WATER SUPPLY ASSESSMENT

FOR THE

AGINCOURT SOLAR PROJECT
LUCERNE VALLEY, CALIFORNIA

Prepared for:

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TABLE OF CONTENTS

List of Tables

List of Figures

List of Exhibits

LIST OF ABBREVIATIONS

AC	Alternating Current
af	Acre Foot or Feet (i.e., 1 acre X 1 foot deep)
afy	Acre Feet per Year
BBARWA	Big Bear Area Regional Wastewater Agency
CEQA	California Environmental Quality Act
CUP	Conditional Use Permit
DWR	California Department of Water Resources
FPA	Free Production Allowance
gpm	Gallons per minute
GPD	Gallons Per Day
JMWC	Jubilee Mutual Water Company
kV	Kilovolt
MW	Megawatts
Watermaster	Mojave Basin Area Watermaster
MGB	Mojave Groundwater Basin
MWA	Mojave Water Agency
MWD	Mojave Water District
PV	Photovoltaic
PSY	Production Safe Yield
SCE	Southern California Edison
SB	Senate Bill
SR	State Route
TDS	Total Dissolved Solids
UWMP	Urban Water Management Plan

EXECUTIVE SUMMARY

This Water Supply Assessment (WSA) has been prepared to assist the County of San Bernardino Land Use Services Department in satisfying the requirements of Senate Bill 610 (SB 610) for the WDG Capital Partners' (Applicant) Agincourt Solar Project (proposed project) in Lucerne Valley of unincorporated San Bernardino County, California. The intent of SB 610 is to strengthen the process by which local agencies determine the adequacy, sufficiency and quality of current and future water supplies in order to meet current and future demands.

SB 610 amended Water Code sections 10910 and 10912 to create a direct relationship between water supply and land use. In general terms, prior to constructing developments with more than 500 homes or the equivalent, SB 610 requires a showing that there is an adequate 20-year water supply. The County of San Bernardino has determined the proposed project meets with the intent of Water Code Sections 10910 and 10912.

Under SB 610, when groundwater is a source of supply, specific information relating to the groundwater basin must be incorporated in the WSA. The Agincourt Solar Project is located within the Mojave Groundwater Basin.

San Bernardino County, as lead agency, must include the WSA in the project's CEQA document and may also include an evaluation of the WSA. Finally, as the CEQA lead agency, the County must independently determine, "based on the entire record," whether adequate water supplies exist to supply the project.

At its heart, a WSA is an informational document relied on by the CEQA lead agency in deciding whether to approve projects. In this way, a WSA is similar to other informational documents used to support the analysis of impacts in CEQA documents, such as traffic or biological resource studies. Like such studies, other than its role in the CEQA process and the ultimate project approval, a WSA effects no change.

This WSA:

1. Provides information on the proposed Solar Project's water supply consistent with Water Code Sections 10620 *et seq.* (the Urban Water Management Act) and Sections 10910 *et seq.* (Water Supply Planning to support Existing and Planned Future Uses)
2. Provides data to make sufficiency findings required by CEQA

ES.1 PROJECT DEMAND

The Agincourt Solar Project will not be directly connected to a public water supply nor will it drill its own well to provide water for the project. It only needs a one-time purchase of

approximately 11 to 15 afy during its 9-month construction schedule to suppress dust and support other construction activities.

The proposed solar facility will be unmanned and during operation of the solar power plant approximately 1 to 2 afy of water will be needed to wash the solar panels. During panel washing, water would be sprayed on the panels and allowed to drip off into the ground. A fire suppression system infrastructure is not considered necessary.

ES.2 PROJECT SUPPLY

The proposed solar project will procure water for construction and operations from a water producer in the Este Subarea portion of the Mojave Groundwater Basin (MGB), one of the 19 adjudicated groundwater basins within California. All water extracted from this basin is closely accounted for by the annual Mojave Basin Area Watermaster (Watermaster) report as prepared by the Mojave Water Agency (MWA) in its role as the court-ordered Watermaster. This water is protected by a ruling from the courts and water pumped from each specific subarea which exceeds a specified volume per year is subject to recharge costs. MWA has produced 17 annual Watermaster reports on the basin. The most recent is the *Seventeenth Annual Report of the Mojave Basin Area Watermaster, Water Year 2009–10;* information from the Watermaster report was incorporated into the MWA *Final 2010 Urban Water Management Plan* (UWMP).

The 2011 Watermaster report and the 2010 UWMP indicate that groundwater levels in the Este Subarea have been stable for at least the past 16 years, and recent pumpage is well below the maximum Production Safe Yield for that subarea. According to the most recent Watermaster report, a number of water companies that deliver water supplies throughout the Este Subarea are currently pumping less than 50 percent of their allowed volume of water each year.

ES.3 CONCLUSION

Adequate water supplies for the construction and operation of the proposed solar project are available; Appendix B of the 2011 Watermaster report indicates that in 2009–2010 (the most recent year for which data are available) water producers in the Este Subarea pumped a total of 14,430 af less than their Free Production Allowance (FPA). For example, the closest water producer to the proposed project site, the Jubilee Mutual Water Company, had an unused FPA of 114 af in 2009–2010, far in excess of the 11 to 15 af needed for construction of the proposed solar facility and the 1 to 2 afy needed for operations. In 2009–2010, water producers in the Este Subarea pumped only 68 percent of the Production Safe Yield, indicating there is every reason to expect there is available supply for the construction and operation of the proposed project.

In addition, the Big Bear Area Regional Wastewater Agency (BBARWA) has an existing water pipeline that runs along Camp Rock Road paralleling the eastern edge of the proposed project site. The pipeline delivers treated wastewater to an alfalfa farm and more than 1,000 afy of excess treated water is pumped into seepage ponds located north of State Route 18 (SR 18) and south of State Route 247 (SR 247). Excess treated wastewater from this pipeline may also be a source of water for construction and/or operation of the proposed project.

The data indicate that adequate water supplies exist to serve the proposed project.

SECTION 1.0
INTRODUCTION

The County of San Bernardino Land Use Services Department requested the preparation of this WSA in its role as lead agency under the CEQA for the proposed development of the WDG Capital Partners Agincourt Solar Project (proposed project) in the unincorporated area of San Bernardino County referred to as Lucerne Valley, California.

1.1 BACKGROUND INFORMATION

The proposed project will connect with the existing Southern California Edison (SCE) 33-kV transmission line that runs north-south along Camp Rock road to the Cottonwood Substation located approximately 1.7 miles to the south. No new off-site transmission line is necessary. The electricity produced by the proposed project will be marketed to SCE through a long-term power purchase agreement.

The project is designed to have a useful life of 20 to 30 years, although the life span could be extended by upgrades and refurbishments. In the event that the Project is decommissioned, the facility would be removed and the site prepared for subsequent land use.

This WSA incorporates updated information from interviews with key personnel at the MWA, the Jubilee Mutual Water Company (JMWC), and the Big Bear Area Regional Wastewater Agency (BBARWA), and searches of records, documents and data of water use, water quality and local water conditions, including review of the *Seventeenth Annual Report of the Mojave Basin Area Watermaster, Water Year 2009–10* and the *MWA Final 2010 Urban Water Management Plan*.

The intent of this WSA is to provide the County of San Bernardino Land Use Services Department with a thorough understanding of the quality and quantity of water available for use by the proposed project.

SECTION 2.0
PROPERTY DESCRIPTION

2.1 LEGAL DESCRIPTION

The Project site is situated in the southern Lucerne Valley region of the Colorado River Hydrologic Region of the Mojave Desert. It is in the Este Subarea of the Mojave Groundwater Basin and is located about 5.5 miles southeast of the Lucerne Valley community and approximately 26 miles southeast of downtown Victorville (Figure 1). The primary facility access point is from Camp Rock Road, which runs along the eastern project boundary. Camp Rock Road intersects SR 18 approximately 1.7 miles south of the project site.

The preliminary title report indicates the project site includes the following County of San Bernardino Assessor Parcel Numbers (APNs):

- 0449-641-04 (40 acres, NE/4 of NW/4, Section 34, Township 4N, Range 1E)
- 0449-641-27 (39.2 acres, S/2 of N/2 of NE/4, Section 34, Township 4N, Range 1E, excepting County 50-foot road easement

2.2 PROJECT OVERVIEW

The 79-acre unmanned solar power generation facility would be comprised of the following major components: non-reflective PV solar module arrays mounted on fixed tilt or single-axis trackers and a racking system supported by pole-driven foundations, inverters and transformers on pads, buried collector lines, and switchgear. The main public access road would be improved with compacted crush stone. Internal site access would be provided by unimproved roads. Low-lying vegetation or dust palliatives would be used to control wind and water erosion during operations. The site would be protected by an 8-foot-high perimeter fence and screened by landscaping as needed.

Construction of the proposed Project is estimated to require a local workforce of approximately 50 to 100 workers. Construction is estimated to start in the fourth quarter of 2012 and would take approximately nine months to complete. The solar facility is scheduled to be operational in the third quarter of 2013.

The facility would be unmanned and would not need water or sewer connections.

2.3 DEMAND

Approximately 11 to 15 af of water will be used for construction, primarily for dust control during grading.

The proposed facility would be unmanned and no water or sewer connections would be needed. During operations the facility would be visited periodically by several part-time employees expected to provide their own water. Once or twice a year the employees or a contractor would visit the site to wash the PV panels. The operational demand for panel washing would require approximately 1 to 2 afy. Water from panel washing would be non-hazardous and would be allowed to soak into the ground below the panels.

For its water needs, the Applicant intends to make purchases from a water producer with unused Free Production Allowance (FPA), preferably in the Este Subarea. An alternate source of water would be excess treated waste water from the BBARWA wastewater treatment plant. These sources are described below in Section 3.2.4.

SECTION 3.0
WATER SOURCES

The proposed project would obtain groundwater from the Este Subarea in the Mojave Groundwater Basin. The following presents information that demonstrates that present water resources are expected to be more than sufficient to provide the small amount of water required to sustain this project throughout its 20- to 30-year operational lifespan.

3.1 MOJAVE GROUNDWATER BASIN

Rights to produce groundwater from the Mojave Groundwater Basin (MGB) have been adjudicated by the courts and, as per the Judgment, groundwater supplies in the MGB are rigorously managed in accordance with the Judgment by the Mojave Water Agency in its role as Watermaster. The main responsibilities of a Watermaster are to monitor and verify water use, collect assessments, conduct studies and prepare an annual report of its findings and activities to the Court as outlined in the Judgment. Additionally, the Watermaster acts as the clearinghouse for recording water transfers and reports changes in ownership of Base Annual Production rights to the Court.

The adjudicated boundary of the MGB encompasses about 3,400 square miles of San Bernardino County, California (See Figure 1). The adjudicated area is bounded by the San Bernardino and San Gabriel Mountains to the south, Afton Canyon to the northeast, just beyond Lucerne Valley in the east, and the Antelope Valley to the west at the San Bernardino Los Angeles County line.

For purposes of administering of the Judgment, the basin is divided into five separate hydrologic subareas. The five subareas are: Este (East Basin); Oeste (West Basin); Alto (Upper Basin); Centro (Middle Basin); and Baja (Lower Basin). The proposed project is located in the Este Subarea (see Figure 1).

3.2 ESTE SUBAREA

The Este Subarea was historically designated as the Lucerne Valley basin and is bounded on the south by the San Bernardino Mountains and on the northwest by the Granite Mountains. The Ord Mountains bound the basin on the north and the Camp Rock fault and Kane Wash bound the area to the northeast and the Fry Mountains bound it to the east and southeast.

The principal water bearing deposits are Quaternary age alluvium and dune sand. These deposits are unconsolidated and semi-consolidated alluvium comprised of gravel, sand, silt, clay and boulders. The average specific yield of the deposits is about 11 percent. Wells in the basin yield as much as 1,000 gallons per minute. Thickness of the deposits average about 600 feet thick but go as high as 1,800 feet in along the Helendale fault. Depth to water in the

vicinity of the project is about 300 feet. The direction of groundwater flow is radially from the perimeter of the basin and toward the Lucerne (dry) Lake in the middle of the basin.

3.2.1 Groundwater Levels

The *Seventeenth Annual Report of the Mojave Basin Area Watermaster, Water Year 2009–10* states for the Este Subarea that "Water levels in Este have remained stable for the past several years indicating a relative balance between recharge and discharge" (Watermasters 2011:24) and "[w]ater levels remain relatively stable in Este….and… Water production in Este declined 19.9% from 2008–09 (Watermaster 2011:32)." This finding is echoed in the MWA's Final Urban Water Management Plan (2011:3-23). Groundwater levels within the Este subbasin have been stable for at least the past 16 years. Hydrographs for the Este Subarea illustrated in Figure 2 demonstrate that water levels between 1994 and 2011 have been relatively flat, declining only about 3 feet during that 16 year period. In fact, one well located in Section 27 (4N/1E-27R2) where the project is to be located has experienced a rise in water levels between 1994 and 2010 of about 5 feet. Additional hydrographs for wells 4N/1E-23K01 and 23K02 illustrate that both shallow wells and deeper wells have exhibited relatively flat water levels.

3.2.2 Available Groundwater Supplies

The following is excerpted with only minor editing from the Final MWA Urban Water Management Plan, which incorporates information from the most recent Watermaster report.

In the Mojave Basin Area, Base Annual Production (BAP) rights were assigned by the Mojave Basin Area Judgment to each producer using 10 afy or more, based on historical production. BAP is defined as the producer's highest annual use verified for the five-year base period from 1986–1990. Parties to the Judgment are assigned a variable FPA by the Watermaster, which is a percentage of BAP set for each subarea for each year. The allocated FPA represents each producer's share of the water supply available for that subarea. This FPA is reduced or "ramped-down" over time until total FPA comes into balance with available supplies. Production Safe Yield (PSY) is also determined for each subarea for each year. The PSY in each subarea is assumed to equal the average net natural water supply plus the expected return flow from the previous year's water production. Exhibit H of the Judgment requires that in the event the FPA exceeds the estimated PSY by five percent or more of BAP, Watermaster recommends a reduction in FPA equal to, but not more than, a full five percent of the aggregate subarea BAP. Any water user that pumps more than their FPA in any year is required to buy "Replacement Water" equal to the amount of production in excess of the FPA. Replacement Obligations can be satisfied either by paying the Mojave Basin Area Watermaster to purchase imported water from MWA or by temporarily transferring unused FPA within that subarea from another party to the Judgment.

Table 3-1 shows the base annual production values and the FPA for water year 2010–2011 for each subarea and the estimated PSY. Also shown in Table 3-1 is the verified production for water year 2009–2010 for comparison. Free Production Allowance is greater than PSY by more than 5 percent in four of the five subareas; water levels remain stable in most areas currently because verified production is less than the available supply. In regards to the Este Subarea, local producers only produced 4,848 af in 2009–2010, only 68 percent of the PSY for that subarea.

TABLE 3-1
MOJAVE BASIN AREA PRODUCTION SAFE YIELD AND CURRENT FREE PRODUCTION ALLOWANCE (afy)

Mojave Basin Subarea	Base Annual Production	2010–2011 FPA	Production Safe Yield	Percent Difference[1]	2009–2010 Verified Production
Alto	116,412	74,534	69,862	4.00%	78,493
Baja	66,157	43,863	20,679	35.00%	21,539
Centro	56,269	45,349	33,375	21.30%	21,847
Este	20,205	16,376	7,156	45.60%	4,848
Oeste	7,095	5,727	4,052	23.60%	4,342

Source: Table 3-7 of the MWA Final 2010 UWMP; original source: Annual Watermaster Reports.

[1] This value represents the percent of BAT that PSY departs from FPA.

Based upon the Este Subarea's annual PSY of 7,156 af, the one-time purchase of up to 15 af of water for use during construction of the proposed solar project represents only 0.02 percent of the PSY and the 1 to 2 afy needed for operational use of the proposed solar project represents only 0.03 percent of the PSY for the Este Subarea.

3.2.3 Water Producers and Availability in the Este Subarea

Appendix B of the 2011 Watermaster report identifies 61 water producers that have an FPA in the Este Subarea. Pages 1 and 2 of that appendix (included herein as Exhibit A) indicate that at the end of 2009–2010, water producers in the Este Subarea had 14,430 af of available water that had not been used (see column titled "Unused FPA"). A number of water companies that deliver water supplies to homes and businesses throughout the Este Subarea are currently pumping less than 50 percent of their allowed volume of water each year. As an example of the likely availability of water supplies we note that the Jubilee Mutual Water Company, the closest water producer to the proposed project, had an unused FPA of 114 af in 2009–2010. As noted, these producers pumped only about 68 percent of the PSY in 2009-2010.

These data indicate that there is every likelihood that local water producers have more than sufficient and available supplies to provide the proposed project with 11 to 15 af of water during construction and 1 to 2 afy throughout operations.

An alternate source of water may be treated water from the BBARWA wastewater treatment plant. Currently the BBARWA delivers more than 3,000 af of secondary treated wastewater to the Lucerne Valley in the Este Subarea via a pipeline along Camp Rock Road immediately adjacent to the proposed solar site. A proportion of the water is delivered to an alfalfa farm but much is excess water pumped into ponds (personal communication, (Steve Schindler, BBARWA General Manager). The Applicant's agent has contacted the BBARWA to investigate the potential use of treated water from the pipeline for construction, operations, or both.

3.2.4 Water Quality of Local Groundwater

The Final 2010 UWMP indicates that MWA water supplies meet all Environmental Protection Agency (EPA) and State water quality requirements. Based on water quality analyses of five wells in the Este subarea (4N/1E-5P2, 15R1, 17L1, 23K1, and 27D2) local groundwater has total dissolved solids (TDS) concentrations ranging from 275 to 467 milligrams per liter. These waters are within the Maximum Contaminant Level (MCL) limits for drinking water supplies. As noted above, the Applicant is exploring the potential use of treated wastewater.

SECTION 4.0
WATER RESOURCES QUANTIFICATION

4.1 DEMAND

No on-site groundwater extraction or production is proposed as part of the proposed project.

Approximately 11 to 15 af of water will be purchased during the 9-month construction period for dust control and ancillary activities.

Annual water consumption for the proposed solar project during operations will be approximately 1 to 2 afy for panel washing. The maximum volume of water needed (2 afy) is only about 0.03 percent of the PSY of the Este Subarea and represents the annual water use of only about 5 single family residences.

Water usage in this subarea over the past few years his historically been on the decline and has been far less than the PSY. During 2009–2010, local water producers in the Este Subarea had more than 14,000 af of unused Free Production Allowance and pumped less than 68 percent of the PSY.

Therefore, it is expected that available water supplies are more than adequate to serve the proposed project.

4.2 WATER QUALITY REPORT

Based on water quality analyses of five wells in the Este subarea, any locally produced groundwater purchased for project construction and/or operations is expected to have TDS concentrations ranging approximately from 275 to 467 milligrams per liter. These waters are within the MCL limits for drinking water supplies, although the project's needs (dust control during construction, panel washing during operations) do not require potable water.

Treated water from the BBARWA wastewater treatment plant is an alternate source. Water purchased from the BBARWA is secondary treated wastewater and is not suitable for drinking but is solely for the purpose of dust control and/or panel washing. If used, the Applicant will provide notice at the site that this water is not potable and not fit to drink.

FIGURES

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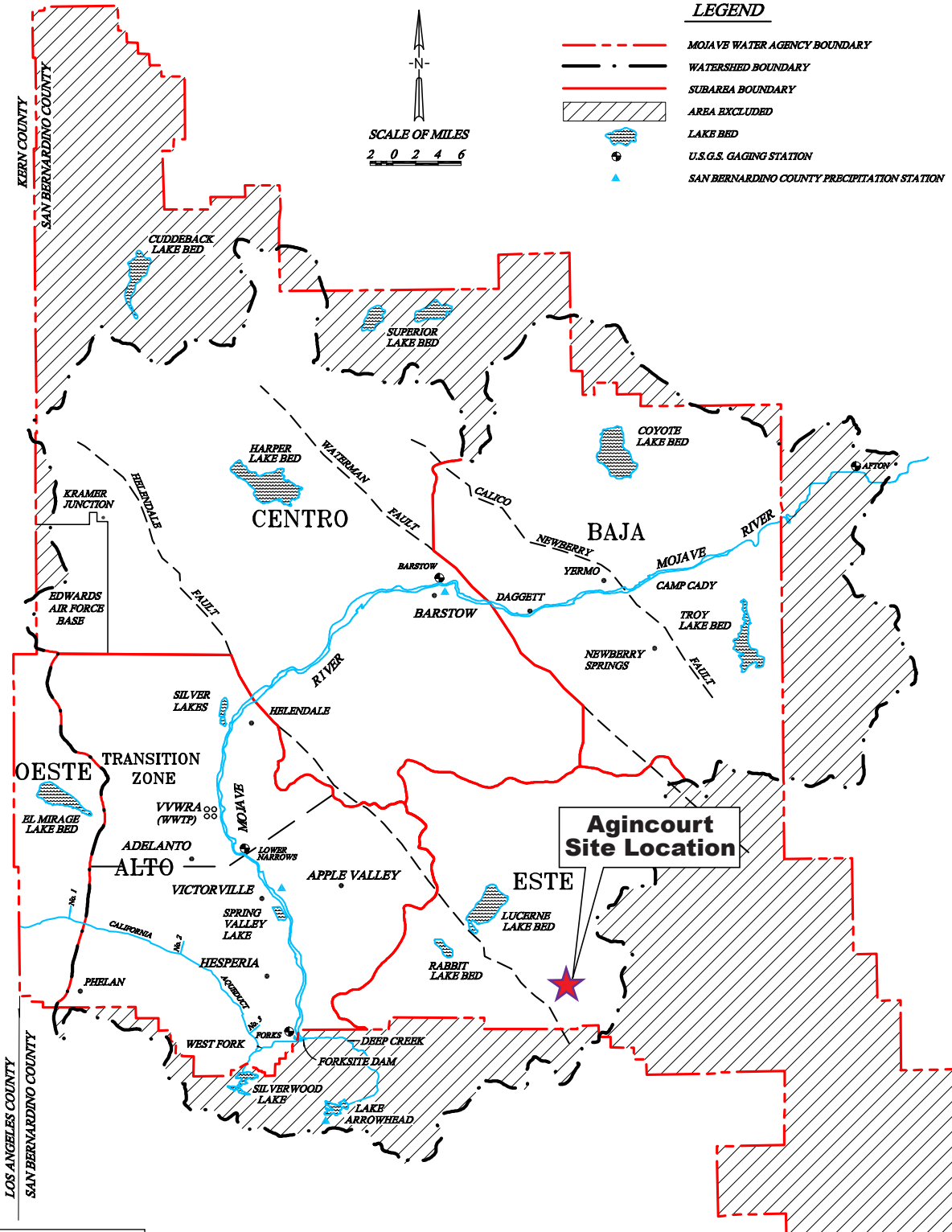
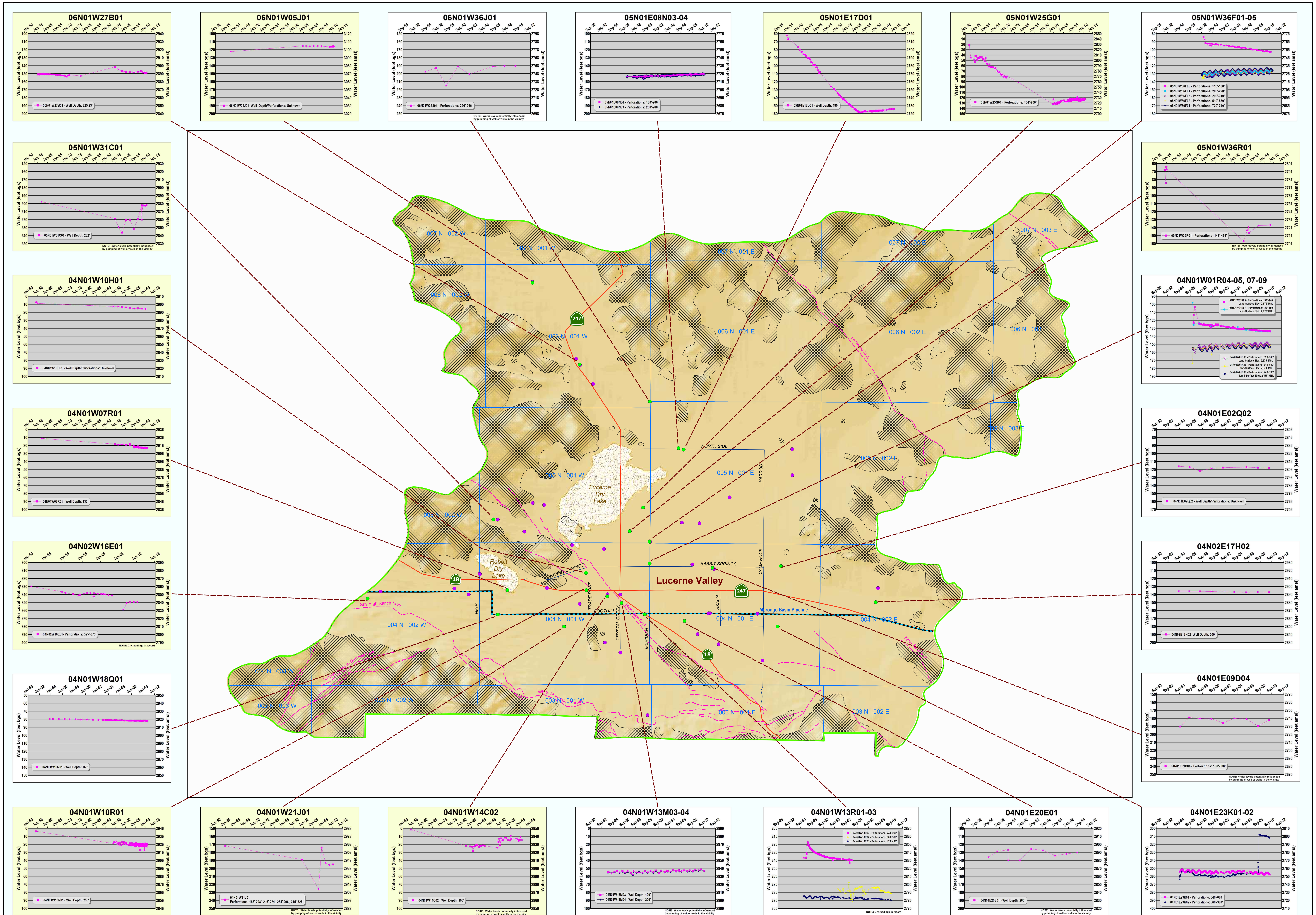


MOJAVE BASIN AREA

WDG Agincourt WSA **URS Corporation**	**Source:** Mojave Water Agency	**Figure 1.** MOJAVE GROUNDWATER BASIN SUBAREAS AND THE AGINCOURT PROJECT LOCATION	August 2011



Este Subarea Hydrographs

- Graphed Wells
- Wells in MWA monitoring program
- Morongo Basin Pipeline
- CA Geologic Faults (USGS)
- Non Water Bearing Areas (DWR Bulletin 84)

- Recent record
- Long-term record (begins ~1950 to ~ 1980)

0 1 2 4
Miles

N

Mojave Water Agency

Data Sources:
MWA, US Census,
USGS/NWIS,
DWR Bulletin 84 1967
Date: February 2011
Mojave Water Agency
Water Resources Department

EXHIBIT A
UNUSED FREE PRODUCTION ALLOWANCE OF WATER PRODUCERS IN THE ESTE SUBAREA

Source: Appendix B of the 2011 Watermaster report *(Seventeenth Annual Report of the Mojave Basin Area Watermaster, Water Year 2009–10)*

APPENDIX B

APRIL 08, 2011

PRODUCER REPLACEMENT WATER
AND
MAKEUP WATER OBLIGATIONS
AND
ASSESSMENTS DUE FOR 2009-10
(UNLESS OTHERWISE NOTED ALL AMOUNTS SHOWN ARE IN ACRE-FEET)

ESTE SUBAREA

		2009-10 FREE PRODUCTION ALLOWANCE										ASSESSMENTS DUE BY JULY 1, 2011 (AMOUNTS IN DOLLARS)		
PRODUCER	BASE ANNUAL PRODUCTION	BASE FREE PRODUCTION ALLOWANCE[1]	CARRYOVER FROM PREVIOUS YEAR[2]	TRANSFERS + OR (-) 2008-09 CARRYOVER[3]	TRANSFERS + OR (-) 2009-10 FPA[4]	TOTAL[5]	2009-10 VERIFIED PRODUCTION[6]	UNUSED FPA[7]	REPLACEMENT WATER OBLIGATION	PRODUCTION SUBJECT TO MAKEUP OBLIGATION[8]	MAKEUP WATER OBLIGATION[9]	REPLACEMENT WATER $395.00/AF	MAKEUP WATER N/A	TOTAL
ABDUL, HARRY AND ANITA	194	156	156	0	0	312	42	156	0	42	0.00	0.00	0.00	0.00
ABSHIRE, DAVID V.	24	20	20	0	0	40	1	20	0	1	0.00	0.00	0.00	0.00
ANDERSON, ROSS C. AND BETTY J.	34	28	28	0	0	56	0	28	0	0	0.00	0.00	0.00	0.00
AVILA, ANGEL AND EVALIA	573	459	459	0	0	918	273	459	0	273	0.00	0.00	0.00	0.00
BAR H MUTUAL WATER COMPANY	53	43	42	0	0	85	31	43	0	31	0.00	0.00	0.00	0.00
BELL, CHUCK	494	396	280	(28)	0	648	372	276	0	372	0.00	0.00	0.00	0.00
BRACHT, WILLIAM F. AND ALEXANDER, ALICIA M.	50	40	37	0	0	77	36	40	0	36	0.00	0.00	0.00	0.00
CAMPBELL FAMILY TRUST	597	478	478	0	0	956	0	478	0	0	0.00	0.00	0.00	0.00
CASA COLINA FOUNDATION	90	72	40	0	0	112	81	31	0	81	0.00	0.00	0.00	0.00
CENTER WATER COMPANY	40	32	10	0	0	42	40	2	0	40	0.00	0.00	0.00	0.00
CLUB VIEW PARTNERS	1,276	1,021	1,021	0	0	2,042	0	1,021	0	0	0.00	0.00	0.00	0.00
CROSS, SHARON I.	23	19	19	0	0	38	1	19	0	1	0.00	0.00	0.00	0.00
DAHLQUIST, GEORGE R.	594	476	476	0	0	952	0	476	0	0	0.00	0.00	0.00	0.00
DESERT DAWN MUTUAL WATER COMPANY	15	12	1	10	0	23	22	1	0	22	0.00	0.00	0.00	0.00
DESERT SPRINGS MUTUAL WATER COMPANY	78	63	21	0	0	84	54	30	0	54	0.00	0.00	0.00	0.00
DJC CORPORATION	66	53	53	0	0	106	0	53	0	0	0.00	0.00	0.00	0.00
GABRYCH, EUGENE	2,201	1,761	1,761	(91)	0	3,431	0	1,761	0	0	0.00	0.00	0.00	0.00
GAETA, MIGUEL AND MARIA	1,500	1,200	1,200	0	0	2,400	973	1,200	0	973	0.00	0.00	0.00	0.00
GAETA, TRINIDAD	512	410	410	0	0	820	136	410	0	136	0.00	0.00	0.00	0.00
GAYJIKIAN, SAMUEL AND HAZEL	102	82	82	0	0	164	2	82	0	2	0.00	0.00	0.00	0.00
GOLDEN STATE WATER COMPANY	178	143	28	0	0	171	173	0	2	171	0.00	790.00	0.00	790.00
GORDON ACRES WATER COMPANY	54	44	44	0	0	88	28	44	0	28	0.00	0.00	0.00	0.00
GUBLER, HANS	30	24	11	0	0	35	19	16	0	19	0.00	0.00	0.00	0.00
HAL-DOR LTD.	23	19	19	0	0	38	4	19	0	4	0.00	0.00	0.00	0.00
HANDLEY, DON R. AND MARY ANN	73	59	59	0	0	118	3	59	0	3	0.00	0.00	0.00	0.00
HARVEY, JEFFREY W. AND LISA M.	700	560	560	0	0	1,120	560	560	0	560	0.00	0.00	0.00	0.00
HERT, SCOTT	276	221	220	0	0	441	228	213	0	228	0.00	0.00	0.00	0.00
HI-GRADE MATERIALS COMPANY	442	354	354	0	0	708	83	354	0	83	0.00	0.00	0.00	0.00
HITCHIN LUCERNE, INC.	16	13	13	0	0	26	8	13	0	8	0.00	0.00	0.00	0.00
JO, MYUNG HYUN	28	23	13	0	0	36	28	8	0	28	0.00	0.00	0.00	0.00
JUBILEE MUTUAL WATER COMPANY	142	114	114	0	0	228	106	114	0	106	0.00	0.00	0.00	0.00
JUNIPER RIVIERA COUNTY WATER DISTRICT	37	30	0	29	0	59	66	0	7	59	0.00	2,765.00	0.00	2,765.00
KIM, JU SANG	30	24	24	0	0	48	0	24	0	0	0.00	0.00	0.00	0.00
LEE, DOO HWAN	78	63	63	0	0	126	0	63	0	0	0.00	0.00	0.00	0.00
LOPEZ, BALTAZAR	385	308	308	0	0	616	0	308	0	0	0.00	0.00	0.00	0.00

SEE NOTES PAGE 18 OF 18

APPENDIX B

PRODUCER REPLACEMENT WATER
AND
MAKEUP WATER OBLIGATIONS
AND
ASSESSMENTS DUE FOR 2009-10
(UNLESS OTHERWISE NOTED ALL AMOUNTS SHOWN ARE IN ACRE-FEET)

ESTE SUBAREA

		2009-10 FREE PRODUCTION ALLOWANCE										ASSESSMENTS DUE BY JULY 1, 2011 (AMOUNTS IN DOLLARS)		
				TRANSFERS + OR (-)						PRODUCTION				
PRODUCER	BASE ANNUAL PRODUCTION	BASE FREE PRODUCTION ALLOWANCE[1]	CARRYOVER FROM PREVIOUS YEAR[2]	2008-09 CARRYOVER[3]	2009-10 FPA[4]	TOTAL[5]	2009-10 VERIFIED PRODUCTION[6]	UNUSED FPA[7]	REPLACEMENT WATER OBLIGATION[8]	SUBJECT TO MAKEUP OBLIGATION[9]	MAKEUP WATER OBLIGATION	REPLACEMENT WATER $395.00/AF	MAKEUP WATER N/A	TOTAL
LUA, MICHAEL T. AND DONNA S.	348	279	279	0	0	558	0	279	0	0	0.00	0.00	0.00	0.00
LUCERNE VALLEY MUTUAL WATER COMPANY	54	44	34	0	0	78	35	43	0	35	0.00	0.00	0.00	0.00
LUCERNE VALLEY PARTNERS	1,213	971	971	0	0	1,942	0	971	0	0	0.00	0.00	0.00	0.00
LUCERNE VISTA MUTUAL WATER COMPANY	21	17	9	0	0	26	14	12	0	14	0.00	0.00	0.00	0.00
M.B. LANDSCAPING AND NURSERY, INC.	1,773	1,419	187	0	0	1,606	630	976	0	630	0.00	0.00	0.00	0.00
MITSUBISHI CEMENT CORPORATION	1,395	1,116	1,116	(52)	0	2,180	319	1,116	0	319	0.00	0.00	0.00	0.00
MONACO INVESTMENT COMPANY	70	56	56	0	0	112	0	56	0	0	0.00	0.00	0.00	0.00
MOSS, LAWRENCE W. AND HELEN J.	43	35	35	0	0	70	10	35	0	10	0.00	0.00	0.00	0.00
OMYA CALIFORNIA, INC.	23	19	19	0	0	38	14	19	0	14	0.00	0.00	0.00	0.00
PAK, KAE SOO AND MYONG HUI KANG	247	198	198	0	0	396	1	198	0	1	0.00	0.00	0.00	0.00
PETTIGREW, DAN	22	18	18	0	0	36	0	18	0	0	0.00	0.00	0.00	0.00
PETTIGREW, JAMES AND CHERLYN	500	400	400	0	0	800	81	400	0	81	0.00	0.00	0.00	0.00
REED, MIKE	58	47	20	0	0	67	4	47	0	4	0.00	0.00	0.00	0.00
ROBERTSON'S READY MIX	0	0	0	0	0	0	73	0	73	0	0.00	28,835.00	0.00	28,835.00
ROYAL WAY	200	160	160	0	0	320	36	160	0	36	0.00	0.00	0.00	0.00
SAN BERNARDINO COUNTY SERVICE AREA 29	40	32	0	0	0	32	60	0	28	32	0.00	11,060.00	0.00	11,060.00
SEALS, WILLIAM AND TIBBETT, VICKI SEALS	33	27	27	0	0	54	0	27	0	0	0.00	0.00	0.00	0.00
SON'S RANCH	140	112	112	0	0	224	44	112	0	44	0.00	0.00	0.00	0.00
SPECIALTY MINERALS, INC.	42	34	0	0	0	34	29	5	0	29	0.00	0.00	0.00	0.00
SPILLMAN, JAMES R. AND NANCY J.	23	19	19	0	0	38	7	19	0	7	0.00	0.00	0.00	0.00
THE CUSHENBURY TRUST, C/O SPECIALTY MINERALS, INC.	10	8	4	0	0	12	3	8	0	3	0.00	0.00	0.00	0.00
VIROSTECK, STEVE AND JULIE	56	45	45	0	0	90	2	45	0	2	0.00	0.00	0.00	0.00
VISOSKY, ESTATE OF JOSEPH F., SR.	1,120	896	896	0	0	1,792	0	896	0	0	0.00	0.00	0.00	0.00
WEISER, SIDNEY AND RAQUEL	90	72	33	36	0	141	112	29	0	112	0.00	0.00	0.00	0.00
WEST END MUTUAL WATER COMPANY	30	24	16	0	0	40	4	24	0	4	0.00	0.00	0.00	0.00
WILSHIRE ROAD PARTNERS	692	554	554	0	0	1,108	0	554	0	0	0.00	0.00	0.00	0.00
TOTAL	19,251	15,422	13,632	(96)	0	28,958	4,848	14,430	110	4,738	0.00	43,450.00	0.00	43,450.00

SEE NOTES PAGE 18 OF 18