOJAVE BASIN AREA ADJUDICATION
***ESTIMATED YEARLY NET WATER REQUIREMENTS FOR**
VARIOUS CROPS
USDA SOIL CONSERVATION SERVICE
(ALL VALUES IN ACRE-FEET PER ACRE)

CROPS	BARSTOW AREA (CENTRO)	DAGGETT AREA (BAJA)	VICTORVILLE AREA (ALTO, ESTE, & OESTE)
Alfalfa	4.70	5.25	4.04
Almonds	2.32	2.58	1.98
Deciduous Orchard w/out Cover	3.07	3.42	2.62
Grapes	2.95	3.28	2.53
Pasture	4.01	4.47	3.44
Pecans	3.11	3.46	2.67
Pistachios	2.87	3.04	2.42
Pomegranates		2.96	
Small Vegetables (Nov. 15th- Jul. 15th)	1.68	1.89	1.42
Spring Grain (Oct. 15th-May 15th)	1.03	1.18	0.89
Sunflower (May 1st- Sept. 1st)			1.88
Turfgrass - cool	3.97	4.44	3.42
Turfgrass - warm	3.26	3.64	2.81
Walnuts	3.11	3.46	2.67

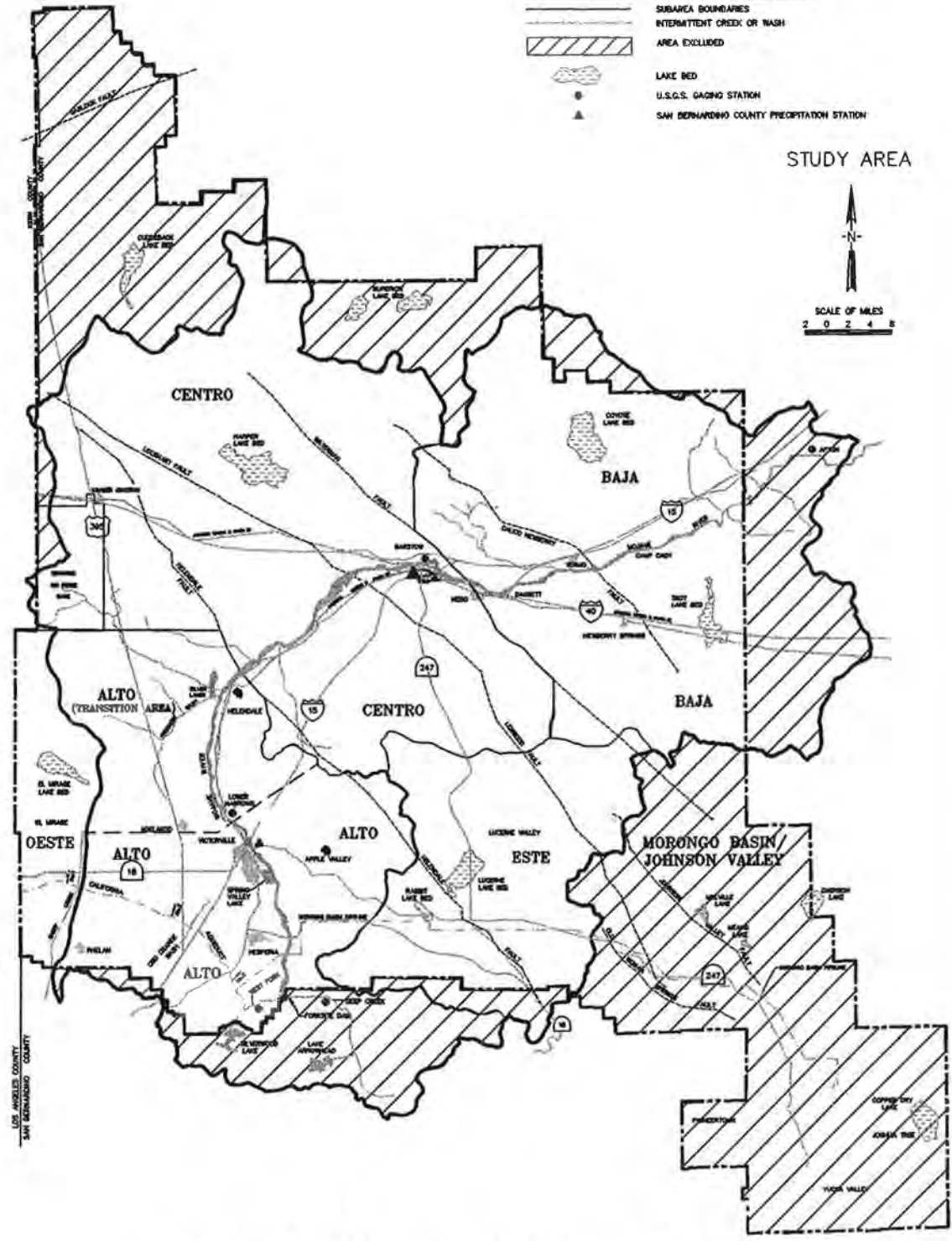
* Determined using modified Blaney-Criddle formula.

** Please note that the amounts shown are the NET water requirement. The GROSS water application needed to meet the NET water requirement is dependent on the efficiency of the irrigation system. The less efficient the system, the more water is needed to meet the NET water requirement for the particular crop.

LEGEND

- MOJAVE WATER AGENCY BOUNDARY
- MOJAVE RIVER WATERSHED BOUNDARY
- SUBAREA BOUNDARIES
- - - INTERMITTENT CREEK OR WASH
- ▨ AREA EXCLUDED
- ☁ LAKE BED
- U.S.G.S. GAGING STATION
- ▲ SAN BERNARDINO COUNTY PRECIPITATION STATION

STUDY AREA



MOJAVE BASIN AREA