Beaumont Basin Watermaster

2017 Consolidated Annual Report and Engineering Report

FINAL

2017 Watermaster Board

Art Vela, City of Banning
George Jorritsma, South Mesa Water Company, **Vice Chairman**
Eric Fraser, Beaumont Cherry Valley Water District, **Secretary**
Joseph Zoba, Yucaipa Valley Water District, **Treasurer**
Kyle Warsinski, City of Beaumont

Alvarado Smith, **Legal Counsel**
ALDA Inc. in Association with Thomas Harder & Company, **Engineering**
Rogers, Anderson, Malody, and Scott. LLP, **Financial Auditors**

March 2018

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March 28, 2018

Art Vela, Chairman
Beaumont Basin Watermaster Committee
560 Magnolia Avenue
Beaumont, CA 92223

Subject: **Beaumont Basin Watermaster**
Final Consolidated Annual Report and Engineering Report for Calendar Year 2017

Dear Mr. Vela:

ALDA Inc., in association with Thomas Harder & Co. is pleased to submit to you, as Chairman of the Beaumont Basin Watermaster Committee, the 2017 Consolidated Annual Report and Engineering Report. This final report summarizes all production, spreading, and storage activities that took place during calendar year 2017. Further, it documents changes in water levels and storage conditions, as well as, an estimate of the Basin Operating Safe Yield for 2017. Finally, the Annual Report presents an evaluation of water quality conditions in the basin for the 2013-2017 five-year period.

Should you have any questions on this matter, please contact us at 909-587-9916 during normal business hours.

Very truly yours

ALDA Inc.

F. Anibal Blandon, P.E.
Principal

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Abbreviations

ac-ft	acre-feet
ac-ft/yr	acre-feet per year
Banning	City of Banning
Basin	Beaumont Basin
BCVWD	Beaumont-Cherry Valley Water District
BMZ	Beaumont Management Zone
Beaumont	City of Beaumont
CDPH	California Department of Public Health
CVCOI	Cherry Valley Community of Interest
CY	calendar year
du	dwelling unit
FY	fiscal year
IRWMP	Integrated Regional Water Management Program
MCL	Maximum Contaminant Level
NL	Notification Level
NTU	Nephelometric Turbidity Units
OSWDS	On-Site Waste Disposal Systems
Pass Agency	San Gorgonio Pass Water Agency
SGPWA	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
TDS	Total Dissolved Solids
UCR	University of California, Riverside
USEPA	United States Environmental Protection Agency
Watermaster	Beaumont Basin Watermaster Committee
YVWD	Yucaipa Valley Water District

Section 1
Background

The Fourteenth Annual Report of the Beaumont Basin Watermaster Committee (Watermaster) consolidates the information about the basin previously presented in Annual Reports with the information presented in the bi-annual Engineer's Report. This report documents activities in the Beaumont Basin for Calendar Year 2017. Section 3 of the original annual report has been expanded and retitled as "Status of the Basin and Administration of the Judgment"; it documents the Administration of the Judgment as well as provides a status of conditions in the basin addressing water production, water levels, and storage activities. In addition, a Water Quality section, Section 4, has been added to document water quality of selected compounds at selected wells, as well as, basin wide concentrations for the 2013-17 period.

1.1 History of the Beaumont Basin Stipulated Judgment

In January 2001, the City of Beaumont (Beaumont), the Beaumont-Cherry Valley Water District (BCVWD), the South Mesa Water Company (SMWC), and the Yucaipa Valley Water District (YVWD) formed the San Timoteo Watershed Management Authority (STWMA). One of the initial tasks of STWMA was to develop a watershed-wide program to develop and implement a comprehensive management program for the San Timoteo watershed.

Phase I of the management program, documented in the San Timoteo Watershed Management Program, Phase I Report (WEI, 2002), included the following goals:

- Enhancing 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 Integrated Regional Watershed Management Program for the San Timoteo watershed

One of the elements identified in the management plan to achieve the listed goals consisted in the establishment of a groundwater management entity for the Beaumont Basin. As a result of this initiative, two groups representing overlying users and water agencies with interest in this basin began negotiations in May 2002.

Over the next 18 months of negotiations, a Stipulated Agreement was developed and submitted to the Court. Honorable Judge Gary Tranbarger of the Superior Court of the State of California for the County of Riverside signed the Agreement, titled "San Timoteo Watershed Management Authority, vs. City of Banning, et al." (Case No. RIC 389197), on February 4, 2004, (the Judgment).

Pursuant to the Judgment, the Court appointed a five-member Watermaster Committee, consisting of representatives from each of the Appropriator parties: City of Banning, City of

Beaumont, Beaumont Cherry Valley Water District (BCVWD), South Mesa Water Company (SMWC), and Yucaipa Valley Water District (YVWD). The effective date of the Judgment for accounting purposes was retroactively established to July 1, 2003.

The Court gave the responsibility of managing the Basin to the 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 Essential Elements of the Judgment

Elements of the 2004 Judgment are as follows:

- All producers shall be allowed to pump sufficient water from the Basin to meet their respective requirements.
- The Safe Yield of the Basin was established at 8,650 ac-ft/yr to be distributed among the Overlying Producers. The Safe Yield of the Basin is to be re-evaluated every 10 years, at a minimum.
- The Overlying Parties can extract a combined total of 8,650 ac-ft/yr. with individual rights set for each Overlying Producer. If an Overlying Party pumps more than five times its share of the operating Safe Yield in any five consecutive years, the overlying producer shall provide Watermaster with sufficient funds to replace the overproduction.
- A controlled overdraft of the basin is allowed to create enough additional storage capacity to prevent the waste of water. This controlled overdraft, also known as Temporary Surplus, allows Appropriators to extract up to 160,000 ac-ft of water from the basin over the 10-year period immediately following the Judgment inception. The Temporary Surplus will cease after the initial 10 years of operations.
- During the first ten years after adoption of the Judgment, the Appropriators have the right to extract, as a whole, a maximum of 16,000 ac-ft/yr not including storage credits from spreading supplemental water or transfers from Overlying Parties. The Temporary Surplus has been divided among the Appropriators as follows:

  - ✓ Beaumont Cherry Valley WD — 42.51 percent or 6,802 ac-ft/yr
  - ✓ City of Banning — 31.43 percent or 5,029 ac-ft/yr
  - ✓ South Mesa Water Company — 12.48 percent or 1.997 ac-ft/yr
  - ✓ Yucaipa Valley Water District — 13.58 percent or 2,173 ac-ft/yr

- After the first 10 years of operation, Appropriators can extract only the amount each has in storage or credited to them. An Appropriator shall provide Watermaster with sufficient funds to replace any amount of overproduction that may have occurred over a five-year consecutive period.
- The Watermaster has the authority to enter into Groundwater Storage Agreements with producers for the storage of supplemental water, wellhead protection and recharge, well

abandonment, well construction, monitoring, replenishment, mitigation of overdraft, and collection of assessments.

- Supplemental replenishment water can be in the form of recycled water, imported State Project Water, or other imported water. Replenishment can be accomplished by spreading and percolation, injection, or in-lieu use of surface water or imported water.
- A minimum of 200,000 ac-ft of groundwater storage capacity shall be reserved for conjunctive use. Any person, party to the Judgment can make reasonable beneficial use of the groundwater storage capacity for storage of supplemental water provided that it is in accordance with a storage agreement with Watermaster.
- Minimal producers, those producing less than 10 ac-ft/yr from the basin, and not listed in the Judgment, are exempt from the provisions of the Judgment.

1.3 Watermaster Responsibilities

Under the Judgment, the Watermaster is granted discretionary powers to develop and implement a groundwater management plan for the Beaumont Basin, including water quality and quantity considerations and being reflective of the provisions of the Judgment.

In carrying out its duties, Watermaster is responsible for providing the legal and practical means of ensuring that the waters of the Basin are put to maximum beneficial use. Specific responsibilities are summarized below.

1.- Administer the Beaumont Basin Judgment. Watermaster operates under the Judgment and the Rules and Regulations, which were originally adopted June 8, 2004, and subsequently amended in 2006 and 2008. The Judgment and the Rules and Regulations establish the procedures by which Watermaster accounts for the water resources of the Basin. Watermaster has the power to collect administrative assessments from all Appropriators and replenishment assessments from those parties (Appropriative and Overlying) pumping in excess of their pumping right to fund its operations. Each year, Watermaster publishes an Annual Report, which documents production and recharge activities in the Beaumont Basin.

2.- Approve Producer Activities. All producers 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.

3.- Maintain and Improve Water Supply. On an annual basis, Watermaster determines the amount of groundwater that each producer is entitled to pump from the Basin without incurring a replenishment obligation. Further, Watermaster is responsible for facilitating and coordinating the acquisition, recharge, and storage of imported water or other local supplemental water to replenish and/or conjunctively manage the Basin to increase local supplies.

4.- Monitor and Understand the Basin. Watermaster is responsible for collecting information from producers, and other cooperating agencies, in order to enhance its knowledge of how the Basin works and manage it more effectively. Information collected by the Watermaster includes:

- Water production, water level, and water quality information from the Appropriator Parties.
- Water production and water level information from the Overlying Parties.
- Water level and water quality data collected by local agencies as part of their Maximum Benefit and Monitoring Program for the Beaumont Management Zone.
- Ground surface elevations from periodic surveys conducted to determine whether ground subsidence may be occurring as a result of over pumping from the basin.

5.- Maintain and Improve Water Quality. Watermaster coordinates and participates in local efforts to preserve and/or enhance the quality of groundwater in the Basin. It assists and encourages regulatory agencies to enforce water quality regulations that may have an effect on the Basin groundwater sources and its surrounding resources. One of these programs is the Maximum Benefit Monitoring Program of the Beaumont Management Zone.

6.- Develop and Administer a Well Policy. Watermaster is responsible for developing a policy on the proper construction and abandonment of wells in the Basin. Through the adoption of Resolution 2004-04, the Watermaster adopted minimum standards for the construction, repair, abandonment and destruction of groundwater extraction wells in the Beaumont Basin. As part of this resolution, Watermaster adopted Riverside County Ordinance No. 682.3 and expanded it to require the installation of a sounding tube in order to facilitate the measurement of water levels on all future wells.

7.- 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 agencies and programs to implement and expand the direct or indirect use of recycled water.

8.- Provide Cooperative Leadership. Watermaster may act jointly or cooperate with other local, state, and/or federal agencies to develop and implement regional scale programs for the management of the Basin and its surrounding resources.

1.4 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

1.5 Watermaster Website

Watermaster website address is www.beaumontbasinwatermaster.org. This website is maintained by the YVWD and it is used by the Watermaster to communicate its activities to the Parties and the public. The website contains copies of the Judgment, the Rules and

Regulations, Annual Reports, and Engineer's Reports. In addition, it contains meeting minutes, meeting agendas, and other documents of interest.

1.6 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."*

Section 2
Watermaster Activities

2.1 Makeup of the Board

During the February 1, 2017 regular meeting of the Beaumont Basin Watermaster, elections were held; the officers to the Watermaster Committee during 2016 were reaffirmed for calendar year 2017 as follows.

- Mr. Art Vela – Chairman
- Mr. George Jorritsma – Vice Chairman
- Mr. Eric Fraser – Secretary
- Mr. Joseph Zoba – Treasurer

The Committee Representatives serving each Appropriative Party during CY 2017 were as follows:

Agency	Representative	Alternate
City of Banning	Art Vela	Vacant
City of Beaumont	Vacant	Kyle Warsinski
Beaumont Cherry Valley Water District	Eric Fraser	Tony Lara
South Mesa Water Company	George Jorritsma	Dave Armstrong
Yucaipa Valley Water District	Joseph Zoba	Jennifer Ares

Legal counsel during CY 2017 was provided by Alvarado Smith APC, represented by Keith McCullough and Thierry Montoya, while Engineering Services were provided by ALDA Inc., represented by Hannibal Blandon, in association with Thomas Harder & Company, represented by Thomas Harder.

2.2 Watermaster Accomplishments and Activities During 2017

2.2.1 Watermaster Meetings

A total of six regular meetings were held during CY 2017 on the following dates:

- February 1, 2017
- April 5, 2017
- June 7, 2017
- August 2, 2017
- October 4, 2017
- December 6, 2017

In addition, there was a Special Meeting conducted on August 30, 2017.

Agendas and approved minutes from each of the above regular and special meetings can be viewed at and/or downloaded from Watermaster's website or by making a request to the Watermaster Secretary. Pursuant to Resolution 2009-01, 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.

2.2.2 Watermaster Committee Resolutions

During CY 2017, two resolutions were adopted.

Resolution 17-01, a Resolution of the Beaumont Basin Watermaster to Confirm and Adopt San Gorgonio Pass Water Agency's Application for Groundwater Storage, Subject to Stated Conditions, was approved at the June 7, 2017 regular meeting. Under this resolution, SGPWA has the right to store up to 10,000 ac-ft of water in the Basin under certain conditions. A copy of the resolution is included under Appendix A.

Resolution 17-02, a Resolution of the Beaumont Basin Watermaster to transfer Oak Valley Partners overlying production rights associated with specific parcels to the Yucaipa Valley Water District was adopted at a special meeting on August 30, 2017. Under this resolution Oak Valley Partners transfers all of their overlying rights, initially set in the 2003 Judgment at 1,806 ac-ft/yr to the YVWD. OVP's rights have since been adjusted down to 1,398.86 ac-ft based on the recalculation of the Basin Safe Yield of 6,700 ac-ft/yr. A copy of Resolution 17-02 is included under Appendix A.

2.2.3 Items Discussed in 2017

This section is an unofficial summary of topics addressed at Watermaster meetings. The Beaumont Basin Watermaster maintains official meeting minutes that report the items discussed and actions taken during normal and special meetings. Official meeting minutes may be accessed at: www.beaumontbasinwatermaster.org

The following items were discussed during the six regular meetings and one special meeting held in CY 2017 along with their resulting outcome.

Items Discussed During the February 1, 2017 Regular Watermaster Committee Meeting

- Reorganization of the Beaumont Basin Watermaster Committee [Memorandum 17-01]. All members of the Board serving in CY 2016 were reaffirmed for CY 2017.

- Independent Accountant's Financial Report for the Beaumont Basin Watermaster for CY 2016 [Memorandum 17-02]. Member Zoba provided a brief explanation of the report and answered several questions. Report was received and filed.

- Review and Discussion of Conditions Related to the Groundwater Storage Agreement in the Beaumont Basin for the San Gorgonio Pass Water Agency [Memorandum 17-03]. Member Zoba provided an update on the progress being made on this issue; after some

insight provided by Legal Counsel Montoya as well as SGPWA General Manager Jeff Davis, the item was continued to the next meeting for additional discussion.

- Review and Discussion of the Conceptual Framework for the Formation of a Groundwater Sustainability Agency (GSA) for the San Timoteo Basin [Memorandum 17-04]. Member Zoba provided an overview of the agenda item and of the discussions that have occurred with other stakeholder agencies regarding the formation of a GSA. No action was taken.

- Approval of a Contract Amendment for Engineering Services with ALDA Inc. [Memorandum 17-05]. Member Zoba indicated that the initial contract expired on June 30, 2016 and needed to be renewed based on the positive track record of ALDA Inc. After some discussion, Legal Counsel was instructed to prepare a contract amendment extending the contract with ALDA Inc. through December 31, 2021.

- Discussion Regarding Task Order No. 12 with ALDA Inc. for the Preparation of the 2016 Consolidated Annual Report, Estimate of the Safe Yield, Update of the Groundwater Model, and Associated Consulting Services [Memorandum 17-06]. After Engineer Blandon provided an overview of the consulting services provided by ALDA Inc. on a year to year basis, the Committee approved Task Order No. 12 for a sum not to exceed $95,970.00.

- Discussion Regarding Task Order No. 13 with ALDA Inc. for the Installation, Maintenance, and Data Collection of Water Level Monitoring Equipment in CY 2017 [Memorandum 17-07]. After Engineer Blandon provided an overview of the consulting services provided under this task, the Committee approved Task Order No. 13 for a sum not to exceed $21,520.00.

- Discussion Regarding Task Order No. 14 with ALDA Inc. for the Analysis of Return Flows by Appropriators to the Beaumont Groundwater Basin and Incorporation of Findings into the 2016 Beaumont Basin Watermaster Annual Report [Memorandum 17-08]. Hydrogeologist Harder explained the steps that will be involved in this assessment and indicated that the majority of the cost will result with issues associated with the City of Banning. A motion was approved to exclude the cost related to the City of Banning in order to reduce the cost shared by the Watermaster member agencies.

- Preparation of Methodology for Estimating Groundwater Storage Losses Associated with Supplemental Water Recharage [Memorandum 17-09]. Mr. Harder requested the Committee's input regarding this issue and indicated that he would summarize methodologies used to account for groundwater storage losses by other agencies and that he would have a proposal for the Committee at the April meeting.

- Discussion Regarding the Methodology for Calculating New Yield [Memoramndum 17-10]. Mr. Harder gave an overview of the issues that would be faced in calculating new yield. After much discussion, the Committee members supported the notion that additional discussion needed to take place at future meetings.

- Discussion Regarding the Water Level Monitoring Equipment [Memorandum 17-11]. After Engineer Blandon noted the concerns that have been raised in prior Watermaster discussions about poor customer service received from Solinst, the manufacturer of the equipment being used. Engineer Blandon presented a comparison matrix of four providers of water level monitoring equipment and discussed aspects related to features, cost, and reliability. He also recommended that the Watermaster continue with Solinst.

Items Discussed During the April 5, 2017 Regular Watermaster Committee Meeting

- Overview of the Issues Associated with the Estimation of Storage Losses due to Supplemental Water Recharge [Memorandum 17-12]. Mr. Harder presented a synopsis of the methodology, or lack thereof, of twelve groundwater management basins in California in estimating groundwater storage losses. He indicated that with the exception of a couple of basins, groundwater storage losses are not addressed as technically or in as much detail as he had expected. After much discussion, several Committee Members indicated their support of a technically defensible model to estimate groundwater storage losses from the basin and requested a proposal to conduct this analysis by the next Committee meeting.

Items Discussed During the June 7, 2017 Regular Watermaster Committee Meeting

- Status Report on Water Level Monitoring throughout the Beaumont Basin through May 31, 2017 [Memorandum 17-13]. Engineer Blandon gave a status report of the water level monitoring throughout the basin and indicated that in general water levels were beginning to come up at various locations.

- 2016 Consolidated Annual Report and Engineering Report – Draft Report [Memorandum 17-14]. Engineer Blandon apologized for not being able to present the Draft Consolidated Annual Report and Engineering Report at this meeting and stated that the draft report will be submitted at the regular August 2, 2018 meeting.

- 2014 Sustainable Groundwater Management Act Reporting Requirements and its impact on the 2017 Consolidated Annual Report and Engineering Report [Memorandum 17-15]. Engineer Blandon indicated that as an adjudicated basin, the Beaumont Basin must comply with the reporting requirements to the state under this act. One of the requirements is the delivery of a Final Annual Report to the state for the preceding year by April 1st. He indicated that the completion of the Consolidated Annual Report by the reporting date will require an adjustment in the presentation of the Draft report and in the adoption of the Final report. After a brief discussion, the Committee members agreed that the Draft report be presented at the regular February meeting while presentation of the Final report will require moving the April meeting to the last Wednesday in March.

- Approval of the Groundwater Storage Application and Groundwater Storage Agreement in the Beaumont Basin for the San Gorgonio Pass Water Agency in the Amount of 10,000 ac-ft. [Memoranum 17-16]. Member Zoba gave an overview of the agenda item highlighting the four conditions under which the Watermaster Committee would approve the storage account requested by SGPWA. Member Frazer motion to approve the

Resolution as drafted before several representatives of SGPWA including their legal counsel indicated that they could not agree to the conditions set forth in the Draft Resolution. After much discussion between members of the Board, legal counsel, and representatives of the SGPWA, the original motion was approved on a 3-2 vote. A copy of the approved Resolution 17-01 is included under Appendix A of this report.

Items Discussed During the August 2, 2017 Regular Watermaster Committee Meeting

- Approval of Watermaster Budget for Fiscal Year 2017-18 [Memorandum 17-17]. Member Zoba gave a presentation of the proposed budget prior to the Committee approving it as presented.

- Consideration of Resolution 17-02 Approving the Transfer of Overlying Water Rights to Specific Parcels – Oak Valley Partners [Memorandum 17-18]. Legal Counsel McCullough provided background information on the agenda item. A discussion ensued on this issue with some members in favor a deferring any action until some issues be addressed while other members supported the approval of the resolution as presented. Additional input was provided by representatives from Oak Valley Partners and Summerwind Ranch, the developing company. After much discussion, the Watermaster Committee voted to further consider this matter at as special meeting to be held on August 30, 2017.

- 2016 Consolidated Annual Report and Engineering Report – Presentation of Draft Report [Memorandum 17-19]. Engineer Blandon presented the draft 2016 Annual Report which included discussions on groundwater conditions, groundwater production and recharge, transfer and adjustment of rights, and accounting of storage. Mr. Harder presented the operating Safe Yield for the basin for 2016. Engineer Blandon concluded the presentation with a discussion of water quality in the basin and provided recommendations to be considered by the Watermaster in the future.

- Status Report on Water Level Monitoring throughout the Beaumont Basin through July 24, 2017 [Memorandum No. 17-20]. Engineer Blandon gave a status report of the water level monitoring program being done at 13 locations throughout the basin.

- Consideration of Task Order No. 14 with ALDA Inc. for the preparation of a Methodology to Estimate Storage Losses from the Beaumont Groundwater Basin at Selected Locations [Memorandum 17-21]. Mr. Harder provided an overview of the scope of services included in the proposed task order. After questions and discussions regarding the project timeline, Member Warsinski indicated that this should be a special project and the City of Beaumont should not be required to share on the cost of the study. In response, Member Zoba motioned that the report be funded by four of the five members; task order was approved.

Items Discussed During the August 30, 2017 Special Watermaster Committee Meeting

- Consideration of Resolution 17-02 Approving the Transfer of Overlying Water Rights to Specific Parcels – Oak Valley Partners [Memorandum 17-22]. Engineer Blandon presented a map of the parcels owned by Oak Valley Partners and identified those listed in the Resolution. Legal Counsel McCullough provided his firm's opinion on the transfer of rights. After much discussion the original resolution was adopted. Under this resolution Oak Valley Partners transfers their overlying right to produce 77.4566 percent of 1,806 ac-ft of groundwater from the Beaumont Basin to the Yucaipa Valley Water District. A copy of the approved Resolution 17-02 is included under Appendix A.

Items Discussed During the October 5, 2017 Regular Watermaster Committee Meeting

- Nomination of the Beaumont Basin Watermaster Committee Secretary [Memorandum 17-23]. Member Zoba nominated Mr. Tony Lara of the Beaumont Cherry Valley Water District as Secretary of the Watermaster Committee. Motion was approved.

- Status Report on Water Level Monitoring throughout the Beaumont Basin through September 25, 2017 [Memorandum 17-24]. Engineer Blandon presented a map of potential additional monitoring sites and discussed sites currently being considered. He continued with a status of the water level monitoring program being done.

- Potential Scenarios to be Evaluated Using the Groundwater Model for Analyzing Basin Losses [Memorandum 17-25]. Mr. Harder presented three scenarios and alternatives to determine water losses and requested written comments from members of the Watermaster Committee.

- Independent Accountant's Financial Report of Agreed-Upon Procedures for the Beaumont Basin Watermaster [Memorandum 17-26]. Member Lara moved to receive and file the Independent Financial Report for the Period ending June 30, 2017. The motion was carried.

Items Discussed During the December 6, 2017 Regular Watermaster Committee Meeting

- Status Report on Water Level Monitoring throughout the Beaumont Basin through November 27, 2017 [Memorandum 17-27]. Engineer Blandon indicated that BCVWD's Well No. 25 has been added as a monitoring well; he further mentioned that this was an active pumping well that was selected because of the absence of dedicated monitoring wells in that portion of the basin. He continued with a status of the water level monitoring program being done and indicated that water levels in the upper aquifer in the vicinity of the Noble Creek spreading grounds have risen by close to 80 feet in the last 18 months.

- Progress Report to the Storage Losses Evaluation [Memorandum 17-28]. Mr. Harder indicated that the model is anticipated to be completed within the next two weeks to then begin running scenarios. He indicated that the scenarios to be run will be as realistic as possible and that anticipated to provide preliminary results at the February meeting.

2.2.4 Redetermination of Safe Yield

Under the Judgment (2003) the Safe Yield of the Beaumont Basin was established at 8,650 ac-ft/yr. to be distributed among the Overlying Producers. The Judgment indicates that the Safe Yield of the Beaumont Basin shall be redetermined at least every 10 years beginning 10 years after the date of entry of the Judgment (February 4, 2004).

At the February 2013 Watermaster meeting, the Watermaster Committee authorized a study to develop a hydrologic model of the groundwater basin to be used as a tool in the re-evaluation of the Safe Yield of the basin. At the February 2015 Watermaster meeting a formal presentation of the final-draft document was made to provide members of the Committee with an opportunity to ask questions and addressed any unresolved issues. The final document was presented for approval and adoption at the April 2015 Watermaster meeting.

Resolution No. 2015-01 was adopted at the April 1st, 2015 Regular Watermaster Committee meeting. Through this resolution, the Final 2013 Reevaluation of the Beaumont Basin Safe Yield Report and Redetermination of the Safe Yield of the Beaumont Basin were adopted.

The Beaumont Basin Watermaster Committee re-determined the Safe Yield of the Beaumont Basin to be 6,700 ac-ft per year.

2.3 Storage Applications and Agreements

The first applications to use the Basin for storage purposes were approved in FY 2005-06 when Watermaster approved applications by Banning, BCVWD, SMWC, and YVWD to store up to 135,000 ac-ft of water in the Basin. The City of Beaumont's application to store water was approved by Watermaster in FY 2007-08 bringing the total storage allocation to 157,000 ac-ft. In FY 2009-10, Watermaster approved additional applications by Banning, BCVWD, Beaumont, and YVWD to increase the total storage allowed to 260,000 ac-ft. It is our understanding that the Watermaster Committee has not yet amended the respective Storage Agreements to reflect the current storage limits.

An application for a storage agreement was received by the Watermaster from the San Gorgonio Pass Water Agency (SGPWA) in mid 2010 and brought for discussion at the summer of 2012. The initial application was rejected because it was determined to be incomplete.

An application for a storage agreement was also received from the Morongo Band of Mission Indians at the December 2012 meeting. Watermaster deemed the application incomplete and requested further information from the applicant to address questions posed by members of the Watermaster Committee. This application was subsequently approved at the June 5, 2013 meeting allowing the Morongo Band of Mission Indians to store up to 20,000 ac-ft of imported water in the basin.

A new application for Groundwater Storage Agreement was developed in early 2013; the application was presented and discussed at several Watermaster Committee meetings where

input was received and questions were addressed. The new application was approved by the Watermaster Committee in August 2013 and will be used for future applicants.

After development of new forms and procedures, a new application by SGPWA was received in early 2016 to develop a Groundwater Storage Agreement. This application was discussed over several Watermaster Committee meetings and was finally approved at the June 7, 2017 regular meeting under Resolution 17-01. The approval of this application allows the SGPWA to store up to 10,000 ac-ft of water in the Beaumont Groundwater Basin.

As of December 31, 2017, the total storage allowed stands at 290,000 ac-ft; storage limits by participant are presented below. Amounts of water in storage by participant are discussed under Section 3.

- City of Banning 80,000 ac-ft
- City of Beaumont 30,000 ac-ft
- Beaumont Cherry Valley WD 80,000 ac-ft
- South Mesa Water Company 20,000 ac-ft
- Yucaipa Valley Water District 50,000 ac-ft
- Morongo Band of Mission Indians 20,000 ac-ft
- San Gorgonio Pass Water Agency 10,000 ac-ft

2.4 Rules and Regulations

The original Rules and Regulations of the Watermaster were adopted on June 8, 2004. The Judgment provides for their periodic update as deemed necessary by the Watermaster. On September 9, 2008, the Watermaster adopted Rule and Regulation 7.8, entitled “Availability of Unused Overlying Production and Allocation to the Appropriator Parties”. The objective of this rule is to define the process through which unused production by Overlying Parties is allocated to the Appropriator Parties. The unused water will be allocated based on each Appropriator’s percent share of the operating Safe Yield, as described in Exhibit C of the Judgment. This allocation will have no impact on the legal water rights owned by the Overlying Parties in subsequent years. The initial allocation to take place on or after February 4, 2009.

No changes to the Rules and Regulations were made during Calendar Year 2017.

2.5 Active Party List

Part VII, Paragraph 1 of the Judgment, indicates that Watermaster shall maintain an updated list of parties to whom notices are to be sent for service. Said list should include names, addresses for the Parties or their successors. A copy of the list has been included with this annual report as Appendix B.

2.6 Financial Management

The Watermaster must develop and administer a budget for all administrative, operational, and capital costs it incurs. The following discussion summarizes the budget established for the Fiscal Year 2017 operations.

2.6.1 Budget

The budget for Fiscal Year 2017-18 was initially approved at the August 2, 2017 Watermaster Committee meeting under Memorandum 17-17. The approved budget provided funding for Administrative expenses in the amount of $197,800.00, an increase of $14,750.00 or 8.05 percent from the prior year of $183,050.00. Funding for administrative expenses was covered from a carryover of $189,260.00 from FY 2016-17 and water agencies contributions of $1,375.00 each. The approved budget did not include any funds for Special Projects.

The following table presents a comparison between the final budgets for FY 2015-16, final budget for FY 2016-17, and approved budget for FY 2017-18.

Operating Expense	*FY 2015-16 Final Budget*	*FY 2016-17 Final Budget*	*FY 2017-18 Approved Budget*
Administrative Expenses			
Bank Fees and Interest	$ 50.00	$ 50.00	$ 100.00
Miscellaneous and Meetings	$ 500.00	$ 500.00	$ 200.00
Acquisition/computation & Annual Report	$ 85,000.00	$ 90,000.00	$ 100,000.00
Annual Audit	$ 2,500.00	$ 2,500.00	$ 2,500.00
Engineering Services	$ 10,000.00	$ 20,000.00	$ 15,000.00
Monitoring and Data Acquisition		$ 25,000.00	$ 25,000.00
Meter Installation and Repair		$ 10,000.00	$ 10,000.00
Legal Expenses	$ 20,000.00	$ 20,000.00	$ 20,000.00
Reserve Funding	$ 10,000.00	$ 15,000.00	$ 25,000.00
	$ 128,050.00	**$ 183,050.00**	**$ 197,800.00**
Special Project Expenses			
Engineering	$ 0.00	$ 0.00	$ 0.00
Litigation	$ 0.00	$ 0.00	$ 0.00
	$ 0.00	**$ 0.00**	**$ 0.00**
Total Operating Expense	**$ 128,050.00**	**$ 183,050.00**	**$ 197,800.00**

2.6.2 Financial Audit

The Beaumont Basin Watermaster has a financial audit performed on annually on a fiscal year basis. The audit assists in properly accounting for the revenues and expenses of the Watermaster and tracking the financial resources of the agency. The detailed audit report for FY 2017, prepared by Rogers, Anderson, Malody, and Scott, LLP, was presented, received and filed as Watermaster under Memorandum No. 17-26 on October 5, 2017. This report is included under Appendix C.

Section 3
Status of the Basin and Administration of the Judgment

The Beaumont Basin Watermaster is responsible for the accounting of groundwater production, recharge of supplemental water, groundwater transfers and storage activities in the Beaumont Basin. Since the inception of the Judgment accounting has been conducted on a fiscal year basis starting on July 1, 2003.

Through the adoption of Resolution No. 2011-01, on September 21, 2011, Watermaster changed the accounting from a fiscal year basis to a calendar year basis starting in CY 2011. The conversion of Fiscal Year basis to Calendar Year basis was documented in the Annual Report for CY 2011 adopted by the Board in early 2013. The annual report for CY 2017 builds on the information presented in previous annual reports.

3.1 Climate, Hydrology and Hydrogeology

3.1.1 Climate

The Beaumont Basin is located in a semi-arid region characterized by warm summers and mild winters with average summer high temperatures in the mid to upper 90s (Fahrenheit) and average winter low temperatures in the mid to low 40s. Precipitation in the region occurs as snowfall in the upper elevations of the San Bernardino Mountains to the north and rainfall in the Basin. Annual precipitation in the Beaumont Basin, as recorded at the County of Riverside's Beaumont Station 013 averaged 17.16 inches over the 100-year period between 1918 and 2017. On the average during this 100 year period, 11.96 inches of precipitation, or 69.8 percent of total, fell during the winter between December and March. Over the last 25 years, precipitation has averaged 15.23 inches of rain which is approximately 89 percent of the 100 year average precipitation.

Figure 3-1 illustrates annual precipitation at this station for the 25-year reporting period between 1993 and 2017 including a plot of the cumulative departure from the mean (CDFM) precipitation. This parameter is used to assess the occurrence, duration, and extent of wet and dry precipitation cycles. Upper trending periods in the graph represent periods with above average precipitation such as the 1993-98 period; average precipitation during this period was 22.6 inches or close to 50 percent above the long-term average. Other above average precipitation periods include the 2003-05 period. Conversely, down trending periods indicate periods of below average precipitation as in the 2011-17 period when average precipitation was only 11.1 inches or approximately 70 percent of the 25-year average.

Currently, the Basin is in a dry period that began in 2011. During the last 10 years, two of the five years with the lowest precipitation ever recorded at Station 13 have occurred; 7.4 inches (lowest ever) in 2013 and 8.07 inches in 2009. It should be noted that the average precipitation during the base period (1997-2001) used to determine the Safe Yield of the Basin was 13.43 inches, close to 25 percent below the 100 year long-term average for the Basin and approximately 12 percent below the 25-year precipitation average.

3.1.2 Surface Water Hydrology

There are three significant drainage systems that overlie the Beaumont Basin: the San Timoteo Creek drainage system which is tributary to the Santa Ana River; the Potrero Creek drainage system in the San Jacinto watershed; and the Smith Creek drainage system tributary to the White Water River which is part of the Salton Sea drainage basin.

Surface water flows originate in the San Bernardino Mountains to the north of the Basin. The streams and creeks that flow into the Beaumont Basin are dry for most of the year with occasional runoff during rainfall events. There are no stream gages in the Basin that can be used to estimate surface water recharge to the Basin or discharge from the Basin.

3.1.3 Hydrogeology

3.1.3.1 Regional Geologic Context

The Beaumont Basin is located in the San Gorgonio Pass, a low-relief highland that is bordered on the north by the San Bernardino Mountains, on the southeast by the San Jacinto Mountains, and on the west by the San Timoteo Badlands. Surface sediments in the Beaumont Basin and nearby lowlands consist of unconsolidated to semiconsolidated Quaternary alluvium. Surrounding the alluvial sediments are semiconsolidated rocks of the San Timoteo Formation and igneous and metamorphic rocks that make up the San Jacinto and San Bernardino Mountains (see Figure 3-2). The San Timoteo Formation is composed primarily of sandstone, conglomerate, siltstone, and mudstone (Rewis, et al., 2007). The igneous and metamorphic rocks form the crystalline basement rocks in the area (Bloyd, 1971). The unconsolidated Quaternary alluvium and the upper portion of the underlying San Timoteo Formation constitute the water-bearing aquifer of the Beaumont Basin (Rewis, et al., 2007).

3.1.3.2 Faults

The boundaries of the Beaumont Basin are based on faults that often form barriers to groundwater flow (Bloyd, 1971). Major faults in the area include the Banning and Cherry Valley faults, which form the northern boundary of the basin (see Figure 3-2). Groundwater levels within the Beaumont Basin are generally lower than groundwater levels in the surrounding areas. Along the Banning Fault, groundwater levels on the north side of the fault and outside the basin are as much as 400 ft higher than groundwater levels on the south side of the fault and inside the basin. The same condition has been observed along the southern Beaumont Basin boundary.

3.1.3.3 Groundwater Occurrence and Flow

Groundwater in the Beaumont Basin occurs at depth in the Quaternary alluvium and the underlying San Timoteo Formation. Groundwater flow within the Beaumont Basin generally depends on location with respect to a groundwater flow divide which occurs in the center of the basin, approximately coincident with the Noble Creek drainage (see Figure 3-2). West of the Noble Creek drainage, groundwater generally flows to the northwest and ultimately as

underflow beneath San Timoteo Wash. East of the Noble Creek drainage, groundwater flows to the southeast towards the City of Banning.

The groundwater system in the Beaumont Basin is replenished from multiple sources. These include:

- Infiltration of precipitation within the unlined portions of natural streams
- Subsurface seepage across fault boundaries
- Return flow from irrigation and individual septic systems
- Artificial recharge in man-made basins (e.g. Noble Creek Recharge Facility).

Groundwater discharges from the Beaumont Basin primarily occur from:

- Groundwater production
- Underflow out of the basin at the downgradient margins
- Rising water in San Timoteo Creek
- Evapotranspiration

3.2 Production

The Beaumont Basin Watermaster is responsible for the tracking and accounting of groundwater production by all producers named in the Judgment regardless of the amount of groundwater produced. Other producers, not listed in the Judgment, and pumping less than 10 ac-ft /yr., also known as minimal producers, are exempt from the provisions of the Judgment. Figure 3-3 illustrates the location of all production wells that belong to the Appropriators and Overlying parties of the Judgment.

3.2.1 Appropriative Party Production

There are five Appropriative Producers; namely, City of Banning, City of Beaumont, the BCVWD, the SMWC, and the YVWD. The amount that each Appropriator produces in any given year, without incurring a replenishment obligation, varies from year to year and results from a combination of:

- Their share of the Operating Yield, based on the Temporary Surplus of 16,000 ac-ft/yr for all Appropriators,
- Transfers from other Appropriators,
- Transfers of unused production from Overlying Producers,
- Water withdrawn from their storage account, and
- New yield created by the Appropriator.

It should be noted that beginning in 2014, the Temporary Surplus is no longer available to the Appropriators as it officially ended after 10 years during Fiscal Year 2013.

Annual production by well for each of the five Appropriative Parties for the CY 2003-2012 period is summarized in Table 3-1A; this table also includes the Temporary Surplus Allocation and the amount of unused production that is eligible for storage for each Appropriator. Monthly production for the last five years of operation (CY 2013-17) are presented in a series of tables starting with Table 3-1B for CY 2013 and continuing on an annual basis through Table 3-1F for CY 2017. Table 3-1B for CY 2013 also includes the Temporary Surplus Allocation for each of the Appropriators based on half of the 16,000 ac-ft/yr since this temporary allocation ended at the end of Fiscal Year 2013 in June of that year. It should be noted that all production by Appropriators is currently being metered; however, no information is available as to the accuracy of existing meters.

During CY 2017, Appropriators pumped a combined amount of 13,462.40 ac-ft of groundwater from the Beaumont Basin. Production for the year was approximately 12 percent higher than in CY 2016 and 20 percent higher than in CY 2015; however, it was less than two percent higher than the 5-year average of 13,228 ac-ft.

Compared to groundwater production totals for CY 2016, production for individual agencies in CY 2017 was mixed. The City of Banning production dropped by two percent; however, production by BCVWD and SMWC increased by 15 percent and four percent respectively. Production by YVWD was rather minimal as less than one ac-ft was pumped during the year. A comparison of production against a five-yr running average, the City of Banning underproduced by over 22 percent while the BCVWD pumped 11 percent higher. Production by SMWC was only one percent higher than the average while no comparison could be established for the YVWD due to minimal production.

3.2.2 Overlying Party Production

Overlying Parties are defined in the Judgment as persons, or their assignees, that are part of the Judgment and who are owners of land which overlies the Beaumont Basin and have exercised Overlying Water Rights to pump therefrom. Overlying Parties include successors in interest and assignees. Overlying Producers were assigned a share of the Basin's Safe Yield, estimated in 2003 at 8,650 ac-ft/yr. Individual Overlying Producers may not pump more than five times their assigned share of the Basin's Safe Yield in any five-year consecutive period without incurring a replenishment obligation.

Currently, there are 17 Overlying Producers in the Basin pumping from 20 groundwater wells. All active wells operated by the larger producers are metered. Meters were installed by individual owners or as part of an effort initiated by Watermaster in 2013 to obtain a closer production accounting from Overlying Parties. Production from metered wells represented close to 99 percent of the total production by Overlying Parties in CY 2017.

The remaining wells, operated by smaller producers, did not have meters for some or most of 2017 and their production is estimated using the water duty method. This method was initially proposed by Wildermuth Environmental Inc. (WEI), during the preparation of the 2005-06 Annual Report. After being accepted by the Watermaster, an updated water duty method was developed

by WEI and it has been used since. The estimate of unmetered production for the CY 2017 Annual Report uses the updated method developed by WEI as detailed in Appendix D.

Similar to the production reported for the Appropriators, a series of tables was developed to report monthly and annual production from the Overlying Parties on a calendar year basis. Starting with Table 3-2A, annual production is documented for CY 2003-12; Table 3-2B through 3-2F summarize monthly production by Overlying well for CY 2013 through CY 2017 respectively. In addition, these tables show their share of the Safe Yield and the amount of unused water for each Overlying Party is shown. It should be noted that these tables have been revised to reflect updated production records from Sharondale Mesa Owner Association since 2011 and Plantation by the Lake since 2013.

Production by Plantation by the Lake has been corrected for the 2013 to 2016 period. During those years, monthly production records were provided by this Overlying Producer in million gallons; however, research conducted early in the year indicated that the number should have been reported in million cubic feet instead. This result in a documented under production by a factor of 7.48 since there are 7.48 gallons of water in a cubic foot. Production by this Overlying user continues to be refined and has not been confirmed by Overlying User at this time; revisions, if any, will be documented in the 2018 Annual Report.

During CY 2017, Overlying Producers produced an estimated 2,404.7 ac-ft; this level of production is approximately 24 percent higher than in CY 2016 and 15 percent higher than in CY 2015. Compared to the five-year average of 2,186.1 ac-ft, Overlying Producers pumped 10 percent more water than the average. Production tables 3-2B (2013) through 3-2F (2017) have been corrected based on the Plantation by the Lake revisions.

3.2.3 2003-2017 Annual Production Summary

Annual production for all Appropriators and Overlying Parties since 2003 is summarized in Table 3-3a on a calendar year basis for the 2003 to 2010 calendar years while Table 3-3b documents annual production for CY 2011 through CY 2017. It should be noted that production from 2003 only includes production for the second half of the year. Since July 2003, a total of 229,014 ac-ft have been pumped from the Beaumont Basin; an estimated 83 percent of this total has been pumped by Appropriators. The percentage of groundwater production from Appropriators has steadily increased since the Judgment inception from a low of 74.3 percent registered in CY 2003 to a high of 87.2 percent recorded in CY 2014 and has averaged 85.7 percent over the last five calendar years.

Groundwater production peaked in CY 2007 when close to 20,000 ac-ft were pumped from the basin; since, it declined steadily through 2010 to approximately 13,600 ac-ft; however, production during the 2011-14 period increased by 23.6 percent. Total groundwater production from the basin in CY 2017 was 15,867 ac-ft; approximately three percent higher than the five-year average of 15,414 ac-ft/yr. Annual production for each of the Appropriators and for the Overlying Producers combined is depicted in Figure 3-4.

3.3 Groundwater Recharge

The Watermaster is responsible for maintaining an annual account of all water artificially recharged in the Beaumont Basin and any losses of water supplies or Safe Yield resulting from such recharge water. Sources of groundwater recharge include imported water from the State Water Project (SWP), recycled water, and new yield sources developed in the basin since the Judgment inception in July 2003. The Watermaster has maintained the accounting of groundwater recharge; however, losses from the basin, if any, have not been estimated. Table 3-4 presents a summary of the annual groundwater recharge in the Beaumont Basin since 2003 on a calendar year basis.

3.3.1 State Water Project Water Recharge

BCVWD's Noble Creek spreading facility, located in the vicinity of Beaumont Avenue and Cherry Valley Boulevard, is the only facility in the Beaumont Basin where deliveries of imported water can be used to recharge the groundwater basin. The location of this spreading facility is depicted in Figure 3-3. Deliveries of imported water are conducted through the San Gorgonio Pass Water Agency, which is the State Water Contractor for this area.

The BCVWD began taking deliveries of imported water for groundwater recharge in the Fall of 2006 when 3,501 ac-ft were spread pursuant to the storage and recharge agreement on file with Watermaster. Deliveries of imported water for BCVWD increased over the next five years peaking in CY 2011 at 7,979 ac-ft and declining through 2015 to an all-time low of 2,773 ac-ft. BCVWD augmented spreading of imported water significantly in CY 2016 at 9,319 ac-ft and even more in CY 2017 to an all-time high of 13,590 ac-ft. A total of 72,121 ac-ft of imported water have been spread by BCVWD since CY 2006 as documented in Table 3-4.

The City of Banning began purchasing imported water for recharge at the BCVWD's Noble Creek facility in July 2008 and has since recharged 12,942 ac-ft. in accordance with their storage agreement on file with Watermaster. During CY 2012 and 2013, the City of Banning spread an average of 100 ac-ft per month; spreading in CY 2014 and 2015 was reduced to approximately half of that amount. However, spreading in CY 2016 and 2017 increased significantly to 1,477 ac-ft and 1,350 ac-ft respectively.

In addition to imported water deliveries to BCVWD and the City of Banning at BCVWD's Noble Creek facility, SGPWA has also delivered significant quantities of imported water at the Little San Gorgonio Creek Spreading Ponds. These spreading ponds are located outside the adjudicated boundary of the Beaumont Basin and to the north of the Banning Fault, as shown in Figure 3-3. Spreading of imported water at these spreading ponds is likely to be a source of subsurface recharge to the Beaumont Basin; however, Watermaster has not adopted this finding. Subsurface recharge across the Banning Fault was investigated as part of the Safe Yield of the Basin determination study, completed in early 2015.

Deliveries of imported water by the SGPWA to the Little San Gorgonio Creek Spreading Ponds began in August 2003; the agency has since recharged a total of 10,508 ac-ft

averaging 808 ac-ft/yr. Deliveries in CY 2013, at 881 ac-ft, were less than half of the amount spread in CY 2011 and CY 2012. Deliveries in CY 2014 through CY 2017 were basically non-existent as less than 44 ac-ft were spread in those four years combined. Under Resolution 17-01, adopted on June 7, 2017, the SGPWA entered into a storage agreement with the Beaumont Basin Watermaster to spread up to 10,000 ac-ft of imported water in the Beaumont Basin subject to certain conditions. As part of their application, the SGPWA plans to construct their own spreading facilities in the southwest corner of Brookside Avenue and Beaumont Avenue.

3.3.2 Recycled Water Recharge

Prior to March 2010, Beaumont's recycled water from Wastewater Treatment Plant No. 1 was discharged at Discharge Point No. 1 (DP-001) in Cooper's Creek where it infiltrates into the San Timoteo Management Zone and outside the Beaumont Basin. Starting in March 2010, Beaumont began deliveries of recycled water to Discharge Point No. 7 (DP-007), located along an unnamed tributary of Marshall Creek, as shown in Figure 3-3. It is believed that a portion of the recycled water discharged at this location reaches and recharges the Beaumont Basin. It should be noted that the City of Beaumont decided to ceased deliveries to DP-007 in the Fall of 2015.

In CY 2017, the City of Beaumont discharged an estimated 3,663 ac-ft of recycled water at DP-001 in Cooper's Creek. Recycled water discharges were approximately four percent higher than in CY 2016. Monthly discharges at DP-001 varied slightly from a low 3.17 mgd in March to a high of 3.36 mgd in January; the average for the year was 3.27 mgd. Monthly recycled water discharges by the City of Beaumont since 2007 are summarized in Table 3-5.

3.3.3 New Yield Stormwater Recharge

Before accounting for any new yield resulting from the recharge of local surface water, not initially considered as part of the Basin Safe Yield, Watermaster needs to develop a methodology to quantify and credit the New Yield to the party that creates the new recharge. According to Part VI Paragraph 5.V of the Judgment, Watermaster shall make an independent scientific assessment of the estimated new yield created by each proposed project. It is our understanding that the City of Beaumont has been recharging local waters at various locations in the Basin and would like to receive credit for the New Yield developed. For Beaumont to receive credit however, Watermaster will need to develop the methodology to compute and credit the New Yield dating back to the Judgment inception in February 2003 or since delivery of flows began, whichever is latest.

3.4 Water Transfers and Adjustments of Rights

Section 7 of the Watermaster Rules and Regulations, as amended in September 2008, provides for the adjustment of rights by and between Appropriators and Overlying Parties. This section indicates that Watermaster shall maintain an accounting for all transfers and include said transfers in the Annual Report or other relevant document. There are three types of transfers that Watermaster accounts for: a) transfer of water rights and/or water in storage between Appropriator Producers, b) transfer of water rights from Overlying Producers to an

Appropriator Producer in exchange for water service, and c) the allocation of unused Overlying Water to the Appropriator Parties based on their share of the Operating Safe Yield.

According to Part VI, Administration, Paragraph 5Y of the Judgment, the Safe Yield of the Beaumont Basin shall be re-determined at least every 10 years after the date of entry of the Judgment, February 4, 2004. In 2015 the Safe Yield of the Beaumont Basin was re-determined and estimated at 6,700 ac-ft/yr. This amount represents a 22.54 percent reduction from the previous estimate of 8,650 ac-ft/yr. Table 3-6 presents the initial and revised production rights from individual Overlying Producers and compares them against actual groundwater production during the 2013-17 five-year period for each user. Annual average groundwater production during this period for all Overlying Producers combined was estimated at 2,161.5 ac-ft/yr; representing approximately 32.3 percent of the revised Safe Yield. Individually, none of the Overlying Producers produced more than their allowable production rights during this five-year period; California Oak Valley Golf and Resort LLC averaged the highest percentage of their respective allocation at 86.6 percent followed by Plantation by the Lake at 78.7 percent and Sharondale Mesa Owner Association at 70.1 percent. Tukwet Canyon Golf Club followed at an average of 59.8 percent of their Overlying right.

3.4.1 Transfers between Appropriators

According to Section 7.3 of the Rules and Regulations, an Appropriator may transfer all or a portion of its production right or water in storage that exceeds its supply needs to another Appropriator.

In January 2008, the SMWC and the BCVWD entered into a transfer agreement that allows BCVWD the option to purchase all water that SMWC determines to be available for transfer from their storage account. As part of the agreement, each year the SMWC estimates the amount of water available for transfer and offers it to the BCVWD for purchase prior to offering it to other Appropriators. Since the beginning of the agreement, SMWC has transferred 9,500 ac-ft of water to BCVWD with 3,500 ac-ft transferred in CY 2011. SMWC also transferred 1,500 ac-ft of water to Banning in CY 2007. The purchase agreements and transfers between these agencies are on file with Watermaster.

Water transfers between Appropriators were not reported during CY 2017.

3.4.2 Transfers of Overlying Rights for Service by an Appropriator

The Judgment, under Part III, Paragraph 3, provides that to the extent an Overlying Party request water service from an Appropriator Party, and uses its adjudicated water rights to obtain said service; an equivalent volume of groundwater shall be reserved for the Appropriator Party providing the service to the Overlying Party. Further, Section 7 of the Rules and Regulations indicates that both the Overlying and Appropriator will file a Notice of Adjustments of Rights with Watermaster within 30 days after entering a service agreement.

Under Resolution 17-02, adopted on August 30, 2017, the Oak Valley Partners LP transferred all of its Overlying rights to the YVWD to serve a number of parcels in the Beaumont Basin. The

Stipulated Judgment allocated OVP an overlying production right of 1,806 ac-ft based on the initial Safe Yield of 8,650 ac-ft/yr. OVPs rights have been adjusted to 1,398.86 ac-ft based on the recalculated Safe Yield of 6,700 ac-ft/yr as approved by the Watermaster on April 1, 2015. Overlying rights and Overlying-Appropriative rights will be adjusted every 10 years based on the recalculation of the Safe Yield of the Beaumont Basin.

The following table summarizes the transfer and conversion of Overlying Water Rights from an Overlier Party to an Appropriative User. This table will be used to track the conversion of rights as lands develop and begin being served by the Appropriators.

Description	Resolution 17-02
✓ Resolution Effective Date	August 30, 2017
✓ Overlyier water rights were transferred from	Oak Valley Partners LP
✓ Appropriator water rights were transferred to	Yucaipa Valley Water District
✓ Date that Overlier notifies Watermaster of assignment of a quantity of Overlying water rights to a project area	To be determined
✓ Date that Appropriators begins to provide water service to the project area	To be determined
✓ Calculated quantity of water rights transferred	To be determined
✓ Remaining quantity of Overlying Water Rights not converted to an Overlying-Appropriative Right	1,398.86 ac-ft/yr

3.4.3 Allocation of Unused Overlying Water

Section 7.8 of the Rules and Regulations, adopted on September 9, 2008, by Watermaster, outlines the process for distributing the volume of adjudicated water not produced by the Overlying Parties to the Appropriators. Under this section, if an Overlying Party produces less than five times of their share of the Safe Yield in any five-year period, the quantity of groundwater not produced by that Overlying Party shall be made available for allocation to the Appropriators. Transferring of unused production from Overlying Users does not diminish their legal right to produce in subsequent years.

Since the inception of the Judgment, transfers of unused production by Overlying Users has been made on a fiscal year basis coinciding with the preparation of the annual report. Preparing the annual report on a calendar year basis required that the transfers of unused production also be made on the same basis. Based on the five-year format used in the Rules and Regulations, transfers to the Appropriator Parties for CY 2017 were based on unused production from Overlying Users in CY 2012. This required the recalculation of Overlying

Users production, back to July 2003, on a calendar year basis. Under this format, unused production from the second half of 2003, with adjusted water rights for half of the year, was allocated to Appropriators for CY 2008. Table 3-7 summarizes the volume of unused Overlying water for CY 2003 through CY 2017. While groundwater production by Overlying Users has decreased by over 40 percent since 2004, the volume of unused overlying water has correspondingly increased from 5,053 ac-ft/yr in CY 2006 to a maximum of 6,679 ac-ft during CY 2011. The amount of unused production decreased starting in CY 2014 to slightly over 4,600 ac-ft/yr as a result of reduced Overlying allocations resulting from the new basin Safe Yield of 6,700 ac-ft/yr.

Table 3-7 presents the allocation of unused Overlying water to each Appropriator based on their shares of the Safe Yield and the schedule set forth under Section 7.8 of the Rules and Regulations. It should be noted that this schedule has been modified to reflect a calendar year basis for allocation. Under the modified schedule, unused Overlying production in CY 2012, estimated at 6,565 ac-ft, is allocated to Appropriators during CY 2017. Unused Overlying production during CY 2017, estimated at 4,295 ac-ft and subject to revision, would be allocated to Appropriators during CY 2022.

It should be noted that if a portion or all of the Overlying Right of Oak Valley Partners LP is converted to an Overlying-Appropriative Right in favor of YVWD prior to CY 2022, then the quantity of water available to Appropriators in 2022 will be adjusted accordingly.

3.5 Storage Accounting

Section 6.7 of the Watermaster Rules and Regulations indicates that Watermaster shall calculate additions, extractions, and losses of all water stored and any losses of water supplies or Safe Yield resulting from such water stored. This section further indicates that Watermaster shall keep and maintain for public record an annual accounting thereof. While additions (spreading) and extractions (pumping) are easily quantifiable, losses from storage are more difficult to estimate. A methodology for estimating groundwater losses from the Basin is currently being developed and is anticipated to be completed in FY 2018.

3.5.1 Annual Storage Consolidation

Consistent with the new reporting format to document extractions, spreading and other groundwater activities on a calendar year basis, Table 3-8 represents the consolidation of each Appropriator's storage account from CY 2003 through CY 2017. This table includes annual production by Appropriator, their share of Temporary Surplus, supplemental water recharge in its various forms, transfers between Appropriators, potable deliveries to parcels previously owned by Overlying Users, and transfers of unused water from Overlying Users. At the end of 2016, an overall total of 101,118.8 ac-ft of water were stored in the Basin for future use; this total increased in CY 2017 by 8,046.2 ac-ft to a cumulative total of 109,165.0 ac-ft. Increased spreading of imported water by BCVWD and the City of Banning along with low production totals by YVWD were the primary reasons for the increase in storage. Despite of the expiration of the Temporary Surplus allocation at the end of CY 2013, the amount of water in storage at the end of CY 2017 was 8,352.3 ac-ft higher. The amount of water in storage by party at the beginning and end of CY 2017 is as follows:

Agency / Party to the Judgment	Calendar Year 2017 (ac-ft)		
	Beginning	Ending	Change
City of Banning	49,990.8	51,960.6	1,969.8
BCVWD	27,565.9	32,295.7	4,729.9
City of Beaumont	0.0	0.0	0.0
South Mesa Water Company	8,681.3	9,132.5	451.2
Yucaipa Valley Water District	14,880.8	15,776.2	895.3
Morongo Band of Mission Indians	0.0	0.0	0.0
San Gorgonio Pass Water Agency	0.0	0.0	0.0
TOTAL in storage	**101,118.8**	**109,165.0**	**8,046.2**

3.6 Changes in Groundwater Levels in the Beaumont Basin

3.6.1 Analysis of Groundwater Level Changes

Changes in groundwater flow and groundwater levels between 2016 and 2017 were evaluated using a calibrated groundwater flow model that was previously developed to reevaluate the Safe Yield of the Beaumont Basin (TH&Co, 2015). For this analysis, the existing calibrated model was updated with groundwater pumping, recharge, and groundwater levels through the end of 2017. A model-generated groundwater contour map was created for Fall 2017 and compared to the model-generated Fall 2016 groundwater contour map in order to evaluate changes in groundwater flow patterns and basin-wide changes in groundwater levels. The model-generated groundwater contour maps for 2016 and 2017 are shown on Figures 3-6 and 3-7, respectively.

Groundwater flow direction and gradient within the Beaumont Basin varies depending on location with respect to a groundwater flow divide which occurs in the center of the basin approximately coincident with the Noble Creek drainage. West of the Noble Creek drainage, groundwater generally flows to the northwest and ultimately towards San Timoteo Wash. East of the Noble Creek drainage, groundwater flows to the southeast towards the City of Banning. The groundwater flow directions did not change significantly between 2016 and 2017 except near the Noble Creek Recharge Facility where a localized mount can be seen in 2017.

Basin-wide groundwater level trends in the Beaumont Basin were evaluated based on hydrographs from eights key wells and the groundwater level change map developed by subtracting the 2016 groundwater surface from the 2017 groundwater surface (See Figures 3-6 and 3-7). The total change in storage between the Fall 2016 and the Fall 2017 is shown in Figure 3-8. In the northwest portion of the basin (YVWD 34 and Singleton Ranch 7),

groundwater levels remained stable in CY 2017. At Tukwet Canyon Golf Club C, groundwater levels continued a steady decline in 2017 that has been observed since 2003. When evaluated on a long-term basis, groundwater levels in wells in the western portion of the basin have shown a general long-term decline since approximately 2005.

As shown on Figure 3-9, groundwater levels in the north central portion of the basin rose as much as 15 ft in 2017 as a result of increased recharge at the Noble Creek Artificial Recharge facility. Conversely, groundwater levels in TW-1, located on the northeast corner of the recharge facility began to recover slightly in early 2017 before starting to decline again. This well is perforated in the lower aquifer and typically shows a delayed response to groundwater recharge relative to wells perforated in the upper aquifer.

In the south-central portion of the basin, groundwater levels at Oak Valley No. 1 declined by over 10 feet since 2016. At BCVWD Well No. 2, groundwater levels rose in February 2016 but have generally been declining since. At Banning Well C-4 (southeast Beaumont Basin), groundwater levels were rising in April, declined in the summer, and began increasing in October.

The variability of groundwater levels at BCVWD Well No. 2 and Banning Well C4 are likely due to seasonal pumping patterns in these areas. Groundwater levels in the northeast portion of the basin (335714116565002) have been trending upward since 2010 and have remained mostly stable in 2017.

3.6.2 Analysis of Change in Groundwater Storage

Basin-wide change in groundwater storage between Fall 2016 and Fall 2017 was analyzed as a function of the difference in groundwater levels across the basin and the specific yield of the aquifer sediments. Groundwater level change across the basin was analyzed using the following procedure:

1. The Fall 2016 and Fall 2017 model-generated groundwater contour maps were each converted into three-dimensional raster surfaces.
2. The basin was discretized into 100-ft by 100-ft grid cells.
3. Attributes were assigned to each grid cell including groundwater level change and specific yield.
4. The resulting attribute table was processed in a Geographic Information System (GIS) for calculating the change in storage.

The specific yield distribution used for the analysis was obtained from the calibrated groundwater flow model used to evaluate the Safe Yield of the Beaumont Basin, as summarized in TH&Co (2015).

Results of the analysis show an increase in groundwater storage within the adjudicated basin of approximately 1,362 acre-ft between Fall 2016 and Fall 2017. The net storage increase is attributable to artificial recharge of imported water at the Noble Creek Artificial Recharge

facility. Most of the western and southern areas showed decreases in groundwater in storage

3.7 Operating Safe Yield

For purposes of this annual report, the annual operating Safe Yield (OSY) describes the net infiltration to the adjudicated groundwater basin (not including artificial recharge) for any given year. It is noted that the OSY is different than the Operating Yield, which is a function of the unused overlyer production (Appropriative Water) and Temporary Surplus, as described in the Beaumont Basin Judgment (San Timoteo Management Authority v. Banning et al., 2004).

Operating Safe Yield is estimated based on the following equation:

$$OSY = \frac{\Sigma P + \Delta S - \Sigma AR}{\Delta T}$$

where:

ΣP	=	The sum of groundwater production (ac-ft)
ΔS	=	The change in groundwater storage (ac-ft)
ΣAR	=	The sum of groundwater recharge (ac-ft)
ΔT	=	The time over which the OSY is estimated (years)

Total Beaumont Basin groundwater production in calendar year 2017 was 15,867 ac-ft (see Table 3-3). Total artificial recharge in calendar year 2017 was 14,940 ac-ft (see Table 3-4). It is noted that only the Noble Creek Recharge Facility recharge was used in the analysis of OSY (recharge at the Little San Gorgonio Creek facility is not included because it is outside the adjudicated area). The change in groundwater storage estimate is based on the analysis of groundwater levels described earlier in this TM. The period of time over which the OSY is evaluated is one year. The resulting OSY is estimated as:

$$OSY = \frac{15{,}867 + 1{,}362 - 14{,}940}{1} = 2{,}289 \text{ ac-ft}$$

It is emphasized that the OSY, as presented herein, is based on one year of data. When evaluated on a long-term basis, this methodology can be used to estimate the long-term Safe Yield of the basin, as defined in the Beaumont Basin Judgment. As required by the Judgment, the Safe Yield of the basin was reevaluated in 2013. The Safe Yield will be reevaluated again in 2023.

It is noted that the change in groundwater storage used to estimate the annualized Safe Yield is based on a calibrated model, as described herein. As additional hydrogeological

data are collected and incorporated into the model, it can be refined to produce more representative groundwater storage change estimates.

It is also noted that there are a number of data limitations that could impact the OSY estimate. These limitations include:

- Accuracy of Overlyer Production Data – Production data from many of the Overlying Parties is not metered but is estimated based on a water duty method (Wildermuth Environmental, 2012). In addition to inherent limitations in this methodology, there are, in some cases, discrepancies between groundwater production estimated using the water duty method and production reported by individual parties to the California State Water Resources Control Board. Resolution of Overlyer Production is anticipated to affect the OSY (plus or minus) on the order of hundreds of ac-ft (not thousands).

- Change in Storage Calculation – Although groundwater storage change estimates will always have inherent uncertainty, it is possible to develop more representative results through collection and analysis of additional data. These data include:

    - ✓ Static groundwater levels from dedicated non-pumping wells. There is evidence that groundwater levels measured in some wells had not recovered fully between pumping cycles in the w ell and were not, therefore, representative of true static conditions. This can be addressed by waiting longer after pumping to collect groundwater levels or constructing/designating non-pumping groundwater monitoring wells in strategic areas.
    - ✓ Measurement of surface water flow in selected drainages, hydrogeological data near Noble Creek and San Timoteo Creek, and hydrogeological analysis of faults in the basin to help achieve a better calibrated model, resulting in more accurate groundwater head distributions. Bettering our understanding of the hydrogeology of this area will help improve the accuracy of the model and its output.

3.8 Recommendations

The Rules and Regulations, initially adopted in June 2004, were developed with the understanding that they should be revisited and/or revised from time to time to make sure they were consistent with the provisions of the Judgment. Revisions to the Rules and Regulations have been made over the years with the latest revision changing the reporting of Watermaster activities from a fiscal year basis to a calendar year basis.

Currently, Watermaster is conducting a study to estimate groundwater losses from the basin resulting from spreading of imported or outside water at selected locations in the basin. The report is anticipated to be completed in eary 2018.

Watermaster may conduct additional studies in the future in support of:

- ✓ Developing a methodology to account for new yield from capturing local stormwater in the basin, and

- ✓ Developing a methodology to account for recycled water recharge in the basin.

In preparing this annual report and through the review of previous annual reports, we have identified a number of issues/activities that should be considered by the Watermaster to ensure accurate accounting of production, transfers, recharge, and storage. It should be noted that many of the recommendations provided in this section have been previously documented in prior annual reports. Our recommendations are as follows:

- Develop a protocol to increase the accuracy and consistency of data reported to the Watermaster. Watermaster should identify a person and/or entity to be the central repository for data collection, transfer, and exchange. This person/entity shall be responsible for the collection and distribution of all groundwater production, water level, groundwater recharge, and water quality information. Quality control of the data in its various forms including checks for errors, omissions, and inconsistencies between the reporting agencies and/or parties should be part of this process.
- Develop a policy to account for transfers of water that may result when an Appropriator provides water service to an Overlying Party. Section 7 of the Rules and Regulations, Adjustments for Rights, provides initial guidelines to execute this transfer; however, it needs to be enhanced in the following areas: a) data requirements to complete the transfer, b) review process by Watermaster, c) schedule for completion so that proper accounting of transfers can be given and documented in the annual report.

As indicated earlier, Watermaster should revisit the Rules and Regulations to ensure that its activities are consistent with the requirements of the Judgment. The following inc onsistencies between guidelines provided in this document and current Watermaster activities were identified:

- Watermaster has not conducted a meter maintenance program, as required under Section 3.1 of the Rules and Regulations, to make sure groundwater production is reported accurately. Individual parties may or may not maintain and calibrate their production meters at acceptable intervals.
- Under Section 3.2 of the Rules and Regulations, producers producing in an excess of 10 ac-ft/yr. should report on a monthly basis by the 15th day of the ensuing month while those producing less should file on an annual basis by the 15th of July. This provision should be revised as it was written for fiscal year accounting. Overlying Parties producing less than 10 ac-ft/yr should report by the 15th of January now that calendar year accounting is used. Proper supporting information should be provided.
- Watermaster has not enforced the submittal of notices of transfers prior to accounting for said transfers as defined in Sections 7.1 through 7.5 of the Rules and Regulations.

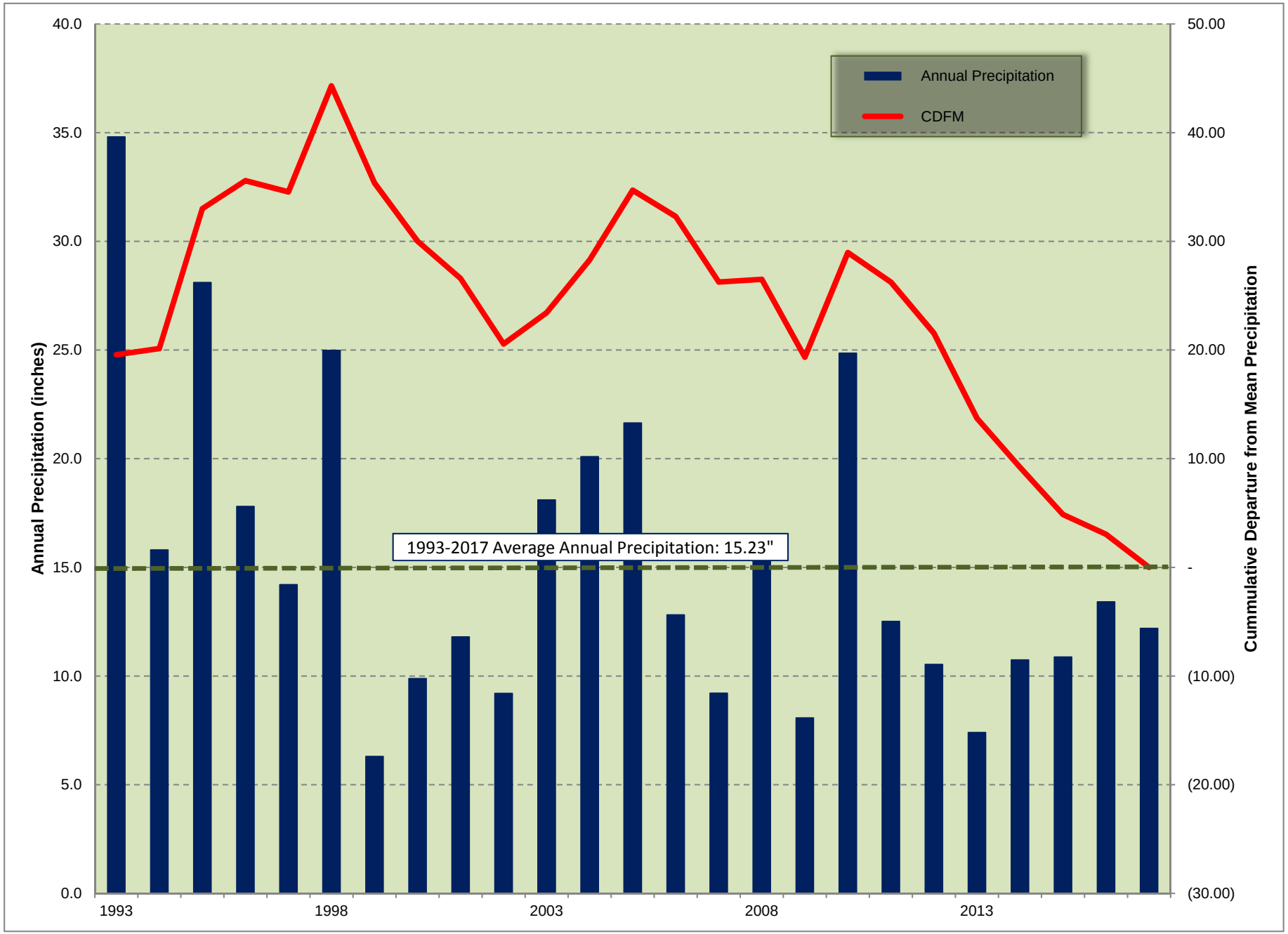
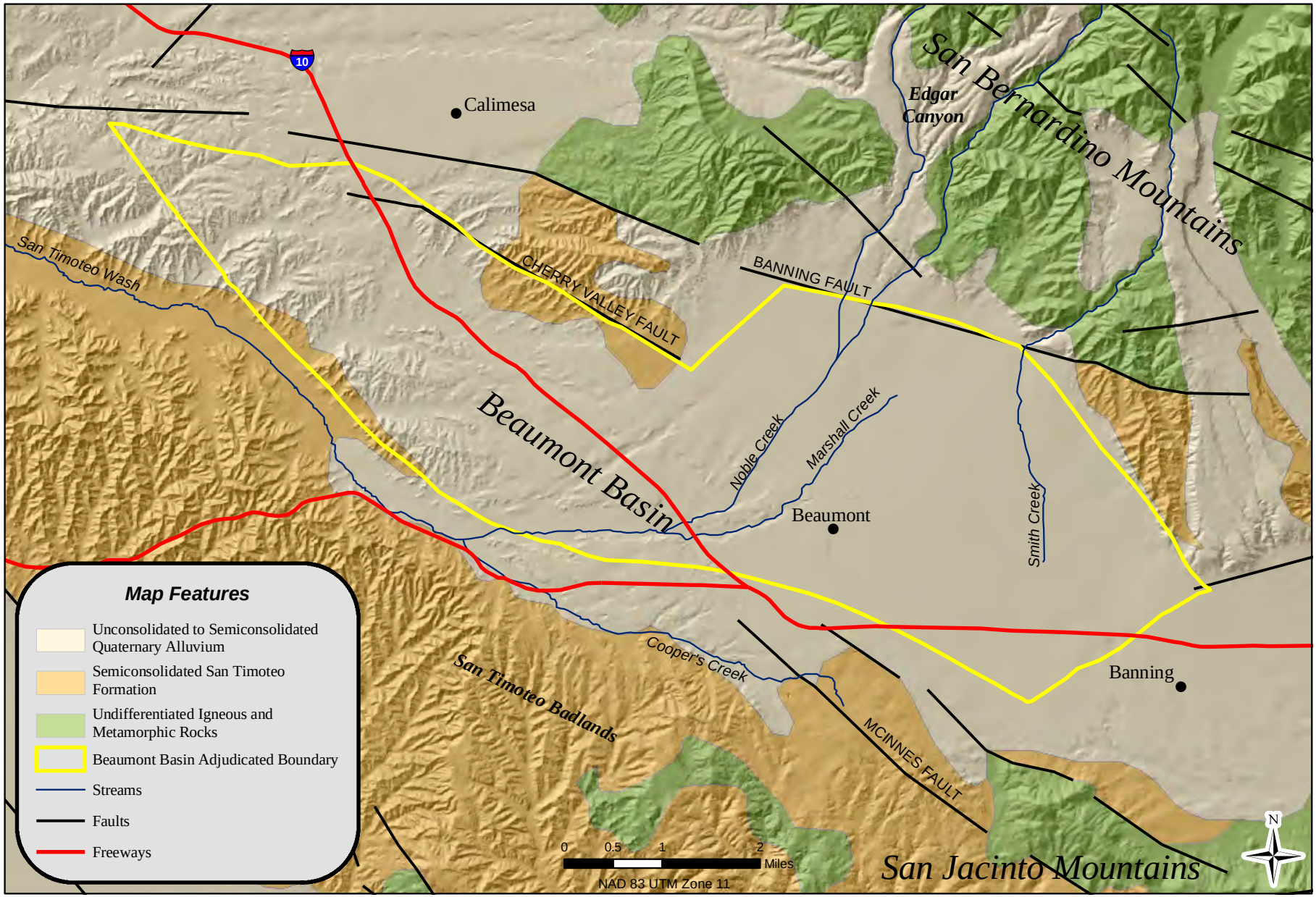


Figure 3-1
Annual Precipitation with Cummulative Departure from the Mean (1993-2017)



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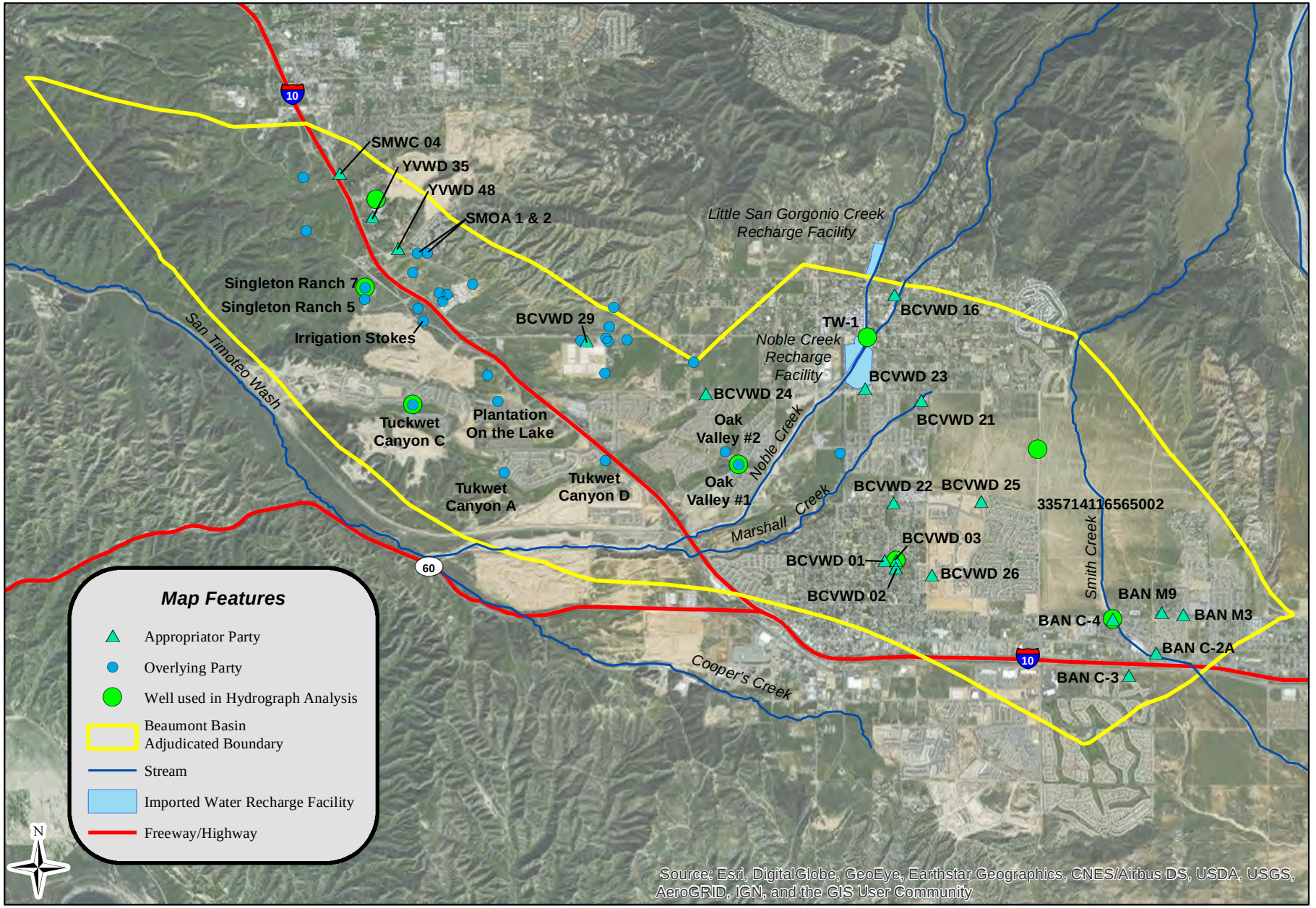
Thomas Harder & Co.
Groundwater Consulting

Geology of the Beaumont Basin

Figure 3-2



Alda, Inc. *in association with*
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Groundwater Consulting

0 0.5 1 2
Miles
NAD 83 UTM Zone 11

Well Locations in the Beaumont Basin

Figure 3-3

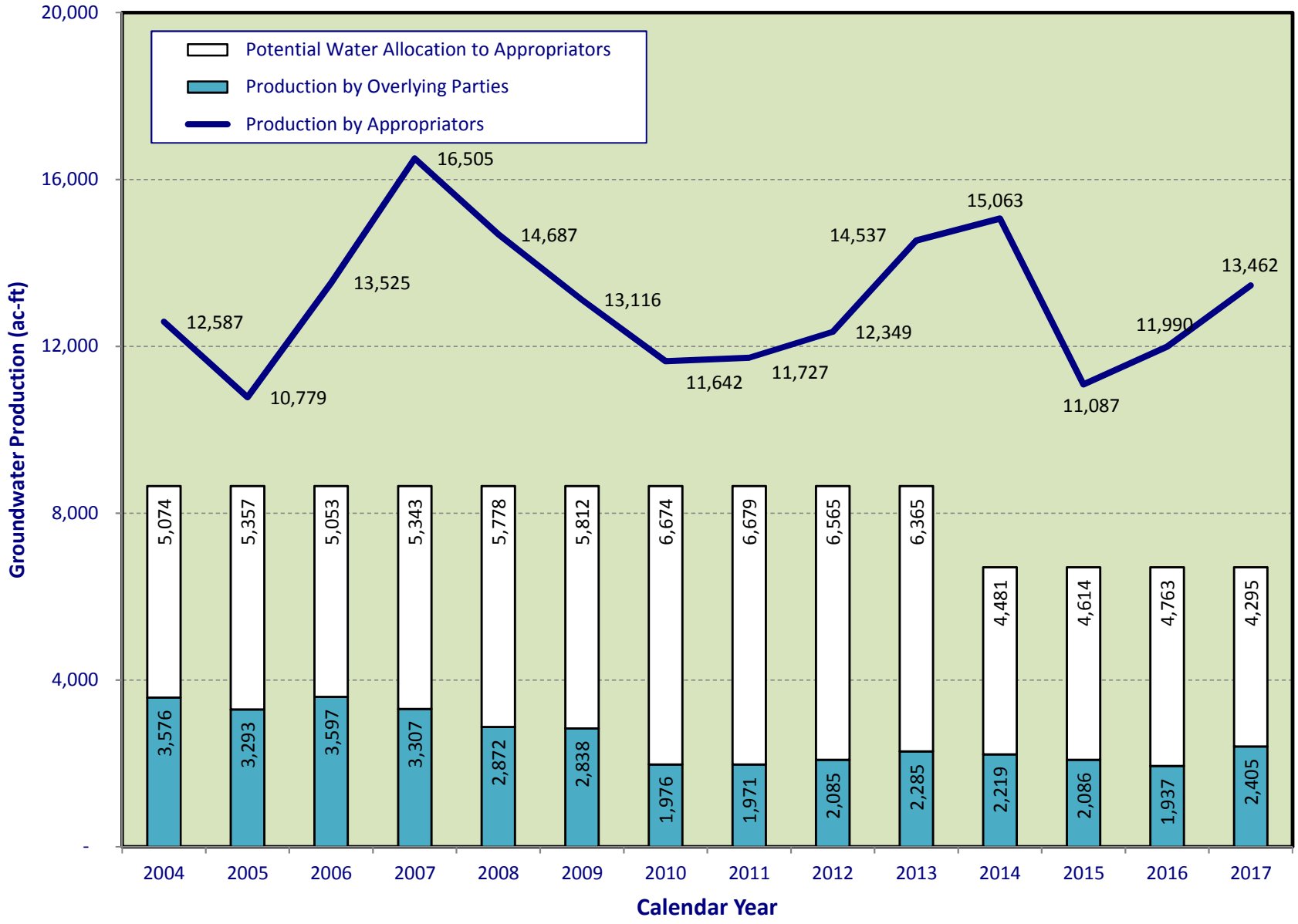


Figure 3-4
Annual Production by Appropriators and Overalying Users (2004-17)

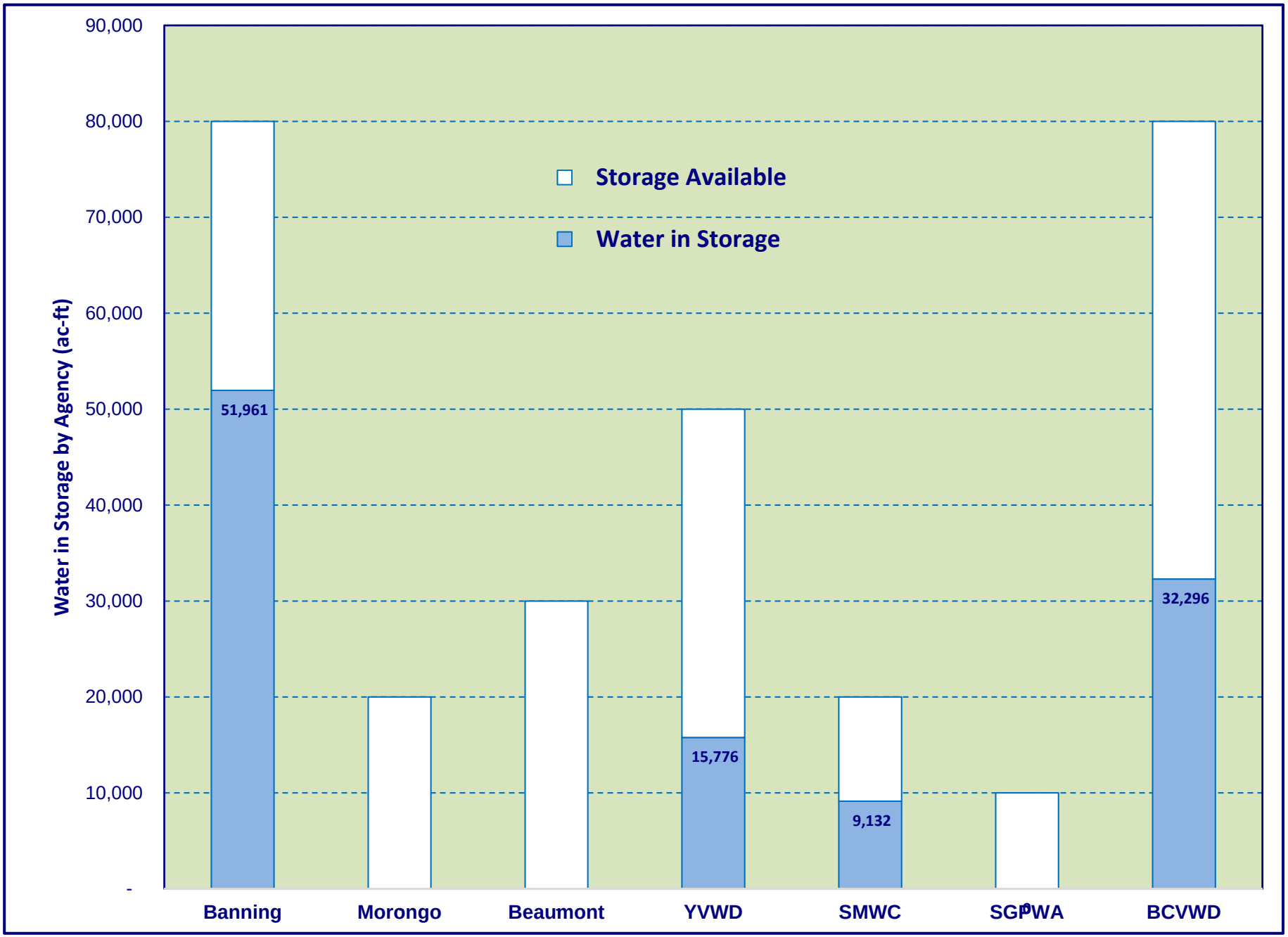
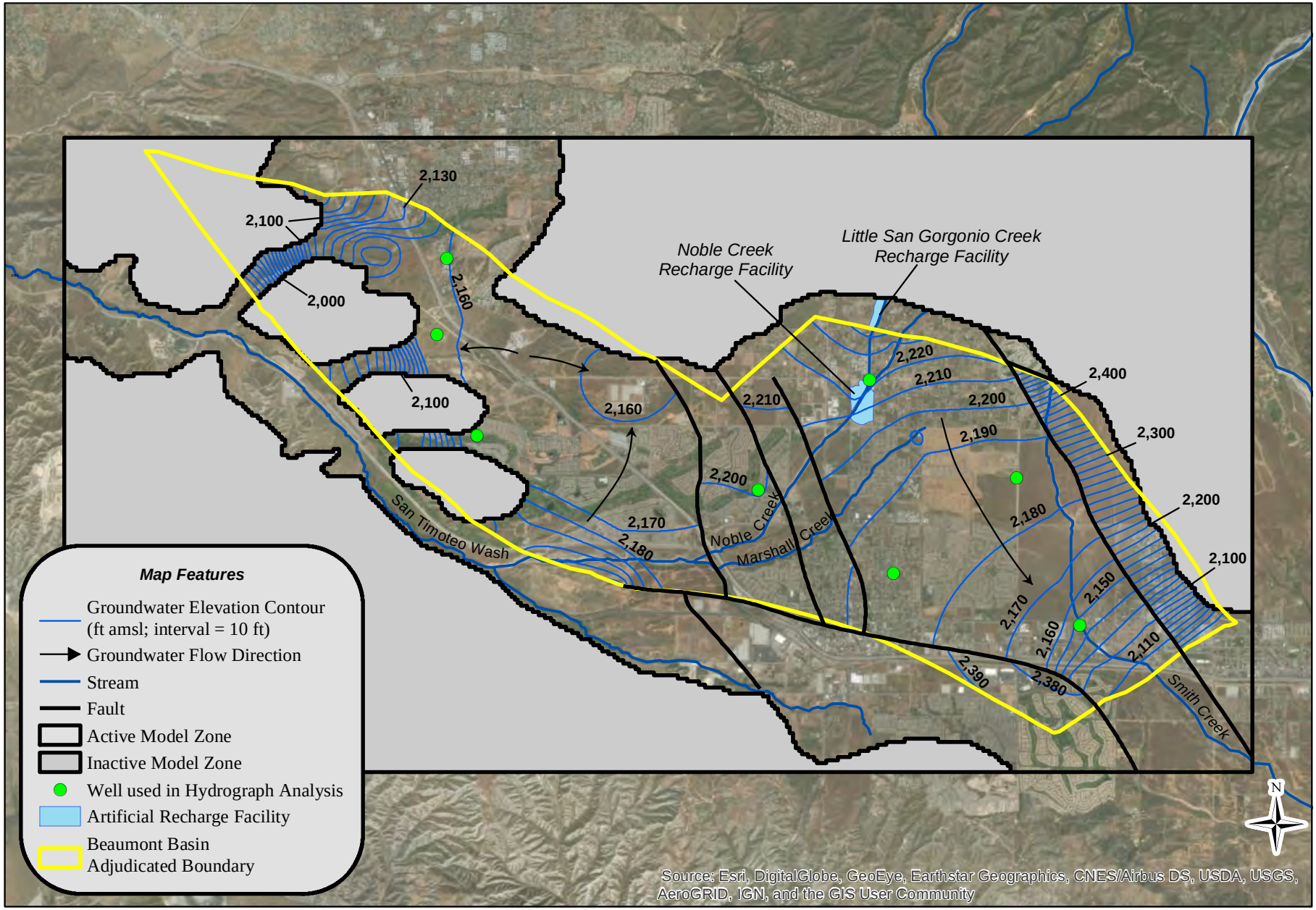


Figure 3-5
Groundwater Storage by Agency/User as of 2017



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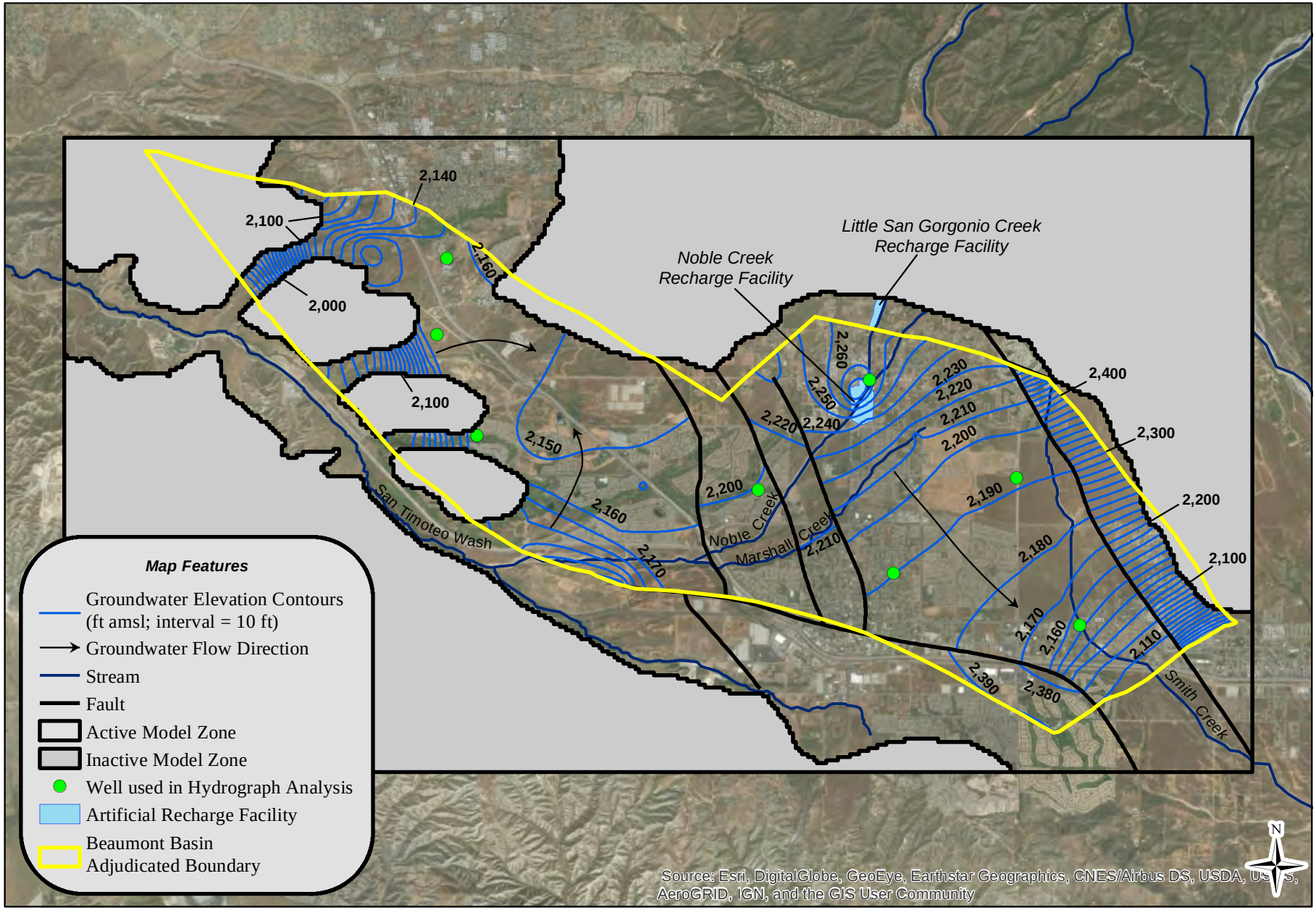
0 0.5 1 2 Miles

NAD 83 CA State Plane Zone 6

Groundwater Elevation Contours in the Beaumont Basin - Fall 2016

Figure 3-6



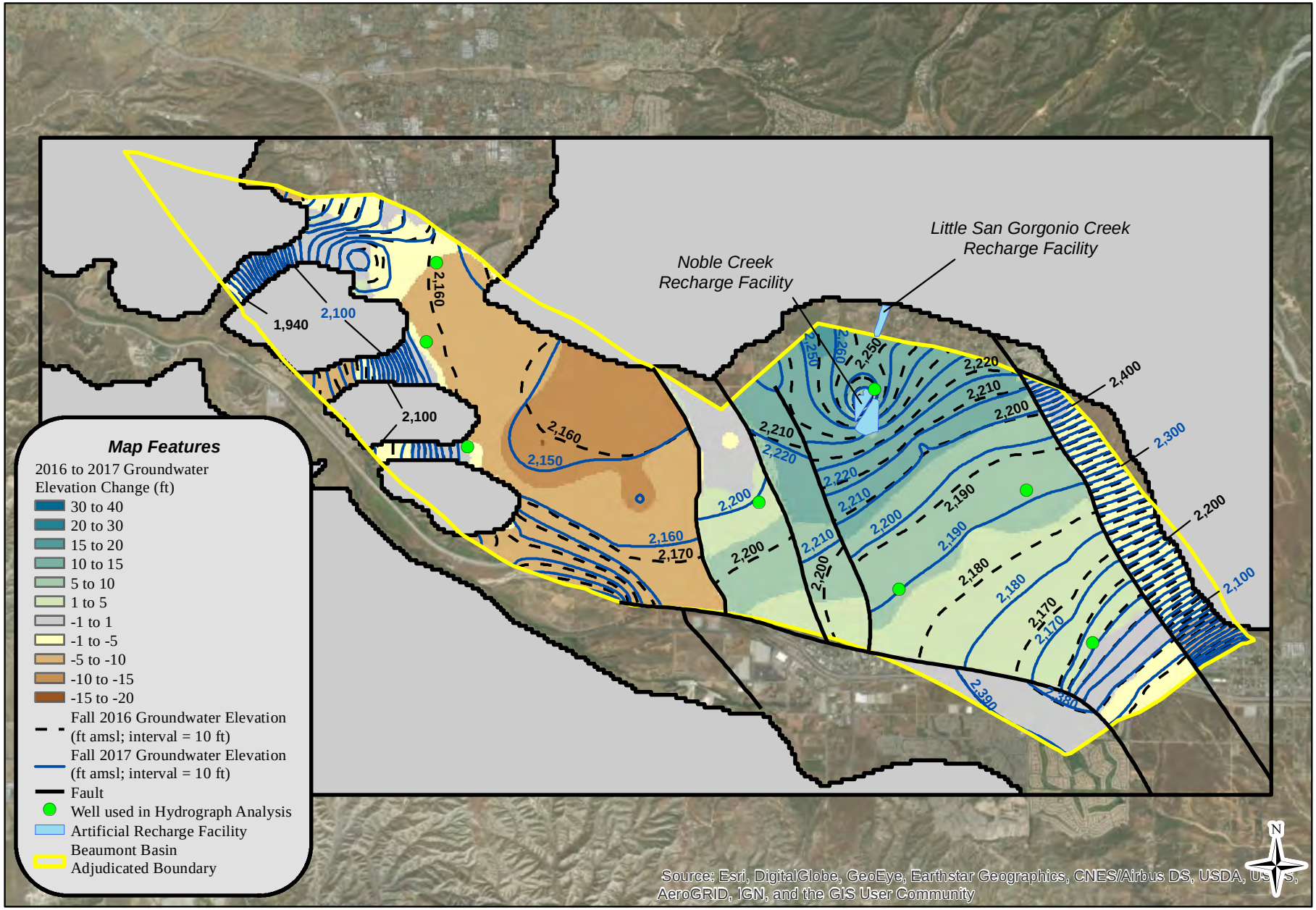
Alda, Inc. *in association with*
Thomas Harder & Co.
Groundwater Consulting

0 0.5 1 2 Miles

NAD 83 CA State Plane Zone 6

Groundwater Elevation Contours in the Beaumont Basin - Fall 2017

Figure 3-7



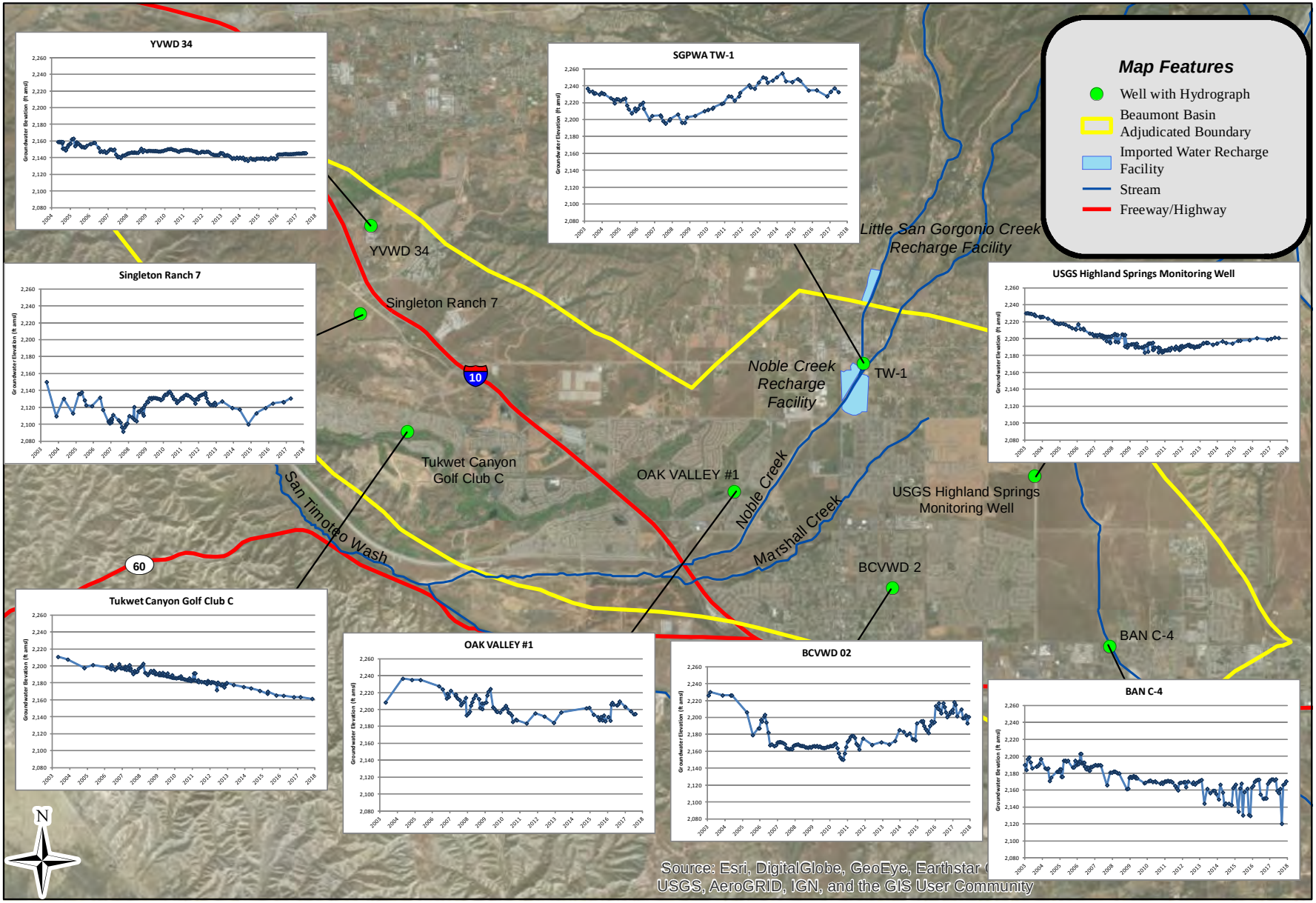
Alda, Inc. *in association with*
Thomas Harder & Co.
Groundwater Consulting

0 0.5 1 2 Miles

NAD 83 CA State Plane Zone 6

Change in Groundwater Elevation 2016 - 2017

Figure 3-8



Alda, Inc. *in association with*
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Groundwater Consulting

0 0.5 1 2
Miles

NAD 83 UTM Zone 11

Groundwater Level Trends at Key Wells

Figure 3-9

Table 3-1A
Appropriator Producer - Summary of Annual Production (2003 to 2012)

Owner & Well Name	Water Production by Well (ac-ft/yr) [1]									
	2003 [2]	2004	2005	2006	2007	2008	2009	2010	2011	2012
Banning, City of										
Well C2-A	619.2	710.7	0.4	6.8	288.1	382.3	119.8	26.8	32.5	13.1
Well C3	517.7	1,026.6	521.2	235.3	511.6	552.5	733.0	843.0	776.6	607.9
Well C4	448.3	1,135.7	387.8	276.8	673.9	664.3	472.6	51.4	197.5	73.0
Well M3	525.7	169.8	532.8	671.9	726.0	583.3	294.8	80.0	335.1	344.2
Well M9	63.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
From BCVWD [3]	0.0	354.5	366.4	636.7	572.9	751.3	474.8	142.5	0.0	0.0
Annual Production	**2,174.2**	**3,397.3**	**1,808.6**	**1,827.5**	**2,772.6**	**2,933.6**	**2,095.0**	**1,143.6**	**1,341.7**	**1,038.3**
Eligible for Storage [4]	340.3	1,631.7	3,220.4	3,201.5	2,256.4	2,095.4	2,934.0	3,885.4	3,687.3	3,990.7
Beaumont Cherry Valley Water District										
Well 1	5.9	978.3	1,244.2	1,149.1	1,283.8	976.9	894.1	809.1	461.7	93.9
Well 2	960.2	1,628.2	117.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Well 3	675.1	936.0	841.6	749.7	1,357.3	1,310.2	1,139.5	775.6	535.6	716.6
Well 16	554.6	1,103.7	735.6	537.7	348.3	414.9	452.0	11.9	153.8	255.0
Well 21	832.8	1,252.5	2,299.5	1,996.3	2,424.7	2,446.1	1,784.1	8.7	1,473.3	2,035.0
Well 22	483.3	1,125.3	405.7	1,062.6	1,056.8	1,105.3	265.1	381.7	95.1	514.7
Well 23	0.0	204.3	1,747.9	1,963.9	3,018.3	2,491.7	982.7	1,930.4	982.1	854.6
Well 24				2,231.7	2,467.1	2,093.1	2,045.4	2,199.6	2,045.7	1,764.1
Well 25						127.6	1,060.7	1,300.4	1,188.6	1,680.9
Well 26						495.9	1,187.9	1,312.2	1,435.3	1,280.9
Well 29							797.1	834.4	1,060.3	966.1
To Banning [3]	0.0	-354.5	-366.4	-636.7	-572.9	-751.3	-474.8	-142.5	0.0	0.0
Annual Production	**3,511.9**	**6,873.9**	**7,025.6**	**9,054.1**	**11,383.3**	**10,710.5**	**10,133.9**	**9,421.3**	**9,431.3**	**10,162.0**
Eligible for Storage [4]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
South Mesa Water Company										
3rd No. 4 Well	223.2	482.5	663.2	616.0	665.8	470.9	382.2	405.0	419.9	448.5
Annual Production	**223.2**	**482.5**	**663.2**	**616.0**	**665.8**	**470.9**	**382.2**	**405.0**	**419.9**	**448.5**
Eligible for Storage [4]	774.8	1,513.5	1,332.8	1,380.0	1,330.2	1,525.2	1,613.8	1,591.0	1,576.1	1,547.5
Yucaipa Valley Water District										
Well 35	58.9	226.3	117.5	220.0	163.8	3.2	0.0	0.0	0.0	0.0
Well 48	1,103.5	1,607.4	1,163.7	1,807.2	1,519.1	568.8	504.4	672.4	534.1	700.1
Annual Production	**1,162.4**	**1,833.7**	**1,281.3**	**2,027.3**	**1,682.9**	**572.0**	**504.4**	**672.4**	**534.1**	**700.1**
Eligible for Storage [4]	0.0	339.3	891.7	145.7	490.1	1,601.0	1,668.6	1,500.6	1,638.9	1,472.9
Annual Production	**7,071.7**	**12,587.4**	**10,778.6**	**13,524.9**	**16,504.6**	**14,687.0**	**13,115.6**	**11,642.3**	**11,727.1**	**12,348.9**
Eligible for Storage	**1,115.1**	**3,484.5**	**5,445.0**	**4,727.2**	**4,076.7**	**5,221.5**	**6,216.4**	**6,977.0**	**6,902.3**	**7,011.1**

1.- Calendar Year Production. All values rounded and subject to revision based on receipt of more accurate information.

2.- 2003 Production only includes from July to December to account for first half of Fiscal Year 2004 Production.

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

4.- Volume of water available for storage is equal to the positive difference between the temporary surplus allocation and the volume of groundwater produced by each agency. Temporary surplus based on 16,000 ac-ft/yr allocated from Fiscal Year 2004 to Fiscal Year 2013. Annual allocation is as follows: a) City of Banning, 5,029 ac-ft/yr, b) Beaumont Cherry Valley Water District, 6,802 ac-ft/yr, c) South Mesa Water Company, 1,996 ac-ft/yr, and d) Yucaipa Valley Water District, 2,173 ac-ft/yr. Allocations for 2003 are based on 50 percent of the annual allocation to acount for the second half of the year only.

Table 3-1B

Appropriator Producer - Summary of Production for Calendar Year 2013 (ac-ft)

Owner & Well Name	Water Production by Appropriator (ac-ft) [1]												Total Production
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Banning, City of				*Eligible for Storage based on the Temporary Surplus Allocation:*						*413.8 ac-ft*			
Well C2-A	0.3	0.3	0.2	0.7	0.3	0.4	35.5	52.8	7.2	10.7	4.0	3.2	115.5
Well C3	3.0	0.1	2.2	56.6	76.2	92.1	78.7	82.0	79.5	70.9	47.1	38.3	626.7
Well C4	0.5	2.8	126.0	140.6	97.6	100.5	116.2	87.3	56.0	48.1	23.8	59.0	858.5
Well M3	0.1	66.4	0.1	0.0	0.0	0.0	12.6	69.9	84.6	99.8	79.3	87.1	499.9
Well M9	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
From BCVWD [2]	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	**4.0**	**69.7**	**128.5**	**197.9**	**174.1**	**193.0**	**243.0**	**292.1**	**227.3**	**229.4**	**154.1**	**187.6**	**2,100.7**
Beaumont Cherry Valley Water District				*Eligible for Storage based on the Temporary Surplus Allocation:*						*0.0 ac-ft*			
Well 1	0.6	0.0	0.0	0.3	74.0	95.9	121.9	2.2	0.0	0.0	0.0	0.0	294.9
Well 2	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 3	0.5	0.0	0.0	0.0	79.2	113.9	154.4	160.8	139.9	104.0	26.5	9.9	789.2
Well 16	0.2	0.0	35.7	52.4	43.2	53.3	0.0	45.2	53.6	41.6	9.2	26.5	360.8
Well 21	47.1	50.6	170.6	188.9	226.7	215.4	189.1	225.5	226.6	211.0	199.5	190.2	2,141.1
Well 22	0.0	0.0	0.0	0.0	48.0	94.0	43.1	76.5	72.7	4.5	9.7	10.3	358.9
Well 23	0.7	0.0	54.0	36.2	168.0	198.6	240.1	89.7	0.0	0.0	0.0	0.0	787.3
Well 24	157.5	123.4	128.7	159.7	109.3	122.6	100.2	118.8	123.4	120.1	118.1	144.6	1,526.5
Well 25	78.6	77.8	80.8	165.8	112.5	144.0	204.6	292.8	287.0	253.9	203.3	132.5	2,033.4
Well 26	70.2	75.7	80.7	125.0	115.4	144.8	148.6	155.9	146.2	126.8	68.6	0.0	1,257.9
Well 29	64.0	65.9	93.1	123.2	144.0	144.6	192.4	89.0	273.7	144.6	118.5	94.3	1,547.3
To Banning [2]	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	**419.3**	**393.4**	**643.7**	**851.4**	**1,120.4**	**1,327.2**	**1,394.4**	**1,256.4**	**1,323.2**	**1,006.5**	**753.4**	**608.4**	**11,097.4**
South Mesa Water Company				*Eligible for Storage based on the Temporary Surplus Allocation:*						*689.7 ac-ft*			
3rd No. 4 Well	18.09	14.48	22.02	26.88	31.13	42.36	47.77	45.59	34.45	25.58	-	-	308.4
Subtotal	**18.1**	**14.5**	**22.0**	**26.9**	**31.1**	**42.4**	**47.8**	**45.6**	**34.5**	**25.6**	**0.0**	**0.0**	**308.4**
Yucaipa Valley Water District				*Eligible for Storage based on the Temporary Surplus Allocation:*						*55.7 ac-ft*			
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	0.0	17.0	72.8	106.0	95.6	135.6	188.2	198.0	99.5	106.5	11.6	0.0	1,030.8
Subtotal	**0.0**	**17.0**	**72.8**	**106.0**	**95.6**	**135.6**	**188.2**	**198.0**	**99.5**	**106.5**	**11.6**	**0.0**	**1,030.8**
Total	**441.3**	**494.5**	**867.0**	**1,182.1**	**1,421.2**	**1,698.1**	**1,873.4**	**1,792.1**	**1,684.5**	**1,368.0**	**919.1**	**796.0**	**14,537.2**

(1) - All values rounded and subject to revision based on receipt of more accurate information

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

Table 3-1C

Appropriator Producer - Summary of Production for Calendar Year 2014 (ac-ft)

Owner & Well Name	Water Production by Appropriator (ac-ft) [1]												Total Production
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Banning, City of													
Well C2-A	0.9	26.3	93.5	87.4	73.1	71.3	71.2	52.3	9.2	15.6	29.4	0.3	530.5
Well C3	68.2	26.7	2.4	26.9	58.6	66.8	73.0	61.9	46.7	49.2	41.3	5.2	526.8
Well C4	64.1	1.5	21.2	39.4	124.4	112.9	110.1	103.3	118.1	114.5	47.7	0.2	857.7
Well M3	98.4	71.4	96.7	80.2	26.2	68.4	29.3	37.7	92.0	69.4	0.0	0.4	670.0
Well M9	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
From BCVWD [2]	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	**231.7**	**125.9**	**213.9**	**233.9**	**282.2**	**319.4**	**283.6**	**255.2**	**265.9**	**248.7**	**118.4**	**6.0**	**2,585.1**
Beaumont Cherry Valley Water District													
Well 1	0.0	0.0	0.0	6.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.9
Well 2	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 3	7.4	81.4	72.5	140.9	143.4	161.8	192.3	124.1	135.0	122.2	85.1	15.6	1,281.8
Well 16	21.7	0.0	0.0	0.0	0.0	0.0	0.0	35.1	45.5	51.3	20.7	7.8	182.2
Well 21	229.5	181.2	184.3	170.1	231.5	242.0	283.3	262.8	211.4	212.5	177.6	174.4	2,560.7
Well 22	0.1	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Well 23	0.0	0.0	0.0	0.0	76.2	208.3	211.0	133.9	92.7	90.6	165.2	103.3	1,081.0
Well 24	198.6	80.7	128.0	104.6	110.0	94.1	2.4	0.0	86.1	147.6	108.7	5.9	1,066.7
Well 25	227.3	164.1	175.4	234.7	259.9	279.0	372.6	285.9	188.3	170.9	26.3	2.4	2,386.8
Well 26	0.0	0.0	8.2	9.1	0.3	0.0	0.0	55.6	142.3	123.2	89.8	93.3	521.9
Well 29	119.0	88.7	102.0	128.1	172.9	198.3	210.9	180.6	172.3	158.4	120.1	65.2	1,716.5
To Banning [2]	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	**803.6**	**596.1**	**671.3**	**794.4**	**994.3**	**1,183.5**	**1,272.5**	**1,078.1**	**1,073.7**	**1,076.7**	**793.6**	**467.8**	**10,805.5**
South Mesa Water Company													
3rd No. 4 Well	17.43	24.26	56.87	30.32	38.34	50.25	56.87	46.55	54.69	45.88	33.22	19.04	473.7
Subtotal	**17.4**	**24.3**	**56.9**	**30.3**	**38.3**	**50.3**	**56.9**	**46.6**	**54.7**	**45.9**	**33.2**	**19.0**	**473.7**
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	5.1	57.0	81.7	143.3	96.6	127.1	136.5	108.9	127.9	156.6	117.9	39.9	1,198.5
Subtotal	**5.1**	**57.0**	**81.7**	**143.3**	**96.6**	**127.1**	**136.5**	**108.9**	**127.9**	**156.6**	**117.9**	**39.9**	**1,198.5**
Total	**1,057.8**	**803.4**	**1,023.8**	**1,201.9**	**1,411.5**	**1,680.2**	**1,749.4**	**1,488.8**	**1,522.2**	**1,527.9**	**1,063.1**	**532.8**	**15,062.8**

(1) - All values rounded and subject to revision based on receipt of more accurate information

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

Table 3-1D

Appropriator Producer - Summary of Production for Calendar Year 2015 (ac-ft)

Owner & Well Name	Water Production by Appropriator (ac-ft) [1]												Total Production
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Banning, City of													
Well C2-A	3.8	13.0	55.3	3.3	2.0	1.7	3.2	2.6	28.2	4.6	0.4	0.5	118.6
Well C3	1.7	-1.4	35.3	41.0	22.9	59.5	43.9	60.0	38.3	26.5	50.9	11.6	390.2
Well C4	3.2	2.7	7.5	1.4	5.1	94.0	100.4	89.4	55.1	103.0	69.9	39.9	571.8
Well M3	0.1	10.1	58.3	88.6	91.9	84.8	94.2	83.6	53.8	1.2	18.1	13.1	597.7
Well M9	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
From BCVWD [2]	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	**8.8**	**24.5**	**156.5**	**134.2**	**122.0**	**240.0**	**241.7**	**235.6**	**175.3**	**135.2**	**139.3**	**65.1**	**1,678.3**
Beaumont Cherry Valley Water District													
Well 1	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 2	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 3	0.1	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 16	5.6	24.4	49.7	75.3	81.7	83.1	72.5	60.3	51.4	73.6	57.0	41.8	0.0
Well 21	166.9	184.6	230.4	218.9	185.3	218.2	216.1	224.9	200.5	204.2	192.8	191.9	0.0
Well 22	40.0	108.3	30.6	86.1	7.5	74.6	128.2	116.1	121.1	55.5	13.4	3.0	0.0
Well 23	184.7	121.3	199.1	246.6	232.9	267.5	261.9	241.3	216.7	226.2	167.1	143.9	0.0
Well 24	54.6	5.7	97.1	69.0	64.7	179.4	124.6	106.8	60.1	24.5	49.4	27.3	0.0
Well 25	0.0	61.1	10.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Well 26	16.8	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 29	80.4	95.7	102.6	113.2	112.0	156.7	155.7	163.3	151.3	138.4	114.5	93.0	0.0
Egg Ranch Well	10.5	8.1	7.1	15.1	0.0	34.0	6.8	14.9	25.3	0.0	17.3	0.5	0.0
To Banning [2]	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	**559.6**	**609.2**	**727.4**	**824.2**	**684.2**	**1,013.4**	**965.6**	**927.5**	**826.4**	**722.4**	**611.4**	**501.5**	**8,972.8**
South Mesa Water Company													
3rd No. 4 Well	20.10	19.95	21.55	27.08	21.72	36.95	34.27	37.80	28.89	27.91	21.03	19.90	317.2
Subtotal	**20.1**	**20.0**	**21.6**	**27.1**	**21.7**	**37.0**	**34.3**	**37.8**	**28.9**	**27.9**	**21.0**	**19.9**	**317.2**
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	7.5	10.0	43.0	12.8	4.3	5.8	6.1	20.4	3.4	0.0	0.1	5.8	119.2
Subtotal	**7.5**	**10.0**	**43.0**	**12.8**	**4.3**	**5.8**	**6.1**	**20.4**	**3.4**	**0.0**	**0.1**	**5.8**	**119.2**
Total	**596.0**	**663.6**	**948.6**	**998.3**	**832.2**	**1,296.2**	**1,247.7**	**1,221.3**	**1,034.0**	**885.5**	**771.9**	**592.3**	**11,087.4**

(1) - All values rounded and subject to revision based on receipt of more accurate information

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

Table 3-1E

Appropriator Producer - Summary of Production for Calendar Year 2016 (ac-ft)

Owner & Well Name	Water Production by Appropriator (ac-ft) [1]												Total Production
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Banning, City of													
Well C2-A	4.1	0.7	0.2	0.2	1.9	17.4	32.9	30.1	1.1	2.0	0.0	3.5	94.2
Well C3	15.5	21.9	0.2	5.8	20.1	50.0	50.9	70.6	55.5	23.0	3.0	1.5	317.8
Well C4	25.5	0.9	12.0	8.3	11.8	92.8	121.5	121.2	101.9	91.9	14.2	0.5	602.3
Well M3	0.4	0.4	0.0	0.4	22.3	92.9	95.7	95.8	90.3	58.4	1.7	0.1	458.5
Well M9	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
From BCVWD [2]	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	**45.4**	**23.9**	**12.5**	**14.8**	**56.0**	**253.0**	**301.0**	**317.7**	**248.8**	**175.3**	**18.8**	**5.5**	**1,472.7**
Beaumont Cherry Valley Water District													
Well 1	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 2	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 3	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 16	68.6	67.5	61.8	66.6	80.2	75.0	91.4	74.0	37.7	70.1	47.9	20.8	761.5
Well 21	221.1	196.3	223.2	201.2	234.2	246.1	245.0	295.8	258.9	225.3	193.1	153.3	2,693.3
Well 22	0.0	2.6	0.0	0.0	40.5	111.8	144.7	177.7	164.2	155.8	67.5	7.0	871.8
Well 23	19.9	85.8	113.9	152.0	213.6	250.9	273.2	257.9	228.1	228.1	160.6	153.7	2,137.8
Well 24	30.4	48.9	19.1	1.5	0.0	188.0	241.6	216.5	145.8	38.6	104.9	62.2	1,097.3
Well 25	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 26	23.3	65.8	54.6	74.6	101.9	123.3	151.8	293.5	25.1	99.6	82.8	31.7	1,127.9
Well 29	77.3	101.7	98.7	104.3	91.7	141.6	198.7	36.8	181.8	89.9	183.7	84.2	1,390.4
Egg Ranch Well	11.6	8.4	2.6	7.0	3.1	11.1	7.4	11.2	11.4	0.2	2.7	3.0	79.8
To Banning [2]	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	**452.1**	**577.0**	**573.9**	**607.2**	**765.2**	**1,147.9**	**1,353.7**	**1,363.4**	**1,052.9**	**907.6**	**843.2**	**515.9**	**10,159.8**
South Mesa Water Company													
3rd No. 4 Well	16.9	21.9	23.3	24.7	28.1	38.4	47.1	45.6	37.6	27.9	23.6	17.6	352.6
Subtotal	**16.9**	**21.9**	**23.3**	**24.7**	**28.1**	**38.4**	**47.1**	**45.6**	**37.6**	**27.9**	**23.6**	**17.6**	**352.6**
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	0.7	0.7	1.0	0.0	0.0	1.4	0.0	0.0	0.9	0.0	0.0	0.0	4.6
Subtotal	**0.7**	**0.7**	**1.0**	**0.0**	**0.0**	**1.4**	**0.0**	**0.0**	**0.9**	**0.0**	**0.0**	**0.0**	**4.6**
Total	**515.0**	**623.5**	**610.6**	**646.6**	**849.3**	**1,440.7**	**1,701.9**	**1,726.7**	**1,340.2**	**1,110.8**	**885.6**	**539.0**	**11,989.7**

(1) - All values rounded and subject to revision based on receipt of more accurate information

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

Table 3-1F

Appropriator Producer - Summary of Production for Calendar Year 2017 (ac-ft)

Owner & Well Name	Water Production by Appropriator (ac-ft) [1]												Total Production
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Banning, City of													
Well C2-A	0.8	0.3	0.8	0.3	0.0	4.6	3.8	2.0	0.7	3.7	1.4	0.2	18.6
Well C3	0.9	0.3	1.5	69.3	113.5	87.0	92.5	76.4	49.9	4.6	16.0	0.1	512.1
Well C4	1.2	0.5	48.5	20.8	7.6	73.5	91.4	76.8	73.3	64.2	26.6	14.2	498.4
Well M3	0.0	0.3	0.4	1.5	14.3	76.4	94.3	92.1	87.5	47.2	0.2	0.2	414.4
Well M9	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
From BCVWD [2]	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	**3.0**	**1.4**	**51.2**	**91.9**	**135.4**	**241.5**	**282.0**	**247.2**	**211.4**	**119.7**	**44.1**	**14.7**	**1,443.5**
Beaumont Cherry Valley Water District													
Well 1	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 2	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 3	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 16	9.0	10.3	3.6	2.3	50.3	89.4	112.4	113.8	84.6	68.2	78.8	58.0	680.6
Well 21	141.5	87.6	144.2	196.3	39.5	394.9	290.1	294.4	240.9	210.7	196.2	169.5	2,405.7
Well 22	0.0	0.0	2.1	1.6	37.3	111.1	172.9	167.2	140.1	102.8	1.0	2.6	738.6
Well 23	147.7	169.0	113.3	209.2	264.7	265.3	268.8	263.6	178.5	0.0	107.1	256.8	2,244.0
Well 24	0.0	6.9	152.6	227.0	194.4	171.2	129.7	121.1	187.7	212.5	149.0	159.0	1,711.1
Well 25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	232.4	120.2	0.0	352.6
Well 26	9.0	10.4	57.8	133.6	154.5	163.9	174.9	170.0	152.5	161.1	127.4	130.1	1,445.1
Well 29	54.7	54.3	95.7	161.8	174.9	221.8	324.2	255.6	231.5	189.2	144.2	142.7	2,050.5
Egg Ranch Well	0.0	1.9	11.6	8.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.4
To Banning [2]	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	**361.8**	**340.4**	**580.9**	**940.7**	**915.5**	**1,417.6**	**1,472.8**	**1,385.7**	**1,215.8**	**1,176.9**	**923.8**	**918.7**	**11,650.7**
South Mesa Water Company													
3rd No. 4 Well	15.7	12.9	17.7	25.0	36.7	41.9	45.6	51.0	37.1	34.7	27.6	22.2	368.1
Subtotal	**15.7**	**12.9**	**17.7**	**25.0**	**36.7**	**41.9**	**45.6**	**51.0**	**37.1**	**34.7**	**27.6**	**22.2**	**368.1**
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1
Subtotal	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.1**	**0.0**	**0.0**	**0.1**
Total	**380.5**	**354.8**	**649.8**	**1,057.6**	**1,087.7**	**1,700.9**	**1,800.4**	**1,684.0**	**1,464.2**	**1,331.4**	**995.5**	**955.6**	**13,462.4**

(1) - All values rounded and subject to revision based on receipt of more accurate information

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

Table 3-2A
Overlying Producer - Summary of Production for Calendar Year 2003 through 2012 (ac-ft)

Owner and Well Name	Metered	Annual Water Production by Overlying Producer [1] [2]										Overlying Water Right (ac-ft/yr)
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	
Beckman, Walter M.	No	**16.2**	**27.0**	**22.4**	**11.5**	**8.3**	**12.7**	**12.9**	**6.4**	**9.0**	**9.0**	**75.0**
California Oak Valley Golf and Resort LLC [3]												
Oak Valley #1	Yes			523.2	453.6	181.7	596.9	135.7	304.2	0.0	0.0	
Oak Valley #2	Yes			180.7	377.9	597.3	183.5	631.0	260.9	0.0	0.0	
Subtotal		**736.2**	**728.6**	**703.9**	**831.5**	**779.0**	**780.4**	**766.7**	**565.1**	**517.3**	**517.3**	**950.0**
Merlin Properties	No	**3.6**	**1.6**	**1.6**	**1.6**	**1.6**	**1.6**	**1.6**	**1.5**	**1.6**	**1.6**	**550.0**
Oak Valley Partners, LP [4]												
Haskell Ranch-Main	N/A	29.4	19.6	300.0	300.0	300.0	0.0	0.0	0.0	0.0	0.0	
Singleton Ranch #5	No	180.0	300.0	40.2	2.1	2.1	2.5	2.5	2.5	2.5	2.5	
Singleton Ranch #7	Yes	85.8	111.1	10.0	10.0	10.0	0.0	0.0	0.0	0.0	0.0	
Irrigation Stokes	No	6.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Subtotal		**301.2**	**440.7**	**350.2**	**312.1**	**312.1**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**1,806.0**
Plantation on the Lake LLC [6]	Yes	**178.6**	**340.9**	**310.2**	**350.1**	**344.2**	**354.0**	**352.3**	**337.2**	**344.7**	**344.7**	**581.0**
Rancho Calimesa Mobile Home Park	No	**35.4**	**68.3**	**68.3**	**68.3**	**69.3**	**69.3**	**69.3**	**69.3**	**69.3**	**69.3**	**150.0**
Roman Catholic Bishop of San Bernardino	No	**46.8**	**59.1**	**55.6**	**59.0**	**0.7**	**0.7**	**0.7**	**0.0**	**0.0**	**0.0**	**154.0**
Sharondale Mesa Owners Association												
Well No.1	Yes	98.6	111.0	98.4	97.0	130.1	102.9	80.3	67.7	81.0	79.2	
Well No.2	Yes	5.7	47.0	82.6	91.6	52.3	90.4	74.0	64.6	52.0	66.0	
Subtotal		**104.3**	**158.0**	**181.0**	**188.6**	**182.3**	**193.3**	**154.3**	**132.3**	**133.0**	**145.3**	**200.0**
Tukwet Canyon Golf Club [5]												
Well A	Yes	130.8	268.0	217.2	341.7	329.1	11.2	204.4	118.6	118.4	217.5	
Well C	Yes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Well D	Yes	660.6	1,078.6	995.9	1,411.6	1,269.9	1,126.4	954.2	733.2	764.5	766.8	
Subtotal		**791.4**	**1,346.7**	**1,213.1**	**1,753.4**	**1,599.1**	**1,137.6**	**1,158.6**	**851.8**	**882.9**	**984.3**	**2,200.0**
Stearns, Leonard M. and Dorothy D.	No	**1.1**	**1.1**	**1.1**	**1.1**	**1.1**	**1.1**	**1.1**	**0.7**	**0.7**	**0.7**	**200.0**
Sunny-Cal Egg and Poultry Company	N/A	**226.0**	**404.4**	**385.4**	**2.6**	**2.7**	**4.2**	**4.2**	**3.8**	**4.2**	**4.3**	**1,439.5**
Sunny-Cal North - Manheim, M & Berman	No				**13.2**	**2.3**	**2.3**	**2.3**	**2.1**	**2.3**	**2.4**	**300.0**
Nikodinov, Nick	No				**0.7**	**0.8**	**0.8**	**0.7**	**0.7**	**0.8**	**0.8**	**20.0**
McAmis, Ronald L.	No				**0.5**	**0.6**	**0.6**	**0.5**	**0.5**	**0.6**	**0.6**	**5.0**
Aldama, Nicolas and Amalia	No				**0.8**	**0.8**	**0.9**	**0.8**	**0.8**	**0.9**	**0.9**	**7.0**
Gutierrez, Hector, et al.	No				**1.4**	**1.4**	**1.4**	**1.4**	**1.3**	**1.4**	**1.4**	**10.0**
Darmont, Boris and Miriam	No				**0.4**	**0.4**	**0.4**	**0.4**	**0.4**	**0.4**	**0.4**	**2.5**
TOTAL		**2,440.8**	**3,576.3**	**3,292.6**	**3,596.7**	**3,306.5**	**2,563.6**	**2,530.1**	**1,976.5**	**1,971.4**	**2,085.4**	**8,650.0**

1.- All values rounded and subject to revision based on receipt of more accurate information.

2.- Annual production is estimated for Overlying parties with un-metered wells.

3.- Metering began in late 2004 and was not reported monthly. One total production value for each well was reported to Watermaster for FY 2003/04 . For the conversion to CY accounting, it was assumed that CY 2004 production for this entity was equal to FY 2003/04 production.

4.- Provided copies of state filing with annual calendar year totals for each well. Production values for Singleton Ranch #5 and Irrigation Stokes are estimated by Oak Valley Partners through 2007. Starting in 2008, production was reduced to an estimated 2.5 ac-ft/yr as agricultural use of the land ended. Estimate based on water use by a single farm house and a small cattle population.

5.- The Southern California Section of the PGA of America changed to East Valley Golf Club in 2007 and to Tukwet Canyon Golf Course in 2010. Monthly production provided by the Morongo Band of Mission Indians - 03/14.

6.- Production from Plantion on the Lake LLC is subject to revision pending updated information to be provided by Overlying User.

Table 3-2B
Overlying Producer - Summary of Production for Calendar Year 2013 (ac-ft)

Owner and Well Name	Metered	Monthly Water Production by Overlying Producer [1]												Total [2] Production	Overlying Water Right	Unused Overlying Allocation in 2013
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
Beckman, Walter M. [3]	Yes	0.0	0.0	0.0	0.3	0.3	0.4	0.6	0.0	0.4	0.1	0.0	0.0	**2.1**	**75.0**	**72.9**
California Oak Valley Golf and Resort LLC [3]																
Oak Valley #1	Yes	11.5	12.4	12.5	11.4	55.2	66.1	97.7	0.0	0.0	0.0	0.0	0.0	266.8		
Oak Valley #2	Yes	1.3	0.7	1.1	0.8	0.0	0.0	2.5	68.9	49.7	70.4	53.3	110.4	359.0		
Subtotal		**12.8**	**13.1**	**13.6**	**12.1**	**55.2**	**66.1**	**100.1**	**68.9**	**49.7**	**70.4**	**53.3**	**110.4**	**625.8**	**950.0**	**324.2**
Merlin Properties	No	Water Duty Method Used to Estimate Annual Production												1.6	550.0	548.4
Oak Valley Partners, LP [4]																
Singleton Ranch #5	No													0.00		
Singleton Ranch #7	No													2.50		
Irrigation Stokes	No													0.00		
Subtotal		Annual consumption estimated based on water use by a single farm house and a small bovine population												**2.5**	**1,806.0**	**1,803.5**
Plantation on the Lake LLC [7]	Yes	13.3	16.1	17.0	29.8	20.4	35.1	36.7	41.1	35.4	37.0	24.6	20.2	326.7	581.0	254.3
Rancho Calimesa Mobile Home Park [5]	No	Water Duty Method Used to Estimate Annual Production												69.3	150.0	80.7
Roman Catholic Bishop of San Bernardino		Water Duty Method Used to Estimate Annual Production												0.0	154.0	154.0
Sharondale Mesa Owners Association [5]																
Well No.1	Yes	2.7	3.1	4.8	7.3	7.6	9.7	10.8	10.9	3.6	1.6	5.8	4.0	72.0		133.4
Well No.2	Yes	2.5	2.8	4.1	5.9	5.8	6.6	7.6	7.8	13.3	12.2	3.0	3.7	75.0		
Subtotal		**5.2**	**6.0**	**8.8**	**13.2**	**13.4**	**16.3**	**18.3**	**18.7**	**16.9**	**13.8**	**8.8**	**7.7**	**147.0**	**200.0**	**53.0**
Tukwet Canyon Golf Club [6]																
Well A	Yes	6.6	6.2	15.6	29.9	33.8	39.6	0.0	0.0	5.2	25.4	15.7	20.0	198.1		
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		
Well D	Yes	20.2	13.3	35.3	70.2	86.0	111.1	152.8	143.9	117.1	77.7	41.6	31.2	900.3		
Subtotal		**26.9**	**19.4**	**50.9**	**100.0**	**119.8**	**150.6**	**152.8**	**143.9**	**122.3**	**103.1**	**57.3**	**51.2**	**1,098.4**	**2,200.0**	**1,101.6**
Stearns, Leonard M. and Dorothy D.	No	Water Duty Method Used to Estimate Annual Production												**0.7**	**200.0**	**199.3**
Sunny-Cal Egg and Poultry Company	No	Water Duty Method Used to Estimate Annual Production												**4.3**	**1,439.5**	**1,435.2**
Albor Properties III, LP	No	Water Duty Method Used to Estimate Annual Production												**2.4**	**300.0**	**297.6**
Nikodinov, Nick	No	Water Duty Method Used to Estimate Annual Production												**0.8**	**20.0**	**19.2**
McAmis, Ronald L.	No	Water Duty Method Used to Estimate Annual Production												**0.6**	**5.0**	**4.4**
Aldama, Nicolas and Amalia	No	Water Duty Method Used to Estimate Annual Production												**0.9**	**7.0**	**6.1**
Gutierrez, Hector, et al.	No	Water Duty Method Used to Estimate Annual Production												**1.4**	**10.0**	**8.6**
Darmont, Boris and Miriam	No	Water Duty Method Used to Estimate Annual Production												**0.4**	**2.5**	**2.2**
TOTAL														**2,284.8**	**8,650.0**	**6,365.2**

1.- All values rounded and subject to revision based on receipt of more accurate information in the future.

2.- Total production is estimated for Overlying parties with un-metered wells.

3.- Monthly production provided by BCVWD - Feb 2014

4.- Starting in 2008, the parcels owned by Oak Valley Partners were no longer used for agricultural purposes. Groundwater production was estimated at 2.5 ac-ft/yr based on water use by a single farm house and a small cattle population.

5.- Monthly production since 2011 provided by Clearwater Solutions, a company in charge of operating the water system.

6.- Actual monthly production provided by the Morongo Band of Mission Indians - March 2014.

7.- Production from Plantion on the Lake LLC is subject to revision pending updated information to be provided by Overlying User.

Table 3-2C
Overlying Producer - Summary of Production for Calendar Year 2014 (ac-ft)

Owner and Well Name	Metered	Monthly Water Production by Overlying Producer[1]												Total[2] Production	Overlying Water Right	Unused Overlying Allocation in 2014
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
Beckman, Walter M. [3]	Yes	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.9**	**58.1**	**57.2**
California Oak Valley Golf and Resort LLC [3]																
Oak Valley #1	Yes	0.0	2.0	3.3	4.7	6.4	5.5	4.0	5.9	0.0	0.0	4.9	18.7	55.4		
Oak Valley #2	Yes	28.7	16.9	0.0	0.0	0.0	42.8	69.0	24.7	54.9	98.7	25.9	0.0	361.6		
Subtotal		**28.7**	**18.9**	**3.3**	**4.7**	**6.4**	**48.3**	**73.0**	**30.5**	**54.9**	**98.7**	**30.8**	**18.7**	**417.0**	**735.8**	**318.8**
Merlin Properties	No	Water Duty Method Used to Estimate Annual Production												1.6	426.0	424.4
Oak Valley Partners, LP [4]																
Singleton Ranch #5	No													0.00		
Singleton Ranch #7	No													2.50		
Irrigation Stokes	No													0.00		
Subtotal		Annual consumption estimated based on water use by a single farm house and a small bovine population												**2.5**	**1,398.9**	**1,396.4**
Plantation on the Lake LLC [7]	Yes	20.2	23.6	25.7	44.3	31.7	32.4	37.6	42.7	39.0	32.8	34.0	39.7	403.8	450.0	46.2
Rancho Calimesa Mobile Home Park [5]	Yes	0.9	0.9	0.9	1.0	1.0	1.1	2.6	1.1	0.6	2.0	1.7	2.3	16.2	116.2	100.0
Roman Catholic Bishop of San Bernardino		Water Duty Method Used to Estimate Annual Production												0.0	119.3	119.3
Sharondale Mesa Owners Association [5]																
Well No.1	Yes	5.1	4.0	4.9	7.0	9.0	8.7	10.1	7.0	6.5	8.8	4.9	1.8	78.0		
Well No.2	Yes	4.8	3.7	4.3	5.4	6.3	6.4	6.9	4.4	5.4	5.5	4.6	1.7	59.3		
Subtotal		**9.9**	**7.7**	**9.2**	**12.4**	**15.3**	**15.1**	**17.0**	**11.4**	**12.0**	**14.3**	**9.5**	**3.5**	**137.3**	**154.9**	**17.6**
Tukwet Canyon Golf Club [6]																
Well A	Yes	24.0	15.9	20.1	29.3	34.3	43.4	41.1	29.6	12.1	23.5	3.5	0.8	277.6		
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		
Well D	Yes	55.4	30.0	34.6	63.1	114.4	127.5	119.3	111.5	134.5	85.8	58.4	16.0	950.3		
Subtotal		**79.4**	**45.8**	**54.7**	**92.4**	**148.7**	**170.9**	**160.3**	**141.1**	**146.6**	**109.3**	**61.9**	**16.7**	**1,227.9**	**1,704.0**	**476.1**
Stearns, Leonard M. and Dorothy D.	No	Water Duty Method Used to Estimate Annual Production												**0.7**	**154.9**	**154.2**
Sunny-Cal Egg and Poultry Company	No	Water Duty Method Used to Estimate Annual Production												**4.3**	**1,115.0**	**1,110.6**
Albor Properties III, LP	No	Water Duty Method Used to Estimate Annual Production												**2.4**	**232.4**	**229.9**
Nikodinov, Nick	No	Water Duty Method Used to Estimate Annual Production												**0.8**	**15.5**	**14.7**
McAmis, Ronald L.	No	Water Duty Method Used to Estimate Annual Production												**0.6**	**3.9**	**3.3**
Aldama, Nicolas and Amalia	No	Water Duty Method Used to Estimate Annual Production												**0.9**	**5.4**	**4.6**
Gutierrez, Hector, et al.	No	Water Duty Method Used to Estimate Annual Production												**1.4**	**7.7**	**6.3**
Darmont, Boris and Miriam	No	Water Duty Method Used to Estimate Annual Production												**0.4**	**1.9**	**1.6**
TOTAL														**2,218.7**	**6,700.0**	**4,481.3**

1.- All values rounded and subject to revision based on receipt of more accurate information in the future.

2.- Total production is estimated for Overlying parties with un-metered wells.

3.- Monthly production provided by BCVWD - Feb 2015

4.- Starting in 2008, the parcels owned by Oak Valley Partners were no longer used for agricultural purposes. Groundwater production was estimated at 2.5 ac-ft/yr based on water use by a single farm house and a small cattle population.

5.- Monthly production since 2011 provided by Clearwater Solutions, a company in charge of operating the water system.

6.- Actual monthly production provided by the Morongo Band of Mission Indians - March 2014.

7.- Production from Plantion on the Lake LLC is subject to revision pending updated information to be provided by Overlying User.

Table 3-2D
Overlying Producer - Summary of Production for Calendar Year 2015 (ac-ft)

Owner and Well Name	Metered	Monthly Water Production by Overlying Producer[1]												Total[2] Production	Overlying Water Right	Unused Overlying Allocation in 2015
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
Beckman, Walter M. [3]	Yes	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.9**	**58.1**	**57.2**
California Oak Valley Golf and Resort LLC [3]																
Oak Valley #1	Yes	22.2	0.0	34.5	56.4	40.1	66.6	35.1	59.9	111.6	31.3	25.3	2.8	485.6		
Oak Valley #2	Yes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	193.8	11.7	60.0	0.0	265.5		
Subtotal		**22.2**	**0.0**	**34.5**	**56.4**	**40.1**	**66.6**	**35.1**	**59.9**	**305.4**	**43.0**	**85.3**	**2.8**	**751.1**	**735.8**	**0.0**
Merlin Properties	No	Water Duty Method Used to Estimate Annual Production												**1.6**	**426.0**	**424.4**
Oak Valley Partners, LP [4]																
Singleton Ranch #5	No													0.00		
Singleton Ranch #7	No													2.50		
Irrigation Stokes	No													0.00		
Subtotal		Annual consumption estimated based on water use by a single farm house and a small bovine population												**2.5**	**1,398.9**	**1,396.4**
Plantation on the Lake LLC [5]	Yes	39.7	19.3	17.4	24.3	26.2	32.1	20.9	24.8	28.2	27.3	21.6	20.2	**302.1**	**450.0**	**147.9**
Rancho Calimesa Mobile Home Park [6]																
Well No.1	Yes	1.2	1.1	1.1	1.5	0.8	0.8	1.2	1.2	0.9	1.2	1.1	1.0	13.2		
Well No.2	No	0.8	1.0	0.9	0.9	0.8	0.8	1.0	1.0	0.8	0.8	0.8	0.8	10.2		
Subtotal		**1.9**	**2.1**	**2.0**	**2.4**	**1.7**	**1.7**	**2.2**	**2.2**	**1.7**	**1.9**	**1.9**	**1.8**	**23.4**	**116.2**	**92.7**
Roman Catholic Bishop of San Bernardino		Water Duty Method Used to Estimate Annual Production												**0.0**	**119.3**	**119.3**
Sharondale Mesa Owners Association [6]																
Well No.1	Yes	2.5	3.9	0.5	0.2	1.9	5.1	6.3	9.6	8.4	8.9	7.9	1.8	57.1		
Well No.2	Yes	2.4	3.2	6.6	9.3	5.3	3.9	1.9	0.0	0.0	0.0	0.0	4.5	37.0		
Subtotal		**4.9**	**7.2**	**7.1**	**9.5**	**7.2**	**9.0**	**8.2**	**9.6**	**8.4**	**8.9**	**7.9**	**6.3**	**94.1**	**154.9**	**60.8**
Tukwet Canyon Golf Club [7]																
Well A	Yes	6.0	1.6	3.3	4.3	1.5	12.4	6.4	5.1	1.8	1.9	0.7	3.2	48.1		
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		
Well D	Yes	42.1	53.7	51.7	89.2	55.4	120.3	93.3	104.8	95.5	59.3	50.9	34.1	850.5		
Subtotal		**48.1**	**55.4**	**55.0**	**93.5**	**56.9**	**132.7**	**99.7**	**109.8**	**97.3**	**61.2**	**51.6**	**37.3**	**898.6**	**1,704.0**	**805.4**
Stearns, Leonard M. and Dorothy D.	No	Water Duty Method Used to Estimate Annual Production												**0.7**	**154.9**	**154.2**
Sunny-Cal Egg and Poultry Company	No	Water Duty Method Used to Estimate Annual Production												**4.3**	**1,115.0**	**1,110.6**
Albor Properties III, LP	No	Water Duty Method Used to Estimate Annual Production												**2.4**	**232.4**	**229.9**
Nikodinov, Nick	No	Water Duty Method Used to Estimate Annual Production												**0.8**	**15.5**	**14.7**
McAmis, Ronald L.	No	Water Duty Method Used to Estimate Annual Production												**0.6**	**3.9**	**3.3**
Aldama, Nicolas and Amalia	No	Water Duty Method Used to Estimate Annual Production												**0.9**	**5.4**	**4.6**
Gutierrez, Hector, et al.	No	Water Duty Method Used to Estimate Annual Production												**1.4**	**7.7**	**6.3**
Darmont, Boris and Miriam	No	Water Duty Method Used to Estimate Annual Production												**0.4**	**1.9**	**1.6**
TOTAL														**2,085.8**	**6,700.0**	**4,629.5**

1.- All values rounded and subject to revision based on receipt of more accurate information in the future.

2.- Total production is estimated for Overlying parties with un-metered wells.

3.- Monthly production provided by Overlying User

4.- Starting in 2008, the parcels owned by Oak Valley Partners were no longer used for agricultural purposes. Groundwater production was estimated at 2.5 ac-ft/yr based on water use by a single farm house and a small cattle population.

5.- Production from Plantion on the Lake LLC is subject to revision pending updated information to be provided by Overlying User.

6.- Monthly production since 2011 provided by Clearwater Solutions, a company in charge of operating the water system

7.- Actual monthly production provided by the Morongo Band of Mission Indians - May 2016

Table 3-2E
Overlying Producer - Summary of Production for Calendar Year 2016 (ac-ft)

Owner and Well Name	Metered	Monthly Water Production by Overlying Producer[1]												Total[2] Production	Overlying Water Right	Unused Overlying Allocation in 2016
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
Beckman, Walter M. [3]	Yes	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.9**	**58.1**	**57.2**
California Oak Valley Golf and Resort LLC [3]																
Oak Valley #1	Yes	23.7	12.6	4.3	18.7	20.9	75.0	113.5	106.2	31.7	5.6	4.1	2.2	418.5		
Oak Valley #2	Yes	44.6	43.9	5.5	11.1	26.9	0.0	0.0	0.0	1.8	0.1	0.0	0.0	133.9		
Subtotal		**68.2**	**56.5**	**9.8**	**29.8**	**47.8**	**75.0**	**113.5**	**106.2**	**33.4**	**5.7**	**4.1**	**2.2**	**552.3**	**735.8**	**183.5**
Merlin Properties	No	Water Duty Method Used to Estimate Annual Production												**1.6**	**426.0**	**424.4**
Oak Valley Partners, LP [4]																
Singleton Ranch #5	No													0.00		
Singleton Ranch #7	No													2.50		
Irrigation Stokes	No													0.00		
Subtotal		Annual consumption estimated based on water use by a single farm house and a small cattle population.												**2.5**	**1,398.9**	**1,396.4**
Plantation on the Lake LLC [7]	Yes	14.5	15.6	17.9	19.5	16.8	28.7	34.4	35.1	38.3	33.7	20.9	17.9	**293.4**	**450.0**	**156.6**
Rancho Calimesa Mobile Home Park [5]																
Well No.1	Yes	1.0	1.0	0.6	1.7	2.5	3.3	3.0	3.4	3.7	2.8	2.7	1.1	26.9		
Well No.2	No	0.7	0.6	0.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.9	4.2		
Subtotal		**1.7**	**1.6**	**1.1**	**2.9**	**2.5**	**3.3**	**3.0**	**3.4**	**3.7**	**2.8**	**3.1**	**2.0**	**31.2**	**116.2**	**85.0**
Roman Catholic Bishop of San Bernardino		Water Duty Method Used to Estimate Annual Production												**0.0**	**119.3**	**119.3**
Sharondale Mesa Owners Association [5]																
Well No.1	Yes	2.7	3.7	4.7	2.7	5.1	6.6	3.5	0.3	7.2	5.3	5.8	2.9	50.5		
Well No.2	Yes	2.3	2.7	1.4	4.0	3.3	4.0	5.5	4.3	1.6	0.0	2.8	2.5	34.3		
Subtotal		**5.0**	**6.4**	**6.1**	**6.7**	**8.4**	**10.6**	**9.0**	**4.5**	**8.9**	**5.3**	**8.6**	**5.4**	**84.8**	**154.9**	**70.1**
Tukwet Canyon Golf Club [6]																
Well A	Yes	0.8	0.7	14.1	0.7	1.7	4.7	7.9	11.7	5.7	1.4	0.6	0.5	50.6		
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		
Well D	Yes	18.2	39.1	17.1	43.8	78.6	138.6	134.9	162.8	124.8	85.7	58.4	6.0	908.1		
Subtotal		**19.1**	**39.8**	**31.2**	**44.5**	**80.2**	**143.2**	**142.8**	**174.5**	**130.5**	**87.2**	**59.1**	**6.5**	**958.6**	**1,704.0**	**745.4**
Stearns, Leonard M. and Dorothy D.	No	Water Duty Method Used to Estimate Annual Production												**0.7**	**154.9**	**154.2**
Sunny-Cal Egg and Poultry Company	No	Water Duty Method Used to Estimate Annual Production												**4.3**	**1,115.0**	**1,110.6**
Albor Properties III, LP	No	Water Duty Method Used to Estimate Annual Production												**2.4**	**232.4**	**229.9**
Nikodinov, Nick	No	Water Duty Method Used to Estimate Annual Production												**0.8**	**15.5**	**14.7**
McAmis, Ronald L.	No	Water Duty Method Used to Estimate Annual Production												**0.6**	**3.9**	**3.3**
Aldama, Nicolas and Amalia	No	Water Duty Method Used to Estimate Annual Production												**0.9**	**5.4**	**4.6**
Gutierrez, Hector, et al.	No	Water Duty Method Used to Estimate Annual Production												**1.4**	**7.7**	**6.3**
Darmont, Boris and Miriam	No	Water Duty Method Used to Estimate Annual Production												**0.4**	**1.9**	**1.6**
TOTAL														**1,936.7**	**6,700.0**	**4,763.3**

1.- All values rounded and subject to revision based on receipt of more accurate information in the future.

2.- Total production is estimated for Overlying parties with un-metered wells.

3.- Monthly production provided by Overlying User

4.- Starting in 2008, the parcels owned by Oak Valley Partners were no longer used for agricultural purposes. Groundwater production was estimated at 2.5 ac-ft/yr based on water use by a single farm house and a small cattle population.

5.- Monthly production since 2011 provided by Clearwater Solutions, a company in charge of operating the water system.

6.- Actual monthly production provided by the Morongo Band of Mission Indians - May 2017.

7.- Production from Plantion on the Lake LLC is subject to revision pending updated information to be provided by Overlying User.

Table 3-2F
Overlying Producer - Summary of Production for Calendar Year 2017 (ac-ft)

Owner and Well Name	Metered	Monthly Water Production by Overlying Producer[1]												Total[2] Production	Overlying Water Right	Unused Overlying Allocation in 2017
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
Beckman, Walter M. [3]	Yes	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.9**	**58.1**	**57.2**
California Oak Valley Golf and Resort LLC [3]																
Oak Valley #1	Yes	0.0	0.0	0.0	0.0	0.0	0.0	38.9	88.3	40.8	0.0	0.0	0.0	168.1		
Oak Valley #2	Yes	6.3	6.5	125.4	54.7	61.6	75.0	129.4	0.0	52.7	10.1	80.1	60.1	661.9		
Subtotal		**6.3**	**6.5**	**125.4**	**54.7**	**61.6**	**75.0**	**168.3**	**88.3**	**93.5**	**10.1**	**80.1**	**60.1**	**830.0**	**735.8**	**0.0**
Merlin Properties	No	Water Duty Method Used to Estimate Annual Production												**1.6**	**426.0**	**424.4**
Oak Valley Partners, LP [4]																
Singleton Ranch #5	No													0.00		
Singleton Ranch #7	No													2.50		
Irrigation Stokes	No													0.00		
Subtotal		Annual consumption estimated based on water use by a single farm house and a small cattle population.												**2.5**	**1,398.9**	**1,396.4**
Plantation on the Lake LLC [7]	Yes	11.6	9.0	9.7	20.1	26.8	29.0	35.7	38.6	73.4	55.7	61.1	47.1	**417.8**	**450.0**	**32.2**
Rancho Calimesa Mobile Home Park [5]																
Well No.1	Yes	1.0	1.0	0.6	1.7	2.5	3.3	3.0	3.4	3.7	2.8	2.7	1.1	26.9		
Well No.2	No	0.7	0.6	0.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.9	4.2		
Subtotal		**1.7**	**1.6**	**1.1**	**2.9**	**2.5**	**3.3**	**3.0**	**3.4**	**3.7**	**2.8**	**3.1**	**2.0**	**31.2**	**116.2**	**85.0**
Roman Catholic Bishop of San Bernardino		Water Duty Method Used to Estimate Annual Production												**0.0**	**119.3**	**119.3**
Sharondale Mesa Owners Association [5]																
Well No.1	Yes	1.4	1.3	4.2	5.4	5.2	8.4	10.5	9.2	9.1	8.7	6.0	5.4	74.7		
Well No.2	Yes	1.4	1.2	3.3	4.0	3.8	4.1	4.0	3.7	3.9	4.3	5.1	4.4	43.2		
Subtotal		**2.7**	**2.5**	**7.4**	**9.3**	**9.0**	**12.5**	**14.5**	**13.0**	**13.0**	**13.0**	**11.2**	**9.8**	**117.9**	**154.9**	**37.0**
Tukwet Canyon Golf Club [6]																
Well A	Yes	0.4	0.8	0.6	7.9	6.2	15.4	12.3	6.1	2.9	12.4	0.7	0.5	66.3		
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		
Well D	Yes	0.0	4.7	48.3	94.9	111.7	130.5	58.2	137.6	112.1	101.8	58.4	67.1	925.1		
Subtotal		**0.4**	**5.5**	**48.8**	**102.8**	**117.9**	**145.9**	**70.5**	**143.7**	**115.0**	**114.1**	**59.1**	**67.6**	**991.4**	**1,704.0**	**712.7**
Stearns, Leonard M. and Dorothy D.	No	Water Duty Method Used to Estimate Annual Production												**0.7**	**154.9**	**154.2**
Sunny-Cal Egg and Poultry Company	No	Water Duty Method Used to Estimate Annual Production												**4.3**	**1,115.0**	**1,110.6**
Albor Properties III, LP	No	Water Duty Method Used to Estimate Annual Production												**2.4**	**232.4**	**229.9**
Nikodinov, Nick	No	Water Duty Method Used to Estimate Annual Production												**0.8**	**15.5**	**14.7**
McAmis, Ronald L.	No	Water Duty Method Used to Estimate Annual Production												**0.6**	**3.9**	**3.3**
Aldama, Nicolas and Amalia	No	Water Duty Method Used to Estimate Annual Production												**0.9**	**5.4**	**4.6**
Gutierrez, Hector, et al.	No	Water Duty Method Used to Estimate Annual Production												**1.4**	**7.7**	**6.3**
Darmont, Boris and Miriam	No	Water Duty Method Used to Estimate Annual Production												**0.4**	**1.9**	**1.6**
TOTAL														**2,404.7**	**6,700.0**	**4,389.4**

1.- All values rounded and subject to revision based on receipt of more accurate information in the future.

2.- Total production is estimated for Overlying parties with un-metered wells.

3.- Monthly production provided by BCVWD - Feb 2015 - Production for Plantation by the Lake for 2015 was used for 2016 until producer provides final numbers.

4.- Starting in 2008, the parcels owned by Oak Valley Partners were no longer used for agricultural purposes. Groundwater production was estimated at 2.5 ac-ft/yr based on water use by a single farm house and a small cattle population.

5.- Monthly production since 2011 provided by Clearwater Solutions, a company in charge of operating the water system.

6.- Actual monthly production provided by the Morongo Band of Mission Indians - May 2017.

7.- Production from Plantion on the Lake LLC is subject to revision pending updated information to be provided by Overlying User.

Table 3-3a

Production Summary for Appropriator and Overlying Producers in the Beaumont Basin

2003 through 2010 - Calendar Year Accounting (ac-ft)

	Annual Production (ac-ft)							
	2003[1]	2004	2005	2006	2007	2008	2009	2010
Appropriator Parties								
Banning, City of	2,174.2	3,397.3	1,808.6	1,827.5	2,772.6	2,933.6	2,095.0	1,143.6
Beaumont-Cherry Valley Water District	3,511.9	6,873.9	7,025.6	9,054.1	11,383.3	10,710.5	10,133.9	9,421.3
South Mesa Water Company	223.2	482.5	663.2	616.0	665.8	470.9	382.2	405.0
Yucaipa Valley Water District	1,162.4	1,833.7	1,281.3	2,027.3	1,682.9	572.0	504.4	672.4
Subtotal	**7,071.7**	**12,587.4**	**10,778.6**	**13,524.9**	**16,504.6**	**14,687.0**	**13,115.6**	**11,642.3**
Overlying Parties								
Beckman, Walter M	16.2	27.0	22.4	11.5	8.3	12.7	12.9	6.4
California Oak Valley Golf and Resort LLC	736.2	728.6	703.9	831.5	779.0	780.4	766.7	565.1
Merlin Properties	3.6	1.6	1.6	1.6	1.6	1.6	1.6	1.5
Oak Valley Partners, LP	301.2	440.7	350.2	312.1	312.1	310.5	310.5	2.5
Plantation on the Lake LLC	178.6	340.9	310.2	350.1	344.2	354.0	352.3	337.2
Rancho Calimesa Mobile Home Park	35.4	68.3	68.3	68.3	69.3	69.3	69.3	69.3
Roman Catholic Bishop of San Bernardino	46.8	59.1	55.6	59.0	0.7	0.7	0.7	0.0
Sharondale Mesa Owners Association	104.3	158.0	181.0	188.6	182.3	193.3	154.3	132.3
Tukwet Canyon Golf Club[2]	791.4	1,346.7	1,213.1	1,753.4	1,599.1	1,137.6	1,158.6	851.8
Stearns, Leonard M. and Dorothy D.	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.7
Sunny-Cal Egg and Poultry Company	226.0	404.4	385.4	2.6	2.7	4.2	4.2	3.8
Albor Properties III, LP[3]				13.2	2.3	2.3	2.3	2.1
Nikodinov, Nick				0.7	0.8	0.8	0.7	0.7
McAmis, Ronald L.				0.5	0.6	0.6	0.5	0.5
Aldama, Nicolas and Amalia				0.8	0.8	0.9	0.8	0.8
Gutierrez, Hector, et. al.				1.4	1.4	1.4	1.4	1.3
Darmont, Boris and Miriam				0.4	0.4	0.4	0.4	0.4
Subtotal	**2,440.8**	**3,576.3**	**3,292.6**	**3,596.7**	**3,306.5**	**2,871.6**	**2,838.2**	**1,976.5**
Total	**9,512.5**	**16,163.6**	**14,071.3**	**17,121.6**	**19,811.1**	**17,558.6**	**15,953.7**	**13,618.8**

1.- 2003 groundwater production only includes Jul-Dec time period.

2.- Formerly known as the East Valley Golf Course and the Southern California Section of the PGA of America.

3.- Formerly Known as Sunny Cal North - Manheim, Manheim & Berman.

Table 3-3b

Production Summary for Appropriator and Overlying Producers in the Beaumont Basin

2011 through 2017 - Calendar Year Accounting (ac-ft)

	Annual Production (ac-ft)						
	2011	2012	2013	2014	2015	2016	2017
Appropriator Parties							
Banning, City of	1,341.7	1,038.3	2,100.7	2,585.1	1,678.3	1,472.7	1,443.5
Beaumont-Cherry Valley Water District	9,431.3	10,162.0	11,097.4	10,805.5	8,972.8	10,159.8	11,650.7
South Mesa Water Company	419.9	448.5	308.4	473.7	317.2	352.6	368.1
Yucaipa Valley Water District	534.1	700.1	1,030.8	1,198.5	119.2	4.6	0.1
Subtotal	**11,727.1**	**12,348.9**	**14,537.2**	**15,062.8**	**11,087.4**	**11,989.7**	**13,462.4**
Overlying Parties							
Beckman, Walter M	9.0	9.0	2.1	0.9	0.9	0.9	0.9
California Oak Valley Golf and Resort LLC	517.3	517.3	625.8	417.0	751.1	552.3	830.0
Merlin Properties	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Oak Valley Partners, LP	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Plantation on the Lake LLC	344.7	344.7	326.7	403.8	302.1	293.4	417.8
Rancho Calimesa Mobile Home Park	69.3	69.3	69.3	16.2	23.4	31.2	31.2
Roman Catholic Bishop of San Bernardino	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sharondale Mesa Owners Association	133.0	145.3	147.0	137.3	94.1	84.8	117.9
Tukwet Canyon Golf Club[2]	882.9	984.3	1,098.4	1,227.9	898.6	958.6	991.4
Stearns, Leonard M. and Dorothy D.	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Sunny-Cal Egg and Poultry Company	4.2	4.3	4.3	4.3	4.3	4.3	4.3
Albor Properties III, LP[3]	2.3	2.4	2.4	2.4	2.4	2.4	2.4
Nikodinov, Nick	0.8	0.8	0.8	0.8	0.8	0.8	0.8
McAmis, Ronald L.	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Aldama, Nicolas and Amalia	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Gutierrez, Hector, et. al.	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Darmont, Boris and Miriam	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Subtotal	**1,971.4**	**2,085.4**	**2,284.8**	**2,218.7**	**2,085.7**	**1,936.7**	**2,404.7**
Total	**13,698.4**	**14,434.3**	**16,821.9**	**17,281.5**	**13,173.1**	**13,926.4**	**15,867.1**

1.- 2003 groundwater production only includes Jul-Dec time period.

2.- Formerly known as the East Valley Golf Course and the Southern California Section of the PGA of America.

3.- Formerly Known as Sunny Cal North - Manheim, Manheim & Berman.

Table 3-4

Annual Supplemental Recharge to the Beaumont Basin -- Calendar Year Accounting

Year	Supplemental Recharge (ac-ft)				
	Banning[1]	Beaumont[2]	BCVWD[1]	SGPWA[3]	Total
2003	-	-	-	-	-
2004	-	-	-	813.8	813.8
2005	-	-	-	687.4	687.4
2006	-	-	3,501.0	777.7	4,278.7
2007	-	-	4,501.0	541.3	5,042.3
2008	1,534.0	-	2,399.0	1,047.4	4,980.4
2009	2,741.2	-	2,741.2	823.4	6,305.8
2010	1,338.0	-	5,727.0	1,222.3	8,287.3
2011	800.0	-	7,979.0	1,842.0	10,621.0
2012	1,200.0	-	7,783.0	1,827.2	10,810.2
2013	1,200.0	-	7,403.0	881.8	9,484.8
2014	608.0	-	4,405.0	16.5	5,029.5
2015	694.0	-	2,773.0	9.2	3,476.2
2016	1,477.0	-	9,319.0	17.8	10,813.8
2017	1,350.0	-	13,590.0	-	14,940.0
Totals	**12,942.2**	**-**	**72,121.2**	**10,507.8**	**95,571.2**

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

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

3.- SWP water recharged in the Pass Agency's Little San Gorgonio Creek Spreading Ponds

Table 3-5

City of Beaumont Wastewater Treatment Plant - Monthly Discharges Since 2007

Recycled Water Daily Average Discharges (mgd) to DDP1 - Coopers's Canyon

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average (mgd)	Annual (ac-ft)
2007	2.32	2.17	2.25	2.23	2.61	2.57	2.57	2.66	2.66	2.67	2.63	2.50	2.49	2,786
2008	2.44	2.79	2.49	2.65	2.55	2.59	2.55	2.59	2.60	2.50	2.57	2.65	2.58	2,889
2009	2.52	2.66	2.56	2.58	2.59	2.56	2.44	2.63	2.60	2.61	2.63	2.69	2.59	2,902
2010	2.83	2.65	2.66	2.60	2.00	1.88	1.94	1.96	1.94	2.00	2.04	2.22	2.23	2,495
2011	2.07	2.12	2.06	2.01	2.04	2.25	2.23	2.13	2.10	2.08	2.19	2.13	2.12	2,371
2012	2.19	2.64	2.19	2.23	2.29	2.24	2.28	2.29	2.24	2.70	2.38	2.33	2.33	2,614
2013	2.76	2.80	2.80	2.81	2.78	2.78	2.81	2.82	2.89	2.83	2.21	2.50	2.73	3,061
2014	2.62	2.22	2.45	2.48	2.61	2.62	2.61	2.74	2.87	2.74	2.99	3.12	2.67	2,992
2015	2.87	2.94	2.97	2.90	2.92	2.98	2.99	3.10	3.08	3.08	3.06	3.11	3.00	3,360
2016	3.15	3.06	3.01	3.07	3.11	3.15	3.15	3.26	3.22	3.18	3.19	3.30	3.15	3,533
2017	3.36	3.26	3.17	3.35	3.22	3.18	3.21	3.31	3.32	3.26	3.29	3.31	3.27	3,663

Recycled Water Daily Average Discharges (mgd) to DDP7 - Marshall's Canyon

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average (mgd)	Annual (ac-ft)
2010	0.00	0.00	0.82	0.67	0.57	0.62	0.70	0.69	0.69	0.70	0.67	0.65	0.68	633
2011	0.66	0.63	0.63	0.63	0.58	0.45	0.52	0.63	0.64	0.60	0.55	0.54	0.59	660
2012	0.54	0.54	0.52	0.47	0.45	0.45	0.45	0.49	0.50	0.47	0.41	0.53	0.49	545
2013	0.48	0.52	0.45	0.43	0.25	0.44	0.52	0.61	0.33	0.69	0.57	0.41	0.47	530
2014	0.21	0.65	0.61	0.66	0.61	0.42	0.49	0.35	0.21	0.24	0.02	0.02	0.37	418
2015	0.24	0.20	0.31	0.31	0.22	0.38	0.37	0.23	0.00	0.00	0.00	0.00	0.19	212
2016	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
2017	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-

Table 3-6
Overlying Parties Production Rights Allocation Based on Revised Safe Yield

Overlying Party to the 2003 Judgment	Initial Overlying Water Right through 2013	New Overlying Water Right Starting in 2014	5-Year (2013-17) Average Production (ac-ft)	5-Year (2013-17) Running Avg % of Water Right
California Oak Valley Golf and Resort LLC [(1)]	950.0	735.8	637.6	86.6%
Plantation on the Lake LLC	581.0	450.0	354.3	78.7%
Sharondale Mesa Owners Association	200.0	154.9	108.5	70.1%
Tukwet Canyon Golf Club	2,200.0	1,704.0	1,019.1	59.8%
Rancho Calimesa Mobile Home Park	150.0	116.2	25.5	21.9%
Gutierrez, Hector, et al.	10.0	7.7	1.4	18.5%
Darmont, Boris and Miriam	2.5	1.9	0.4	18.1%
Aldama, Nicolas and Amalia	7.0	5.4	0.9	16.0%
McAmis, Ronald L.	5.0	3.9	0.6	14.5%
Nikodinov, Nick	20.0	15.5	0.8	5.0%
Beckman, Walter M.	75.0	58.1	0.9	1.5%
Albor Properties III, LP	300.0	232.4	2.4	1.0%
Stearns, Leonard M. and Dorothy D.	200.0	154.9	0.7	0.5%
Sunny-Cal Egg and Poultry Company	1,439.5	1,115.0	4.3	0.4%
Merlin Properties	550.0	426.0	1.6	0.4%
Oak Valley Partners, LP [(2)]	1,806.0	1,398.9	2.5	0.2%
Roman Catholic Bishop of San Bernardino	154.0	119.3	0.0	0.0%
	8,650.0	**6,700.0**	**2,161.5**	**32.3%**

(1) - California Oak Valley Golf and Resort LLC exceeded its annual production right in 2015 and 2017; however, their average production over the 2013-17 period is below its water right.

(2) - Under Resolution 17-02, adopted August 30, 2017, Oak Valley Partners LP transferred all of its Overlying rights to the Yucaipa Valley Water District to serve a number of parcels in the Beaumont Basin. If the Overlying Right from OVP is converted to an Overlying-Appropriative Right in favor of YVWD prior to 2022, then the quantity of water available for Appropriators in 2022 will be adjusted accordingly.

Table 3-7
Summary of Unused Overlying Water and Allocation to Appropriators (ac-ft)

Accounting Year	Overlying Water Right	Overlying Production	Unused Overlying Water Right
2003	4,325	2,441	1,884
2004	8,650	3,576	5,074
2005	8,650	3,293	5,357
2006	8,650	3,597	5,053
2007	8,650	3,307	5,343
2008	8,650	2,872	5,778
2009	8,650	2,838	5,812
2010	8,650	1,976	6,674
2011	8,650	1,971	6,679
2012	8,650	2,085	6,565
2013	8,650	2,285	6,365
2014	6,700	2,219	4,481
2015	6,700	2,086	4,614
2016	6,700	1,937	4,763
2017	6,700	2,405	4,295

Allocation Year	City of Banning	City of Beaumont	Beaumont Cherry Valley WD	South Mesa Water Co.	Yucaipa Valley Water District	Total
2008	592	0	801	235	256	1,884
2009	1,595	0	2,157	633	689	5,074
2010	1,684	0	2,277	669	728	5,357
2011	1,588	0	2,148	631	686	5,053
2012	1,679	0	2,272	667	726	5,343
2013	1,816	0	2,456	721	785	5,778
2014	1,827	0	2,471	725	789	5,812
2015	2,097	0	2,837	833	906	6,674
2016	2,099	0	2,839	833	907	6,679
2017	2,063	0	2,791	819	891	6,565
2018	2,001	0	2,706	794	864	6,365
2019	1,408	0	1,905	559	609	4,481
2020	1,450	0	1,962	576	627	4,614
2021	1,497	0	2,025	594	647	4,763
2022	1,350	0	1,826	536	583	4,295

Note - Under Resolution 17-02, adopted August 30, 2017, Oak Valley Partners LP transferred all of its Overlying rights to the Yucaipa Valley Water District to serve a number of parcels in the Beaumont Basin. If the Overlying Right from OVP is converted to an Overlying-Appropriative Right in favor of YVWD prior to 2022, then the quantity of water available for Appropriators in 2022 will be adjusted accordingly.

Table 3-8
Consolidation of Appropriator Production and Storage Accounts
Calendar Year Accounting (ac-ft) 2003 through 2017

Calendar Year	Storage Account Balance at Beginning of CY	Share of Surplus Water	Groundwater Production for CY	Additions to Storage Account							Ending Account Balance
				Under / Over Production [1]	Unused Overlying Production Allocation	Transfers Among Appropriators	Supplemental Water		Local Recharge	Total Additions to Storage Account	
							SWP Water Recharge	Recycled Water Recharge			
City of Banning - Authorized Storage Account: 80,000 ac-ft											
2003	0.0	2,514.5	2,174.2	340.3	0.0	0.0	0.0	0.0	0.0	340.3	340.3
2004	340.3	5,029.0	3,397.3	1,631.7	0.0	0.0	0.0	0.0	0.0	1,631.7	1,972.0
2005	1,972.0	5,029.0	1,808.6	3,220.4	0.0	0.0	0.0	0.0	0.0	3,220.4	5,192.5
2006	5,192.5	5,029.0	1,827.5	3,201.5	0.0	0.0	0.0	0.0	0.0	3,201.5	8,393.9
2007	8,393.9	5,029.0	2,772.6	2,256.4	0.0	1,500.0	0.0	0.0	0.0	3,756.4	12,150.3
2008	12,150.3	5,029.0	2,933.6	2,095.4	592.2	0.0	1,534.0	0.0	0.0	4,221.6	16,371.9
2009	16,371.9	5,029.0	2,095.0	2,934.0	1,594.7	0.0	2,741.2	0.0	0.0	7,269.8	23,641.8
2010	23,641.8	5,029.0	1,143.6	3,885.4	1,683.8	0.0	1,338.0	0.0	0.0	6,907.2	30,549.0
2011	30,549.0	5,029.0	1,341.7	3,687.3	1,588.2	0.0	800.0	0.0	0.0	6,075.6	36,624.5
2012	36,624.5	5,029.0	1,038.3	3,990.7	1,679.5	0.0	1,200.0	0.0	0.0	6,870.2	43,494.7
2013	43,494.7	2,514.5	2,100.7	413.8	1,816.1	0.0	1,200.0	0.0	0.0	3,430.0	46,924.7
2014	46,924.7	0.0	2,585.1	-2,585.1	1,826.7	0.0	608.0	0.0	0.0	-150.4	46,774.3
2015	46,774.3	0.0	1,678.3	-1,678.3	2,097.5	0.0	694.0	0.0	0.0	1,113.2	47,887.5
2016	47,887.5	0.0	1,472.7	-1,472.7	2,099.1	0.0	1,477.0	0.0	0.0	2,103.4	49,990.8
2017	49,990.8	0.0	1,443.5	-1,443.5	2,063.2	0.0	1,350.0	0.0	0.0	1,969.8	51,960.6
Beaumont Cherry Valley Water District - Authorized Storage Account: 80,000 ac-ft											
2003	0.0	3,401.0	3,511.9	-110.9	0.0	0.0	0.0	0.0	0.0	-110.9	-110.9
2004	-110.9	6,802.0	6,873.9	-71.9	0.0	0.0	0.0	0.0	0.0	-71.9	-182.8
2005	-182.8	6,802.0	7,025.6	-223.6	0.0	0.0	0.0	0.0	0.0	-223.6	-406.4
2006	-406.4	6,802.0	9,054.1	-2,252.1	0.0	0.0	3,501.0	0.0	0.0	1,248.9	842.5
2007	842.5	6,802.0	11,383.3	-4,581.3	0.0	1,500.0	4,501.0	0.0	0.0	1,419.7	2,262.2
2008	2,262.2	6,802.0	10,710.5	-3,908.5	801.0	2,500.0	2,399.0	0.0	0.0	1,791.5	4,053.7
2009	4,053.7	6,802.0	10,133.9	-3,331.9	2,156.8	2,000.0	2,741.2	0.0	0.0	3,566.1	7,619.8
2010	7,619.8	6,802.0	9,421.3	-2,619.3	2,277.4	0.0	5,727.0	0.0	0.0	5,385.1	13,004.9
2011	13,004.9	6,802.0	9,431.3	-2,629.3	2,148.1	3,500.0	7,979.0	0.0	0.0	10,997.8	24,002.8
2012	24,002.8	6,802.0	10,162.0	-3,360.0	2,271.5	0.0	7,783.0	0.0	0.0	6,694.5	30,697.3
2013	30,697.3	3,401.0	11,097.4	-7,696.4	2,456.4	0.0	7,403.0	0.0	0.0	2,163.0	32,860.3
2014	32,860.3	0.0	10,805.5	-10,805.5	2,470.6	0.0	4,405.0	0.0	0.0	-3,929.9	28,930.4
2015	28,930.4	0.0	8,972.8	-8,972.8	2,836.9	0.0	2,773.0	0.0	0.0	-3,362.8	25,567.6
2016	25,567.6	0.0	10,159.8	-10,159.8	2,839.1	0.0	9,319.0	0.0	0.0	1,998.3	27,565.9
2017	27,565.9	0.0	11,650.7	-11,650.7	2,790.6	0.0	13,590.0	0.0	0.0	4,729.9	32,295.7

Table 3-8
Consolidation of Appropriator Production and Storage Accounts
Calendar Year Accounting (ac-ft) 2003 through 2017

Calendar Year	Storage Account Balance at Beginning of CY	Share of Surplus Water	Groundwater Production for CY	Additions to Storage Account							Ending Account Balance
				Under / Over Production [1]	Unused Overlying Production Allocation	Transfers Among Appropriators	Supplemental Water		Local Recharge	Total Additions to Storage Account	
							SWP Water Recharge	Recycled Water Recharge			
City of Beaumont - Authorized Storage Account: 30,000 ac-ft											
2003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2008	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2012	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2014	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2016	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2017	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
South Mesa Water Company - Authorized Storage Account: 20,000 ac-ft											
2003	0.0	998.0	223.2	774.8	0.0	0.0	0.0	0.0	0.0	774.8	774.8
2004	774.8	1,996.0	482.5	1,513.5	0.0	0.0	0.0	0.0	0.0	1,513.5	2,288.3
2005	2,288.3	1,996.0	663.2	1,332.8	0.0	0.0	0.0	0.0	0.0	1,332.8	3,621.1
2006	3,621.1	1,996.0	616.0	1,380.0	0.0	0.0	0.0	0.0	0.0	1,380.0	5,001.1
2007	5,001.1	1,996.0	665.8	1,330.2	0.0	-3,000.0	0.0	0.0	0.0	-1,669.8	3,331.3
2008	3,331.3	1,996.0	470.9	1,525.2	235.2	-2,500.0	0.0	0.0	0.0	-739.7	2,591.6
2009	2,591.6	1,996.0	382.2	1,613.8	633.2	-2,000.0	0.0	0.0	0.0	247.0	2,838.6
2010	2,838.6	1,996.0	405.0	1,591.0	668.6	0.0	0.0	0.0	0.0	2,259.6	5,098.2
2011	5,098.2	1,996.0	419.9	1,576.1	630.6	-3,500.0	0.0	0.0	0.0	-1,293.3	3,805.0
2012	3,805.0	1,996.0	448.5	1,547.5	666.9	0.0	0.0	0.0	0.0	2,214.4	6,019.3
2013	6,019.3	998.0	308.4	689.7	721.1	0.0	0.0	0.0	0.0	1,410.8	7,430.1
2014	7,430.1	0.0	473.7	-473.7	725.3	0.0	0.0	0.0	0.0	251.6	7,681.7
2015	7,681.7	0.0	317.2	-317.2	832.9	0.0	0.0	0.0	0.0	516.7	8,198.4
2016	8,198.4	0.0	352.6	-352.6	833.5	0.0	0.0	0.0	0.0	482.9	8,681.3
2017	8,681.3	0.0	368.1	-368.1	819.3	0.0	0.0	0.0	0.0	451.2	9,132.5

Table 3-8
Consolidation of Appropriator Production and Storage Accounts
Calendar Year Accounting (ac-ft) 2003 through 2017

Calendar Year	Storage Account Balance at Beginning of CY	Share of Surplus Water	Groundwater Production for CY	Additions to Storage Account							Ending Account Balance
				Under / Over Production [1]	Unused Overlying Production Allocation	Transfers Among Appropriators	Supplemental Water		Local Recharge	Total Additions to Storage Account	
							SWP Water Recharge	Recycled Water Recharge			
Morongo Band of Mission Indians - Authorized Storage Account: 20,000 ac-ft											
2013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2014	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2016	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2017	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yucaipa Valley Water District - Authorized Storage Account: 50,000 ac-ft											
2003	0.0	1,086.5	1,162.4	-75.9	0.0	0.0	0.0	0.0	0.0	-75.9	-75.9
2004	-75.9	2,173.0	1,833.7	339.3	0.0	0.0	0.0	0.0	0.0	339.3	263.4
2005	263.4	2,173.0	1,281.3	891.7	0.0	0.0	0.0	0.0	0.0	891.7	1,155.1
2006	1,155.1	2,173.0	2,027.3	145.7	0.0	0.0	0.0	0.0	0.0	145.7	1,300.8
2007	1,300.8	2,173.0	1,682.9	490.1	0.0	0.0	0.0	0.0	0.0	490.1	1,790.9
2008	1,790.9	2,173.0	572.0	1,601.0	255.9	0.0	0.0	0.0	0.0	1,856.8	3,647.8
2009	3,647.8	2,173.0	504.4	1,668.6	689.0	0.0	0.0	0.0	0.0	2,357.6	6,005.4
2010	6,005.4	2,173.0	672.4	1,500.6	727.5	0.0	0.0	0.0	0.0	2,228.1	8,233.5
2011	8,233.5	2,173.0	534.1	1,638.9	686.2	0.0	0.0	0.0	0.0	2,325.1	10,558.6
2012	10,558.6	2,173.0	700.1	1,472.9	725.6	0.0	0.0	0.0	0.0	2,198.5	12,757.1
2013	12,757.1	1,086.5	1,030.8	55.7	784.7	0.0	0.0	0.0	0.0	840.4	13,597.6
2014	13,597.6	0.0	1,198.5	-1,198.5	789.2	0.0	0.0	0.0	0.0	-409.2	13,188.4
2015	13,188.4	0.0	119.2	-119.2	906.3	0.0	0.0	0.0	0.0	788.1	13,976.4
2016	13,976.4	0.0	4.6	-4.6	907.0	0.0	0.0	0.0	0.0	904.4	14,880.8
2017	14,880.8	1.0	0.1	0.9	891.5	0.0	0.0	0.0	0.0	895.3	15,776.2

Table 3-8
Consolidation of Appropriator Production and Storage Accounts
Calendar Year Accounting (ac-ft) 2003 through 2017

Calendar Year	Storage Account Balance at Beginning of CY	Share of Surplus Water	Groundwater Production for CY	Additions to Storage Account							Ending Account Balance
				Under / Over Production [1]	Unused Overlying Production Allocation	Transfers Among Appropriators	Supplemental Water		Local Recharge	Total Additions to Storage Account	
							SWP Water Recharge	Recycled Water Recharge			
Totals											
2003	0.0	8,000.0	7,071.7	928.3	0.0	0.0	0.0	0.0	0.0	928.3	928.3
2004	928.3	16,000.0	12,587.4	3,412.6	0.0	0.0	0.0	0.0	0.0	3,412.6	4,340.9
2005	4,340.9	16,000.0	10,778.6	5,221.4	0.0	0.0	0.0	0.0	0.0	5,221.4	9,562.3
2006	9,562.3	16,000.0	13,524.9	2,475.1	0.0	0.0	3,501.0	0.0	0.0	5,976.1	15,538.3
2007	15,538.3	16,000.0	16,504.6	-504.6	0.0	0.0	4,501.0	0.0	0.0	3,996.4	19,534.8
2008	19,534.8	16,000.0	14,687.0	1,313.0	1,884.2	0.0	3,933.0	0.0	0.0	7,130.2	26,665.0
2009	26,665.0	16,000.0	13,115.6	2,884.4	5,073.7	0.0	5,482.4	0.0	0.0	13,440.6	40,105.6
2010	40,105.6	16,000.0	11,642.3	4,357.7	5,357.4	0.0	7,065.0	0.0	0.0	16,780.0	56,885.6
2011	56,885.6	16,000.0	11,727.1	4,272.9	5,053.3	0.0	8,779.0	0.0	0.0	18,105.2	74,990.9
2012	74,990.9	16,000.0	12,348.9	3,651.1	5,343.5	0.0	8,983.0	0.0	0.0	17,977.6	92,968.5
2013	92,968.5	8,000.0	14,537.2	-6,537.2	5,778.4	0.0	8,603.0	0.0	0.0	7,844.2	100,812.7
2014	100,812.7	0.0	15,062.8	-15,062.8	5,811.8	0.0	5,013.0	0.0	0.0	-4,237.9	96,574.8
2015	96,574.8	0.0	11,087.4	-11,087.4	6,673.5	0.0	3,467.0	0.0	0.0	-944.9	95,629.9
2016	95,629.9	0.0	11,989.7	-11,989.7	6,678.6	0.0	10,796.0	0.0	0.0	5,488.9	101,118.8
2017	101,118.8	1.0	13,462.4	-13,461.4	6,564.6	0.0	14,940.0	0.0	0.0	8,046.2	109,165.0

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

Section 4
Water Quality Conditions

The purpose of this section is to document the water quality conditions in the Beaumont Basin during the 2013-2017 reporting period. TDS and nitrate concentrations in the basin are compared against groundwater quality objectives for anti-degradation and maximum benefit as established by the Regional Board for TDS and Nitrate (as N) in the Beaumont Management Zone (BMZ). In addition, water quality concentrations for a number of compounds are compared against Federal and State Drinking Water Standards. Figure 4-1 depicts all the wells that have groundwater quality data for the reporting period.

Sources and Availability of Water Quality Information

There are two main sources of data used in the assessment of water quality conditions in the Beaumont Basin and near surroundings; namely, the California Department of Public Health database and the Beaumont Management Zone Maximum Benefit Monitoring Program. The database obtained from the CDPH, which focuses primarily on drinking water sources, contains water quality information for the 2013-2017 reporting period. Water quality from the BMZ Maximum Benefit Monitoring Program was also available for the same period.

4.1 Comparison with Management Zone Objectives

Groundwater quality objectives for anti-degradation and maximum benefit have been established by the Regional Board for TDS and Nitrate (as N) in the BMZ, which encompasses portions of the Beaumont Basin, the Singleton and South Beaumont basins, and limited portions of Edgar Canyon above the Banning Fault as illustrated in Figure 4-1. The anti-degradation objectives are based on the historic ambient TDS and nitrate-nitrogen concentration of 230 mg/L and 1.5 mg/L respectively.

The maximum benefit objectives were adopted by the Regional Board in 2004 at the request of STWMA and the City of Beaumont to allow for recharge of imported water and the reuse of recycled water. The maximum benefit objectives, set to 330 mg/L for TDS and 5.0 mg/L for Nitrate-N, are relatively low compared to other basins and are protective of the beneficial uses of the Basin groundwater. According to the Basin Plan, salt mitigation will be required once the ambient TDS and nitrate-nitrogen concentration exceeds the BMZ maximum benefit objectives.

4.1.1 Total Dissolved Solids

Figure 4-2 shows the maximum TDS concentrations for 55 wells measured within and in the vicinity of the Beaumont Basin wells during the 2013-2017 reporting period. A total of 30 wells are located inside the basin with the remaining 25 in the Singleton Basin / Edgar Canyon and the South Beaumont Basin areas.

The maximum TDS concentrations for domestic wells within the basin ranged from 190 to 370 mg/L and averaged 245 mg/L; this average value is 25 mg/L lower than the average maximum

TDS concentration reported in the 2008-11 Engineering Report indicating that TDS concentrations have been fairly stable in the last 10 years.

In the Singleton Basin / Edgar Canyon area, the maximum TDS concentration ranged from 200 to 400 mg/L and averaged 273 mg/L. The average TDS concentration for all samples in this area was 262 mg/L.

In the South Beaumont Basin, the maximum TDS concentration ranged from 240 to 690 mg/L and averaged 516 mg/L. The average TDS concentration for all samples in this area was 470 mg/L.

Average and maximum TDS concentrations for all sampled wells within the basin are as follows:

Well Classification	Count	Samples	Average Concentration	Avg Max Concentration
Beaumont Groundwater Basin				
Appropriators	15	42	230	245
Overlyiers	11	33	238	252
Other	4	14	260	273
Total	30	89		
Singleton Basin / Edgar Canyon Area				
All Wells	16	27	262	273
South Beaumont Basin				
All Wells	9	55	470	516

Of the 26 potable wells, 11 wells had a maximum concentration below the anti-degradation objective of 230 mg/L, 14 wells were between the anti-degradation and maximum benefit objective of 330 mg/L, and one exceeded the maximum benefit objective for the BMZ at 370 mg/L. None of the production wells samples exceeded the secondary federal or state drinking water standard for TDS (500 mg/L). BCVWD wells along Edgar Canyon were not included in the analysis of domestic wells.

In the Singleton Basin / Edgar Canyon area, four wells had a maximum concentration below the anti-degradation objective, nine wells were between the anti-degradation and maximum benefit objective of 330 mg/L, and the remaining two wells exceeded the maximum objective, no wells exceeded the secondary drinking standard.

In the South Beaumont Basin, none of the wells had a maximum TDS concentration below the anti-degradation objective, two wells were between this and the maximum objective, and the remaining seven wells exceeded the maximum objective. Most of the wells with the highest

TDS concentrations are located in the South Beaumont Basin. Table 4-1 presents the average and maximum TDS and Nitrate (as N) concentration for all the wells in the Beaumont Basin and surrounding areas.

4.1.2 Nitrate-Nitrogen

Figure 4-3 shows the maximum Nitrate-N concentrations for 53 wells measured within and in the vicinity of the Beaumont Basin wells during the 2013-2017 reporting period. A total of 30 wells are located inside the basin with the remaining 23 in the Singleton Basin / Edgar Canyon and the South Beaumont Basin areas.

Maximum Nitrate-N concentrations for domestic wells owned by Appropriators ranged from 1.11 to 7.33 mg/L and averaged 2.76 mg/L. Maximum concentrations for overlying wells was slightly higher as they ranged from 1.90 to 7.11 mg/L and averaged 3.91 mg/L. The average concentration for all potable wells was 2.57 mg/L.

In the Singleton Basin / Edgar Canyon area, the maximum Nitrate-N concentration ranged from 0.81 to 14.0 mg/L and averaged 3.94 mg/L. The average concentration for all samples in this area was 3.06 mg/L.

In the South Beaumont Basin, the maximum Nitrate-N concentration ranged from 4.2 to 17.0 mg/L and averaged 11.36 mg/L. The average concentration for all samples in this area was 10.45 mg/L.

Average and maximum Nitrate-N concentrations for all sampled wells within the basin are as follows:

Well Classification	No. of Wells	Samples	Average Concentration	Avg Max Concentration
Beaumont Groundwater Basin				
Appropriators	15	186	2.13	2.76
Overlyiers	11	85	3.18	3.91
Other	4	14	1.08	1.15
Total	30	285		
Singleton Basin / Edgar Canyon Area				
All Wells	16	52	3.06	3.94
South Beaumont Basin				
All Wells	7	63	10.45	11.36

Of the 26 potable wells, only two wells had a maximum concentration below the anti-degradation objective of 1.5 mg/L, 18 wells were between this objective and maximum benefit

objective of 5.0 mg/L; six wells exceeded the maximum benefit objective for the BMZ. None of the production wells samples exceeded the primary federal or state drinking water standard for Nitrate-N (10 mg/L).

In the Singleton Basin / Edgar Canyon area, six wells had a maximum concentration below the anti-degradation objective, another six wells had concentrations between the anti-degradation and maximum objective while four wells exceeded the maximum benefit objective of 5.0 mg/L.

In the South Beaumont Basin, only one well had a maximum concentration below the maximum objective while the remaining eight exceed it with six of these wells also exceeding drinking water standards. There were no wells with nitrate concentrations below the anti-degradation limit. Table 4-1 presents the average and maximum TDS and Nitrate (as N) concentration for all the wells in the Beaumont Basin and surrounding areas.

4.1.3 Nitrate Studies in the Beaumont Management Zone

Rising nitrate concentrations observed in 2005 along the northern portion of the Basin prompted STWMA to launch an investigation in 2006 to determine the potential impact on groundwater quality from on-site waste disposal systems (OSWDS) commonly used in the Cherry Valley Community of Interest (CVCOI). STWMA retained the services of Wildermuth Environmental Inc. (WEI) to conduct this study.

The results of this study were disputed by the Beaumont Board of Supervisors' Groundwater Quality Evaluation Committee (Committee) as they identified potential shortcomings in sampling design and project execution. The Committee recommended that an independent assessment be conducted. They recommended that the second study should expand the study area, consider reasonable build-out projections and other sources of groundwater contamination. This independent study was conducted by scientist at the University of California, Riverside and funded as a Supplemental Environmental Project by the State Water Resources Control Board. The results of this study were published in early 2012. A brief summary and their findings is presented below for information purposes only.

Summary of Wildermuth Environmental Inc. Study

This study is titled: "*Water Quality Impacts from On-Site Waste Disposal Systems in the Cherry Valley Community of Interest" (WEI, 2007).* The bases for this study include the following:

- A review of scientific literature,
- A field study to estimate nitrogen concentrations in soil water below selected OSWDS,
- A tracer study of nitrogen isotope and pharmaceutical and personal care products (PPCP) to confirm the presence of effluent from OSWDS,
- An estimation of current and future discharge from OSWDS to groundwater,
- A planning-level evaluation of basin impacts using the groundwater flow and nitrate transport model, and

- A review of the threshold used in California to compel sewering when OSWDS contaminate or threaten to contaminate groundwater

The results of the investigation are summarized as follows:

- Parcel density in the CVCOI violates the minimum half-acre parcel size requirement of the Regional Board to be on a septic system.
- Water produced from high nitrate wells in the area has a nitrogen isotopic signature and contain PPCPs consistent with discharge from OSWDS.
- Present contribution of OSWDS discharges is estimated at 665 ac-ft/yr.; this represents about five percent of total recharge to the BMZ. At ultimate buildout, there will be between 4,900 to 8,800 OSWDS in the CVCOI. Discharge contribution from these OSWDS is estimated between 1,700 and 3,100 ac-ft/yr. representing 13 to 21 percent of total recharge to the BMZ.
- At 4,900 lots, the contributions from OSWDS will significantly impact water quality to the point that well head treatment will be required at certain well locations in order to meet drinking water standards. At 8,800 lots, the contributions from OSWDS will rendered the entire BMZ non-potable.
- Left unmitigated, OSWDS discharges will contribute enough nitrate to exceed the Basin Plan objectives for the BMZ.
- There is sufficient evidence of groundwater contamination by OSWDS to warrant the Regional Board to issue a prohibition on new OSWDS in the CVCOI.

According to WEI, as a result of this investigation, the County of Riverside issued a moratorium, followed by a permanent prohibition on the installation of septic systems in Cherry Valley unless the septic system is designed to remove at least 50 percent of the nitrogen in the wastewater. In 2009, the County passed a new ordinance that removed the prohibition on conventional OSWDS. WEI further indicates that the Regional Board initiated a process in 2009 that may lead to amending the Basin Plan prohibiting conventional OSWDS and regulating the discharges to meet antidegradation objectives.

Summary of University of California, Riverside Study

This study is titled: *"Water Quality Assessment of the Beaumont Management Zone: Identifying Sources of Groundwater Contamination Using Chemical and Isotopic Tracers" (UCR, 2012).*

The study divides the BMZ into four distinct zones; their location is depicted in Figure 2 of the UCR report (not included here). A brief description of the zones is as follows:

Zone 1 – Region Influenced by Wastewater Treatment Plant Effluent. This zone occupies the southernmost area of the BMZ. Water quality in this zone is influenced by effluent from the City of Beaumont wastewater treatment plant.

Zone 2 – Wildland and Low Density Septic Disposal Region. This zone is defined as the area uphill of Edgar Canyon to the north of Cherry Valley. Water quality in this area had low to moderate concentrations of TDS and nitrate.

Zone 3 – Urban Region with On-site Septic Disposal Systems. This zone overlies the Cherry Valley area including the area around the Noble Creek and Little San Gorgonio Spreading Ponds. Human waste from homes and business in this zone is primarily disposed of in on-site waste disposal systems.

Zone 4 – Urban Region with Consolidate Sewer System. Zone 4 comprises those portions of the City of Beaumont utilizing a municipal wastewater system.

The UCR report attempted to answer a series of questions; the questions and a summary of their response is provided below.

1.- Can different groundwater regions within the BMZ be defined using isotope, PPCP, and general chemical parameters?

According to the study,

- Zone 1 was characterized by relatively high levels of PPCPs and it has the highest likelihood for nitrate contamination from human waste.
- Zone 2 had detectable levels of some PPCPs. Septic contributions to groundwater are relatively minor.
- Zone 3 had several wells with clear signs of contamination by septic systems. Groundwater in the central portion of Cherry Valley appeared to be more strongly affected by septic systems than on the periphery of Cherry Valley.
- Zone 4 shows the fewest signs of human waste as most homes are served by consolidated sewer systems.

1A.- Do areas with septic systems have different chemistry than areas with sewers?

The report indicates that there are statistically significant differences between groundwater in areas with septic systems and groundwater where sewer service is available. The concentrations of PPCPs, TDS, Nitrate-N, the sum of base cations, Boron, and Isotopes of Nitrate were all significantly higher in areas with septic systems than in areas with sewer service.

1B.- Do areas where groundwater recharge with water from the State Water Project or wastewater treatment plant effluent have different chemistry from other areas?

Strong evidence of nitrate deriving from human waste was detected in Zone 1 as well as strong biological attenuation of nitrate transported in groundwater.

2.- What sources contribute nitrate to groundwater of the BMZ?

The report indicates that in Zone 1 the isotopes of nitrate values overlap those expected for human or animal waste. Similarly, in Zone 3 the isotopic composition of water suggest a high

probability of inputs of nitrate from human or animal waste. The presence of PPCPs in most samples indicates the possibility that septic systems are contaminating groundwater within the central part of Cherry Valley.

3.- How much nitrate from human waste is making its way into the groundwater of the BMZ?

The report documents the following findings:

- Mixing models suggest that between 18 to 30 percent of the nitrate in central Cherry Valley groundwater is derived from septic systems.
- If septic systems were completely phased out, nitrate concentrations in central Cherry Valley groundwater could decline by 30 percent once a steady state condition is achieved. The time to reach a steady state is anticipated to be shorter than in other portions of the BMZ due to relatively high rates of recharge in Zone 3.
- Mass balance calculations show that nitrate-nitrogen inputs from septic systems is one of the largest inputs of nitrogen to groundwater in the BMZ.
- If the waste from septic tanks were to be conveyed to the City of Beaumont WWTP, about 30 percent of the current input of nitrate from human waste to groundwater would be removed.

4.2 Comparison with Federal and State Drinking Water Standards

The California Department of Health Services (CDPH) maintains an active water quality database of all public and private drinking water wells throughout the state. This database, available at CDPH's website, was assessed for the 2013-2017 reporting period for 20 domestic production wells in the Beaumont Basin. The objective of this analysis was to determine whether any of these potable wells exceeded the Primary or Secondary Federal and State standards or the notification levels set by the state. Federal standards are set by the United States Environmental Protection Agency (USEPA) while state standards in California are set by CDPH. Primary standards at the federal and state level are enforceable criteria that have been established to protect the public against consumption of drinking water contaminants that present a risk to human health. Secondary standards are not enforceable standards; they have been established for aesthetic qualities of water, such as taste, color, and others. Contaminants with a secondary MCL are not considered to present a risk to human health at the established maximum level. Notification levels (NL) are not enforceable standards; however, they require that municipal water suppliers notify the public if the NL for a chemical has been exceeded.

A total of 1,612 water quality results were extracted from the CDPH database for all production wells in the Beaumont Basin and surrounding basins. Results were obtained for 176 analytes sampled between 2013 and 2017. The results of the analysis indicate that not a single well exceeded the primary Federal or State MCL for any of the analytes tested; however, one well (BCVWD No. 3) exceeded the secondary MCL for Iron during the reporting period. In addition,

the California Notification Limit for Vanadium (100 ug/day) was exceeded once at SMWC Well No. 4 during the reporting period.

Additional water quality information from 2012 through 2016 was obtained from Dudek Engineering as part of the Maximum Benefit Monitoring Program. A total of 1,356 water quality results were analyzed to determine if the water quality at non-domestic wells exceeded drinking water standards. Drinking standards were exceeded for a limited number of constituents as follows:

- Nitrate-N – Six of the 17 monitoring wells sampled for Nitrate-N exceeded the federal and state primary MCL of 10 mg/L – Total of 98 readings. All of these wells are located outside the Beaumont Basin.
- pH – Nine of the 16 monitoring wells sampled for pH exceeded the secondary federal MCL of 8.5 – Total of 77 readings. One of these wells is located in the Beaumont Basin.
- Total Dissolved Solids – Nine of the 16 monitoring wells exceeded the federal and state secondary MCL of 500 mg/L – Total of 75 readings. These wells are located outside the Beaumont Basin.

Appendix E contains summary statistics of the analytical results for the 2013-2017 period for all chemicals that have a federal or state drinking water standard as reported in the CDPH website; it also contained water quality information from the Maximum Benefit Monitoring Program database.

4.2.1 Trace Metals

As indicated earlier, not a single domestic well exceeded the primary federal and state standards during the reporting period. This represents a significant improvement over previous reporting periods when several wells exceeded the MCL for trace metals. Trace metals are briefly discussed here and compared to previous reporting periods.

Aluminum. There were 34 water samples taken during the reporting period and tested for aluminum. Aluminum concentration at all wells was below 50 ug/L, significantly below the secondary MCL of 200 ug/L. Aluminum above the MCL can add color to water. One well exceeded the MCL during the FY 2004-08 reporting period.

Arsenic. There were 35 water samples collected and tested for arsenic during the reporting period. The highest arsenic concentration was observed at SMWC's Well No. 4; arsenic concentration at this well has increased from 4.2 mg/L in 2009, to 4.6 mg/L in 2012, to the highest value of 5.2 mg/L in April 2013. Latest value, recorded in April 2016, arsenic concentration was down to 4.4 mg/L. One well exceeded the MCL during the FY 2004-08 reporting period.

Iron. A total of 34 water samples were taken during the reporting period and tested for iron. In most cases iron concentration was below 100 ug/L., which is significantly below the current secondary MCL of 300 ug/L. However, there is one well that exceeded the MCL during the 2013-

17 period; BCVWD Well No. 3 at 450 mg/L. Iron at a concentration above the MCL can impact color, odor, and taste in water. Five wells exceeded the MCL during the FY 2004-08 reporting period.

Lead. There were 34 water samples collected and tested for lead during the reporting period. The highest concentration reported were 0.0065 mg/L at BCVWD Well No. 25 and 0.0058 mg/L at Rancho Calimesa Mobile Home Park Well No. 1. Both of these concentrations are significantly below the current primary MCL for Lead of 0.015 mg/L. Lead concentrations in water above the MCL can have significant impacts on human health. One well exceeded the MCL during the FY 2004-08 reporting period.

Manganese. There were 34 water samples taken during the reporting period and tested for Manganese. Manganese concentration at all wells was below 20 ug/L, significantly below the secondary MCL of 50 ug/L. Manganese can significantly impact color and taste in water at concentrations above the MCL. One monitoring well exceeded the MCL during the FY 2004-08 reporting period.

Total Chromium. A total of 34 water samples were taken during the reporting period and tested for total chromium. The highest reported concentrations of total chromium were observed in January 2013 at BCVWD Well 26 at 17 ug/L and in March 2017 at Banning C-3 at 15 ug/L. Both of these values are significantly below the current state primary MCL of 50 ug/L. One well exceeded the state primary MCL during the FY 2004-08 reporting period.

Vanadium. Three water samples were tested for vanadium during the reporting period from SMWC's Well 4 and YVWD No. 48. Vanadium at the SMWC well has been consistently hovering around 100 ug/L doubling the state notification level of 50 ug/L. Vanadium concentration at YVWD No. 48 was 25 ug/L in 2014, but increase to 90 ug/L in the summer of 2017.

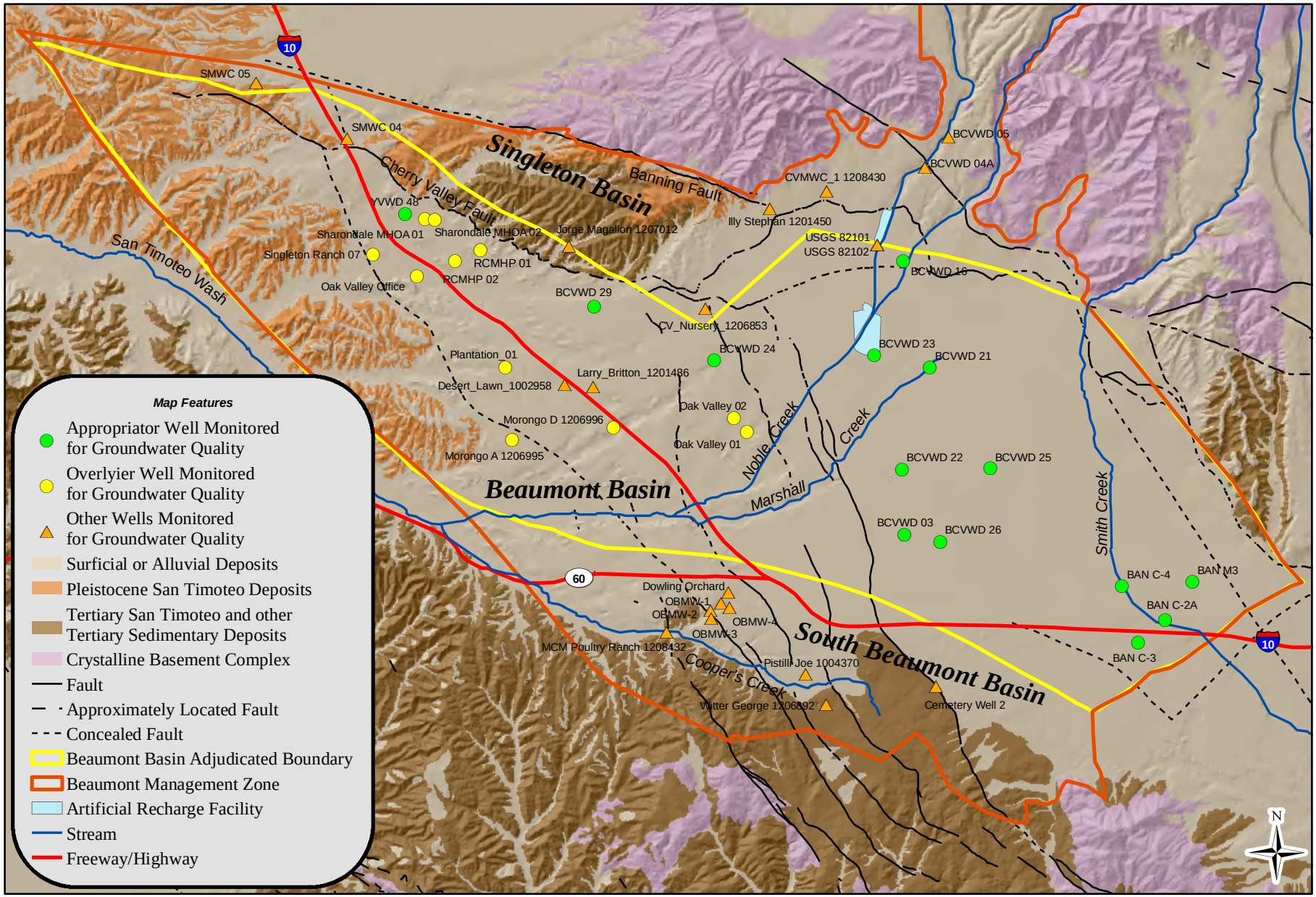
Copper. There were 34 water samples collected and tested for copper during the reporting period. Over the last five years only one well has exceeded the detection limit of 50 ug/L; the Rancho Calimesa Well No. 2 at 62 ug/L (Feb 2013). This concentration is significantly below the state primary MCL of 1,300 ug/L. This is consistent with previous reporting periods.

4.2.3 pH

There are two secondary standards for pH, a lower limit of 6.5 and an upper limit of 8.5. With the exception of one well, all other production wells were within these limits. pH concentrations ranging from a low of 7.0 to a high of 8.9 (SMWC Well No. 4) with most wells in the 7.8 to 8.0 range. Four wells in the basin exceeded the upper limit for pH during the FY 2004-08 reporting period.

4.2.4 Turbidity

Turbidity is a measure of the cloudiness of water, and is used to indicate water quality and filtration effectiveness. All production wells in the Basin were tested for turbidity and none exceeded the primary federal and state MCL of 5 NTU.

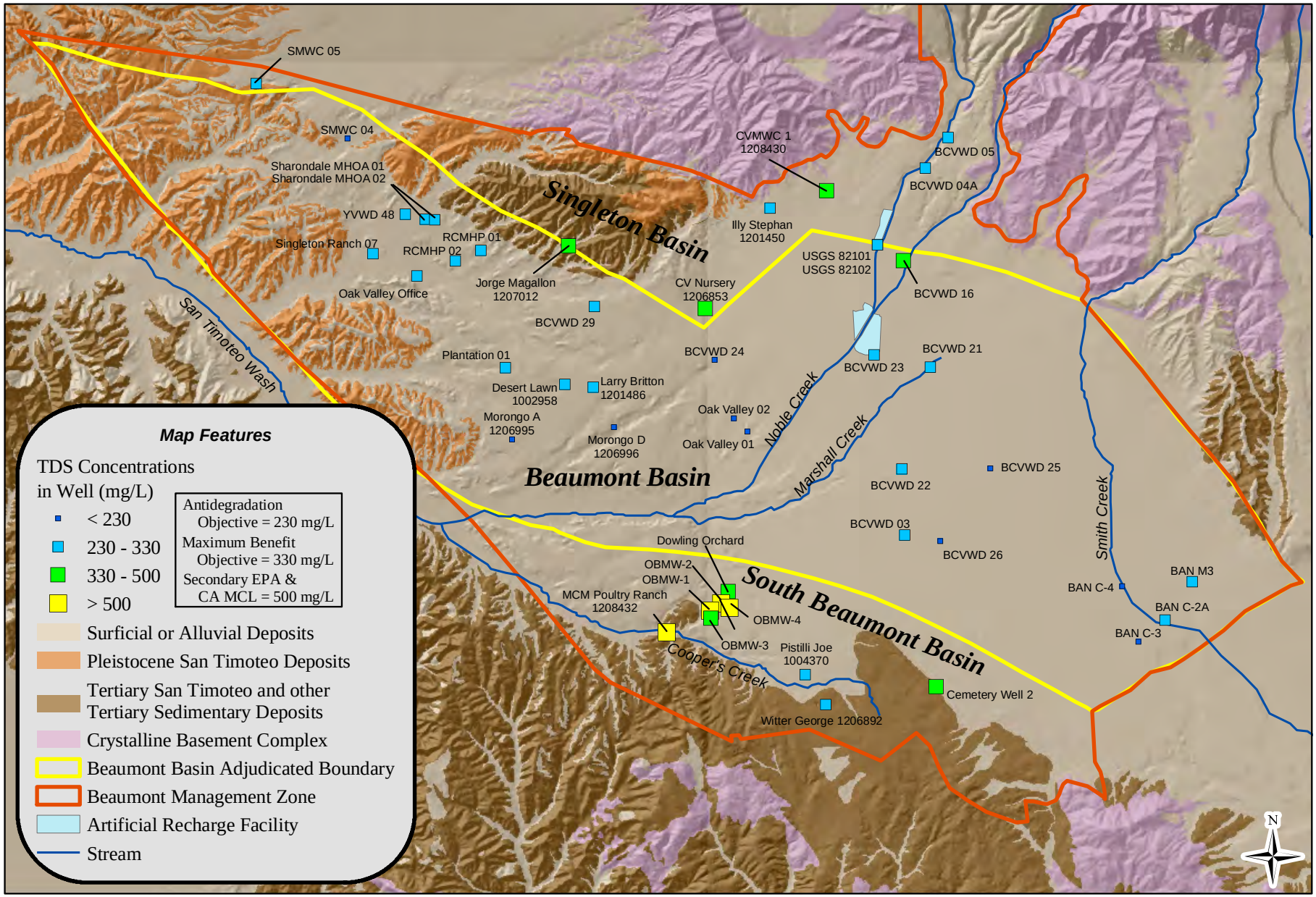


Alda, Inc. *in association with*
Thomas Harder & Co.
Groundwater Consulting

0 0.5 1 2 Miles
NAD 83 UTM Zone 11

Wells with Groundwater Quality Data in the Beaumont Basin

Figure 4-1



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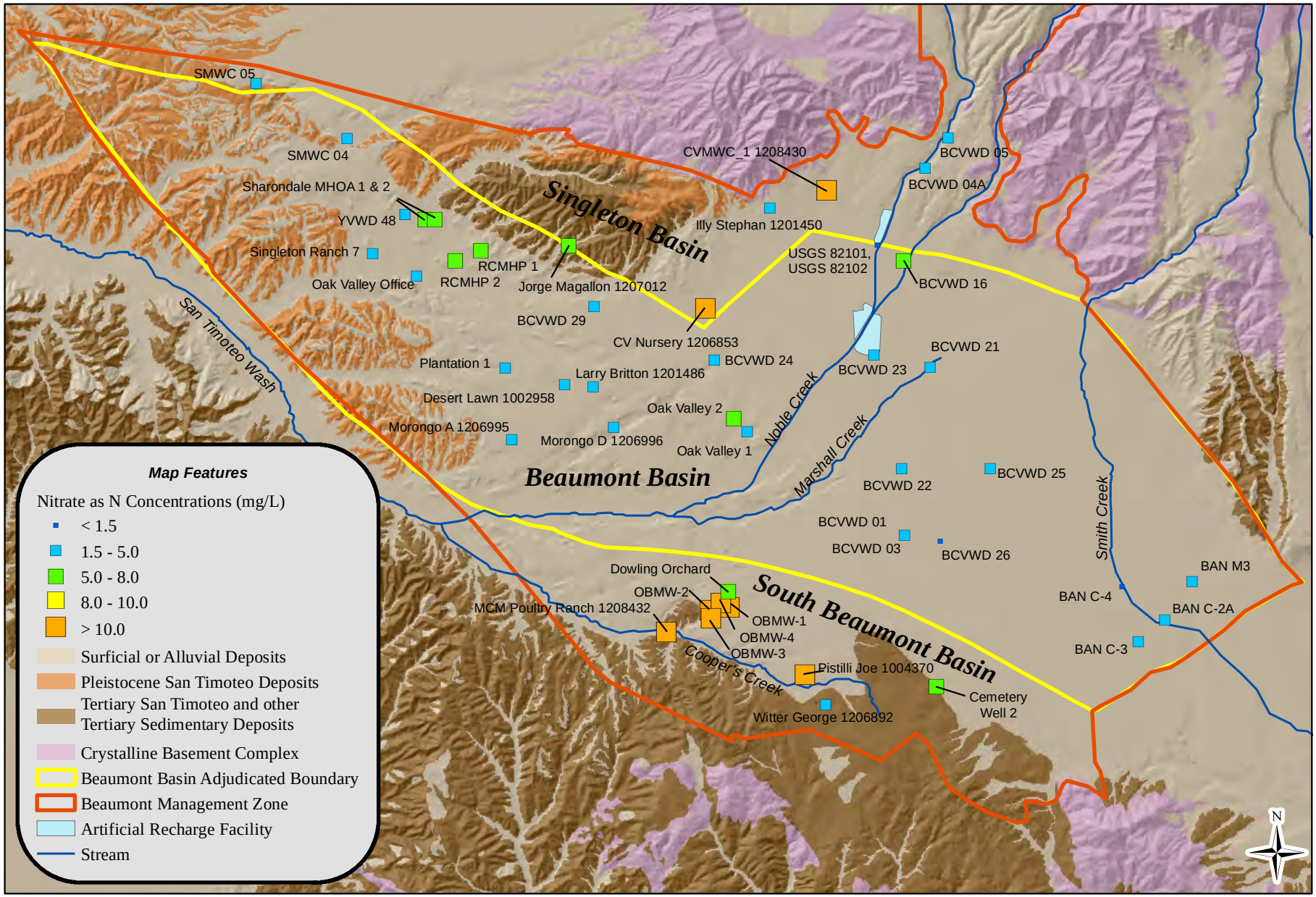
Thomas Harder & Co.
Groundwater Consulting

0 0.5 1 2 Miles
NAD 83 UTM Zone 11

Total Dissolved Solids in Groundwater (Maximum Concentrations 2012 to 2017)

Figure 4-2



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Nitrate in Groundwater (Maximum Concentrations 2012 to 2017)

Figure 4-3

Table 4-1
Summary of Nitrate and TDS by Well in and around the Beaumont Basin (2013-17)

Rec No.	Well Name	Nitrate as N			TDS		
		Count	Avg	Max	Count	Avg	Max
Appropriators							
1004350	BCVWD 03	3	1.17	1.70	3	222	240
1002938	BCVWD 16	53	5.75	7.33	4	333	370
1201487	BCVWD 21	50	3.40	4.06	2	285	290
1002966	BCVWD 22	4	1.47	3.00	2	235	260
1207328	BCVWD 23	12	2.51	3.39	2	215	250
1208224	BCVWD 24	5	1.55	1.70	1	210	210
1220057	BCVWD 25	4	1.11	1.60	1	220	220
1220058	BCVWD 26	2	1.12	1.17	1	213	213
1201480	BCVWD 29	4	1.85	2.30	2	250	280
1007031	BAN C-2A	8	1.91	2.48	2	230	240
1004377	BAN C-3	9	1.71	1.92	3	181	190
1206706	BAN C-4	8	0.95	1.11	2	185	190
1206700	BAN M3	5	1.91	2.20	1	300	300
1003035	SMWC 04	12	3.42	4.90	2	180	190
1003063	YVWD 48	7	2.11	2.48	14	193	230
Overlyiers							
1007025	Oak Valley #1	3	2.07	2.60	3	187	210
1207769	Oak Valley #2	5	3.62	5.30	5	204	220
1201561	Oak Valley Office Well	3	1.70	1.90	3	240	260
1003072	Singleton Ranch 7	4	2.20	2.20	4	253	270
1206844	Sharondale_MHOA_1	20	4.70	6.10	1	260	260
1206845	Sharondale_MHOA_2	7	4.63	5.10	1	260	260
1206995	Morongo_A	6	1.67	2.00	6	193	220
1206996	Morongo_D	5	2.30	2.60	5	206	220
	Plantation 1	6	1.56	1.91	2	260	270
	RCMHP - W1	7	4.53	6.22	1	260	260
	RCMHP - W2	19	6.03	7.11	2	295	320
Other Monitoring Wells Inside Beaumont Basin							
1002958	Desert Lawn	6	1.53	1.70	6	232	240
1201486	Larry Britton	6	1.80	1.90	6	218	260
1207827	USGS 82101	1	0.51	0.51	1	310	310
1207828	USGS 82102	1	0.49	0.49	1	280	280

Table 4-1
Summary of Nitrate and TDS by Well in and around the Beaumont Basin (2013-17)

Rec No.	Well Name	Nitrate as N			TDS		
		Count	Avg	Max	Count	Avg	Max
Singleton Basin / Edgar Cyn							
1002917	BCVWD 06	3	2.55	2.90	1	240	240
1002896	BCVWD 10	5	2.58	8.13	1	240	240
1002901	BCVWD 11	3	0.98	1.20	2	240	250
1002891	BCVWD 12	4	1.03	1.50	1	230	230
1002890	BCVWD 13	1	0.81	0.81			
1002899	BCVWD 14	4	0.82	0.94	1	280	280
1002895	BCVWD 18	3	1.59	1.90	2	240	240
1007011	BCVWD 19	3	0.91	1.00	1	210	210
1007014	BCVWD 20	2	1.05	1.13	1	200	200
1002931	BCVWD 04A	4	1.98	2.20	1	300	300
1002935	BCVWD 05	2	2.93	3.16	1	230	230
1003032	SMWC 05	5	1.69	3.50	2	245	300
1201450	Illy, Stefan Well 2	1	1.70	1.70	1	270	270
1206853	CV_Nursery	6	11.83	14.00	6	333	370
1207012	Magallon, Jorge	1	6.00	6.00	1	330	330
1208430	CVMWC-1	5	10.58	13.00	5	348	400
South Beaumont Basin							
1004370	Pistilli_Joe	7	13.57	14.00	7	274	290
1206892	Witter_George	5	4.02	4.20	5	224	240
1208432	Ranch Well	7	15.00	16.00	7	726	780
1220050	Cemetery Well 2	8	6.34	7.70	8	295	370
1221612	Dowling Orchard	7	6.01	7.30	7	374	420
1232662	OBMW-1	7	11.29	12.00	5	648	700
1232663	OBMW-2	7	15.43	17.00	5	650	690
1232664	OBMW-3	8	10.25	11.00	6	438	480
1232665	OBMW-4	7	12.14	13.00	5	604	670

Section 5
Land Subsidence

In the first ten years of operations under the Judgment, a temporary surplus was established that allows up to 160,000 acre-ft of overdraft within the Basin. The purpose of the temporary surplus was to create room for the safe storage of supplemental water and to reduce losses from the basin. A major concern is that overdraft of the groundwater basin may lead to the lowering of groundwater levels and, subsequently, to land subsidence and ground fissuring. To proactively address this concern, the STWMA and the Watermaster developed a monitoring program specifically to assess the occurrence of subsidence from past groundwater pumping and future pumping. To implement this program, the STWMA, on behalf of the Watermaster, successfully applied for an AB303 Grant from the California Department of Water Resources (DWR)

The Subsidence Monitoring Program was established in 2005. Initially, ground level information for the 1928 to 2000 period was analyzed. In mid to late 2006, 72 benchmark monuments were installed across the Basin and in nearby basins and an initial ground-level survey conducted to establish the initial elevations of all benchmarks. A second survey was conducted in 2007. A comparison analysis of the two surveying efforts reveals little vertical change; in addition, this minimum subsidence was fairly evenly distributed across the Basin. According to the program, the ground level survey of all benchmarks was to be conducted on a tri-annual basis with the next round of survey scheduled for the spring of 2009. The 2009 survey was not conducted by Watermaster since it was determined that the level of subsidence was minimal. No additional surveys are scheduled at this time.

Appendix A
Board Resolutions 17-01 and 17-02

RESOLUTION NO. 2017-01

A RESOLUTION OF THE BEAUMONT BASIN WATERMASTER TO CONFIRM AND ADOPT SAN GORGONIO PASS WATER AGENCY'S ("SGPWA") APPLICATION FOR GROUNDWATER STORAGE AGREEMENT, SUBJECT TO STATED CONDITIONS

WHEREAS, the Stipulated Judgment establishing the Beaumont Basin Watermaster (Riverside Superior Court Case No. 389197) empowers the Beaumont Basin Watermaster to adopt appropriate rules and regulations for the conduct of Watermaster affairs; and

WHEREAS, pursuant to its authority, the Beaumont Basin Watermaster established principles of groundwater storage in the Beaumont Basin via Resolution No. 2005-01, the foundation for San Gorgonio Pass Water Agency Application for Groundwater Storage Agreement; and

WHEREAS, San Gorgonio Pass Water Agency is a state water contractor formed in 1961 for the purpose of importing water from the State Water Project into the San Gorgonio Pass area; and

WHEREAS, the San Gorgonio Pass Water Agency service area includes the Beaumont Basin; and

WHEREAS, the San Gorgonio Pass Water Agency submitted to the Beaumont Basin Watermaster a Groundwater Storage Application requesting, in pertinent part, to store up to 10,000 acre-feet of water in the Beaumont Basin through artificial recharge of water from the State Water Project, via proposed recharge facilities to be located in the southwest corner of Brookside Avenue and Beaumont Avenue; and

WHEREAS, the Beaumont Basin Watermaster issued copies of SGPWA's Groundwater Storage Application to members of its Watermaster Committee for review; and,

WHEREAS, the Beaumont Basin Watermaster met on numerous occasions to discuss SGPWA's Groundwater Storage Application agreeing to support such under the following conditions:

1. The San Gorgonio Pass Water Agency shall add imported water to their Groundwater Storage Account via spreading basins when the quantity of imported water available to the Region exceeds the demands and/or requests for imported water by the Watermaster Committee members as provided in the SGPWA application.

2. The San Gorgonio Pass Water Agency may recharge the excess imported water in the Beaumont Avenue Recharge Facility, or any other location approved by the Beaumont Basin Watermaster.

3. The imported water stored by the SGPWA pursuant to the conditions herein and the Groundwater Storage Application, will be made available, at any time, to the members of the Beaumont Basin Watermaster consistent with the laws, resolutions, ordinances, and policies of the San Gorgonio Pass Water Agency.

4. Members of the Watermaster Committee shall maintain the right(s) of first refusal to purchase imported water placed in storage by the San Gorgonio Pass Water Agency at times when the San Gorgonio Pass water Agency determines that it has stored supplemental water available for sale, transfer, or exchange. At such times, the San Gorgonio Pass Water Agency shall notify all Watermaster Committee members via electronic mail a minimum of 60 calendar days prior to any sale, transfer, or exchange of any supplemental water in the storage account of the San Gorgonio Pass Water Agency to any person, entity, or Watermaster member. The Watermaster shall determine what amount(s), if any, of the stored imported water available by the San Gorgonio Pass Water Agency will be purchased individually or collectively by the Watermaster Committee members, which right(s) of first refusal must be exercised in writing received by the San Gorgonio Pass Water Agency within 60 calendar days notice was sent by the San Gorgonio Pass Water Agency; and

WHEREAS, the Beaumont Basin Watermaster reviewed and discussed this Resolution on June 6, 2017 to take this matter up, finding that the foregoing is true and accurate.

NOW, THEREFORE, BE IT RESOLVED BY THE BEAUMONT BASIN WATERMASTER that it does hereby accept SGPWA's Groundwater Storage Application and does hereby grant SGPWA a water storage account pursuant to SGPWA's Groundwater Storage Application, subject to the conditions set forth in this Resolution, and subject to the Judgment establishing the Beaumont Basin Watermaster (Riverside Superior Court Case No. 389197), its rules and regulations for the Beaumont Basin - to include groundwater storage in the Beaumont Basin by Non-Appropriators - a classification applying to SGPWA in the amount of 10,000 acre feet.

PASSED AND ADOPTED this 6th day of June 2017.

BEAUMONT BASIN WATERMASTER

By: _____

Art Vela, Chairman of the
Beaumont Basin Watermaster

RESOLUTION NO. 2017-02

A RESOLUTION OF THE BEAUMONT BASIN WATERMASTER APPROVING THE TRANSFER OF OVERLYING WATER RIGHTS TO SPECIFIC PARCELS

WHEREAS, the Stipulated Judgment establishing the Beaumont Basin Watermaster (Riverside Superior Court Case No. 389197) ("Adjudication") was filed with the Superior Count of California, County of Riverside on February 4, 2004; and

WHEREAS, Oak Valley Partners, L.P. ("OVP") was designated as holding Overlying Water Rights within the Adjudication, with an overall water amount of 1806 acre-feet/year spread over 5,331.65 acres under the then-specified Safe Yield of the basin as described in the Adjudication. As specified in the Adjudication, OVP's property consists of numerous assessor parcels that are identified within Exhibit D of the Adjudication ("OVP Adjudication Parcels"). Section III, 3(G) of the Adjudication outlines OVP's intended development of its property and specifies the process that OVP may utilize to arrange the transfer of its Overlying Water Rights to particular development parcels eventually to be serviced by one or more retail water service providers upon annexation; and

WHEREAS, OVP now desires to have its designated Overlying Water Rights acknowledged in the Adjudication assigned to the requisite Assessor Parcel Numbers within the Summerwind Ranch Specific Plan ("Project") that correlate to certain of the OVP Adjudication Parcels; and

WHEREAS, the OVP Adjudication Parcels listed on Exhibit D of the Adjudication that correlate to the Project parcels and which total 2409.02 acres include the following parcel numbers from Exhibit D:

- 413-040-002;
- 413-160-003 through 007;
- 413-170-020, 021, 023, 027 through 031, 033, and 035;
- 413-180-017 and 019;
- 413-190-001 and 011;
- 413-200-002, 010, 014, 015, 020, 023, 024, 026 through 030, and 034 through 037;
- 413-290-003 and 007;
- 413-460-038; and

WHEREAS, the Assessor Parcel Numbers for the Project parcels that correlate to the above-designated OVP Adjudication Parcels as contained in Exhibit D to the Adjudication are listed and specified in Exhibit 1 attached hereto; and

WHEREAS, OVP desires that Watermaster approve the transfer of all of OVP's Overlying Water Rights designated within the Adjudication to the Project parcels identified in Exhibit 1 attached hereto for the development of the Project by OVP and its successors and/or assigns; and

WHEREAS, OVP further intends to secure commitments from the Yucaipa Valley Water District to provide water service to development phases of the Project, and requests that when those commitments are made and water service is provided to the designated Project parcels that the Overlying Water Rights for those Project parcels be transferred to the Yucaipa Valley Water District ("YVWD") consistent with the Adjudication.

NOW, THEREFORE, BE IT RESOLVED BY THE BEAUMONT BASIN WATERMASTER as follows:

1. Transfer of Overlying Water Rights. Watermaster hereby approves the transfer of all of OVP's Overlying Water Rights to the Project parcels listed on Exhibit 1 attached hereto to provide for the development phases of the Project by OVP and its successors/assigns. OVP shall immediately inform Watermaster of any successor or assign who takes ownership of one or more Project parcels listed on Exhibit 1 to which Overlying Water Rights have been transferred. As of this time, the amount of water associated with the OVP Overlying Water Rights is consistent with the relationship between the redetermined safe yield (6700 acre-feet) and the original Safe Yield (8650 acre-feet), or in other words 77.5% of the original amount identified to OVP in Exhibit B to the Adjudication.

2. Transfer of Rights on Confirmed Water Service by YVWD. Once OVP and/or its successor(s) or assigns secures commitments from the Yucaipa Valley Water District to provide water service to the development phases of the Project, and when water service is provided to the designated Project parcels, then the overlying water rights for those Project parcels shall be transferred to YVWD. YVWD shall report to Watermaster when it has provided retail water service to various properties making up portions of the Project and Watermaster shall account for the same consistent with Section VI, 5. W. of the Adjudication.

3. Use of Wells. The existing and future wells on the Project parcels may be used to extract water for use on the Project parcels and/or any remaining OVP parcels, consistent with the Adjudication and current and future Watermaster rules, regulations and policies.

4. Further Documentation or Action. The Chief of Watermaster Services or Watermaster Engineer is hereby authorized and directed to execute such further documents and instruments, and take such further action, as shall be reasonably required to carry out the purposes and intent of this resolution.

5. Effective Date. The effective date of this resolution is August 30, 2017.

PASSED AND ADOPTED by the Beaumont Basin Watermaster this 30th day of August 2017.

BEAUMONT BASIN WATERMASTER

By:_____
Art Vela, Chairman of the
Beaumont Basin Watermaster

Appendix B
Active and Interested Party List

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South Mesa Mutual Water Company
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Beaumont-Cherry Valley Water District
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Appendix C
Fiscal Year 2016-17 Audit Letter

BEAUMONT BASIN WATERMASTER

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

June 30, 2017

ROGERS, ANDERSON, MALODY & SCOTT, LLP
CERTIFIED PUBLIC ACCOUNTANTS, SINCE 1948

ROGERS, ANDERSON, MALODY & SCOTT, LLP
CERTIFIED PUBLIC ACCOUNTANTS, SINCE 1948

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Certified Public Accountants

PCPS The AICPA Alliance
for CPA Firms

Governmental Audit
Quality Center

California Society of
Certified Public Accountants

INDEPENDENT ACCOUNTANT'S 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 as of June 30, 2017 and for the year then ended. The District and Watermaster are responsible for the accuracy of the Schedules. The sufficiency of these procedures is solely the responsibility of those parties specified in this report. Consequently, we make no representation regarding the sufficiency of the procedures enumerated 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, 2016.

   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, 2016 to the beginning check number for the period beginning on July 1, 2016. Note any breaks in check sequence for the period of July 1, 2016 through June 30, 2017.

Finding

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

5. Procedure

Based on the population of checks issued during July 1, 2016 through June 30, 2017, 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. Procedure

Obtain the general ledger detail for the period of July 1, 2016 to June 30, 2017. 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.

This agreed-upon procedures engagement was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. We were not engaged to and did not conduct an examination or review, the objective of which would be the expression of an opinion or conclusion, respectively, on the schedules of assets, liabilities and net position (Exhibit A) and assessments and expenses (Exhibit B). Accordingly, we do not express such an opinion or conclusion. 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 information and use of the Watermaster and the District and is not intended to be and should not be used by anyone other than the specified parties.

Rogers, Anderson, Malody & Scott, LLP.

August 16, 2017
San Bernardino, California

Beaumont Basin Watermaster
Schedule of Assets, Liabilities and Net Position
(Unaudited)
June 30, 2017

Assets	
Cash and cash equivalents	$ 190,797
Liabilities	
Accounts payable	1,537
Net position	
Unrestricted	$ 189,260

Beaumont Basin Watermaster
Schedule of Revenues and Expenses
(Unaudited)
For the Year Ended June 30, 2017

Revenues	
Assessments	$ 130,985
Interest	101
Total revenues	131,086
Expenses	
Special projects	
Acquisition/computation and annual report	49,724
Engineering	3,423
Monitoring and data acquisition	56,138
Administrative	
Meetings and miscellaneous	137
Legal and professional	10,448
Bank charges	50
Total expenses	119,920
Change in net position	11,166
Unrestricted net position, beginning of year	178,094
Unrestricted net position, end of year	$ 189,260

Appendix D
Production Estimation Methods for Unmetered Overlying Producers

Production Estimation for Un-metered Overlying Producers

Introduction

The Water Duty Method is a method used to estimate groundwater production for individual Overlying Users whose wells do not have water meters. The method was initially developed by Wildermuth Environmental Inc. (WEI) during the preparation of the 2005-06 Annual Report for the Watermaster. This method was later updated by WEI and it has been used since.

This appendix presents a list of un-metered Overlying Users, a summary of the Water Duty Method, and updated production estimates.

Unmetered Overlying Users

The Water Duty Method was applied to the following un-metered Overlying Users:

- Merlin Properties
- 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

The following is a summary of the main elements of the water duty method.

- The method is used to estimate groundwater pumping for indoor, outdoor, and agricultural use.
- Indoor water use is estimated based on the number of dwelling units on each producer's property. From historical water sales records in the BCVWD's service area, indoor water used was estimated 0.35 ac-ft/yr per dwelling unit. This consumption rate was applied to each Overlying User based on the number of dwelling units in their property.
- Outdoor water uses the Crop Water Requirement approach to estimate, based on the acreage of irrigated landscape, the volume of water pumped on each producer's property. This approach uses evapotranspiration records from the CIMIS Station 44, located at the University of California, Riverside, and crop type to determine the amount

of water required for landscape use; an irrigation efficiency of 70 percent is then used to estimate the volume of water pumped.

- Agricultural water use was limited to the operations of the former Sunny-Cal Egg and Poultry Company. The approach considers the water consumption of chickens and the amount of water used for washing ranch facilities. A water consumption rate of 60 gallons per day per 1,000 chickens was used, based on published daily nutritional requirements. Water for washing of ranch facilities was considered to be equal to the amount use for landscape irrigation on a per acre basis.

Estimated Water Production

The estimate of groundwater production from un-metered Overlying Users is presented for each user in the tables attached. It should be noted that very small differences exist between the amounts published in previous reports and the numbers presented here. The differences are based on the evapotranspiration values obtained from the CIMIS station; some published values currently used were slightly different than those used in the past for selected months.

University of California Riverside - CIMIS Station 44

Monthly Evapotranspiration Values - 2002 through 2016

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2003	3.05	2.57	4.61	5.00	5.65	5.16	7.05	7.46	5.54	4.08	2.23	2.07	54.47
2004	2.49	2.76	4.81	5.90	7.10	6.50	7.55	6.81	5.83	3.39	2.44	2.30	57.88
2005	2.02	2.21	3.93	5.41	6.47	6.49	7.28	6.68	5.32	3.65	2.84	2.15	54.45
2006	2.92	3.35	3.42	4.26	6.02	7.16	7.73	7.20	5.70	3.95	3.14	2.94	57.79
2007	3.28	2.91	5.02	5.04	6.47	7.16	7.57	7.09	5.44	4.34	2.81	2.24	59.37
2008	1.69	2.31	5.30	6.04	6.28	7.59	7.53	7.23	5.79	5.02	3.14	1.89	59.81
2009	3.32	2.41	4.62	5.58	6.32	5.37	7.60	6.68	5.89	4.40	3.18	2.08	57.45
2010	2.35	2.44	4.67	5.11	6.18	6.25	6.57	6.99	5.45	2.10	3.22	1.78	53.11
2011	2.91	2.91	4.22	5.57	6.67	6.95	7.76	7.65	5.47	4.03	2.45	2.82	59.41
2012	3.02	3.41	4.51	5.85	7.00	7.62	7.93	7.83	6.44	4.38	2.72	1.70	62.41
2013	2.72	3.18	4.80	5.71	7.01	7.36	7.13	7.37	6.14	4.27	2.76	2.80	61.25
2014	3.27	3.03	4.95	6.52	7.65	7.62	7.76	7.29	6.19	4.40	3.21	2.01	63.90
2015	2.76	3.33	5.83	6.30	5.38	7.42	6.76	7.67	5.83	3.81	2.77	1.84	59.70
2016	2.09	4.28	4.91	6.00	5.34	6.95	7.26	6.67	4.84	3.67	3.10	1.83	56.94
2017	2.41	2.08	5.01	6.13	5.95	6.98	7.11	6.40	4.92	4.54	2.35	3.09	56.97

Crop Coefficient (Warm Season Bermuda Grass)

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

Monthly Water Requirements (inches)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2004	1.74	1.93	3.37	4.13	4.97	4.55	5.29	4.77	4.08	2.37	1.71	1.61	40.52
2005	1.41	1.55	2.75	3.79	4.53	4.54	5.10	4.68	3.72	2.56	1.99	1.51	38.12
2006	2.04	2.35	2.39	2.98	4.21	5.01	5.41	5.04	3.99	2.77	2.20	2.06	40.45
2007	2.30	2.04	3.51	3.53	4.53	5.01	5.30	4.96	3.81	3.04	1.97	1.57	41.56
2008	1.18	1.62	3.71	4.23	4.40	5.31	5.27	5.06	4.05	3.51	2.20	1.32	41.87
2009	2.32	1.69	3.23	3.91	4.42	3.76	5.32	4.68	4.12	3.08	2.23	1.46	40.22
2010	1.65	1.71	3.27	3.58	4.33	4.38	4.60	4.89	3.82	1.47	2.25	1.25	37.18
2011	2.04	2.04	2.95	3.90	4.67	4.87	5.43	5.36	3.83	2.82	1.72	1.97	41.59
2012	2.11	2.39	3.16	4.10	4.90	5.33	5.55	5.48	4.51	3.07	1.90	1.19	43.69
2013	1.90	2.23	3.36	4.00	4.91	5.15	4.99	5.16	4.30	2.99	1.93	1.96	42.88
2014	2.29	2.12	3.47	4.56	5.36	5.33	5.43	5.10	4.33	3.08	2.25	1.41	44.73
2015	1.93	2.33	4.08	4.41	3.77	5.19	4.73	5.37	4.08	2.67	1.94	1.29	41.79
2016	1.46	3.00	3.44	4.20	3.74	4.87	5.08	4.67	3.39	2.57	2.17	1.28	39.86
2017	1.69	1.46	3.51	4.29	4.17	4.89	4.98	4.48	3.44	3.18	1.65	2.16	39.88

Indoor Water Use: 0.35 ac-ft/yr/du Irrigation Efficienty: 70%

Estimated Pumping - All Unmetered Accounts

Year	Total Use (ac-ft/yr)
2004	466.11
2005	443.64
2006	81.28
2007	12.23
2008	13.78
2009	13.47
2010	11.85
2011	12.67
2012	13.07
2013	12.98
2014	13.17
2015	12.87
2016	12.67
2017	#REF!

Estimated Pumping by Merlin Properties

Year	Parcel Size (acres)	No. DU	Indoor Water Use (ac-ft/yr)	Irrigated Acres	Irrigation Requirement (ac-ft/yr)	Outdoor Water Use (ac-ft/yr)	Total Use (ac-ft/yr)
2004	48	3	1.05	0.11	0.37	0.53	1.58
2005	48	3	1.05	0.11	0.35	0.50	1.55
2006	48	3	1.05	0.11	0.37	0.53	1.58
2007	48	3	1.05	0.11	0.38	0.54	1.59
2008	48	3	1.05	0.11	0.38	0.55	1.60
2009	48	3	1.05	0.11	0.37	0.53	1.58
2010	48	3	1.05	0.11	0.34	0.49	1.54
2011	48	3	1.05	0.11	0.38	0.54	1.59
2012	48	3	1.05	0.11	0.40	0.57	1.62
2013	48	3	1.05	0.11	0.39	0.56	1.61
2014	48	3	1.05	0.11	0.41	0.59	1.64
2015	48	3	1.05	0.11	0.38	0.55	1.60
2016	48	3	1.05	0.11	0.37	0.52	1.57
2017	48	3	1.05	0.11	0.37	0.52	1.57

Estimated Pumping by Roman Catholic Bishop of San Bernardino

Year	Parcel Size (acres)	No. DU	Indoor Water Use (ac-ft/yr)	Irrigated Acres	Irrigation Requirement (ac-ft/yr)	Outdoor Water Use (ac-ft/yr)	Total Use (ac-ft/yr)
2004	34	2	0.70	12.10	40.85	58.36	59.06
2005	34	2	0.70	12.10	38.43	54.90	55.60
2006	34	2	0.70	12.10	40.79	58.27	58.97
2007	34	2	0.70	0.00	0.00	0.00	0.70
2008	34	2	0.70	0.00	0.00	0.00	0.70
2009	34	2	0.70	0.00	0.00	0.00	0.70
2010	34	0	0.00	0.00	0.00	0.00	0.00
2011	34	0	0.00	0.00	0.00	0.00	0.00
2012	34	0	0.00	0.00	0.00	0.00	0.00
2013	34	0	0.00	0.00	0.00	0.00	0.00
2014	34	0	0.00	0.00	0.00	0.00	0.00
2015	34	0	0.00	0.00	0.00	0.00	0.00
2016	34	0	0.00	0.00	0.00	0.00	0.00
2017	48	0	0.00	0.00	0.00	0.00	0.00

Estimated Pumping by Leonard Stearns

Year	Parcel Size (acres)	No. DU	Indoor Water Use (ac-ft/yr)	Irrigated Acres	Irrigation Requirement (ac-ft/yr)	Outdoor Water Use (ac-ft/yr)	Total Use (ac-ft/yr)
2004	91	3	1.05	0.00	0.00	0.00	1.05
2005	91	3	1.05	0.00	0.00	0.00	1.05
2006	91	3	1.05	0.00	0.00	0.00	1.05
2007	91	3	1.05	0.00	0.00	0.00	1.05
2008	91	3	1.05	0.00	0.00	0.00	1.05
2009	91	3	1.05	0.00	0.00	0.00	1.05
2010	91	2	0.70	0.00	0.00	0.00	0.70
2011	91	2	0.70	0.00	0.00	0.00	0.70
2012	91	2	0.70	0.00	0.00	0.00	0.70
2013	91	2	0.70	0.00	0.00	0.00	0.70
2014	91	2	0.70	0.00	0.00	0.00	0.70
2015	91	2	0.70	0.00	0.00	0.00	0.70
2016	91	2	0.70	0.00	0.00	0.00	0.70
2017	91	2	0.70	0.00	0.00	0.00	0.70

Estimated Pumping by Sunny Cal

Year	Parcel Size (acres)	No. DU	Indoor Water Use (ac-ft/yr)	Number of Chickens	Chicken Water Use (ac-ft/yr)	Irrigated Acres	Irrigation Requirement (ac-ft/yr)	Outdoor Water Use (ac-ft/yr)	Total Use (ac-ft/yr)
2004	200	10	3.50	1,200,000	80.65	66.40	224.19	320.27	404.42
2005	200	10	3.50	1,200,000	80.65	66.40	210.90	301.29	385.44
2006	185	2	0.70	0.00	0.00	0.40	1.35	1.93	2.63
2007	185	2	0.70	0.00	0.00	0.40	1.39	1.98	2.68
2008	185	2	0.70	0.00	0.00	0.70	2.44	3.49	4.19
2009	185	2	0.70	0.00	0.00	0.70	2.35	3.35	4.05
2010	185	2	0.70	0.00	0.00	0.70	2.17	3.10	3.80
2011	185	2	0.70	0.00	0.00	0.70	2.43	3.47	4.17
2012	185	2	0.70	0.00	0.00	0.70	2.55	3.64	4.34
2013	185	2	0.70	0.00	0.00	0.70	2.55	3.64	4.34
2014	185	2	0.70	0.00	0.00	0.70	2.55	3.64	4.34
2015	185	2	0.70	0.00	0.00	0.70	2.55	3.64	4.34
2015	185	2	0.70	0.00	0.00	0.70	2.55	3.64	4.34
2016	185	2	0.70	0.00	0.00	0.70	2.55	3.64	4.34
2017	185	2	0.70	0.00	0.00	0.70	2.55	3.64	4.34

Water consumption per chicken estimated at 6.0 gal/100 chickens

Estimated Pumping by Albor Properties

Year	Parcel Size (acres)	No. DU	Indoor Water Use (ac-ft/yr)	Irrigated Acres	Irrigation Requirement (ac-ft/yr)	Outdoor Water Use (ac-ft/yr)	Total Use (ac-ft/yr)
2004	0	0	0.00	0.00	0.00	0.00	0.00
2005	0	0	0.00	0.00	0.00	0.00	0.00
2006	122	2	0.70	2.60	8.76	12.52	13.22
2007	122	1	0.35	0.40	1.39	1.98	2.33
2008	122	1	0.35	0.40	1.40	1.99	2.34
2009	122	1	0.35	0.40	1.34	1.92	2.27
2010	122	1	0.35	0.40	1.24	1.77	2.12
2011	122	1	0.35	0.40	1.39	1.98	2.33
2012	122	1	0.35	0.40	1.46	2.08	2.43
2013	122	1	0.35	0.40	1.43	2.04	2.39
2014	122	1	0.35	0.40	1.49	2.13	2.48
2015	122	1	0.35	0.40	1.39	1.99	2.34
2016	122	1	0.35	0.40	1.33	1.90	2.25
2017	122	1	0.35	0.40	1.33	1.90	2.25

Estimated Pumping by Nikodinov

Year	Parcel Size (acres)	No. DU	Indoor Water Use (ac-ft/yr)	Irrigated Acres	Irrigation Requirement (ac-ft/yr)	Outdoor Water Use (ac-ft/yr)	Total Use (ac-ft/yr)
2004	0	0	0.00	0.00	0.00	0.00	0.00
2005	0	0	0.00	0.00	0.00	0.00	0.00
2006	10	1	0.35	0.08	0.27	0.39	0.74
2007	10	1	0.35	0.08	0.28	0.40	0.75
2008	10	1	0.35	0.08	0.28	0.40	0.75
2009	10	1	0.35	0.08	0.27	0.38	0.73
2010	10	1	0.35	0.08	0.25	0.35	0.70
2011	10	1	0.35	0.08	0.28	0.40	0.75
2012	10	1	0.35	0.08	0.29	0.42	0.77
2013	10	1	0.35	0.08	0.29	0.41	0.76
2014	10	1	0.35	0.08	0.30	0.43	0.78
2015	10	1	0.35	0.08	0.28	0.40	0.75
2016	10	1	0.35	0.08	0.27	0.38	0.73
2017	10	1	0.35	0.08	0.27	0.38	0.73

Estimated Pumping by McAmis

Year	Parcel Size (acres)	No. DU	Indoor Water Use (ac-ft/yr)	Irrigated Acres	Irrigation Requirement (ac-ft/yr)	Outdoor Water Use (ac-ft/yr)	Total Use (ac-ft/yr)
2004	0	0	0.00	0.00	0.00	0.00	0.00
2005	0	0	0.00	0.00	0.00	0.00	0.00
2006	0.9	1	0.35	0.04	0.13	0.19	0.54
2007	0.9	1	0.35	0.04	0.14	0.20	0.55
2008	0.9	1	0.35	0.04	0.14	0.20	0.55
2009	0.9	1	0.35	0.04	0.13	0.19	0.54
2010	0.9	1	0.35	0.04	0.12	0.18	0.53
2011	0.9	1	0.35	0.04	0.14	0.20	0.55
2012	0.9	1	0.35	0.04	0.15	0.21	0.56
2013	0.9	1	0.35	0.04	0.14	0.20	0.55
2014	0.9	1	0.35	0.04	0.15	0.21	0.56
2015	0.9	1	0.35	0.04	0.14	0.20	0.55
2016	0.9	1	0.35	0.04	0.13	0.19	0.54
2017	0.9	1	0.35	0.04	0.13	0.19	0.54

Estimated Pumping by Aldama

Year	Parcel Size (acres)	No. DU	Indoor Water Use (ac-ft/yr)	Irrigated Acres	Irrigation Requirement (ac-ft/yr)	Outdoor Water Use (ac-ft/yr)	Total Use (ac-ft/yr)
2004	0	0	0.00	0.00	0.00	0.00	0.00
2005	0	0	0.00	0.00	0.00	0.00	0.00
2006	1.4	1	0.35	0.10	0.34	0.48	0.83
2007	1.4	1	0.35	0.10	0.35	0.49	0.84
2008	1.4	1	0.35	0.10	0.35	0.50	0.85
2009	1.4	1	0.35	0.10	0.34	0.48	0.83
2010	1.4	1	0.35	0.10	0.31	0.44	0.79
2011	1.4	1	0.35	0.10	0.35	0.50	0.85
2012	1.4	1	0.35	0.10	0.36	0.52	0.87
2013	1.4	1	0.35	0.10	0.36	0.51	0.86
2014	1.4	1	0.35	0.10	0.37	0.53	0.88
2015	1.4	1	0.35	0.10	0.35	0.50	0.85
2016	1.4	1	0.35	0.10	0.33	0.47	0.82
2017	1.4	1	0.35	0.10	0.33	0.47	0.82

Estimated Pumping by Gutierrez

Year	Parcel Size (acres)	No. DU	Indoor Water Use (ac-ft/yr)	Irrigated Acres	Irrigation Requirement (ac-ft/yr)	Outdoor Water Use (ac-ft/yr)	Total Use (ac-ft/yr)
2004	0	0	0.00	0.00	0.00	0.00	0.00
2005	0	0	0.00	0.00	0.00	0.00	0.00
2006	2	2	0.70	0.14	0.47	0.67	1.37
2007	2	2	0.70	0.14	0.48	0.69	1.39
2008	2	2	0.70	0.14	0.49	0.70	1.40
2009	2	2	0.70	0.14	0.47	0.67	1.37
2010	2	2	0.70	0.14	0.43	0.62	1.32
2011	2	2	0.70	0.14	0.49	0.69	1.39
2012	2	2	0.70	0.14	0.51	0.73	1.43
2013	2	2	0.70	0.14	0.50	0.71	1.41
2014	2	2	0.70	0.14	0.52	0.75	1.45
2015	2	2	0.70	0.14	0.49	0.70	1.40
2016	2	2	0.70	0.14	0.47	0.66	1.36
2017	2	2	0.70	0.14	0.47	0.66	1.36

Estimated Pumping by Damont

Year	Parcel Size (acres)	No. DU	Indoor Water Use (ac-ft/yr)	Irrigated Acres	Irrigation Requirement (ac-ft/yr)	Outdoor Water Use (ac-ft/yr)	Total Use (ac-ft/yr)
2004	0	0	0.00	0.00	0.00	0.00	0.00
2005	0	0	0.00	0.00	0.00	0.00	0.00
2006	0.5	1	0.35	0.00	0.00	0.00	0.35
2007	0.5	1	0.35	0.00	0.00	0.00	0.35
2008	0.5	1	0.35	0.00	0.00	0.00	0.35
2009	0.5	1	0.35	0.00	0.00	0.00	0.35
2010	0.5	1	0.35	0.00	0.00	0.00	0.35
2011	0.5	1	0.35	0.00	0.00	0.00	0.35
2012	0.5	1	0.35	0.00	0.00	0.00	0.35
2013	0.5	1	0.35	0.00	0.00	0.00	0.35
2014	0.5	1	0.35	0.00	0.00	0.00	0.35
2015	0.5	1	0.35	0.00	0.00	0.00	0.35
2016	0.5	1	0.35	0.00	0.00	0.00	0.35
2017	0.5	1	0.35	0.00	0.00	0.00	0.35

Appendix E
Water Quality Analysis Summary (2013-2017) for Production Wells

Well_Name	Sample Date	Analyte	Concent.	Unit
Beaumont Basin - Appropriator Wells				
BAN C-2A	3/25/2014	ALKALINITY (TOTAL) AS CACO3	160	MG/L
BAN C-2A	3/25/2014	ALUMINUM	< 50	UG/L
BAN C-2A	3/25/2014	ARSENIC	< 2	UG/L
BAN C-2A	3/25/2014	BICARBONATE ALKALINITY	200	MG/L
BAN C-2A	3/25/2014	CALCIUM	44	MG/L
BAN C-2A	3/25/2014	CARBONATE ALKALINITY	< 3	MG/L
BAN C-2A	3/25/2014	CHLORIDE	11	MG/L
BAN C-2A	3/25/2014	CHROMIUM (TOTAL)	15	UG/L
BAN C-2A	12/10/2014	CHROMIUM, HEXAVALENT	17	UG/L
BAN C-2A	3/24/2015	CHROMIUM, HEXAVALENT	17	UG/L
BAN C-2A	6/27/2015	CHROMIUM, HEXAVALENT	17	UG/L
BAN C-2A	10/2/2015	CHROMIUM, HEXAVALENT	17	UG/L
BAN C-2A	12/30/2015	CHROMIUM, HEXAVALENT	16	UG/L
BAN C-2A	3/29/2016	CHROMIUM, HEXAVALENT	15	UG/L
BAN C-2A	6/24/2016	CHROMIUM, HEXAVALENT	15	UG/L
BAN C-2A	9/22/2016	CHROMIUM, HEXAVALENT	16	UG/L
BAN C-2A	1/4/2017	CHROMIUM, HEXAVALENT	16	UG/L
BAN C-2A	11/13/2017	CHROMIUM, HEXAVALENT	16	UG/L
BAN C-2A	3/25/2014	COPPER	< 50	UG/L
BAN C-2A	3/25/2014	DIBROMOCHLOROPROPANE (DBCP)	< 0.01	UG/L
BAN C-2A	3/25/2014	FLUORIDE (F) (NATURAL-SOURCE)	0.3	MG/L
BAN C-2A	3/25/2014	HARDNESS (TOTAL) AS CACO3	150	MG/L
BAN C-2A	3/25/2014	HYDROXIDE ALKALINITY	< 3	MG/L
BAN C-2A	3/25/2014	IRON	< 100	UG/L
BAN C-2A	3/25/2014	LEAD	< 5	UG/L
BAN C-2A	3/25/2014	MAGNESIUM	9.5	MG/L
BAN C-2A	3/25/2014	MANGANESE	< 20	UG/L
BAN C-2A	6/26/2013	NITRATE (as N)	1.7	MG/L
BAN C-2A	7/23/2013	NITRATE (as N)	1.8	MG/L
BAN C-2A	3/18/2014	NITRATE (as N)	1.9	MG/L
BAN C-2A	5/28/2014	NITRATE (as N)	2.5	MG/L
BAN C-2A	4/30/2015	NITRATE (as N)	1.8	MG/L
BAN C-2A	4/27/2016	NITRATE (as N)	1.8	MG/L
BAN C-2A	4/26/2017	NITRATE (as N)	1.9	MG/L
BAN C-2A	7/19/2017	NITRATE (as N)	1.8	MG/L
BAN C-2A	6/27/2013	NITRATE (AS NO3)	7.7	MG/L
BAN C-2A	7/24/2013	NITRATE (AS NO3)	8.1	MG/L
BAN C-2A	3/25/2014	NITRATE (AS NO3)	8.5	MG/L
BAN C-2A	5/29/2014	NITRATE (AS NO3)	11	MG/L
BAN C-2A	4/30/2015	NITRATE (AS NO3)	8.1	MG/L
BAN C-2A	3/25/2014	NITRITE (AS N)	< 100	MG/L
BAN C-2A	4/27/2016	NITRITE (AS N)	< 0.1	MG/L
BAN C-2A	4/26/2017	NITRITE (AS N)	< 0.1	MG/L
BAN C-2A	3/25/2014	POTASSIUM	1.3	MG/L
BAN C-2A	3/25/2014	SODIUM	26	MG/L
BAN C-2A	3/25/2014	SPECIFIC CONDUCTANCE	380	US
BAN C-2A	3/25/2014	SULFATE	10	MG/L
BAN C-2A	3/25/2014	TETRACHLOROETHYLENE	< 0.5	UG/L

Well_Name	Sample Date	Analyte	Concent.	Unit
Beaumont Basin - Overlyier Wells or Wells From Surrounding Basins				
Desert Lawn	12/24/2013	NITRATE (as N)	1.5	MG/L
Desert Lawn	11/18/2015	NITRATE (as N)	1.6	MG/L
Desert Lawn	12/2/2015	NITRATE (as N)	1.5	MG/L
Desert Lawn	11/10/2016	NITRATE (as N)	1.7	MG/L
Desert Lawn	5/12/2017	NITRATE (as N)	1.5	MG/L
Desert Lawn	11/1/2017	NITRATE (as N)	1.4	MG/L
Desert Lawn	12/24/2013	TOTAL DISSOLVED SOLIDS	230	MG/L
Desert Lawn	11/18/2015	TOTAL DISSOLVED SOLIDS	230	MG/L
Desert Lawn	12/2/2015	TOTAL DISSOLVED SOLIDS	230	MG/L
Desert Lawn	11/10/2016	TOTAL DISSOLVED SOLIDS	240	MG/L
Desert Lawn	5/12/2017	TOTAL DISSOLVED SOLIDS	230	MG/L
Desert Lawn	11/1/2017	TOTAL DISSOLVED SOLIDS	230	MG/L
Larry Britton	12/26/2013	NITRATE (as N)	1.9	MG/L
Larry Britton	11/17/2015	NITRATE (as N)	1.8	MG/L
Larry Britton	12/1/2015	NITRATE (as N)	1.8	MG/L
Larry Britton	11/10/2016	NITRATE (as N)	1.7	MG/L
Larry Britton	5/12/2017	NITRATE (as N)	1.8	MG/L
Larry Britton	11/1/2017	NITRATE (as N)	1.8	MG/L
Larry Britton	12/26/2013	TOTAL DISSOLVED SOLIDS	210	MG/L
Larry Britton	11/17/2015	TOTAL DISSOLVED SOLIDS	210	MG/L
Larry Britton	12/1/2015	TOTAL DISSOLVED SOLIDS	230	MG/L
Larry Britton	11/10/2016	TOTAL DISSOLVED SOLIDS	190	MG/L
Larry Britton	5/12/2017	TOTAL DISSOLVED SOLIDS	260	MG/L
Larry Britton	11/1/2017	TOTAL DISSOLVED SOLIDS	210	MG/L
Morongo_A	12/30/2014	NITRATE (as N)	2.0	MG/L
Morongo_A	11/18/2015	NITRATE (as N)	1.6	MG/L
Morongo_A	12/2/2015	NITRATE (as N)	1.6	MG/L
Morongo_A	11/10/2016	NITRATE (as N)	1.5	MG/L
Morongo_A	5/12/2017	NITRATE (as N)	1.7	MG/L
Morongo_A	11/1/2017	NITRATE (as N)	1.6	MG/L
Morongo_A	12/30/2014	TOTAL DISSOLVED SOLIDS	220	MG/L
Morongo_A	11/18/2015	TOTAL DISSOLVED SOLIDS	180	MG/L
Morongo_A	12/2/2015	TOTAL DISSOLVED SOLIDS	170	MG/L
Morongo_A	11/10/2016	TOTAL DISSOLVED SOLIDS	180	MG/L
Morongo_A	5/12/2017	TOTAL DISSOLVED SOLIDS	220	MG/L
Morongo_A	11/1/2017	TOTAL DISSOLVED SOLIDS	190	MG/L
Morongo_D	11/18/2015	NITRATE (as N)	2.5	MG/L
Morongo_D	12/2/2015	NITRATE (as N)	2.0	MG/L
Morongo_D	11/10/2016	NITRATE (as N)	2.2	MG/L
Morongo_D	5/12/2017	NITRATE (as N)	2.6	MG/L
Morongo_D	11/1/2017	NITRATE (as N)	2.2	MG/L
Morongo_D	11/18/2015	TOTAL DISSOLVED SOLIDS	220	MG/L
Morongo_D	12/2/2015	TOTAL DISSOLVED SOLIDS	200	MG/L
Morongo_D	11/10/2016	TOTAL DISSOLVED SOLIDS	200	MG/L
Morongo_D	5/12/2017	TOTAL DISSOLVED SOLIDS	210	MG/L
Morongo_D	11/1/2017	TOTAL DISSOLVED SOLIDS	200	MG/L
OAK VALLEY #1	12/24/2014	NITRATE (as N)	2.1	MG/L
OAK VALLEY #1	11/18/2015	NITRATE (as N)	1.5	MG/L

Well_Name	Sample Date	Analyte	Concent.	Unit
Beaumont Basin - Appropriator Wells				
BAN C-2A	3/18/2014	TOTAL DISSOLVED SOLIDS	240	MG/L
BAN C-2A	7/19/2017	TOTAL DISSOLVED SOLIDS	220	MG/L
BAN C-2A	3/25/2014	TRICHLOROETHYLENE	< 0.5	UG/L
BAN C-2A	3/25/2014	TURBIDITY, LABORATORY	< 0.2	NTU
BAN C-2A	3/25/2014	ZINC	< 50	UG/L
BAN C-3	3/25/2014	ALKALINITY (TOTAL) AS CACO3	140	MG/L
BAN C-3	3/15/2017	ALKALINITY (TOTAL) AS CACO3	140	MG/L
BAN C-3	3/25/2014	ALUMINUM	< 50	UG/L
BAN C-3	3/13/2017	ALUMINUM	< 50	UG/L
BAN C-3	3/25/2014	ARSENIC	< 2	UG/L
BAN C-3	3/13/2017	ARSENIC	< 2	UG/L
BAN C-3	3/25/2014	BICARBONATE ALKALINITY	160	MG/L
BAN C-3	3/15/2017	BICARBONATE ALKALINITY	160	MG/L
BAN C-3	3/25/2014	CALCIUM	32	MG/L
BAN C-3	3/13/2017	CALCIUM	31	MG/L
BAN C-3	3/25/2014	CARBONATE ALKALINITY	< 3	MG/L
BAN C-3	3/15/2017	CARBONATE ALKALINITY	< 3	MG/L
BAN C-3	3/25/2014	CHLORIDE	12	MG/L
BAN C-3	3/8/2017	CHLORIDE	9.9	MG/L
BAN C-3	3/25/2014	CHROMIUM (TOTAL)	13	UG/L
BAN C-3	3/9/2017	CHROMIUM (TOTAL)	15	UG/L
BAN C-3	12/10/2014	CHROMIUM, HEXAVALENT	16	UG/L
BAN C-3	3/24/2015	CHROMIUM, HEXAVALENT	15	UG/L
BAN C-3	6/27/2015	CHROMIUM, HEXAVALENT	16	UG/L
BAN C-3	10/2/2015	CHROMIUM, HEXAVALENT	14	UG/L
BAN C-3	1/2/2016	CHROMIUM, HEXAVALENT	16	UG/L
BAN C-3	3/29/2016	CHROMIUM, HEXAVALENT	15	UG/L
BAN C-3	6/24/2016	CHROMIUM, HEXAVALENT	14	UG/L
BAN C-3	9/22/2016	CHROMIUM, HEXAVALENT	15	UG/L
BAN C-3	5/16/2017	CHROMIUM, HEXAVALENT	14	UG/L
BAN C-3	8/17/2017	CHROMIUM, HEXAVALENT	14	UG/L
BAN C-3	11/13/2017	CHROMIUM, HEXAVALENT	15	UG/L
BAN C-3	3/25/2014	COPPER	< 50	UG/L
BAN C-3	3/13/2017	COPPER	< 50	UG/L
BAN C-3	3/25/2014	DIBROMOCHLOROPROPANE (DBCP)	< 0.01	UG/L
BAN C-3	3/14/2017	DIBROMOCHLOROPROPANE (DBCP)	< 0.01	UG/L
BAN C-3	3/25/2014	FLUORIDE (F) (NATURAL-SOURCE)	0.5	MG/L
BAN C-3	3/15/2017	FLUORIDE (F) (NATURAL-SOURCE)	0.4	MG/L
BAN C-3	3/25/2014	HARDNESS (TOTAL) AS CACO3	100	MG/L
BAN C-3	3/13/2017	HARDNESS (TOTAL) AS CACO3	100	MG/L
BAN C-3	3/25/2014	HYDROXIDE ALKALINITY	< 3	MG/L
BAN C-3	3/15/2017	HYDROXIDE ALKALINITY	< 3	MG/L
BAN C-3	3/25/2014	IRON	< 100	UG/L
BAN C-3	3/13/2017	IRON	< 100	UG/L
BAN C-3	3/25/2014	LEAD	< 5	UG/L
BAN C-3	3/13/2017	LEAD	< 5	UG/L
BAN C-3	3/25/2014	MAGNESIUM	5.9	MG/L
BAN C-3	3/13/2017	MAGNESIUM	5.7	MG/L

Well_Name	Sample Date	Analyte	Concent.	Unit
Beaumont Basin - Overlyier Wells or Wells From Surrounding Basins				
OAK VALLEY #1	12/2/2015	NITRATE (as N)	2.6	MG/L
OAK VALLEY #1	12/24/2014	TOTAL DISSOLVED SOLIDS	210	MG/L
OAK VALLEY #1	11/18/2015	TOTAL DISSOLVED SOLIDS	160	MG/L
OAK VALLEY #1	12/2/2015	TOTAL DISSOLVED SOLIDS	190	MG/L
Oak Valley #2	11/18/2015	NITRATE (as N)	1.7	MG/L
Oak Valley #2	12/2/2015	NITRATE (as N)	3.9	MG/L
Oak Valley #2	11/14/2016	NITRATE (as N)	2.4	MG/L
Oak Valley #2	6/1/2017	NITRATE (as N)	5.3	MG/L
Oak Valley #2	11/1/2017	NITRATE (as N)	4.8	MG/L
Oak Valley #2	11/18/2015	TOTAL DISSOLVED SOLIDS	190	MG/L
Oak Valley #2	12/2/2015	TOTAL DISSOLVED SOLIDS	210	MG/L
Oak Valley #2	11/14/2016	TOTAL DISSOLVED SOLIDS	190	MG/L
Oak Valley #2	6/1/2017	TOTAL DISSOLVED SOLIDS	210	MG/L
Oak Valley #2	11/1/2017	TOTAL DISSOLVED SOLIDS	220	MG/L
Oak Valley Office Well	11/11/2016	NITRATE (as N)	1.7	MG/L
Oak Valley Office Well	5/11/2017	NITRATE (as N)	1.9	MG/L
Oak Valley Office Well	11/1/2017	NITRATE (as N)	1.5	MG/L
Oak Valley Office Well	11/11/2016	TOTAL DISSOLVED SOLIDS	240	MG/L
Oak Valley Office Well	5/11/2017	TOTAL DISSOLVED SOLIDS	260	MG/L
Oak Valley Office Well	11/1/2017	TOTAL DISSOLVED SOLIDS	220	MG/L
Plantation 01	3/25/2014	ALKALINITY (TOTAL) AS CACO3	200	MG/L
Plantation 01	3/23/2017	ALKALINITY (TOTAL) AS CACO3	200	MG/L
Plantation 01	3/25/2014	ALUMINUM	< 50	UG/L
Plantation 01	3/23/2017	ALUMINUM	< 50	UG/L
Plantation 01	3/25/2014	ARSENIC	< 2	UG/L
Plantation 01	3/27/2017	ARSENIC	< 2	UG/L
Plantation 01	3/25/2014	BICARBONATE ALKALINITY	240	MG/L
Plantation 01	3/23/2017	BICARBONATE ALKALINITY	240	MG/L
Plantation 01	3/25/2014	CALCIUM	53	MG/L
Plantation 01	3/23/2017	CALCIUM	50	MG/L
Plantation 01	3/25/2014	CARBONATE ALKALINITY	< 3	MG/L
Plantation 01	3/23/2017	CARBONATE ALKALINITY	< 3	MG/L
Plantation 01	3/25/2014	CHLORIDE	14	MG/L
Plantation 01	3/20/2017	CHLORIDE	14	MG/L
Plantation 01	3/25/2014	CHROMIUM (TOTAL)	4.8	UG/L
Plantation 01	3/22/2017	CHROMIUM (TOTAL)	5.4	UG/L
Plantation 01	12/26/2014	CHROMIUM, HEXAVALENT	4.9	UG/L
Plantation 01	3/25/2014	COPPER	< 50	UG/L
Plantation 01	3/23/2017	COPPER	< 50	UG/L
Plantation 01	3/25/2014	DIBROMOCHLOROPROPANE (DBCP)	< 0.01	UG/L
Plantation 01	3/25/2014	FLUORIDE (F) (NATURAL-SOURCE)	0.5	MG/L
Plantation 01	3/24/2017	FLUORIDE (F) (NATURAL-SOURCE)	0.5	MG/L
Plantation 01	3/25/2014	HARDNESS (TOTAL) AS CACO3	210	MG/L
Plantation 01	3/23/2017	HARDNESS (TOTAL) AS CACO3	200	MG/L
Plantation 01	3/25/2014	HYDROXIDE ALKALINITY	< 3	MG/L
Plantation 01	3/23/2017	HYDROXIDE ALKALINITY	< 3	MG/L
Plantation 01	3/25/2014	IRON	< 100	UG/L
Plantation 01	3/23/2017	IRON	< 100	UG/L

Well_Name	Sample Date	Analyte	Concent.	Unit
Beaumont Basin - Appropriator Wells				
BAN C-3	3/25/2014	MANGANESE	< 20	UG/L
BAN C-3	3/13/2017	MANGANESE	< 20	UG/L
BAN C-3	6/19/2013	NITRATE (as N)	1.6	MG/L
BAN C-3	6/20/2013	NITRATE (as N)	1.8	MG/L
BAN C-3	3/18/2014	NITRATE (as N)	1.9	MG/L
BAN C-3	5/28/2014	NITRATE (as N)	1.7	MG/L
BAN C-3	4/22/2015	NITRATE (as N)	1.6	MG/L
BAN C-3	4/23/2016	NITRATE (as N)	1.6	MG/L
BAN C-3	3/8/2017	NITRATE (as N)	1.6	MG/L
BAN C-3	4/26/2017	NITRATE (as N)	1.8	MG/L
BAN C-3	7/19/2017	NITRATE (as N)	1.8	MG/L
BAN C-3	6/20/2013	NITRATE (AS NO3)	7.2	MG/L
BAN C-3	3/25/2014	NITRATE (AS NO3)	8.5	MG/L
BAN C-3	5/29/2014	NITRATE (AS NO3)	7.5	MG/L
BAN C-3	4/22/2015	NITRATE (AS NO3)	7.1	MG/L
BAN C-3	7/17/2013	NITRITE (AS N)	< 100	MG/L
BAN C-3	3/25/2014	NITRITE (AS N)	< 100	MG/L
BAN C-3	4/22/2016	NITRITE (AS N)	< 0.1	MG/L
BAN C-3	3/8/2017	NITRITE (AS N)	< 0.1	MG/L
BAN C-3	4/25/2017	NITRITE (AS N)	< 0.1	MG/L
BAN C-3	3/25/2014	POTASSIUM	1.6	MG/L
BAN C-3	3/13/2017	POTASSIUM	1.5	MG/L
BAN C-3	3/25/2014	SODIUM	31	MG/L
BAN C-3	3/13/2017	SODIUM	29	MG/L
BAN C-3	3/25/2014	SPECIFIC CONDUCTANCE	320	US
BAN C-3	3/13/2017	SPECIFIC CONDUCTANCE	330	US
BAN C-3	3/25/2014	SULFATE	5.9	MG/L
BAN C-3	3/8/2017	SULFATE	6	MG/L
BAN C-3	3/25/2014	TETRACHLOROETHYLENE	< 0.5	UG/L
BAN C-3	3/9/2017	TETRACHLOROETHYLENE	< 0.5	UG/L
BAN C-3	6/20/2013	TOTAL DISSOLVED SOLIDS	183	MG/L
BAN C-3	3/18/2014	TOTAL DISSOLVED SOLIDS	190	MG/L
BAN C-3	7/19/2017	TOTAL DISSOLVED SOLIDS	170	MG/L
BAN C-3	3/25/2014	TRICHLOROETHYLENE	< 0.5	UG/L
BAN C-3	3/9/2017	TRICHLOROETHYLENE	< 0.5	UG/L
BAN C-3	3/25/2014	TURBIDITY, LABORATORY	< 0.2	NTU
BAN C-3	3/9/2017	TURBIDITY, LABORATORY	0.18	NTU
BAN C-3	3/25/2014	ZINC	< 50	UG/L
BAN C-3	3/13/2017	ZINC	< 50	UG/L
BAN C-4	3/22/2014	ALKALINITY (TOTAL) AS CACO3	160	MG/L
BAN C-4	3/13/2017	ALKALINITY (TOTAL) AS CACO3	120	MG/L
BAN C-4	3/22/2014	ALUMINUM	< 50	UG/L
BAN C-4	3/13/2017	ALUMINUM	< 50	UG/L
BAN C-4	3/22/2014	ARSENIC	< 2	UG/L
BAN C-4	3/13/2017	ARSENIC	< 2	UG/L
BAN C-4	3/22/2014	BICARBONATE ALKALINITY	190	MG/L
BAN C-4	3/13/2017	BICARBONATE ALKALINITY	140	MG/L
BAN C-4	3/22/2014	CALCIUM	37	MG/L

Well_Name	Sample Date	Analyte	Concent.	Unit
Beaumont Basin - Overlyier Wells or Wells From Surrounding Basins				
Plantation 01	3/25/2014	LEAD	< 5	UG/L
Plantation 01	3/27/2017	LEAD	< 5	UG/L
Plantation 01	3/25/2014	MAGNESIUM	18	MG/L
Plantation 01	3/23/2017	MAGNESIUM	17	MG/L
Plantation 01	3/25/2014	MANGANESE	< 20	UG/L
Plantation 01	3/23/2017	MANGANESE	< 20	UG/L
Plantation 01	3/27/2013	NITRATE (as N)	1.7	MG/L
Plantation 01	3/25/2014	NITRATE (as N)	1.9	MG/L
Plantation 01	5/31/2014	NITRATE (as N)	0.4	MG/L
Plantation 01	2/24/2016	NITRATE (as N)	1.8	MG/L
Plantation 01	10/22/2016	NITRATE (as N)	1.8	MG/L
Plantation 01	3/20/2017	NITRATE (as N)	1.8	MG/L
Plantation 01	3/27/2013	NITRATE (AS NO3)	7.5	MG/L
Plantation 01	3/25/2014	NITRATE (AS NO3)	8.6	MG/L
Plantation 01	5/31/2014	NITRATE (AS NO3)	1.8	MG/L
Plantation 01	3/25/2014	NITRITE (AS N)	< 100	MG/L
Plantation 01	3/21/2017	NITRITE (AS N)	< 0.1	MG/L
Plantation 01	3/25/2014	SODIUM	20	MG/L
Plantation 01	3/23/2017	SODIUM	20	MG/L
Plantation 01	3/25/2014	SPECIFIC CONDUCTANCE	440	US
Plantation 01	3/21/2017	SPECIFIC CONDUCTANCE	450	US
Plantation 01	3/25/2014	SULFATE	12	MG/L
Plantation 01	3/20/2017	SULFATE	10	MG/L
Plantation 01	2/24/2016	TETRACHLOROETHYLENE	< 0.5	UG/L
Plantation 01	2/24/2016	TRICHLOROETHYLENE	< 0.5	UG/L
Plantation 01	3/25/2014	TURBIDITY, LABORATORY	0.28	NTU
Plantation 01	3/20/2017	TURBIDITY, LABORATORY	< 0.1	NTU
Plantation 01	3/25/2014	ZINC	< 50	UG/L
Plantation 01	3/23/2017	ZINC	< 50	UG/L
Plantation 1	3/25/2014	TOTAL DISSOLVED SOLIDS	250	MG/L
Plantation 1	3/20/2017	TOTAL DISSOLVED SOLIDS	270	MG/L
RCMHP - W1	2/6/2016	TOTAL DISSOLVED SOLIDS	260	MG/L
RCMHP - W2	2/5/2013	TOTAL DISSOLVED SOLIDS	320	MG/L
RCMHP - W2	2/6/2016	TOTAL DISSOLVED SOLIDS	270	MG/L
RCMHP 01	2/9/2016	ALKALINITY (TOTAL) AS CACO3	170	MG/L
RCMHP 01	2/10/2016	ALUMINUM	< 50	UG/L
RCMHP 01	2/10/2016	ARSENIC	< 2	UG/L
RCMHP 01	2/9/2016	BICARBONATE ALKALINITY	210	MG/L
RCMHP 01	2/10/2016	CALCIUM	44	MG/L
RCMHP 01	2/9/2016	CARBONATE ALKALINITY	< 3	MG/L
RCMHP 01	2/6/2016	CHLORIDE	14	MG/L
RCMHP 01	2/9/2016	CHROMIUM (TOTAL)	6	UG/L
RCMHP 01	8/6/2014	CHROMIUM, HEXAVALENT	5.3	UG/L
RCMHP 01	2/9/2016	CHROMIUM, HEXAVALENT	6	UG/L
RCMHP 01	2/10/2016	COPPER	< 50	UG/L
RCMHP 01	2/5/2016	FLUORIDE (F) (NATURAL-SOURCE)	0.5	MG/L
RCMHP 01	2/10/2016	HARDNESS (TOTAL) AS CACO3	180	MG/L
RCMHP 01	2/9/2016	HYDROXIDE ALKALINITY	< 3	MG/L

Well_Name	Sample Date	Analyte	Concent.	Unit
Beaumont Basin - Appropriator Wells				
BAN C-4	3/13/2017	CALCIUM	22	MG/L
BAN C-4	3/22/2014	CARBONATE ALKALINITY	< 3	MG/L
BAN C-4	3/13/2017	CARBONATE ALKALINITY	< 3	MG/L
BAN C-4	3/22/2014	CHLORIDE	7.1	MG/L
BAN C-4	3/6/2017	CHLORIDE	5.6	MG/L
BAN C-4	3/22/2014	CHROMIUM (TOTAL)	13	UG/L
BAN C-4	3/9/2017	CHROMIUM (TOTAL)	9.9	UG/L
BAN C-4	12/12/2014	CHROMIUM, HEXAVALENT	13	UG/L
BAN C-4	4/1/2015	CHROMIUM, HEXAVALENT	13	UG/L
BAN C-4	6/27/2015	CHROMIUM, HEXAVALENT	17	UG/L
BAN C-4	10/2/2015	CHROMIUM, HEXAVALENT	16	UG/L
BAN C-4	12/30/2015	CHROMIUM, HEXAVALENT	17	UG/L
BAN C-4	3/29/2016	CHROMIUM, HEXAVALENT	10	UG/L
BAN C-4	6/24/2016	CHROMIUM, HEXAVALENT	15	UG/L
BAN C-4	9/22/2016	CHROMIUM, HEXAVALENT	15	UG/L
BAN C-4	1/4/2017	CHROMIUM, HEXAVALENT	13	UG/L
BAN C-4	5/30/2017	CHROMIUM, HEXAVALENT	11	UG/L
BAN C-4	8/17/2017	CHROMIUM, HEXAVALENT	15	UG/L
BAN C-4	11/14/2017	CHROMIUM, HEXAVALENT	15	UG/L
BAN C-4	3/22/2014	COPPER	< 50	UG/L
BAN C-4	3/13/2017	COPPER	< 50	UG/L
BAN C-4	3/22/2014	DIBROMOCHLOROPROPANE (DBCP)	< 0.01	UG/L
BAN C-4	3/8/2017	DIBROMOCHLOROPROPANE (DBCP)	< 0.01	UG/L
BAN C-4	3/22/2014	FLUORIDE (F) (NATURAL-SOURCE)	0.3	MG/L
BAN C-4	3/13/2017	FLUORIDE (F) (NATURAL-SOURCE)	0.4	MG/L
BAN C-4	3/22/2014	HARDNESS (TOTAL) AS CACO3	120	MG/L
BAN C-4	3/13/2017	HARDNESS (TOTAL) AS CACO3	67	MG/L
BAN C-4	3/22/2014	HYDROXIDE ALKALINITY	< 3	MG/L
BAN C-4	3/13/2017	HYDROXIDE ALKALINITY	< 3	MG/L
BAN C-4	3/22/2014	IRON	< 100	UG/L
BAN C-4	3/13/2017	IRON	< 100	UG/L
BAN C-4	3/22/2014	LEAD	< 5	UG/L
BAN C-4	3/13/2017	LEAD	< 5	UG/L
BAN C-4	3/22/2014	MAGNESIUM	7.4	MG/L
BAN C-4	3/13/2017	MAGNESIUM	3.1	MG/L
BAN C-4	3/22/2014	MANGANESE	< 20	UG/L
BAN C-4	3/13/2017	MANGANESE	< 20	UG/L
BAN C-4	6/11/2013	NITRATE (as N)	0.9	MG/L
BAN C-4	3/13/2014	NITRATE (as N)	1.1	MG/L
BAN C-4	5/28/2014	NITRATE (as N)	1.1	MG/L
BAN C-4	4/30/2015	NITRATE (as N)	1.1	MG/L
BAN C-4	4/27/2016	NITRATE (as N)	0.9	MG/L
BAN C-4	3/6/2017	NITRATE (as N)	0.8	MG/L
BAN C-4	4/26/2017	NITRATE (as N)	0.9	MG/L
BAN C-4	7/19/2017	NITRATE (as N)	0.8	MG/L
BAN C-4	6/12/2013	NITRATE (AS NO3)	4	MG/L
BAN C-4	3/22/2014	NITRATE (AS NO3)	4.9	MG/L
BAN C-4	5/29/2014	NITRATE (AS NO3)	4.7	MG/L

Well_Name	Sample Date	Analyte	Concent.	Unit
Beaumont Basin - Overlyier Wells or Wells From Surrounding Basins				
RCMHP 01	2/10/2016	IRON	< 100	UG/L
RCMHP 01	2/10/2016	LEAD	< 5	UG/L
RCMHP 01	2/10/2016	MAGNESIUM	16	MG/L
RCMHP 01	2/10/2016	MANGANESE	< 20	UG/L
RCMHP 01	1/5/2013	NITRATE (as N)	3.8	MG/L
RCMHP 01	1/4/2014	NITRATE (as N)	4.2	MG/L
RCMHP 01	4/5/2014	NITRATE (as N)	6.2	MG/L
RCMHP 01	1/2/2015	NITRATE (as N)	4.2	MG/L
RCMHP 01	1/5/2016	NITRATE (as N)	4.6	MG/L
RCMHP 01	2/6/2016	NITRATE (as N)	4.1	MG/L
RCMHP 01	1/17/2017	NITRATE (as N)	4.6	MG/L
RCMHP 01	1/5/2013	NITRATE (AS NO3)	17	MG/L
RCMHP 01	1/4/2014	NITRATE (AS NO3)	19	MG/L
RCMHP 01	4/5/2014	NITRATE (AS NO3)	28	MG/L
RCMHP 01	1/2/2015	NITRATE (AS NO3)	19	MG/L
RCMHP 01	2/5/2016	NITRITE (AS N)	< 0.1	MG/L
RCMHP 01	2/10/2016	SODIUM	22	MG/L
RCMHP 01	2/5/2016	SPECIFIC CONDUCTANCE	440	US
RCMHP 01	2/6/2016	SULFATE	9	MG/L
RCMHP 01	2/6/2016	TETRACHLOROETHYLENE	< 0.5	UG/L
RCMHP 01	2/6/2016	TRICHLOROETHYLENE	< 0.5	UG/L
RCMHP 01	2/5/2016	TURBIDITY, LABORATORY	0.11	NTU
RCMHP 01	2/10/2016	ZINC	< 50	UG/L
RCMHP 02	2/5/2013	ALKALINITY (TOTAL) AS CACO3	170	MG/L
RCMHP 02	2/9/2016	ALKALINITY (TOTAL) AS CACO3	170	MG/L
RCMHP 02	2/5/2013	ALUMINUM	< 50	UG/L
RCMHP 02	2/10/2016	ALUMINUM	< 50	UG/L
RCMHP 02	2/5/2013	ARSENIC	< 2	UG/L
RCMHP 02	2/10/2016	ARSENIC	< 2	UG/L
RCMHP 02	2/5/2013	BICARBONATE ALKALINITY	210	MG/L
RCMHP 02	2/9/2016	BICARBONATE ALKALINITY	210	MG/L
RCMHP 02	2/5/2013	CALCIUM	41	MG/L
RCMHP 02	2/10/2016	CALCIUM	40	MG/L
RCMHP 02	2/5/2013	CARBONATE ALKALINITY	< 3	MG/L
RCMHP 02	2/9/2016	CARBONATE ALKALINITY	< 3	MG/L
RCMHP 02	2/5/2013	CHLORIDE	23	MG/L
RCMHP 02	2/6/2016	CHLORIDE	20	MG/L
RCMHP 02	2/5/2013	CHROMIUM (TOTAL)	7.5	UG/L
RCMHP 02	2/9/2016	CHROMIUM (TOTAL)	13	UG/L
RCMHP 02	8/6/2014	CHROMIUM, HEXAVALENT	6.7	UG/L
RCMHP 02	2/9/2016	CHROMIUM, HEXAVALENT	12	UG/L
RCMHP 02	8/30/2016	CHROMIUM, HEXAVALENT	7	UG/L
RCMHP 02	12/3/2016	CHROMIUM, HEXAVALENT	8.3	UG/L
RCMHP 02	1/24/2017	CHROMIUM, HEXAVALENT	10	UG/L
RCMHP 02	7/12/2017	CHROMIUM, HEXAVALENT	11	UG/L
RCMHP 02	10/17/2017	CHROMIUM, HEXAVALENT	11	UG/L
RCMHP 02	2/5/2013	COPPER	62	UG/L
RCMHP 02	2/10/2016	COPPER	< 50	UG/L

Well_Name	Sample Date	Analyte	Concent.	Unit
Beaumont Basin - Appropriator Wells				
BAN C-4	4/30/2015	NITRATE (AS NO3)	5	MG/L
BAN C-4	7/17/2013	NITRITE (AS N)	< 100	MG/L
BAN C-4	3/22/2014	NITRITE (AS N)	< 100	MG/L
BAN C-4	4/27/2016	NITRITE (AS N)	< 0.1	MG/L
BAN C-4	3/7/2017	NITRITE (AS N)	< 0.1	MG/L
BAN C-4	4/26/2017	NITRITE (AS N)	< 0.1	MG/L
BAN C-4	3/22/2014	POTASSIUM	1.5	MG/L
BAN C-4	3/13/2017	POTASSIUM	1.4	MG/L
BAN C-4	3/22/2014	SODIUM	27	MG/L
BAN C-4	3/13/2017	SODIUM	37	MG/L
BAN C-4	3/22/2014	SPECIFIC CONDUCTANCE	360	US
BAN C-4	3/9/2017	SPECIFIC CONDUCTANCE	290	US
BAN C-4	3/22/2014	SULFATE	11	MG/L
BAN C-4	3/6/2017	SULFATE	13	MG/L
BAN C-4	3/22/2014	TETRACHLOROETHYLENE	< 0.5	UG/L
BAN C-4	3/7/2017	TETRACHLOROETHYLENE	< 0.5	UG/L
BAN C-4	3/13/2014	TOTAL DISSOLVED SOLIDS	180	MG/L
BAN C-4	7/19/2017	TOTAL DISSOLVED SOLIDS	190	MG/L
BAN C-4	3/22/2014	TRICHLOROETHYLENE	< 0.5	UG/L
BAN C-4	3/7/2017	TRICHLOROETHYLENE	< 0.5	UG/L
BAN C-4	3/22/2014	TURBIDITY, LABORATORY	< 0.2	NTU
BAN C-4	3/6/2017	TURBIDITY, LABORATORY	< 0.1	NTU
BAN C-4	3/22/2014	ZINC	< 50	UG/L
BAN C-4	3/13/2017	ZINC	< 50	UG/L
BAN M3	3/18/2015	TOTAL DISSOLVED SOLIDS	300	MG/L
BAN M-3	3/24/2015	ALKALINITY (TOTAL) AS CACO3	150	MG/L
BAN M-3	3/24/2015	ALUMINUM	< 50	UG/L
BAN M-3	3/24/2015	ARSENIC	< 2	UG/L
BAN M-3	3/24/2015	BICARBONATE ALKALINITY	190	MG/L
BAN M-3	3/24/2015	CALCIUM	39	MG/L
BAN M-3	3/24/2015	CARBONATE ALKALINITY	< 3	MG/L
BAN M-3	3/24/2015	CHLORIDE	14	MG/L
BAN M-3	3/24/2015	CHROMIUM (TOTAL)	8.5	UG/L
BAN M-3	12/9/2014	CHROMIUM, HEXAVALENT	9.3	UG/L
BAN M-3	3/24/2015	CHROMIUM, HEXAVALENT	9.7	UG/L
BAN M-3	6/27/2015	CHROMIUM, HEXAVALENT	10	UG/L
BAN M-3	10/1/2015	CHROMIUM, HEXAVALENT	10	UG/L
BAN M-3	12/30/2015	CHROMIUM, HEXAVALENT	9.9	UG/L
BAN M-3	3/29/2016	CHROMIUM, HEXAVALENT	9.4	UG/L
BAN M-3	6/24/2016	CHROMIUM, HEXAVALENT	9.1	UG/L
BAN M-3	9/22/2016	CHROMIUM, HEXAVALENT	9.3	UG/L
BAN M-3	1/4/2017	CHROMIUM, HEXAVALENT	9.4	UG/L
BAN M-3	6/6/2017	CHROMIUM, HEXAVALENT	9.9	UG/L
BAN M-3	8/16/2017	CHROMIUM, HEXAVALENT	9.2	UG/L
BAN M-3	11/21/2017	CHROMIUM, HEXAVALENT	9.1	UG/L
BAN M-3	3/24/2015	COPPER	< 50	UG/L
BAN M-3	3/24/2015	DIBROMOCHLOROPROPANE (DBCP)	< 0.01	UG/L
BAN M-3	3/24/2015	FLUORIDE (F) (NATURAL-SOURCE)	0.3	MG/L

Well_Name	Sample Date	Analyte	Concent.	Unit
Beaumont Basin - Overlyier Wells or Wells From Surrounding Basins				
RCMHP 02	2/5/2013	FLUORIDE (F) (NATURAL-SOURCE)	0.8	MG/L
RCMHP 02	2/5/2016	FLUORIDE (F) (NATURAL-SOURCE)	0.7	MG/L
RCMHP 02	2/5/2013	HARDNESS (TOTAL) AS CACO3	170	MG/L
RCMHP 02	2/10/2016	HARDNESS (TOTAL) AS CACO3	170	MG/L
RCMHP 02	2/5/2013	HYDROXIDE ALKALINITY	< 3	MG/L
RCMHP 02	2/9/2016	HYDROXIDE ALKALINITY	< 3	MG/L
RCMHP 02	2/5/2013	IRON	< 100	UG/L
RCMHP 02	2/10/2016	IRON	< 100	UG/L
RCMHP 02	2/5/2013	LEAD	< 5	UG/L
RCMHP 02	2/10/2016	LEAD	< 5	UG/L
RCMHP 02	2/5/2013	MAGNESIUM	17	MG/L
RCMHP 02	2/10/2016	MAGNESIUM	16	MG/L
RCMHP 02	2/5/2013	MANGANESE	< 20	UG/L
RCMHP 02	2/10/2016	MANGANESE	< 20	UG/L
RCMHP 02	1/5/2013	NITRATE (as N)	6.9	MG/L
RCMHP 02	2/5/2013	NITRATE (as N)	6.9	MG/L
RCMHP 02	4/8/2013	NITRATE (as N)	6.9	MG/L
RCMHP 02	7/6/2013	NITRATE (as N)	7.1	MG/L
RCMHP 02	10/11/2013	NITRATE (as N)	6.7	MG/L
RCMHP 02	1/4/2014	NITRATE (as N)	6.4	MG/L
RCMHP 02	7/12/2014	NITRATE (as N)	6.2	MG/L
RCMHP 02	10/11/2014	NITRATE (as N)	6.0	MG/L
RCMHP 02	1/2/2015	NITRATE (as N)	5.6	MG/L
RCMHP 02	4/4/2015	NITRATE (as N)	5.8	MG/L
RCMHP 02	7/10/2015	NITRATE (as N)	5.1	MG/L
RCMHP 02	10/17/2015	NITRATE (as N)	6.0	MG/L
RCMHP 02	1/5/2016	NITRATE (as N)	4.9	MG/L
RCMHP 02	2/6/2016	NITRATE (as N)	4.9	MG/L
RCMHP 02	7/1/2016	NITRATE (as N)	5.5	MG/L
RCMHP 02	12/3/2016	NITRATE (as N)	6.2	MG/L
RCMHP 02	1/17/2017	NITRATE (as N)	6.1	MG/L
RCMHP 02	7/10/2017	NITRATE (as N)	6.6	MG/L
RCMHP 02	10/16/2017	NITRATE (as N)	4.8	MG/L
RCMHP 02	1/5/2013	NITRATE (AS NO3)	31	MG/L
RCMHP 02	2/5/2013	NITRATE (AS NO3)	31	MG/L
RCMHP 02	4/8/2013	NITRATE (AS NO3)	31	MG/L
RCMHP 02	7/6/2013	NITRATE (AS NO3)	32	MG/L
RCMHP 02	10/11/2013	NITRATE (AS NO3)	30	MG/L
RCMHP 02	1/4/2014	NITRATE (AS NO3)	29	MG/L
RCMHP 02	7/12/2014	NITRATE (AS NO3)	28	MG/L
RCMHP 02	10/11/2014	NITRATE (AS NO3)	27	MG/L
RCMHP 02	1/2/2015	NITRATE (AS NO3)	25	MG/L
RCMHP 02	4/4/2015	NITRATE (AS NO3)	26	MG/L
RCMHP 02	7/10/2015	NITRATE (AS NO3)	23	MG/L
RCMHP 02	10/17/2015	NITRATE (AS NO3)	27	MG/L
RCMHP 02	2/5/2013	NITRITE (AS N)	< 100	MG/L
RCMHP 02	2/5/2016	NITRITE (AS N)	< 0.1	MG/L
RCMHP 02	7/1/2016	NITRITE (AS N)	< 0.1	MG/L

Well_Name	Sample Date	Analyte	Concent.	Unit
Beaumont Basin - Appropriator Wells				
BAN M-3	3/24/2015	HARDNESS (TOTAL) AS CACO3	150	MG/L
BAN M-3	3/24/2015	HYDROXIDE ALKALINITY	< 3	MG/L
BAN M-3	3/24/2015	IRON	< 100	UG/L
BAN M-3	3/24/2015	LEAD	< 5	UG/L
BAN M-3	3/24/2015	MAGNESIUM	13	MG/L
BAN M-3	3/24/2015	MANGANESE	< 20	UG/L
BAN M-3	7/22/2013	NITRATE (as N)	1.8	MG/L
BAN M-3	6/18/2014	NITRATE (as N)	1.8	MG/L
BAN M-3	3/18/2015	NITRATE (as N)	1.6	MG/L
BAN M-3	4/27/2016	NITRATE (as N)	2.1	MG/L
BAN M-3	4/27/2017	NITRATE (as N)	2.2	MG/L
BAN M-3	7/23/2013	NITRATE (AS NO3)	8.1	MG/L
BAN M-3	6/20/2014	NITRATE (AS NO3)	8	MG/L
BAN M-3	3/24/2015	NITRATE (AS NO3)	7.2	MG/L
BAN M-3	4/22/2015	NITRATE (AS NO3)	7.8	MG/L
BAN M-3	7/23/2013	NITRITE (AS N)	< 100	MG/L
BAN M-3	3/24/2015	NITRITE (AS N)	< 100	MG/L
BAN M-3	4/27/2016	NITRITE (AS N)	< 0.1	MG/L
BAN M-3	4/26/2017	NITRITE (AS N)	< 0.1	MG/L
BAN M-3	3/24/2015	POTASSIUM	2	MG/L
BAN M-3	3/24/2015	SODIUM	39	MG/L
BAN M-3	3/24/2015	SPECIFIC CONDUCTANCE	460	US
BAN M-3	3/24/2015	SULFATE	35	MG/L
BAN M-3	3/24/2015	TETRACHLOROETHYLENE	< 0.5	UG/L
BAN M-3	3/24/2015	TRICHLOROETHYLENE	< 0.5	UG/L
BAN M-3	3/24/2015	TURBIDITY, LABORATORY	< 0.2	NTU
BAN M-3	3/24/2015	ZINC	< 50	UG/L
BCVWD 03	10/31/2013	ALKALINITY (TOTAL) AS CACO3	150	MG/L
BCVWD 03	8/23/2016	ALKALINITY (TOTAL) AS CACO3	150	MG/L
BCVWD 03	10/31/2013	ALUMINUM	< 50	UG/L
BCVWD 03	8/25/2016	ALUMINUM	< 50	UG/L
BCVWD 03	10/31/2013	ARSENIC	< 2	UG/L
BCVWD 03	8/25/2016	ARSENIC	< 2	UG/L
BCVWD 03	10/31/2013	BICARBONATE ALKALINITY	180	MG/L
BCVWD 03	8/23/2016	BICARBONATE ALKALINITY	190	MG/L
BCVWD 03	10/31/2013	CALCIUM	37	MG/L
BCVWD 03	8/25/2016	CALCIUM	37	MG/L
BCVWD 03	10/31/2013	CARBONATE ALKALINITY	< 3	MG/L
BCVWD 03	8/23/2016	CARBONATE ALKALINITY	< 3	MG/L
BCVWD 03	10/31/2013	CHLORIDE	7.6	MG/L
BCVWD 03	8/19/2016	CHLORIDE	13	MG/L
BCVWD 03	10/31/2013	CHROMIUM (TOTAL)	11	UG/L
BCVWD 03	8/25/2016	CHROMIUM (TOTAL)	8.4	UG/L
BCVWD 03	11/7/2013	CHROMIUM, HEXAVALENT	12	UG/L
BCVWD 03	10/22/2014	CHROMIUM, HEXAVALENT	11	UG/L
BCVWD 03	4/1/2015	CHROMIUM, HEXAVALENT	9.5	UG/L
BCVWD 03	8/23/2016	CHROMIUM, HEXAVALENT	7.3	UG/L
BCVWD 03	10/31/2013	COPPER	< 50	UG/L

Well_Name	Sample Date	Analyte	Concent.	Unit
Beaumont Basin - Overlyier Wells or Wells From Surrounding Basins				
RCMHP 02	2/5/2013	POTASSIUM	1.4	MG/L
RCMHP 02	2/5/2013	SODIUM	35	MG/L
RCMHP 02	2/10/2016	SODIUM	32	MG/L
RCMHP 02	2/5/2013	SPECIFIC CONDUCTANCE	470	US
RCMHP 02	2/5/2016	SPECIFIC CONDUCTANCE	470	US
RCMHP 02	2/5/2013	SULFATE	10	MG/L
RCMHP 02	2/6/2016	SULFATE	10	MG/L
RCMHP 02	2/7/2016	TETRACHLOROETHYLENE	< 0.5	UG/L
RCMHP 02	2/7/2016	TRICHLOROETHYLENE	< 0.5	UG/L
RCMHP 02	2/5/2013	TURBIDITY, LABORATORY	< 0.2	NTU
RCMHP 02	2/5/2016	TURBIDITY, LABORATORY	0.33	NTU
RCMHP 02	2/5/2013	ZINC	< 50	UG/L
RCMHP 02	2/10/2016	ZINC	< 50	UG/L
Sharondale 01	7/14/2015	ALKALINITY (TOTAL) AS CACO3	200	MG/L
Sharondale 01	7/14/2015	ALUMINUM	< 50	UG/L
Sharondale 01	7/14/2015	ARSENIC	< 2	UG/L
Sharondale 01	7/14/2015	BICARBONATE ALKALINITY	240	MG/L
Sharondale 01	7/14/2015	CALCIUM	43	MG/L
Sharondale 01	7/14/2015	CARBONATE ALKALINITY	< 3	MG/L
Sharondale 01	7/14/2015	CHLORIDE	20	MG/L
Sharondale 01	7/14/2015	CHROMIUM (TOTAL)	6.2	UG/L
Sharondale 01	8/6/2014	CHROMIUM, HEXAVALENT	5.4	UG/L
Sharondale 01	7/14/2015	COPPER	< 50	UG/L
Sharondale 01	7/14/2015	FLUORIDE (F) (NATURAL-SOURCE)	0.5	MG/L
Sharondale 01	7/14/2015	HARDNESS (TOTAL) AS CACO3	170	MG/L
Sharondale 01	7/14/2015	HYDROXIDE ALKALINITY	< 3	MG/L
Sharondale 01	7/14/2015	IRON	< 100	UG/L
Sharondale 01	7/14/2015	LEAD	< 5	UG/L
Sharondale 01	7/14/2015	MAGNESIUM	16	MG/L
Sharondale 01	7/14/2015	MANGANESE	< 20	UG/L
Sharondale 01	1/4/2013	NITRATE (as N)	6.1	MG/L
Sharondale 01	4/8/2013	NITRATE (as N)	4.7	MG/L
Sharondale 01	7/5/2013	NITRATE (as N)	4.7	MG/L
Sharondale 01	12/6/2013	NITRATE (as N)	5.2	MG/L
Sharondale 01	1/3/2014	NITRATE (as N)	5.0	MG/L
Sharondale 01	4/4/2014	NITRATE (as N)	5.2	MG/L
Sharondale 01	7/11/2014	NITRATE (as N)	4.7	MG/L
Sharondale 01	10/10/2014	NITRATE (as N)	4.7	MG/L
Sharondale 01	1/2/2015	NITRATE (as N)	6.0	MG/L
Sharondale 01	5/6/2015	NITRATE (as N)	4.0	MG/L
Sharondale 01	7/14/2015	NITRATE (as N)	4.2	MG/L
Sharondale 01	10/17/2015	NITRATE (as N)	4.9	MG/L
Sharondale 01	1/5/2016	NITRATE (as N)	4.3	MG/L
Sharondale 01	7/1/2016	NITRATE (as N)	4.3	MG/L
Sharondale 01	10/4/2016	NITRATE (as N)	4.3	MG/L
Sharondale 01	12/3/2016	NITRATE (as N)	4.9	MG/L
Sharondale 01	1/7/2017	NITRATE (as N)	5.2	MG/L
Sharondale 01	4/8/2017	NITRATE (as N)	2.5	MG/L

Well_Name	Sample Date	Analyte	Concent.	Unit
Beaumont Basin - Appropriator Wells				
BCVWD 03	8/25/2016	COPPER	< 50	UG/L
BCVWD 03	8/19/2016	DIBROMOCHLOROPROPANE (DBCP)	< 0.01	UG/L
BCVWD 03	10/31/2013	FLUORIDE (F) (NATURAL-SOURCE)	0.3	MG/L
BCVWD 03	8/25/2016	FLUORIDE (F) (NATURAL-SOURCE)	0.5	MG/L
BCVWD 03	10/31/2013	HARDNESS (TOTAL) AS CACO3	130	MG/L
BCVWD 03	10/31/2013	HYDROXIDE ALKALINITY	< 3	MG/L
BCVWD 03	8/23/2016	HYDROXIDE ALKALINITY	< 3	MG/L
BCVWD 03	10/31/2013	IRON	< 100	UG/L
BCVWD 03	8/25/2016	IRON	450	UG/L
BCVWD 03	10/31/2013	LEAD	< 5	UG/L
BCVWD 03	8/25/2016	LEAD	< 5	UG/L
BCVWD 03	10/31/2013	MAGNESIUM	9.4	MG/L
BCVWD 03	8/25/2016	MAGNESIUM	13	MG/L
BCVWD 03	10/31/2013	MANGANESE	< 20	UG/L
BCVWD 03	8/25/2016	MANGANESE	< 20	UG/L
BCVWD 03	6/19/2013	NITRATE (as N)	0.9	MG/L
BCVWD 03	10/22/2013	NITRATE (as N)	0.9	MG/L
BCVWD 03	8/19/2016	NITRATE (as N)	1.7	MG/L
BCVWD 03	10/31/2013	NITRATE (AS NO3)	3.9	MG/L
BCVWD 03	10/31/2013	NITRITE (AS N)	< 100	MG/L
BCVWD 03	8/18/2016	NITRITE (AS N)	< 0.1	MG/L
BCVWD 03	10/31/2013	POTASSIUM	1.7	MG/L
BCVWD 03	8/25/2016	POTASSIUM	1.5	MG/L
BCVWD 03	10/31/2013	SODIUM	25	MG/L
BCVWD 03	8/25/2016	SODIUM	24	MG/L
BCVWD 03	10/31/2013	SPECIFIC CONDUCTANCE	350	US
BCVWD 03	8/19/2016	SPECIFIC CONDUCTANCE	380	US
BCVWD 03	10/31/2013	SULFATE	11	MG/L
BCVWD 03	8/19/2016	SULFATE	11	MG/L
BCVWD 03	8/19/2016	TETRACHLOROETHYLENE	< 0.5	UG/L
BCVWD 03	6/19/2013	TOTAL DISSOLVED SOLIDS	215	MG/L
BCVWD 03	11/12/2013	TOTAL DISSOLVED SOLIDS	210	MG/L
BCVWD 03	8/19/2016	TOTAL DISSOLVED SOLIDS	240	MG/L
BCVWD 03	8/19/2016	TRICHLOROETHYLENE	< 0.5	UG/L
BCVWD 03	10/31/2013	TURBIDITY, LABORATORY	< 0.2	NTU
BCVWD 03	8/18/2016	TURBIDITY, LABORATORY	1.7	NTU
BCVWD 03	10/31/2013	ZINC	< 50	UG/L
BCVWD 03	8/25/2016	ZINC	< 50	UG/L
BCVWD 16	10/31/2013	ALKALINITY (TOTAL) AS CACO3	180	MG/L
BCVWD 16	12/9/2016	ALKALINITY (TOTAL) AS CACO3	180	MG/L
BCVWD 16	10/31/2013	ALUMINUM	< 50	UG/L
BCVWD 16	12/15/2016	ALUMINUM	< 50	UG/L
BCVWD 16	10/31/2013	ARSENIC	< 2	UG/L
BCVWD 16	12/14/2016	ARSENIC	< 2	UG/L
BCVWD 16	10/31/2013	BICARBONATE ALKALINITY	220	MG/L
BCVWD 16	12/9/2016	BICARBONATE ALKALINITY	220	MG/L
BCVWD 16	10/31/2013	CALCIUM	52	MG/L
BCVWD 16	12/15/2016	CALCIUM	53	MG/L

Well_Name	Sample Date	Analyte	Concent.	Unit
Beaumont Basin - Overlyier Wells or Wells From Surrounding Basins				
Sharondale 01	7/10/2017	NITRATE (as N)	4.6	MG/L
Sharondale 01	10/16/2017	NITRATE (as N)	4.4	MG/L
Sharondale 01	1/4/2013	NITRATE (AS NO3)	27	MG/L
Sharondale 01	4/8/2013	NITRATE (AS NO3)	21	MG/L
Sharondale 01	7/6/2013	NITRATE (AS NO3)	21	MG/L
Sharondale 01	12/7/2013	NITRATE (AS NO3)	23	MG/L
Sharondale 01	1/4/2014	NITRATE (AS NO3)	22	MG/L
Sharondale 01	4/5/2014	NITRATE (AS NO3)	23	MG/L
Sharondale 01	7/12/2014	NITRATE (AS NO3)	21	MG/L
Sharondale 01	10/11/2014	NITRATE (AS NO3)	21	MG/L
Sharondale 01	1/2/2015	NITRATE (AS NO3)	27	MG/L
Sharondale 01	5/6/2015	NITRATE (AS NO3)	18	MG/L
Sharondale 01	7/14/2015	NITRATE (AS NO3)	19	MG/L
Sharondale 01	10/17/2015	NITRATE (AS NO3)	22	MG/L
Sharondale 01	7/14/2015	NITRITE (AS N)	< 100	MG/L
Sharondale 01	7/14/2015	SODIUM	43	MG/L
Sharondale 01	7/14/2015	SPECIFIC CONDUCTANCE	500	US
Sharondale 01	7/14/2015	SULFATE	16	MG/L
Sharondale 01	3/8/2013	TETRACHLOROETHYLENE	< 0.5	UG/L
Sharondale 01	3/8/2013	TRICHLOROETHYLENE	< 0.5	UG/L
Sharondale 01	7/14/2015	TURBIDITY, LABORATORY	0.53	NTU
Sharondale 01	7/14/2015	ZINC	< 50	UG/L
Sharondale 02	7/14/2015	ALKALINITY (TOTAL) AS CACO3	200	MG/L
Sharondale 02	7/14/2015	ALUMINUM	< 50	UG/L
Sharondale 02	7/14/2015	ARSENIC	< 2	UG/L
Sharondale 02	7/14/2015	BICARBONATE ALKALINITY	240	MG/L
Sharondale 02	7/14/2015	CALCIUM	46	MG/L
Sharondale 02	7/14/2015	CARBONATE ALKALINITY	< 3	MG/L
Sharondale 02	7/14/2015	CHLORIDE	28	MG/L
Sharondale 02	7/14/2015	CHROMIUM (TOTAL)	8.9	UG/L
Sharondale 02	8/6/2014	CHROMIUM, HEXAVALENT	7.9	UG/L
Sharondale 02	7/14/2015	COPPER	< 50	UG/L
Sharondale 02	7/14/2015	FLUORIDE (F) (NATURAL-SOURCE)	0.7	MG/L
Sharondale 02	7/14/2015	HARDNESS (TOTAL) AS CACO3	190	MG/L
Sharondale 02	7/14/2015	HYDROXIDE ALKALINITY	< 3	MG/L
Sharondale 02	7/14/2015	IRON	< 100	UG/L
Sharondale 02	7/14/2015	LEAD	< 5	UG/L
Sharondale 02	7/14/2015	MAGNESIUM	18	MG/L
Sharondale 02	7/14/2015	MANGANESE	< 20	UG/L
Sharondale 02	1/4/2013	NITRATE (as N)	4.5	MG/L
Sharondale 02	1/3/2014	NITRATE (as N)	4.3	MG/L
Sharondale 02	1/2/2015	NITRATE (as N)	4.2	MG/L
Sharondale 02	7/14/2015	NITRATE (as N)	4.7	MG/L
Sharondale 02	1/5/2016	NITRATE (as N)	4.9	MG/L
Sharondale 02	1/7/2017	NITRATE (as N)	5.1	MG/L
Sharondale 02	10/16/2017	NITRATE (as N)	4.7	MG/L
Sharondale 02	1/4/2013	NITRATE (AS NO3)	20	MG/L
Sharondale 02	1/4/2014	NITRATE (AS NO3)	19	MG/L

Well_Name	Sample Date	Analyte	Concent.	Unit
Beaumont Basin - Appropriator Wells				
BCVWD 16	10/31/2013	CARBONATE ALKALINITY	< 3	MG/L
BCVWD 16	12/9/2016	CARBONATE ALKALINITY	< 3	MG/L
BCVWD 16	10/31/2013	CHLORIDE	16	MG/L
BCVWD 16	12/9/2016	CHLORIDE	20	MG/L
BCVWD 16	10/31/2013	CHROMIUM (TOTAL)	11	UG/L
BCVWD 16	12/15/2016	CHROMIUM (TOTAL)	4.1	UG/L
BCVWD 16	10/22/2014	CHROMIUM, HEXAVALENT	4.4	UG/L
BCVWD 16	11/5/2015	CHROMIUM, HEXAVALENT	4.6	UG/L
BCVWD 16	10/31/2013	COPPER	< 50	UG/L
BCVWD 16	12/15/2016	COPPER	< 50	UG/L
BCVWD 16	10/31/2013	DIBROMOCHLOROPROPANE (DBCP)	< 0.01	UG/L
BCVWD 16	10/31/2013	FLUORIDE (F) (NATURAL-SOURCE)	0.8	MG/L
BCVWD 16	12/16/2016	FLUORIDE (F) (NATURAL-SOURCE)	0.8	MG/L
BCVWD 16	10/31/2013	HARDNESS (TOTAL) AS CACO3	200	MG/L
BCVWD 16	12/15/2016	HARDNESS (TOTAL) AS CACO3	210	MG/L
BCVWD 16	10/31/2013	HYDROXIDE ALKALINITY	< 3	MG/L
BCVWD 16	12/9/2016	HYDROXIDE ALKALINITY	< 3	MG/L
BCVWD 16	10/31/2013	IRON	< 100	UG/L
BCVWD 16	12/15/2016	IRON	< 100	UG/L
BCVWD 16	10/31/2013	LEAD	< 5	UG/L
BCVWD 16	12/14/2016	LEAD	< 5	UG/L
BCVWD 16	10/31/2013	MAGNESIUM	18	MG/L
BCVWD 16	12/15/2016	MAGNESIUM	18	MG/L
BCVWD 16	10/31/2013	MANGANESE	< 20	UG/L
BCVWD 16	12/15/2016	MANGANESE	< 20	UG/L
BCVWD 16	5/21/2013	NITRATE (as N)	4.7	MG/L
BCVWD 16	6/12/2013	NITRATE (as N)	4.7	MG/L
BCVWD 16	8/19/2013	NITRATE (as N)	5.2	MG/L
BCVWD 16	9/5/2013	NITRATE (as N)	5.1	MG/L
BCVWD 16	9/16/2013	NITRATE (as N)	5.0	MG/L
BCVWD 16	10/15/2013	NITRATE (as N)	5.0	MG/L
BCVWD 16	10/22/2013	NITRATE (as N)	4.7	MG/L
BCVWD 16	11/25/2013	NITRATE (as N)	4.7	MG/L
BCVWD 16	12/10/2013	NITRATE (as N)	5.4	MG/L
BCVWD 16	2/25/2014	NITRATE (as N)	5.9	MG/L
BCVWD 16	3/18/2014	NITRATE (as N)	6.3	MG/L
BCVWD 16	4/15/2014	NITRATE (as N)	6.1	MG/L
BCVWD 16	5/12/2014	NITRATE (as N)	5.4	MG/L
BCVWD 16	6/9/2014	NITRATE (as N)	5.6	MG/L
BCVWD 16	7/8/2014	NITRATE (as N)	5.8	MG/L
BCVWD 16	7/22/2014	NITRATE (as N)	5.6	MG/L
BCVWD 16	8/12/2014	NITRATE (as N)	5.0	MG/L
BCVWD 16	9/17/2014	NITRATE (as N)	5.4	MG/L
BCVWD 16	10/7/2014	NITRATE (as N)	5.4	MG/L
BCVWD 16	12/8/2014	NITRATE (as N)	6.3	MG/L
BCVWD 16	1/22/2015	NITRATE (as N)	7.3	MG/L
BCVWD 16	2/19/2015	NITRATE (as N)	5.8	MG/L
BCVWD 16	3/18/2015	NITRATE (as N)	6.0	MG/L

Well_Name	Sample Date	Analyte	Concent.	Unit
Beaumont Basin - Overlyier Wells or Wells From Surrounding Basins				
Sharondale 02	1/2/2015	NITRATE (AS NO3)	19	MG/L
Sharondale 02	7/14/2015	NITRATE (AS NO3)	21	MG/L
Sharondale 02	7/14/2015	NITRITE (AS N)	< 100	MG/L
Sharondale 02	7/14/2015	SODIUM	39	MG/L
Sharondale 02	7/14/2015	SPECIFIC CONDUCTANCE	510	US
Sharondale 02	7/14/2015	SULFATE	14	MG/L
Sharondale 02	3/8/2013	TETRACHLOROETHYLENE	< 0.5	UG/L
Sharondale 02	3/8/2013	TRICHLOROETHYLENE	< 0.5	UG/L
Sharondale 02	7/14/2015	TURBIDITY, LABORATORY	0.22	NTU
Sharondale 02	7/14/2015	ZINC	< 50	UG/L
Sharondale_1	7/14/2015	TOTAL DISSOLVED SOLIDS	260	MG/L
Sharondale_2	7/14/2015	TOTAL DISSOLVED SOLIDS	260	MG/L
Singleton Ranch 7	12/24/2014	NITRATE (as N)	2.2	MG/L
Singleton Ranch 7	11/10/2016	NITRATE (as N)	2.2	MG/L
Singleton Ranch 7	5/11/2017	NITRATE (as N)	2.2	MG/L
Singleton Ranch 7	11/1/2017	NITRATE (as N)	2.2	MG/L
Singleton Ranch 7	12/24/2014	TOTAL DISSOLVED SOLIDS	230	MG/L
Singleton Ranch 7	11/10/2016	TOTAL DISSOLVED SOLIDS	270	MG/L
Singleton Ranch 7	5/11/2017	TOTAL DISSOLVED SOLIDS	270	MG/L
Singleton Ranch 7	11/1/2017	TOTAL DISSOLVED SOLIDS	240	MG/L
USGS 82101	12/24/2013	NITRATE (as N)	0.5	MG/L
USGS 82101	12/24/2013	TOTAL DISSOLVED SOLIDS	310	MG/L
USGS 82102	12/24/2013	NITRATE (as N)	0.5	MG/L
USGS 82102	12/24/2013	TOTAL DISSOLVED SOLIDS	280	MG/L
BCVWD 06	8/28/2013	NITRATE (as N)	2.5	MG/L
BCVWD 06	12/2/2015	NITRATE (as N)	2.3	MG/L
BCVWD 06	12/1/2016	NITRATE (as N)	2.9	MG/L
BCVWD 06	12/2/2015	TOTAL DISSOLVED SOLIDS	240	MG/L
BCVWD 10	3/5/2013	NITRATE (as N)	8.1	MG/L
BCVWD 10	8/28/2013	NITRATE (as N)	1.3	MG/L
BCVWD 10	12/2/2015	NITRATE (as N)	0.9	MG/L
BCVWD 10	12/1/2016	NITRATE (as N)	1.3	MG/L
BCVWD 10	11/22/2017	NITRATE (as N)	1.3	MG/L
BCVWD 10	12/2/2015	TOTAL DISSOLVED SOLIDS	240	MG/L
BCVWD 11	8/28/2013	NITRATE (as N)	1.0	MG/L
BCVWD 11	12/2/2015	NITRATE (as N)	0.8	MG/L
BCVWD 11	12/1/2016	NITRATE (as N)	1.2	MG/L
BCVWD 11	8/28/2013	TOTAL DISSOLVED SOLIDS	230	MG/L
BCVWD 11	12/1/2016	TOTAL DISSOLVED SOLIDS	250	MG/L
BCVWD 12	8/28/2013	NITRATE (as N)	0.9	MG/L
BCVWD 12	12/2/2015	NITRATE (as N)	0.7	MG/L
BCVWD 12	12/1/2016	NITRATE (as N)	1.0	MG/L
BCVWD 12	11/22/2017	NITRATE (as N)	1.5	MG/L
BCVWD 12	12/2/2015	TOTAL DISSOLVED SOLIDS	230	MG/L
BCVWD 13	8/28/2013	NITRATE (as N)	0.8	MG/L
BCVWD 14	8/28/2013	NITRATE (as N)	0.6	MG/L
BCVWD 14	12/2/2015	NITRATE (as N)	0.9	MG/L
BCVWD 14	12/1/2016	NITRATE (as N)	0.9	MG/L

Well_Name	Sample Date	Analyte	Concent.	Unit
Beaumont Basin - Appropriator Wells				
BCVWD 16	4/22/2015	NITRATE (as N)	5.8	MG/L
BCVWD 16	5/13/2015	NITRATE (as N)	5.8	MG/L
BCVWD 16	6/9/2015	NITRATE (as N)	5.6	MG/L
BCVWD 16	7/30/2015	NITRATE (as N)	6.0	MG/L
BCVWD 16	9/1/2015	NITRATE (as N)	5.6	MG/L
BCVWD 16	9/30/2015	NITRATE (as N)	6.2	MG/L
BCVWD 16	10/27/2015	NITRATE (as N)	6.0	MG/L
BCVWD 16	11/4/2015	NITRATE (as N)	6.0	MG/L
BCVWD 16	12/2/2015	NITRATE (as N)	5.9	MG/L
BCVWD 16	12/3/2015	NITRATE (as N)	5.8	MG/L
BCVWD 16	12/15/2015	NITRATE (as N)	5.7	MG/L
BCVWD 16	1/12/2016	NITRATE (as N)	5.9	MG/L
BCVWD 16	2/10/2016	NITRATE (as N)	5.8	MG/L
BCVWD 16	4/13/2016	NITRATE (as N)	6.2	MG/L
BCVWD 16	5/26/2016	NITRATE (as N)	5.9	MG/L
BCVWD 16	6/15/2016	NITRATE (as N)	5.8	MG/L
BCVWD 16	6/15/2016	NITRATE (as N)	5.8	MG/L
BCVWD 16	9/21/2016	NITRATE (as N)	5.3	MG/L
BCVWD 16	12/8/2016	NITRATE (as N)	6.1	MG/L
BCVWD 16	12/9/2016	NITRATE (as N)	6.1	MG/L
BCVWD 16	2/1/2017	NITRATE (as N)	6.9	MG/L
BCVWD 16	5/24/2017	NITRATE (as N)	6.6	MG/L
BCVWD 16	6/20/2017	NITRATE (as N)	6.2	MG/L
BCVWD 16	7/19/2017	NITRATE (as N)	6.1	MG/L
BCVWD 16	8/14/2017	NITRATE (as N)	6.2	MG/L
BCVWD 16	9/12/2017	NITRATE (as N)	6.1	MG/L
BCVWD 16	10/23/2017	NITRATE (as N)	5.8	MG/L
BCVWD 16	11/22/2017	NITRATE (as N)	5.7	MG/L
BCVWD 16	11/22/2017	NITRATE (as N)	5.7	MG/L
BCVWD 16	12/11/2017	NITRATE (as N)	5.6	MG/L
BCVWD 16	5/22/2013	NITRATE (AS NO3)	21	MG/L
BCVWD 16	6/13/2013	NITRATE (AS NO3)	21	MG/L
BCVWD 16	8/20/2013	NITRATE (AS NO3)	23	MG/L
BCVWD 16	9/17/2013	NITRATE (AS NO3)	22	MG/L
BCVWD 16	10/16/2013	NITRATE (AS NO3)	22	MG/L
BCVWD 16	10/31/2013	NITRATE (AS NO3)	21	MG/L
BCVWD 16	11/26/2013	NITRATE (AS NO3)	21	MG/L
BCVWD 16	12/11/2013	NITRATE (AS NO3)	24	MG/L
BCVWD 16	2/26/2014	NITRATE (AS NO3)	26	MG/L
BCVWD 16	3/19/2014	NITRATE (AS NO3)	28	MG/L
BCVWD 16	4/16/2014	NITRATE (AS NO3)	27	MG/L
BCVWD 16	5/13/2014	NITRATE (AS NO3)	24	MG/L
BCVWD 16	6/10/2014	NITRATE (AS NO3)	25	MG/L
BCVWD 16	7/23/2014	NITRATE (AS NO3)	25	MG/L
BCVWD 16	8/13/2014	NITRATE (AS NO3)	22	MG/L
BCVWD 16	9/18/2014	NITRATE (AS NO3)	24	MG/L
BCVWD 16	10/8/2014	NITRATE (AS NO3)	24	MG/L
BCVWD 16	12/8/2014	NITRATE (AS NO3)	28	MG/L

Well_Name	Sample Date	Analyte	Concent.	Unit
Beaumont Basin - Overlyier Wells or Wells From Surrounding Basins				
BCVWD 14	11/22/2017	NITRATE (as N)	0.8	MG/L
BCVWD 14	12/2/2015	TOTAL DISSOLVED SOLIDS	280	MG/L
BCVWD 18	8/28/2013	NITRATE (as N)	1.4	MG/L
BCVWD 18	12/8/2016	NITRATE (as N)	1.5	MG/L
BCVWD 18	11/22/2017	NITRATE (as N)	1.9	MG/L
BCVWD 18	8/28/2013	TOTAL DISSOLVED SOLIDS	240	MG/L
BCVWD 18	12/8/2016	TOTAL DISSOLVED SOLIDS	240	MG/L
BCVWD 19	8/28/2013	NITRATE (as N)	0.8	MG/L
BCVWD 19	12/2/2015	NITRATE (as N)	0.9	MG/L
BCVWD 19	12/1/2016	NITRATE (as N)	1.0	MG/L
BCVWD 19	12/2/2015	TOTAL DISSOLVED SOLIDS	210	MG/L
BCVWD 20	8/28/2013	NITRATE (as N)	1.1	MG/L
BCVWD 20	12/2/2015	NITRATE (as N)	1.0	MG/L
BCVWD 20	8/28/2013	TOTAL DISSOLVED SOLIDS	200	MG/L
BCVWD 04A	8/28/2013	NITRATE (as N)	1.9	MG/L
BCVWD 04A	12/2/2015	NITRATE (as N)	1.8	MG/L
BCVWD 04A	12/1/2016	NITRATE (as N)	2.2	MG/L
BCVWD 04A	11/22/2017	NITRATE (as N)	2.1	MG/L
BCVWD 04A	12/2/2015	TOTAL DISSOLVED SOLIDS	300	MG/L
BCVWD 05	10/22/2013	NITRATE (as N)	3.2	MG/L
BCVWD 05	10/2/2017	NITRATE (as N)	2.7	MG/L
BCVWD 05	10/2/2017	TOTAL DISSOLVED SOLIDS	230	MG/L
CV_Nursery	12/27/2013	NITRATE (as N)	10.0	MG/L
CV_Nursery	11/17/2015	NITRATE (as N)	13.0	MG/L
CV_Nursery	12/1/2015	NITRATE (as N)	13.0	MG/L
CV_Nursery	11/11/2016	NITRATE (as N)	10.0	MG/L
CV_Nursery	5/11/2017	NITRATE (as N)	11.0	MG/L
CV_Nursery	11/1/2017	NITRATE (as N)	14.0	MG/L
CV_Nursery	12/27/2013	TOTAL DISSOLVED SOLIDS	290	MG/L
CV_Nursery	11/17/2015	TOTAL DISSOLVED SOLIDS	340	MG/L
CV_Nursery	12/1/2015	TOTAL DISSOLVED SOLIDS	370	MG/L
CV_Nursery	11/11/2016	TOTAL DISSOLVED SOLIDS	320	MG/L
CV_Nursery	5/11/2017	TOTAL DISSOLVED SOLIDS	340	MG/L
CV_Nursery	11/1/2017	TOTAL DISSOLVED SOLIDS	340	MG/L
CVMWC-1	12/24/2013	NITRATE (as N)	7.3	MG/L
CVMWC-1	12/30/2014	NITRATE (as N)	7.6	MG/L
CVMWC-1	11/11/2016	NITRATE (as N)	13.0	MG/L
CVMWC-1	5/11/2017	NITRATE (as N)	13.0	MG/L
CVMWC-1	11/1/2017	NITRATE (as N)	12.0	MG/L
CVMWC-1	12/24/2013	TOTAL DISSOLVED SOLIDS	320	MG/L
CVMWC-1	12/30/2014	TOTAL DISSOLVED SOLIDS	340	MG/L
CVMWC-1	11/11/2016	TOTAL DISSOLVED SOLIDS	370	MG/L
CVMWC-1	5/11/2017	TOTAL DISSOLVED SOLIDS	400	MG/L
CVMWC-1	11/1/2017	TOTAL DISSOLVED SOLIDS	310	MG/L
Illy, Stefan Well 2	12/27/2013	NITRATE (as N)	1.7	MG/L
Illy, Stefan Well 2	12/27/2013	TOTAL DISSOLVED SOLIDS	270	MG/L
Magallon, Jorge	12/26/2013	NITRATE (as N)	6.0	MG/L
Magallon, Jorge	12/26/2013	TOTAL DISSOLVED SOLIDS	330	MG/L

Well_Name	Sample Date	Analyte	Concent.	Unit
Beaumont Basin - Appropriator Wells				
BCVWD 16	1/22/2015	NITRATE (AS NO3)	33	MG/L
BCVWD 16	2/19/2015	NITRATE (AS NO3)	26	MG/L
BCVWD 16	3/18/2015	NITRATE (AS NO3)	27	MG/L
BCVWD 16	4/22/2015	NITRATE (AS NO3)	26	MG/L
BCVWD 16	5/13/2015	NITRATE (AS NO3)	26	MG/L
BCVWD 16	6/9/2015	NITRATE (AS NO3)	25	MG/L
BCVWD 16	7/30/2015	NITRATE (AS NO3)	27	MG/L
BCVWD 16	9/1/2015	NITRATE (AS NO3)	25	MG/L
BCVWD 16	9/30/2015	NITRATE (AS NO3)	28	MG/L
BCVWD 16	10/27/2015	NITRATE (AS NO3)	27	MG/L
BCVWD 16	11/4/2015	NITRATE (AS NO3)	27	MG/L
BCVWD 16	12/3/2015	NITRATE (AS NO3)	26	MG/L
BCVWD 16	10/31/2013	NITRITE (AS N)	< 100	MG/L
BCVWD 16	12/8/2016	NITRITE (AS N)	< 0.1	MG/L
BCVWD 16	10/31/2013	POTASSIUM	1.3	MG/L
BCVWD 16	12/15/2016	POTASSIUM	1.2	MG/L
BCVWD 16	10/31/2013	SODIUM	36	MG/L
BCVWD 16	12/15/2016	SODIUM	38	MG/L
BCVWD 16	10/31/2013	SPECIFIC CONDUCTANCE	540	US
BCVWD 16	11/29/2017	SPECIFIC CONDUCTANCE	550	US
BCVWD 16	10/31/2013	SULFATE	46	MG/L
BCVWD 16	12/9/2016	SULFATE	46	MG/L
BCVWD 16	10/31/2013	TETRACHLOROETHYLENE	< 0.5	UG/L
BCVWD 16	12/12/2016	TETRACHLOROETHYLENE	< 0.5	UG/L
BCVWD 16	9/5/2013	TOTAL DISSOLVED SOLIDS	299	MG/L
BCVWD 16	10/22/2013	TOTAL DISSOLVED SOLIDS	370	MG/L
BCVWD 16	7/8/2014	TOTAL DISSOLVED SOLIDS	331	MG/L
BCVWD 16	12/8/2016	TOTAL DISSOLVED SOLIDS	330	MG/L
BCVWD 16	10/31/2013	TRICHLOROETHYLENE	< 0.5	UG/L
BCVWD 16	12/12/2016	TRICHLOROETHYLENE	< 0.5	UG/L
BCVWD 16	10/31/2013	TURBIDITY, LABORATORY	< 0.2	NTU
BCVWD 16	12/8/2016	TURBIDITY, LABORATORY	< 0.1	NTU
BCVWD 16	10/31/2013	ZINC	< 50	UG/L
BCVWD 16	12/15/2016	ZINC	< 50	UG/L
BCVWD 21	1/6/2013	ALKALINITY (TOTAL) AS CACO3	140	MG/L
BCVWD 21	12/4/2015	ALKALINITY (TOTAL) AS CACO3	180	MG/L
BCVWD 21	1/6/2013	ALUMINUM	< 50	UG/L
BCVWD 21	12/4/2015	ALUMINUM	< 50	UG/L
BCVWD 21	1/6/2013	ARSENIC	< 2	UG/L
BCVWD 21	12/7/2015	ARSENIC	< 2	UG/L
BCVWD 21	1/6/2013	BICARBONATE ALKALINITY	170	MG/L
BCVWD 21	12/4/2015	BICARBONATE ALKALINITY	220	MG/L
BCVWD 21	1/6/2013	CALCIUM	45	MG/L
BCVWD 21	12/4/2015	CALCIUM	49	MG/L
BCVWD 21	1/6/2013	CARBONATE ALKALINITY	< 3	MG/L
BCVWD 21	12/4/2015	CARBONATE ALKALINITY	< 3	MG/L
BCVWD 21	1/6/2013	CHLORIDE	13	MG/L
BCVWD 21	12/3/2015	CHLORIDE	14	MG/L

Well_Name	Sample Date	Analyte	Concent.	Unit
Beaumont Basin - Overlyier Wells or Wells From Surrounding Basins				
SMWC 05	4/3/2013	NITRATE (as N)	1.3	MG/L
SMWC 05	5/23/2013	NITRATE (as N)	1.2	MG/L
SMWC 05	7/15/2013	NITRATE (as N)	1.3	MG/L
SMWC 05	7/14/2014	NITRATE (as N)	1.1	MG/L
SMWC 05	4/11/2016	NITRATE (as N)	3.5	MG/L
SMWC 05	4/3/2013	TOTAL DISSOLVED SOLIDS	190	MG/L
SMWC 05	4/11/2016	TOTAL DISSOLVED SOLIDS	300	MG/L
Cemetery Well 2	6/18/2013	NITRATE (as N)	5.0	MG/L
Cemetery Well 2	12/23/2014	NITRATE (as N)	5.1	MG/L
Cemetery Well 2	9/25/2015	NITRATE (as N)	7.1	MG/L
Cemetery Well 2	11/17/2015	NITRATE (as N)	7.7	MG/L
Cemetery Well 2	12/1/2015	NITRATE (as N)	5.2	MG/L
Cemetery Well 2	11/14/2016	NITRATE (as N)	6.6	MG/L
Cemetery Well 2	5/10/2017	NITRATE (as N)	6.8	MG/L
Cemetery Well 2	10/31/2017	NITRATE (as N)	7.2	MG/L
Cemetery Well 2	6/18/2013	TOTAL DISSOLVED SOLIDS	250	MG/L
Cemetery Well 2	12/23/2014	TOTAL DISSOLVED SOLIDS	210	MG/L
Cemetery Well 2	9/25/2015	TOTAL DISSOLVED SOLIDS	300	MG/L
Cemetery Well 2	11/17/2015	TOTAL DISSOLVED SOLIDS	370	MG/L
Cemetery Well 2	12/1/2015	TOTAL DISSOLVED SOLIDS	260	MG/L
Cemetery Well 2	11/14/2016	TOTAL DISSOLVED SOLIDS	300	MG/L
Cemetery Well 2	5/10/2017	TOTAL DISSOLVED SOLIDS	330	MG/L
Cemetery Well 2	10/31/2017	TOTAL DISSOLVED SOLIDS	340	MG/L
Dowling Orchard	12/23/2014	NITRATE (as N)	5.7	MG/L
Dowling Orchard	9/25/2015	NITRATE (as N)	6.2	MG/L
Dowling Orchard	11/17/2015	NITRATE (as N)	6.2	MG/L
Dowling Orchard	12/1/2015	NITRATE (as N)	4.8	MG/L
Dowling Orchard	11/14/2016	NITRATE (as N)	7.3	MG/L
Dowling Orchard	5/10/2017	NITRATE (as N)	4.6	MG/L
Dowling Orchard	10/31/2017	NITRATE (as N)	7.3	MG/L
Dowling Orchard	12/23/2014	TOTAL DISSOLVED SOLIDS	410	MG/L
Dowling Orchard	9/25/2015	TOTAL DISSOLVED SOLIDS	370	MG/L
Dowling Orchard	11/17/2015	TOTAL DISSOLVED SOLIDS	420	MG/L
Dowling Orchard	12/1/2015	TOTAL DISSOLVED SOLIDS	310	MG/L
Dowling Orchard	11/14/2016	TOTAL DISSOLVED SOLIDS	400	MG/L
Dowling Orchard	5/10/2017	TOTAL DISSOLVED SOLIDS	310	MG/L
Dowling Orchard	10/31/2017	TOTAL DISSOLVED SOLIDS	400	MG/L
OBMW-1	7/23/2013	NITRATE (as N)	12.0	MG/L
OBMW-1	7/23/2013	NITRATE (as N)	12.0	MG/L
OBMW-1	10/2/2013	NITRATE (as N)	11.0	MG/L
OBMW-1	4/16/2014	NITRATE (as N)	11.0	MG/L
OBMW-1	4/10/2015	NITRATE (as N)	11.0	MG/L
OBMW-1	8/25/2015	NITRATE (as N)	11.0	MG/L
OBMW-1	3/9/2017	NITRATE (as N)	11.0	MG/L
OBMW-1	10/2/2013	TOTAL DISSOLVED SOLIDS	680	MG/L
OBMW-1	4/16/2014	TOTAL DISSOLVED SOLIDS	700	MG/L
OBMW-1	4/10/2015	TOTAL DISSOLVED SOLIDS	650	MG/L
OBMW-1	8/25/2015	TOTAL DISSOLVED SOLIDS	580	MG/L

Well_Name	Sample Date	Analyte	Concent.	Unit
Beaumont Basin - Appropriator Wells				
BCVWD 21	1/6/2013	CHROMIUM (TOTAL)	5.4	UG/L
BCVWD 21	12/8/2015	CHROMIUM (TOTAL)	6.4	UG/L
BCVWD 21	10/22/2014	CHROMIUM, HEXAVALENT	6.8	UG/L
BCVWD 21	11/12/2015	CHROMIUM, HEXAVALENT	6.7	UG/L
BCVWD 21	1/6/2013	COPPER	< 50	UG/L
BCVWD 21	12/4/2015	COPPER	< 50	UG/L
BCVWD 21	10/31/2013	DIBROMOCHLOROPROPANE (DBCP)	< 0.01	UG/L
BCVWD 21	1/6/2013	FLUORIDE (F) (NATURAL-SOURCE)	1	MG/L
BCVWD 21	12/6/2015	FLUORIDE (F) (NATURAL-SOURCE)	0.5	MG/L
BCVWD 21	1/6/2013	HARDNESS (TOTAL) AS CACO3	180	MG/L
BCVWD 21	12/4/2015	HARDNESS (TOTAL) AS CACO3	200	MG/L
BCVWD 21	1/6/2013	HYDROXIDE ALKALINITY	< 3	MG/L
BCVWD 21	12/4/2015	HYDROXIDE ALKALINITY	< 3	MG/L
BCVWD 21	1/6/2013	IRON	< 100	UG/L
BCVWD 21	12/4/2015	IRON	< 100	UG/L
BCVWD 21	1/6/2013	LEAD	< 5	UG/L
BCVWD 21	12/7/2015	LEAD	< 5	UG/L
BCVWD 21	1/6/2013	MAGNESIUM	16	MG/L
BCVWD 21	12/4/2015	MAGNESIUM	18	MG/L
BCVWD 21	1/6/2013	MANGANESE	< 20	UG/L
BCVWD 21	12/4/2015	MANGANESE	< 20	UG/L
BCVWD 21	3/5/2013	NITRATE (as N)	4.1	MG/L
BCVWD 21	5/21/2013	NITRATE (as N)	3.8	MG/L
BCVWD 21	6/12/2013	NITRATE (as N)	3.8	MG/L
BCVWD 21	8/19/2013	NITRATE (as N)	3.6	MG/L
BCVWD 21	9/16/2013	NITRATE (as N)	3.6	MG/L
BCVWD 21	10/15/2013	NITRATE (as N)	3.8	MG/L
BCVWD 21	10/22/2013	NITRATE (as N)	3.6	MG/L
BCVWD 21	11/25/2013	NITRATE (as N)	3.2	MG/L
BCVWD 21	12/10/2013	NITRATE (as N)	4.1	MG/L
BCVWD 21	2/25/2014	NITRATE (as N)	3.4	MG/L
BCVWD 21	3/18/2014	NITRATE (as N)	3.6	MG/L
BCVWD 21	4/15/2014	NITRATE (as N)	3.6	MG/L
BCVWD 21	5/12/2014	NITRATE (as N)	3.6	MG/L
BCVWD 21	6/9/2014	NITRATE (as N)	3.6	MG/L
BCVWD 21	7/22/2014	NITRATE (as N)	3.6	MG/L
BCVWD 21	8/12/2014	NITRATE (as N)	3.2	MG/L
BCVWD 21	9/17/2014	NITRATE (as N)	3.4	MG/L
BCVWD 21	10/7/2014	NITRATE (as N)	3.4	MG/L
BCVWD 21	12/8/2014	NITRATE (as N)	3.6	MG/L
BCVWD 21	1/22/2015	NITRATE (as N)	3.6	MG/L
BCVWD 21	2/19/2015	NITRATE (as N)	3.3	MG/L
BCVWD 21	3/18/2015	NITRATE (as N)	3.6	MG/L
BCVWD 21	4/22/2015	NITRATE (as N)	3.3	MG/L
BCVWD 21	5/13/2015	NITRATE (as N)	3.3	MG/L
BCVWD 21	6/9/2015	NITRATE (as N)	3.1	MG/L
BCVWD 21	7/30/2015	NITRATE (as N)	3.3	MG/L
BCVWD 21	8/31/2015	NITRATE (as N)	3.1	MG/L

Well_Name	Sample Date	Analyte	Concent.	Unit
Beaumont Basin - Overlyier Wells or Wells From Surrounding Basins				
OBMW-1	3/9/2017	TOTAL DISSOLVED SOLIDS	630	MG/L
OBMW-2	7/23/2013	NITRATE (as N)	17.0	MG/L
OBMW-2	7/23/2013	NITRATE (as N)	17.0	MG/L
OBMW-2	10/2/2013	NITRATE (as N)	16.0	MG/L
OBMW-2	4/16/2014	NITRATE (as N)	16.0	MG/L
OBMW-2	4/10/2015	NITRATE (as N)	15.0	MG/L
OBMW-2	8/25/2015	NITRATE (as N)	14.0	MG/L
OBMW-2	3/9/2017	NITRATE (as N)	13.0	MG/L
OBMW-2	10/2/2013	TOTAL DISSOLVED SOLIDS	670	MG/L
OBMW-2	4/16/2014	TOTAL DISSOLVED SOLIDS	660	MG/L
OBMW-2	4/10/2015	TOTAL DISSOLVED SOLIDS	650	MG/L
OBMW-2	8/25/2015	TOTAL DISSOLVED SOLIDS	580	MG/L
OBMW-2	3/9/2017	TOTAL DISSOLVED SOLIDS	690	MG/L
OBMW-3	7/23/2013	NITRATE (as N)	11.0	MG/L
OBMW-3	7/23/2013	NITRATE (as N)	11.0	MG/L
OBMW-3	10/2/2013	NITRATE (as N)	10.0	MG/L
OBMW-3	10/28/2013	NITRATE (as N)	10.0	MG/L
OBMW-3	4/16/2014	NITRATE (as N)	10.0	MG/L
OBMW-3	4/10/2015	NITRATE (as N)	10.0	MG/L
OBMW-3	8/25/2015	NITRATE (as N)	10.0	MG/L
OBMW-3	3/9/2017	NITRATE (as N)	10.0	MG/L
OBMW-3	10/2/2013	TOTAL DISSOLVED SOLIDS	450	MG/L
OBMW-3	10/28/2013	TOTAL DISSOLVED SOLIDS	450	MG/L
OBMW-3	4/16/2014	TOTAL DISSOLVED SOLIDS	430	MG/L
OBMW-3	4/10/2015	TOTAL DISSOLVED SOLIDS	480	MG/L
OBMW-3	8/25/2015	TOTAL DISSOLVED SOLIDS	400	MG/L
OBMW-3	3/9/2017	TOTAL DISSOLVED SOLIDS	420	MG/L
OBMW-4	7/23/2013	NITRATE (as N)	12.0	MG/L
OBMW-4	7/23/2013	NITRATE (as N)	12.0	MG/L
OBMW-4	10/2/2013	NITRATE (as N)	12.0	MG/L
OBMW-4	4/16/2014	NITRATE (as N)	12.0	MG/L
OBMW-4	4/10/2015	NITRATE (as N)	13.0	MG/L
OBMW-4	8/25/2015	NITRATE (as N)	12.0	MG/L
OBMW-4	3/9/2017	NITRATE (as N)	12.0	MG/L
OBMW-4	10/2/2013	TOTAL DISSOLVED SOLIDS	650	MG/L
OBMW-4	4/16/2014	TOTAL DISSOLVED SOLIDS	670	MG/L
OBMW-4	4/10/2015	TOTAL DISSOLVED SOLIDS	560	MG/L
OBMW-4	8/25/2015	TOTAL DISSOLVED SOLIDS	540	MG/L
OBMW-4	3/9/2017	TOTAL DISSOLVED SOLIDS	600	MG/L
Pistilli_Joe	12/24/2014	NITRATE (as N)	13.0	MG/L
Pistilli_Joe	9/25/2015	NITRATE (as N)	14.0	MG/L
Pistilli_Joe	11/17/2015	NITRATE (as N)	14.0	MG/L
Pistilli_Joe	12/1/2015	NITRATE (as N)	14.0	MG/L
Pistilli_Joe	11/10/2016	NITRATE (as N)	13.0	MG/L
Pistilli_Joe	5/11/2017	NITRATE (as N)	13.0	MG/L
Pistilli_Joe	10/31/2017	NITRATE (as N)	14.0	MG/L
Pistilli_Joe	12/24/2014	TOTAL DISSOLVED SOLIDS	270	MG/L
Pistilli_Joe	9/25/2015	TOTAL DISSOLVED SOLIDS	280	MG/L

Beaumont Basin - Appropriator Wells

Well_Name	Sample Date	Analyte	Concent.	Unit
BCVWD 21	9/30/2015	NITRATE (as N)	3.3	MG/L
BCVWD 21	10/27/2015	NITRATE (as N)	3.1	MG/L
BCVWD 21	11/4/2015	NITRATE (as N)	3.3	MG/L
BCVWD 21	12/2/2015	NITRATE (as N)	3.2	MG/L
BCVWD 21	12/3/2015	NITRATE (as N)	3.1	MG/L
BCVWD 21	12/15/2015	NITRATE (as N)	3.3	MG/L
BCVWD 21	1/12/2016	NITRATE (as N)	3.2	MG/L
BCVWD 21	4/13/2016	NITRATE (as N)	3.4	MG/L
BCVWD 21	5/26/2016	NITRATE (as N)	3.2	MG/L
BCVWD 21	6/14/2016	NITRATE (as N)	3.1	MG/L
BCVWD 21	9/21/2016	NITRATE (as N)	2.8	MG/L
BCVWD 21	12/1/2016	NITRATE (as N)	3.4	MG/L
BCVWD 21	12/2/2016	NITRATE (as N)	3.4	MG/L
BCVWD 21	2/1/2017	NITRATE (as N)	3.6	MG/L
BCVWD 21	5/24/2017	NITRATE (as N)	3.4	MG/L
BCVWD 21	6/19/2017	NITRATE (as N)	3.4	MG/L
BCVWD 21	7/19/2017	NITRATE (as N)	3.4	MG/L
BCVWD 21	8/14/2017	NITRATE (as N)	3.2	MG/L
BCVWD 21	9/12/2017	NITRATE (as N)	3.2	MG/L
BCVWD 21	10/23/2017	NITRATE (as N)	3.1	MG/L
BCVWD 21	11/22/2017	NITRATE (as N)	3.2	MG/L
BCVWD 21	11/22/2017	NITRATE (as N)	3.2	MG/L
BCVWD 21	12/11/2017	NITRATE (as N)	3.2	MG/L
BCVWD 21	1/6/2013	NITRATE (AS NO3)	35	MG/L
BCVWD 21	3/6/2013	NITRATE (AS NO3)	18	MG/L
BCVWD 21	5/22/2013	NITRATE (AS NO3)	17	MG/L
BCVWD 21	6/13/2013	NITRATE (AS NO3)	17	MG/L
BCVWD 21	8/20/2013	NITRATE (AS NO3)	16	MG/L
BCVWD 21	9/17/2013	NITRATE (AS NO3)	16	MG/L
BCVWD 21	10/16/2013	NITRATE (AS NO3)	17	MG/L
BCVWD 21	10/31/2013	NITRATE (AS NO3)	16	MG/L
BCVWD 21	11/26/2013	NITRATE (AS NO3)	14	MG/L
BCVWD 21	12/11/2013	NITRATE (AS NO3)	18	MG/L
BCVWD 21	2/26/2014	NITRATE (AS NO3)	15	MG/L
BCVWD 21	3/19/2014	NITRATE (AS NO3)	16	MG/L
BCVWD 21	4/16/2014	NITRATE (AS NO3)	16	MG/L
BCVWD 21	5/13/2014	NITRATE (AS NO3)	16	MG/L
BCVWD 21	6/10/2014	NITRATE (AS NO3)	16	MG/L
BCVWD 21	7/23/2014	NITRATE (AS NO3)	16	MG/L
BCVWD 21	8/13/2014	NITRATE (AS NO3)	14	MG/L
BCVWD 21	9/17/2014	NITRATE (AS NO3)	15	MG/L
BCVWD 21	10/8/2014	NITRATE (AS NO3)	15	MG/L
BCVWD 21	12/8/2014	NITRATE (AS NO3)	16	MG/L
BCVWD 21	1/22/2015	NITRATE (AS NO3)	16	MG/L
BCVWD 21	2/19/2015	NITRATE (AS NO3)	15	MG/L
BCVWD 21	3/18/2015	NITRATE (AS NO3)	16	MG/L
BCVWD 21	4/22/2015	NITRATE (AS NO3)	15	MG/L
BCVWD 21	5/13/2015	NITRATE (AS NO3)	15	MG/L

Beaumont Basin - Overlyier Wells or Wells From Surrounding Basins

Well_Name	Sample Date	Analyte	Concent.	Unit
Pistilli_Joe	11/17/2015	TOTAL DISSOLVED SOLIDS	280	MG/L
Pistilli_Joe	12/1/2015	TOTAL DISSOLVED SOLIDS	290	MG/L
Pistilli_Joe	11/10/2016	TOTAL DISSOLVED SOLIDS	290	MG/L
Pistilli_Joe	5/11/2017	TOTAL DISSOLVED SOLIDS	260	MG/L
Pistilli_Joe	10/31/2017	TOTAL DISSOLVED SOLIDS	250	MG/L
Ranch Well	12/26/2013	NITRATE (as N)	14.0	MG/L
Ranch Well	9/25/2015	NITRATE (as N)	16.0	MG/L
Ranch Well	11/17/2015	NITRATE (as N)	16.0	MG/L
Ranch Well	12/1/2015	NITRATE (as N)	15.0	MG/L
Ranch Well	11/10/2016	NITRATE (as N)	14.0	MG/L
Ranch Well	5/12/2017	NITRATE (as N)	16.0	MG/L
Ranch Well	10/31/2017	NITRATE (as N)	14.0	MG/L
Ranch Well	12/26/2013	TOTAL DISSOLVED SOLIDS	640	MG/L
Ranch Well	9/25/2015	TOTAL DISSOLVED SOLIDS	720	MG/L
Ranch Well	11/17/2015	TOTAL DISSOLVED SOLIDS	710	MG/L
Ranch Well	12/1/2015	TOTAL DISSOLVED SOLIDS	780	MG/L
Ranch Well	11/10/2016	TOTAL DISSOLVED SOLIDS	760	MG/L
Ranch Well	5/12/2017	TOTAL DISSOLVED SOLIDS	770	MG/L
Ranch Well	10/31/2017	TOTAL DISSOLVED SOLIDS	700	MG/L
Witter_George	12/26/2013	NITRATE (as N)	4.0	MG/L
Witter_George	11/18/2015	NITRATE (as N)	4.2	MG/L
Witter_George	12/2/2015	NITRATE (as N)	4.1	MG/L
Witter_George	5/10/2017	NITRATE (as N)	4.0	MG/L
Witter_George	10/31/2017	NITRATE (as N)	3.8	MG/L
Witter_George	12/26/2013	TOTAL DISSOLVED SOLIDS	210	MG/L
Witter_George	11/18/2015	TOTAL DISSOLVED SOLIDS	220	MG/L
Witter_George	12/2/2015	TOTAL DISSOLVED SOLIDS	220	MG/L
Witter_George	5/10/2017	TOTAL DISSOLVED SOLIDS	240	MG/L
Witter_George	10/31/2017	TOTAL DISSOLVED SOLIDS	230	MG/L

Well_Name	Sample Date	Analyte	Concent.	Unit
Beaumont Basin - Appropriator Wells				
BCVWD 21	6/9/2015	NITRATE (AS NO3)	14	MG/L
BCVWD 21	7/30/2015	NITRATE (AS NO3)	15	MG/L
BCVWD 21	8/31/2015	NITRATE (AS NO3)	14	MG/L
BCVWD 21	9/30/2015	NITRATE (AS NO3)	15	MG/L
BCVWD 21	10/27/2015	NITRATE (AS NO3)	14	MG/L
BCVWD 21	11/4/2015	NITRATE (AS NO3)	15	MG/L
BCVWD 21	12/3/2015	NITRATE (AS NO3)	14	MG/L
BCVWD 21	1/6/2013	NITRITE (AS N)	< 100	MG/L
BCVWD 21	12/2/2015	NITRITE (AS N)	< 100	MG/L
BCVWD 21	12/1/2016	NITRITE (AS N)	< 0.1	MG/L
BCVWD 21	1/6/2013	POTASSIUM	1.4	MG/L
BCVWD 21	12/4/2015	POTASSIUM	1.6	MG/L
BCVWD 21	1/6/2013	SODIUM	26	MG/L
BCVWD 21	12/4/2015	SODIUM	25	MG/L
BCVWD 21	1/6/2013	SPECIFIC CONDUCTANCE	460	US
BCVWD 21	12/4/2015	SPECIFIC CONDUCTANCE	450	US
BCVWD 21	1/6/2013	SULFATE	24	MG/L
BCVWD 21	12/3/2015	SULFATE	26	MG/L
BCVWD 21	10/31/2013	TETRACHLOROETHYLENE	< 0.5	UG/L
BCVWD 21	12/3/2016	TETRACHLOROETHYLENE	< 0.5	UG/L
BCVWD 21	1/22/2015	TOTAL DISSOLVED SOLIDS	280	MG/L
BCVWD 21	12/2/2015	TOTAL DISSOLVED SOLIDS	290	MG/L
BCVWD 21	10/31/2013	TRICHLOROETHYLENE	< 0.5	UG/L
BCVWD 21	12/3/2016	TRICHLOROETHYLENE	< 0.5	UG/L
BCVWD 21	1/6/2013	TURBIDITY, LABORATORY	< 0.2	NTU
BCVWD 21	12/3/2015	TURBIDITY, LABORATORY	< 0.1	NTU
BCVWD 21	1/6/2013	ZINC	< 50	UG/L
BCVWD 21	12/4/2015	ZINC	< 50	UG/L
BCVWD 22	10/31/2013	ALKALINITY (TOTAL) AS CACO3	170	MG/L
BCVWD 22	12/2/2016	ALKALINITY (TOTAL) AS CACO3	180	MG/L
BCVWD 22	10/31/2013	ALUMINUM	< 50	UG/L
BCVWD 22	12/9/2016	ALUMINUM	< 50	UG/L
BCVWD 22	10/31/2013	ARSENIC	< 2	UG/L
BCVWD 22	12/6/2016	ARSENIC	< 2	UG/L
BCVWD 22	10/31/2013	BICARBONATE ALKALINITY	210	MG/L
BCVWD 22	12/2/2016	BICARBONATE ALKALINITY	210	MG/L
BCVWD 22	10/31/2013	CALCIUM	40	MG/L
BCVWD 22	12/9/2016	CALCIUM	40	MG/L
BCVWD 22	10/31/2013	CARBONATE ALKALINITY	< 3	MG/L
BCVWD 22	12/2/2016	CARBONATE ALKALINITY	< 3	MG/L
BCVWD 22	10/31/2013	CHLORIDE	9.2	MG/L
BCVWD 22	12/2/2016	CHLORIDE	7.6	MG/L
BCVWD 22	10/31/2013	CHROMIUM (TOTAL)	6.9	UG/L
BCVWD 22	12/7/2016	CHROMIUM (TOTAL)	7.9	UG/L
BCVWD 22	10/22/2014	CHROMIUM, HEXAVALENT	7.1	UG/L
BCVWD 22	11/12/2015	CHROMIUM, HEXAVALENT	7.2	UG/L
BCVWD 22	10/31/2013	COPPER	< 50	UG/L
BCVWD 22	12/9/2016	COPPER	< 50	UG/L

Well_Name	Sample Date	Analyte	Concent.	Unit
Beaumont Basin - Overlyier Wells or Wells From Surrounding Basins				

Well_Name	Sample Date	Analyte	Concent.	Unit
Beaumont Basin - Appropriator Wells				
BCVWD 22	10/31/2013	DIBROMOCHLOROPROPANE (DBCP)	< 0.01	UG/L
BCVWD 22	10/31/2013	FLUORIDE (F) (NATURAL-SOURCE)	0.4	MG/L
BCVWD 22	12/7/2016	FLUORIDE (F) (NATURAL-SOURCE)	0.4	MG/L
BCVWD 22	10/31/2013	HARDNESS (TOTAL) AS CACO3	170	MG/L
BCVWD 22	12/9/2016	HARDNESS (TOTAL) AS CACO3	170	MG/L
BCVWD 22	10/31/2013	HYDROXIDE ALKALINITY	< 3	MG/L
BCVWD 22	12/2/2016	HYDROXIDE ALKALINITY	< 3	MG/L
BCVWD 22	10/31/2013	IRON	< 100	UG/L
BCVWD 22	12/9/2016	IRON	< 100	UG/L
BCVWD 22	10/31/2013	LEAD	< 5	UG/L
BCVWD 22	12/6/2016	LEAD	< 5	UG/L
BCVWD 22	10/31/2013	MAGNESIUM	17	MG/L
BCVWD 22	12/9/2016	MAGNESIUM	17	MG/L
BCVWD 22	10/31/2013	MANGANESE	< 20	UG/L
BCVWD 22	12/9/2016	MANGANESE	< 20	UG/L
BCVWD 22	10/22/2013	NITRATE (as N)	1.2	MG/L
BCVWD 22	12/3/2015	NITRATE (as N)	0.8	MG/L
BCVWD 22	12/1/2016	NITRATE (as N)	3.0	MG/L
BCVWD 22	12/14/2017	NITRATE (as N)	0.9	MG/L
BCVWD 22	10/31/2013	NITRATE (AS NO3)	5.1	MG/L
BCVWD 22	12/4/2015	NITRATE (AS NO3)	3.7	MG/L
BCVWD 22	10/31/2013	NITRITE (AS N)	< 100	MG/L
BCVWD 22	12/1/2016	NITRITE (AS N)	< 0.1	MG/L
BCVWD 22	10/31/2013	POTASSIUM	1.5	MG/L
BCVWD 22	12/9/2016	POTASSIUM	1.4	MG/L
BCVWD 22	10/31/2013	SODIUM	19	MG/L
BCVWD 22	12/9/2016	SODIUM	18	MG/L
BCVWD 22	10/31/2013	SPECIFIC CONDUCTANCE	390	US
BCVWD 22	12/2/2016	SPECIFIC CONDUCTANCE	430	US
BCVWD 22	10/31/2013	SULFATE	11	MG/L
BCVWD 22	12/2/2016	SULFATE	24	MG/L
BCVWD 22	10/31/2013	TETRACHLOROETHYLENE	< 0.5	UG/L
BCVWD 22	12/3/2016	TETRACHLOROETHYLENE	< 0.5	UG/L
BCVWD 22	10/22/2013	TOTAL DISSOLVED SOLIDS	210	MG/L
BCVWD 22	12/1/2016	TOTAL DISSOLVED SOLIDS	260	MG/L
BCVWD 22	10/31/2013	TRICHLOROETHYLENE	< 0.5	UG/L
BCVWD 22	12/3/2016	TRICHLOROETHYLENE	< 0.5	UG/L
BCVWD 22	10/31/2013	TURBIDITY, LABORATORY	< 0.2	NTU
BCVWD 22	12/1/2016	TURBIDITY, LABORATORY	< 0.1	NTU
BCVWD 22	10/31/2013	ZINC	< 50	UG/L
BCVWD 22	12/9/2016	ZINC	< 50	UG/L
BCVWD 23	12/4/2015	ALKALINITY (TOTAL) AS CACO3	170	MG/L
BCVWD 23	12/8/2015	ALKALINITY (TOTAL) AS CACO3	160	MG/L
BCVWD 23	12/4/2015	ALUMINUM	< 50	UG/L
BCVWD 23	12/8/2015	ALUMINUM	< 50	UG/L
BCVWD 23	12/7/2015	ARSENIC	< 2	UG/L
BCVWD 23	12/7/2015	ARSENIC	< 2	UG/L
BCVWD 23	12/4/2015	BICARBONATE ALKALINITY	210	MG/L

Well_Name	Sample Date	Analyte	Concent.	Unit
Beaumont Basin - Overlyier Wells or Wells From Surrounding Basins				

Well_Name	Sample Date	Analyte		Concent.	Unit
Beaumont Basin - Appropriator Wells					
BCVWD 23	12/8/2015	BICARBONATE ALKALINITY		190	MG/L
BCVWD 23	12/4/2015	CALCIUM		46	MG/L
BCVWD 23	12/8/2015	CALCIUM		42	MG/L
BCVWD 23	12/4/2015	CARBONATE ALKALINITY	<	3	MG/L
BCVWD 23	12/8/2015	CARBONATE ALKALINITY	<	3	MG/L
BCVWD 23	12/3/2015	CHLORIDE		9.9	MG/L
BCVWD 23	12/4/2015	CHLORIDE		15	MG/L
BCVWD 23	12/8/2015	CHROMIUM (TOTAL)		6.3	UG/L
BCVWD 23	12/8/2015	CHROMIUM (TOTAL)		8.4	UG/L
BCVWD 23	10/22/2014	CHROMIUM, HEXAVALENT		5.4	UG/L
BCVWD 23	11/5/2015	CHROMIUM, HEXAVALENT		6.7	UG/L
BCVWD 23	12/4/2015	COPPER	<	50	UG/L
BCVWD 23	12/8/2015	COPPER	<	50	UG/L
BCVWD 23	12/4/2015	DIBROMOCHLOROPROPANE (DBCP)	<	0.01	UG/L
BCVWD 23	12/4/2015	DIBROMOCHLOROPROPANE (DBCP)		0.028	UG/L
BCVWD 23	12/6/2015	FLUORIDE (F) (NATURAL-SOURCE)		0.4	MG/L
BCVWD 23	12/6/2015	FLUORIDE (F) (NATURAL-SOURCE)		0.3	MG/L
BCVWD 23	12/4/2015	HARDNESS (TOTAL) AS CACO3		170	MG/L
BCVWD 23	12/8/2015	HARDNESS (TOTAL) AS CACO3		170	MG/L
BCVWD 23	12/4/2015	HYDROXIDE ALKALINITY	<	3	MG/L
BCVWD 23	12/8/2015	HYDROXIDE ALKALINITY	<	3	MG/L
BCVWD 23	12/4/2015	IRON	<	100	UG/L
BCVWD 23	12/8/2015	IRON	<	100	UG/L
BCVWD 23	12/7/2015	LEAD	<	5	UG/L
BCVWD 23	12/7/2015	LEAD	<	5	UG/L
BCVWD 23	12/4/2015	MAGNESIUM		14	MG/L
BCVWD 23	12/8/2015	MAGNESIUM		15	MG/L
BCVWD 23	12/4/2015	MANGANESE	<	20	UG/L
BCVWD 23	12/8/2015	MANGANESE	<	20	UG/L
BCVWD 23	6/24/2014	NITRATE (as N)		3.4	MG/L
BCVWD 23	12/3/2015	NITRATE (as N)		2.3	MG/L
BCVWD 23	12/3/2015	NITRATE (as N)		2.2	MG/L
BCVWD 23	12/4/2015	NITRATE (as N)		2.2	MG/L
BCVWD 23	12/8/2016	NITRATE (as N)		2.8	MG/L
BCVWD 23	5/24/2017	NITRATE (as N)		2.4	MG/L
BCVWD 23	6/20/2017	NITRATE (as N)		2.4	MG/L
BCVWD 23	7/19/2017	NITRATE (as N)		2.3	MG/L
BCVWD 23	8/14/2017	NITRATE (as N)		2.4	MG/L
BCVWD 23	9/12/2017	NITRATE (as N)		2.4	MG/L
BCVWD 23	11/22/2017	NITRATE (as N)		2.9	MG/L
BCVWD 23	12/11/2017	NITRATE (as N)		2.4	MG/L
BCVWD 23	6/25/2014	NITRATE (AS NO3)		15	MG/L
BCVWD 23	12/3/2015	NITRATE (AS NO3)		10	MG/L
BCVWD 23	12/4/2015	NITRATE (AS NO3)		10	MG/L
BCVWD 23	12/2/2015	NITRITE (AS N)	<	100	MG/L
BCVWD 23	12/3/2015	NITRITE (AS N)	<	100	MG/L
BCVWD 23	12/4/2015	POTASSIUM		1.6	MG/L
BCVWD 23	12/8/2015	POTASSIUM		1.7	MG/L

Well_Name	Sample Date	Analyte	Concent.	Unit
Beaumont Basin - Overlyier Wells or Wells From Surrounding Basins				

Well_Name	Sample Date	Analyte	Concent.	Unit
Beaumont Basin - Appropriator Wells				
BCVWD 23	12/4/2015	SODIUM	24	MG/L
BCVWD 23	12/8/2015	SODIUM	19	MG/L
BCVWD 23	12/4/2015	SPECIFIC CONDUCTANCE	410	US
BCVWD 23	12/4/2015	SPECIFIC CONDUCTANCE	390	US
BCVWD 23	12/3/2015	SULFATE	16	MG/L
BCVWD 23	12/4/2015	SULFATE	13	MG/L
BCVWD 23	12/4/2015	TETRACHLOROETHYLENE	< 0.5	UG/L
BCVWD 23	12/4/2015	TETRACHLOROETHYLENE	< 0.5	UG/L
BCVWD 23	12/3/2015	TOTAL DISSOLVED SOLIDS	250	MG/L
BCVWD 23	12/4/2015	TOTAL DISSOLVED SOLIDS	180	MG/L
BCVWD 23	12/4/2015	TRICHLOROETHYLENE	< 0.5	UG/L
BCVWD 23	12/4/2015	TRICHLOROETHYLENE	< 0.5	UG/L
BCVWD 23	12/3/2015	TURBIDITY, LABORATORY	< 0.1	NTU
BCVWD 23	12/4/2015	TURBIDITY, LABORATORY	< 0.1	NTU
BCVWD 23	12/4/2015	ZINC	< 50	UG/L
BCVWD 23	12/8/2015	ZINC	< 50	UG/L
BCVWD 24	12/2/2016	ALKALINITY (TOTAL) AS CACO3	160	MG/L
BCVWD 24	12/9/2016	ALUMINUM	< 50	UG/L
BCVWD 24	12/6/2016	ARSENIC	< 2	UG/L
BCVWD 24	12/2/2016	BICARBONATE ALKALINITY	190	MG/L
BCVWD 24	12/9/2016	CALCIUM	37	MG/L
BCVWD 24	12/2/2016	CARBONATE ALKALINITY	< 3	MG/L
BCVWD 24	12/2/2016	CHLORIDE	5.6	MG/L
BCVWD 24	12/7/2016	CHROMIUM (TOTAL)	7.2	UG/L
BCVWD 24	10/22/2014	CHROMIUM, HEXAVALENT	7.5	UG/L
BCVWD 24	11/12/2015	CHROMIUM, HEXAVALENT	7.7	UG/L
BCVWD 24	12/9/2016	COPPER	< 50	UG/L
BCVWD 24	12/7/2016	FLUORIDE (F) (NATURAL-SOURCE)	0.5	MG/L
BCVWD 24	12/9/2016	HARDNESS (TOTAL) AS CACO3	140	MG/L
BCVWD 24	12/2/2016	HYDROXIDE ALKALINITY	< 3	MG/L
BCVWD 24	12/9/2016	IRON	< 100	UG/L
BCVWD 24	12/6/2016	LEAD	< 5	UG/L
BCVWD 24	12/9/2016	MAGNESIUM	12	MG/L
BCVWD 24	12/9/2016	MANGANESE	< 20	UG/L
BCVWD 24	10/22/2013	NITRATE (as N)	1.6	MG/L
BCVWD 24	6/24/2014	NITRATE (as N)	1.3	MG/L
BCVWD 24	12/3/2015	NITRATE (as N)	1.4	MG/L
BCVWD 24	12/1/2016	NITRATE (as N)	1.7	MG/L
BCVWD 24	11/22/2017	NITRATE (as N)	1.7	MG/L
BCVWD 24	10/23/2013	NITRATE (AS NO3)	7	MG/L
BCVWD 24	6/25/2014	NITRATE (AS NO3)	5.8	MG/L
BCVWD 24	12/4/2015	NITRATE (AS NO3)	6.4	MG/L
BCVWD 24	12/1/2016	NITRITE (AS N)	< 0.1	MG/L
BCVWD 24	12/9/2016	POTASSIUM	1.4	MG/L
BCVWD 24	12/9/2016	SODIUM	19	MG/L
BCVWD 24	12/2/2016	SPECIFIC CONDUCTANCE	360	US
BCVWD 24	12/2/2016	SULFATE	11	MG/L
BCVWD 24	12/3/2016	TETRACHLOROETHYLENE	< 0.5	UG/L

Well_Name	Sample Date	Analyte	Concent.	Unit
Beaumont Basin - Overlyier Wells or Wells From Surrounding Basins				

Well_Name	Sample Date	Analyte	Concent.	Unit
Beaumont Basin - Appropriator Wells				
BCVWD 24	12/1/2016	TOTAL DISSOLVED SOLIDS	210	MG/L
BCVWD 24	12/3/2016	TRICHLOROETHYLENE	< 0.5	UG/L
BCVWD 24	12/1/2016	TURBIDITY, LABORATORY	< 0.1	NTU
BCVWD 24	12/9/2016	ZINC	< 50	UG/L
BCVWD 25	1/6/2013	ALKALINITY (TOTAL) AS CACO3	160	MG/L
BCVWD 25	1/6/2013	ALUMINUM	< 50	UG/L
BCVWD 25	1/6/2013	ARSENIC	< 2	UG/L
BCVWD 25	1/6/2013	BICARBONATE ALKALINITY	200	MG/L
BCVWD 25	1/6/2013	CALCIUM	43	MG/L
BCVWD 25	1/6/2013	CARBONATE ALKALINITY	< 3	MG/L
BCVWD 25	1/6/2013	CHLORIDE	7	MG/L
BCVWD 25	1/6/2013	CHROMIUM (TOTAL)	14	UG/L
BCVWD 25	10/22/2014	CHROMIUM, HEXAVALENT	11	UG/L
BCVWD 25	4/1/2015	CHROMIUM, HEXAVALENT	8.3	UG/L
BCVWD 25	8/11/2015	CHROMIUM, HEXAVALENT	11	UG/L
BCVWD 25	9/2/2015	CHROMIUM, HEXAVALENT	11	UG/L
BCVWD 25	1/6/2013	COPPER	< 50	UG/L
BCVWD 25	1/6/2013	FLUORIDE (F) (NATURAL-SOURCE)	0.3	MG/L
BCVWD 25	1/6/2013	HARDNESS (TOTAL) AS CACO3	160	MG/L
BCVWD 25	1/6/2013	HYDROXIDE ALKALINITY	< 3	MG/L
BCVWD 25	1/6/2013	IRON	< 100	UG/L
BCVWD 25	1/6/2013	LEAD	6.5	UG/L
BCVWD 25	1/6/2013	MAGNESIUM	13	MG/L
BCVWD 25	1/6/2013	MANGANESE	< 20	UG/L
BCVWD 25	1/6/2013	NITRATE (as N)	0.7	MG/L
BCVWD 25	10/22/2013	NITRATE (as N)	1.0	MG/L
BCVWD 25	5/15/2017	NITRATE (as N)	1.6	MG/L
BCVWD 25	10/23/2017	NITRATE (as N)	1.1	MG/L
BCVWD 25	1/6/2013	NITRATE (AS NO3)	3.2	MG/L
BCVWD 25	10/23/2013	NITRATE (AS NO3)	4.6	MG/L
BCVWD 25	1/6/2013	NITRITE (AS N)	< 100	MG/L
BCVWD 25	1/6/2013	POTASSIUM	1.5	MG/L
BCVWD 25	1/6/2013	SODIUM	22	MG/L
BCVWD 25	1/6/2013	SPECIFIC CONDUCTANCE	400	US
BCVWD 25	1/6/2013	SULFATE	12	MG/L
BCVWD 25	1/6/2013	TETRACHLOROETHYLENE	< 0.5	UG/L
BCVWD 25	1/6/2013	TOTAL DISSOLVED SOLIDS	220	MG/L
BCVWD 25	1/6/2013	TRICHLOROETHYLENE	< 0.5	UG/L
BCVWD 25	1/6/2013	TURBIDITY, LABORATORY	< 0.2	NTU
BCVWD 25	1/6/2013	ZINC	< 50	UG/L
BCVWD 26	1/6/2013	ALKALINITY (TOTAL) AS CACO3	140	MG/L
BCVWD 26	1/6/2013	ALUMINUM	< 50	UG/L
BCVWD 26	1/6/2013	ARSENIC	< 2	UG/L
BCVWD 26	1/6/2013	BICARBONATE ALKALINITY	170	MG/L
BCVWD 26	1/6/2013	CALCIUM	33	MG/L
BCVWD 26	1/6/2013	CARBONATE ALKALINITY	< 3	MG/L
BCVWD 26	1/6/2013	CHLORIDE	7	MG/L
BCVWD 26	1/6/2013	CHROMIUM (TOTAL)	17	UG/L

Well_Name	Sample Date	Analyte	Concent.	Unit
Beaumont Basin - Overlyier Wells or Wells From Surrounding Basins				

Well_Name	Sample Date	Analyte	Concent.	Unit
Beaumont Basin - Appropriator Wells				
BCVWD 26	10/22/2014	CHROMIUM, HEXAVALENT	14	UG/L
BCVWD 26	4/1/2015	CHROMIUM, HEXAVALENT	13	UG/L
BCVWD 26	1/6/2013	COPPER	< 50	UG/L
BCVWD 26	1/6/2013	FLUORIDE (F) (NATURAL-SOURCE)	0.4	MG/L
BCVWD 26	1/6/2013	HARDNESS (TOTAL) AS CACO3	120	MG/L
BCVWD 26	1/6/2013	HYDROXIDE ALKALINITY	< 3	MG/L
BCVWD 26	1/6/2013	IRON	< 100	UG/L
BCVWD 26	1/6/2013	LEAD	< 5	UG/L
BCVWD 26	1/6/2013	MAGNESIUM	9.7	MG/L
BCVWD 26	1/6/2013	MANGANESE	< 20	UG/L
BCVWD 26	10/22/2013	NITRATE (as N)	1.1	MG/L
BCVWD 26	10/30/2014	NITRATE (as N)	1.2	MG/L
BCVWD 26	1/6/2013	NITRATE (AS NO3)	4.3	MG/L
BCVWD 26	10/23/2013	NITRATE (AS NO3)	4.7	MG/L
BCVWD 26	1/6/2013	NITRITE (AS N)	< 100	MG/L
BCVWD 26	1/6/2013	POTASSIUM	1.4	MG/L
BCVWD 26	1/6/2013	SODIUM	26	MG/L
BCVWD 26	1/6/2013	SPECIFIC CONDUCTANCE	340	US
BCVWD 26	1/6/2013	SULFATE	8.3	MG/L
BCVWD 26	1/6/2013	TETRACHLOROETHYLENE	< 0.5	UG/L
BCVWD 26	10/30/2014	TOTAL DISSOLVED SOLIDS	213	MG/L
BCVWD 26	1/6/2013	TRICHLOROETHYLENE	< 0.5	UG/L
BCVWD 26	1/6/2013	TURBIDITY, LABORATORY	< 0.2	NTU
BCVWD 26	1/6/2013	ZINC	< 50	UG/L
BCVWD 29	1/6/2013	ALKALINITY (TOTAL) AS CACO3	150	MG/L
BCVWD 29	12/9/2016	ALKALINITY (TOTAL) AS CACO3	160	MG/L
BCVWD 29	1/6/2013	ALUMINUM	< 50	UG/L
BCVWD 29	12/15/2016	ALUMINUM	< 50	UG/L
BCVWD 29	1/6/2013	ARSENIC	< 2	UG/L
BCVWD 29	12/14/2016	ARSENIC	< 2	UG/L
BCVWD 29	1/6/2013	BICARBONATE ALKALINITY	180	MG/L
BCVWD 29	12/9/2016	BICARBONATE ALKALINITY	190	MG/L
BCVWD 29	1/6/2013	CALCIUM	42	MG/L
BCVWD 29	12/15/2016	CALCIUM	42	MG/L
BCVWD 29	1/6/2013	CARBONATE ALKALINITY	< 3	MG/L
BCVWD 29	12/9/2016	CARBONATE ALKALINITY	< 3	MG/L
BCVWD 29	1/6/2013	CHLORIDE	12	MG/L
BCVWD 29	12/9/2016	CHLORIDE	13	MG/L
BCVWD 29	1/6/2013	CHROMIUM (TOTAL)	8.7	UG/L
BCVWD 29	12/15/2016	CHROMIUM (TOTAL)	7.6	UG/L
BCVWD 29	10/22/2014	CHROMIUM, HEXAVALENT	8.1	UG/L
BCVWD 29	12/14/2017	CHROMIUM, HEXAVALENT	8	UG/L
BCVWD 29	1/6/2013	COPPER	< 50	UG/L
BCVWD 29	12/15/2016	COPPER	< 50	UG/L
BCVWD 29	12/9/2016	DIBROMOCHLOROPROPANE (DBCP)	< 0.01	UG/L
BCVWD 29	1/6/2013	FLUORIDE (F) (NATURAL-SOURCE)	0.6	MG/L
BCVWD 29	12/16/2016	FLUORIDE (F) (NATURAL-SOURCE)	0.4	MG/L
BCVWD 29	1/6/2013	HARDNESS (TOTAL) AS CACO3	170	MG/L

Well_Name	Sample Date	Analyte	Concent.	Unit
Beaumont Basin - Overlyier Wells or Wells From Surrounding Basins				

Well_Name	Sample Date	Analyte	Concent.	Unit
Beaumont Basin - Appropriator Wells				
BCVWD 29	12/15/2016	HARDNESS (TOTAL) AS CACO3	170	MG/L
BCVWD 29	1/6/2013	HYDROXIDE ALKALINITY	< 3	MG/L
BCVWD 29	12/9/2016	HYDROXIDE ALKALINITY	< 3	MG/L
BCVWD 29	1/6/2013	IRON	< 100	UG/L
BCVWD 29	12/15/2016	IRON	< 100	UG/L
BCVWD 29	1/6/2013	LEAD	< 5	UG/L
BCVWD 29	12/14/2016	LEAD	< 5	UG/L
BCVWD 29	1/6/2013	MAGNESIUM	15	MG/L
BCVWD 29	12/15/2016	MAGNESIUM	15	MG/L
BCVWD 29	1/6/2013	MANGANESE	< 20	UG/L
BCVWD 29	12/15/2016	MANGANESE	< 20	UG/L
BCVWD 29	1/6/2013	NITRATE (as N)	0.7	MG/L
BCVWD 29	10/22/2013	NITRATE (as N)	2.1	MG/L
BCVWD 29	12/8/2016	NITRATE (as N)	2.3	MG/L
BCVWD 29	12/14/2017	NITRATE (as N)	2.3	MG/L
BCVWD 29	1/6/2013	NITRATE (AS NO3)	8.2	MG/L
BCVWD 29	10/23/2013	NITRATE (AS NO3)	9.3	MG/L
BCVWD 29	1/6/2013	NITRITE (AS N)	< 100	MG/L
BCVWD 29	12/8/2016	NITRITE (AS N)	< 0.1	MG/L
BCVWD 29	1/6/2013	POTASSIUM	1.6	MG/L
BCVWD 29	12/15/2016	POTASSIUM	1.5	MG/L
BCVWD 29	1/6/2013	SODIUM	19	MG/L
BCVWD 29	12/15/2016	SODIUM	19	MG/L
BCVWD 29	1/6/2013	SPECIFIC CONDUCTANCE	390	US
BCVWD 29	12/20/2017	SPECIFIC CONDUCTANCE	400	US
BCVWD 29	1/6/2013	SULFATE	10	MG/L
BCVWD 29	12/9/2016	SULFATE	11	MG/L
BCVWD 29	1/6/2013	TETRACHLOROETHYLENE	< 0.5	UG/L
BCVWD 29	12/12/2016	TETRACHLOROETHYLENE	< 0.5	UG/L
BCVWD 29	1/6/2013	TOTAL DISSOLVED SOLIDS	280	MG/L
BCVWD 29	12/8/2016	TOTAL DISSOLVED SOLIDS	220	MG/L
BCVWD 29	1/6/2013	TRICHLOROETHYLENE	< 0.5	UG/L
BCVWD 29	12/12/2016	TRICHLOROETHYLENE	< 0.5	UG/L
BCVWD 29	1/6/2013	TURBIDITY, LABORATORY	< 0.2	NTU
BCVWD 29	12/8/2016	TURBIDITY, LABORATORY	< 0.1	NTU
BCVWD 29	1/6/2013	ZINC	< 50	UG/L
BCVWD 29	12/15/2016	ZINC	< 50	UG/L
SMWC 04	4/8/2013	ALKALINITY (TOTAL) AS CACO3	100	MG/L
SMWC 04	4/12/2016	ALKALINITY (TOTAL) AS CACO3	110	MG/L
SMWC 04	4/8/2013	ALUMINUM	< 0	UG/L
SMWC 04	4/15/2016	ALUMINUM	< 0	UG/L
SMWC 04	4/8/2013	ARSENIC	5.2	UG/L
SMWC 04	4/21/2016	ARSENIC	4.4	UG/L
SMWC 04	4/8/2013	BICARBONATE ALKALINITY	89	MG/L
SMWC 04	4/12/2016	BICARBONATE ALKALINITY	110	MG/L
SMWC 04	4/8/2013	CALCIUM	6.8	MG/L
SMWC 04	4/25/2016	CALCIUM	8.8	MG/L
SMWC 04	4/8/2013	CARBONATE ALKALINITY	16	MG/L

Well_Name	Sample Date	Analyte	Concent.	Unit
Beaumont Basin - Overlyier Wells or Wells From Surrounding Basins				

Well_Name	Sample Date	Analyte		Concent.	Unit
Beaumont Basin - Appropriator Wells					
SMWC 04	4/12/2016	CARBONATE ALKALINITY		12	MG/L
SMWC 04	4/8/2013	CHLORIDE		17	MG/L
SMWC 04	4/11/2016	CHLORIDE		17	MG/L
SMWC 04	4/8/2013	CHROMIUM (TOTAL)	<	0	UG/L
SMWC 04	4/21/2016	CHROMIUM (TOTAL)	<	0	UG/L
SMWC 04	12/9/2014	CHROMIUM, HEXAVALENT		2.7	UG/L
SMWC 04	12/7/2017	CHROMIUM, HEXAVALENT		2.3	UG/L
SMWC 04	4/8/2013	COPPER	<	0	UG/L
SMWC 04	4/15/2016	COPPER	<	0	UG/L
SMWC 04	9/23/2015	DIBROMOCHLOROPROPANE (DBCP)	<	0	UG/L
SMWC 04	4/8/2013	FLUORIDE (F) (NATURAL-SOURCE)		0.38	MG/L
SMWC 04	4/11/2016	FLUORIDE (F) (NATURAL-SOURCE)		0.41	MG/L
SMWC 04	4/8/2013	HARDNESS (TOTAL) AS CACO3		22	MG/L
SMWC 04	4/25/2016	HARDNESS (TOTAL) AS CACO3		29	MG/L
SMWC 04	4/8/2013	HYDROXIDE ALKALINITY	<	0	MG/L
SMWC 04	4/12/2016	HYDROXIDE ALKALINITY	<	0	MG/L
SMWC 04	4/8/2013	IRON	<	0	UG/L
SMWC 04	4/15/2016	IRON	<	0	UG/L
SMWC 04	4/8/2013	LEAD	<	0	UG/L
SMWC 04	4/20/2016	LEAD	<	0	UG/L
SMWC 04	4/8/2013	MAGNESIUM		1.1	MG/L
SMWC 04	4/25/2016	MAGNESIUM		1.7	MG/L
SMWC 04	4/8/2013	MANGANESE	<	0	UG/L
SMWC 04	4/15/2016	MANGANESE	<	0	UG/L
SMWC 04	4/3/2013	NITRATE (as N)		2.9	MG/L
SMWC 04	7/15/2013	NITRATE (as N)		2.9	MG/L
SMWC 04	7/14/2014	NITRATE (as N)		2.9	MG/L
SMWC 04	7/8/2015	NITRATE (as N)		4.0	MG/L
SMWC 04	4/11/2016	NITRATE (as N)		3.2	MG/L
SMWC 04	6/1/2016	NITRATE (as N)		3.0	MG/L
SMWC 04	9/2/2016	NITRATE (as N)		3.0	MG/L
SMWC 04	12/1/2016	NITRATE (as N)		4.0	MG/L
SMWC 04	3/3/2017	NITRATE (as N)		3.8	MG/L
SMWC 04	6/5/2017	NITRATE (as N)		3.1	MG/L
SMWC 04	9/14/2017	NITRATE (as N)		4.9	MG/L
SMWC 04	12/4/2017	NITRATE (as N)		3.2	MG/L
SMWC 04	4/8/2013	NITRATE (AS NO3)		13	MG/L
SMWC 04	7/16/2013	NITRATE (AS NO3)		13	MG/L
SMWC 04	7/14/2014	NITRATE (AS NO3)		13	MG/L
SMWC 04	7/8/2015	NITRATE (AS NO3)		18	MG/L
SMWC 04	4/8/2013	NITRITE (AS N)	<	0	MG/L
SMWC 04	4/11/2016	NITRITE (AS N)	<	0	MG/L
SMWC 04	4/8/2013	POTASSIUM	<	0	MG/L
SMWC 04	4/25/2016	POTASSIUM		1	MG/L
SMWC 04	4/8/2013	SODIUM		62	MG/L
SMWC 04	4/25/2016	SODIUM		61	MG/L
SMWC 04	4/8/2013	SPECIFIC CONDUCTANCE		320	US
SMWC 04	4/12/2016	SPECIFIC CONDUCTANCE		330	US

Well_Name	Sample Date	Analyte	Concent.	Unit
Beaumont Basin - Overlyier Wells or Wells From Surrounding Basins				

Well_Name	Sample Date	Analyte	Concent.	Unit
Beaumont Basin - Appropriator Wells				
SMWC 04	4/8/2013	SULFATE	16	MG/L
SMWC 04	4/11/2016	SULFATE	16	MG/L
SMWC 04	8/14/2013	TETRACHLOROETHYLENE	< 0	UG/L
SMWC 04	8/12/2016	TETRACHLOROETHYLENE	< 0	UG/L
SMWC 04	4/3/2013	TOTAL DISSOLVED SOLIDS	170	MG/L
SMWC 04	4/11/2016	TOTAL DISSOLVED SOLIDS	190	MG/L
SMWC 04	8/14/2013	TRICHLOROETHYLENE	< 0	UG/L
SMWC 04	8/12/2016	TRICHLOROETHYLENE	< 0	UG/L
SMWC 04	4/8/2013	TURBIDITY, LABORATORY	< 0	NTU
SMWC 04	4/11/2016	TURBIDITY, LABORATORY	0.3	NTU
SMWC 04	4/8/2013	VANADIUM	84	UG/L
SMWC 04	4/25/2016	VANADIUM	100	UG/L
SMWC 04	4/8/2013	ZINC	< 0	UG/L
SMWC 04	4/15/2016	ZINC	< 0	UG/L
YVWD 48	5/22/2014	ALKALINITY (TOTAL) AS CACO3	140	MG/L
YVWD 48	7/27/2017	ALKALINITY (TOTAL) AS CACO3	96	MG/L
YVWD 48	5/22/2014	ALUMINUM	< 0	UG/L
YVWD 48	7/19/2017	ALUMINUM	< 0	UG/L
YVWD 48	5/22/2014	ARSENIC	< 0	UG/L
YVWD 48	7/28/2017	ARSENIC	2.5	UG/L
YVWD 48	5/22/2014	BICARBONATE ALKALINITY	170	MG/L
YVWD 48	7/27/2017	BICARBONATE ALKALINITY	75	MG/L
YVWD 48	5/22/2014	CALCIUM	31	MG/L
YVWD 48	7/21/2017	CALCIUM	11	MG/L
YVWD 48	5/22/2014	CARBONATE ALKALINITY	< 0	MG/L
YVWD 48	7/27/2017	CARBONATE ALKALINITY	21	MG/L
YVWD 48	5/22/2014	CHLORIDE	12	MG/L
YVWD 48	7/21/2017	CHLORIDE	8.8	MG/L
YVWD 48	5/22/2014	CHROMIUM (TOTAL)	< 0	UG/L
YVWD 48	7/24/2017	CHROMIUM (TOTAL)	< 0	UG/L
YVWD 48	2/27/2013	CHROMIUM, HEXAVALENT	6.2	UG/L
YVWD 48	7/17/2017	CHROMIUM, HEXAVALENT	5.8	UG/L
YVWD 48	5/22/2014	COPPER	< 0	UG/L
YVWD 48	7/19/2017	COPPER	< 0	UG/L
YVWD 48	9/2/2015	DIBROMOCHLOROPROPANE (DBCP)	< 0	UG/L
YVWD 48	5/22/2014	FLUORIDE (F) (NATURAL-SOURCE)	0.43	MG/L
YVWD 48	7/14/2017	FLUORIDE (F) (NATURAL-SOURCE)	0.63	MG/L
YVWD 48	5/22/2014	HARDNESS (TOTAL) AS CACO3	96	MG/L
YVWD 48	7/21/2017	HARDNESS (TOTAL) AS CACO3	38	MG/L
YVWD 48	5/22/2014	HYDROXIDE ALKALINITY	< 0	MG/L
YVWD 48	7/27/2017	HYDROXIDE ALKALINITY	< 0	MG/L
YVWD 48	5/22/2014	IRON	< 0	UG/L
YVWD 48	7/19/2017	IRON	< 0	UG/L
YVWD 48	5/22/2014	LEAD	< 0	UG/L
YVWD 48	7/25/2017	LEAD	< 0	UG/L
YVWD 48	5/22/2014	MAGNESIUM	4.5	MG/L
YVWD 48	7/21/2017	MAGNESIUM	2.8	MG/L
YVWD 48	5/22/2014	MANGANESE	< 0	UG/L

Well_Name	Sample Date	Analyte	Concent.	Unit
Beaumont Basin - Overlyier Wells or Wells From Surrounding Basins				

Well_Name	Sample Date	Analyte	Concent.	Unit
Beaumont Basin - Appropriator Wells				
YVWD 48	7/19/2017	MANGANESE	< 0	UG/L
YVWD 48	2/26/2013	NITRATE (as N)	2.5	MG/L
YVWD 48	8/14/2013	NITRATE (as N)	2.2	MG/L
YVWD 48	5/20/2014	NITRATE (as N)	2.2	MG/L
YVWD 48	8/14/2014	NITRATE (as N)	2.3	MG/L
YVWD 48	8/26/2015	NITRATE (as N)	2.2	MG/L
YVWD 48	9/22/2016	NITRATE (as N)	1.8	MG/L
YVWD 48	7/14/2017	NITRATE (as N)	1.6	MG/L
YVWD 48	2/27/2013	NITRATE (AS NO3)	11	MG/L
YVWD 48	8/15/2013	NITRATE (AS NO3)	9.6	MG/L
YVWD 48	5/22/2014	NITRATE (AS NO3)	9.9	MG/L
YVWD 48	8/15/2014	NITRATE (AS NO3)	10	MG/L
YVWD 48	8/26/2015	NITRATE (AS NO3)	9.9	MG/L
YVWD 48	5/22/2014	NITRITE (AS N)	< 0	MG/L
YVWD 48	7/14/2017	NITRITE (AS N)	< 0	MG/L
YVWD 48	5/22/2014	POTASSIUM	2	MG/L
YVWD 48	7/21/2017	POTASSIUM	1.5	MG/L
YVWD 48	5/22/2014	SODIUM	36	MG/L
YVWD 48	7/21/2017	SODIUM	43	MG/L
YVWD 48	5/22/2014	SPECIFIC CONDUCTANCE	340	US
YVWD 48	7/27/2017	SPECIFIC CONDUCTANCE	260	US
YVWD 48	5/22/2014	SULFATE	16	MG/L
YVWD 48	7/14/2017	SULFATE	14	MG/L
YVWD 48	12/13/2015	TETRACHLOROETHYLENE	< 0	UG/L
YVWD 48	6/26/2016	TETRACHLOROETHYLENE	< 0	UG/L
YVWD 48	4/23/2012	TOTAL DISSOLVED SOLIDS	170	MG/L
YVWD 48	8/21/2012	TOTAL DISSOLVED SOLIDS	210	MG/L
YVWD 48	2/26/2013	TOTAL DISSOLVED SOLIDS	230	MG/L
YVWD 48	2/27/2013	TOTAL DISSOLVED SOLIDS	230	MG/L
YVWD 48	8/14/2013	TOTAL DISSOLVED SOLIDS	200	MG/L
YVWD 48	8/15/2013	TOTAL DISSOLVED SOLIDS	200	MG/L
YVWD 48	5/20/2014	TOTAL DISSOLVED SOLIDS	220	MG/L
YVWD 48	5/22/2014	TOTAL DISSOLVED SOLIDS	220	MG/L
YVWD 48	8/14/2014	TOTAL DISSOLVED SOLIDS	210	MG/L
YVWD 48	8/15/2014	TOTAL DISSOLVED SOLIDS	210	MG/L
YVWD 48	8/26/2015	TOTAL DISSOLVED SOLIDS	210	MG/L
YVWD 48	9/22/2016	TOTAL DISSOLVED SOLIDS	130	MG/L
YVWD 48	9/29/2016	TOTAL DISSOLVED SOLIDS	130	MG/L
YVWD 48	7/14/2017	TOTAL DISSOLVED SOLIDS	130	MG/L
YVWD 48	12/13/2015	TRICHLOROETHYLENE	< 0	UG/L
YVWD 48	6/26/2016	TRICHLOROETHYLENE	< 0	UG/L
YVWD 48	5/22/2014	TURBIDITY, LABORATORY	< 0	NTU
YVWD 48	7/13/2017	TURBIDITY, LABORATORY	0.4	NTU
YVWD 48	5/22/2014	VANADIUM	25	UG/L
YVWD 48	7/26/2017	VANADIUM	90	UG/L
YVWD 48	5/22/2014	ZINC	< 0	UG/L
YVWD 48	7/19/2017	ZINC	< 0	UG/L

Well_Name	Sample Date	Analyte	Concent.	Unit
Beaumont Basin - Overlyier Wells or Wells From Surrounding Basins				

Appendix F
Copy of Power Point Presentation
February 6, 2018 Regular Board Meeting
(Updated for March 28, 2018 Meeting)

Beaumont Basin Watermaster

Consolidated Annual Report and Engineering Report - FINAL

Presented by

ALDA Inc. in association with Thomas Harder & Co

February 7th, 2018 – Updated March 28th, 2018

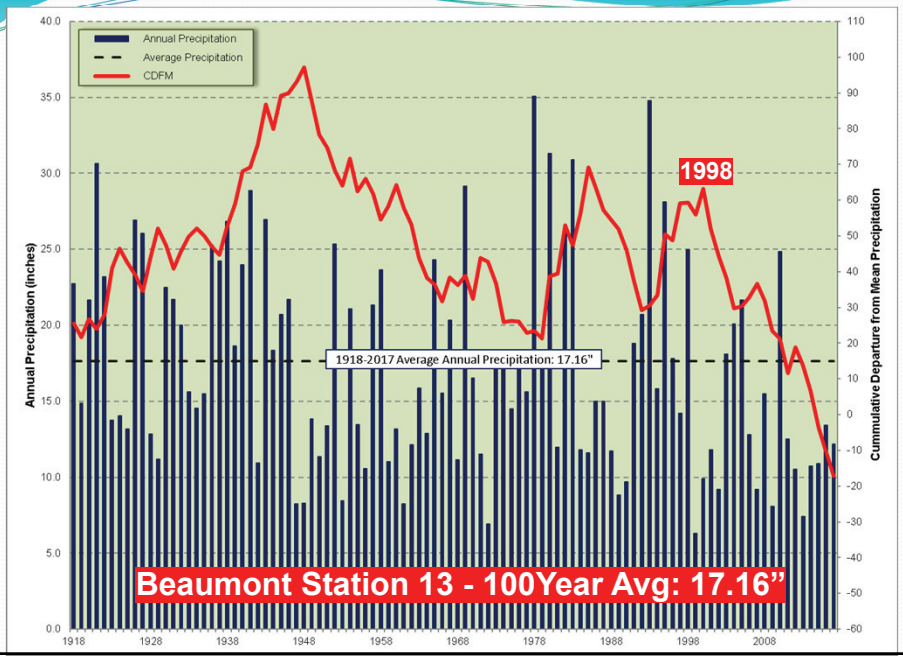
Topics of Discussion

- Resolutions
- Groundwater Production and Recharge
- Water Transfers and Adjustments of Rights
- Storage Accounting
- Operating Safe Yield for CY 2017
- Water Quality

2017 Resolutions

- Resolution 17-01 – Resolution to confirm and adopt San Gorgonio Pass Water Agency's application for Groundwater Storage, subject to stated conditions.
  - Approved June 7, 2017
  - Allows SGPWA to spread up to 10,000 ac-ft of imported water in the basin
- Resolution 17-02 – Transfers of Overlying Production Rights from Oak Valley Partners to the Yucaipa Valley Water District
  - Approved August 30, 2017
  - Allows for the transfer of all overlying rights – 1,398.86 ac-ft based on an Operating Safe Yield of 6,700 ac-ft/yr

Historical Precipitation – 1918-2017

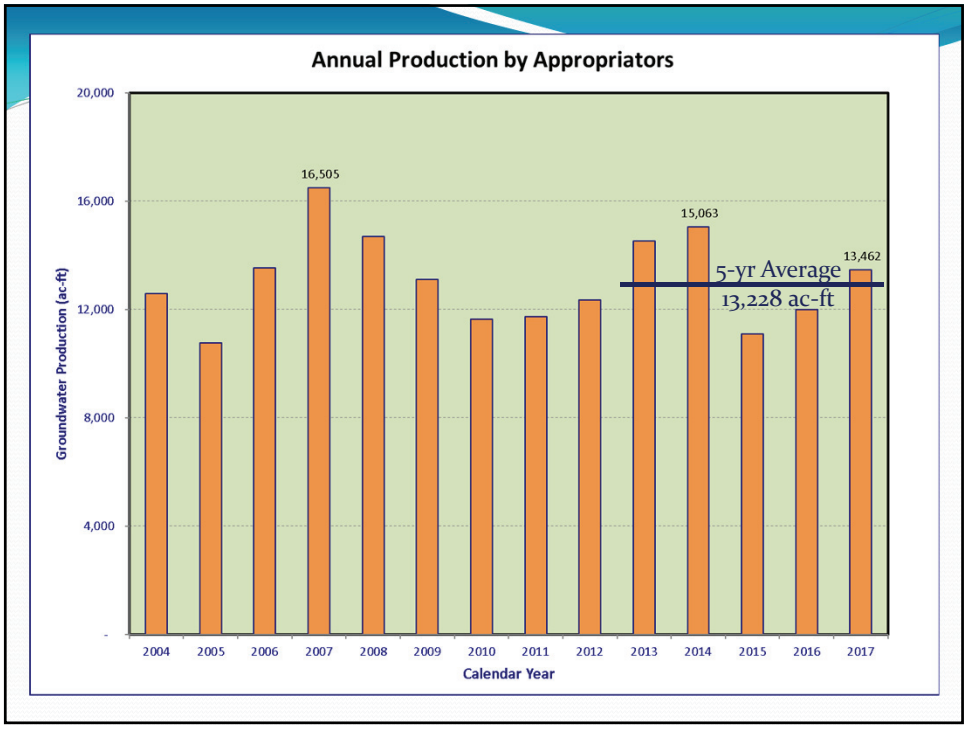


Tracking Water Production

- The Adjudication was designed to include 3 types of water rights:
  - Appropriative Water Rights
  - Overlying Water Rights
  - Overlying Water Rights that are converted to Appropriative Rights

Appropriative Water Rights

- Under the Stipulated Judgment, Appropriators do not have an established annual right
- Initially Production Right based on Temporary Overproduction
  - 160,000 ac-ft over 10 years – Ended in 2014
- Now based on
  - Transfers of underproduction from Overlying Parties
  - Transfers from other Appropriators (5-yr lag)
  - Purchase of imported water
  - A storage account is maintained



Overlying Water Rights

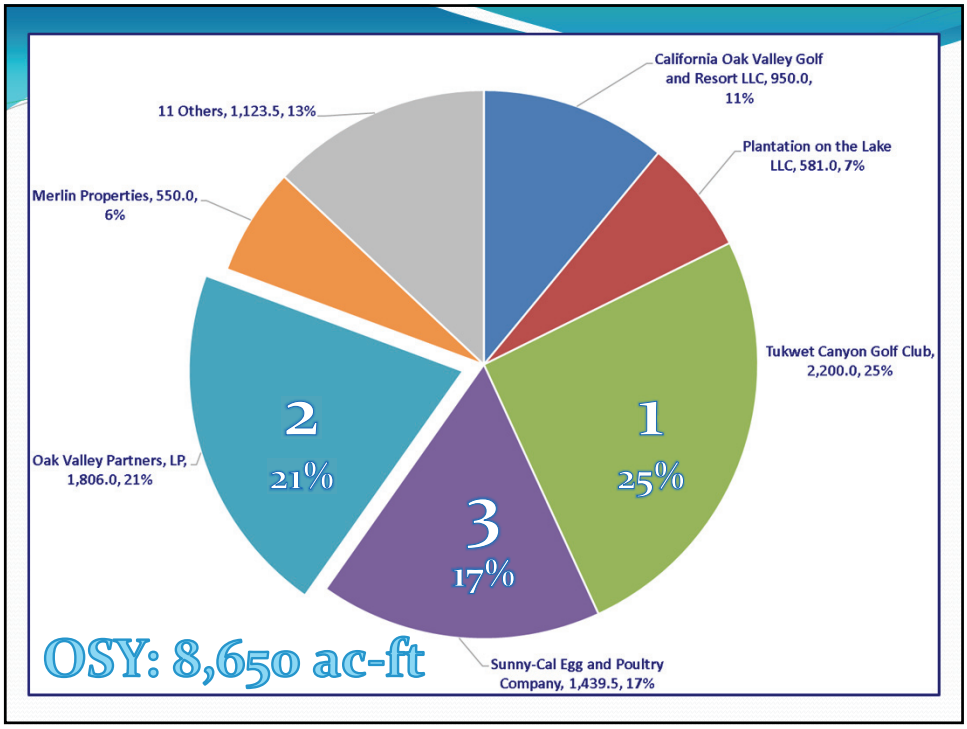
- Based on Operating Safe Yield
  - 2003 – Estimated at 8,650 ac-ft/yr
  - 2013 – Estimated at 6,700 ac-ft/yr
- Under production transferred to Appropriators with a five-year lag

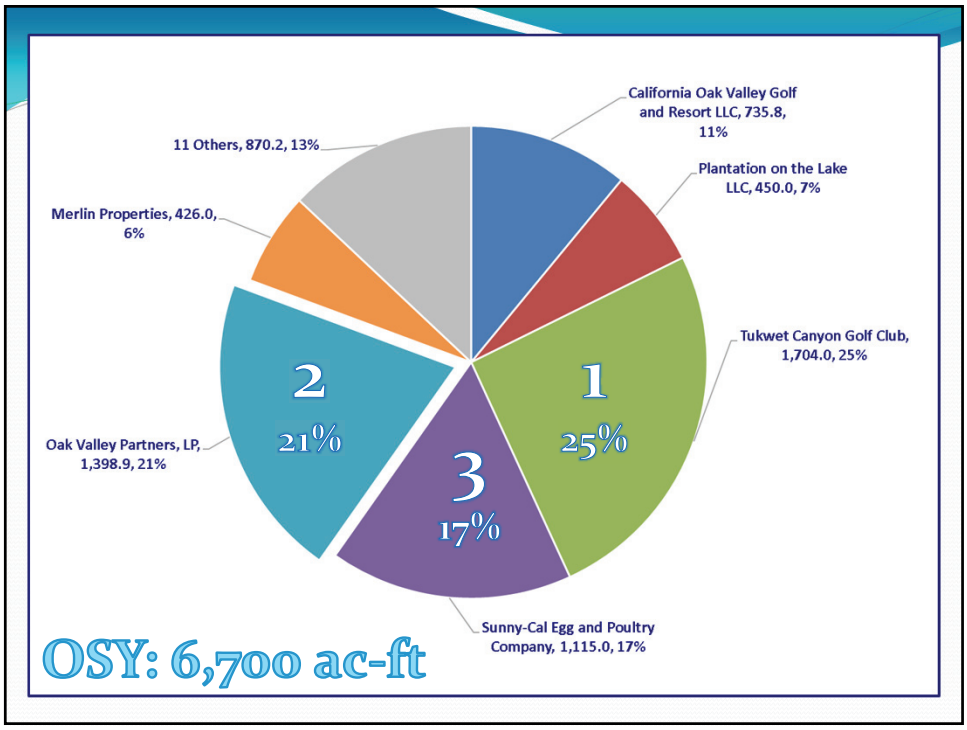
Plantation by the Lake Revisions

- Historically monthly production has been provided by Plantation from report they provide to the state
  - Report prepared in March
  - Documents production in million of gallons
- 2017 Information provided from their database
  - Documents production in million of cubic feet
- Production off by a factor of 7.48
  - 2016 – 39 ac-ft revised to 293 ac-ft

Overlying Production

2013-17 Average Production	2,186 ac-ft/yr 32.6 % of Overlying Right
2017 Production	2,405 ac-ft – (Highest since 2009) 10 percent higher than average
Highest Use of Overlying Rights	Cal Oak Valley Golf & Resort – 87% Plantation on the Lake – 79 % Sharondale Mesa HOA – 70 % Tukwet Canyon Golf Clug – 60%
Production Metered	Over 99 percent


California Oak Valley Golf and Resort LLC, 950.0, 11%
Plantation on the Lake LLC, 581.0, 7%
Tukwet Canyon Golf Club, 2,200.0, 25%
Sunny-Cal Egg and Poultry Company, 1,439.5, 17%
Oak Valley Partners, LP, 1,806.0, 21%
Merlin Properties, 550.0, 6%
11 Others, 1,123.5, 13%
1 25%
2 21%
3 17%
OSY: 8,650 ac-ft


California Oak Valley Golf and Resort LLC, 735.8, 11%
Plantation on the Lake LLC, 450.0, 7%
Tukwet Canyon Golf Club, 1,704.0, 25%
Sunny-Cal Egg and Poultry Company, 1,115.0, 17%
Oak Valley Partners, LP, 1,398.9, 21%
Merlin Properties, 426.0, 6%
11 Others, 870.2, 13%
1 25%
2 21%
3 17%
OSY: 6,700 ac-ft

Conversion of Overlying Rights to Appropriative Rights

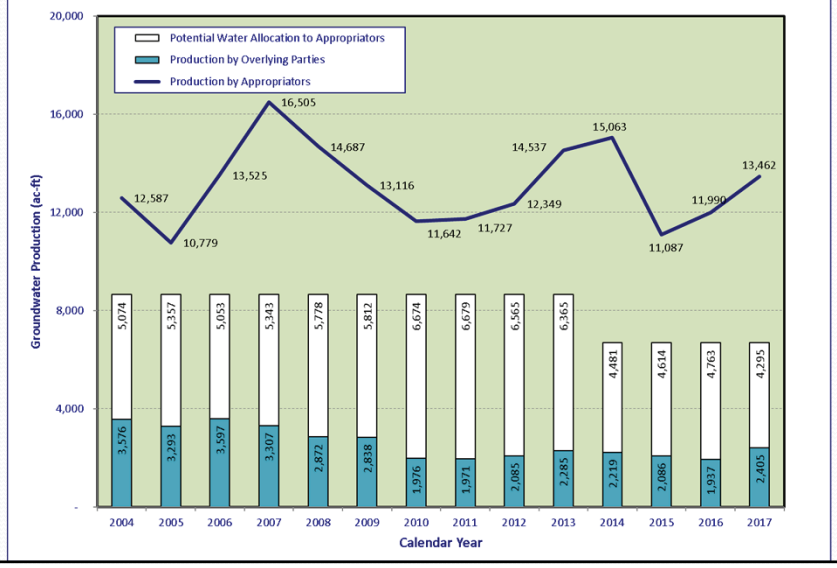
- Resolution 17-02 sets for the conversion of Oak Valley Partners LP Overlying Right to the YVWD
- Prior to entering into a development agreement for specific parcels, OVP will notify the Watermaster of the assignment of water rights to the YVWD.
- After a specific quantity of overlying water rights have been assigned to YVWD, then YVWD will provide a commitment to provide water service to the development phases of the Project.
- YVWD begins to provide water service to the Project, then the overlying water rights are converted to appropriative rights.

2017 Conversion of Underproduction to 2022

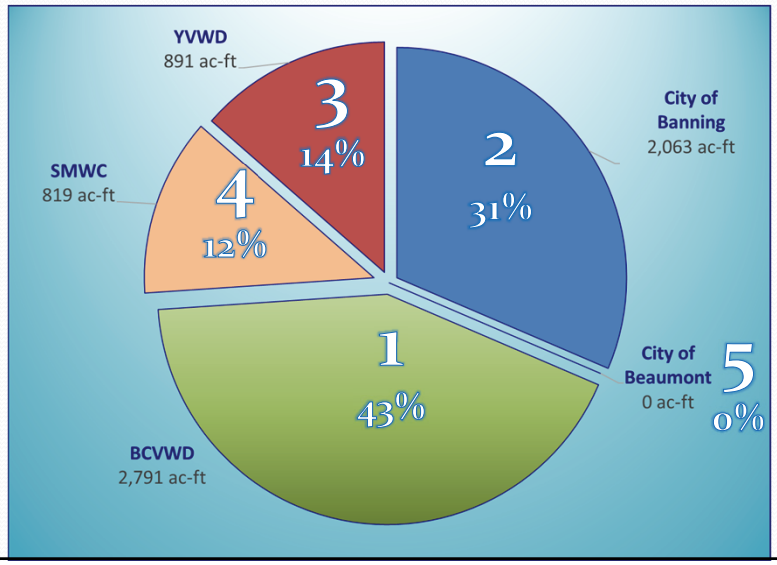
2017 Production: 2,405 ac-ft
2022 Allocation: 4,295 ac-ft

	YVWD	BCVWD	SMWC	Banning
Percent Allocation	13.58%	42.51%	12.48%	31.43%
Normal Allocation	583	1,826	536	1,350
Oak Valley Partners – Conversion of Overlying Rights to YVWD *(Based on 1,399 ac-ft of Overlying Right)*				
Allocation	1,792	1,231	361	910
Difference	**1,209**	**-595**	**-175**	**-440**

Overlying production - Highest level since 2009
Appropriators just above 5-yr average of 13,228 ac-ft



Transfers of Unused Production from Overlying Users, a Key Supply Component to Appropriators (6,565 ac-ft from CY 2012) for CY 2017.



Components of Storage

- Prior Year Balance
- Transfers from Appropriators
- Spreading of Imported Water
- Transfers of Unused Production from Overliers
- Production

2017 Accounting Balance

Appropriator	Transfers from Overliers	Imported Water Recharge	Total Inflows	Groundwater Production	Balance
City of Banning	2,063	1,350	3,413	1,444	**1,969**
City of Beaumont	0	0	0	0	**0**
BCVWD	2,791	13,590	16,381	11,651	**4,730**
SMWC	819	0	819	368	**451**
YVWD	895	-	895	0	**895**

Imported Water Spreading

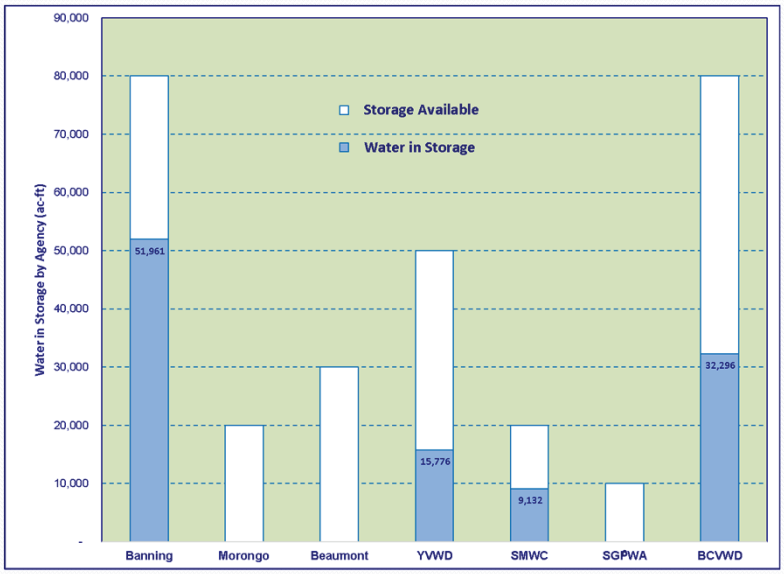
Agency	2017	2003-17
At Noble Creek Spreading Grounds		
City of Banning	1,350	12,942
Beaumont Cherry Valley WD	13,590	72,121
	14,940	**85,063**
At Little San Gorgonio Creek Spreading Ponds (Outside of the Beaumont Basin)		
San Gorgonio Pass WA	0	10,508

2017 – Storage Balance

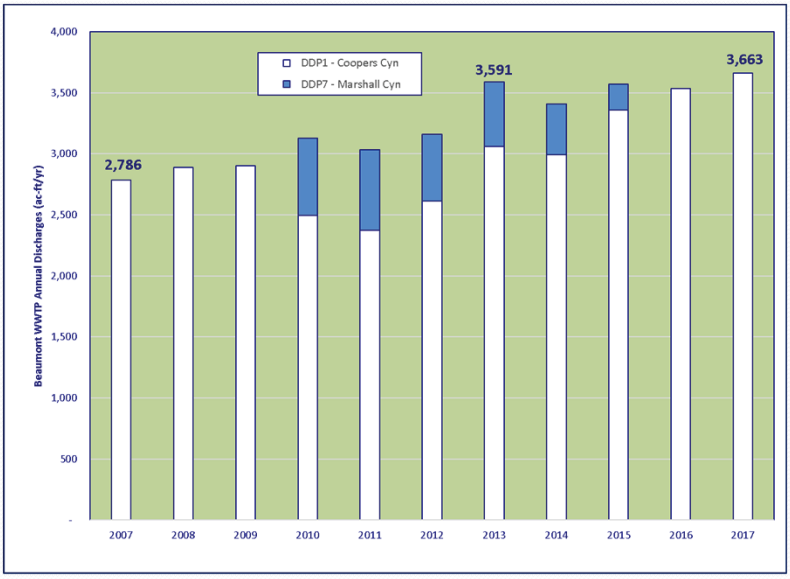
8,046 ac-ft were added to storage

Agency / Party to the Judgment	Calendar Year 2017 (ac-ft)		
	Beginning	Ending	Change
City of Banning	49,990	51,960	1,969
BCVWD	27,565	32,295	4,730
City of Beaumont	0	0	0
South Mesa Water Company	8,681	9,132	451
Yucaipa Valley Water District	14,880	15,776	895
Morongo Band of Mission Indians	0.0	0	0
San Gorgonio Pass Water Agency	0.0	0	0
TOTAL in storage	101,118	109,165	8,046

Water in Storage Accounts at 37.6% of total or 109,165 of 290,000 ac-ft Potential



Beaumont WWTP discharges have increased by over 30 percent in the last 10 years.



Operating Safe Yield Estimate

$$OSY = \frac{\text{Production} + \text{Change in Storage} + \text{GW Recharge}}{\text{Time (years)}}$$

$$OSY = \frac{15{,}867 \text{ ac-ft} + 1{,}362 \text{ ac-ft} - 14{,}940 \text{ ac-ft}}{1 \text{ Year}}$$

2017 OSY Estimate: 2,289 ac-ft

Operating Safe Yield Estimate

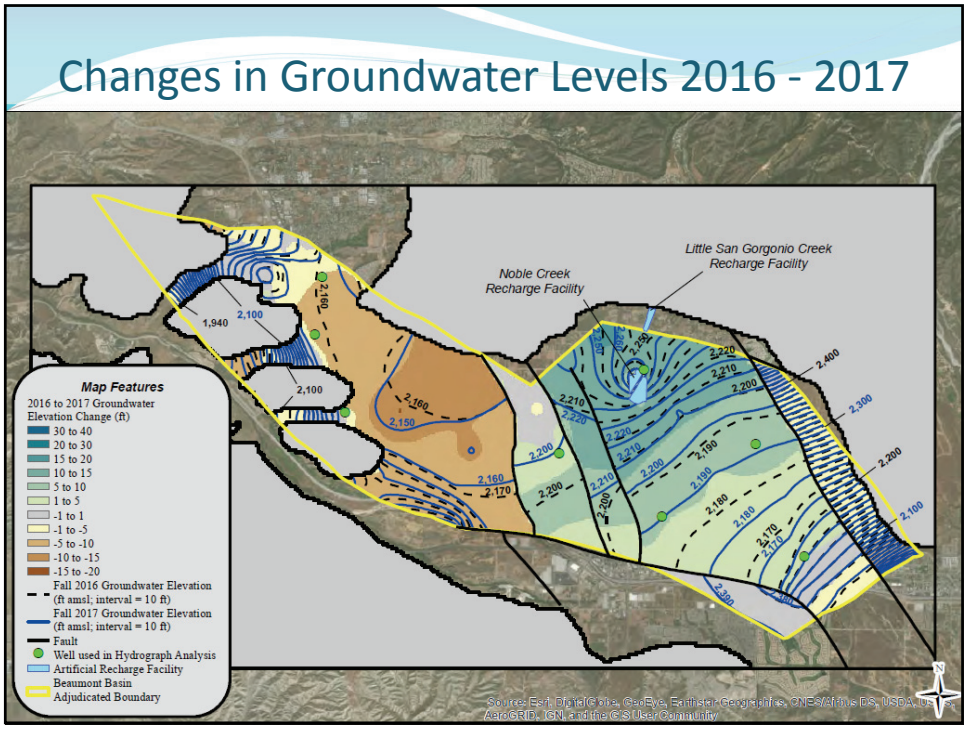
2017 Estimated OSY: 2,289 ac-ft

- 2016 – 4,200 ac-ft
- 2015 - 7,771 ac-ft
- 2014 – 7,497 ac-ft
- 2013 – 6,846 ac-ft
- 2012 - 7,497 ac-ft

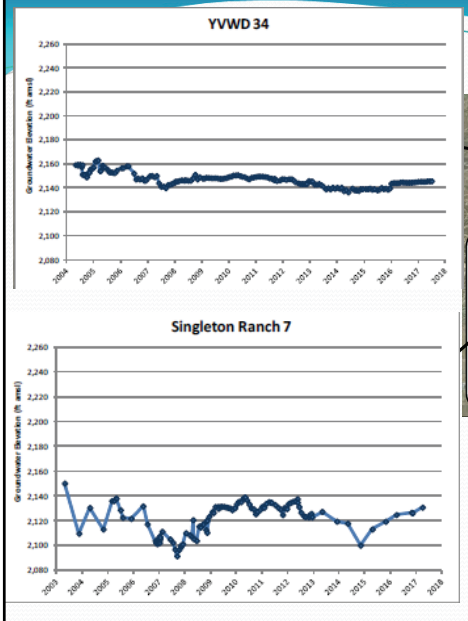
- Average 2012-2017 = 6,017 ac-ft

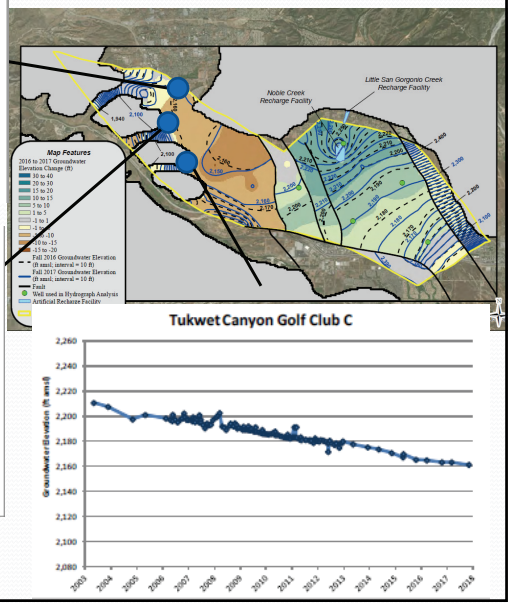
Long-Term
Safe Yield = 6,700 ac-ft/yr

Changes in Groundwater Levels 2016 - 2017

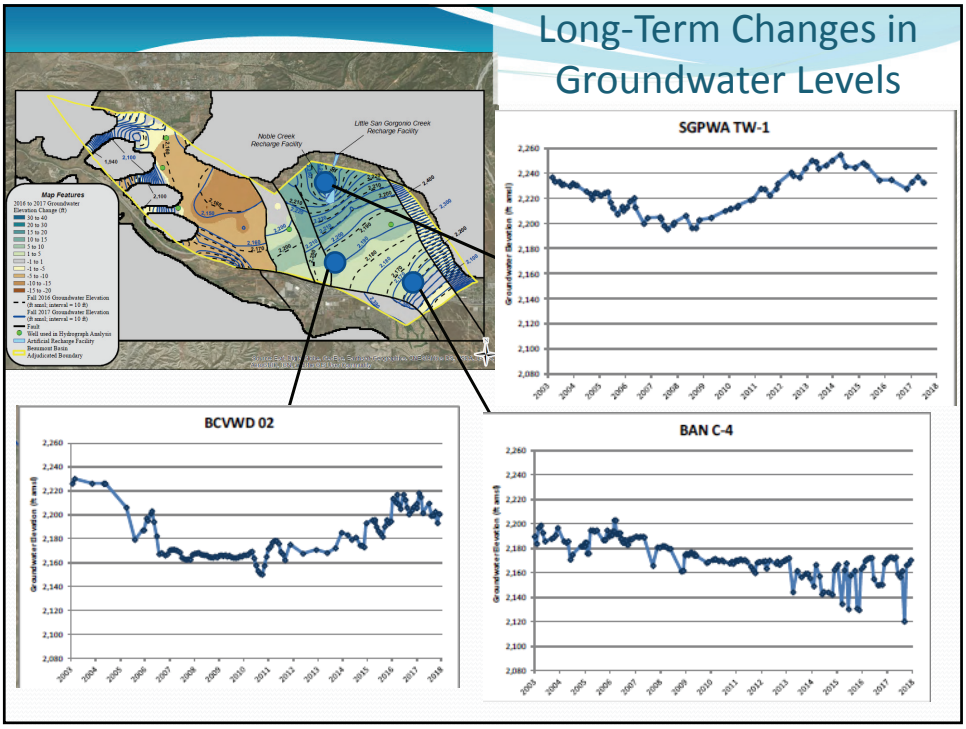


Long-Term Changes in Groundwater Levels





Long-Term Changes in Groundwater Levels



Water Quality Evaluation Sources of Information

- California Department of Public Health Database
  - Historic data available through 2017 for all wells in California
- Beaumont Management Zone Maximum Benefit Monitoring Program
  - Report prepared by Dudek (Engineering Consultant)
  - Not Available until March 2018

Water Quality Evaluation (2013-17)

- In 2017 included 26 domestic wells and 29 non-potable
- Management Zone Objectives
  - TDS and Nitrates
- State and Federal Drinking Water Standards
  - Trace Metals and Other 100+ Analytes

Database Analysis

- Database contained information on 26 drinking water wells and 29 non-potable wells
- A total of 1,612 water quality results were obtained
- Drinking Water Wells
  - Not a single Primary State or Federal standards exceeded
  - One well exceeded secondary MCL for iron (BCVWD No. 3)
  - Two wells exceeded State NL for Vanadium of 50 ug/L – SMWC No. 4 and YVWD No. 48)

Total Dissolved Solids
Average and Max Concentrations

Classification	Count	Samples	Average Concentration	Average Max Concentration
Beaumont Groundwater Basin				
Appropriators	15	42	230	245
Overliers	11	33	238	252
Other	4	14	260	273
Singleton Basin / Edgar Canyon Area				
All Wells	16	27	262	273
South Beaumont Basin				
All Wells	9	55	470	516

Nitrate (as N)
Average and Max Concentrations

Classification	Count	Samples	Average Concentration	Average Max Concentration
Beaumont Groundwater Basin				
Appropriators	15	186	2.13	2.76
Overliers	11	85	3.18	3.91
Other	4	14	1.08	1.15
Singleton Basin / Edgar Canyon Area				
All Wells	16	52	3.06	3.94
South Beaumont Basin				
All Wells	7	63	10.45	11.36

Recommendations

- Develop policy to account for groundwater storage losses, new yield, and recycled water recharge
- Develop protocol to increase accuracy and consistency of data reporting
- Develop policy to account for water transfers when Appropriator serves Overlying User

Recommendations (Continued)

- Implement meter maintenance program
- Enforced guidelines for reporting
- Enforce submittal of notice of transfers
- File Annual Reports with the Court

ALDA Inc.

In Association with

Thomas Harder & Co.
Groundwater Consulting