#### Combined 7<sup>th</sup> and 8<sup>th</sup> Annual Report Of the Beaumont Basin Watermaster

August 1, 2012

Prepared for:

#### Beaumont Basin Watermaster

Prepared by:



23692 Birtcher Drive, Lake Forest California Tel: 949.420.3030 Fax: 949.420.4040 www.WildermuthEnvironmental.com

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	Acronyms, Abbreviations, and Initialisms
acre-ft	acre-feet
acre-ft/yr	acre-feet per year
Banning	City of Banning
Basin	Beaumont Basin
BCVWD	Beaumont-Cherry Valley Water District
Beaumont	City of Beaumont
du	dwelling unit
FY	fiscal year
IRWMP	Integrated Regional Water Management Program
Pass Agency	San Gorgonio Pass Water Agency
SMWC	South Mesa Water Company
STWMA	San Timoteo Watershed Management Authority
STWMP	San Timoteo Watershed Management Program
SWP	State Water Project
Watermaster	Beaumont Basin Watermaster
WEI	Wildermuth Environmental, Inc.
YVWD	Yucaipa Valley Water District



This Combined Seventh and Eighth Annual Report of the Beaumont Basin Watermaster (Watermaster) summarizes the activities and operations of Watermaster for fiscal year<sup>1</sup> (FY) 2009/10 and FY 2010/11.

#### 1.1 Background

In January 2001, based on a common interest in the San Timoteo Watershed, the Beaumont-Cherry Valley Water District (BCVWD), the City of Beaumont (Beaumont), the South Mesa Water Company (SMWC), and the Yucaipa Valley Water District (YVWD) formed the San Timoteo Watershed Management Authority (STWMA). Once formed, the STWMA began a watershed-wide, multi-phase effort to develop and implement a comprehensive San Timoteo Watershed Management Program (STWMP). Phase 1 of the STWMP included developing a description of the area's water resources, establishing goals to protect and enhance these resources, and affirming a management plan to accomplish said goals. This work is documented in the *San Timoteo Watershed Management Program, Phase 1 Report* (WEI, 2002) and its successor, the updated and re-titled *Integrated Regional Water Management Program for the San Timoteo Watershed* (IRWMP) (WEI, 2005). The goals established in Phase I include:

- Enhancing Basin water supplies
- Protecting and enhancing water quality
- Optimizing the management of STWMA area groundwater basins
- Protecting riparian habitat in San Timoteo Creek and protecting/enhancing habitat in the STWMA area
- Equitably distributing the benefits and costs of developing the IRWMP for the San Timoteo Watershed

The Phase 1 report also identified the initiatives and program elements necessary to achieve these goals. Program Element 5 called for the STWMA members to establish a groundwater management entity for the Beaumont Basin (Basin). The Basin encompasses approximately 26 square miles, has a safe yield of approximately 8,650 acre-feet (acre-ft), and a total storage capacity of over a million acre-ft. Two groups, representing Appropriator and Overlying interests in the Basin, began negotiations in May 2002 to implement this program element.

A Stipulated Agreement was developed and submitted to the Court as a result of the negotiations. Honorable Judge Gary Tranbarger of the Superior Court of the State of California for the County of Riverside signed the Judgment, titled "San Timoteo Watershed Management Authority, vs. City of Banning, et al." (Case No. RIC 389197), on February 4, 2004. Pursuant to the Judgment, the Court appointed a five-member Watermaster committee, consisting of representatives from each of the Appropriator parties: the City of Banning



<sup>&</sup>lt;sup>1</sup> The Watermaster fiscal year is July 1 through June 30.

(Banning), Beaumont, the BCVWD, the SMWC, and the YVWD. The effective date of the Judgment for accounting purposes is July 1, 2003.

The Court gave the responsibility of managing the Basin to Watermaster by approving the Stipulated Agreement but retained continuing jurisdiction should there be any future need to resolve difficult questions among the Parties.

#### **1.2 Watermaster Responsibilities**

Watermaster, in carrying out its duties, is responsible for providing a legal and practical means of ensuring that the waters of the Basin are put to maximum beneficial use by facilitating the conjunctive use of surface, ground, and supplemental waters. Watermaster's specific responsibilities are summarized below.

Administer the Beaumont Basin Judgment. Watermaster operates under the Judgment and a formal set of Rules and Regulations (and any revisions thereto), which were adopted on June 8, 2004. Together, the Judgment and the Rules and Regulations establish the procedures by which Watermaster accounts for the water resources of the Basin. To fund its operations, Watermaster collects both administrative and replenishment assessments from the Appropriator Parties. Each year, Watermaster publishes an Annual Report on its activities, which includes an accounting of production and recharge in the Basin.

**Maintain and Improve Water Supply.** Watermaster determines the amount of groundwater that each producer is entitled to pump annually without incurring a replenishment obligation. As needed, Watermaster facilitates the acquisition, recharge, and storage of supplemental water for replenishment and conjunctive-use purposes.

Approve Producer Activities. Producer Parties must notify and obtain approval, as necessary, from Watermaster for activities, such as recharging water, transferring or exchanging water, storing local water, and storing or recovering supplemental water.

**Develop and Administer a Well Policy.** Watermaster is responsible for developing a policy on the proper construction and abandonment of wells in the Basin. The Well Policy that is currently in effect was adopted as Resolution 2004-04, *A Resolution of the Beaumont Basin Watermaster Adopting Minimum Standards for the Construction, Reconstruction, Abandonment and Destruction of Groundwater Extraction Wells*, on July 20, 2004. With Resolution 2004-04, the Watermaster Committee adopted existing Riverside County Ordinance No. 682.3 and expanded it by requiring the installation of a "sounding tube" to facilitate the measurement of water levels on all wells constructed in the Basin after July 20, 2004.

Monitor and Understand the Basin. Watermaster collects data from the Appropriator Parties, and other cooperating agencies to expand its knowledge of how the Basin works in order to manage it more effectively. The Appropriator parties provide Watermaster with production, water level, and water quality data for their wells. Beaumont provides Watermaster with additional water level and water quality data collected at wells throughout the region as part of their Maximum Benefit Monitoring Program (see WEI, 2010). Watermaster also conducts a periodic ground surface survey to determine if land subsidence is occurring in the Basin, the last of which was conducted in March 2009 and was reported to



Watermaster in July 2009 (WEI, 2009). All of these data are periodically compiled into an Engineer's Report on the state of the Basin's water resources.

Maintain and Improve Water Quality. Watermaster coordinates and participates in local efforts to preserve the quality of groundwater in the Basin. It assists and encourages regulatory agencies to enforce water quality regulations that affect the Basin and its surrounding resources. Watermaster supports the Maximum Benefit Monitoring efforts in the Beaumont Management Zone and utilizes the results of these efforts when reporting regional water quality conditions in its Engineer's Report.

**Develop Contracts for Beneficial Programs and Services.** Watermaster is responsible for developing and entering into contracts for programs and services that are beneficial to the Basin on behalf of the Parties to the Judgment. This includes programs for conjunctively utilizing the Basin for the storage of supplemental water with other entities, such as the San Gorgonio Pass Water Agency (Pass Agency), and programs for the direct and/or indirect use of recycled water.

**Provide Cooperative Leadership.** Watermaster helps develop and implement regional scale programs for the management of the Basin and its surrounding resources.

#### **1.3 Watermaster Address**

For the purposes of conducting Watermaster business and maintaining records, Watermaster's official address remains as follows:

Office of the Watermaster Secretary C/O Beaumont-Cherry Valley Water District 560 Magnolia Avenue Beaumont, CA 92223

#### **1.4 Watermaster Website**

Watermaster maintains a website to communicate its activities to the Parties and the public. The website contains copies of the Judgment, the Rules and Regulations, Annual Reports, Engineer's Reports, meeting minutes, meeting agendas, and other relevant documents. The website address is www.beaumontbasinwatermaster.org. The YVWD manages the site.

#### **1.5 Mission Statement**

Watermaster adopted the following mission statement in October 2004:

"Watermaster's mission is to manage the yield of and storage within the Beaumont Basin to provide maximum benefit to the people dependent on it."



Watermaster continued to administer and implement the Judgment during its seventh and eighth years of operation. Watermaster's activities are discussed in more detail below by subject matter.

#### 2.1 Watermaster Committee Representatives and Staff

The Committee Representatives serving each Appropriator Party during FY 2009/10 and FY 2010/11 were as follows:

Banning, City of	Duane Burk, Director of Public Works
Beaumont, City of	Dave Dillon, Economic Development Director
Beaumont-Cherry Valley Water District	Anthony Lara, Interim General Manager
South Mesa Water Company	George Jorritsma, General Manager
Yucaipa Valley Water District	Joseph B. Zoba, General Manager

The Representatives listed below served as the Officers to the Watermaster Committee in FY 2009/10 and FY 2010/11:

Chairman	George Jorritsma
Vice Chairman	Dave Dillon
Secretary	Anthony Lara
Treasurer	Joseph B. Zoba

Mr. J. Andrew Schlange continued to serve as the Chief of Watermaster Services until his resignation from the position effective November 30, 2009. After Mr. Schlange's resignation, the Watermaster Committee elected not to seek out a new Chief of Watermaster Services. All Watermaster activities after November 30, 2009 were initiated and coordinated by the Committee members themselves.

Mr. Joseph S. Aklufi continued to serve as the Watermaster's Legal Counsel, and Mr. Mark J. Wildermuth of Wildermuth Environmental, Inc. (WEI) continued to serve as the Watermaster Engineer in FY 2009/10 and FY 2010/11.

#### 2.2 Watermaster Meetings

Meetings of the Watermaster Committee were held on the following dates:

September 15, 2009 April 14, 2010 May 11, 2010 September 14, 2010 April 7, 2011



Copies of the agendas and approved minutes from each of the above meetings can be viewed at Watermaster's website or by making a request to the Watermaster Secretary. Pursuant to Resolution 2009-001, all of Watermaster's public records are open for inspection during office hours, provided that a written request to inspect said records has been submitted.

#### 2.3 Resolutions

No resolutions were adopted by Watermaster during FY 2009/10 or FY 2010/11.

#### 2.4 Storage Applications and Agreements

The first applications and agreements to store unused appropriator production rights and supplemental water recharge were approved in FY 2005/06. During that year, Watermaster approved applications and agreements with Banning, BCVWD, SMWC, and YVWD to store up to 135,000 acre-ft of water in the Basin. Beaumont's first application and agreement to store water was approved by Watermaster in FY 2007/08, bringing the total approved storage allocation to 157,000 acre-ft. During FY 2009/10, Watermaster received four applications to increase the total storage allowed under the existing Storage Agreements with Banning, the BCVWD, Beaumont, and the YVWD, as summarized below. All of the applications to increase storage were approved, increasing the total storage allocation to 260,000 acre-ft. Watermaster has not yet executed amended Storage Agreements with the Parties to reflect the changes to their accounts. No applications to store water were received in FY 2010/11; however, the Pass Agency notified Watermaster of its interest in submitting an application for a storage agreement likely in FY 2011/12.

Appropriator	Authorized Storage Account as of July 1, 2009 (acre-ft)	Date of Application to Increase Storage Account	Requested Storage Account Increase (acre-ft)	Date of Application Approval	Authorized Storage Account as of July 1, 2011
Banning	40,000	April 16, 2010	40,000	Sept. 14, 2010	80,000
BCVWD	70,000	Sept. 15, 2009	10,000	May 11, 2010	80,000
Beaumont	22,000	April 19, 2010	8,000	Sept. 14, 2010	30,000
SMWC	20,000	n/a	n/a	n/a	20,000
YVWD	5,000	April 15, 2010	45,000	May 11, 2010	50,000
Total	157,000		103,000		260,000

#### 2.5 Rules and Regulations

Watermaster adopted its original Rules and Regulations of the Watermaster on June 8, 2004. The rules were adopted with an understanding that modifications would be considered as necessary. No changes to the Rules and Regulations were made in FY 2009/10 or FY 2010/11.



#### 2.6 Annual Audit

Under Part VI, Paragraph 6(b) of the Judgment, Watermaster's annual report of operations shall include an accounting and audit of all assessments and expenditures. Copies of the FY 2009/10 and FY 2010/11 Audit Reports have been included with this annual report as Appendix A.

#### 2.7 Active Party List

Under Part VII, Paragraph 1 of the Judgment, "[T]he Watermaster shall maintain, at all times, a current list of Parties to whom notices are to be sent and their addresses for the purposes of service. Watermaster shall also maintain a full current list of names and addresses of all Parties or their successors, as filed herein. Copies of such lists shall be available to any Person." These lists are commonly referred to as Watermaster's "Active Party List." A copy of the list has been included with this annual report as Appendix B. Under the Judgment, any Party that desires to be relieved of receiving notices regarding Watermaster activities can complete the Waiver of Notice and Designation of Address for Notice and Service portion of the form adopted by Watermaster.



#### Section 3 – Administration of the Judgment: Accounting for Production, Recharge, Transfers, and Storage

One of Watermaster's primary responsibilities is to account for the production, recharge, transfer, and storage activities of the Parties to the Judgment. The following sections detail the accounting of these activities for FY 2009/10 and FY 2010/11.

#### 3.1 Production

Watermaster is responsible for the tracking and accounting of groundwater production by all Appropriator and Overlying Parties named in the Judgment. Beaumont Basin producers who pump less than 10 acre-ft per year (acre-ft/yr), otherwise known as minimal producers, are exempt from the provisions of the Judgment unless otherwise ordered by the Court (Judgment Part III, Paragraph 4). Accordingly, Watermaster does not collect production information from minimal producers other than those participating in the Judgment. Figure 1 shows the locations of all wells that belong to the Appropriator and Overlying Parties of the Judgment.

#### 3.1.1 Appropriator Party Production

There are five Appropriator Parties: Banning, Beaumont, the BCVWD, the SMWC, and the YVWD. As stated in the Judgment, an Appropriator's annual production right consists of:

- "[T]he Appropriator's share of operating safe yield, plus
  - (1) any water acquired by an Appropriator from an Overlying Producer or other Appropriator pursuant to the Judgment,
  - (2) any water withdrawn from the Appropriator's storage account, and
  - (3) New Yield created by the Appropriator" (Part I, Paragraph 3B).

An Appropriator's annual production right represents the maximum quantity of water an Appropriator can produce from the Basin each year without incurring a replenishment obligation. It includes the Appropriator's share of the temporary surplus (Part I, Paragraph 3M), defined in the Judgment as "the amount of groundwater that can be pumped annually in excess of safe yield from a groundwater basin necessary to create enough additional storage capacity to prevent the waste of water" (Part I, Paragraph 3BB). The temporary surplus in the Basin was decreed to be 160,000 acre-ft, was allocated over the first ten years of the physical solution at 16,000 acre-ft/yr, and was split among the Appropriators in accordance with their respective percentage shares of the unused safe yield.

Table 1a shows monthly and annual production, the share of operating safe yield, and the amount of unused water that is eligible for storage by each Appropriator for FY 2009/10. Table 1b shows the same data for FY 2010/11. During FY 2009/10, the Appropriators pumped a total of 12,537 acre-ft of water. Production was down in FY 2009/10 by about eight percent compared to FY 2008/09. During FY 2010/11, the Appropriators pumped a total of 11,115 acre-ft of water. Production in FY 2010/11 was down by about 11 percent compared to FY 2009/10 and 18 percent compared to FY 2008/09. All metered groundwater



production data for FY 2003/04 through 2010/11 is contained in an Access database that has been included with this report as Appendix C.

#### 3.1.2 Overlying Party Production

Producers who pump groundwater for overlying uses and are Parties to the Judgment are defined as Overlying Producers. Overlying Producers are assigned a share of the Basin's safe yield and may not use more than five times their share of the safe yield in any five-year period (Part II, Paragraph 1A).

During FY 2005/06, the Watermaster Engineer reported that several Overlying Producers' wells were not metered or that their meters may not have been working properly. The Watermaster Engineer recommended using a water duty method that is routinely used to estimate production in the absence of metered production. The water duty method estimates production based on the type of use (indoor, outdoor, and industrial). Watermaster accepted the water duty method and the subsequent production estimates made in FY 2005/06, subject to the receipt of more accurate information from the affected Overlying Producers. During FY 2007/08, an updated water duty method, developed by the Watermaster Engineer, was used to estimate production for Overlying Producers with unmetered wells.

During FY 2009/10 and 2010/11, only 5 of the 17 Overlying Parties to the Judgment metered and reported their monthly or annual groundwater production. The water duty method developed in FY 2007/08 was used to estimate production for each unmetered Overlying Producer in FY 2009/10 and 2010/11.<sup>2</sup> A detailed description of the water duty method has been included with this report as Appendix D.

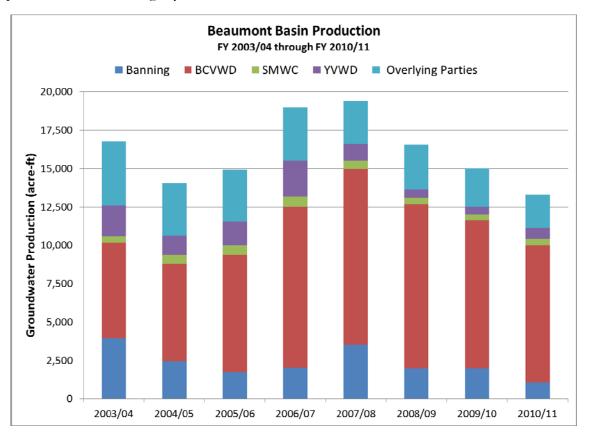
Table 2a shows a summary of annual production, the share of operating safe yield, and the amount of unused water for each Overlying Producer for FY 2009/10. Table 2b shows the same data for FY 2010/11. During FY 2009/10, the Overlying Producers pumped an estimated 2,500 acre-ft of water. Estimated production was down in FY 2009/10 by about 14 percent compared to FY 2008/09. During FY 2010/11, the Overlying Producers pumped an estimated 2,183 acre-ft of water. Estimated production in FY 2010/11 was down by about 13 percent compared to FY 2009/10 and 25 percent compared to FY 2008/09. All metered and estimated groundwater production data for FY 2003/04 through 2010/11 is contained in an Access database that has been included with this report as Appendix C.



<sup>&</sup>lt;sup>2</sup> Production values were not reported by Oak Valley Partners (OVP) for either FY 2009/10 or FY 2010/11. This was the first time the OVP did not report production to Watermaster, which typically included meter reads for one well and estimates of production for two additional wells (the estimates by OVP were previously deemed appropriate for use by the Watermaster in lieu of the water duty method used for other overlying parties). For this draft report, the average production reported by OVP for FY 2006/07 through FY2008/09 was used for FY2009/10 and FY 2010/11. Watermaster does not have sufficient information to apply the water duty method described in Appendix D for the OVP given the large area of land owned and varied water uses (domestic, commercial, and agricultural).

#### 3.1.3 Eight-Year Production Summary

Table 3 shows the annual production summary for each Party since FY 2003/04. During the eight years since the adjudication of the Basin, a total of 129,037 acre-ft of water has been pumped. Of this, 104,150 acre-ft (81 percent) was pumped by Appropriator Producers, and 24,887 acre-ft (19 percent) was pumped by Overlying Producers. The minimum annual production during the eight-year period was 13,299 acre-ft in FY 2010/11, and the maximum production was 19,405 acre-ft in FY 2007/08. Total production in the Basin has steadily decreased each year since the maximum production value in FY 2007/08. The average production across all eight years is 16,130 acre-ft.



#### 3.2 Recharge

Pursuant to Section 5 of the Watermaster Rules and Regulations, all groundwater recharge activities in the Basin shall be subject to Watermaster's review and approval. There are three types of water being recharged in the Basin: supplemental imported State Water Project (SWP) water, supplemental recycled water, and new yield stormwater. Table 4 summarizes the annual groundwater recharge from all supplemental and new yield sources in the Basin since FY 2003/04. Daily groundwater recharge data for FY 2003/04 through FY 2010/11 is contained in an Access database that has been included with this report as Appendix C.



#### 3.2.1 State Water Project (SWP) Water Recharge

Currently, there is one facility in operation that recharges SWP water imported by the Pass Agency to the Basin: the BCVWD's Noble Creek facility, located east of Beaumont Avenue between Brookside Avenue and Cherry Valley Boulevard. The location of the recharge facility is shown in Figure 1.

The BCVWD began recharging SWP water in September 2006, and has since recharged about 24,664 acre-ft pursuant to the storage and recharge agreements on file with Watermaster. A total of 4,918 acre-ft was recharged in FY 2009/10 and 7,254 acre-ft was recharged in FY 2010/11.

The City of Banning began recharging SWP water at the BCVWD's Noble Creek facility in July 2008 and has since recharged 3,600 acre-ft of water pursuant to the storage agreement on file with Watermaster. As of June 30, 2011, Banning has not submitted an application for recharge with Watermaster. A total of 1,200 acre-ft was recharged in FY 2009/10, and 1,200 acre-ft was recharged in FY 2010/11.

SWP water is also recharged at the Little San Gorgonio Creek Spreading Ponds, which are located immediately to the north and outside of the northeastern boundary of the adjudicated Basin boundary (along the Banning Fault-see Figure 1). The Little San Gorgonio Creek Spreading Ponds are operated by the Pass Agency. Water recharged at this facility may be a source of supplemental yield to the Basin. However, Watermaster has not adopted a finding as such; therefore, this water cannot be exploited by Watermaster or any individual Party as water in the Basin until an investigation has been conducted to determine if some or all of this water recharges the Beaumont Basin and a formal finding has been made. The Pass Agency began recharging SWP water in August 2003 and has since recharged about 6,700 acre-ft at the Little San Gorgonio Creek Spreading Ponds. A total of 829 acre-ft was recharged in FY 2009/10, and 1,683 acre-ft was recharged in FY 2010/11.

#### 3.2.2 Recycled Water Recharge

In March 2010, pursuant to its Waste Discharge permit with the Regional Board (R8-2009-0002), Beaumont began discharging recycled water from Wastewater Treatment Plant No. 1 to Discharge Point (DP) 007 located on an unnamed tributary of Marshall Creek (see Figure 1). A portion of the recycled water discharged at DP-007 flows into and recharges the Basin. Prior to March 2010, all of Beaumont's recycled water was discharged at DP-001 in Cooper's Creek where it infiltrates into the San Timoteo Management Zone, which is outside of the Basin. Thus, recycled water discharged to DP-007 that flows into and infiltrates the Basin is considered a new recharge source for which the City may obtain credit pursuant to the storage agreement on file with Watermaster. A technical demonstration of the amount of recharge to the Basin will need to be prepared and accepted by Watermaster for the City to obtain credit for the recharge. Watermaster has yet to approve a methodology for the required technical demonstration. Once a technical demonstration has been made and approved, the City will retroactively receive credit for all recharge to the Basin since March 2010.



#### 3.2.3 New Yield Stormwater Recharge

Pursuant to Part VI Paragraph 5.V of the Judgment, recharge of new, locally generated water shall be accounted for by Watermaster and credited to the Party that creates the new recharge for all projects constructed after February 20, 2003. The City of Beaumont continues to recharge local waters to the Basin; however, Watermaster has yet to develop rules and regulations regarding the methodology to quantify and credit the New Yield. Upon the development of the New Yield rules, Watermaster will compute and credit all New Yield dating back to February 20, 2003 if applicable.

#### 3.3 Water Transfers and Adjustments of Rights

Pursuant to Section 7 of the Watermaster Rules and Regulations, Watermaster shall maintain an accounting of all water transfers and adjustments of rights by and between the Appropriator and Overlying Parties. Watermaster accounts for three types of transfers: the transfer of water rights and/or water in storage between Appropriators, the transfer of water rights from Overlying Producers in exchange for water service by an Appropriator Party, and the allocation of unused Overlying Water.

#### **3.3.1 Transfers between Appropriators**

An Appropriator may transfer to another Appropriator all or any portion of its production right or water in storage that is surplus to its needs. On January 8, 2008, the SMWC and the BCVWD entered into a water transfer agreement, providing the BCVWD with the option to purchase all SMWC water, or a portion thereof, that is not pumped or designated for storage by the SMWC, termed "available water." Each year the SMWC will compute the amount of "available water" and offer it to the BCVWD for purchase prior to offering it to any other party. This agreement is effective through February 4, 2014. During FY 2010/11, the BCVWD purchased 3,500 acre-ft of "available water" in storage from the SMWC. The purchase agreement and records of transfer are on file with Watermaster.

#### **3.3.2 Transfers of Overlying Rights for Service by an Appropriator**

The Judgment (Part III, Paragraph 3) provides that to the extent any Overlying Party requests and uses its adjudicated water rights to obtain water service (potable or non-potable) from an Appropriator Party, an equivalent volume of groundwater shall be earmarked for use by the Appropriator Party, which will serve the Overlying Party, up to the volume of the Overlying Water Right as reflected in Exhibit B of the Judgment. Section 7.1 of the Watermaster Rules and Regulations requires that the Overlying Pumper and Appropriator complete and file a Notice of Adjustment of Rights (Watermaster Form 5) with Watermaster. As of June 30, 2011, Watermaster has not received any notices for the adjustment of water rights.

The BCVWD verbally notified Watermaster that it is serving water to Overlying Parties and will be submitting the documentation necessary to compute the appropriate transfer amount, retroactive to the time that service to each Overlying Party commenced. Once this transfer is complete, Watermaster will need to recompute the allocation of unused Overlying Water to



the Parties (see Section 3.3.3).

#### **3.3.3** Allocation of Unused Overlying Water

On September 9, 2009, Watermaster adopted Rule & Regulation 7.8, entitled *Availability of Unused Overlying Production and Allocation to the Appropriator Parties.* The objective of Rule & Regulation 7.8 is to define the process for allocating, to the Appropriator Parties, the volume of water that was not produced by the Overlying Parties pursuant to their production rights. So long as an Overlying Party's groundwater production does not exceed five times their share of the safe yield in any five-year period, the amount of groundwater not produced by that Overlying Party becomes available for allocation to the Appropriator Parties. The aggregate unused Overlying production rights will be based on each appropriator's share of the operating safe yield, as shown in Exhibit C of the Judgment, and will have no impact on the legal water right held by the Overlying Parties in subsequent years. Table 5 summarizes the volume of unused Overlying water for FY 2003/04 through FY 2010/11. Table 6 shows the allocation of unused Overlying water to each Appropriator per their shares of the safe yield and the schedule of allocation outlined in the Rules and Regulations.

In FY 2009/10, a total of 5,235 acre-ft of unproduced Overlying water from FY 2004/05 was allocated to the Appropriator Parties. The 6,150 acre-ft of unproduced Overlying water for the FY 2009/10 period will be allocated to the Appropriator Parties in FY 2014/15.

In FY 2010/11, a total of 5,278 acre-ft of unproduced Overlying water from FY 2005/06 was allocated to the Appropriator Parties. The 6,467 acre-ft of unproduced Overlying water for the FY 2010/11 period will be allocated to the Appropriator Parties in FY 2015/16.

#### 3.4 Storage Accounting

Pursuant to Section 6.7 of the Watermaster Rules and Regulations, Watermaster shall calculate additions, extractions, and losses of all water stored, and any losses of water supplies or safe yield that result from such water stored, and keep and maintain an annual accounting thereof for public record. As of June 30, 2011, Watermaster has not developed a methodology to estimate losses of water in storage.

Table 7 is a reconciliation of each Appropriator's storage account from FY 2003/04 through FY 2010/11. The groundwater pumping, supplemental water recharge, local water recharge, allocation of unused Overlying water, and other transfer activities discussed in the preceding sections of this report are included in the storage accounting contained in Table 7. At the beginning of FY 2009/10, the total volume of water in all storage accounts was 33,666 acre-ft. As of June 30, 2011, the volume of water in all storage accounts is 67,098 acre-ft. No Party incurred a replenishment obligation in either FY 2009/10 or FY 2010/11.

#### 3.5 Change in Groundwater Levels in the Beaumont Basin

Figure 2 shows the change in groundwater levels observed at 8 wells in the Basin compared against annual production and recharge for the July 1, 2003 through June 30, 2011 period. In



general, water levels have declined across the Basin. A slight rebound in groundwater elevations was observed at a few wells during FY 2010/11 and may be the result of decreasing production, increasing recharge, or both. A more detailed assessment of the changes in groundwater elevations and storage will be contained in Watermaster's next Basin Condition Report (Engineer's Report).

#### **3.6 Recommendations**

Watermaster should prioritize the following activities to ensure the accurate accounting of production, transfers, recharge, and storage:

- Develop a policy to account for the recharge of waters to the Basin, including supplemental imported water and recycled water and new-yield stormwater. At a minimum, this policy should address who is responsible for preparing the technical demonstration of the amount of recharge to the Basin (e.g. Watermaster or the Party seeking credit for recharge), the process by which Watermaster will review and approve the recharge credit, and the schedule for completing the necessary documentation to ensure that recharge credits are reflected in Watermaster's annual reporting for the year the recharge activities occurred. Some guidelines are already included in Section 5 of the Watermaster Rules and Regulations but should be amended to provide more clarity to the process.
- Develop a policy to account for transfers of water that result from an Appropriator Party providing water service to an Overlying Party. At a minimum, this policy should address the data needed to compute the transfer amount, the process by which Watermaster will review and approve the transfer, and the schedule for completing the necessary documentation to ensure that such transfers are reflected in Watermaster's annual reporting for the year the transfer activities occurred. Some guidelines are already included in Section 7 of the Watermaster Rules and Regulations but should be amended to provide more clarity to the process.

Secondary to the two activities prioritized above, Watermaster should revisit the Rules and Regulations to ensure that the document is consistent with the requirements of the Judgment and with the practical aspects of accounting for production, recharge, transfers, and storage. Watermaster adopted its original Rules and Regulations in June 2004, and they were developed as a guiding document to administer the Judgment and to outline the protocols to be followed by the Parties to assist Watermaster and its staff in the accounting of production, recharge, transfers, and storage. The Rules and Regulations were developed with an understanding that modifications would be considered as necessary—as was done in 2009. In the preparation of this Combined Seventh and Eighth Annual Report, several circumstances were identified where the Rules and Regulations were not being followed as originally envisioned. The following is a summary of such inconsistencies:

• Watermaster has not prepared a Basin Condition report per the prescribed bi-annual frequency (Rules and Regulations, Section 2.13).



- Watermaster has not performed a meter maintenance program to ensure accurate reporting of groundwater production (Rules and Regulations, Sections 3.1b and 3.1c).
- All Producers are not regularly reporting production to Watermaster (Rules and Regulations, Section 3.2). WEI recommends that Producers who pump in excess of 10 acre-ft per year report their production on a monthly or quarterly basis to the Watermaster Secretary. All Parties who pump less than 10 acre-ft per year should report their production annually. Recharge should also be reported to the Watermaster Secretary on a monthly or quarterly basis.
- Watermaster has yet to develop a methodology for estimating New Yield (stormwater) recharges to the Basin (Rules and Regulations, Section 4.2).
- Watermaster has yet to develop a methodology for estimating losses of water in storage (Rules and Regulations, Section 4.3).
- Watermaster has not enforced the submittal of applications to recharge supplemental or new yield water in the Basin prior to accounting for said recharges (Rules and Regulations, Sections 5.0, 5.1, 5.2, and 5.3, and Form 3).
- Watermaster has not developed and executed Groundwater Storage Agreements per the criteria defined in the Rules and Regulations (Rules and Regulations, Section 6.4 and Forms 1 and 2).
- Watermaster has not enforced the submittal of applications for the recapture of water in storage by Appropriators as a means of precluding a replenishment obligation (Rules and Regulations, Section 6.1 and Form 4).
- Watermaster has not enforced the submittal of notices of transfers prior to accounting for said transfers. (Rules and Regulations, Sections 7.1, 7.2, 7.3, and 7.4, and Forms 5, 7, and 8)

Finally, Watermaster has not filed its annual reports with the Court; this is typically done in adjudicated basins where the Court maintains continuing jurisdiction, as is the case for the Beaumont Judgment. The Watermaster Board should make a formal determination whether or not it should file the annual reports with the Court.



- Superior Court of the State of California for the County of Riverside. (2004). Judgment Pursuant to Stipulation Adjudicating Groundwater Rights in the Beaumont Basin. Gary Tranbarger, Judge of the Superior Court. Case No. RIC 389197, February 4, 2004.
- Wildermuth Environmental, Inc. (2002). San Timoteo Watershed Management Program, Final Phase 1 Report.
- Wildermuth Environmental, Inc. (2005). Integrated Regional Water Management Program for the San Timoteo Watershed.
- Wildermuth Environmental, Inc. (2009). Land Subsidence Monitoring Program, Spring 2009.
- Wildermuth Environmental, Inc. (2011). Maximum Benefit Monitoring Program 2010 Annual Report.



Water Production Reported by Appropriator Producers<sup>1</sup> Well Name Jun October November February July August September December January March April May Banning, City of 31.3 3.0 0.5 0.7 1.7 0.3 Well C2-A 36.8 0.5 0.0 2.6 0.4 Well C3 107.4 90.7 66.0 51.8 61.0 41.6 35.4 12.7 8.9 49.4 119.2 107 96.4 9.3 6.4 2.9 0.6 Well C4 156.1 156.2 1.5 3.4 0.4 0.5 2.0 2.7 3.3 0.3 Well M3 10.5 73.5 77.0 1.1 0.2 7.3 0.2 11 66.6 Production from BCVWD<sup>2</sup> 63.7 65.8 59.3 0.0 61.6 66.2 64.1 66.8 17.3 0.0 Subtotal 366.9 389.7 340.2 130.3 129.6 119.6 106.3 72.6 39.0 50.6 120.2 119 **Beaumont-Cherry Valley** Water District Well 1 123.8 105.8 93.6 68.1 45.5 29.9 36.7 50.6 53.3 48.2 73.9 98 Well 3 133.4 94.0 59.6 38.1 44.3 57.3 57.2 11 165.7 159.5 60.7 91.1 2.6 Well 16 103.9 103.2 100.8 59.8 18.7 0.0 0.3 1.2 0.5 0.0 Well 21 253.2 208.7 200.5 88.4 0.0 163.2 113.8 0.0 0.0 0.0 0.0 Well 22 0.0 0.0 0.0 13.9 50.3 62.2 52.4 43.0 41.6 20.0 6.4 1 203 Well 23 0.1 0.0 0.0 0.0 21.6 88.8 96.5 45.7 106.0 156.3 182.2 228.5 233.0 178.5 127.2 293.4 166.2 226.2 219 Well 24 221.4 190.4 110.2 148.8 249.1 32.6 217.5 217.2 25.2 12.5 25.2 44.1 191 Well 25 17.5 0.0 155.0 20.7 69.7 144 Well 26 171.9 168.2 162.4 126.2 135.0 85.9 59.3 97.2 150.6 126.8 132.3 97.1 92.6 51.5 39.1 0.0 89 Well 29 117.2 0.0 0.0 0.5 Production for Banning<sup>2</sup> -61.6 -66.2 -64.1 -66.8 -63.7 -66.6 -65.8 -59.3 -17.3 0.0 0.0 982.8 465.3 485.1 Subtotal 1,361.4 1,076.9 963.4 869.0 412.0 494.6 591.8 885.9 1,07 South Mesa Water Company 36.8 46.4 42.6 28.8 16.6 23.0 32.1 3rd No. 4 Well 39.2 20.4 18.1 14.9 52 Subtotal 36.8 39.2 46.4 42.6 28.8 20.4 18.1 14.9 23.0 32.1 52 16.6 Yucaipa Valley Water District 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Well 35 0.0 Well 48 89.3 67.3 76.0 50.6 34.5 10.1 6.4 0.9 21.5 18.0 59.6 84 Subtotal 89.3 67.3 76.0 50.6 34.5 10.1 6.4 0.9 21.5 18.0 59.6 84 Total 1,854.3 1,573.1 1,445.4 1,186.9 1.061.9 615.4 542.7 583.0 562.1 683.3 1,097.9 1,33

Table 1aAppropriator Producer Production Summary for Fiscal Year 2009/10(acre-ft)

2 -- Pursuant to Part I, Paragraph 3B of the Judgment, and a separate agreement (a copy of which is on file with the Watermaster)

Water Eligible	Share of	Total	
for Storage	Operating Safe Yield	Production	ne
		78.0	0.3
		751.1	07.0
		434.2	0.6
		189.6	1.4
		531.5	0.0
3,044.7	5,029	1,984.3	9.3
		828.0	98.7
		1,077.5	6.5
		391.4	0.6
		1,027.8 301.1	0.0 1.3
		900.2	1.3 )3.0
		2,343.0	9.2
		1,187.6	91.8
		1,391.4	4.3
		746.6	39.6
		-531.5	0.0
0.0	6,802	9,663.2	<b>'</b> 5.0
		371.2	52.4
1,624.8	1,996	371.2	52.4
		0.0	0.0
		518.3	34.2
1,654.8	2,173	518.3	34.2
6,324.2	16,000.0	12,537.0	1.0



Table 1bAppropriator Producer Production Summary for Fiscal Year 2010/11(acre-ft)

				Wa	ater Productio	n Reported by	Appropriat	or Producers	1				Total	Share of	Water Eligible for Storage
Well Name	July	August	September	October	November	December	January	February	March	April	Мау	June	Production	Operating Safe Yield	
Banning, City of															
Well C2-A	1.6	1.3	9.6	8.4	0.9	1.0	0.4	0.6	1.2	0.3	0.3	12.5	38.0		
Well C3	113.8	120.6	114.8	47.1	76.1	38.1	24.5	24.7	41.9	59.0	107.5	111.8	879.9		
Well C4	3.5	22.3	14.3	0.3	1.6	1.1	0.9	0.9	1.4	1.2	1.0	3.5	51.9		
Well M3	30.5	21.4	1.9	3.5	0.4	1.8	0.5	0.3	0.4	0.3	0.6	10.7	72.2		
Production from BCVWD <sup>2</sup>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Subtotal	149.3	165.6	140.5	59.3	78.9	42.0	26.3	26.5	45.0	60.7	109.5	138.4	1,042.0	5,029	3,987.0
Beaumont-Cherry Valley Water District															
Well 1	115.0	87.5	116.1	68.5	46.3	14.3	7.1	0.5	20.5	20.8	66.4	75.7	638.7		
Well 3	155.6	119.1	73.7	0.0	0.0	0.0	0.0	6.6	19.6	12.0	70.0	83.6	540.1		
Well 16	2.5	0.5	0.7	1.5	0.7	0.9	1.7	0.0	0.0	0.0	1.3	1.7	11.4		
Well 21	0.0	0.0	7.2	0.0	1.5	0.0	0.0	0.0	0.0	0.0	105.7	159.8	274.2		
Well 22	69.1	42.5	80.4	9.0	4.6	1.4	2.8	0.0	0.0	2.8	5.8	0.0	218.3		
Well 23	271.3	217.3	296.4	146.1	101.6	108.1	84.6	78.2	43.8	6.1	130.7	172.0	1,656.1		
Well 24	243.5	178.7	255.7	88.3	128.1	141.4	206.4	161.6	116.5	167.6	139.2	163.7	1,990.7		
Well 25	250.0	209.1	196.7	138.3	66.8	11.0	0.3	2.7	10.0	116.2	136.1	30.8	1,167.8		
Well 26	159.9	124.0	167.1	66.6	96.8	90.8	127.4	113.1	77.8	108.8	119.7	111.9	1,363.8		
Well 29	165.8	131.7	177.9	92.7	86.9	50.2	0.0	6.8	65.8	91.0	109.9	132.6	1,111.1		
Production for Banning <sup>2</sup>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Subtotal	1,432.7	1,110.3	1,371.8	611.0	533.1	418.1	430.1	369.5	354.0	525.2	884.7	931.7	8,972.1	6,802	0.0
South Mesa Water Company															
3rd No. 4 Well	53.8	58.2	56.5	32.5	32.4	14.5	18.3	16.8	19.9	20.7	30.2	42.5	396.4		
Subtotal	53.8	58.2	56.5	32.5	32.4	14.5	18.3	16.8	19.9	20.7	30.2	42.5	396.4	1,996	1,599.6
Yucaipa Valley Water District															
Well 35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Well 48	127.4	115.6	137.3	43.3	33.6	23.6	27.4	23.4	22.3	33.7	50.2	67.0	704.8		
Subtotal	127.4	115.6	137.3	43.3	33.6	23.6	27.4	23.4	22.3	33.7	50.2	67.0	704.8	2,173	1,468.2
Total	1,763.2	1,449.8	1,706.1	746.1	678.0	498.2	502.1	436.2	441.2	640.3	1,074.6	1,179.7	11,115.3	16,000.0	7,054.8

2 -- Pursuant to Part I, Paragraph 3B of the Judgment, and a separate agreement (a copy of which is on file with the Watermaster)



Table 2a
Overlying Producer Production Summary for Fiscal Year 2009/10
(acre-ft)

Valid Name         Value of the large									(00)	e-it)									
Sectors Water M.         Yes	Well Name	Metered	ladar	August	Contombor			-			March	A	Mov	lune		Water	Allocation	Production	
And the value         Vare         0.0	Bockman Walter M	Vos													10.2				
Oak values relations         Yes         0.0         0.0         7.8         0.5         0.1         0.5         0.1         0.5         0.1         0.5		165	1.0	2.2	1.5	0.0	0.0	0.1	0.0	0.1	0.5	0.2	0.5	0.0	10.2	75.0	04.0	575.0	57.5
Ode: Marcial 2014         Yes	•	Vee	0.0	0.0	76.0	0.6	40.4	0.0	5.0	7.0	0.5	6.1	F7 0	24.6	246.2				
Subtrod         Vinot         1047         1047         1047         6.8         17.7         7.8         32.5         21.4         92.8         67.5         67.3         95.00         27.70         47.50         32.85.7           Mein Properises         No																			
Same data watery Partners, LP* Singenom Ranch #S Singenom Ranch #S Singenom Ranch #S Singenom Ranch #S         No         No<	Subtotal	163													-	950.0	271.7	4,750.0	3,855.7
Singless Ranch 2 ingless Ranch 2 Singless Ranch 2 S	Merlin Properties	No													1.6	550.0	548.4	2,750.0	8.0
Singless Ranch 2 ingless Ranch 2 Singless Ranch 2 S	Oak Vallev Partners. LP⁵																		
Irrigions Solving       No		No													300.0				
Subicial         Let         Let         Let         Let         Let         Let         Let         Let         Let         State	Singleton Ranch #7	Yes													1.0				
Plantation on the Lake LLC <sup>4</sup> Yes         36.8         34.9         34.0         <	Irrigation Stokes	No													10.0				
Rancho Calimosa Mobile Home Park         No         Far and a set allow of same marking of same marki	Subtotal														311.0	1,806.0	1,495.0	9,030.0	1,720.3
Non-         No.         No. </td <td>Plantation on the Lake <math>LLC^{6}</math></td> <td>Yes</td> <td>36.8</td> <td>34.0</td> <td>34.0</td> <td>34.0</td> <td>34.0</td> <td>34.0</td> <td>34.0</td> <td>12.4</td> <td>12.4</td> <td>24.3</td> <td>25.6</td> <td>33.2</td> <td>348.6</td> <td>581.0</td> <td>232.4</td> <td>2,905.0</td> <td>1,738.3</td>	Plantation on the Lake $LLC^{6}$	Yes	36.8	34.0	34.0	34.0	34.0	34.0	34.0	12.4	12.4	24.3	25.6	33.2	348.6	581.0	232.4	2,905.0	1,738.3
Shorodale Mesa Owners Association Weil No.2 Weil No.2 Subtotal         Yes Yes (No.2)         No.2 7.8 (No.2)         No.2 7.8 (No.2)         No.2 7.8 (No.2)         No.2 7.7 (No.2)         <	Rancho Calimesa Mobile Home Park	No													69.3	150.0	80.7	750.0	345.5
Weil No.1 Weil No.2 Weil No.2 Weil No.2 Subtotal         Yes Yes         88 76 76 76 165         100 76 78 76 76 76 76 76 76 76 76 76 76 76 76 76	Roman Catholic Bishop of San Bernardino <sup>7</sup>	No													0.0	154.0	154.0	770.0	58.3
Weil No.2       Yes       7.8       8.3       8.5       7.4       6.0       4.6       5.1       1.5       2.9       4.9       6.3       7.8       7.10       2000       3.55       1.000       88.3         Subtorial       Yes       7.6       18.5       18.5       18.5       15.7       13.0       6.5       5.5       6.0       13.7       17.6       17.6       141.7       20.0       3.55       11.00       68.3       3.5       13.7       13.7       13.7       14.7       14.7       20.0       5.55       16.0       17.6       13.7       14.7       14.7       20.0       5.55       16.0       17.6       13.7       14.7       14.7       20.0       5.55       15.0       1	Sharondale Mesa Owners Association																		
Subtotal       Inf.	Well No.1	Yes	8.8	10.2	9.7	8.4	7.0	1.7	0.1	1.5	3.0	3.1	7.4	9.8	70.7				
Base Analysis of Club <sup>8</sup> Weil D Weil D Subtrate         Yes Yes         130 150 960         150 00 150 150         130 00 150         150 150         130 00         150 150         130 00         130 00         1400 150         1300 000         1400         1300 000         1300 150         1300 160         1400         1400         6383           Stanty-Cal Egg and Poultry Company         No         -         -         -         -         -         -         -         -         -         1,0000         6383           Nikodinov, Nick         No         -         <	Well No.2	Yes	7.8	8.3	8.5	7.4	6.0	4.6	5.1	1.5	2.9	4.9	6.3	7.8	71.0				
Weil A       Yes       130       450       320       240       6.0       2.0       2.0       7.0       1.0       3.0       3.0       160       1750       1750       1750       1750       1750       1750       1750       1750       1750       1750       1750       1750       1750       1700       1100       1250       69.0       56.0       7.0       16.0       140       59.0       55.0       6.0       7755.0       7755.0       6.0       7755.0       6.0       775.0       775.0       775.0       775.0       775.0       775.0       775.0       775.0       775.0       775.0       775.0       775.0       775.0       775.0       775.0       775.0       775.0 <td>Subtotal</td> <td></td> <td>16.5</td> <td>18.5</td> <td>18.2</td> <td>15.7</td> <td>13.0</td> <td>6.3</td> <td>5.3</td> <td>3.1</td> <td>5.8</td> <td>8.0</td> <td>13.7</td> <td>17.6</td> <td>141.7</td> <td>200.0</td> <td>58.3</td> <td>1,000.0</td> <td>883.2</td>	Subtotal		16.5	18.5	18.2	15.7	13.0	6.3	5.3	3.1	5.8	8.0	13.7	17.6	141.7	200.0	58.3	1,000.0	883.2
Weil C Weil D Subtrati       Yes Yes       0.0	East Valley Golf Club <sup>8</sup>																		
Well D       Yes       83.0       15.0       110.0       125.0       69.0       56.0       7.0       16.0       14.0       59.0       55.0       6.0       755.0       2.000       11,200       11,000       6,383.1         Stearns, Leonard M. and Dorothy D.       No       No       I       Image: Stearns, Leonard M. and Dorothy D.       No       No       Image: Stearns, Leonard M. and Dorothy D.       Image: Stearns, Le	Well A	Yes	13.0	45.0	32.0	24.0	6.0	2.0	23.0	7.0	1.0	3.0	3.0	16.0	175.0				
Subtrain       96.0       200.0       142.0       149.0       75.0       58.0       23.0       15.0       62.0       58.0       22.0       93.0.0       2,20.0       1,27.0.0       1,100.0       6,383.2         Stearns, Leonard M. and Dorothy D.       No       No       Image: Stearns, Leonard M. and Dorothy D.       No       Image: Stearns, Leonard M. and Dorothy D.       Image: Stearns, Leonard M. and Dorot	Well C	Yes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Stearns, Leonard M. and Dorothy D.       No       1,000.0       1,000.0       5.4         Stunny-Cal Egg and Poultry Company       No       2.6       1,439.5       1,436.9       7,197.5       13.4         Albor Properties III, LP <sup>9</sup> No       2.3       300.0       2297.8       1,500.0       21.9         Nikodinov, Nick       No       0.0       0.0       0.0       0.0       3.4         McAmis, Ronald L.       No       0.0       0.0       0.0       0.0       3.00       297.8       1,500.0       21.9         Aldama, Nicolas and Amalia       No       0.0       0.0       0.0       0.0       0.0       3.00       297.8       1,500.0       21.9       3.00       297.8       1,500.0       21.9       3.00       297.8       1,500.0       21.9       3.00       20.0       1.93.0       21.9       3.00       20.0       1.93.0       21.9 <td< td=""><td>Well D</td><td>Yes</td><td>83.0</td><td>155.0</td><td>110.0</td><td>125.0</td><td>69.0</td><td>56.0</td><td>7.0</td><td>16.0</td><td>14.0</td><td>59.0</td><td>55.0</td><td>6.0</td><td>755.0</td><td></td><td></td><td></td><td></td></td<>	Well D	Yes	83.0	155.0	110.0	125.0	69.0	56.0	7.0	16.0	14.0	59.0	55.0	6.0	755.0				
Sunny-Cal Egg and Poultry Company       No         Albor Properties III, LP <sup>9</sup> No         No       Cal         No       No         McAmis, Ronald L.       No         Aldama, Nicolas and Amalia       No         No       No         Sutierrez, Hector and Luis       No         No       No         No       No         No       No         Sutierrez, Hector and Luis       No         No       No         No       No         No       No         Sutierrez, Hector and Luis       No         No       No         No       No         No       No         Sutierrez, Hector and Luis       No         No	Subtotal		96.0	200.0	142.0	149.0	75.0	58.0	30.0	23.0	15.0	62.0	58.0	22.0	930.0	2,200.0	1,270.0	11,000.0	6,383.1
Albor Properties III, LP <sup>9</sup> No         Nikodinov, Nick       No         No       No         McAmis, Ronald L.       No         No       No         Aldama, Nicolas and Amalia       No         No       No         Sutierrez, Hector and Luis       No         No       No         No       No         No       No         Sutierrez, Hector and Luis       No         No       No         No       No         No       No         No       No         Sutierrez, Hector and Luis       No         No       No         No       No         No       No         No       No         Sutierrez, Hector and Luis       No         No       Intervintententententententententententententen	Stearns, Leonard M. and Dorothy D.	No													0.7	200.0	199.3	1,000.0	5.1
Nikodinov, NickNo $0$ $0$ $0$ $100$ $3.0$ McAmis, Ronald L.NoNo $0$ $0$ $0$ $0.$	Sunny-Cal Egg and Poultry Company	No													2.6	1,439.5	1,436.9	7,197.5	13.1
McAmis, Ronald L.       No       No       5.0       4.5       25.0       2.5         Aldama, Nicolas and Amalia       No       No       6.0       7.0       6.2       3.50       4.6       3.50       4.0         Gutierrez, Hector and Luis and Sebastian Monroy       No       No       No       No       No       1.0       8.66       5.00       4.50       6.50       4.50       6.50       4.50       6.50       4.50       6.50       4.50       6.50 </td <td>Albor Properties III, LP<sup>9</sup></td> <td>No</td> <td></td> <td>2.3</td> <td>300.0</td> <td>297.8</td> <td>1,500.0</td> <td>21.9</td>	Albor Properties III, LP <sup>9</sup>	No													2.3	300.0	297.8	1,500.0	21.9
Aldama, Nicolas and Amalia       No       No       6.2       35.0       4.0         Gutierrez, Hector and Luis and Sebastian Monroy       No       No       6.2       35.0       6.2 <td>Nikodinov, Nick</td> <td>No</td> <td></td> <td>0.7</td> <td>20.0</td> <td>19.3</td> <td>100.0</td> <td>3.6</td>	Nikodinov, Nick	No													0.7	20.0	19.3	100.0	3.6
Gutierrez, Hector and Luis and Sebastian Monroy       No       No       1.4       10.0       8.6       50.0       6.9         Darmont, Boris and Miriam       No       No       1.4       10.0       10.0       10.0       10.0       10.0       10.0       10.0       10.0       10.0       10.0       10.0 <t< td=""><td>McAmis, Ronald L.</td><td>No</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>0.5</td><td>5.0</td><td>4.5</td><td>25.0</td><td>2.7</td></t<>	McAmis, Ronald L.	No													0.5	5.0	4.5	25.0	2.7
And Sebastian Monroy       No       No       10.0       8.6       50.0       6.9         Darmont, Boris and Miriam       No       No       Image: Control of the second seco	Aldama, Nicolas and Amalia	No													0.8	7.0	6.2	35.0	4.0
	Gutierrez, Hector and Luis and Sebastian Monroy	No													1.4	10.0	8.6	50.0	6.9
otal 2 500 0 8 650 0 6 150 0 43 250 0 15 109	Darmont, Boris and Miriam	No													0.4	2.5	2.2	12.5	1.8
	Total														2,500.0	8,650.0	6,150.0	43,250.0	15,109.1

2 -- Total production was estimated for Overliers with un-metered wells. Please see Appendix E for a detailed demonstration of the water duty method.

3 -- The unused overlying allocation in 09/10 will be distributed to the Appropriators' storage accounts in fiscal 2014/15, according to their shares of the unused safe yield.

4 -- Data for Oak Valley #2 was formerly reported as the OVGC Comfort Stn. Well. OVGC Comfort Stn. has not been in use since the beginning of the adjudication and all data should have been assigned to Oak Valley #2.

5 -- Production values were not reported by Oak Valley Partners for 2009/10. For this draft report, the average production for FY 2006/07 through FY2008/09 used for the FY2009/10 and FY 2010/11 values. Information about OVP is not sufficient for performing the water duty method in Appendix D.

6 -- Plantation on the Lake only reported one meter read for the period covering August 2009 through January 2010. The reported production was divided evenly across this six-month period.

7 -- All structures on the land parcels owned by the Roman Catholic Bishop of San Bernardino have been demolished and the property is vacant.

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Table 2b
Overlying Producer Production Summary for Fiscal Year 2010/11
(acre-ft)

								(40)	e-it)						
Well Name	Metered				١	Vater Produ	ction by O	verlying P	roducers <sup>1</sup>					Total Production <sup>2</sup>	
		July	August	September	October	November	December	January	February	March	April	May	June	Production	
Beckman, Walter M. <sup>4</sup>	Yes	1.1	0.8	1.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.4	5.2	ĺ
California Oak Valley Golf and Resort LLC															
Oak Valley #1_	Yes	45.6	24.6	94.3	25.3	4.0	0.0	10.7	1.0	0.2	0.0	0.0	0.0	205.6	1
Oak Valley #2 <sup>5</sup>	Yes	41.4	59.1	4.4	0.1	30.4	9.2	0.3	9.6	0.6	15.4	72.2	12.6	255.1	1
Subtotal		87.0	83.7	98.7	25.4	34.3	9.2	11.0	10.6	0.8	15.4	72.2	12.6	460.7	
Merlin Properties	No													1.6	
Oak Valley Partners, LP <sup>6</sup>															
Singleton Ranch #5	No													300.0	1
Singleton Ranch #7	Yes													1.0	1
Irrigation Stokes	No													10.0	l I
Subtotal														311.0	
Plantation on the Lake LLC	Yes	33.2	39.5	20.3	49.9	28.9	23.5	16.1	23.4	15.9	20.7	24.1	34.3	329.7	
Rancho Calimesa Mobile Home Park	No													69.3	
Roman Catholic Bishop of San Bernardino <sup>7</sup>	No													0.0	
Sharondale Mesa Owners Association															
Well No.1	Yes	9.1	10.4	9.7	5.2	4.8	3.6	3.4	2.7	2.8	4.1	5.7	8.0	69.5	1
Well No.2	Yes	7.8	8.6	8.1	4.3	4.5	2.8	3.3	2.6	2.5	4.1	6.2	6.5	61.2	1
Subtotal		16.9	19.0	17.8	9.5	9.3	6.4	6.6	5.3	5.3	8.3	11.9	14.5	130.7	
East Valley Golf Club <sup>8</sup>															
Well A	Yes	20.0	14.0	28.0	12.0	11.0	3.0	3.0	4.0	0.0	17.0	5.0	20.0	137.0	1
Well C	Yes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	l I
Well D	Yes	222.0	72.0	98.0	112.0	32.0	25.0	23.0	40.0	18.0	26.0	45.0	16.0	729.0	1
Subtotal		242.0	86.0	126.0	124.0	43.0	28.0	26.0	44.0	18.0	43.0	50.0	36.0	866.0	1
Stearns, Leonard M. and Dorothy D.	No													0.7	
Sunny-Cal Egg and Poultry Company	No													2.6	
Albor Properties III, LP <sup>9</sup>	No													2.2	ĺ
Nikodinov, Nick	No													0.7	ĺ
McAmis, Ronald L.	No													0.5	
Aldama, Nicolas and Amalia	No													0.8	
Gutierrez, Hector and Luis	Nie														
and Sebastian Monroy	No													1.4	
Darmont, Boris and Miriam	No													0.4	ĺ
Total		I		l	1	1	I	I	1		I			2,183.4	

2 -- Total production was estimated for Overliers with un-metered wells. Please see Appendix E for a detailed demonstration of the water duty method.

3 -- The unused overlying allocation in 10/11 will be distributed to the Appropriators' storage accounts in fiscal 2015/16, according to their shares of the unused safe yield.

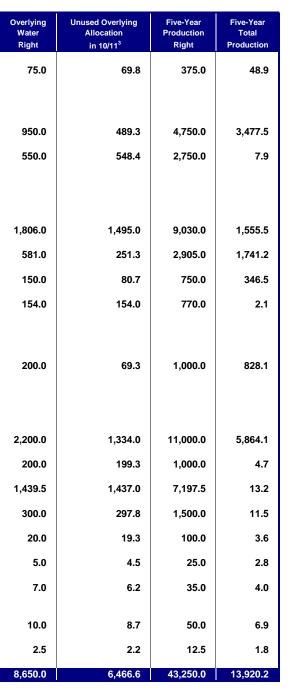
4 -- Only one meter read for the period covering Dec 2010 through Feb 2011 was reported; production was divided evenly across this three-month period. Only one meter read for the period covering Mar 2011 through May 2011 was reported; production was divided evenly across this three-month period. Only one meter read for the period covering Mar 2011 through May 2011 was reported; production was divided evenly across this three-month period. No meter read was reported for June 2011. A value of 0.4 acre-ft, which is the average production value for the July through May period, was entered as an estimated value.

5 -- Data for Oak Valley #2 was formerly reported as the OVGC Comfort Stn. Well. OVGC Comfort Stn. has not been in use since the beginning of the adjudication and all data should have been assigned to Oak Valley #2.

6 -- Production values were not reported by Oak Valley Partners for 2009/10. For this draft report, the average production for FY 2006/07 through FY2008/09 used for the FY2009/10 and FY 2010/11 values. Information about OVP is not sufficient for performing the water duty method in Appendix D. 7 -- All structures on the land parcels owned by the Roman Catholic Bishop of San Bernardino have been demolished and the property is vacant.

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# Table 3 Production Summary for Appropriator and Overlying Producers in the Beaumont Basin Fiscal Years 2003/04 through 2010/11 (acre-ft)

				Annual Pr	roduction				Total
	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	Production
Appropriator Parties									
Banning, City of	3,951.2	2,420.3	1,767.8	2,046.1	3,524.4	1,985.1	1,984.3	1,042.0	18,721.2
Beaumont-Cherry Valley Water District	6,204.3	6,386.0	7,624.9	10,455.5	11,429.5	10,711.8	9,663.2	8,972.1	71,447.2
South Mesa Water Company	419.8	558.0	632.4	691.4	576.9	410.9	371.2	396.4	4,057.1
Yucaipa Valley Water District	2,005.1	1,284.5	1,529.7	2,308.7	1,046.6	527.1	518.3	704.8	9,924.7
Subtotal	12,580.4	10,648.8	11,554.8	15,501.7	16,577.4	13,634.8	12,537.0	11,115.3	104,150.2
Overlying Parties									
Beckman, Walter M. <sup>1</sup>	22.0	21.3	14.2	9.3	11.1	13.2	10.2	5.2	106.4
California Oak Valley Golf and Resort LLC	1,227.4	635.0	839.0	767.9	778.0	792.5	678.3	460.7	6,178.9
Merlin Properties <sup>2</sup>	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	12.7
Oak Valley Partners, LP <sup>3</sup>	502.7	399.8	475.7	311.2	311.8	310.5	311.0	311.0	2,933.8
Plantation on the Lake LLC	321.4	312.7	326.8	372.2	332.3	358.4	348.6	329.7	2,702.1
Rancho Calimesa Mobile Home Park <sup>2</sup>	68.3	68.3	68.3	69.3	69.3	69.3	69.3	69.3	551.4
Roman Catholic Bishop of San Bernardino <sup>2</sup>	59.2	56.0	56.2	0.7	0.7	0.7	0.0	0.0	173.5
Sharondale Mesa Owners Association	169.1	162.8	185.8	194.8	171.0	189.9	141.7	130.7	1,345.9
East Valley Golf Club <sup>4</sup>	1,401.0	1,369.0	1,385.0	1,764.1	1,142.1	1,161.9	930.0	866.0	10,019.1
Stearns, Leonard M. and Dorothy D. <sup>2</sup>	1.1	1.1	1.1	1.1	1.1	1.1	0.7	0.7	8.0
Sunny-Cal Egg and Poultry Company <sup>2</sup>	405.0	387.6	2.5	2.7	2.7	2.6	2.6	2.6	808.3
Albor Properties III, LP <sup>2,5</sup>			12.6	2.4	2.3	2.3	2.3	2.2	24.1
Nikodinov, Nick <sup>2</sup>			0.7	0.8	0.7	0.7	0.7	0.7	4.3
McAmis, Ronald L. <sup>2</sup>			0.5	0.6	0.6	0.5	0.5	0.5	3.2
Aldama, Nicolas and Amalia <sup>2</sup>			0.8	0.9	0.8	0.8	0.8	0.8	4.8
Gutierrez, Hector, Luis Gutierrez and Sebastian Monroy <sup>2</sup>			1.3	1.4	1.4	1.4	1.4	1.4	8.2
Darmont. Boris and Miriam <sup>2</sup>			0.4	0.4	0.4	0.4	0.4	0.4	2.1
Subtotal	4,178.9	3,415.2	3,372.3	3,501.3	2,827.9	2,907.6	<b>2,500.0</b>	2,183.4	24,886.6
Gustolai	4,170.9	5,415.2	5,572.5	5,501.5	2,021.3	2,307.0	2,500.0	2,103.4	24,000.0
Total	16,759.3	14,064.0	14,927.2	19,002.9	19,405.3	16,542.5	15,037.0	13,298.7	129,036.8

1 -- Production estimated in 03/04, 04/05, and part of 05/06. Please see Appendix E for a detailed demonstration of the water duty method.

2 -- Production estimated in all years. Please see Appendix E for a detailed demonstration of the water duty method.

3 -- Production estimated in FY 209/10 and FY 2010/11. The average production for FY 2006/07 through FY2008/09 was used for the FY2009/10 and FY 2010/11 values. Information about OVP is not sufficient for performing water duty method.

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## Table 4Annual Supplemental Recharge to the Beaumont BasinFiscal Years 2003/04 through 2010/11

Veer	Supplemental Recharge (acre-ft)									
Year	Banning <sup>1</sup>	Beaumont <sup>2</sup>	BCVWD <sup>1</sup>	Total						
2003/04	0	0	0	0						
2004/05	0	0	0	0						
2005/06	0	0	0	0						
2006/07	0	0	6,462	6,462						
2007/08	0	0	3,248	3,248						
2008/09	1,200	0	2,783	3,983						
2009/10	1,200	0	4,918	6,118						
2010/11	1,200	0	7,254	8,454						
Totals	3,600	0	24,664	13,692						

1--SWP water recharged in the BCVWD Noble Creek Recharge Facility

2--The City of Beaumont is seeking credit for recycled water recharged in the Basin from DP-007 in the unnamed tributary to Marshall Creek. A technical demonstration of the amount of recharge in the Basin is pending.



# Table 5Summary of Unused Overlying WaterFiscal Years 2003/04 through 2010/11(acre-ft)

Watermaster Accounting Year	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11
Annual Overlying Water Right	8,650	8,650	8,650	8,650	8,650	8,650	8,650	8,650
Annual Overlying Production	4,179	3,415	3,372	3,501	2,828	2,908	2,500	2,183
Unused Overlying Water	4,471	5,235	5,278	5,149	5,822	5,742	6,150	6,467

Table 6Allocation of Unused Overlying WaterFiscal Years 2008/09 through 2015/16(acre-ft)

Appropriator Party	Share of Safe Yield	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
Banning, City of	31.43%	1,405	1,645	1,659	1,618	1,830	1,805	1,933	2,032
Beaumont, City of	0.00%	0	0	0	0	0	0	0	0
Beaumont Cherry Valley Water District	42.51%	1,901	2,225	2,244	2,189	2,475	2,441	2,614	2,749
South Mesa Water Company	12.48%	558	653	659	643	727	717	768	807
Yucaipa Valley Water District	13.58%	607	711	717	699	791	780	835	878
Total	100.00%	4,471	5,235	5,278	5,149	5,822	5,742	6,150	6,467



 
 Table 7

 Reconciliation of Appropriator Production and Storage Accounts -- Fiscal Years 2003/04 through 2010/11 (acre-ft)

	Storage			Additions to Storage Account								
	Account	Organistica	Groundwater		Unused			ntal Water		Total Additions	Ending	Authorized
Fiscal Year	Balance at Beginning of Fiscal Year	Operating Yield	Production for Fiscal Year	Production <sup>1</sup> Production	Transfers Among Appropriators			Local Recharge		Account Balance	Storage Account as of June 30, 2011	
Beaumont Cherry Valley												
Water District												
2003/04	0	6,802		598	0	0	0	0	0	598	598	
2004/05	598	6,802		416	0	0	0	0	0	416	1,014	
2005/06	1,014	6,802	7,625	-823	0	0	0	0	0	-823	191	
2006/07 <sup>2</sup>	191	6,802	10,455	-3,653	0	1,500	6,462	0	0	4,308	4,499	
2007/08 <sup>3</sup>	4,499	6,802	11,429	-4,627	0	2,500	3,248	0	0	1,120	5,620	
2008/09 <sup>3</sup>	5,620	6,802	10,712	-3,910	1,901	2,000	2,783	0	0	2,774	8,393	
2009/10	8,393	6,802		-2,861	2,225	0	4,918		0	4,283	12,676	
2010/11 <sup>3</sup>	12,676	6,802		-2,170	2,244	3,500	7,254		0	10,827	23,503	
City of Banning												
2003/04	0	5,029	3,951	1,078	0	0	0	0	0	1,078	1,078	
2004/05	1,078	5,029		2,609	0	0	0	0	0	2,609	3,686	
2005/06	3,686	5,029		3,261	0	0	0	0	0	3,261	6,948	
2006/07 <sup>2</sup>	6,948	5,029		2,983	0	1,500	0	0	0	4,483	11,431	
2007/08	11,431	5,029		1,505	0	0	0	0	0	1,505	12,935	
2008/09	12,935	5,029		3,044	1,405	0	1,200	0	0	5,649	18,584	
2009/10	18,584	5,029		3,045	1,645		1,200		0	5,890	24,474	
2010/11	24,474	5,029		3,987	1,659		1,200		0	6,846	31,320	80,000
City of Beaumont												
2003/04	0	0	0	0	0	0	0	0	0	0	0	
2004/05	0	0	0	0	0	0	0	0	0	0	0	
2005/06	0	0	0	0	0	0	0	0	0	0	0	
2006/07	0	0	0	0	0	0	0	0	0	0	0	
2007/08	0	0	0	0	0	0	0	0	0	0	0	
2008/09	0	0	0	0	0	0	0	0	0	0	0	
2009/10	0	0	0	0	0	0	0	0	0	0	0	
2010/11	0	0	0	0	0	0	0	0	0	0	0	30,000
South Mesa Water Company												
2003/04	0	1,996		1,576	0	0	0	0	0	<b>)</b>	1,576	
2004/05	1,576	1,996		1,438	0	0	0	0	0	1,438	3,014	
2005/06	3,014	1,996		1,364	0	0	0	0	0	1,364	4,378	
2006/07 <sup>2</sup>	4,378	1,996	691	1,305	0	-3,000	0	0	0	-1,695	2,682	
2007/08 <sup>3</sup>	2,682	1,996	577	1,419	0	-2,500	0	0	0	-1,081	1,601	
2008/09 <sup>3</sup>	1,601	1,996	411	1,585	558	-2,000	0	0	0	143	1,745	
2009/10	1,745	1,996		1,625	653		0	0	0	2,278	4,023	
2010/11	4,023	1,996		1,600			0	0	0		2,781	



 
 Table 7

 Reconciliation of Appropriator Production and Storage Accounts -- Fiscal Years 2003/04 through 2010/11 (acre-ft)

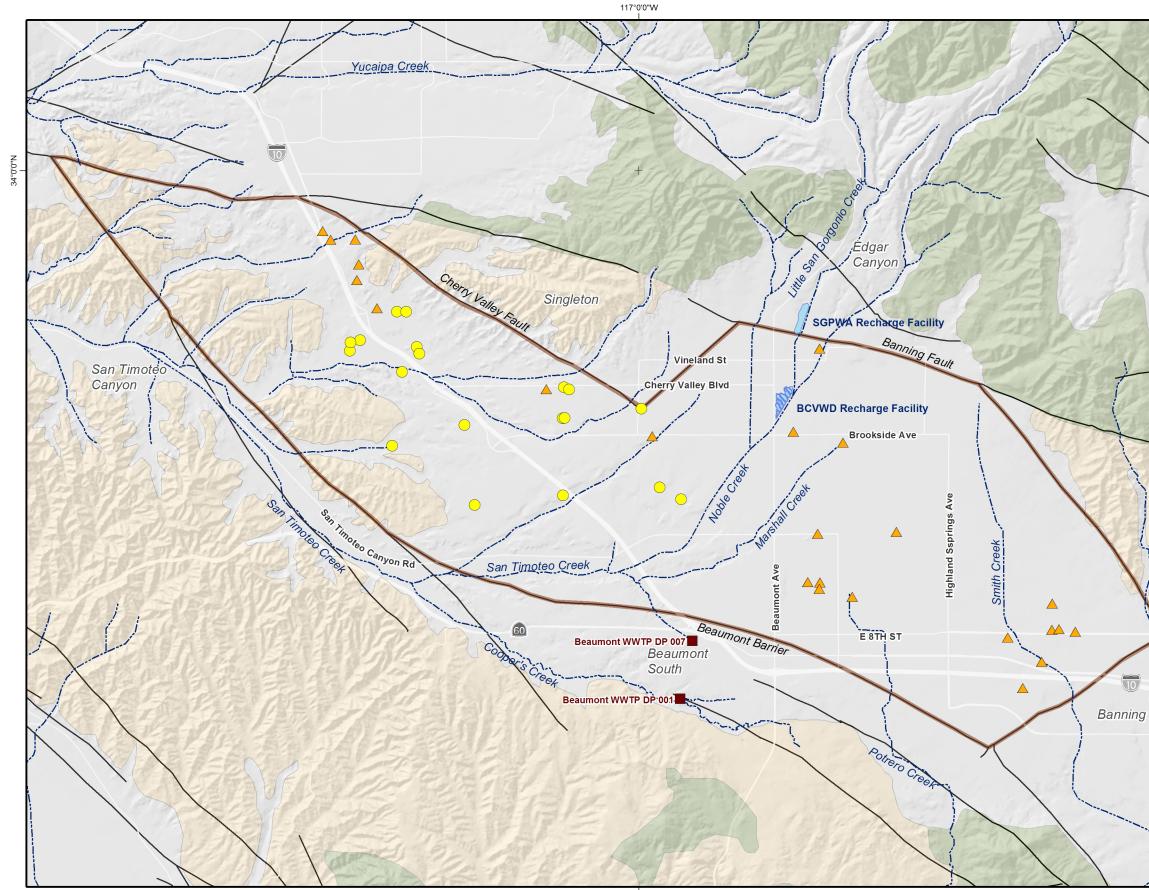
	Storage			Additions to Storage Account							Authorized	
	Account	Operating	Groundwater		Unused	Transfers	Suppleme	ntal Water		Total Additions	Ending	Storage
Fiscal Year	Balance at Beginning of Fiscal Year	Yield	Production for Fiscal Year	Under Production <sup>1</sup>	Overlying Production Allocation	Among Appropriators		Recycled Water Recharge	Local Recharge		Account Balance	Account as of June 30, 2011
Yucaipa Valley Water District 2003/04	0	2,173	2,005	168	0	0	0	0	0	168	168	
2003/04 2004/05	168	2,173		889	0	0	0	0	0	889	1,056	
2005/06	1,056	2,173	1,530	643	0	0	0	0	0	643	1,700	
2006/07	1,700	2,173		-136	0	0	0	0	0	-136	1,564	
2007/08 2008/09	1,564 2,691	2,173 2,173		1,126 1,646	0 607	0	0	0	0	1,126 2,253	2,691 4,944	
2008/09 2009/10	4,944	2,173		1,655	711	0	0	0	0	2,253	4,944 7,309	
2010/11	7,309	2,173		1,468	717	0	0	0	0	2,185	9,494	50,000
Totals												
2003/04	0	16,000		3,420	0	0	0	0	0	3,420	3,420	
2004/05	3,420	16,000		5,351	0	0	0	0	0	5,351	8,771	
2005/06	8,771	16,000		4,445	0	0	0	0	0	4,445	13,216	
2006/07	13,216	16,000		498	0	0	6,462		0	6,960	20,176	
2007/08	20,176	16,000		-577	0	0	3,248		0	2,671	22,847	
2008/09	22,847	16,000		2,365	4,471	0	3,983		0	10,819	33,666	
2009/10 2010/11	33,666 48,482	16,000 16,000		3,463 4,885	5,235 5,278	0	6,118 8,454		0	14,816 18,616	48,482 67,098	260,000
2010/11	40,402	10,000	11,113	4,005	5,270	0	0,434	0	0	10,010	07,090	200,000

1 -- Negative values of under production indicate that the appropriator pumped more than its share of the operating yield.

2 -- Water in the SMWC storage account was sold to Banning and the BCVWD. The transfer agreement is on file with the Watermaster.

3 -- Water in the SMWC storage account was sold to the BCVWD. The transfer agreement is on file with the Watermaster.

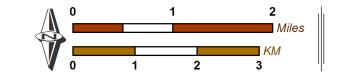




Produced by:

WILDERMUTH<sup>\*\*</sup> 

23692 Birtcher Drive Lake Forest, California 92630 949.420.3030 www.wildermuthenvironmental.com Author: SSA Date: 20111101 File: Figure\_1.mxd 117°0'0"W



**Beaumont Basin Watermaster** 7th & 8th Annual Report FY 2009/10 & FY 2010/11



#### **Beaumont Basin Wells**

Appropriator Party Wells

 $\bigcirc$ Overlying Party Wells

#### ZOther Features

Streams, Rivers, and Channels



Beaumont Basin Adjudicated Boundary



Imported Water Recharge Facility

Recycled Water Discharge Location

#### Geology

Water-Bearing Sediments



Unconsolidated to Semi-consolidated Quaternary Alluvium

Semi-consolidated San Timoteo Formation

Consolidated Bedrock



Undifferentiated Pre-Tertiary Igneous and Metamorphic Crystalline Rocks

#### Faults

----- Location Certain

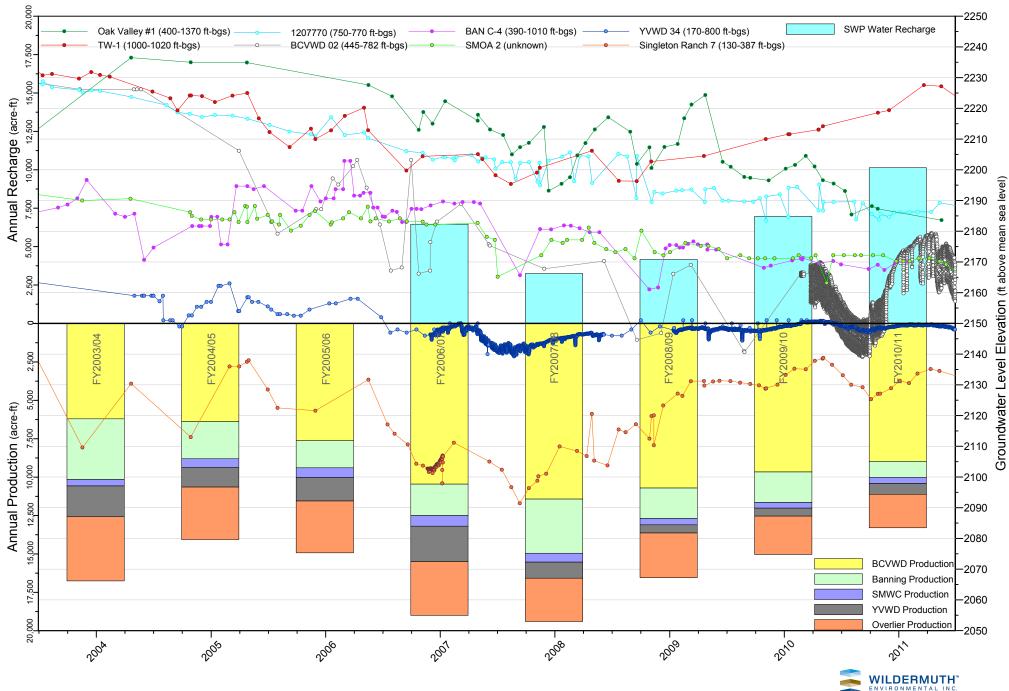
---?-- Location Uncertain

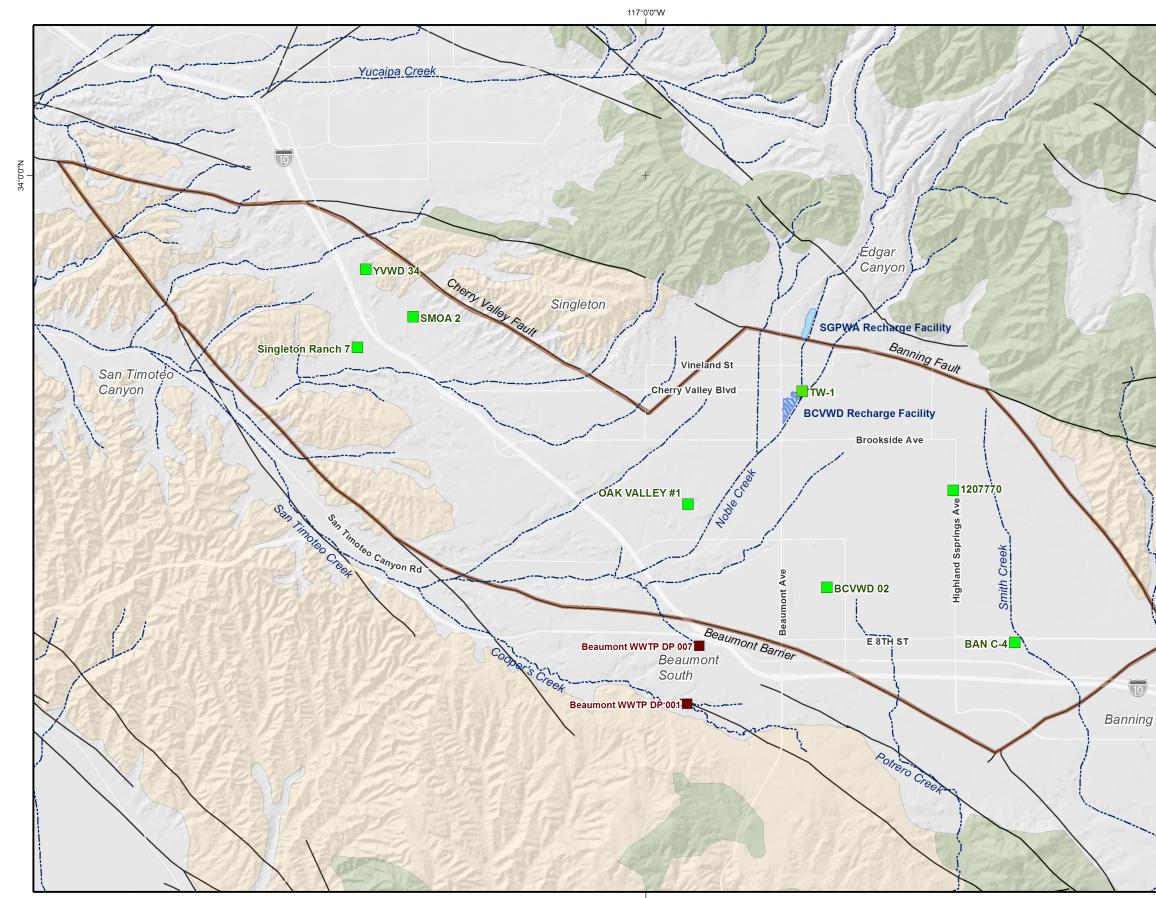
- Location Approximate ······· Location Concealed



#### Locations of Wells in the Beaumont Basin

Figure 2 Groundwater Levels, Production, and Recharge in the Beaumont Basin - FY2003/04 to FY2010/11

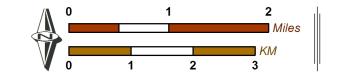




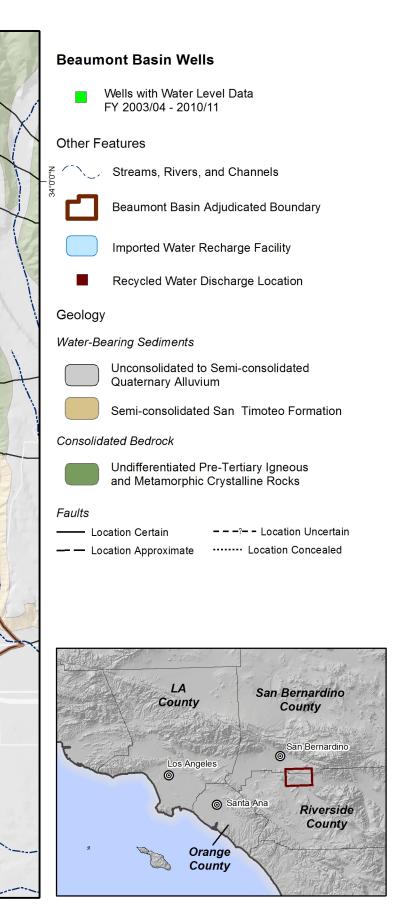
Produced by:

WILDERMUTH\* ENVIRONMENTAL INC 23692 Birtcher Drive

Lake Forest, California 92630 949.420.3030 www.wildermuthenvironmental.com Author: SSA Date: 20111101 File: Figure\_3.mxd 117°0'0"W



**Beaumont Basin Watermaster** 7th & 8th Annual Report FY 2009/10 & FY 2010/11



#### Locations of Wells used for the Water Level Change Analysis



FY 2009/10 Audit Letter FY 2010/11 Audit Letter

## **BEAUMONT BASIN WATERMASTER**

Auditors' Report And Financial Statements

For the Year Ended June 30, 2010

SIEBERT BOTKIN HICKEY & ASSOCIATES, LLP Certified Public Accountants



### Siebert Botkin Hickey & Associates, LLP

Watermaster Committee Beaumont Basin Watermaster Yucaipa, CA 92399

#### **Independent Auditors' Report**

We have audited the accompanying basic financial statements of the Beaumont Basin Watermaster, as of and for the year ended June 30, 2010. These financial statements are the responsibility of the management of Beaumont Basin Watermaster. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Beaumont Basin Watermaster, as of June 30, 2010, and the changes in financial position and cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America.

The Beaumont Basin Watermaster has not presented the management's discussion and analysis that accounting principles generally accepted in the United States of America require to supplement, although not to be a part of, the basic financial statements.

Siebert Botkin Hicky & Associates, LLP

July 16, 2010

#### **Beaumont Basin Watermaster**

Statement of Net Assets As of June 30, 2010

#### **ASSETS**

<u>CURRENT ASSETS</u>		
Cash and Cash Equivalents		\$ 25,152
<b>LIABILITIES and NE</b>	ET ASSETS	
<u>CURRENT LIABILITIES</u> Accounts Payable		 10,493

\$

14,659

<u>NET ASSETS</u>

Unrestricted

#### **Beaumont Basin Watermaster**

Statement of Activities For the Year Ended June 30, 2010

<u>REVENUES</u>	
San Timoteo Watershed Management Authority Special Project Funds	\$ 33,339
Interest Revenue	6
Total Revenues	 33,345
EXPENSES	
Administrative Expenses	
Chief of Watermaster Services	21,500
Meetings and Miscellaneous	6,815
Acquisition and Computation of Production Data/Annual Report	16,900
General Engineering	10,667
Groundwater Level Water Monitoring Program	9,840
Legal and Professional	6,063
Bank Charges and Miscellaneous	611
Total Expenses	72,396
Change in Net Assets	(39,051)
<u>NET ASSETS</u>	
Unrestricted Net Assets, Beginning of Year	53,710
Unrestricted Net Assets, End of Year	\$ 14,659

# **Beaumont Basin Watermaster**

Statement of Cash Flows For the Year Ended June 30, 2010

Cash Flows From Operating Activities:	
Cash Received from San Timoteo Watershed Management Authority	\$ 33,339
Cash Paid to Vendors for Services and Supplies	(79,894)
Net Cash Used By Operations	(46,555)
Cash Flows From Investing Activities: Interest Earned on Operating Funds	6
Net Cash Provided by Investing Activities	 6
Net Decrease in Cash	(46,549)
Cash and Cash Equivalents at Beginning of Year	71,701
Cash and Cash Equivalents at End of Year	\$ 25,152

# **Beaumont Basin Watermaster**

Notes to Financial Statements For the Year Ended June 30, 2010

## NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

### **Description of Operations:**

The Beaumont Basin Watermaster is the entity charged with administering adjudicated water rights and managing groundwater resources within the Beaumont Groundwater Basin. It was created on February 4, 2004 by a Judgment entered in the Superior Court of the State of California for the County of Riverside (Case No. RIC 389197). Pursuant to the Judgment, the Watermaster Committee is comprised of representatives from the City of Banning, the City of Beaumont, the Beaumont-Cherry Valley Water District, the South Mesa Mutual Water Company, and the Yucaipa Valley Water District.

The Watermaster's area of jurisdiction, which is also known as the adjudicated boundary, overlies a portion of the Santa Ana River Watershed. San Timoteo Creek, which is a tributary to the Santa Ana River, is one of the major surface streams traversing the area as well as portions of Little San Gorgonio Creek and Noble Creek.

## Basis of Presentation:

The Beaumont Basin Watermaster's financial statements have been prepared in accordance with Accounting Principles Generally Accepted in the United States of America (GAAP) as applied to governmental units. The Governmental Accounting Standards Board (GASB) is the accepted standard setting body for establishing governmental accounting and financial reporting principles.

The Watermaster is considered a single activity special-purpose government. A single proprietary fund is used to report all of the Watermaster's financial activities.

Financial reporting is based upon all Governmental Accounting Standards Board (GASB) pronouncements, as well as the Financial Accounting Standards Board Statements and Interpretations, Accounting Principles Board Opinions, and Accounting Research Bulletins that were issued on or before November 30, 1989 that do not conflict with or contradict GASB pronouncements. FASB pronouncements issued after November 30, 1989 are not followed in the preparation of the accompanying financial statements.

## Basis of Accounting:

The Beaumont Basin Watermaster uses the accrual method of accounting for financial statement reporting purposes. Under the accrual method revenues are recognized when they are earned, and expenses are recognized when they are incurred.

## <u>Reporting Entity:</u>

The Watermaster has defined its reporting entity in accordance with GASB Statement No. 14, "The Financial Reporting Entity," which provides guidance for determining which governmental activities, organizations, and functions should be included in its reporting entity. The Watermaster's reporting entity includes all significant operation and revenue sources for which the Watermaster Committee exercises oversight responsibility as determined under the criteria established by the National Council on Governmental Accounting Statement No. 3, as adopted by FASB. Oversight responsibility is determined on the basis of selection of the governing board, designation of management, ability to significantly influence operations, accountability for fiscal matters, and the scope of public service.

### Income Taxes

The Watermaster is exempt from federal income and state franchise taxes.

### Cash and Cash Equivalents:

For purposes of the statement of cash flows, cash equivalents includes time deposits, certificates of deposit, and all highly liquid debt instruments with original maturities of three months or less. The Watermaster maintains bank accounts at financial institutions located within the State of California.

# **Beaumont Basin Watermaster**

Notes to Financial Statements For the Year Ended June 30, 2010

## NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued):

### Net Assets/Fund Equity

The financial statements are presented using the net asset method. Net assets are categorized as invested capital assets (net of related debt), restricted and unrestricted. The Watermaster reports only unrestricted net assets.

- Unrestricted Net Assets - This category represents net assets of the Watermaster not restricted for any project or other purpose.

## NOTE 2 - CASH AND INVESTMENTS:

California law requires banks and savings and loan institutions to pledge government securities with a market value of 110% of the Watermaster's cash on deposits or first trust deed mortgage notes with a value of 150% of the deposit as collateral for all public agency deposits. Under California law this collateral remains with the institution but is held in the Watermaster's name and places the Watermaster ahead of general creditors of the institution.

The Watermaster's cash balances of \$25,152at June 30, 2010 are held in FDIC insured demand deposit accounts.

The Watermaster's Investment Policy and the California Government Code allow the District to invest in a variety of investment types, provided the credit ratings of the issuers are acceptable to the Watermaster Committee. The following also identifies certain provisions of the Watermaster's Investment Policy and California Government Code that address interest rate risk, credit risk, and concentration of credit risk.

Authorized Investment Type	Maximum Maturity	Minimum Credit Quality	Maximum Percentage of Portfolio	Maximum Investment In One Issuer
U.S. Treasury Obligation	5 years	N/A	100%	No Limit
U.S. Agency Securities	5 years	N/A	100%	No Limit
Bankers Acceptances	180 days	N/A	40%	30%
Commercial Paper	270 days	A-I	25%	10%
Negotiable Certificates of Deposit	5 years	N/A	30%	No Limit
Repurchase Agreements	1 year	N/A	100%	No Limit
Reverse Repurchase Agreements	92 days	N/A	20%	No Limit
Demand Deposits	N/A	Highest Category	20%	10%
Medium Term Notes	5 years	А	30%	No Limit
Money Market Mutual Funds	N/A	Highest Category	20%	10%
Asset-Backed Securities	5 years	AA	20%	No Limit
State of California Obligations	5 years	N/A	100%	No Limit
Local Agency Investment Fund	N/A	N/A	\$40 million account	No Limit

### Interest Rate Risk, Credit Risk, and Concentration of Credit Risk

Interest rate risk is the risk that changes in market rates will adversely affect the fair value of an investment. Generally, the longer the maturity the more sensitive the investment is to market fluctuations. Credit risk is measured by nationally recognized statistical agencies such as Standard & Poor's. Credit risk is simply the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. Concentration of credit risk measures the extent to which the Watermaster's investments are invested in a single issuer. Since the Watermaster's does not have investments and the cash balances are fully insured, the Watermaster is not exposed to interest rate risk, credit risk, or concentration of credit risk.

# **BEAUMONT BASIN WATERMASTER**

## INDEPENDENT ACCOUNTANT'S REPORT ON APPLYING AGREED-UPON PROCEDURES ON THE BEAUMONT BASIN WATERMASTER SCHEDULES

**OCTOBER 11, 2011** 



## INDEPENDENT ACCOUNTANTS' REPORT ON APPLYING AGREED-UPON PROCEDURES

Yucaipa Valley Water District as treasurer of the Beaumont Basin Watermaster Yucaipa, California

We have performed the procedures enumerated below, which were agreed to by the Yucaipa Valley Water District (District), as treasurer of the Beaumont Basin Watermaster (Watermaster), solely to assist the District in evaluating certain amounts reported in the Watermaster Schedules (Schedules), attached as Exhibit A and Exhibit B, on the full accrual basis of accounting. The District and Watermaster is responsible for the accuracy of the Schedules. This agreed-upon procedures engagement was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. The sufficiency of the procedures is solely the responsibility of those parties specified in the report. Consequently, we make no representations regarding the sufficiency of the procedures described below, either for the purpose for which this report has been requested or for any other purpose.

Our procedures and findings are as follows:

## 1. Procedure

Agree the opening equity on Exhibit B to the ending equity noted on the trial balance for the fiscal year ended June 30, 2010.

## **Finding**

No exceptions were noted as a result of applying the procedure.

## 2. Procedure

Agree the cash balance reported on Exhibit A to the bank reconciliation, bank statement and trial balance. Select all of the deposits in transit and outstanding checks and trace their clearing to the subsequent month's bank statement.

## **Finding**

No exceptions were noted as a result of applying the procedure.

## 3. Procedure

Trace all member agency assessments recorded in the schedule to invoices and the bank statements.

## **Finding**

No exceptions were noted as a result of applying the procedure.

## 4. Procedure

Compare the ending check number for the fiscal year ended June 30, 2010 to the beginning check number for the period beginning on July 1, 2010. Note any breaks in check sequence for the period of July 1, 2010 through June 30, 2011.

## Finding

No exceptions were noted as a result of applying the procedure. No breaks in check sequence were noted during the period of July 1, 2010 through June 30, 2011.

## 5. <u>Procedure</u>

Based on the population of checks issued during July 1, 2010 through June 30, 2011, select all payments and trace the check to supporting invoice noting whether the activity pertains to the Watermaster. Agree the dollar amount and vendor on the invoice to the check for accuracy.

## Finding

No exceptions were noted as a result of applying the procedure.

## 6. <u>Procedure</u>

Obtain the general ledger detail for the period of July 1, 2010 to June 30, 2011. Select all journal entries and trace the transaction to an approved journal entry and documentation supporting the nature and rationale of the journal entry.

## Finding

No exceptions were noted as a result of applying the procedure.

We were not engaged to, and did not conduct an audit, the objective of which would be the expression of an opinion on the schedules of assets, liabilities and equity (Exhibit A) and assessments and expenses (Exhibit B) or the related internal control structure. Accordingly, we do not express such an opinion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you.

This report is intended solely for the use of the Beaumont Basin Watermaster and the District and is not intended to be and should not be used by anyone other than the specified party.

Varinel Trin, Dig ; Co, UP

Rancho Cucamonga, California October 11, 2011

## **BEAUMONT BASIN WATERMASTER**

## SCHEDULE OF ASSETS, LIABILITIES AND NET ASSETS (UNAUDITED) JUNE 30, 2011

ASSETS Cash and Cash Equivalents	\$ 40,430
LIABILITIES Accounts Payable	 -
NET ASSETS Unrestricted	\$ 40,430

See Independent Accountant's Agreed Upon Procedures Report.

## **BEAUMONT BASIN WATERMASTER**

## SCHEDULE OF ASSESSMENTS AND EXPENSES (UNAUDITED) FOR THE FISCAL YEAR ENDED JUNE 30, 2011

REVENUES	
Assessments	\$ 30,000
Interest Revenue	4
Total Revenues	30,004
EXPENSES	
Administrative Expenses:	
Meetings and Miscellaneous	1,297
Legal and Professional	2,525
Bank Charges and Miscellaneous	411
Total Expenses	4,233
Change in Net Assets	25,771
NET ASSETS	
Unrestricted Net Assets, Beginning of Year	14,659
Unrestricted Net Assets, End of Year	\$ 40,430

See Independent Accountant's Agreed Upon Procedures Report.

**Appendix B** 

**Active and Interested Party List** 

# 2011 Active & Interested Party List

Duane Burk City of Banning Post Office Box 998 Banning, CA 92220

Mr. Joseph Zoba General Manager Yucaipa Valley Water District Post Office Box 730 Yucaipa, CA 92399

Mr. George Jorritsma, General Manager South Mesa Mutual Water Company Post Office Box 458 Calimesa, CA 92320

Mr. William Wood Sharondale Mesa Owners Association 9525 Sharon Way Calimesa, CA 92320

Mr. Dave Dillon Mr. Dee Moorjani Urban Logic Consultants 43517 Ridge Park Drive, Suite 200 Temecula, CA 92590

Mr. Gil Granito, Esq. Redwine and Sherrill 1950 Market Street Riverside, Ca 9250

Mr. James Krueger Plantation on the Lake 10961 Desert Lawn Dr. Calimesa, CA 92320 jimk@mrc1.com

Mr. Robert Hawkins, Esq. 110 Newport Center Dr., Ste. 200 Newport Beach, CA 92660

Ira Pace Sharondale Mesa Owners Association 9525 Sharon Way Calimesa, CA 92320 rbnjp@msn.com

Mr. Ron Sullivan California Oak Valley Golf & Resort LLC 27710 Jefferson Ave #301 Temecula, CA 92590 John Ohanian Oak Valley Partners LP Post Office Box 645 10410 Roberts Rd. Calimesa, CA 92320

Mr. Paul Singarella, Esq. Latham & Watkins, LLP 650 Town Center Drive, 20th Floor Costa Mesa, CA 92626-1925

Tom Addis So Cal Professional Golfers Association of America 36201 Champions Drive Beaumont, CA 92223

Mr. Greg Wilkinson, Esq. Best, Best & Krieger 3750 University Avenue, Suite 400 Riverside, CA 92501

Mr. Steve Anderson, Esq. Manheim, Manheim & Berman and Sunny Cal Egg and Poultry Company Best, Best & Krieger 3750 University Avenue, Suite 400 Riverside, CA 92501

Mrs. Beckman 38201 Cherry Valley Boulevard Cherry Valley, CA 92223

Mr. Fred Reidman and Mr. Richard Reidman Merlin Properties, LLC 6475 East Pacific Coast Highway, No. 399 Long Beach, CA 90803 <u>riedman@gte.net</u>

Mr. Leonard Stearns Post Office Box 141 Calimesa, CA 92320

Mr. Randy Van Gelder San Bernardino Valley Municipal Water District 1350 South "E" Street San Bernardino, CA 92412-5906

Mr. Robert Reiter San Bernardino Valley Municipal Water District 1350 South E Street San Bernardino, CA 92412-5906 Mr. Jeff Davis General Manager San Gorgonio Pass Water Agency 1210 Beaumont, Avenue Beaumont, CA 92223

Mr. Mark J. Wildermuth President/CEO Wildermuth Environmental, Inc. 23692 Birtcher Drive Lake Forest, CA 92630-1790

Samantha Adams Wildermuth Environmental, Inc. 23692 Birtcher Drive Lake Forest, CA 92630-1790

Mr. Joe Aklufi, Esq. Aklufi and Wysocki 3403 Tenth Street, Suite 610 Riverside, CA 92501

Mrs. Barbara Voigt Director San Gorgonio Pass Water Agency 1210 Beaumont Ave Beaumont, CA 92223

Mr. John Jeter Director San Gorgonio Pass Water Agency 1210 Beaumont Ave Beaumont, CA 92223

Mr. Ray Morris Board President San Gorgonio Pass Water Agency 1210 Beaumont Ave Beaumont, CA 92223

Mr. David Dysart Director San Gorgonio Pass Water Agency 1210 Beaumont Ave Beaumont, CA 92223

Bill Dickson Director San Gorgonio Pass Water Agency 1210 Beaumont Ave Beaumont, CA 92223

Carl Workman Director San Gorgonio Pass Water Agency 1210 Beaumont Ave Beaumont, CA 92223

Cheryle Rasmussen Executive Assistant San Gorgonio Pass Water Agency 1210 Beaumont Ave Beaumont, CA 92223

Mrs. Patsy Reeley 10096 Live Oak Avenue Cherry Valley, CA 92223 Ms. Luwana Ryan 9574 Mountain View Ave. Cherry Valley, CA 92223

Mrs. Frances Flanders 41045 Mohawk Cir Cherry Valley, CA 92223

Ted Haring 10961 – 354 Desert Lawn Dr. Calimesa, CA 92320 tdharing@msn.com

Robert C. Newman 29455 Live Oak Canyon Rd Redlands, CA 92373 Newman4governor@aol.com

Eric Fraser General Manager Beaumont Cherry Valley Water District 560 Magnolia Avenue Beaumont, CA 92223 Eric.fraser@bcvwd.org

Anthony Lara Assistant General Manager Beaumont Cherry Valley Water District 560 Magnolia Avenue Beaumont, CA 92223 bcvwdos@hotmail.com

Blanca Marin Executive Assistant Beaumont Cherry Valley Water District 560 Magnolia Avenue Beaumont, CA 92223 Blanca.marin@bcvwd.org

Eric Borstein Albor Properties 12301 Wilshire Blvd. Ste 302 Los Angeles, CA 90025

**Appendix C** 

**Compact Disc: Groundwater Production and Recharge Database** 

**Appendix D** 

Production Estimation Methods for Unmetered Overlying Producers

# Introduction

During FY 2005/06, the Watermaster engineer reported that several of the Overlying Producer's wells were not metered or that their meters may not have been working properly. The Watermaster engineer recommended using a water duty method that is routinely used to estimate production in the absence of metered production. Watermaster accepted the water duty method and the subsequent production estimates that were made in FY 2005/06. This appendix details the updated water duty method used to estimate production for the following un-metered Overlying Parties for FY 2003/04 through FY 2010/11:

- Merlin Properties
- Rancho Calimesa Mobile Home Park
- Roman Catholic Bishop of San Bernardino County
- Leonard M. and Dorothy D. Stearns
- Sunny-Cal Egg and Poultry Company
- Albor Properties III, LP
- Nick Nikodinov
- Ronald L. McAmis
- Nicolas and Amalia Aldama
- Hector Gutierrez, Luis Gutierrez, and Sebastian Monroy
- Boris and Miriam Darmont

# Water Duty Method

With the water duty method, the groundwater production of a producer is estimated by estimating the water use volume for each of said producer's water use activities. In the Beaumont Basin, Overlying Producers pump water for indoor, outdoor, and agricultural uses. Information about the water use activities of each producer was obtained during field investigations conducted in 2006, 2008, 2011 and through the examination of springtime air photos of the Beaumont Basin from 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, and 2011. The methods used to estimate groundwater pumping for each water use activity is outlined below.

# Indoor Water Use

Indoor water use is estimated based on the number of dwelling units (du) on each producer's property.

For a recent study of the impacts of septic system use in the Cherry Valley area, Wildermuth Environmental, Inc. analyzed water sales data in the Beaumont Cherry Valley Water District's service area for the 2000 to 2005 period. In the study, indoor water use for single family dwellings was estimated to be 0.35 acre-ft/du/yr (WEI, 2007).

Accordingly, the indoor water use of each Overlying Producer was calculated by multiplying



the number of dwelling units on each Overlying Producer's property by 0.35 acre-ft. This is an update to the indoor water use component of the water duty method developed in fiscal 2005/06, which applied an indoor water use component of 0.30 acre-ft/du/yr.

# Outdoor Water Use

Outdoor water use is estimated based on the acreage of irrigated landscape on each producer's property. The volume of water pumped for irrigation use is estimated using the Crop Water Requirements approach. This approach uses local climate parameters and crop type to determine the amount of water required by a landscape such that:

$$ET_O \times K_C = ET_C$$

Where,

 $ET_{O}$  = Reference Evapotranspiration: A climate specific parameter based on locally measured meteorological data such as wind speed, humidity, and solar radiation.  $ET_{O}$  represents the evapotranspiration of a standardized vegetated surface under localized conditions.

 $K_c$  = Crop Coefficient: A coefficient used to convert reference evapotranspiration into an estimate of evapotranspiration, based on the type of crop irrigated.

 $ET_{c}$  = Crop Water Requirement: The amount of water required for irrigating a specific type of crop under known climate conditions.

Reference Evapotranspiration (ET<sub>o</sub>) data were obtained from the California Irrigation Management Information System (CIMIS). Monthly ET<sub>o</sub> measured at CIMIS Station UC Riverside #44 was used as an approximation of the climate in the Beaumont Basin. Field investigations indicated that all irrigation activity was for standard grass landscapes. To estimate the crop water requirements of these standard grass landscapes, a mid-range crop coefficient ( $K_c = 0.70$ ) for warm season grasses was applied (University of Arizona Cooperative Extension, 2000).

The final factor in determining outdoor water use is irrigation efficiency. It is assumed that the efficiency with which an irrigation system delivers water to a landscape is imperfect (less than 100% efficient). For this analysis, an irrigation efficiency of 70% was applied such that (Department of Water Resources, 2008):

$$Outdoor Water Use = \frac{ET_c}{0.70}$$

# Agricultural Water Use

The only known agricultural water use by un-metered Overlying Producers is for the operations of the former Sunny-Cal Egg and Poultry Company. Water pumped by Sunny-Cal was used for the water consumption of chickens and for washing ranch facilities.

According to the National Research Council Subcommittee on Poultry Nutrition (1994), for hens kept at 21 degrees Celsius, approximately 40 to 80 gallons of water are required per 1,000 birds to meet daily nutritional requirements. For this water duty method, a value in the middle of this range was applied to estimate the daily pumping necessary to meet the nutritional requirements of the chickens at Sunny-Cal. Thus, the volume of water pumped was calculated as follows:



Daily Consumptive WaterUse = 
$$\frac{Total \# Chickens}{1,000} \times 60 \text{ gal}/\text{day}$$

The volume of water needed to wash the chicken ranch facilities is unknown. Because Sunny-Cal was able to store wash water onsite after use, for this water duty method, it was assumed that the amount of groundwater pumped for washing was equal to the amount of water needed to satisfy the irrigation needs of the property. Accordingly, the groundwater pumped to meet this water use was estimated based on the Crop Water Requirements approach described above.

# Applying the Water Duty Method to Un-metered Overlying Producers

To apply the water duty method to each Overlying Producer, it was necessary to obtain the following information about each property:

- Number of dwelling units
- Total area of irrigated land

Initial field investigations were performed in fiscal 2005/06 when the first version of the water duty method was used to estimate the production of Overlying Producers. The information obtained in the FY 2005/06 investigations was verified and/or updated with information obtained from the FY 2010/11 field investigation and through the use of annual springtime aerial photographs from spring 2003 through spring 2011. The aerial photography allowed for an accurate accounting of the number of dwelling units on large properties. The aerial photographs were also used to delineate and calculate the acreage of irrigated land on each property.

A worksheet that details the estimated indoor, outdoor, and agricultural water use of each Overlying Producer is provided in Exhibits D-1 through D-11.

# References

- Department of Water Resources. (2008). Draft White Paper: Evapotranspiration Adjustment Factor. Available at http://www.owue.water.ca.gov/docs/etWhitePaper.pdf
- National Research Council Subcommittee on Poultry Nutrition. (1994). *Nutrient requirements* of *Poultry*. (9th revised ed.). Washington, D.C.: National Academy Press. Available at www.nap.edu/catalog.php?record\_id=2114
- University of Arizona Cooperative Extension. (2000). Converting Reference Evapotranspiration into Turf Water Use. Turf Irrigation Management Series No. 2. Retrieved from http://ag.arizona.edu/pubs/water/az1195.pdf
- Wildermuth Environmental, Inc. (2007). Water Quality Impacts from On-Site Waste Disposal Systems in the Cherry Valley Community of Interest.



### Exhibit D1 Estimated Pumping by Merlin Properties -- FY 2003/04 through FY 2010/11

Year	Parcel Size (acres)	Dwelling Units	Indoor Water Use (acre-ft)	Irrigated Area (acres)	Outdoor Water Use (acre-ft)	Total Use (acre-ft)
2003/04	48	3	1.05	0.11	0.53	1.58
2004/05	48	3	1.05	0.11	0.50	1.55
2005/06	48	3	1.05	0.11	0.50	1.55
2006/07	48	3	1.05	0.11	0.55	1.60
2007/08	48	3	1.05	0.11	0.54	1.59
2008/09	48	3	1.05	0.11	0.53	1.58
2009/10	48	3	1.05	0.11	0.52	1.57
2010/11	48	3	1.05	0.11	0.51	1.56
Total			6.30		3.17	9.47

Indoor Water Use

0.35 af/du/year

Dwelling		Indoor	1			
Units	#DU	Water Use		Irrigated Area (Acre		
FY 2003/04	3	1.05		FY 2003/04	0.11	
FY 2004/05	3	1.05		FY 2004/05	0.11	
FY 2005/06	3	1.05		FY 2005/06	0.11	
FY 2006/07	3	1.05		FY 2006/07	0.11	
FY 2007/08	3	1.05		FY 2007/08	0.11	
FY 2008/09	3	1.05		FY 2008/09	0.11	
FY 2009/10	3	1.05		FY 2009/10	0.11	
FY 2010/11	3	1.05	1	FY 2010/11	0.11	

#### Crop Coefficient (Warm Season Bermuda Grass)

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Kc	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7

ET(o)	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total (in/yr)
FY 2003/04	7.05	7.46	5.54	4.08	2.23	2.07	2.49	2.76	4.81	5.90	7.10	6.50	57.99
FY 2004/05	7.55	6.81	5.83	3.39	2.44	2.30	2.02	2.21	3.93	5.41	6.47	6.49	54.85
FY 2005/06	7.28	6.68	5.32	3.65	2.84	2.15	2.92	3.35	3.42	4.26	6.02	7.16	55.05
FY 2006/07	7.74	7.20	5.70	3.95	3.14	2.94	3.28	2.91	5.02	5.04	6.47	7.16	60.55
FY 2007/08	7.57	7.09	5.44	4.34	2.81	2.24	1.69	2.31	5.30	6.04	6.28	7.59	58.70
FY 2008/09	7.53	7.23	5.79	5.02	3.12	1.89	3.32	2.41	4.62	5.58	6.32	5.37	58.20
FY 2009/10	7.60	6.68	5.89	4.40	3.18	2.08	2.35	2.44	4.67	5.11	6.18	6.25	56.83
FY 2010/11	6.57	6.99	5.45	2.10	3.22	1.78	2.91	2.91	4.22	5.57	6.67	6.95	55.34

				_		_						_	Total	Irrigation Requirement
ETc	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	(in/yr)	(acre-ft/yr)
FY 2003/04	4.90	5.20	3.90	2.90	1.60	1.40	1.70	1.90	3.40	4.10	5.00	4.60	40.60	0.37
FY 2004/05	5.30	4.80	4.10	2.40	1.70	1.60	1.40	1.50	2.80	3.80	4.50	4.50	38.40	0.35
FY 2005/06	5.10	4.70	3.70	2.60	2.00	1.50	2.00	2.30	2.40	3.00	4.20	5.00	38.50	0.35
FY 2006/07	5.40	5.00	4.00	2.80	2.20	2.10	2.30	2.00	3.50	3.50	4.50	5.00	42.30	0.39
FY 2007/08	5.30	5.00	3.80	3.00	2.00	1.60	1.20	1.60	3.70	4.20	4.40	5.30	41.10	0.38
FY 2008/09	5.30	5.10	4.10	3.50	2.20	1.30	2.30	1.70	3.20	3.90	4.40	3.80	40.80	0.37
FY 2009/10	5.30	4.70	4.10	3.10	2.20	1.50	1.60	1.70	3.30	3.60	4.30	4.40	39.80	0.36
FY 2010/11	4.60	4.90	3.80	1.50	2.30	1.20	2.00	2.00	3.00	3.90	4.70	4.90	38.80	0.36

Outdoor	
Water Use	(Acre Feet)
FY 2003/04	0.53
FY 2004/05	0.50
FY 2005/06	0.50
FY 2006/07	0.55
FY 2007/08	0.54
FY 2008/09	0.53
FY 2009/10	0.52
FY 2010/11	0.51



### Exhibit D2 Estimated Pumping by Rancho Calimesa – FY 2003/04 through FY 2010/11

Year	Parcel Size (acres	Dwelling Units	Indoor Water Use (acre-ft)	Irrigated Area (acres)	Outdoor Water Use (acre-ft)	Total Use (acre-ft)
2003/04	29	195	68.25	0	0.00	68.25
2004/05	29	195	68.25	0	0.00	68.25
2005/06	29	195	68.25	0	0.00	68.25
2006/07	29	198	69.30	0	0.00	69.30
2007/08	29	198	69.30	0	0.00	69.30
2008/09	29	198	69.30	0	0.00	69.30
2009/10	29	198	69.30	0	0.00	69.30
2010/11	29	198	69.30	0	0.00	69.30
Total			412.65		0.00	412.65

Indoor Water Use

0.35 af/du/year

Dwelling		Indoor	1			
Units	#DU	Water Use		Irrigated Area (Acres		
FY 2003/04	195	68.25		FY 2003/04	0	
FY 2004/05	195	68.25		FY 2004/05	0	
FY 2005/06	195	68.25		FY 2005/06	0	
FY 2006/07	198	69.3		FY 2006/07	0	
FY 2007/08	198	69.3		FY 2007/08	0	
FY 2008/09	198	69.3		FY 2008/09	0	
FY 2009/10	198	69.3	1	FY 2009/10	0	
FY 2010/11	198	69.3		FY 2010/11	0	

### Crop Coefficient (Warm Season Bermuda Grass)

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Kc	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0

ET(o)	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total (in/yr)
FY 2003/04	7.05	7.46	5.54	4.08	2.23	2.07	2.49	2.76	4.81	5.90	7.10	6.50	57.99
FY 2004/05	7.55	6.81	5.83	3.39	2.44	2.30	2.02	2.21	3.93	5.41	6.47	6.49	54.85
FY 2005/06	7.28	6.68	5.32	3.65	2.84	2.15	2.92	3.35	3.42	4.26	6.02	7.16	55.05
FY 2006/07	7.74	7.20	5.70	3.95	3.14	2.94	3.28	2.91	5.02	5.04	6.47	7.16	60.55
FY 2007/08	7.57	7.09	5.44	4.34	2.81	2.24	1.69	2.31	5.30	6.04	6.28	7.59	58.70
FY 2008/09	7.53	7.23	5.79	5.02	3.12	1.89	3.32	2.41	4.62	5.58	6.32	5.37	58.20
FY 2009/10	7.60	6.68	5.89	4.40	3.18	2.08	2.35	2.44	4.67	5.11	6.18	6.25	56.83
FY 2010/11	6.57	6.99	5.45	2.10	3.22	1.78	2.91	2.91	4.22	5.57	6.67	6.95	55.34

			0	0.1	Neu	Dec		E-h				1	Total	Irrigation Requirement
ETc	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	(in/yr)	(acre-ft/yr)
FY 2003/04	4.90	5.20	3.90	2.90	1.60	1.40	1.70	1.90	3.40	4.10	5.00	4.60	40.60	0.00
FY 2004/05	5.30	4.80	4.10	2.40	1.70	1.60	1.40	1.50	2.80	3.80	4.50	4.50	38.40	0.00
FY 2005/06	5.10	4.70	3.70	2.60	2.00	1.50	2.00	2.30	2.40	3.00	4.20	5.00	38.50	0.00
FY 2006/07	5.40	5.00	4.00	2.80	2.20	2.10	2.30	2.00	3.50	3.50	4.50	5.00	42.30	0.00
FY 2007/08	5.30	5.00	3.80	3.00	2.00	1.60	1.20	1.60	3.70	4.20	4.40	5.30	41.10	0.00
FY 2008/09	5.30	5.10	4.10	3.50	2.20	1.30	2.30	1.70	3.20	3.90	4.40	3.80	40.80	0.00
FY 2009/10	5.30	4.70	4.10	3.10	2.20	1.50	1.60	1.70	3.30	3.60	4.30	4.40	39.80	0.00
FY 2010/11	4.60	4.90	3.80	1.50	2.30	1.20	2.00	2.00	3.00	3.90	4.70	4.90	38.80	0.00

Outdoor	
Water Use	(Acre Feet)
FY 2003/04	0.00
FY 2004/05	0.00
FY 2005/06	0.00
FY 2006/07	0.00
FY 2007/08	0.00
FY 2008/09	0.00
FY 2009/10	0.00
FY 2010/11	0.00



Exhibit D3
Estimated Pumping by the Roman Catholic Bishop of San Bernardino FY 2003/04 through FY 2010/11

Year	Parcel Size (acres	Dwelling Units	Indoor Water Use (acre-ft)	Irrigated Area (acres)	Outdoor Water Use (acre-ft)	Total Use (acre-ft)
2003/04	34	2	0.70	12.1	58.48	59.18
2004/05	34	2	0.70	12.1	55.31	56.01
2005/06	34	2	0.70	12.1	55.46	56.16
2006/07	34	2	0.70	0	0.00	0.70
2007/08	34	2	0.70	0	0.00	0.70
2008/09	34	2	0.70	0	0.00	0.70
2009/10	34	0	0.00	0	0.00	0.00
2010/11	34	0	0.00	0	0.00	0.00
Total			4.20		169.26	173.46

Indoor Water Use

0.35 af/du/year

Dwelling		Indoor	
Units	#DU	Water Use	Irrigated Area (Ac
FY 2003/04	2	0.7	FY 2003/04 12
FY 2004/05	2	0.7	FY 2004/05 12
FY 2005/06	2	0.7	FY 2005/06 12
FY 2006/07	2	0.7	FY 2006/07
FY 2007/08	2	0.7	FY 2007/08
FY 2008/09	2	0.7	FY 2008/09
FY 2009/10	0	0	FY 2009/10
FY 2010/11	0	0	FY 2010/11

### Crop Coefficient (Warm Season Bermuda Grass)

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
Kc	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	
ET(o)	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total (in/yr)
FY 2003/04	7.05	7.46	5.54	4.08	2.23	2.07	2.49	2.76	4.81	5.90	7.10	6.50	57.99

FY 2004/05	7.55	6.81	5.83	3.39	2.44	2.30	2.02	2.21	3.93	5.41	6.47	6.49	54.85
FY 2005/06	7.28	6.68	5.32	3.65	2.84	2.15	2.92	3.35	3.42	4.26	6.02	7.16	55.05
FY 2006/07	7.74	7.20	5.70	3.95	3.14	2.94	3.28	2.91	5.02	5.04	6.47	7.16	60.55
FY 2007/08	7.57	7.09	5.44	4.34	2.81	2.24	1.69	2.31	5.30	6.04	6.28	7.59	58.70
FY 2008/09	7.53	7.23	5.79	5.02	3.12	1.89	3.32	2.41	4.62	5.58	6.32	5.37	58.20
FY 2009/10	7.60	6.68	5.89	4.40	3.18	2.08	2.35	2.44	4.67	5.11	6.18	6.25	56.83
FY 2010/11	6.57	6.99	5.45	2.10	3.22	1.78	2.91	2.91	4.22	5.57	6.67	6.95	55.34

													Total	Irrigation Requirement
ETc	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	(in/yr)	(acre-ft/yr)
FY 2003/04	4.90	5.20	3.90	2.90	1.60	1.40	1.70	1.90	3.40	4.10	5.00	4.60	40.60	40.94
FY 2004/05	5.30	4.80	4.10	2.40	1.70	1.60	1.40	1.50	2.80	3.80	4.50	4.50	38.40	38.72
FY 2005/06	5.10	4.70	3.70	2.60	2.00	1.50	2.00	2.30	2.40	3.00	4.20	5.00	38.50	38.82
FY 2006/07	5.40	5.00	4.00	2.80	2.20	2.10	2.30	2.00	3.50	3.50	4.50	5.00	42.30	0.00
FY 2007/08	5.30	5.00	3.80	3.00	2.00	1.60	1.20	1.60	3.70	4.20	4.40	5.30	41.10	0.00
FY 2008/09	5.30	5.10	4.10	3.50	2.20	1.30	2.30	1.70	3.20	3.90	4.40	3.80	40.80	0.00
FY 2009/10	5.30	4.70	4.10	3.10	2.20	1.50	1.60	1.70	3.30	3.60	4.30	4.40	39.80	0.00
FY 2010/11	4.60	4.90	3.80	1.50	2.30	1.20	2.00	2.00	3.00	3.90	4.70	4.90	38.80	0.00

Outdoor	
Water Use	(Acre Feet)
FY 2003/04	58.48
FY 2004/05	55.31
FY 2005/06	55.46
FY 2006/07	0.00
FY 2007/08	0.00
FY 2008/09	0.00
FY 2009/10	0.00
FY 2010/11	0.00



### Exhibit D4 Estimated Pumping by Leonard Stearns -- FY 2003/04 through FY 2010/11

Year	Parcel Size (acres	Dwelling Units	Indoor Water Use (acre-ft)	Irrigated Area (acres)	Outdoor Water Use (acre-ft)	Total Use (acre-ft)
2003/04	91	3	1.05	0	0.00	1.05
2004/05	91	3	1.05	0	0.00	1.05
2005/06	91	3	1.05	0	0.00	1.05
2006/07	91	3	1.05	0	0.00	1.05
2007/08	91	3	1.05	0	0.00	1.05
2008/09	91	3	1.05	0	0.00	1.05
2009/10	91	2	0.70	0	0.00	0.70
2010/11	91	2	0.70	0	0.00	0.70
Total			6.30		0.00	6.30

Indoor Water Use

0.35 af/du/year

Dwelling		Indoor		
Units	#DU	Water Use	Irrigated A	rea (Acres)
FY 2003/04	3	1.05	FY 2003/04	0
FY 2004/05	3	1.05	FY 2004/05	0
FY 2005/06	3	1.05	FY 2005/06	0
FY 2006/07	3	1.05	FY 2006/07	0
FY 2007/08	3	1.05	FY 2007/08	0
FY 2008/09	3	1.05	FY 2008/09	0
FY 2009/10	2	0.7	FY 2009/10	0
FY 2010/11	2	0.7	FY 2010/11	0

### Crop Coefficient (Warm Season Bermuda Grass)

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
Kc	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1
	le el		0	0-1	Marca	Dee	la co	E a la				la sea	

ET(o)	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total (in/yr)
FY 2003/04	7.05	7.46	5.54	4.08	2.23	2.07	2.49	2.76	4.81	5.90	7.10	6.50	57.99
FY 2004/05	7.55	6.81	5.83	3.39	2.44	2.30	2.02	2.21	3.93	5.41	6.47	6.49	54.85
FY 2005/06	7.28	6.68	5.32	3.65	2.84	2.15	2.92	3.35	3.42	4.26	6.02	7.16	55.05
FY 2006/07	7.74	7.20	5.70	3.95	3.14	2.94	3.28	2.91	5.02	5.04	6.47	7.16	60.55
FY 2007/08	7.57	7.09	5.44	4.34	2.81	2.24	1.69	2.31	5.30	6.04	6.28	7.59	58.70
FY 2008/09	7.53	7.23	5.79	5.02	3.12	1.89	3.32	2.41	4.62	5.58	6.32	5.37	58.20
FY 2009/10	7.60	6.68	5.89	4.40	3.18	2.08	2.35	2.44	4.67	5.11	6.18	6.25	56.83
FY 2010/11	6.57	6.99	5.45	2.10	3.22	1.78	2.91	2.91	4.22	5.57	6.67	6.95	55.34

													Total	Irrigation Requirement
ETc	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	(in/yr)	(acre-ft/yr)
FY 2003/04	4.90	5.20	3.90	2.90	1.60	1.40	1.70	1.90	3.40	4.10	5.00	4.60	40.60	0.00
FY 2004/05	5.30	4.80	4.10	2.40	1.70	1.60	1.40	1.50	2.80	3.80	4.50	4.50	38.40	0.00
FY 2005/06	5.10	4.70	3.70	2.60	2.00	1.50	2.00	2.30	2.40	3.00	4.20	5.00	38.50	0.00
FY 2006/07	5.40	5.00	4.00	2.80	2.20	2.10	2.30	2.00	3.50	3.50	4.50	5.00	42.30	0.00
FY 2007/08	5.30	5.00	3.80	3.00	2.00	1.60	1.20	1.60	3.70	4.20	4.40	5.30	41.10	0.00
FY 2008/09	5.30	5.10	4.10	3.50	2.20	1.30	2.30	1.70	3.20	3.90	4.40	3.80	40.80	0.00
FY 2009/10	5.30	4.70	4.10	3.10	2.20	1.50	1.60	1.70	3.30	3.60	4.30	4.40	39.80	0.00
FY 2010/11	4.60	4.90	3.80	1.50	2.30	1.20	2.00	2.00	3.00	3.90	4.70	4.90	38.80	0.00

Outdoor	
Water Use	(Acre Feet)
FY 2003/04	0.00
FY 2004/05	0.00
FY 2005/06	0.00
FY 2006/07	0.00
FY 2007/08	0.00
FY 2008/09	0.00
FY 2009/10	0.00
FY 2010/11	0.00



Exhibit D5
Estimated Pumping by Sunny Cal FY 2003/04 through FY 2010/11

Year	Parcel Size (acres	Dwelling Units	Indoor Water Use (acre-ft)	Number of Chickens	Chicken Water Use (acre-ft)	Irrigated Area (acres)	Outdoor Water Use (acre-ft)	Total Use (acre-ft)
2003/04	200	10	3.50	1,200,000	81	66.40	320.9	405.03
2004/05	200	10	3.50	1,200,000	81	66.40	303.5	387.64
2005/06	185	2	0.70	0	0	0.40	1.83	2.53
2006/07	185	2	0.70	0	0	0.40	2.01	2.71
2007/08	185	2	0.70	0	0	0.70	1.96	2.66
2008/09	185	2	0.70	0	0	0.70	1.94	2.64
2009/10	185	2	0.70	0	0	0.70	1.90	2.60
2010/11	185	2	0.70	0	0	0.70	1.85	2.55
Total			9.80		161.20	171.00	630	800.6

Indoor Water Use

0.35 af/du/year

Dwelling		Indoor
Units	#DU	Water Use
FY 2003/04	10	3.5
FY 2004/05	10	3.5
FY 2005/06	2	0.7
FY 2006/07	2	0.7
FY 2007/08	2	0.7
FY 2008/09	2	0.7
FY 2009/10	2	0.7
FY 2010/11	2	0.7

#### Chicken Water use

.

6 gal/100 chickens

Chicken		
Water Use	Chickens	Water Use
FY 2003/04	1200000	80.6
FY 2004/05	1200000	80.6
FY 2005/06	0	0
FY 2006/07	0	0
FY 2007/08	0	0
FY 2008/09	0	0
FY 2009/10	0	0
FY 2010/11	0	0

### Crop Coefficient (Warm Season Bermuda Grass)

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Kc	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7

ET(o)	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total (in/yr)
FY 2003/04	7.05	7.46	5.54	4.08	2.23	2.07	2.49	2.76	4.81	5.90	7.10	6.50	57.99
FY 2004/05	7.55	6.81	5.83	3.39	2.44	2.30	2.02	2.21	3.93	5.41	6.47	6.49	54.85
FY 2005/06	7.28	6.68	5.32	3.65	2.84	2.15	2.92	3.35	3.42	4.26	6.02	7.16	55.05
FY 2006/07	7.74	7.20	5.70	3.95	3.14	2.94	3.28	2.91	5.02	5.04	6.47	7.16	60.55
FY 2007/08	7.57	7.09	5.44	4.34	2.81	2.24	1.69	2.31	5.30	6.04	6.28	7.59	58.70
FY 2008/09	7.53	7.23	5.79	5.02	3.12	1.89	3.32	2.41	4.62	5.58	6.32	5.37	58.20
FY 2009/10	7.60	6.68	5.89	4.40	3.18	2.08	2.35	2.44	4.67	5.11	6.18	6.25	56.83
FY 2010/11	6.57	6.99	5.45	2.10	3.22	1.78	2.91	2.91	4.22	5.57	6.67	6.95	55.34

ETc	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total (in/yr)	Irrigation Requirement (acre-ft/yr)
FY 2003/04	4.90	5.20	3.90	2.90	1.60	1.40	1.70	1.90	3.40	4.10	5.00	4.60	40.60	224.65
FY 2004/05	5.30	4.80	4.10	2.40	1.70	1.60	1.40	1.50	2.80	3.80	4.50	4.50	38.40	212.48
FY 2005/06	5.10	4.70	3.70	2.60	2.00	1.50	2.00	2.30	2.40	3.00	4.20	5.00	38.50	1.28
FY 2006/07	5.40	5.00	4.00	2.80	2.20	2.10	2.30	2.00	3.50	3.50	4.50	5.00	42.30	1.41
FY 2007/08	5.30	5.00	3.80	3.00	2.00	1.60	1.20	1.60	3.70	4.20	4.40	5.30	41.10	1.37
FY 2008/09	5.30	5.10	4.10	3.50	2.20	1.30	2.30	1.70	3.20	3.90	4.40	3.80	40.80	1.36
FY 2009/10	5.30	4.70	4.10	3.10	2.20	1.50	1.60	1.70	3.30	3.60	4.30	4.40	39.80	1.33
FY 2010/11	4.60	4.90	3.80	1.50	2.30	1.20	2.00	2.00	3.00	3.90	4.70	4.90	38.80	1.29

Outdoor Water Use (Acre Feet)	Irrigation Requirement
FY 2003/04	320.93
FY 2004/05	303.54
FY 2005/06	1.83
FY 2006/07	2.01
FY 2007/08	1.96
FY 2008/09	1.94
FY 2009/10	1.90
FY 2010/11	1.85

### Exhibit D6 Estimated Pumping by Albor Properties -- FY 2003/04 through FY 2010/11

Year	Parcel Size (acres	Dwelling Units	Indoor Water Use (acre-ft)	Irrigated Area (acres)	Outdoor Water Use (acre-ft)	Total Use (acre-ft)
2003/04	0	0	0.00	0	0.00	0.00
2004/05	0	0	0.00	0	0.00	0.00
2005/06	122	2	0.70	2.6	11.92	12.62
2006/07	122	1	0.35	0.4	2.01	2.36
2007/08	122	1	0.35	0.4	1.96	2.31
2008/09	122	1	0.35	0.4	1.94	2.29
2009/10	122	1	0.35	0.4	1.90	2.25
2010/11	122	1	0.35	0.4	1.85	2.20
Total			1.75		17.83	19.58

Indoor Water Use

0.35 af/du/year

Dwelling		Indoor					
Units	#DU	Water Use		Irrigated Area (Acres)			
FY 2003/04	0	0		FY 2003/04	0		
FY 2004/05	0	0		FY 2004/05	0		
FY 2005/06	2	0.7		FY 2005/06	2.6		
FY 2006/07	1	0.35		FY 2006/07	0.4		
FY 2007/08	1	0.35		FY 2007/08	0.4		
FY 2008/09	1	0.35		FY 2008/09	0.4		
FY 2009/10	1	0.35		FY 2009/10	0.4		
FY 2010/11	1	0.35	1	FY 2010/11	0.4		

### Crop Coefficient (Warm Season Bermuda Grass)

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
Kc	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	
ET(o)	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total (in/yr)
FY 2003/04	7 05	7 46	5.54	4 08	2 23	2 07	2 49	2 76	4 81	5 90	7 10	6.50	57 99

112003/04	1.05	1.40	5.54	4.00	2.25	2.07	2.43	2.70	4.01	5.50	7.10	0.50	51.55
FY 2004/05	7.55	6.81	5.83	3.39	2.44	2.30	2.02	2.21	3.93	5.41	6.47	6.49	54.85
FY 2005/06	7.28	6.68	5.32	3.65	2.84	2.15	2.92	3.35	3.42	4.26	6.02	7.16	55.05
FY 2006/07	7.74	7.20	5.70	3.95	3.14	2.94	3.28	2.91	5.02	5.04	6.47	7.16	60.55
FY 2007/08	7.57	7.09	5.44	4.34	2.81	2.24	1.69	2.31	5.30	6.04	6.28	7.59	58.70
FY 2008/09	7.53	7.23	5.79	5.02	3.12	1.89	3.32	2.41	4.62	5.58	6.32	5.37	58.20
FY 2009/10	7.60	6.68	5.89	4.40	3.18	2.08	2.35	2.44	4.67	5.11	6.18	6.25	56.83
FY 2010/11	6.57	6.99	5.45	2.10	3.22	1.78	2.91	2.91	4.22	5.57	6.67	6.95	55.34

													Total	Irrigation Requirement
ETc	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	(in/yr)	(acre-ft/yr)
FY 2003/04	4.90	5.20	3.90	2.90	1.60	1.40	1.70	1.90	3.40	4.10	5.00	4.60	40.60	0.00
FY 2004/05	5.30	4.80	4.10	2.40	1.70	1.60	1.40	1.50	2.80	3.80	4.50	4.50	38.40	0.00
FY 2005/06	5.10	4.70	3.70	2.60	2.00	1.50	2.00	2.30	2.40	3.00	4.20	5.00	38.50	8.34
FY 2006/07	5.40	5.00	4.00	2.80	2.20	2.10	2.30	2.00	3.50	3.50	4.50	5.00	42.30	1.41
FY 2007/08	5.30	5.00	3.80	3.00	2.00	1.60	1.20	1.60	3.70	4.20	4.40	5.30	41.10	1.37
FY 2008/09	5.30	5.10	4.10	3.50	2.20	1.30	2.30	1.70	3.20	3.90	4.40	3.80	40.80	1.36
FY 2009/10	5.30	4.70	4.10	3.10	2.20	1.50	1.60	1.70	3.30	3.60	4.30	4.40	39.80	1.33
FY 2010/11	4.60	4.90	3.80	1.50	2.30	1.20	2.00	2.00	3.00	3.90	4.70	4.90	38.80	1.29

Outdoor	
Water Use	(Acre Feet)
FY 2003/04	0.00
FY 2004/05	0.00
FY 2005/06	11.92
FY 2006/07	2.01
FY 2007/08	1.96
FY 2008/09	1.94
FY 2009/10	1.90
FY 2010/11	1.85



### Exhibit D7 Estimated Pumping by Nikodinov -- FY 2003/04 through FY 2010/11

Year	Parcel Size (acres	Dwelling Units	Indoor Water Use (acre-ft)	Irrigated Area (acres)	Outdoor Water Use (acre-ft)	Total Use (acre-ft)
2003/04	0	0	0.00	0	0	0.00
2004/05	0	0	0.00	0	0	0.00
2005/06	10	1	0.35	0.08	0.37	0.72
2006/07	10	1	0.35	0.08	0.40	0.75
2007/08	10	1	0.35	0.08	0.39	0.74
2008/09	10	1	0.35	0.08	0.39	0.74
2009/10	10	1	0.35	0.08	0.38	0.73
2010/11	10	1	0.35	0.08	0.37	0.72
Total			1.40		1.55	2.95

Indoor Water Use

0.35 af/du/year

Dwelling		Indoor	]				
Units	#DU	Water Use		Irrigated Area (Acres)			
FY 2003/04	0	0		FY 2003/04	0		
FY 2004/05	0	0		FY 2004/05	0		
FY 2005/06	1	0.35		FY 2005/06	0.08		
FY 2006/07	1	0.35		FY 2006/07	0.08		
FY 2007/08	1	0.35		FY 2007/08	0.08		
FY 2008/09	1	0.35		FY 2008/09	0.08		
FY 2009/10	1	0.35		FY 2009/10	0.08		
FY 2010/11	1	0.35	]	FY 2010/11	0.08		

### Crop Coefficient (Warm Season Bermuda Grass)

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
Kc	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	
ET(o)	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total (in/yr)
FY 2003/04	7.05	7.46	5.54	4.08	2.23	2.07	2.49	2.76	4.81	5.90	7.10	6.50	57.99
FY 2004/05	7.55	6.81	5.83	3.39	2.44	2.30	2.02	2.21	3.93	5.41	6.47	6.49	54.85
FY 2005/06	7.28	6.68	5.32	3.65	2.84	2.15	2.92	3.35	3.42	4.26	6.02	7.16	55.05
EY 2006/07	7 74	7 20	5 70	3 95	3 14	2 94	3 28	2 91	5.02	5.04	6 47	7 16	60.55

FY 2005/06	7.28	6.68	5.32	3.65	2.84	2.15	2.92	3.35	3.42	4.26	6.02	7.16	55.05
FY 2006/07	7.74	7.20	5.70	3.95	3.14	2.94	3.28	2.91	5.02	5.04	6.47	7.16	60.55
FY 2007/08	7.57	7.09	5.44	4.34	2.81	2.24	1.69	2.31	5.30	6.04	6.28	7.59	58.70
FY 2008/09	7.53	7.23	5.79	5.02	3.12	1.89	3.32	2.41	4.62	5.58	6.32	5.37	58.20
FY 2009/10	7.60	6.68	5.89	4.40	3.18	2.08	2.35	2.44	4.67	5.11	6.18	6.25	56.83
FY 2010/11	6.57	6.99	5.45	2.10	3.22	1.78	2.91	2.91	4.22	5.57	6.67	6.95	55.34

													Total	Irrigation Requirement
ETc	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	(in/yr)	(acre-ft/yr)
FY 2003/04	4.90	5.20	3.90	2.90	1.60	1.40	1.70	1.90	3.40	4.10	5.00	4.60	40.60	0.00
FY 2004/05	5.30	4.80	4.10	2.40	1.70	1.60	1.40	1.50	2.80	3.80	4.50	4.50	38.40	0.00
FY 2005/06	5.10	4.70	3.70	2.60	2.00	1.50	2.00	2.30	2.40	3.00	4.20	5.00	38.50	0.26
FY 2006/07	5.40	5.00	4.00	2.80	2.20	2.10	2.30	2.00	3.50	3.50	4.50	5.00	42.30	0.28
FY 2007/08	5.30	5.00	3.80	3.00	2.00	1.60	1.20	1.60	3.70	4.20	4.40	5.30	41.10	0.27
FY 2008/09	5.30	5.10	4.10	3.50	2.20	1.30	2.30	1.70	3.20	3.90	4.40	3.80	40.80	0.27
FY 2009/10	5.30	4.70	4.10	3.10	2.20	1.50	1.60	1.70	3.30	3.60	4.30	4.40	39.80	0.27
FY 2010/11	4.60	4.90	3.80	1.50	2.30	1.20	2.00	2.00	3.00	3.90	4.70	4.90	38.80	0.26

Outdoor	
Water Use	(Acre Feet)
FY 2003/04	0.00
FY 2004/05	0.00
FY 2005/06	0.37
FY 2006/07	0.40
FY 2007/08	0.39
FY 2008/09	0.39
FY 2009/10	0.38
FY 2010/11	0.37



### Exhibit D8 Estimated Pumping by McAmis -- FY 2003/04 through FY 2010/11

Year	Parcel Size (acres	Dwelling Units	Indoor Water Use (acre-ft)	Irrigated Area (acres)	Outdoor Water Use (acre-ft)	Total Use (acre-ft)
2003/04	0	0	0.00	0	0	0.00
2004/05	0	0	0.00	0	0	0.00
2005/06	0.9	1	0.35	0.04	0.18	0.53
2006/07	0.9	1	0.35	0.04	0.20	0.55
2007/08	0.9	1	0.35	0.04	0.20	0.55
2008/09	0.9	1	0.35	0.04	0.19	0.54
2009/10	0.9	1	0.35	0.04	0.19	0.54
2010/11	0.9	1	0.35	0.04	0.18	0.53
Total			1.40		0.77	2.17

Indoor Water Use

0.35 af/du/year

Dwelling		Indoor	1				
Units	#DU	Water Use		Irrigated Area (Acres)			
FY 2003/04	0	0		FY 2003/04	0		
FY 2004/05	0	0		FY 2004/05	0		
FY 2005/06	1	0.35		FY 2005/06	0.04		
FY 2006/07	1	0.35		FY 2006/07	0.04		
FY 2007/08	1	0.35		FY 2007/08	0.04		
FY 2008/09	1	0.35		FY 2008/09	0.04		
FY 2009/10	1	0.35	1	FY 2009/10	0.04		
FY 2010/11	1	0.35		FY 2010/11	0.04		

### Crop Coefficient (Warm Season Bermuda Grass)

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
Kc	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	
													-
ET(o)	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total (in/yr)
FY 2003/04	7.05	7.46	5.54	4.08	2.23	2.07	2.49	2.76	4.81	5.90	7.10	6.50	57.99
FY 2004/05	7.55	6.81	5.83	3.39	2.44	2.30	2.02	2.21	3.93	5.41	6.47	6.49	54.85
FY 2005/06	7.28	6.68	5.32	3.65	2.84	2.15	2.92	3.35	3.42	4.26	6.02	7.16	55.05
FY 2006/07	7.74	7.20	5.70	3.95	3.14	2.94	3.28	2.91	5.02	5.04	6.47	7.16	60.55

FY 2006/07	7.74	7.20	5.70	3.95	3.14	2.94	3.28	2.91	5.02	5.04	6.47	7.16	60.55
FY 2007/08	7.57	7.09	5.44	4.34	2.81	2.24	1.69	2.31	5.30	6.04	6.28	7.59	58.70
FY 2008/09	7.53	7.23	5.79	5.02	3.12	1.89	3.32	2.41	4.62	5.58	6.32	5.37	58.20
FY 2009/10	7.60	6.68	5.89	4.40	3.18	2.08	2.35	2.44	4.67	5.11	6.18	6.25	56.83
FY 2010/11	6.57	6.99	5.45	2.10	3.22	1.78	2.91	2.91	4.22	5.57	6.67	6.95	55.34

													Total	Irrigation Requirement
ETc	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	(in/yr)	(acre-ft/yr)
FY 2003/04	4.90	5.20	3.90	2.90	1.60	1.40	1.70	1.90	3.40	4.10	5.00	4.60	40.60	0.00
FY 2004/05	5.30	4.80	4.10	2.40	1.70	1.60	1.40	1.50	2.80	3.80	4.50	4.50	38.40	0.00
FY 2005/06	5.10	4.70	3.70	2.60	2.00	1.50	2.00	2.30	2.40	3.00	4.20	5.00	38.50	0.13
FY 2006/07	5.40	5.00	4.00	2.80	2.20	2.10	2.30	2.00	3.50	3.50	4.50	5.00	42.30	0.14
FY 2007/08	5.30	5.00	3.80	3.00	2.00	1.60	1.20	1.60	3.70	4.20	4.40	5.30	41.10	0.14
FY 2008/09	5.30	5.10	4.10	3.50	2.20	1.30	2.30	1.70	3.20	3.90	4.40	3.80	40.80	0.14
FY 2009/10	5.30	4.70	4.10	3.10	2.20	1.50	1.60	1.70	3.30	3.60	4.30	4.40	39.80	0.13
FY 2010/11	4.60	4.90	3.80	1.50	2.30	1.20	2.00	2.00	3.00	3.90	4.70	4.90	38.80	0.13

Outdoor	
Water Use	(Acre Feet)
FY 2003/04	0.00
FY 2004/05	0.00
FY 2005/06	0.18
FY 2006/07	0.20
FY 2007/08	0.20
FY 2008/09	0.19
FY 2009/10	0.19
FY 2010/11	0.18



### Exhibit D9 Estimated Pumping by Aldama -- FY 2003/04 through FY 2010/11

Year	Parcel Size (acres	Dwelling Units	Indoor Water Use (acre-ft)	Irrigated Area (acres)	Outdoor Water Use (acre-ft)	Total Use (acre-ft)
2003/04	0	0	0.00	0	0	0.00
2004/05	0	0	0.00	0	0	0.00
2005/06	1.4	1	0.35	0.1	0.46	0.81
2006/07	1.4	1	0.35	0.1	0.50	0.85
2007/08	1.4	1	0.35	0.1	0.49	0.84
2008/09	1.4	1	0.35	0.1	0.49	0.84
2009/10	1.4	1	0.35	0.1	0.47	0.82
2010/11	1.4	1	0.35	0.1	0.46	0.81
Total			1.40		1.94	3.34

Indoor Water Use

0.35 af/du/year

Dwelling		Indoor	1				
Units	#DU	Water Use		Irrigated Area (Acres			
FY 2003/04	0	0		FY 2003/04	0		
FY 2004/05	0	0		FY 2004/05	0		
FY 2005/06	1	0.35		FY 2005/06	0.1		
FY 2006/07	1	0.35		FY 2006/07	0.1		
FY 2007/08	1	0.35		FY 2007/08	0.1		
FY 2008/09	1	0.35	]	FY 2008/09	0.1		
FY 2009/10	1	0.35		FY 2009/10	0.1		
FY 2010/11	1	0.35	]	FY 2010/11	0.1		

#### Crop Coefficient (Warm Season Bermuda Grass)

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Kc	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7

ET(o)	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total (in/yr)
FY 2003/04	7.05	7.46	5.54	4.08	2.23	2.07	2.49	2.76	4.81	5.90	7.10	6.50	57.99
FY 2004/05	7.55	6.81	5.83	3.39	2.44	2.30	2.02	2.21	3.93	5.41	6.47	6.49	54.85
FY 2005/06	7.28	6.68	5.32	3.65	2.84	2.15	2.92	3.35	3.42	4.26	6.02	7.16	55.05
FY 2006/07	7.74	7.20	5.70	3.95	3.14	2.94	3.28	2.91	5.02	5.04	6.47	7.16	60.55
FY 2007/08	7.57	7.09	5.44	4.34	2.81	2.24	1.69	2.31	5.30	6.04	6.28	7.59	58.70
FY 2008/09	7.53	7.23	5.79	5.02	3.12	1.89	3.32	2.41	4.62	5.58	6.32	5.37	58.20
FY 2009/10	7.60	6.68	5.89	4.40	3.18	2.08	2.35	2.44	4.67	5.11	6.18	6.25	56.83
FY 2010/11	6.57	6.99	5.45	2.10	3.22	1.78	2.91	2.91	4.22	5.57	6.67	6.95	55.34

ETc	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total (in/yr)	Irrigation Requirement (acre-ft/yr)
FY 2003/04	4.90	5.20	3.90	2.90	1.60	1.40	1.70	1.90	3.40	4.10	5.00	4.60	40.60	0.00
FY 2004/05	5.30	4.80	4.10	2.40	1.70	1.60	1.40	1.50	2.80	3.80	4.50	4.50	38.40	0.00
FY 2005/06	5.10	4.70	3.70	2.60	2.00	1.50	2.00	2.30	2.40	3.00	4.20	5.00	38.50	0.32
FY 2006/07	5.40	5.00	4.00	2.80	2.20	2.10	2.30	2.00	3.50	3.50	4.50	5.00	42.30	0.35
FY 2007/08	5.30	5.00	3.80	3.00	2.00	1.60	1.20	1.60	3.70	4.20	4.40	5.30	41.10	0.34
FY 2008/09	5.30	5.10	4.10	3.50	2.20	1.30	2.30	1.70	3.20	3.90	4.40	3.80	40.80	0.34
FY 2009/10	5.30	4.70	4.10	3.10	2.20	1.50	1.60	1.70	3.30	3.60	4.30	4.40	39.80	0.33
FY 2010/11	4.60	4.90	3.80	1.50	2.30	1.20	2.00	2.00	3.00	3.90	4.70	4.90	38.80	0.32

Outdoor	
Water Use	(Acre Feet)
FY 2003/04	0.00
FY 2004/05	0.00
FY 2005/06	0.46
FY 2006/07	0.50
FY 2007/08	0.49
FY 2008/09	0.49
FY 2009/10	0.47
FY 2010/11	0.46

### Exhibit D10 Estimated Pumping by Gutierrez -- FY 2003/04 through FY 2010/11

Year	Parcel Size (acres	Dwelling Units	Indoor Water Use (acre-ft)	Irrigated Area (acres)	Outdoor Water Use (acre-ft)	Total Use (acre-ft)
2003/04	0	0	0.00	0	0	0.00
2004/05	0	0	0.00	0	0	0.00
2005/06	2	2	0.70	0.14	0.64	1.34
2006/07	2	2	0.70	0.14	0.71	1.41
2007/08	2	2	0.70	0.14	0.69	1.39
2008/09	2	2	0.70	0.14	0.68	1.38
2009/10	2	2	0.70	0.14	0.66	1.36
2010/11	2	2	0.70	0.14	0.65	1.35
Total			2.80		2.71	5.51

Indoor Water Use

FY 2008/09

FY 2009/10

FY 2010/11

0.35 af/du/year

Dwelling		Indoor	1		
Units	#DU	Water Use		Irrigated A	rea (Acres)
FY 2003/04	0	0		FY 2003/04	0
FY 2004/05	0	0		FY 2004/05	0
FY 2005/06	2	0.7		FY 2005/06	0.14
FY 2006/07	2	0.7		FY 2006/07	0.14
FY 2007/08	2	0.7		FY 2007/08	0.14
FY 2008/09	2	0.7		FY 2008/09	0.14
FY 2009/10	2	0.7		FY 2009/10	0.14
FY 2010/11	2	0.7		FY 2010/11	0.14

### Crop Coefficient (Warm Season Bermuda Grass)

7.53

7.60

6.57

7.23

6.68

6.99

5.79

5.89

5.45

5.02

4.40

2.10

3.12

3.18

3.22

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
Kc	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	
ET(o)	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total (in/yr)
FY 2003/04	7.05	7.46	5.54	4.08	2.23	2.07	2.49	2.76	4.81	5.90	7.10	6.50	57.99
FY 2004/05	7.55	6.81	5.83	3.39	2.44	2.30	2.02	2.21	3.93	5.41	6.47	6.49	54.85
FY 2005/06	7.28	6.68	5.32	3.65	2.84	2.15	2.92	3.35	3.42	4.26	6.02	7.16	55.05
FY 2006/07	7.74	7.20	5.70	3.95	3.14	2.94	3.28	2.91	5.02	5.04	6.47	7.16	60.55
FY 2007/08	7.57	7.09	5.44	4.34	2.81	2.24	1.69	2.31	5.30	6.04	6.28	7.59	58.70

1.89

2.08

1.78

													1	Irrigation
													Total	Requirement
ETc	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	(in/yr)	(acre-ft/yr)
FY 2003/04	4.90	5.20	3.90	2.90	1.60	1.40	1.70	1.90	3.40	4.10	5.00	4.60	40.60	0.00
FY 2004/05	5.30	4.80	4.10	2.40	1.70	1.60	1.40	1.50	2.80	3.80	4.50	4.50	38.40	0.00
FY 2005/06	5.10	4.70	3.70	2.60	2.00	1.50	2.00	2.30	2.40	3.00	4.20	5.00	38.50	0.45
FY 2006/07	5.40	5.00	4.00	2.80	2.20	2.10	2.30	2.00	3.50	3.50	4.50	5.00	42.30	0.49
FY 2007/08	5.30	5.00	3.80	3.00	2.00	1.60	1.20	1.60	3.70	4.20	4.40	5.30	41.10	0.48
FY 2008/09	5.30	5.10	4.10	3.50	2.20	1.30	2.30	1.70	3.20	3.90	4.40	3.80	40.80	0.48
FY 2009/10	5.30	4.70	4.10	3.10	2.20	1.50	1.60	1.70	3.30	3.60	4.30	4.40	39.80	0.46
FY 2010/11	4.60	4.90	3.80	1.50	2.30	1.20	2.00	2.00	3.00	3.90	4.70	4.90	38.80	0.45

3.32

2.35

2.91

2.41

2.44

2.91

4.62

4.67

4.22

5.58

5.11

5.57

6.32

6.18

6.67

5.37

6.25

6.95

58.20

56.83

55.34

Outdoor	
Water Use	(Acre Feet)
FY 2003/04	0.00
FY 2004/05	0.00
FY 2005/06	0.64
FY 2006/07	0.71
FY 2007/08	0.69
FY 2008/09	0.68
FY 2009/10	0.66
FY 2010/11	0.65



### Exhibit D11 Estimated Pumping by Darmont -- FY 2003/04 through FY 2010/11

Year	Parcel Size (acres	Dwelling Units	Indoor Water Use (acre-ft)	Irrigated Area (acres)	Outdoor Water Use (acre-ft)	Total Use (acre-ft)
2003/04	0	0	0.00	0	0	0.00
2004/05	0	0	0.00	0	0	0.00
2005/06	0.5	1	0.35	0	0.00	0.35
2006/07	0.5	1	0.35	0	0.00	0.35
2007/08	0.5	1	0.35	0	0.00	0.35
2008/09	0.5	1	0.35	0	0.00	0.35
2009/10	0.5	1	0.35	0	0.00	0.35
2010/11	0.5	1	0.35	0	0.00	0.35
Total			1.40		0.00	1.40

Indoor Water Use

0.35 af/du/year

Dwelling		Indoor		
Units	#DU	Water Use	Irrigated A	rea (Acres)
FY 2003/04	0	0	FY 2003/04	0
FY 2004/05	0	0	FY 2004/05	0
FY 2005/06	1	0.35	FY 2005/06	0
FY 2006/07	1	0.35	FY 2006/07	0
FY 2007/08	1	0.35	FY 2007/08	0
FY 2008/09	1	0.35	FY 2008/09	0
FY 2009/10	1	0.35	FY 2009/10	0
FY 2010/11	1	0.35	FY 2010/11	0

#### Crop Coefficient (Warm Season Bermuda Grass)

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Kc	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7

ET(o)	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total (in/yr)
FY 2003/04	7.05	7.46	5.54	4.08	2.23	2.07	2.49	2.76	4.81	5.90	7.10	6.50	57.99
FY 2004/05	7.55	6.81	5.83	3.39	2.44	2.30	2.02	2.21	3.93	5.41	6.47	6.49	54.85
FY 2005/06	7.28	6.68	5.32	3.65	2.84	2.15	2.92	3.35	3.42	4.26	6.02	7.16	55.05
FY 2006/07	7.74	7.20	5.70	3.95	3.14	2.94	3.28	2.91	5.02	5.04	6.47	7.16	60.55
FY 2007/08	7.57	7.09	5.44	4.34	2.81	2.24	1.69	2.31	5.30	6.04	6.28	7.59	58.70
FY 2008/09	7.53	7.23	5.79	5.02	3.12	1.89	3.32	2.41	4.62	5.58	6.32	5.37	58.20
FY 2009/10	7.60	6.68	5.89	4.40	3.18	2.08	2.35	2.44	4.67	5.11	6.18	6.25	56.83
FY 2010/11	6.57	6.99	5.45	2.10	3.22	1.78	2.91	2.91	4.22	5.57	6.67	6.95	55.34

														Irrigation
													Total	Requirement
ETc	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	(in/yr)	(acre-ft/yr)
FY 2003/04	4.90	5.20	3.90	2.90	1.60	1.40	1.70	1.90	3.40	4.10	5.00	4.60	40.60	0.00
FY 2004/05	5.30	4.80	4.10	2.40	1.70	1.60	1.40	1.50	2.80	3.80	4.50	4.50	38.40	0.00
FY 2005/06	5.10	4.70	3.70	2.60	2.00	1.50	2.00	2.30	2.40	3.00	4.20	5.00	38.50	0.00
FY 2006/07	5.40	5.00	4.00	2.80	2.20	2.10	2.30	2.00	3.50	3.50	4.50	5.00	42.30	0.00
FY 2007/08	5.30	5.00	3.80	3.00	2.00	1.60	1.20	1.60	3.70	4.20	4.40	5.30	41.10	0.00
FY 2008/09	5.30	5.10	4.10	3.50	2.20	1.30	2.30	1.70	3.20	3.90	4.40	3.80	40.80	0.00
FY 2009/10	5.30	4.70	4.10	3.10	2.20	1.50	1.60	1.70	3.30	3.60	4.30	4.40	39.80	0.00
FY 2010/11	4.60	4.90	3.80	1.50	2.30	1.20	2.00	2.00	3.00	3.90	4.70	4.90	38.80	0.00

Outdoor	
Water Use	(Acre Feet)
FY 2003/04	0.00
FY 2004/05	0.00
FY 2005/06	0.00
FY 2006/07	0.00
FY 2007/08	0.00
FY 2008/09	0.00
FY 2009/10	0.00
FY 2010/11	0.00