Beaumont Basin Watermaster

2015 Annual Report

DRAFT

2015 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**

August 2016

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August 3, 2016

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

Subject: **Beaumont Basin Watermaster**
Draft Annual Report for Calendar Year 2015

Dear Mr. Vela:

ALDA Inc., in association with Thomas Harder & Co. is pleased to submit to you, as Chairman of the Beaumont Basin Watermaster, the Beaumont Basin Watermaster Annual Report for Calendar Year 2015. This draft report expands on the earlier format of the annual report by incorporating information previously presented in the biannual Engineering Report. As such, this Annual Report summarizes all production, spreading, and storage activities that took place during calendar year 2015. Further, it documents changes in water levels and storage conditions, as well as, an estimate of the Basin Operating Safe Yield for 2015. Finally, the report presents an evaluation of water quality conditions for the 2011-2015 five year period.

We will make a formal presentation to the Watermaster Committee during the upcoming Board meeting on August 3rd, 2016. We welcome your review and comments on this report and look forward to answering any questions you may have.

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
PPCPs	Pharmaceutical and Personal Care Products
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 Twelfth 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 2015. Section 3 of the original annual report has been expanded and retitled as "Status of the Basin" to document the Administration of the Judgment as well as to provide an 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 historical water quality of selected compounds at selected wells, as well as, basin wide concentrations.

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 December 4, 2013 regular meeting of the Beaumont Basin Watermaster, elections were held; the officers to the Watermaster Committee listed below were appointed for calendar year 2014. During the February 4, 2015 regular meeting a recommendation was made for the members of the Watermaster Committee to reaffirm the existing officers or conduct nominations for the appointment of new officers; however, no action was taken.

- Mr. Duane Burk – Chairman
- Mr. George Jorritsma – Vice Chairman
- Mr. Eric Fraser – Secretary
- Mr. Joseph Zoba – Treasurer

The Committee Representatives serving each Appropriator Party during CY 2015 were as follows:

- City of Banning - Duane Burk, Director of Public Works
- City of Beaumont – Kyle Warsinski, as an alternate member
- Beaumont-Cherry Valley Water District – Eric Fraser, General Manager
- South Mesa Water Company - George Jorritsma, General Manager
- Yucaipa Valley Water District - Joseph B. Zoba, General Manager

It should be noted that Mr. Burk only served as representative of the City of Banning during the first meeting in 2015. The City of Banning was represented by its alternate member, Mr. Art Vela for the remainder of the year.

Legal counsel during CY 2015 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 2015

2.2.1 Watermaster Meetings

A total of six regular meetings were held during CY 2015 on the following dates:

- February 4, 2015
- April 1, 2015
- June 3, 2015
- August 5, 2015
- October 7, 2015
- December 2, 2015

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

2.2.2 Watermaster Committee Resolutions

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. See Technical Memorandum 15-07 for details.

2.2.3 Items Discussed in 2015

This section is simply 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 meetings held in CY 2015 along with their resulting outcome.

Items Discussed During the February 4, 2015 Regular Watermaster Committee Meeting

- Reorganization of the Beaumont Basin Watermaster Committee. [Memorandum 15-01]. No action was taken.

- Status Report on the Return Flow Analysis for Calendar Year 2013 and Calendar Year 2014 [Memorandum 15-02]. Mr. Harder reported that there is still an evaluation pending of the delivered water records within the adjudicated area to estimate return flows.

- Purchase of Water Level Monitoring Equipment for Installation at Twelve Sites in the Beaumont Basin [Memorandum 15-03]. Mr. Blandon presented the results of the equipment assessment and identified potential sites to install the water level monitoring equipment. Watermaster members approved the purchase of the equipment for a cost not to exceed

$16,000.00 and authorized an equal assessment to Watermaster members to fund the expense.

- Approval of Task Order No. 6 for the Installation of Water Level Monitoring Equipment in the Beaumont Basin, Collection of Water Level Data, and Reporting to Watermaster Committee [Memorandum 15-04]. Mr. Blandon explained the various elements of this task and after a bried discussion, Watermaster Committee approved the task for a sum not to exceed $18,490.00 and authorized an equal assessment to Watermaster members to fund the expense.

- Approval of Task Order No. 7 for the Preparation of the 2014 Consolidated Annual Report, Estimate of the Operating Safe Yield, Update of the Groundwater Model, and Associated Consulting Services [Memorandum 15-05]. Mr. Blandon and Mr. Harder explained the additional tasks to be incorporated into the consolidated report and after a brief discussion Watermaster Committee approved this task for a sum not to exceed $80,790.00.

- Status Report and Discussion Regarding the Beaumont Basin Groundwater Model and Redetermination of the Safe Yield – Final Draft Presentation [Memorandum 15-06]. Mr. Harder provided a summary of the different considerations taken when finalizing the study including imported water spreading by SGPWA, return flow analysis, groundwater outflow losses and land use impact on return flows. After a brief discussion a motion to schedule an agenda item for the redetermination of the safe yield at the next Watermaster Committee meeting was passed.

Items Discussed During the April 1, 2015 Regular Watermaster Committee Meeting

- Adoption of Resolution No. 2015-01 Adopting the Final 2013 Reevaluation of the Beaumont Basin Safe Yield Report and Redetermination of the Safe Yield of the Beaumont Basin [Memorandum 15-07]. Without additional discussion, the resolution was passed.

- Status Report on the Installation of Water Level Monitoring Equipment at Twelve (12) Sites in the Beaumont Basin [Memorandum 15-08]. A status report was presented, questions answered, and feedback from the Committee members provided.

- Correction of the Supplemental Water Recharge Allocation for Calendar Year 2013 [Memorandum 15-09]. The corrections associated with fiscal year reporting, as used in the past, to calendar year reporting were explained by Mr. Blandon. This item was for information purposes only.

Items Discussed During the June 3, 2015 Regular Watermaster Committee Meeting

- Status Report on the Installation of Water Level Monitoring Equipment at Twelve (12) Sites in the Beaumont Basin [Memorandum 15-10]. A status report was presented, questions answered, and feedback from the Committee members provided.

- Response to Questions Asked About Groundwater Production Over and Above Safe Yield in the Beaumont Basin [Memorandum 15-11]. Mr. Blandon provided an initial explanation to this question and answered additional questions by members of the public.

- Discussion Regarding the Allocation of Unused Overlying Production to Appropriator Parties [Memorandum 15-12]. Minutes for the June 3, 2015 meeting were not available.

- Draft Budget for Fiscal Year 2015-2016 [Memorandum 15-13]. A draft budget was presented for consideration at the August 5, 2015 Watermaster Committee meeting.

Items Discussed During the August 5, 2015 Regular Watermaster Committee Meeting

- Proposed Budget for Fiscal Year 2015-16 [Memorandum No. 15-14]. The budget was presented by Member Zoba; however, no formal action was taken as the discussion was moved to the October 7, 2015 meeting.

- Evaluation of Groundwater Conditions and Operating Safe Yield for 2014 [Memorandum No. 15-15]. Mr. Harder presented a summary of the groundwater conditions and Operating Safe Yield that were presented in the Annual Report. Mr. Harder addressed questions and indicated his concerns for a widening discrepancy in storage levels in the northwest portion of the modeled area.

- Presentation of the Consolidated Annual Report and Engineering Report for Calendar Year 2014 [Memorandum No. 15-16]. Mr. Blandon presented information from the report including accomplishments of the Committee in 2014, groundwater conditions, production, and recharge, transfers and adjustments of rights, accounting of storage, and water quality in the basin.

- Proposed Groundwater Storage Agreement for the Morongo Band of Mission Indians [Memorandum No. 15-17]. Several presentations were initially made on this proposed groundwater storage agreement, starting with the Tribe's engineers, Mr. Steven Johnson of Stetson Engineers, Inc., followed by the Tribe's legal counsel, Mr. Scott Summers, and Mr. Harder, as part of the Watermaster Committee engineering support team. Mr. Harder raised significant concerns regarding accounting methodology of water losses, water quality, and the lack of permeability of the bedrock formation in the proposed area of recharge. After a significant discussion on the proposed recharge project, a motion to continue discussion on this issue at the October 7, 2015 meeting was passed. As part of this motion, additional information from the Tribe, including the development of a work plan, was requested.

- Overview of Oak Valley Production Wells and Proposed Adjustments to Historical Groundwater Production [Memorandum No. 15-18]. Mr. Blandon stated that the Final Annual Report for 2014 be revised to reflect the significant changes in groundwater production from the Oak Valley Partners production wells.

- Status Report on the Installation of Water Level Monitoring Equipment at Twelve (12) Sites in the Beaumont Basin [Memorandum 15-19]. A status report was presented and questions answered. Mr. Blandon indicated that additional sites needed to be identified to increase the number of monitoring sites to 18.

- Discussion Regarding Overlying Users Revised Production Rights [Memorandum No. 15-20]. Mr. Montoya recommended that the Committee lodge the 2014 Safe Yield Study with the Riverside County Superior Court to show that the Committee is meeting its central

obligation under the Judgment and to put Appropriator and Overlying parties on notice of the study as the Overlying users may have issues to raise in court in regards to the study findings. A motion was passed to direct legal counsel to file the report with the court.

Items Discussed During the October 7, 2015 Regular Watermaster Committee Meeting

- Status Report on Water Level Monitoring throughout the Beaumont Basin [Memorandum 15-21]. Mr. Blandon gave a status report of the water level conditions in the Beaumont Basin.

- Task Order No. 6 – Water Level Monitoring for 2015 Reallocation of Funds to Acquire Four Additional Monitoring Probes [Memorandum No. 15-22]. Mr. Blandon provided an accounting to date for this task and explained that $3,000.00 will be available from this task that could be used to acquire additional monitoring equipment. A motion to reallocate $3,000.00 from this task to acquire additional probes was passed.

- Discussion Regarding Task Order No. 8 with ALDA Inc. for On-Call Engineering Services [Memorandum 15-23]. Mr. Blandon provided an overview of this task before a motion to approve this task order for a sum not to exceed $20,000.00 was passed.

- Adoption of the 2014 Consolidated Annual Report and Engineering Report [Memorandum 15-24]. Adoption of this report was postponed until the December 2nd , 2015 meeting based on Mr. Blandon's recommendation to address the issues of overlying water rights and the transfer of unused production from Oak Valley Partners.

- Independent Account Financial Report of Agreed-Upon Procedures for the Beaumont Basin [Memorandum 15-25]. After a brief discussion, a motion was introduced to receive and file this financial report. Motion was passed.

- Consideration of the Proposed Budget for Fiscal Year 2015-16 [Memorandum No. 15-26]. Member Zoba gave a presentation of the proposed budget including proposed amendments. The proposed budget, as amended, was approved.

- Morongo Band of Mission Indians – Proposed Groundwater Storage Agreement – Revised Storage Location [Memorandum No. 15-26]. Mr. Blandon presented a new groundwater storage project proposal from the Tribe, which included the relocation of the recharge facility. After long discussion by Members of the Committee, legal counsel, engineering support staff, and members of the tribe regarding water rights, water quality, basin objectives, and accounting methodology, motions were introduced and amended twice, but not formal vote took place. Finally, Member Zoba introduced a motion to request a copy of the environmental study for the proposed project. Motion was passed.

Items Discussed During the December 2, 2015 Regular Watermaster Committee Meeting

- Status Report on Water Level Monitoring throughout the Beaumont Basin [Memorandum 15-28]. Mr. Blandon gave a status report of the water level conditions in the Beaumont Basin and fielded questions by members of the Committee.

- Adoption of the 2014 Consolidated Annual Report and Engineering Report [Memorandum 15-29]. After a brief presentation by Mr. Blandon, Member Zoba introduced a motion to receive and file the 2014 Consolidated Annual Report; the motion was passed.

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 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 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. The 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.

As of December 31, 2015, the total storage allowed stands at 280,000 ac-ft; storage limits by participant are as follows:

- 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

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.

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 2015.

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 the purpose of 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 A.

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 2015 operations.

2.6.1 Budget

The budget for Fiscal Year 2015 was initially approved at the June 4, 2014 Watermaster Committee meeting. The approved budget provided funding for Administrative expenses in the

amount of $113,050, an increase of $5,990.00 or 5.6 percent from the prior year of $107,060.00.

The approved budget also provided funding for Special Projects in the amount of $25,000.00. This is a significant decreased from the $180,710.00 approved for Fiscal Year 2013-14 as the basin model update and the Safe Yield studies were completed.

The Special Project expenses to fund the completion of the Groundwater Model Update and Redetermination of Safe Yield were primarily funded from carryover funds from FY 2014 ($10,000.00). In addition, $20,610.00 was collected from the water agencies based on their share of the operating safe yield.

The proposed budget for FY 2016 includes $128,050.00 for administrative expenses; no budget was allocated for special projects. Funding for administrative expenses is expected to be cover from a carryover of $15,000.00 and water agencies contributions of $22,610.00 each.

The following table presents a comparison between the amended final budgets for FY 2013-14, approved final budget for FY 2014-15 and proposed budget for FY 2015-16.

Operating Expense	*FY 2013-14 Amended Final Budget*	*FY 2014-15 Approved Budget*	*FY 2015-16 Proposed Budget*
Administrative Expenses			
Bank Fees and Interest	$ 60.00	$ 50.00	$ 50.00
Miscellaneous and Meetings	$ 500.00	$ 500.00	$ 500.00
Acquisition/computation & Annual Report	$ 55,000.00	$ 75,000.00	$ 85,000.00
Annual Audit	$ 2,000.00	$ 2,500.00	$ 2,500.00
Engineering Services	$ 17,000.00	$ 10,000.00	$ 10,000.00
Legal Expenses	$ 22,500.00	$ 15,000.00	$ 20,000.00
Reserve Funding	$ 10,000.00	$ 10,000.00	$ 10,000.00
	$ 107,060.00	**$ 113,050.00**	**$ 128,050.00**
Special Project Expenses			
Engineering	$ 189,930.00	$ 22,500.00	$ 0.00
Litigation	$ 2,500.00	$ 2,500.00	$ 0.00
	$ 192,430.00	**$ 25,000.00**	**$ 0.00**
Total Operating Expense	**$ 299,490.00**	**$ 138,050.00**	**$ 128,050.00**

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 2015, prepared by Rogers, Anderson, Malody, and Scott, LLP, was presented at the October 7, 2015 Watermaster meeting. A copy of the audit is included under Appendix B.

Their independent auditors' report of the Watermaster's financial statements is that they fairly present the organization's financial position in all material aspects and its operations were conducted in conformity with generally accepted accounting principles.

At the beginning of the 2014-2015 fiscal year, the Beaumont Basin Watermaster had unrestricted net assets in the amount of $22,057.00. During the fiscal year, the Watermaster collected $227,378.00 in revenues and expended $188,125.00. As of June 30, 2015, the Watermaster had unrestricted net assets in the amount of $61,310.00.

No recommendations were provided as part of this Independent Accountant's Report; the results of this report disclosed no instances of non-compliance or other matters that are required to be reported under Government Auditing Standards.

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 2015 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 17.32 inches over the 100-year period between 1916 and 2015. On the average, 70 percent of precipitation falls during the winter between December and March.

Figure 3-1 illustrates annual precipitation at this station for the reporting period 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 1913-46 period; average precipitation during this period was 20.5 inches or close to 16 percent above the long-term average. Other above average precipitation periods include the 1977-83 and 1990-98 periods. Conversely, down trending periods indicate periods of below average precipitation as in the 1947-77 period when average precipitation was only 15.2 inches. The 1984-90 period with seven consecutive years of below average precipitation was also characterized as a dry period.

Currently, the Basin is in a dry period that began in 1999. During this 16-year period three of the five years with the lowest precipitation ever recorded at Station 13 have occurred; 6.3 inches (lowest ever) in 1999, 7.40 inches 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 long-term average for the Basin.

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 during Fiscal Year 2013.

Annual production by well for each of the five Appropriative Parties for the CY 2003-2010 period is summarized in Table 3-1 while monthly production for the last five years of operation (CY 2011-15) are presented in a series of tables starting with Table 3-1A for CY 2011 and continuing on an annual basis through Table 3-1E for CY 2015. These tables also include the overall Temporary Surplus Allocation and the amount of unused production that is eligible for storage for each Appropriator. 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 2015, Appropriators pumped a combined amount of 11,087 ac-ft of groundwater from the Beaumont Basin representing the second lowest production year since the inception of the Judgment. Groundwater production by Appropriators in CY 2015 was 26 percent lower than 2014 production and 24 percent lower than 2013 production.

Groundwater production for all individual agencies in CY 2015 was significantly lower than in CY 2014. The City of Banning and SMWC production dropped by 35 and 33 percent respectively. BCVWD production was lowered by 17 percent while production by YVWD was only 10 percent of 2014. The reduction in groundwater production may be associated with conservation requirements as dictated by the State of California in late 2014.

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 22 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 2015.

The remaining wells, operated by smaller producers, did not have meters for some or most of 2015 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 2015 Annual Report uses the updated method developed by WEI as detailed in Appendix C.

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 2003-10; Table 3-2B through 3-2F summarize monthly production by Overlying well for CY 2011 through CY 2015. 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.

During CY 2015, Overlying Producers produced an estimated 1,838 ac-ft; this level of production is the lowest on record since accounting began in 2003. Part of the reason is related to revisions made to production totals by Oak Valley Partners in CY 2015. Production by this Overlying Party has been reported in the past at approximately 310 ac-ft per year under the assumption that a significant amount of water has been produced for agricultural purposes. A field visit to the property conducted in early April 2015 revealed that agricultural production has not taken place in that area since 2008. In addition, two of the four wells have been abandoned and the other two produce minimally; annual production has been conservatively estimated at 2.5 ac-ft/yr. Production quantities from this Overlying Producer were revised for CY 2008 through 2015.

3.2.3 2003-2015 Annual Production Summary

Annual production for all Appropriators and Overlying Parties since 2003 is summarized in Table 3-3 on a calendar year basis. Production from 2003 only includes production for the second half of the year. Since July 2003, a total of 198,340 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 89 percent recorded in CY 2014 and has averaged 86.8 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 2015 was only 12,925 ac-ft; the second lowest recorded since the inception of the judgment. Of this amount, 11,087 ac-ft were pumped by Appropriators representing close to 86 percent of total production. 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 and peaked in CY 2011 at 7,979 ac-ft. Spreading of imported water slightly decreased through CY 2013 to 7,403 ac-ft; however, significant lower amounts of imported water spreading for BCVWD were documented for CY 2014 (4,405 ac-ft) and 2015 (2,773 ac-ft). A total of 49,212 ac-ft of imported water have been spread by the BCVWD since 2006 as illustrated in Table 3-4. Values provided by the SGPWA for CY 2015 need to be checked against information to be provided by the BCVWD.

The City of Banning began purchasing imported water for recharge at the BCVWD's Noble Creek facility in July 2008 and has since recharged 10,115 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 the amount spread during the previous two years.

In addition to imported water deliveries to 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 10,490 ac-ft averaging 874 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 and 2015 were basically non-existent as less than 26 ac-ft were spread in those two years combined. At the present time, the SGPWA does not have a storage agreement with the Beaumont Basin Watermaster.

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. 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; in which case, this would be considered a new source of supplemental

water for which Beaumont should receive credit pursuant to the storage agreement with the Watermaster and Section 5.4 of the Rules and Regulations. Technical documentation of the amount of recycled water that reaches and recharges the Beaumont Basin would need to be prepared by Beaumont and considered and accepted by Watermaster.

In CY 2015, the City of Beaumont discharged an estimated 3,360 ac-ft of recycled water at DP-001 in Cooper's Creek and an estimated 212 ac-ft at DP-007. Recycled water discharges in CY 2015 were approximately 12 percent higher than in CY 2014. Monthly discharges at DP-001 vary slightly seasonally and averaged 3.00 mgd in CY 2015; conversely, discharges at DP-007 vary significantly during the year from 0.00 mgd in the September through December 2015 period to a high of 0.38 mgd in June 2015. 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 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 February 20, 2003.

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 redetermined 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 redetermined 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 2011-15 five year period for each user. Annual average groundwater production during this period for all Overlying Producers combined was estimated at 1,964 ac-ft/yr; representing approximately 30 percent of the revised safe yield. Individually, none of the Overlying Producers produced more than their allowable production rights during this five year period; Sharondale Mesa Owners Association produced the

highest percentage of their respective allocation at 84.8 percent followed by California Oak Valley Golf and Resort LLC at 76.9 percent and Tukwet Canyon Golf Club at 59.8 percent.

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 2007. The purchase agreements and transfers between these agencies are on file with Watermaster. Water transfers between Appropriators were not reported during CY 2015.

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.

The BCVWD has given verbal notification to Watermaster that is providing potable service to certain Overlying Parties; however, formal notification by either party for the adjustment of water rights has not been received by Watermaster. A formal notification will be required to complete the transfer of water rights from one or more Overlying Producers to BCVWD; the notification should be retroactive to the time service began. Upon formal completion of the transfer, Watermaster will be required to recalculate the allocation of unused Overlying Water to the Appropriators, as documented in Section 7 of the Rules and Regulations.

In early 2013, BCVWD provided detailed documentation of all the parcels now served by the District that were previously owned by Overlying Users including parcels owned by Oak Valley Partners, Southern California PGA, and Plantation on the Lake. The accounting of this information has been challenged by the Morongo Band of Mission Indians representatives. As of the time of this writing, the accuracy of the information has not been corroborated and it is therefore not included in this report.

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 2015 were based on unused production from Overlying Users in CY 2010. 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 transferred to Appropriators for CY 2008. Table 3-7 summarizes the volume of unused Overlying water for CY 2003 through CY 2015. 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. Transfers decreased significantly in CY 2014 and CY 2015 to slightly over 4,800 ac-ft/yr as a result of reduced Overlying allocations resulting from the new basin Safe Yield of 6,700 ac-ft/yr.

Table 3-8 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 2010, estimated at 6,673 ac-ft, is allocated to Appropriators during CY 2015. Unused Overlying production during CY 2015, estimated at 4,862.4 ac-ft and subject to revision, would be allocated to Appropriators during CY 2020.

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 anticipated to be developed after the completion of the groundwater model update of the Beaumont Basin in CY 2015.

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 3-9 represents the consolidation of each Appropriator's storage account from CY 2003 through CY 2015. 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 2014, an overall total of 96,575 ac-ft of water were stored in the Basin for future use; this total was reduced in CY 2015 by 946 ac-ft to a cumulative total of 95,629 ac-ft. The amount of water in storage has decreased over the last two years due to the expiration of the Temporary Surplus allocation at the end of FY 2013. As of the end of CY 2015 the amount of water in storage for each party with a storage account is as follows:

City of Banning	47,887.48 ac-ft
BCVWD	25,567.57 ac-ft
City of Beaumont	0.00 ac-ft
South Mesa Water Company	8,198.43 ac-ft
Yucaipa Valley Water District	13,976.43 ac-ft
Morongo Band of Mission Indians	0.00 ac-ft
TOTAL in storage	95,628.92 ac-ft

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 2014 and 2015 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 2015. A model-generated groundwater contour map was created for Fall 2015 and compared to the model-generated Fall 2014 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 2014 and 2015 are shown on Figures 3-5 and 3-6, respectively.

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. 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 2014 and 2015.

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 2014 groundwater surface from the 2015 groundwater surface. In the northwest portion of the basin (YVWD 34 and Singleton Ranch 7), groundwater levels have remained stable in YVWD 34, but have increased since November 2014 in Singleton Ranch 7. At Tukwet Canyon Golf Club C, groundwater levels have been steadily declining each

year. In the north central portion of the basin (TW-1), groundwater levels increased slightly before declining. In the south-central portion of the basin, groundwater levels at Oak Valley No. 1 decreased in 2015. At Beaumont-Cherry Valley Water District (BCVWD) Well No. 2, groundwater levels rose in March 2015 to the highest levels in eight years, declined in the summer, and then rose again in September. At Banning Well C-4 (southeast Beaumont Basin), groundwater levels have rising and falling throughout 2015. However, the overall trend in this well since 2013 is downward. Groundwater levels in the northeast portion of the basin (335714116565002) have been trending upward since 2010.

3.6.2 Analysis of Change in Groundwater Storage

Basin-wide change in groundwater storage between Fall 2013 and Fall 2015 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 2014 and Fall 2015 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 a decrease in groundwater storage within the adjudicated basin of approximately 1,679 acre-ft between Fall 2014 and Fall 2015.

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 2015 was 12,926 ac-ft (see Table 3-3). Total artificial recharge in calendar year 2015 was 3,476 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:

$$OSY = \frac{12{,}926 + (-1{,}679) - 3{,}476}{1} = 7{,}771 \text{ ac-ft}$$

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 2014.

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 acre-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 well 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.

Since the completion of the previous report, Watermaster is in the process of conducting additional groundwater studies, expected to be completed by early 2015, that may be used to address some of the recommendations from previous years including:

- The development of a methodology to account for new yield from capturing local stormwater in the basin.
- The development of a methodology to account for groundwater storage losses in the basin resulting from the spreading of additional water sources.
- The development of a methodology to account for recycled water recharge.

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 inconsistencies 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.
- Watermaster has not filed its annual reports with the Court. The Watermaster Board should make a formal determination as to whether the annual reports should be filed with the Court.

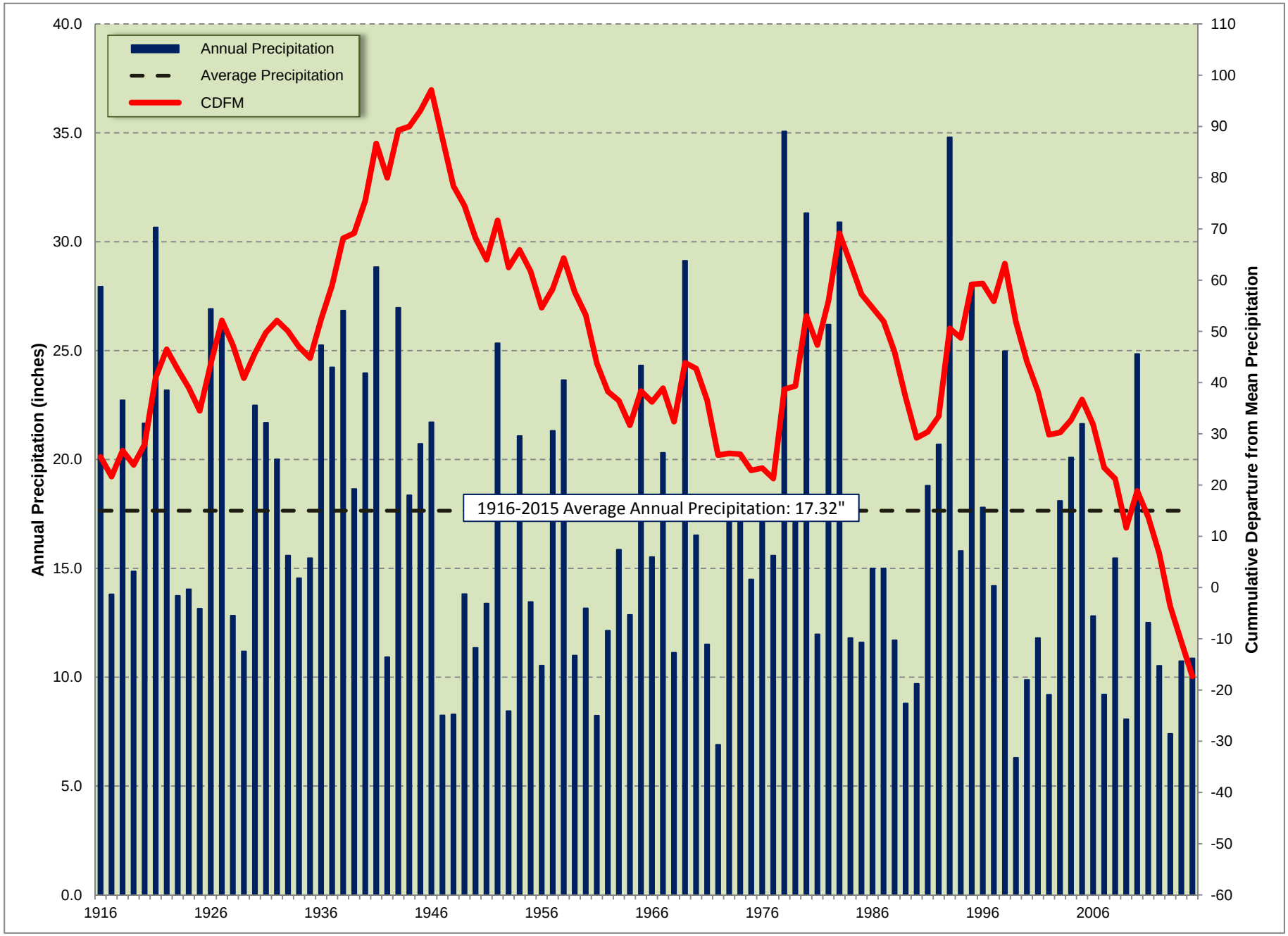
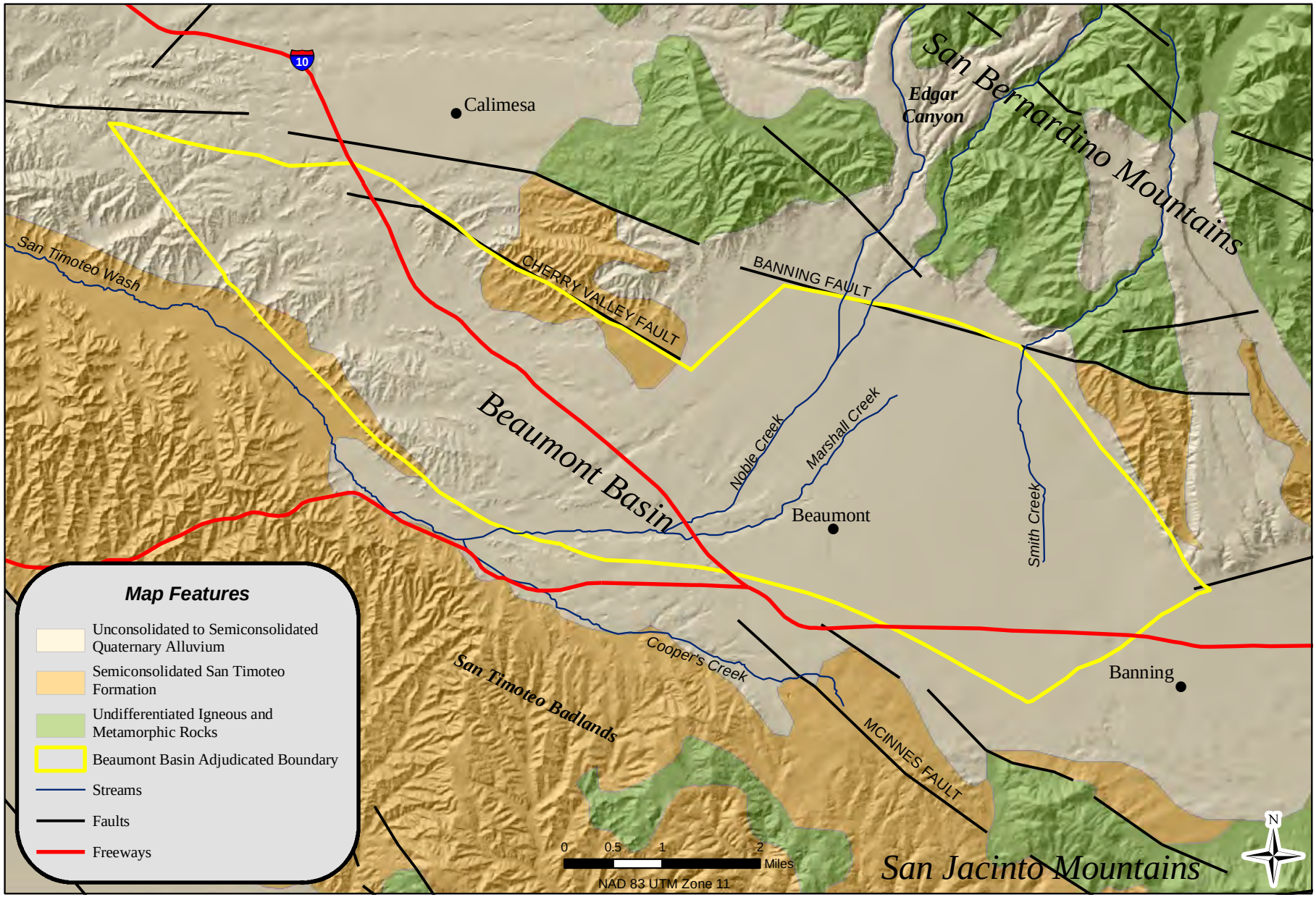


Figure 3-1
Annual Precipitation with Cummulative Departure from the Mean (1916-2015)



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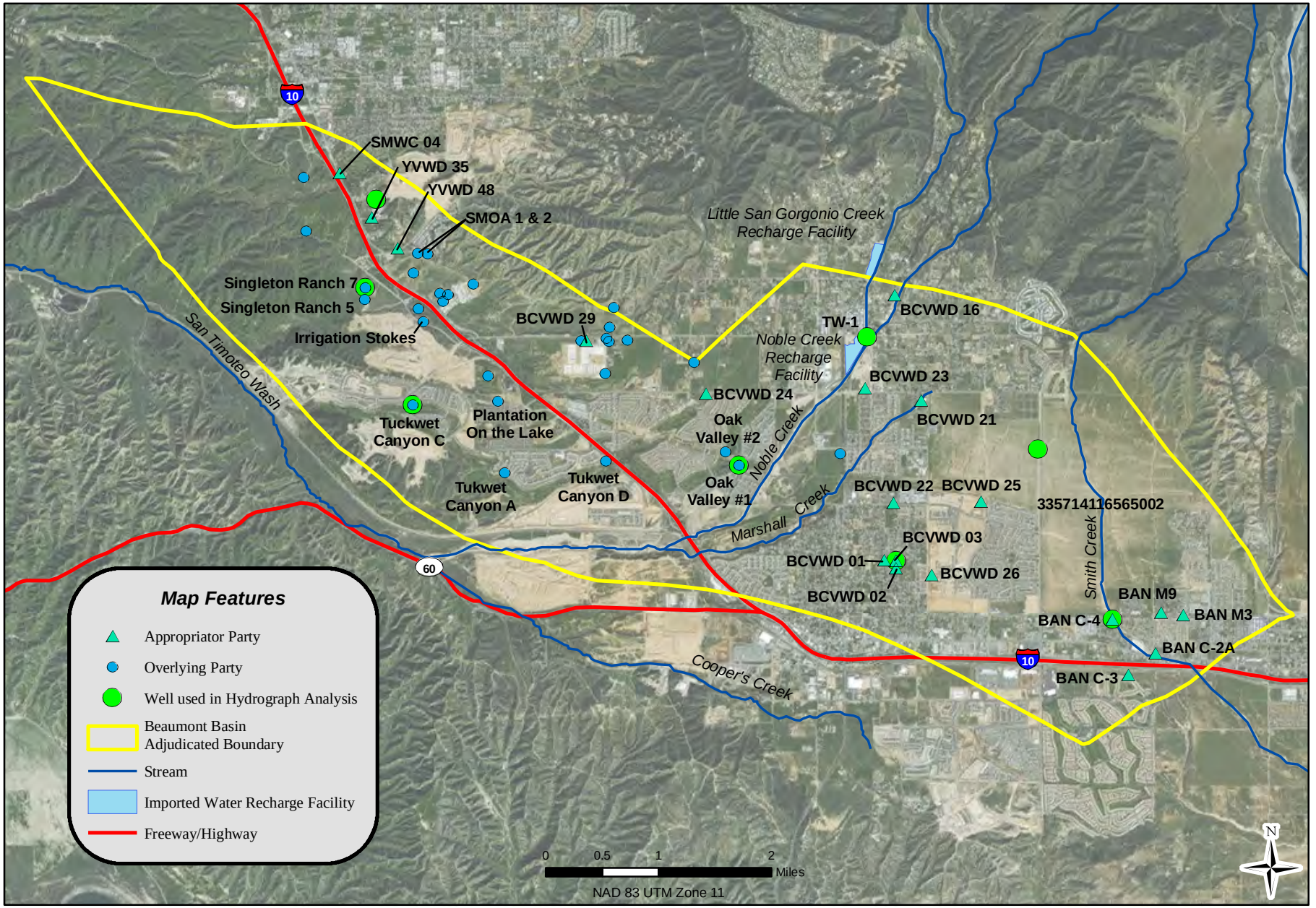
Thomas Harder & Co.
Groundwater Consulting

Geology of the Beaumont Basin

Figure 3-2



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Well Locations in the Beaumont Basin

Figure 3-3

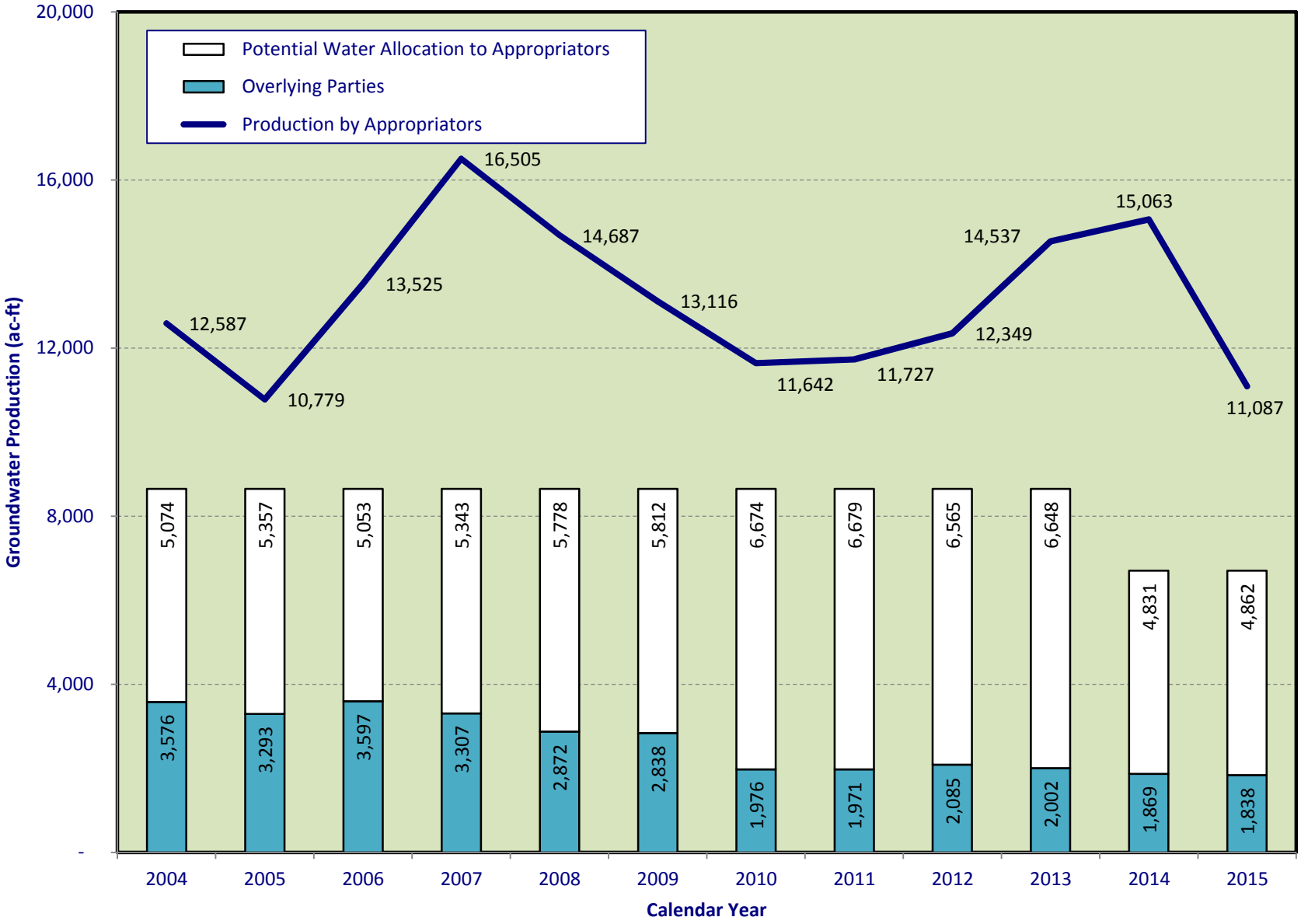
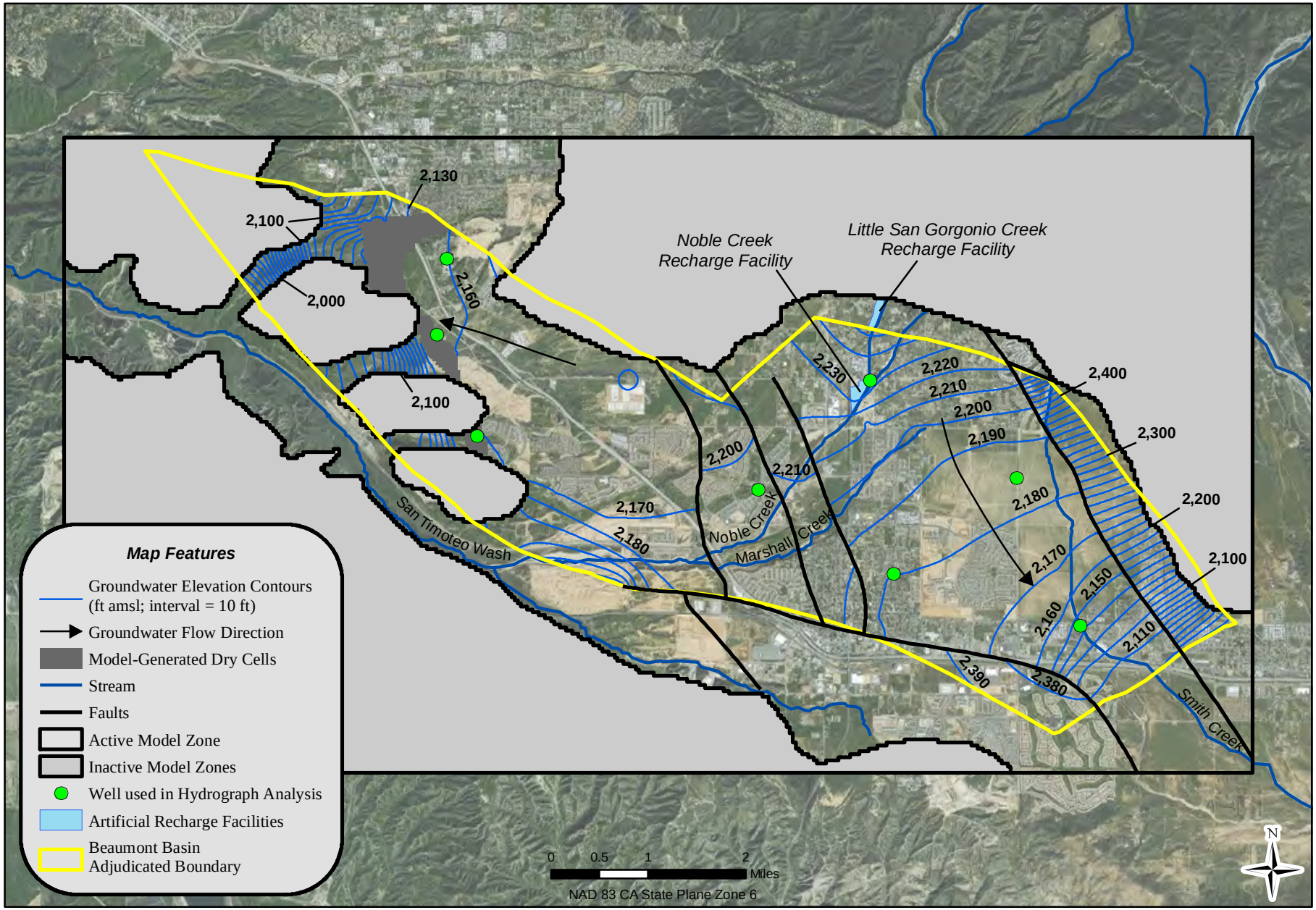


Figure 3-4
Annual Production by Appropriators and Overalying Users (2004-15)



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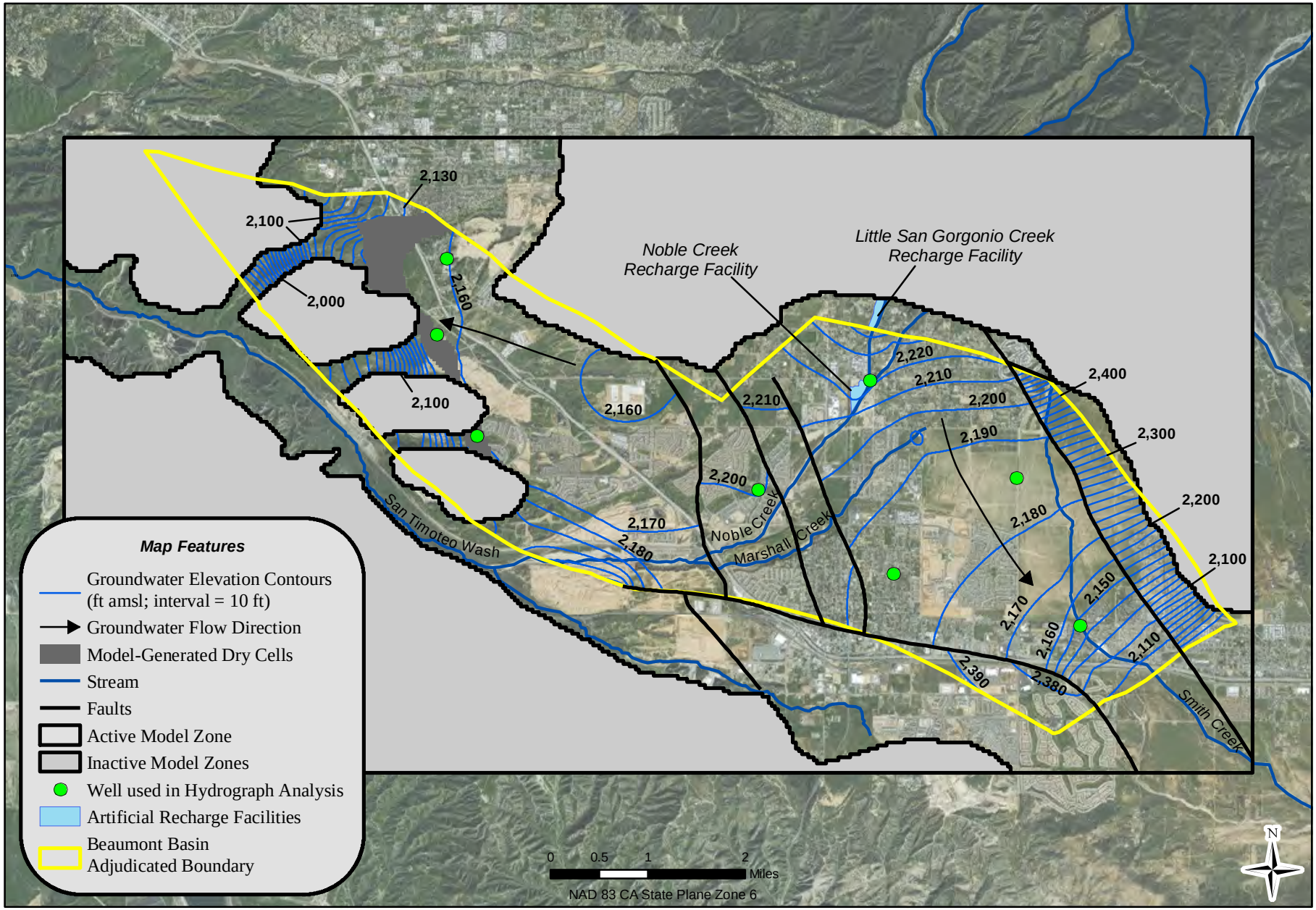
Groundwater Elevation Contours in the Beaumont Basin - Fall 2014

Figure 3-5



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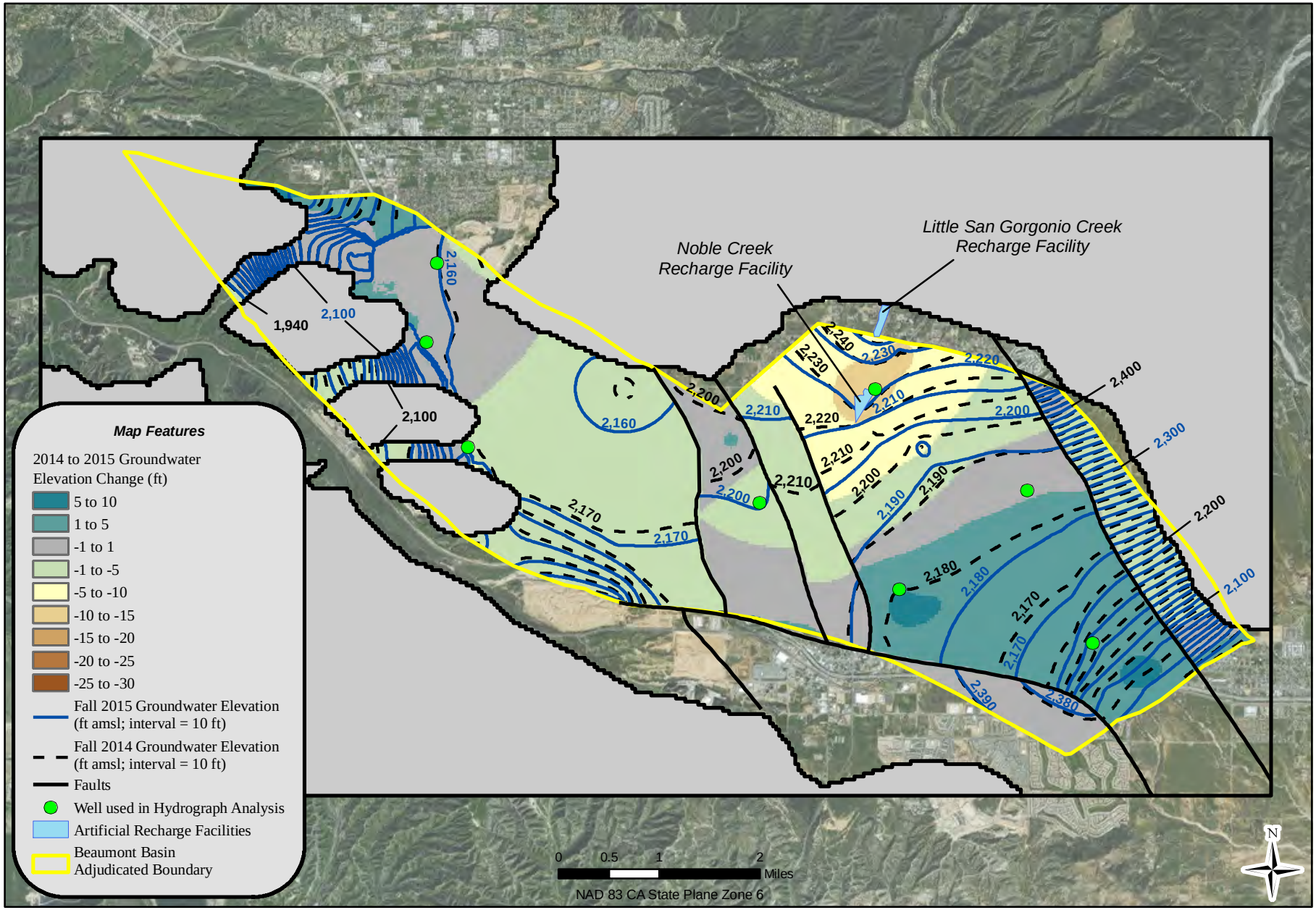
Groundwater Elevation Contours in the Beaumont Basin - Fall 2015

Figure 3-6



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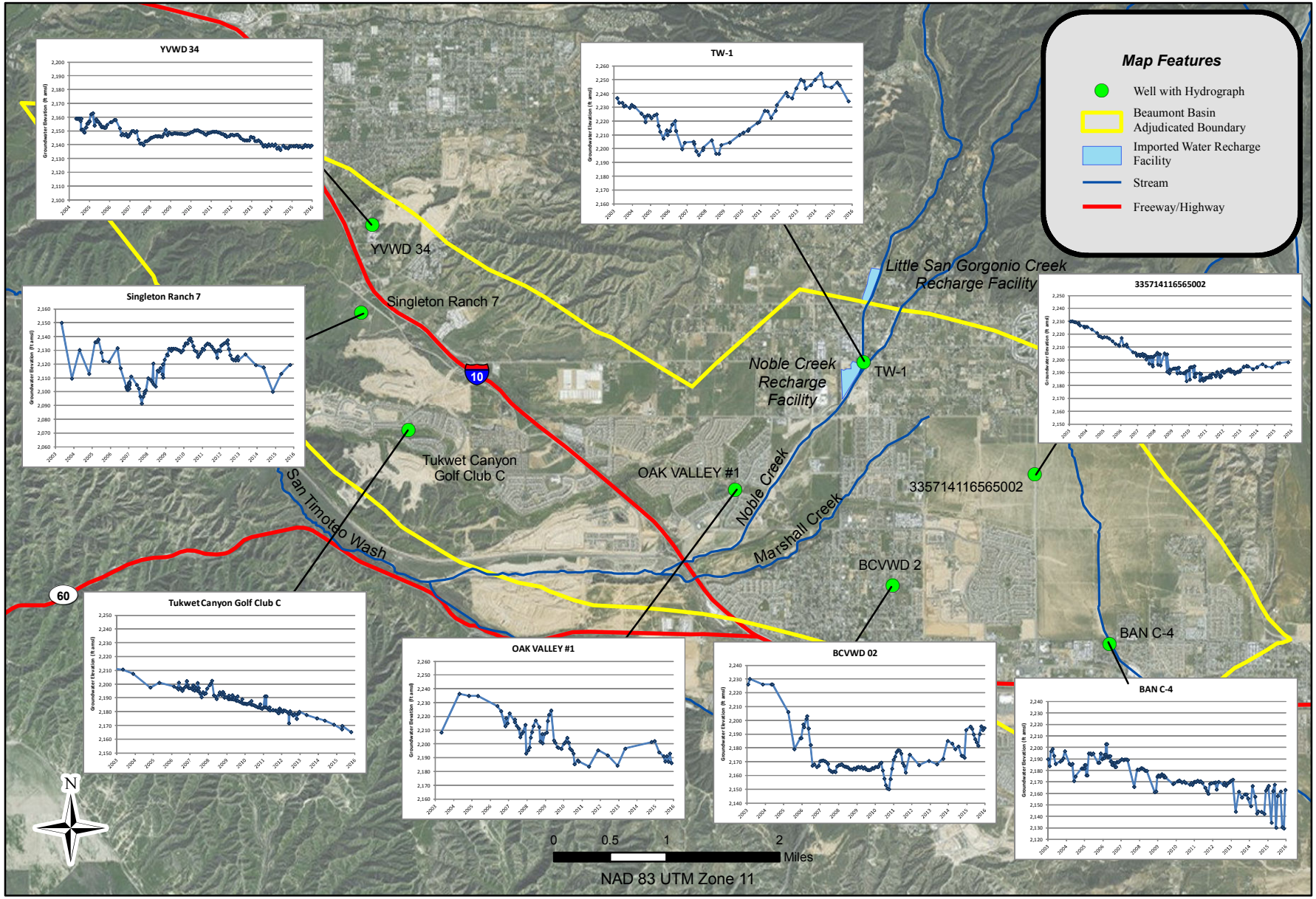
Change in Groundwater Elevation 2014 - 2015

Figure 3-7



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Groundwater Level Trends at Key Wells

Figure 3-8

Table 3-1
Appropriator Producer - Summary of Annual Production (2003 to 2010)

Owner & Well Name	Water Production by Well (ac-ft/yr) [1]							
	2003 [2]	2004	2005	2006	2007	2008	2009	2010
Banning, City of								
Well C2-A	619.2	710.7	0.4	6.8	288.1	382.3	119.8	26.8
Well C3	517.7	1,026.6	521.2	235.3	511.6	552.5	733.0	843.0
Well C4	448.3	1,135.7	387.8	276.8	673.9	664.3	472.6	51.4
Well M3	525.7	169.8	532.8	671.9	726.0	583.3	294.8	80.0
Well M9	63.3	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
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**
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
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
Well 2	960.2	1,628.2	117.6	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
Well 16	554.6	1,103.7	735.6	537.7	348.3	414.9	452.0	11.9
Well 21	832.8	1,252.5	2,299.5	1,996.3	2,424.7	2,446.1	1,784.1	8.7
Well 22	483.3	1,125.3	405.7	1,062.6	1,056.8	1,105.3	265.1	381.7
Well 23	0.0	204.3	1,747.9	1,963.9	3,018.3	2,491.7	982.7	1,930.4
Well 24				2,231.7	2,467.1	2,093.1	2,045.4	2,199.6
Well 25						127.6	1,060.7	1,300.4
Well 26						495.9	1,187.9	1,312.2
Well 29							797.1	834.4
To Banning [3]	0.0	-354.5	-366.4	-636.7	-572.9	-751.3	-474.8	-142.5
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**
Eligible for Storage [4]	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
Annual Production	**223.2**	**482.5**	**663.2**	**616.0**	**665.8**	**470.9**	**382.2**	**405.0**
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
Yucaipa Valley Water District								
Well 35	58.9	226.3	117.5	220.0	163.8	3.2	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
Annual Production	**1,162.4**	**1,833.7**	**1,281.3**	**2,027.3**	**1,682.9**	**572.0**	**504.4**	**672.4**
Eligible for Storage [4]	0.0	339.3	891.7	145.7	490.1	1,601.0	1,668.6	1,500.6
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**
Volume 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**

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 2011 (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	0.4	0.6	1.2	0.3	0.3	12.5	10.4	1.3	0.9	1.2	0.4	3.2	32.5
Well C3	24.5	24.7	41.9	59.0	107.5	111.8	95.6	45.5	45.9	80.3	52.8	87.1	776.6
Well C4	0.9	0.9	1.4	1.2	1.0	3.5	95.5	82.3	7.6	2.2	0.5	0.6	197.5
Well M3	0.5	0.3	0.4	0.3	0.6	10.7	91.6	109.8	99.7	19.2	0.8	1.2	335.1
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 [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
Subtotal	**26.3**	**26.5**	**45.0**	**60.7**	**109.5**	**138.4**	**293.1**	**239.0**	**154.0**	**103.0**	**54.4**	**92.0**	**1,341.7**
Beaumont Cherry Valley Water District													
Well 1	7.1	0.5	20.5	20.8	66.4	75.7	79.1	87.5	65.0	31.3	4.8	2.9	461.7
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	6.6	19.6	12.0	70.0	83.6	92.0	105.7	80.0	34.9	27.2	4.0	535.6
Well 16	1.7	0.0	0.0	0.0	1.3	1.7	2.1	15.5	58.2	37.2	20.4	15.6	153.8
Well 21	0.0	0.0	0.0	0.0	105.7	159.8	218.3	218.0	205.1	190.5	156.5	219.3	1,473.3
Well 22	2.8	0.0	0.0	2.8	5.8	0.0	0.0	21.8	58.0	3.9	0.0	0.0	95.1
Well 23	84.6	78.2	43.8	6.1	130.7	172.0	247.9	205.7	0.0	0.0	0.0	13.1	982.1
Well 24	206.4	161.6	116.5	167.6	139.2	163.7	235.8	229.9	210.9	156.5	94.9	162.7	2,045.7
Well 25	0.3	2.7	10.0	116.2	136.1	30.8	82.6	184.6	245.8	208.4	80.4	90.8	1,188.6
Well 26	127.4	113.1	77.8	108.8	119.7	111.9	158.4	154.1	136.2	124.9	98.9	104.3	1,435.3
Well 29	0.0	6.8	65.8	91.0	109.9	132.6	165.4	165.4	150.5	112.8	56.8	3.5	1,060.3
To Banning [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
Subtotal	**430.1**	**369.5**	**354.0**	**525.2**	**884.7**	**931.7**	**1,281.8**	**1,388.3**	**1,209.7**	**900.4**	**540.0**	**616.0**	**9,431.3**
South Mesa Water Company													
3rd No. 4 Well	18.3	16.8	19.9	20.7	30.2	50.9	52.9	56.8	52.3	45.2	30.3	25.5	419.9
Subtotal	**18.3**	**16.8**	**19.9**	**20.7**	**30.2**	**50.9**	**52.9**	**56.8**	**52.3**	**45.2**	**30.3**	**25.5**	**419.9**
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	27.37	23.43	22.25	33.71	50.16	67.00	84.85	82.47	76.06	46.97	12.18	7.69	534.1
Subtotal	**27.4**	**23.4**	**22.3**	**33.7**	**50.2**	**67.0**	**84.9**	**82.5**	**76.1**	**47.0**	**12.2**	**7.7**	**534.1**
Total	**502.1**	**436.2**	**441.2**	**640.3**	**1,074.6**	**1,188.1**	**1,712.6**	**1,766.5**	**1,492.1**	**1,095.5**	**636.8**	**741.1**	**11,727.1**

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

2.- 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.

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).

Table 3-1C
Appropriator Producer - Summary of Production for Calendar Year 2012 (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	0.5	0.4	0.4	2.3	0.3	0.7	1.4	6.1	0.2	0.2	0.4	0.2	13.1
Well C3	95.4	82.2	64.5	85.2	107.5	25.9	20.1	47.1	41.4	29.9	8.6	0.3	607.9
Well C4	0.7	0.7	0.4	0.2	1.0	13.3	2.2	26.9	23.4	3.0	1.0	0.2	73.0
Well M3	0.6	0.2	0.5	1.4	0.6	76.1	80.0	72.3	68.4	37.9	2.3	3.9	344.2
Well M9		-	-	-	-	-	-	-	-	-	-	-	0.0
From BCVWD [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
Subtotal	**97.1**	**83.4**	**65.8**	**89.1**	**109.5**	**116.1**	**103.6**	**152.3**	**133.3**	**71.0**	**12.4**	**4.7**	**1,038.3**
Beaumont Cherry Valley Water District													
Well 1	-	-	-	3.02	72.03	18.84	-	-	-	-	-	-	93.9
Well 2	-	-	-	-	-	-	-	-	-	-	-	-	0.0
Well 3	-	-	-	2.99	60.85	130.94	150.25	140.12	90.97	64.36	60.38	15.76	716.6
Well 16	-	-	0.01	-	17.17	45.11	72.41	53.98	39.05	8.15	15.87	3.27	255.0
Well 21	192.55	165.40	193.32	174.32	205.19	209.22	216.61	200.54	211.30	180.71	0.77	85.08	2,035.0
Well 22	-	1.50	-	-	18.64	141.42	136.12	76.60	106.07	34.37	-	-	514.7
Well 23	24.66	99.04	82.69	28.94	-	1.04	40.21	188.67	94.27	157.50	115.95	21.67	854.6
Well 24	143.87	139.27	124.45	155.98	107.88	185.79	207.00	138.86	145.87	148.56	160.36	106.24	1,764.1
Well 25	100.50	27.80	-	78.74	222.76	245.35	257.70	238.09	264.00	139.88	76.09	30.02	1,680.9
Well 26	97.20	93.20	76.80	54.20	147.45	147.78	131.49	126.50	115.35	121.99	104.40	64.56	1,280.9
Well 29	1.59	-	-	30.41	85.06	138.76	156.83	150.64	129.68	129.06	92.69	51.35	966.1
To Banning [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
Subtotal	**560.4**	**526.2**	**477.3**	**528.6**	**937.0**	**1,264.3**	**1,368.6**	**1,314.0**	**1,196.6**	**984.6**	**626.5**	**378.0**	**10,162.0**
South Mesa Water Company													
3rd No. 4 Well	27.77	23.65	23.13	23.22	41.79	70.07	69.08	62.75	53.24	27.30	8.18	18.32	448.5
Subtotal	**27.8**	**23.7**	**23.1**	**23.2**	**41.8**	**70.1**	**69.1**	**62.8**	**53.2**	**27.3**	**8.2**	**18.3**	**448.5**
Yucaipa Valley Water District													
Well 35	-	-	-	-	-	-	-	-	-	-	-	-	0.0
Well 48	7.19	39.11	19.00	37.39	76.94	100.79	108.51	129.60	70.41	67.78	31.59	11.79	700.1
Subtotal	**7.2**	**39.1**	**19.0**	**37.4**	**76.9**	**100.8**	**108.5**	**129.6**	**70.4**	**67.8**	**31.6**	**11.8**	**700.1**
Total	**692.5**	**672.4**	**585.2**	**678.4**	**1,165.3**	**1,551.2**	**1,649.8**	**1,658.6**	**1,453.5**	**1,150.6**	**678.6**	**412.7**	**12,348.9**

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

2.- 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.

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).

Table 3-1D
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													
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 [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
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													
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 [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
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													
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													
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.- 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 for 2013 is based on 8,000 ac-ft corresponding to half of the 16,000 ac-ft allocated between 2004 and 2012 . Annual allocation is as follows: a) City of Banning, 2,514.5 ac-ft/yr, b) Beaumont Cherry Valley Water District, 3,401 ac-ft/yr, c) South Mesa Water Company, 998 ac-ft/yr, and d) Yucaipa Valley Water District, 1,086.5 ac-ft/yr.

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).

Table 3-1E
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 [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
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 3-1F
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 [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
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	0.1
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	676.3
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	2,434.5
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	894.4
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	2,509.1
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	863.1
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	71.9
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	16.8
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	1,476.9
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	138.5
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	**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 3-2A
Overlying Producer - Summary of Production for Calendar Year 2003 through 2010 (ac-ft)

Owner and Well Name	Metered	Annual Water Production by Overlying Producer [1] [2]								Overlying Water Right (ac-ft/yr)	Unused Overlying Allocation in 2010
		2003	2004	2005	2006	2007	2008	2009	2010		
Beckman, Walter M.	No	**16.20**	**27.00**	**22.40**	**11.49**	**8.31**	**12.69**	**12.88**	**6.37**	**75.00**	**68.63**
California Oak Valley Golf and Resort LLC [3]											
Oak Valley #1	Yes			523.18	453.58	181.68	596.93	135.69	304.23		
Oak Valley #2	Yes			180.70	377.90	597.30	183.50	630.98	260.89		
Subtotal		**736.20**	**728.64**	**703.88**	**831.48**	**778.98**	**780.43**	**766.67**	**565.12**	**950.00**	**384.88**
Merlin Properties	No	**3.60**	**1.58**	**1.55**	**1.58**	**1.59**	**1.60**	**1.58**	**1.54**	**550.00**	**548.46**
Oak Valley Partners, LP [4]											
Haskell Ranch-Main	N/A	29.40	19.60	300.00	300.00	300.00	0.00	0.00	0.00		
Singleton Ranch #5	No	180.00	300.00	40.22	2.14	2.10	2.50	2.50	2.50		
Singleton Ranch #7	Yes	85.80	111.08	10.00	10.00	10.00	0.00	0.00	0.00		
Irrigation Stokes	No	6.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00		
Subtotal		**301.20**	**440.68**	**350.22**	**312.14**	**312.10**	**2.50**	**2.50**	**2.50**	**1,806.00**	**1,803.50**
Plantation on the Lake LLC	Yes	**178.60**	**340.88**	**310.19**	**350.09**	**344.19**	**354.04**	**352.31**	**337.19**	**581.00**	**243.82**
Rancho Calimesa Mobile Home Park	No	**35.40**	**68.25**	**68.25**	**68.25**	**69.30**	**69.30**	**69.30**	**69.30**	**150.00**	**80.70**
Roman Catholic Bishop of San Bernardino	No	**46.80**	**59.06**	**55.60**	**58.97**	**0.70**	**0.70**	**0.70**	**0.00**	**154.00**	**154.00**
Sharondale Mesa Owners Association											
Well No.1	Yes	98.60	111.0	98.39	97.02	130.06	102.91	80.30	67.69		
Well No.2	Yes	5.70	47.0	82.56	91.60	52.28	90.39	73.98	64.64		
Subtotal		**104.30**	**158.02**	**180.95**	**188.62**	**182.34**	**193.30**	**154.28**	**132.33**	**200.00**	**67.67**
So Calif Section of the PGA of America [5]											
Well A	Yes	130.80	268.04	217.17	341.74	329.12	11.18	204.36	118.64		
Well C	Yes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Well D	Yes	660.63	1,078.64	995.94	1,411.64	1,269.93	1,126.41	954.24	733.16		
Subtotal		**791.43**	**1,346.68**	**1,213.11**	**1,753.38**	**1,599.05**	**1,137.59**	**1,158.60**	**851.81**	**2,200.00**	**1,348.19**
Stearns, Leonard M. and Dorothy D.	No	**1.05**	**1.05**	**1.05**	**1.05**	**1.05**	**1.05**	**1.05**	**0.70**	**200.00**	**199.30**
Sunny-Cal Egg and Poultry Company	N/A	**226.00**	**404.42**	**385.44**	**2.63**	**2.68**	**4.19**	**4.19**	**3.80**	**1,439.50**	**1,435.70**
Sunny-Cal North - Manheim, M & Berman	No				**13.22**	**2.33**	**2.34**	**2.27**	**2.12**	**300.00**	**297.88**
Nikodinov, Nick	No				**0.74**	**0.75**	**0.75**	**0.73**	**0.70**	**20.00**	**19.30**
McAmis, Ronald L.	No				**0.54**	**0.55**	**0.55**	**0.54**	**0.53**	**5.00**	**4.47**
Aldama, Nicolas and Amalia	No				**0.83**	**0.84**	**0.85**	**0.83**	**0.79**	**7.00**	**6.21**
Gutierrez, Hector, et al.	No				**1.37**	**1.39**	**1.40**	**1.37**	**1.32**	**10.00**	**8.68**
Darmont, Boris and Miriam	No				**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**2.50**	**2.15**
TOTAL		**2,440.78**	**3,576.26**	**3,292.63**	**3,596.72**	**3,306.50**	**2,563.63**	**2,530.15**	**1,976.47**	**8,650.00**	**6,673.53**

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 (1,227.4 acre-ft).

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 bovine population.

5.- The Southern California Section of the PGA of America changed name to East Valley Golf Club in 2007 and again to Tukwet Canyon Golf Course in 2010. Actual monthly production provided by the Morongo Band of Mission Indians - March 2014

Table 3-2B
Overlying Producer - Summary of Production for Calendar Year 2011 (ac-ft)

Owner and Well Name	Metered	Monthly Water Production by Overlying Producer [1]												Total [2] Production	Overlying Water Right	Unused Overlying Allocation in 2011
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
Beckman, Walter M. [3]	Yes	0.20	0.20	0.17	0.17	0.17	0.40	1.79	2.21	1.93	0.75	0.84	0.14	**8.98**	**75.00**	**66.02**
California Oak Valley Golf and Resort LLC [3]																
Oak Valley #1	Yes	10.65	1.00	0.23	0.00	0.00	0.00									
Oak Valley #2	Yes	0.30	9.55	0.56	15.36	72.15	12.58									
Subtotal		**10.95**	**10.55**	**0.79**	**15.36**	**72.15**	**12.58**	**97.56**	**94.19**	**109.08**	**39.45**	**45.87**	**8.83**	**517.35**	**950.00**	**432.66**
Merlin Properties	No	Water Duty Method Used to Estimate Annual Production												**1.59**	**550.00**	**548.41**
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												**2.50**	**1,806.00**	**1,803.50**
Plantation on the Lake LLC [3]	Yes	16.09	23.37	15.94	20.68	24.09	34.30	35.24	45.73	27.15	41.92	31.42	28.74	**344.67**	**581.00**	**236.33**
Rancho Calimesa Mobile Home Park	No	Water Duty Method Used to Estimate Annual Production												**69.30**	**150.00**	**80.70**
Roman Catholic Bishop of San Bernardino	No	Water Duty Method Used to Estimate Annual Production												**0.00**	**154.00**	**154.00**
Sharondale Mesa Owners Association [5]																
Well No.1	Yes	3.36	2.70	2.62	4.15	5.70	8.02	11.31	9.61	15.41	10.66	3.67	3.77	80.98		
Well No.2	Yes	3.25	2.57	2.39	4.12	6.16	6.45	6.60	8.81	2.08	2.80	3.34	3.46	52.01		
Subtotal		**6.61**	**5.27**	**5.01**	**8.27**	**11.86**	**14.47**	**17.91**	**18.42**	**17.49**	**13.45**	**7.00**	**7.23**	**132.99**	**200.00**	**67.01**
Tukwet Canyon Golf Club [6]																
Well A	Yes	2.26	2.06	14.74	2.81	22.57	18.12	33.91	15.57	3.78	1.35	0.76	0.47	118.40		
Well C	Yes	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		
Well D	Yes	35.81	23.04	13.59	42.91	21.43	97.66	130.08	130.71	128.94	70.25	27.57	42.53	764.51		
Subtotal		**38.07**	**25.10**	**28.33**	**45.72**	**44.01**	**115.77**	**163.99**	**146.28**	**132.71**	**71.60**	**28.33**	**43.00**	**882.91**	**2,200.00**	**1,317.09**
Stearns, Leonard M. and Dorothy D.	No	Water Duty Method Used to Estimate Annual Production												**0.70**	**200.00**	**199.30**
Sunny-Cal Egg and Poultry Company	No	Water Duty Method Used to Estimate Annual Production												**4.17**	**1,439.50**	**1,435.33**
Albor Properties III, LP	No	Water Duty Method Used to Estimate Annual Production												**2.33**	**300.00**	**297.67**
Nikodinov, Nick	No	Water Duty Method Used to Estimate Annual Production												**0.75**	**20.00**	**19.25**
McAmis, Ronald L.	No	Water Duty Method Used to Estimate Annual Production												**0.55**	**5.00**	**4.45**
Aldama, Nicolas and Amalia	No	Water Duty Method Used to Estimate Annual Production												**0.85**	**7.00**	**6.15**
Gutierrez, Hector, et al.	No	Water Duty Method Used to Estimate Annual Production												**1.39**	**10.00**	**8.61**
Darmont, Boris and Miriam	No	Water Duty Method Used to Estimate Annual Production												**0.35**	**2.50**	**2.15**
TOTAL														**1,971.4**	**8,650.0**	**6,678.6**

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 2013. Production by Plantation on the Lake needs to be confirmed (May 2015).

4.- Oak Valley Partners has not submitted production data to the Watermaster since October 2009. Assumed annual production for all wells as the average production for the 2004-2008 period.

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

6.- Formerly known as the East Valley Golf Course; prior to that known as the Southern California Section of the PGA of America. Actual monthly production provided by the Morongo Band of Mission Indians - March 2014.

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

Owner and Well Name	Metered	Monthly Water Production by Overlying Producer [1]												Total [2] Production	Overlying Water Right	Unused Overlying Allocation in 2012
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
Beckman, Walter M. [3]	Yes	0.20	0.20	0.17	0.17	0.17	0.40	1.79	2.21	1.93	0.75	0.84	0.14	**8.98**	**75.00**	**66.02**
California Oak Valley Golf and Resort LLC [3]																
Oak Valley #1	Yes															
Oak Valley #2	Yes															
Subtotal		**10.95**	**10.55**	**0.79**	**15.36**	**72.15**	**12.58**	**97.56**	**94.19**	**109.08**	**39.45**	**45.87**	**8.83**	**517.35**	**950.00**	**432.66**
Merlin Properties	No	Water Duty Method Used to Estimate Annual Production												**1.62**	**550.00**	**548.38**
Oak Valley Partners, LP [4]																
Singleton Ranch #5	No													0.00		
Singleton Ranch #7	No													2.50		
	No													0.00		
Subtotal		Annual consumption estimated based on water use by a single farm house and a small bovine population												**2.50**	**1,806.00**	**1,803.50**
Plantation on the Lake LLC [3]	Yes	16.09	23.37	15.94	20.68	24.09	34.30	35.24	45.73	27.15	41.92	31.42	28.74	**344.67**	**581.00**	**236.33**
Rancho Calimesa Mobile Home Park	No	Water Duty Method Used to Estimate Annual Production												**69.30**	**150.00**	**80.70**
Roman Catholic Bishop of San Bernardino	No	Water Duty Method Used to Estimate Annual Production												**0.00**	**154.00**	**154.00**
Sharondale Mesa Owners Association [5]																
Well No.1	Yes	4.28	3.94	3.60	4.52	8.44	10.20	10.43	8.00	9.49	9.14	4.75	2.44	79.23		
Well No.2	Yes	3.96	3.68	3.33	4.00	6.50	7.59	7.93	7.75	7.30	7.34	4.37	2.29	66.04		
Subtotal		**8.24**	**7.63**	**6.93**	**8.52**	**14.94**	**17.80**	**18.37**	**15.74**	**16.79**	**16.47**	**9.12**	**4.72**	**145.27**	**200.00**	**54.73**
Tukwet Canyon Golf Club [6]																
Well A	Yes	0.47	0.58	0.83	0.59	20.36	44.05	38.86	36.60	29.52	28.86	16.30	0.45	217.47		
Well C	Yes	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		
Well D	Yes	51.36	27.39	28.12	47.64	93.11	118.17	113.83	102.25	86.26	70.99	17.37	10.37	766.84		
Subtotal		**51.82**	**27.97**	**28.95**	**48.23**	**113.47**	**162.21**	**152.69**	**138.85**	**115.78**	**99.85**	**33.67**	**10.82**	**984.32**	**2,200.00**	**1,215.69**
Stearns, Leonard M. and Dorothy D.	No	Water Duty Method Used to Estimate Annual Production												**0.70**	**200.00**	**199.30**
Sunny-Cal Egg and Poultry Company	No	Water Duty Method Used to Estimate Annual Production												**4.34**	**1,439.50**	**1,435.16**
Albor Properties III, LP	No	Water Duty Method Used to Estimate Annual Production												**2.43**	**300.00**	**297.57**
Nikodinov, Nick	No	Water Duty Method Used to Estimate Annual Production												**0.77**	**20.00**	**19.23**
McAmis, Ronald L.	No	Water Duty Method Used to Estimate Annual Production												**0.56**	**5.00**	**4.44**
Aldama, Nicolas and Amalia	No	Water Duty Method Used to Estimate Annual Production												**0.87**	**7.00**	**6.13**
Gutierrez, Hector, et al.	No	Water Duty Method Used to Estimate Annual Production												**1.43**	**10.00**	**8.57**
Darmont, Boris and Miriam	No	Water Duty Method Used to Estimate Annual Production												**0.35**	**2.50**	**2.15**
TOTAL														**2,085.4**	**8,650.0**	**6,564.6**

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 2013. Production by Plantation on the Lake needs to be confirmed (May 2015).

4.- Oak Valley Partners has not submitted production data to the Watermaster since October 2009. Assumed annual production for all wells as the average production for the 2004-2008 period.

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

6.- Formerly known as the East Valley Golf Course; prior to that known as the Southern California Section of the PGA of America. Actual monthly production provided by the Morongo Band of Mission Indians - March 2014.

Table 3-2D
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 [3]	Yes	1.8	2.1	2.3	4.0	2.7	4.7	4.9	5.5	4.7	4.9	3.3	2.7	43.7	581.0	537.3
Rancho Calimesa Mobile Home Park	No	Water Duty Method Used to Estimate Annual Production												69.3	150.0	80.7
Roman Catholic Bishop of San Bernardino	No	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														**2,001.8**	**8,650.0**	**6,648.2**

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.- Oak Valley Partners has not submitted production data to the Watermaster since October 2009. Assumed annual production for all wells as the average production for the 2004-2008 period.

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

6.- Formerly known as the East Valley Golf Course; prior to that known as the Southern California Section of the PGA of America. Actual monthly production provided by the Morongo Band of Mission Indians - March 2014.

Table 3-2E
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 [3]	Yes	2.7	3.2	3.4	5.9	4.2	4.3	5.0	5.7	5.2	4.4	4.5	5.3	54.0	450.0	396.0
Rancho Calimesa Mobile Home Park	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	No	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														**1,868.9**	**6,700.0**	**4,831.1**

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.- Estimated production based on field visit conducted in April 2015.

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

6.- Formerly known as the East Valley Golf Course; prior to that known as the Southern California Section of the PGA of America. Actual monthly production provided by the Morongo Band of Mission Indians - March 2015

Table 3-2F
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 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	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**	**-15.3**
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 [3]	Yes	2.7	3.2	3.4	5.9	4.2	4.3	5.0	5.7	5.2	4.4	4.5	5.3	**54.0**	**450.0**	**396.0**
Rancho Calimesa Mobile Home Park																
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	No	Water Duty Method Used to Estimate Annual Production												**0.0**	**119.3**	**119.3**
Sharondale Mesa Owners Association [5]																
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 [6]																
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														**1,837.7**	**6,700.0**	**4,862.3**

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.- Estimated production based on field visit conducted in April 2015.

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

6.- Formerly known as the East Valley Golf Course; prior to that known as the Southern California Section of the PGA of America. Actual monthly production provided by the Morongo Band of Mission Indians - March 2015

Table 3-3
Production Summary for Appropriator and Overlying Producers in the Beaumont Basin
2006 through 2015 - Calendar Year Accounting (ac-ft)

	Annual Production (ac-ft)												
	2003[1]	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
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	1,341.7	1,038.3	2,100.7	2,585.1	1,678.3
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	9,431.3	10,162.0	11,097.4	10,805.5	8,972.8
South Mesa Water Company	223.2	482.5	663.2	616.0	665.8	470.9	382.2	405.0	419.9	448.5	308.4	473.7	317.2
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	534.1	700.1	1,030.8	1,198.5	119.2
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**	**11,727.1**	**12,348.9**	**14,537.2**	**15,062.8**	**11,087.4**
Overlying Parties													
Beckman, Walter M	16.2	27.0	22.4	11.5	8.3	12.7	12.9	6.4	9.0	9.0	2.1	0.9	0.9
California Oak Valley Golf and Resort LLC	736.2	728.6	703.9	831.5	779.0	780.4	766.7	565.1	517.3	517.3	625.8	417.0	751.1
Merlin Properties	3.6	1.6	1.6	1.6	1.6	1.6	1.6	1.5	1.6	1.6	1.6	1.6	1.6
Oak Valley Partners, LP	301.2	440.7	350.2	312.1	312.1	310.5	310.5	2.5	2.5	2.5	2.5	2.5	2.5
Plantation on the Lake LLC	178.6	340.9	310.2	350.1	344.2	354.0	352.3	337.2	344.7	344.7	43.7	54.0	54.0
Rancho Calimesa Mobile Home Park	35.4	68.3	68.3	68.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	16.2	23.4
Roman Catholic Bishop of San Bernardino	46.8	59.1	55.6	59.0	0.7	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0
Sharondale Mesa Owners Association	104.3	158.0	181.0	188.6	182.3	193.3	154.3	132.3	133.0	145.3	147.0	137.3	94.1
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	882.9	984.3	1,098.4	1,227.9	898.6
Stearns, Leonard M. and Dorothy D.	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.7	0.7	0.7	0.7	0.7	0.7
Sunny-Cal Egg and Poultry Company	226.0	404.4	385.4	2.6	2.7	4.2	4.2	3.8	4.2	4.3	4.3	4.3	4.3
Albor Properties III, LP[3]				13.2	2.3	2.3	2.3	2.1	2.3	2.4	2.4	2.4	2.4
Nikodinov, Nick				0.7	0.8	0.8	0.7	0.7	0.8	0.8	0.8	0.8	0.8
McAmis, Ronald L.				0.5	0.6	0.6	0.5	0.5	0.6	0.6	0.6	0.6	0.6
Aldama, Nicolas and Amalia				0.8	0.8	0.9	0.8	0.8	0.9	0.9	0.9	0.9	0.9
Gutierrez, Hector, et. al.				1.4	1.4	1.4	1.4	1.3	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	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**	**1,971.4**	**2,085.4**	**2,001.8**	**1,868.9**	**1,837.6**
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**	**13,698.4**	**14,434.3**	**16,538.9**	**16,931.7**	**12,925.0**

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
Totals	**10,115.2**	**-**	**49,212.2**	**10,490.0**	**69,817.4**

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 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

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

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average (mgd)	Annual ac-ft
2010			0.82	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

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 (2011-15) Average Production (ac-ft)	5-Year (2011-15) Running Avg % of Water Right
Sharondale Mesa Owners Association	200.0	154.9	131.3	84.8%
California Oak Valley Golf and Resort LLC	950.0	735.8	565.7	76.9%
Tukwet Canyon Golf Club	2,200.0	1,704.0	1,018.4	59.8%
Rancho Calimesa Mobile Home Park	150.0	116.2	60.1	51.7%
Plantation on the Lake LLC	581.0	450.0	168.2	37.4%
Darmont, Boris and Miriam	2.5	1.9	0.4	18.6%
Gutierrez, Hector, et al.	10.0	7.7	1.4	18.3%
Aldama, Nicolas and Amalia	7.0	5.4	0.9	16.1%
McAmis, Ronald L.	5.0	3.9	0.6	14.6%
Beckman, Walter M.	75.0	58.1	4.4	7.5%
Nikodinov, Nick	20.0	15.5	0.8	5.0%
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	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**	**1,963.6**	**29.3%**

Table 3-7

Summary of Unused Overlying Water - Calendar Year Accounting (ac-ft)

Watermaster Accounting Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Annual Overlying Water Right	4,325.0	8,650.0	8,650.0	8,650.0	8,650.0	8,650.0	8,650.0	8,650.0	8,650.0	8,650.0	8,650.0	6,700.0	6,700.0
Annual Overlying Production	2,440.8	3,576.3	3,292.6	3,596.7	3,306.5	2,871.6	2,838.2	1,976.5	1,971.4	2,085.4	2,001.8	1,868.9	1,837.6
Annual Deliveries by Appropriators			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unused Overlying Water Right	**1,884.2**	**5,073.7**	**5,357.4**	**5,053.3**	**5,343.5**	**5,778.4**	**5,811.8**	**6,673.5**	**6,678.6**	**6,564.6**	**6,648.2**	**4,831.1**	**4,862.4**

Table 3-8

Allocation of Unused Overlying Water -- Calendar Year Accounting (ac-ft)

Appropriator Party	Share of Safe Yield	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Banning, City of	31.43%	592.2	1,594.7	1,683.8	1,588.2	1,679.5	1,816.1	1,826.7	2,097.5	2,099.1	2,063.2	2,089.5	1,518.4	1,528.2
Beaumont, City of	0.00%	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
Beaumont Cherry Valley WD	42.51%	801.0	2,156.8	2,277.4	2,148.1	2,271.5	2,456.4	2,470.6	2,836.9	2,839.1	2,790.6	2,826.2	2,053.7	2,067.0
South Mesa Water Company	12.48%	235.2	633.2	668.6	630.6	666.9	721.1	725.3	832.9	833.5	819.3	829.7	602.9	606.8
Yucaipa Valley WD	13.58%	255.9	689.0	727.5	686.2	725.6	784.7	789.2	906.3	907.0	891.5	902.8	656.1	660.3
Total	**100.00%**	**1,884.2**	**5,073.7**	**5,357.4**	**5,053.3**	**5,343.5**	**5,778.4**	**5,811.8**	**6,673.5**	**6,678.6**	**6,564.6**	**6,648.2**	**4,831.1**	**4,862.4**

Table 3-9
Consolidation of Appropriator Production and Storage Accounts
Calendar Year Accounting (ac-ft) 2003 through 2015

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
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

Table 3-9
Consolidation of Appropriator Production and Storage Accounts
Calendar Year Accounting (ac-ft) 2003 through 2015

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
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

Table 3-9
Consolidation of Appropriator Production and Storage Accounts
Calendar Year Accounting (ac-ft) 2003 through 2015

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			
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
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
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	-945.9	95,628.9

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 2011-2015 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-nitrogen 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.

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-nitrogen 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 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 measured at Basin wells during the 2011-2015 reporting period for 65 wells including 29 domestic wells owned by Appropriators or by Overlying Parties. The maximum TDS concentrations for domestic wells ranged from 190 to 415 mg/L and averaged 277 mg/L; this average value is 22 mg/L higher than the average maximum TDS concentration reported in the 2008-11 Engineering Report indicating that TDS concentrations are on a slight uptrend in the last seven years. Of the 29 potable wells, four wells had a maximum concentration below the anti-degradation objective of 230 mg/L, 23 wells were between the anti-degradation and maximum benefit objective of 330 mg/L, and three exceeded the maximum benefit objective for the BMZ. 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 this analysis.

Maximum TDS concentrations for the non-domestic wells had a much wider range from 203 to 1,100 mg/L and averaged 435 mg/L just below the maximum benefit objectives. Average concentrations were approximately 110 mg/L higher than those previously reported in the

2008-11 Engineering Report. Of the 26 non-domestic wells, 3 had a maximum TDS concentration below the anti-degradation objective, 13 wells were between the anti-degradation and maximum benefit objectives, and 13 exceeded the maximum benefit objective; nine of these wells also exceeded the secondary drinking standard of 500 mg/L.

Most of the wells with the highest TDS concentrations, include those that exceeded drinking water standards are located within the BMZ, but outside the Beaumont Basin.

4.1.2 Nitrate-Nitrogen

Figure 4-3 shows the maximum Nitrate-N concentrations measured at Basin wells during the 2011-2015 reporting period for 62 wells including 30 domestic wells owned by Appropriators or by Overlying Parties. The maximum Nitrate-N concentrations for domestic wells ranged from 1.04 to 8.65 mg/L and averaged 2.83 mg/L. Of these wells, seven had a maximum concentration below the anti-degradation objective of 1.5 mg/L, 20 wells had a maximum concentration between the anti-degradation and maximum benefit objective of 5.0 mg/L, and ten wells exceeded the maximum benefit objective for the BMZ. Only one of these wells (BCVWD 21) also exceeded the 80 percent MCL for Nitrate-N, which is considered as a threshold level that CDPH uses to begin considering potential blending and/or treatment alternatives to address high nitrate concentrations in drinking water. None of the potable wells exceeded the primary federal and state drinking water standard for nitrate-nitrogen of 10 mg/L.

Maximum Nitrate-N concentrations in the 32 non-domestic wells ranged from 0.49 to 47 mg/L. Average maximum concentrations for these wells (8.47 mg/L) exceeded the maximum benefit objective for the BMZ. Of these wells, five had maximum concentrations below the anti-degradation objective, nine had maximum concentrations between the anti-degradation and the maximum benefit objective, and the remaining 18 above the maximum benefit objective. In addition, 11 of these wells had maximum concentrations equal to or higher than the primary federal and state drinking water standard.

The highest Nitrate-N concentration within the Beaumont Basin was observed at a private well with a concentration of 47 mg/L; this well is located a little more than half a mile north of BCVWD Well No. 29 in the Singleton Basin. Other wells exceeding the current MCL are mainly located south of the basin in the South Beaumont Basin.

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 2011-2015 reporting period for 21 domestic production wells in the Beaumont Basin. The objective of this analysis was to determine whether any of these potable wells had 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 other. 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 2,301 water quality results were extracted from the CDPH database for the 21 production wells in the Beaumont Basin. Results were obtained for 176 analytes sampled between 2011 and 2015. The results of the analysis indicate that not a single production well exceeds either the primary or secondary federal and state standards during the reporting period. However, 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 2009 through 2014 was obtained from Dudek Engineering as part of the Maximum Benefit Monitoring Program. A total of 2,679 water quality results were analyzed to determine if the water quality at the monitoring wells exceeded drinking water standards. Drinking standards were exceeded for a limited number of constituents as follows:

- Nitrate-N – Eight of the 17 monitoring wells sampled for Nitrate-N exceeded the federal and state primary MCL of 10 mg/L – Total of 52 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 22 readings. One of these wells is located in the Beaumont Basin.
- Total Dissolved Solids – Eight of the 16 monitoring wells exceeded the federal and state secondary MCL of 500 mg/L – Total of 49 readings. These wells are located outside the Beaumont Basin.
- Turbidity – Eight of the monitoring wells sampled for turbidity exceeded the secondary California MCL of 5 NTU – Total of 28 readings.

Appendix D contains summary statistics of the analytical results for the 2010-2015 period for all chemicals that have a federal or state drinking water standard whether maximum contaminant levels were exceeded.

4.2.1 Trace Metals

As indicated earlier, not a single domestic well exceeded either the primary or secondary 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 33 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 34 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 33 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 are two wells that exceeded the MCL during the 2010-14 period; BCVWD Well No. 11 at 800 mg/L and BCVWD Well No. 20 at 450 mg/L in December 2012. Iron concentration at BCVWD Well No. 11 decreased significantly to 340 mg/L in August 2013. 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 33 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 33 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 33 water samples were taken during the reporting period and tested for total chromium. The highest reported concentrations of total chromium were observed in February 2011 at Sharondale Mesa HOA Well No. 2 at 9.1 ug/L and in October 2013 at BCVWD Well No. 3 at 11 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 increased significantly during the reporting period from 17 ug/L in March 2010 to 84 ug/L in April 2013 and to 100 ug/L in April 2016. These two latest values exceed the state notification level of 50 ug/L. Vanadium concentration at YVWD No. 48 was 25 ug/L, which is half the state notification level.

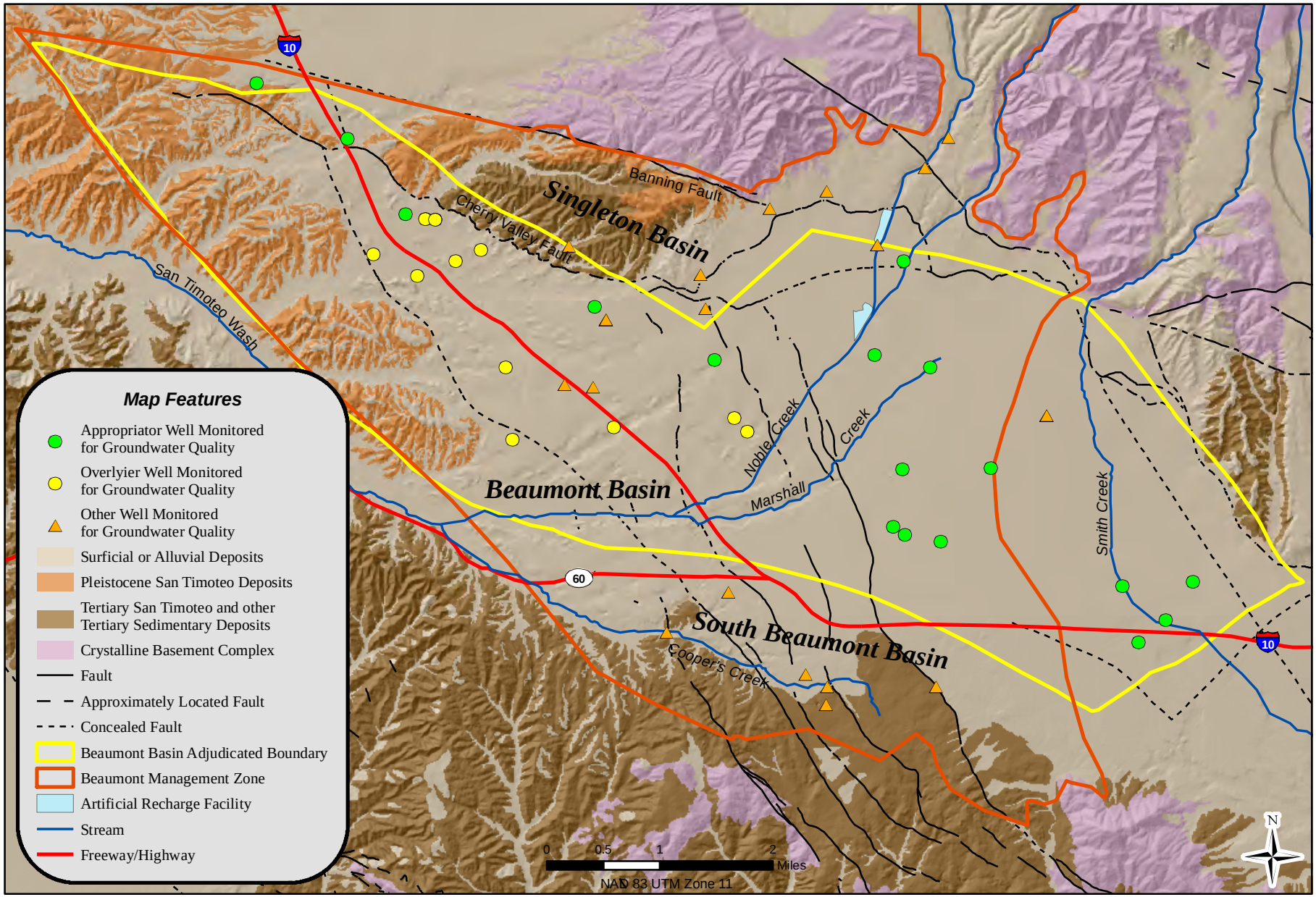
Copper. There were 33 water samples collected and tested for copper during the reporting period. Over the last five years only one well has exceeded the detection limit of 50 ug/L; the Rancho Calimesa Well No. 2 at 62 ug/L (Feb 2013). This concentration is significantly below the state primary MCL of 1,000 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

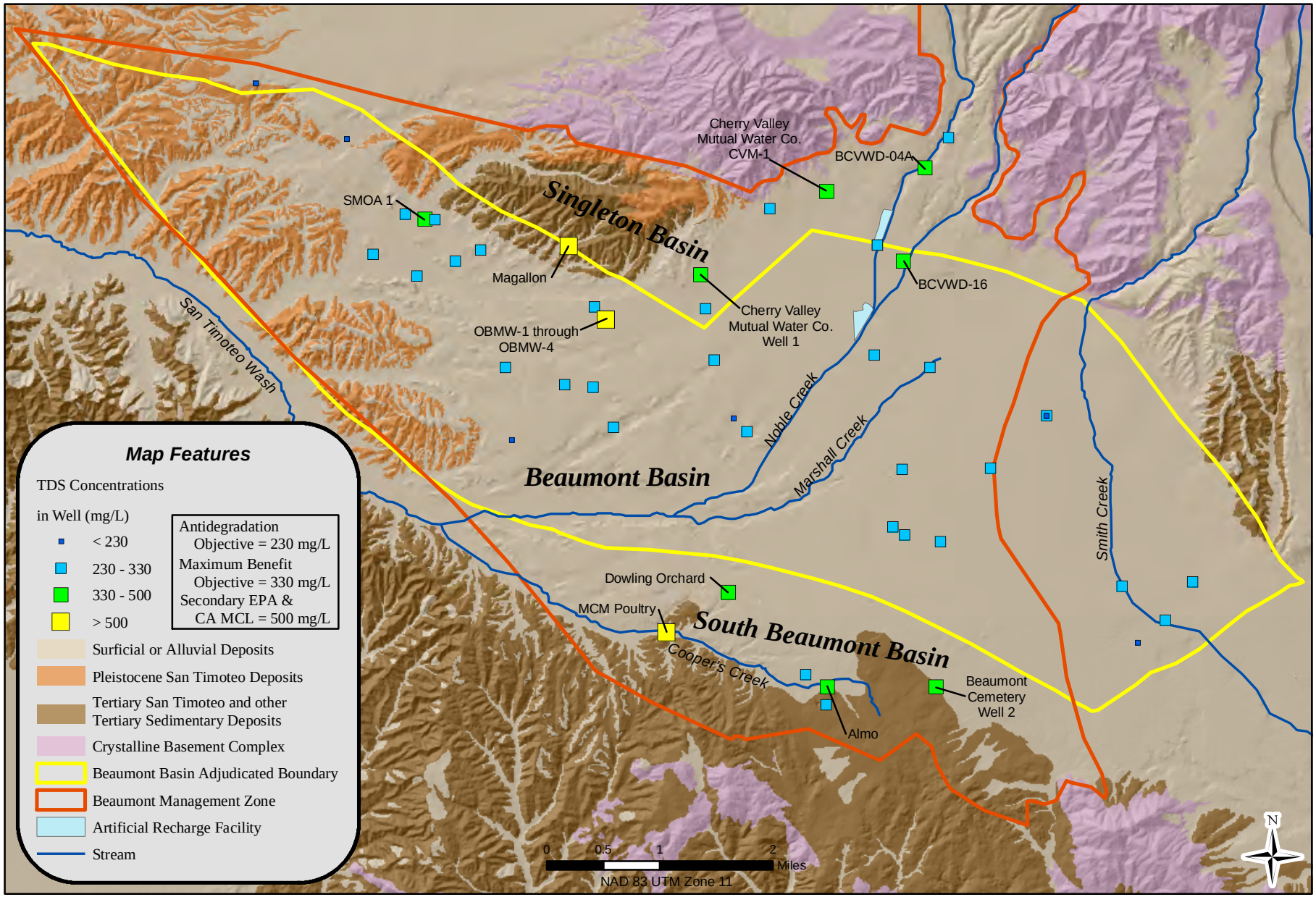
Turbidity is a measure of the cloudiness of water, and is used to indicate water quality and filtration effectiveness. All production wells in the Basin were tested for turbidity and none exceeded the primary federal and state MCL of 5 NTU.



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

Wells with Groundwater Quality Data in the Beaumont Basin

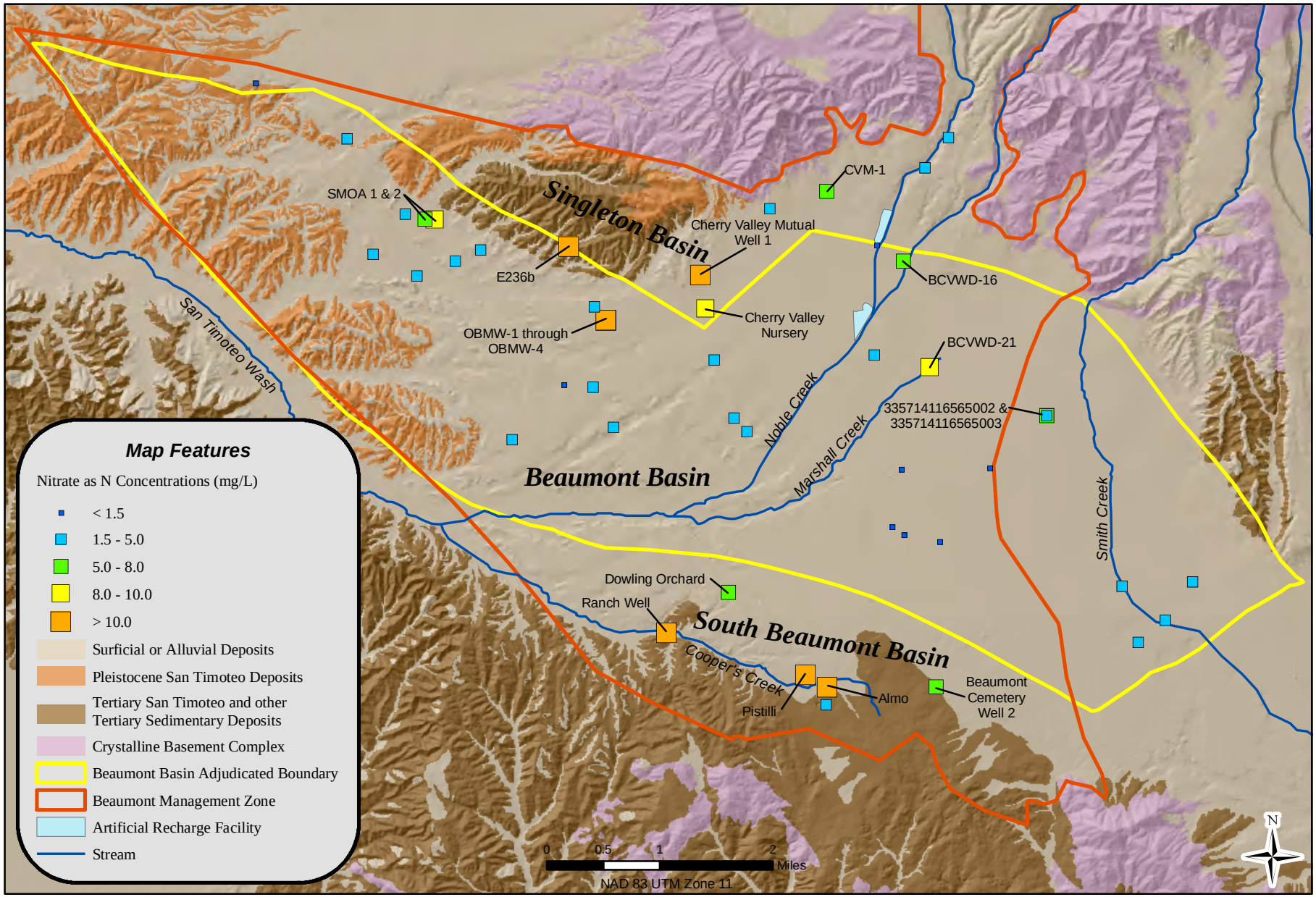
Figure 4-1



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

Total Dissolved Solids in Groundwater (Maximum Concentrations 2010 to 2015)

Figure 4-2



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Groundwater Consulting

Nitrate in Groundwater (Maximum Concentrations 2010 to 2015)

Figure 4-3

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
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Appendix B
Fiscal Year 2014-15 Audit Letter

Appendix C
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 exists 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 2015

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2002	2.65	3.60	4.68	4.88	6.34	7.13	7.55	6.95	5.66	3.13	3.15	2.01	57.73
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

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

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

Estimated Pumping - All Unmetered Accounts

Year	Total Use (ac-ft/yr)
2004	534.36
2005	511.89
2006	149.53
2007	81.53
2008	83.08
2009	82.77
2010	81.15
2011	81.97
2012	82.37
2013	82.28
2014	82.47
2015	86.97

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	0.41	0.59	1.64

Estimated Pumping by Rancho Calimesa

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	29	195	68.25	0.00	0.00	0.00	68.25
2005	29	195	68.25	0.00	0.00	0.00	68.25
2006	29	195	68.25	0.00	0.00	0.00	68.25
2007	29	198	69.30	0.00	0.00	0.00	69.30
2008	29	198	69.30	0.00	0.00	0.00	69.30
2009	29	198	69.30	0.00	0.00	0.00	69.30
2010	29	198	69.30	0.00	0.00	0.00	69.30
2011	29	198	69.30	0.00	0.00	0.00	69.30
2012	29	198	69.30	0.00	0.00	0.00	69.30
2013	29	198	69.30	0.00	0.00	0.00	69.30
2014	29	198	69.30	0.00	0.00	0.00	69.30
2015	29	198	69.30	0.00	0.00	0.00	69.30

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

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

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	1.70	6.19	8.84	9.54

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	1.49	2.13	2.48

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	0.30	0.43	0.78

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	0.15	0.21	0.56

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	0.37	0.53	0.88

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	0.52	0.75	1.45

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

Appendix D
Water Quality Analysis Summary (2011-2015) for Production Wells

Well Name	Sample Date	Analyte	Result Value		Unit
BAN C-2A	12/28/2011	Alkalinity	=	150.00	mg/L
BAN C-2A	3/18/2014	Alkalinity	=	160.00	mg/L
BAN C-2A	12/28/2011	Bicarbonate	=	190.00	mg/L
BAN C-2A	3/18/2014	Bicarbonate	=	200.00	mg/L
BAN C-2A	12/28/2011	Calcium	=	41.00	mg/L
BAN C-2A	3/18/2014	Calcium	=	44.00	mg/L
BAN C-2A	12/28/2011	Carbonate (C03--)	<	3.00	mg/L
BAN C-2A	3/18/2014	Carbonate (C03--)	<	3.00	mg/L
BAN C-2A	12/28/2011	Chloride	=	9.50	mg/L
BAN C-2A	3/18/2014	Chloride	=	11.00	mg/L
BAN C-2A	12/28/2011	Hydroxide (as OH-)	<	3.00	mg/L
BAN C-2A	3/18/2014	Hydroxide (as OH-)	<	3.00	mg/L
BAN C-2A	12/28/2011	Magnesium	=	9.30	mg/L
BAN C-2A	3/18/2014	Magnesium	=	9.50	mg/L
BAN C-2A	6/21/2010	Nitrate-Nitrogen	=	2.03	mg/L
BAN C-2A	4/20/2011	Nitrate-Nitrogen	=	1.90	mg/L
BAN C-2A	12/28/2011	Nitrate-Nitrogen	=	1.85	mg/L
BAN C-2A	6/14/2012	Nitrate-Nitrogen	=	1.94	mg/L
BAN C-2A	6/26/2013	Nitrate-Nitrogen	=	1.74	mg/L
BAN C-2A	7/23/2013	Nitrate-Nitrogen	=	1.83	mg/L
BAN C-2A	3/18/2014	Nitrate-Nitrogen	=	1.92	mg/L
BAN C-2A	5/28/2014	Nitrate-Nitrogen	=	2.48	mg/L
BAN C-2A	12/28/2011	Nitrite-Nitrogen	<	0.100	mg/L
BAN C-2A	3/18/2014	Nitrite-Nitrogen	<	0.100	mg/L
BAN C-2A	12/28/2011	pH	=	7.90	-
BAN C-2A	3/18/2014	pH	=	7.90	-
BAN C-2A	12/28/2011	Potassium	=	1.50	mg/L
BAN C-2A	3/18/2014	Potassium	=	1.30	mg/L
BAN C-2A	12/28/2011	Sodium	=	24.00	mg/L
BAN C-2A	3/18/2014	Sodium	=	26.00	mg/L
BAN C-2A	12/28/2011	Specific Conductance	=	390.00	uS/cm
BAN C-2A	3/18/2014	Specific Conductance	=	380.00	uS/cm
BAN C-2A	12/28/2011	Sulfate	=	9.30	mg/L
BAN C-2A	3/18/2014	Sulfate	=	10.00	mg/L

Well Name	Sample Date	Analyte	Result Value		Unit
BCVWD 16	3/24/2010	Alkalinity	=	170.00	mg/L
BCVWD 16	7/8/2010	Alkalinity	=	170.00	mg/L
BCVWD 16	11/22/2010	Alkalinity	=	175.00	mg/L
BCVWD 16	8/24/2011	Alkalinity	=	182.00	mg/L
BCVWD 16	12/17/2012	Alkalinity	=	178.00	mg/L
BCVWD 16	9/5/2013	Alkalinity	=	183.00	mg/L
BCVWD 16	10/22/2013	Alkalinity	=	180.00	mg/L
BCVWD 16	7/8/2014	Alkalinity	=	175.00	mg/L
BCVWD 16	7/8/2010	Ammonia-Nitrogen	<	0.020	mg/L
BCVWD 16	11/22/2010	Ammonia-Nitrogen	<	0.010	mg/L
BCVWD 16	8/24/2011	Ammonia-Nitrogen	<	0.010	mg/L
BCVWD 16	12/17/2012	Ammonia-Nitrogen	<	0.010	mg/L
BCVWD 16	9/5/2013	Ammonia-Nitrogen	<	0.010	mg/L
BCVWD 16	7/8/2014	Ammonia-Nitrogen	<	0.010	mg/L
BCVWD 16	3/24/2010	Bicarbonate	=	210.00	mg/L
BCVWD 16	7/8/2010	Bicarbonate	=	206.00	mg/L
BCVWD 16	11/22/2010	Bicarbonate	=	213.00	mg/L
BCVWD 16	5/26/2011	Bicarbonate	=	211.83	mg/L
BCVWD 16	5/26/2011	Bicarbonate	=	217.60	mg/L
BCVWD 16	8/24/2011	Bicarbonate	=	221.00	mg/L
BCVWD 16	12/17/2012	Bicarbonate	=	215.00	mg/L
BCVWD 16	9/5/2013	Bicarbonate	=	221.00	mg/L
BCVWD 16	10/22/2013	Bicarbonate	=	220.00	mg/L
BCVWD 16	7/8/2014	Bicarbonate	=	212.00	mg/L
BCVWD 16	3/24/2010	Calcium	=	53.00	mg/L
BCVWD 16	7/8/2010	Calcium	=	53.70	mg/L
BCVWD 16	11/22/2010	Calcium	=	55.40	mg/L
BCVWD 16	5/26/2011	Calcium	=	54.59	mg/L
BCVWD 16	5/26/2011	Calcium	=	54.78	mg/L
BCVWD 16	8/24/2011	Calcium	=	54.10	mg/L
BCVWD 16	12/17/2012	Calcium	=	57.40	mg/L
BCVWD 16	9/5/2013	Calcium	=	50.00	mg/L
BCVWD 16	10/22/2013	Calcium	=	52.00	mg/L
BCVWD 16	7/8/2014	Calcium	=	50.80	mg/L

Well Name	Sample Date	Analyte	Result Value		Unit
BAN C-2A	12/28/2011	TDS	=	210.00	mg/L
BAN C-2A	3/18/2014	TDS	=	240.00	mg/L
BAN C-2A	12/28/2011	Total Hardness (as CaCO3)	=	140.00	mg/L
BAN C-2A	3/18/2014	Total Hardness (as CaCO3)	=	150.00	mg/L
BAN C-2A	12/28/2011	Turbidity	<	0.200	NTU
BAN C-2A	3/18/2014	Turbidity	<	0.200	NTU
BAN C-3	7/13/2010	Alkalinity	=	121.00	mg/L
BAN C-3	12/20/2011	Alkalinity	=	110.00	mg/L
BAN C-3	6/20/2013	Alkalinity	=	125.00	mg/L
BAN C-3	3/18/2014	Alkalinity	=	140.00	mg/L
BAN C-3	7/13/2010	Ammonia-Nitrogen	<	0.020	mg/L
BAN C-3	6/20/2013	Ammonia-Nitrogen	<	0.010	mg/L
BAN C-3	7/13/2010	Bicarbonate	=	145.00	mg/L
BAN C-3	12/20/2011	Bicarbonate	=	140.00	mg/L
BAN C-3	6/20/2013	Bicarbonate	=	150.00	mg/L
BAN C-3	3/18/2014	Bicarbonate	=	160.00	mg/L
BAN C-3	7/13/2010	Calcium	=	26.30	mg/L
BAN C-3	12/20/2011	Calcium	=	25.00	mg/L
BAN C-3	6/20/2013	Calcium	=	26.50	mg/L
BAN C-3	3/18/2014	Calcium	=	32.00	mg/L
BAN C-3	12/20/2011	Carbonate (C03--)	<	3.00	mg/L
BAN C-3	3/18/2014	Carbonate (C03--)	<	3.00	mg/L
BAN C-3	7/13/2010	Chloride	=	12.00	mg/L
BAN C-3	12/20/2011	Chloride	=	9.90	mg/L
BAN C-3	6/20/2013	Chloride	=	11.90	mg/L
BAN C-3	3/18/2014	Chloride	=	12.00	mg/L
BAN C-3	12/20/2011	Hydroxide (as OH-)	<	3.00	mg/L
BAN C-3	3/18/2014	Hydroxide (as OH-)	<	3.00	mg/L
BAN C-3	7/13/2010	Magnesium	=	4.28	mg/L
BAN C-3	12/20/2011	Magnesium	=	4.30	mg/L
BAN C-3	6/20/2013	Magnesium	=	4.45	mg/L
BAN C-3	3/18/2014	Magnesium	=	5.90	mg/L
BAN C-3	6/8/2010	Nitrate-Nitrogen	=	1.87	mg/L
BAN C-3	7/13/2010	Nitrate-Nitrogen	=	1.73	mg/L

Well Name	Sample Date	Analyte	Result Value		Unit
BCVWD 16	3/24/2010	Carbonate (C03--)	<	3.00	mg/L
BCVWD 16	10/22/2013	Carbonate (C03--)	<	3.00	mg/L
BCVWD 16	7/8/2014	Carbonate (C03--)	<	3.00	mg/L
BCVWD 16	3/24/2010	Chloride	=	18.00	mg/L
BCVWD 16	7/8/2010	Chloride	=	19.60	mg/L
BCVWD 16	11/22/2010	Chloride	=	21.00	mg/L
BCVWD 16	5/26/2011	Chloride	=	21.02	mg/L
BCVWD 16	5/26/2011	Chloride	=	21.10	mg/L
BCVWD 16	8/24/2011	Chloride	=	21.60	mg/L
BCVWD 16	12/17/2012	Chloride	=	19.70	mg/L
BCVWD 16	9/5/2013	Chloride	=	17.20	mg/L
BCVWD 16	10/22/2013	Chloride	=	16.00	mg/L
BCVWD 16	7/8/2014	Chloride	=	17.90	mg/L
BCVWD 16	5/26/2011	Dissolved Oxygen (field)	=	8.74	mg/L
BCVWD 16	3/24/2010	Hydroxide (as OH-)	<	3.00	mg/L
BCVWD 16	10/22/2013	Hydroxide (as OH-)	<	3.00	mg/L
BCVWD 16	3/24/2010	Magnesium	=	19.00	mg/L
BCVWD 16	7/8/2010	Magnesium	=	20.30	mg/L
BCVWD 16	11/22/2010	Magnesium	=	20.00	mg/L
BCVWD 16	5/26/2011	Magnesium	=	20.25	mg/L
BCVWD 16	5/26/2011	Magnesium	=	20.31	mg/L
BCVWD 16	8/24/2011	Magnesium	=	20.90	mg/L
BCVWD 16	12/17/2012	Magnesium	=	20.00	mg/L
BCVWD 16	9/5/2013	Magnesium	=	17.70	mg/L
BCVWD 16	10/22/2013	Magnesium	=	18.00	mg/L
BCVWD 16	7/8/2014	Magnesium	=	18.10	mg/L
BCVWD 16	1/26/2010	Nitrate-Nitrogen	=	7.90	mg/L
BCVWD 16	2/26/2010	Nitrate-Nitrogen	=	7.00	mg/L
BCVWD 16	3/24/2010	Nitrate-Nitrogen	=	7.00	mg/L
BCVWD 16	3/31/2010	Nitrate-Nitrogen	=	6.32	mg/L
BCVWD 16	4/20/2010	Nitrate-Nitrogen	=	6.55	mg/L
BCVWD 16	5/26/2010	Nitrate-Nitrogen	=	6.55	mg/L
BCVWD 16	6/30/2010	Nitrate-Nitrogen	=	6.77	mg/L
BCVWD 16	7/8/2010	Nitrate-Nitrogen	=	7.22	mg/L

Well Name	Sample Date	Analyte		Result Value	Unit
BAN C-3	4/12/2011	Nitrate-Nitrogen	=	1.67	mg/L
BAN C-3	12/20/2011	Nitrate-Nitrogen	=	1.56	mg/L
BAN C-3	6/14/2012	Nitrate-Nitrogen	=	1.67	mg/L
BAN C-3	6/19/2013	Nitrate-Nitrogen	=	1.63	mg/L
BAN C-3	6/20/2013	Nitrate-Nitrogen	=	1.81	mg/L
BAN C-3	3/18/2014	Nitrate-Nitrogen	=	1.92	mg/L
BAN C-3	5/28/2014	Nitrate-Nitrogen	=	1.69	mg/L
BAN C-3	7/13/2010	Nitrite-Nitrogen	<	0.002	mg/L
BAN C-3	12/20/2011	Nitrite-Nitrogen	<	0.100	mg/L
BAN C-3	6/20/2013	Nitrite-Nitrogen	<	0.001	mg/L
BAN C-3	7/16/2013	Nitrite-Nitrogen	<	0.100	mg/L
BAN C-3	3/18/2014	Nitrite-Nitrogen	<	0.100	mg/L
BAN C-3	7/13/2010	pH	=	8.10	-
BAN C-3	12/20/2011	pH	=	8.10	-
BAN C-3	6/20/2013	pH	=	8.10	-
BAN C-3	3/18/2014	pH	=	8.00	-
BAN C-3	7/13/2010	pH (field)	=	8.10	-
BAN C-3	6/20/2013	pH (field)	=	8.10	-
BAN C-3	7/13/2010	Potassium	=	1.66	mg/L
BAN C-3	12/20/2011	Potassium	=	1.50	mg/L
BAN C-3	6/20/2013	Potassium	=	1.59	mg/L
BAN C-3	3/18/2014	Potassium	=	1.60	mg/L
BAN C-3	7/13/2010	Sodium	=	33.00	mg/L
BAN C-3	12/20/2011	Sodium	=	33.00	mg/L
BAN C-3	6/20/2013	Sodium	=	33.30	mg/L
BAN C-3	3/18/2014	Sodium	=	31.00	mg/L
BAN C-3	7/13/2010	Specific Conductance	=	310.00	uS/cm
BAN C-3	12/20/2011	Specific Conductance	=	310.00	uS/cm
BAN C-3	6/20/2013	Specific Conductance	=	313.00	uS/cm
BAN C-3	3/18/2014	Specific Conductance	=	320.00	uS/cm
BAN C-3	7/13/2010	Specific Conductance (field)	=	299.00	uS/cm
BAN C-3	6/20/2013	Specific Conductance (field)	=	305.00	uS/cm
BAN C-3	7/13/2010	Sulfate	=	8.47	mg/L
BAN C-3	12/20/2011	Sulfate	=	7.10	mg/L

Well Name	Sample Date	Analyte		Result Value	Unit
BCVWD 16	7/29/2010	Nitrate-Nitrogen	=	6.77	mg/L
BCVWD 16	8/30/2010	Nitrate-Nitrogen	=	6.77	mg/L
BCVWD 16	11/22/2010	Nitrate-Nitrogen	=	6.70	mg/L
BCVWD 16	11/22/2010	Nitrate-Nitrogen	=	6.32	mg/L
BCVWD 16	1/13/2011	Nitrate-Nitrogen	=	3.16	mg/L
BCVWD 16	5/26/2011	Nitrate-Nitrogen	=	5.70	mg/L
BCVWD 16	5/26/2011	Nitrate-Nitrogen	=	5.71	mg/L
BCVWD 16	5/26/2011	Nitrate-Nitrogen	=	6.32	mg/L
BCVWD 16	6/21/2011	Nitrate-Nitrogen	=	6.32	mg/L
BCVWD 16	7/19/2011	Nitrate-Nitrogen	=	6.10	mg/L
BCVWD 16	8/24/2011	Nitrate-Nitrogen	=	6.87	mg/L
BCVWD 16	8/24/2011	Nitrate-Nitrogen	=	6.55	mg/L
BCVWD 16	9/20/2011	Nitrate-Nitrogen	=	5.19	mg/L
BCVWD 16	10/18/2011	Nitrate-Nitrogen	=	4.97	mg/L
BCVWD 16	11/30/2011	Nitrate-Nitrogen	=	5.19	mg/L
BCVWD 16	6/19/2012	Nitrate-Nitrogen	=	4.97	mg/L
BCVWD 16	8/7/2012	Nitrate-Nitrogen	=	3.84	mg/L
BCVWD 16	9/18/2012	Nitrate-Nitrogen	=	4.29	mg/L
BCVWD 16	10/29/2012	Nitrate-Nitrogen	=	5.87	mg/L
BCVWD 16	12/17/2012	Nitrate-Nitrogen	=	6.44	mg/L
BCVWD 16	12/18/2012	Nitrate-Nitrogen	=	5.65	mg/L
BCVWD 16	5/21/2013	Nitrate-Nitrogen	=	4.74	mg/L
BCVWD 16	6/12/2013	Nitrate-Nitrogen	=	4.74	mg/L
BCVWD 16	8/19/2013	Nitrate-Nitrogen	=	5.19	mg/L
BCVWD 16	9/5/2013	Nitrate-Nitrogen	=	5.12	mg/L
BCVWD 16	9/16/2013	Nitrate-Nitrogen	=	4.97	mg/L
BCVWD 16	10/15/2013	Nitrate-Nitrogen	=	4.97	mg/L
BCVWD 16	10/22/2013	Nitrate-Nitrogen	=	4.74	mg/L
BCVWD 16	11/25/2013	Nitrate-Nitrogen	=	4.74	mg/L
BCVWD 16	12/10/2013	Nitrate-Nitrogen	=	5.42	mg/L
BCVWD 16	2/25/2014	Nitrate-Nitrogen	=	5.87	mg/L
BCVWD 16	3/18/2014	Nitrate-Nitrogen	=	6.32	mg/L
BCVWD 16	4/15/2014	Nitrate-Nitrogen	=	6.10	mg/L
BCVWD 16	5/12/2014	Nitrate-Nitrogen	=	5.42	mg/L

Well Name	Sample Date	Analyte	Result Value		Unit
BAN C-3	6/20/2013	Sulfate	=	8.37	mg/L
BAN C-3	3/18/2014	Sulfate	=	5.90	mg/L
BAN C-3	7/13/2010	TDS	=	199.00	mg/L
BAN C-3	12/20/2011	TDS	=	130.00	mg/L
BAN C-3	6/20/2013	TDS	=	183.00	mg/L
BAN C-3	3/18/2014	TDS	=	190.00	mg/L
BAN C-3	7/13/2010	Temperature (field)	=	21.40	°C
BAN C-3	6/20/2013	Temperature (field)	=	21.00	°C
BAN C-3	7/13/2010	Total Hardness (as CaCO3)	=	83.50	mg/L
BAN C-3	12/20/2011	Total Hardness (as CaCO3)	=	79.00	mg/L
BAN C-3	6/20/2013	Total Hardness (as CaCO3)	=	84.60	mg/L
BAN C-3	3/18/2014	Total Hardness (as CaCO3)	=	100.00	mg/L
BAN C-3	12/20/2011	Turbidity	<	0.200	NTU
BAN C-3	3/18/2014	Turbidity	<	0.200	NTU
BAN C-4	12/20/2011	Alkalinity	=	140.00	mg/L
BAN C-4	3/13/2014	Alkalinity	=	160.00	mg/L
BAN C-4	12/20/2011	Bicarbonate	=	180.00	mg/L
BAN C-4	3/13/2014	Bicarbonate	=	190.00	mg/L
BAN C-4	12/20/2011	Calcium	=	36.00	mg/L
BAN C-4	3/13/2014	Calcium	=	37.00	mg/L
BAN C-4	12/20/2011	Carbonate (C03--)	<	3.00	mg/L
BAN C-4	3/13/2014	Carbonate (C03--)	<	3.00	mg/L
BAN C-4	12/20/2011	Chloride	=	10.00	mg/L
BAN C-4	3/13/2014	Chloride	=	7.10	mg/L
BAN C-4	12/20/2011	Hydroxide (as OH-)	<	3.00	mg/L
BAN C-4	3/13/2014	Hydroxide (as OH-)	<	3.00	mg/L
BAN C-4	12/20/2011	Magnesium	=	8.90	mg/L
BAN C-4	3/13/2014	Magnesium	=	7.40	mg/L
BAN C-4	6/21/2010	Nitrate-Nitrogen	=	1.69	mg/L
BAN C-4	4/12/2011	Nitrate-Nitrogen	=	1.49	mg/L
BAN C-4	12/20/2011	Nitrate-Nitrogen	=	1.51	mg/L
BAN C-4	6/13/2012	Nitrate-Nitrogen	=	1.17	mg/L
BAN C-4	6/11/2013	Nitrate-Nitrogen	=	0.903	mg/L
BAN C-4	3/13/2014	Nitrate-Nitrogen	=	1.11	mg/L

Well Name	Sample Date	Analyte	Result Value		Unit
BCVWD 16	6/9/2014	Nitrate-Nitrogen	=	5.65	mg/L
BCVWD 16	7/8/2014	Nitrate-Nitrogen	=	5.85	mg/L
BCVWD 16	7/22/2014	Nitrate-Nitrogen	=	5.65	mg/L
BCVWD 16	8/12/2014	Nitrate-Nitrogen	=	4.97	mg/L
BCVWD 16	9/17/2014	Nitrate-Nitrogen	=	5.42	mg/L
BCVWD 16	10/7/2014	Nitrate-Nitrogen	=	5.42	mg/L
BCVWD 16	12/8/2014	Nitrate-Nitrogen	=	6.32	mg/L
BCVWD 16	3/24/2010	Nitrite-Nitrogen	<	0.100	mg/L
BCVWD 16	7/8/2010	Nitrite-Nitrogen	<	0.002	mg/L
BCVWD 16	11/22/2010	Nitrite-Nitrogen	<	0.001	mg/L
BCVWD 16	5/26/2011	Nitrite-Nitrogen	ND		mg/L
BCVWD 16	5/26/2011	Nitrite-Nitrogen	ND		mg/L
BCVWD 16	8/24/2011	Nitrite-Nitrogen	<	0.001	mg/L
BCVWD 16	12/17/2012	Nitrite-Nitrogen	<	0.001	mg/L
BCVWD 16	9/5/2013	Nitrite-Nitrogen	<	0.001	mg/L
BCVWD 16	10/22/2013	Nitrite-Nitrogen	<	0.100	mg/L
BCVWD 16	7/8/2014	Nitrite-Nitrogen	<	0.001	mg/L
BCVWD 16	3/24/2010	pH	=	7.70	-
BCVWD 16	7/8/2010	pH	=	7.90	-
BCVWD 16	11/22/2010	pH	=	7.70	-
BCVWD 16	5/26/2011	pH	=	7.47	-
BCVWD 16	5/26/2011	pH	=	7.52	-
BCVWD 16	8/24/2011	pH	=	8.20	-
BCVWD 16	12/17/2012	pH	=	7.90	-
BCVWD 16	9/5/2013	pH	=	7.90	-
BCVWD 16	10/22/2013	pH	=	8.00	-
BCVWD 16	7/8/2014	pH	=	7.80	-
BCVWD 16	7/8/2010	pH (field)	=	7.60	-
BCVWD 16	11/22/2010	pH (field)	=	7.20	-
BCVWD 16	8/24/2011	pH (field)	=	7.50	-
BCVWD 16	12/17/2012	pH (field)	=	7.90	-
BCVWD 16	9/5/2013	pH (field)	=	7.60	-
BCVWD 16	7/8/2014	pH (field)	=	7.60	-
BCVWD 16	3/24/2010	Potassium	=	1.40	mg/L

Well Name	Sample Date	Analyte	Result Value		Unit
BAN C-4	5/28/2014	Nitrate-Nitrogen	=	1.06	mg/L
BAN C-4	12/20/2011	Nitrite-Nitrogen	<	0.100	mg/L
BAN C-4	7/16/2013	Nitrite-Nitrogen	<	0.100	mg/L
BAN C-4	3/13/2014	Nitrite-Nitrogen	<	0.100	mg/L
BAN C-4	12/20/2011	pH	=	7.90	-
BAN C-4	3/13/2014	pH	=	8.10	-
BAN C-4	12/20/2011	Potassium	=	1.30	mg/L
BAN C-4	3/13/2014	Potassium	=	1.50	mg/L
BAN C-4	12/20/2011	Sodium	=	25.00	mg/L
BAN C-4	3/13/2014	Sodium	=	27.00	mg/L
BAN C-4	12/20/2011	Specific Conductance	=	360.00	uS/cm
BAN C-4	3/13/2014	Specific Conductance	=	360.00	uS/cm
BAN C-4	12/20/2011	Sulfate	=	9.40	mg/L
BAN C-4	3/13/2014	Sulfate	=	11.00	mg/L
BAN C-4	12/20/2011	TDS	=	240.00	mg/L
BAN C-4	3/13/2014	TDS	=	180.00	mg/L
BAN C-4	12/20/2011	Total Hardness (as CaCO3)	=	130.00	mg/L
BAN C-4	3/13/2014	Total Hardness (as CaCO3)	=	120.00	mg/L
BAN C-4	12/20/2011	Turbidity	<	0.200	NTU
BAN C-4	3/13/2014	Turbidity	<	0.200	NTU
BAN M3	3/14/2012	Alkalinity	=	180.00	mg/L
BAN M3	3/14/2012	Bicarbonate	=	220.00	mg/L
BAN M3	3/14/2012	Calcium	=	41.00	mg/L
BAN M3	3/14/2012	Carbonate (C03--)	<	3.00	mg/L
BAN M3	3/14/2012	Chloride	=	15.00	mg/L
BAN M3	3/14/2012	Hydroxide (as OH-)	<	3.00	mg/L
BAN M3	3/14/2012	Magnesium	=	14.00	mg/L
BAN M3	6/21/2010	Nitrate-Nitrogen	=	1.85	mg/L
BAN M3	4/12/2011	Nitrate-Nitrogen	=	1.81	mg/L
BAN M3	3/14/2012	Nitrate-Nitrogen	=	1.78	mg/L
BAN M3	7/22/2013	Nitrate-Nitrogen	=	1.83	mg/L
BAN M3	6/18/2014	Nitrate-Nitrogen	=	1.81	mg/L
BAN M3	3/14/2012	Nitrite-Nitrogen	<	0.100	mg/L
BAN M3	7/22/2013	Nitrite-Nitrogen	<	0.100	mg/L

Well Name	Sample Date	Analyte	Result Value		Unit
BCVWD 16	7/8/2010	Potassium	=	1.57	mg/L
BCVWD 16	11/22/2010	Potassium	=	1.45	mg/L
BCVWD 16	5/26/2011	Potassium	=	1.29	mg/L
BCVWD 16	5/26/2011	Potassium	=	1.32	mg/L
BCVWD 16	8/24/2011	Potassium	=	1.46	mg/L
BCVWD 16	12/17/2012	Potassium	=	1.36	mg/L
BCVWD 16	9/5/2013	Potassium	=	1.32	mg/L
BCVWD 16	10/22/2013	Potassium	=	1.30	mg/L
BCVWD 16	7/8/2014	Potassium	=	1.23	mg/L
BCVWD 16	3/24/2010	Sodium	=	37.00	mg/L
BCVWD 16	7/8/2010	Sodium	=	37.70	mg/L
BCVWD 16	11/22/2010	Sodium	=	35.90	mg/L
BCVWD 16	5/26/2011	Sodium	=	35.29	mg/L
BCVWD 16	5/26/2011	Sodium	=	35.92	mg/L
BCVWD 16	8/24/2011	Sodium	=	37.60	mg/L
BCVWD 16	12/17/2012	Sodium	=	35.10	mg/L
BCVWD 16	9/5/2013	Sodium	=	35.60	mg/L
BCVWD 16	10/22/2013	Sodium	=	36.00	mg/L
BCVWD 16	7/8/2014	Sodium	=	36.50	mg/L
BCVWD 16	3/24/2010	Specific Conductance	=	580.00	uS/cm
BCVWD 16	7/8/2010	Specific Conductance	=	578.00	uS/cm
BCVWD 16	11/22/2010	Specific Conductance	=	584.00	uS/cm
BCVWD 16	5/26/2011	Specific Conductance	=	612.00	uS/cm
BCVWD 16	5/26/2011	Specific Conductance	=	620.00	uS/cm
BCVWD 16	8/24/2011	Specific Conductance	=	573.00	uS/cm
BCVWD 16	12/17/2012	Specific Conductance	=	557.00	uS/cm
BCVWD 16	9/5/2013	Specific Conductance	=	539.00	uS/cm
BCVWD 16	10/22/2013	Specific Conductance	=	540.00	uS/cm
BCVWD 16	7/8/2014	Specific Conductance	=	543.00	uS/cm
BCVWD 16	7/8/2010	Specific Conductance (field)	=	546.00	uS/cm
BCVWD 16	11/22/2010	Specific Conductance (field)	=	555.00	uS/cm
BCVWD 16	8/24/2011	Specific Conductance (field)	=	544.00	uS/cm
BCVWD 16	12/17/2012	Specific Conductance (field)	=	549.00	uS/cm
BCVWD 16	9/5/2013	Specific Conductance (field)	=	533.00	uS/cm

Well Name	Sample Date	Analyte	Result Value		Unit
BAN M3	3/14/2012	pH	=	7.90	-
BAN M3	3/14/2012	Potassium	=	2.30	mg/L
BAN M3	3/14/2012	Sodium	=	38.00	mg/L
BAN M3	3/14/2012	Specific Conductance	=	470.00	uS/cm
BAN M3	3/14/2012	Sulfate	=	36.00	mg/L
BAN M3	3/14/2012	TDS	=	290.00	mg/L
BAN M3	3/14/2012	Total Hardness (as CaCO3)	=	160.00	mg/L
BAN M3	3/14/2012	Turbidity	<	0.200	NTU
BCVWD 01	3/24/2010	Alkalinity	=	170.00	mg/L
BCVWD 01	3/24/2010	Bicarbonate	=	200.00	mg/L
BCVWD 01	5/10/2011	Bicarbonate	=	195.53	mg/L
BCVWD 01	7/19/2011	Bicarbonate	=	186.68	mg/L
BCVWD 01	3/24/2010	Calcium	=	36.00	mg/L
BCVWD 01	5/10/2011	Calcium	=	39.10	mg/L
BCVWD 01	7/19/2011	Calcium	=	36.81	mg/L
BCVWD 01	3/24/2010	Carbonate (C03--)	<	3.00	mg/L
BCVWD 01	3/24/2010	Chloride	=	7.90	mg/L
BCVWD 01	5/10/2011	Chloride	=	9.78	mg/L
BCVWD 01	7/19/2011	Chloride	=	6.23	mg/L
BCVWD 01	5/10/2011	Dissolved Oxygen (field)	=	7.64	mg/L
BCVWD 01	7/19/2011	Dissolved Oxygen (field)	=	10.17	mg/L
BCVWD 01	3/24/2010	Hydroxide (as OH-)	<	3.00	mg/L
BCVWD 01	3/24/2010	Magnesium	=	13.00	mg/L
BCVWD 01	5/10/2011	Magnesium	=	12.92	mg/L
BCVWD 01	7/19/2011	Magnesium	=	10.95	mg/L
BCVWD 01	3/24/2010	Nitrate-Nitrogen	=	0.926	mg/L
BCVWD 01	5/10/2011	Nitrate-Nitrogen	=	1.11	mg/L
BCVWD 01	7/19/2011	Nitrate-Nitrogen	=	0.600	mg/L
BCVWD 01	12/14/2011	Nitrate-Nitrogen	=	0.994	mg/L
BCVWD 01	12/19/2012	Nitrate-Nitrogen	=	0.610	mg/L
BCVWD 01	3/24/2010	Nitrite-Nitrogen	<	0.100	mg/L
BCVWD 01	5/10/2011	Nitrite-Nitrogen	ND		mg/L
BCVWD 01	7/19/2011	Nitrite-Nitrogen	ND		mg/L
BCVWD 01	3/24/2010	pH	=	7.90	-

Well Name	Sample Date	Analyte	Result Value		Unit
BCVWD 16	7/8/2014	Specific Conductance (field)	=	536.00	uS/cm
BCVWD 16	3/24/2010	Sulfate	=	63.00	mg/L
BCVWD 16	7/8/2010	Sulfate	=	60.40	mg/L
BCVWD 16	11/22/2010	Sulfate	=	61.80	mg/L
BCVWD 16	5/26/2011	Sulfate	=	60.03	mg/L
BCVWD 16	5/26/2011	Sulfate	=	60.09	mg/L
BCVWD 16	8/24/2011	Sulfate	=	58.80	mg/L
BCVWD 16	12/17/2012	Sulfate	=	52.00	mg/L
BCVWD 16	9/5/2013	Sulfate	=	53.30	mg/L
BCVWD 16	10/22/2013	Sulfate	=	46.00	mg/L
BCVWD 16	7/8/2014	Sulfate	=	52.50	mg/L
BCVWD 16	3/24/2010	TDS	=	380.00	mg/L
BCVWD 16	7/8/2010	TDS	=	368.00	mg/L
BCVWD 16	11/22/2010	TDS	=	352.00	mg/L
BCVWD 16	5/26/2011	TDS	=	410.04	mg/L
BCVWD 16	5/26/2011	TDS	=	415.40	mg/L
BCVWD 16	8/24/2011	TDS	=	384.00	mg/L
BCVWD 16	12/17/2012	TDS	=	344.00	mg/L
BCVWD 16	9/5/2013	TDS	=	299.00	mg/L
BCVWD 16	10/22/2013	TDS	=	370.00	mg/L
BCVWD 16	7/8/2014	TDS	=	331.00	mg/L
BCVWD 16	7/8/2010	Temperature (field)	=	18.00	°C
BCVWD 16	11/22/2010	Temperature (field)	=	17.30	°C
BCVWD 16	5/26/2011	Temperature (field)	=	16.80	°C
BCVWD 16	8/24/2011	Temperature (field)	=	18.10	°C
BCVWD 16	12/17/2012	Temperature (field)	=	17.70	°C
BCVWD 16	9/5/2013	Temperature (field)	=	18.40	°C
BCVWD 16	7/8/2014	Temperature (field)	=	17.50	°C
BCVWD 16	3/24/2010	Total Hardness (as CaCO3)	=	210.00	mg/L
BCVWD 16	7/8/2010	Total Hardness (as CaCO3)	=	218.00	mg/L
BCVWD 16	11/22/2010	Total Hardness (as CaCO3)	=	221.00	mg/L
BCVWD 16	8/24/2011	Total Hardness (as CaCO3)	=	221.00	mg/L
BCVWD 16	12/17/2012	Total Hardness (as CaCO3)	=	226.00	mg/L
BCVWD 16	9/5/2013	Total Hardness (as CaCO3)	=	198.00	mg/L

Well Name	Sample Date	Analyte	Result Value		Unit
BCVWD 01	5/10/2011	pH	=	7.43	-
BCVWD 01	7/19/2011	pH	=	7.60	-
BCVWD 01	3/24/2010	Potassium	=	1.30	mg/L
BCVWD 01	5/10/2011	Potassium	=	1.49	mg/L
BCVWD 01	7/19/2011	Potassium	=	1.53	mg/L
BCVWD 01	3/24/2010	Sodium	=	20.00	mg/L
BCVWD 01	5/10/2011	Sodium	=	19.76	mg/L
BCVWD 01	7/19/2011	Sodium	=	22.42	mg/L
BCVWD 01	3/24/2010	Specific Conductance	=	370.00	uS/cm
BCVWD 01	5/10/2011	Specific Conductance	=	383.00	uS/cm
BCVWD 01	7/19/2011	Specific Conductance	=	352.00	uS/cm
BCVWD 01	3/24/2010	Sulfate	=	8.30	mg/L
BCVWD 01	5/10/2011	Sulfate	=	9.49	mg/L
BCVWD 01	7/19/2011	Sulfate	=	10.44	mg/L
BCVWD 01	3/24/2010	TDS	=	220.00	mg/L
BCVWD 01	5/10/2011	TDS	=	256.61	mg/L
BCVWD 01	7/19/2011	TDS	=	235.84	mg/L
BCVWD 01	5/10/2011	Temperature (field)	=	17.90	°C
BCVWD 01	7/19/2011	Temperature (field)	=	20.60	°C
BCVWD 01	3/24/2010	Total Hardness (as CaCO3)	=	140.00	mg/L
BCVWD 01	3/24/2010	Turbidity	<	0.200	NTU
BCVWD 03	3/24/2010	Alkalinity	=	150.00	mg/L
BCVWD 03	7/7/2010	Alkalinity	=	144.00	mg/L
BCVWD 03	6/19/2013	Alkalinity	=	154.00	mg/L
BCVWD 03	10/22/2013	Alkalinity	=	150.00	mg/L
BCVWD 03	7/7/2010	Ammonia-Nitrogen	<	0.020	mg/L
BCVWD 03	6/19/2013	Ammonia-Nitrogen	<	0.010	mg/L
BCVWD 03	3/24/2010	Bicarbonate	=	180.00	mg/L
BCVWD 03	7/7/2010	Bicarbonate	=	174.00	mg/L
BCVWD 03	5/10/2011	Bicarbonate	=	182.07	mg/L
BCVWD 03	6/19/2013	Bicarbonate	=	186.00	mg/L
BCVWD 03	10/22/2013	Bicarbonate	=	180.00	mg/L
BCVWD 03	3/24/2010	Calcium	=	33.00	mg/L
BCVWD 03	7/7/2010	Calcium	=	35.20	mg/L

Well Name	Sample Date	Analyte	Result Value		Unit
BCVWD 16	10/22/2013	Total Hardness (as CaCO3)	=	200.00	mg/L
BCVWD 16	7/8/2014	Total Hardness (as CaCO3)	=	202.00	mg/L
BCVWD 16	3/24/2010	Turbidity	=	0.220	NTU
BCVWD 16	10/22/2013	Turbidity	<	0.200	NTU
BCVWD 20	12/18/2012	Alkalinity	=	170.00	mg/L
BCVWD 20	8/28/2013	Alkalinity	=	170.00	mg/L
BCVWD 20	5/10/2011	Bicarbonate	=	219.85	mg/L
BCVWD 20	7/19/2011	Bicarbonate	=	210.32	mg/L
BCVWD 20	12/18/2012	Bicarbonate	=	210.00	mg/L
BCVWD 20	8/28/2013	Bicarbonate	=	210.00	mg/L
BCVWD 20	5/10/2011	Calcium	=	52.50	mg/L
BCVWD 20	7/19/2011	Calcium	=	51.69	mg/L
BCVWD 20	12/18/2012	Calcium	=	50.00	mg/L
BCVWD 20	8/28/2013	Calcium	=	47.00	mg/L
BCVWD 20	12/18/2012	Carbonate (C03--)	<	3.00	mg/L
BCVWD 20	8/28/2013	Carbonate (C03--)	<	3.00	mg/L
BCVWD 20	5/10/2011	Chloride	=	5.51	mg/L
BCVWD 20	7/19/2011	Chloride	=	4.62	mg/L
BCVWD 20	12/18/2012	Chloride	=	3.60	mg/L
BCVWD 20	8/28/2013	Chloride	=	4.00	mg/L
BCVWD 20	5/10/2011	Dissolved Oxygen (field)	=	6.72	mg/L
BCVWD 20	7/19/2011	Dissolved Oxygen (field)	=	8.25	mg/L
BCVWD 20	12/18/2012	Hydroxide (as OH-)	<	3.00	mg/L
BCVWD 20	8/28/2013	Hydroxide (as OH-)	<	3.00	mg/L
BCVWD 20	5/10/2011	Magnesium	=	17.36	mg/L
BCVWD 20	7/19/2011	Magnesium	=	17.67	mg/L
BCVWD 20	12/18/2012	Magnesium	=	17.00	mg/L
BCVWD 20	8/28/2013	Magnesium	=	16.00	mg/L
BCVWD 20	3/18/2010	Nitrate-Nitrogen	=	1.65	mg/L
BCVWD 20	5/10/2011	Nitrate-Nitrogen	=	2.21	mg/L
BCVWD 20	7/19/2011	Nitrate-Nitrogen	=	1.82	mg/L
BCVWD 20	11/30/2011	Nitrate-Nitrogen	=	2.48	mg/L
BCVWD 20	12/18/2012	Nitrate-Nitrogen	=	1.15	mg/L
BCVWD 20	8/28/2013	Nitrate-Nitrogen	=	1.13	mg/L

Well Name	Sample Date	Analyte	Result Value	Unit
BCVWD 03	5/10/2011	Calcium	= 36.39	mg/L
BCVWD 03	6/19/2013	Calcium	= 37.70	mg/L
BCVWD 03	10/22/2013	Calcium	= 37.00	mg/L
BCVWD 03	3/24/2010	Carbonate (C03--)	< 3.00	mg/L
BCVWD 03	10/22/2013	Carbonate (C03--)	< 3.00	mg/L
BCVWD 03	3/24/2010	Chloride	= 7.00	mg/L
BCVWD 03	7/7/2010	Chloride	= 9.02	mg/L
BCVWD 03	5/10/2011	Chloride	= 9.16	mg/L
BCVWD 03	6/19/2013	Chloride	= 8.55	mg/L
BCVWD 03	10/22/2013	Chloride	= 7.60	mg/L
BCVWD 03	5/10/2011	Dissolved Oxygen (field)	= 7.08	mg/L
BCVWD 03	3/24/2010	Hydroxide (as OH-)	< 3.00	mg/L
BCVWD 03	10/22/2013	Hydroxide (as OH-)	< 3.00	mg/L
BCVWD 03	3/24/2010	Magnesium	= 8.30	mg/L
BCVWD 03	7/7/2010	Magnesium	= 8.33	mg/L
BCVWD 03	5/10/2011	Magnesium	= 8.96	mg/L
BCVWD 03	6/19/2013	Magnesium	= 9.04	mg/L
BCVWD 03	10/22/2013	Magnesium	= 9.40	mg/L
BCVWD 03	3/24/2010	Nitrate-Nitrogen	= 0.903	mg/L
BCVWD 03	7/7/2010	Nitrate-Nitrogen	= 1.11	mg/L
BCVWD 03	5/10/2011	Nitrate-Nitrogen	= 1.04	mg/L
BCVWD 03	12/14/2011	Nitrate-Nitrogen	= 0.768	mg/L
BCVWD 03	12/18/2012	Nitrate-Nitrogen	= 0.632	mg/L
BCVWD 03	6/19/2013	Nitrate-Nitrogen	= 0.939	mg/L
BCVWD 03	10/22/2013	Nitrate-Nitrogen	= 0.881	mg/L
BCVWD 03	3/24/2010	Nitrite-Nitrogen	< 0.100	mg/L
BCVWD 03	7/7/2010	Nitrite-Nitrogen	< 0.002	mg/L
BCVWD 03	5/10/2011	Nitrite-Nitrogen	ND	mg/L
BCVWD 03	6/19/2013	Nitrite-Nitrogen	< 0.001	mg/L
BCVWD 03	10/22/2013	Nitrite-Nitrogen	< 0.100	mg/L
BCVWD 03	3/24/2010	pH	= 8.00	-
BCVWD 03	7/7/2010	pH	= 8.00	-
BCVWD 03	5/10/2011	pH	= 7.50	-
BCVWD 03	6/19/2013	pH	= 8.00	-

Well Name	Sample Date	Analyte	Result Value	Unit
BCVWD 20	5/10/2011	Nitrite-Nitrogen	ND	mg/L
BCVWD 20	7/19/2011	Nitrite-Nitrogen	ND	mg/L
BCVWD 20	12/18/2012	Nitrite-Nitrogen	< 0.100	mg/L
BCVWD 20	8/28/2013	Nitrite-Nitrogen	< 0.100	mg/L
BCVWD 20	5/10/2011	pH	= 7.07	-
BCVWD 20	7/19/2011	pH	= 7.25	-
BCVWD 20	12/18/2012	pH	= 7.10	-
BCVWD 20	8/28/2013	pH	= 7.20	-
BCVWD 20	5/10/2011	Potassium	= 1.77	mg/L
BCVWD 20	7/19/2011	Potassium	= 1.93	mg/L
BCVWD 20	12/18/2012	Potassium	= 1.70	mg/L
BCVWD 20	8/28/2013	Potassium	= 1.70	mg/L
BCVWD 20	5/10/2011	Sodium	= 11.40	mg/L
BCVWD 20	7/19/2011	Sodium	= 12.74	mg/L
BCVWD 20	12/18/2012	Sodium	= 13.00	mg/L
BCVWD 20	8/28/2013	Sodium	= 12.00	mg/L
BCVWD 20	5/10/2011	Specific Conductance	= 451.00	uS/cm
BCVWD 20	7/19/2011	Specific Conductance	= 440.00	uS/cm
BCVWD 20	12/18/2012	Specific Conductance	= 420.00	uS/cm
BCVWD 20	8/28/2013	Specific Conductance	= 440.00	uS/cm
BCVWD 20	5/10/2011	Sulfate	= 25.61	mg/L
BCVWD 20	7/19/2011	Sulfate	= 23.03	mg/L
BCVWD 20	12/18/2012	Sulfate	= 21.00	mg/L
BCVWD 20	8/28/2013	Sulfate	= 21.00	mg/L
BCVWD 20	5/10/2011	TDS	= 302.17	mg/L
BCVWD 20	7/19/2011	TDS	= 294.80	mg/L
BCVWD 20	12/18/2012	TDS	= 220.00	mg/L
BCVWD 20	8/28/2013	TDS	= 200.00	mg/L
BCVWD 20	5/10/2011	Temperature (field)	= 12.80	°C
BCVWD 20	7/19/2011	Temperature (field)	= 15.70	°C
BCVWD 20	12/18/2012	Total Hardness (as CaCO3)	= 200.00	mg/L
BCVWD 20	8/28/2013	Total Hardness (as CaCO3)	= 180.00	mg/L
BCVWD 20	12/18/2012	Turbidity	= 2.90	NTU
BCVWD 20	8/28/2013	Turbidity	= 0.640	NTU

Well Name	Sample Date	Analyte	Result Value		Unit
BCVWD 03	10/22/2013	pH	=	8.20	-
BCVWD 03	7/7/2010	pH (field)	=	7.90	-
BCVWD 03	6/19/2013	pH (field)	=	7.90	-
BCVWD 03	3/24/2010	Potassium	=	1.50	mg/L
BCVWD 03	7/7/2010	Potassium	=	1.73	mg/L
BCVWD 03	5/10/2011	Potassium	=	1.57	mg/L
BCVWD 03	6/19/2013	Potassium	=	1.64	mg/L
BCVWD 03	10/22/2013	Potassium	=	1.70	mg/L
BCVWD 03	3/24/2010	Sodium	=	24.00	mg/L
BCVWD 03	7/7/2010	Sodium	=	26.20	mg/L
BCVWD 03	5/10/2011	Sodium	=	24.42	mg/L
BCVWD 03	6/19/2013	Sodium	=	24.20	mg/L
BCVWD 03	10/22/2013	Sodium	=	25.00	mg/L
BCVWD 03	3/24/2010	Specific Conductance	=	350.00	uS/cm
BCVWD 03	7/7/2010	Specific Conductance	=	344.00	uS/cm
BCVWD 03	5/10/2011	Specific Conductance	=	361.00	uS/cm
BCVWD 03	6/19/2013	Specific Conductance	=	353.00	uS/cm
BCVWD 03	10/22/2013	Specific Conductance	=	350.00	uS/cm
BCVWD 03	7/7/2010	Specific Conductance (field)	=	328.00	uS/cm
BCVWD 03	6/19/2013	Specific Conductance (field)	=	339.00	uS/cm
BCVWD 03	3/24/2010	Sulfate	=	9.00	mg/L
BCVWD 03	7/7/2010	Sulfate	=	10.80	mg/L
BCVWD 03	5/10/2011	Sulfate	=	11.37	mg/L
BCVWD 03	6/19/2013	Sulfate	=	12.30	mg/L
BCVWD 03	10/22/2013	Sulfate	=	11.00	mg/L
BCVWD 03	3/24/2010	TDS	=	190.00	mg/L
BCVWD 03	7/7/2010	TDS	=	195.00	mg/L
BCVWD 03	5/10/2011	TDS	=	241.87	mg/L
BCVWD 03	6/19/2013	TDS	=	215.00	mg/L
BCVWD 03	11/12/2013	TDS	=	210.00	mg/L
BCVWD 03	7/7/2010	Temperature (field)	=	20.00	°C
BCVWD 03	5/10/2011	Temperature (field)	=	18.30	°C
BCVWD 03	6/19/2013	Temperature (field)	=	19.70	°C
BCVWD 03	3/24/2010	Total Hardness (as CaCO3)	=	120.00	mg/L

Well Name	Sample Date	Analyte	Result Value		Unit
BCVWD 21	12/18/2012	Alkalinity	=	140.00	mg/L
BCVWD 21	5/11/2011	Bicarbonate	=	163.86	mg/L
BCVWD 21	7/19/2011	Bicarbonate	=	190.74	mg/L
BCVWD 21	12/18/2012	Bicarbonate	=	170.00	mg/L
BCVWD 21	5/11/2011	Calcium	=	44.54	mg/L
BCVWD 21	7/19/2011	Calcium	=	47.30	mg/L
BCVWD 21	12/18/2012	Calcium	=	45.00	mg/L
BCVWD 21	12/18/2012	Carbonate (C03--)	<	3.00	mg/L
BCVWD 21	5/11/2011	Chloride	=	16.38	mg/L
BCVWD 21	7/19/2011	Chloride	=	13.60	mg/L
BCVWD 21	12/18/2012	Chloride	=	13.00	mg/L
BCVWD 21	5/11/2011	Dissolved Oxygen (field)	=	9.13	mg/L
BCVWD 21	7/19/2011	Dissolved Oxygen (field)	=	9.02	mg/L
BCVWD 21	12/18/2012	Hydroxide (as OH-)	<	3.00	mg/L
BCVWD 21	5/11/2011	Magnesium	=	15.03	mg/L
BCVWD 21	7/19/2011	Magnesium	=	17.27	mg/L
BCVWD 21	12/18/2012	Magnesium	=	16.00	mg/L
BCVWD 21	12/9/2010	Nitrate-Nitrogen	=	8.58	mg/L
BCVWD 21	5/11/2011	Nitrate-Nitrogen	=	8.65	mg/L
BCVWD 21	5/26/2011	Nitrate-Nitrogen	=	7.45	mg/L
BCVWD 21	6/21/2011	Nitrate-Nitrogen	=	6.32	mg/L
BCVWD 21	7/19/2011	Nitrate-Nitrogen	=	4.46	mg/L
BCVWD 21	7/19/2011	Nitrate-Nitrogen	=	4.74	mg/L
BCVWD 21	8/24/2011	Nitrate-Nitrogen	=	4.29	mg/L
BCVWD 21	9/20/2011	Nitrate-Nitrogen	=	4.06	mg/L
BCVWD 21	10/18/2011	Nitrate-Nitrogen	=	3.84	mg/L
BCVWD 21	11/30/2011	Nitrate-Nitrogen	=	4.06	mg/L
BCVWD 21	2/22/2012	Nitrate-Nitrogen	=	3.84	mg/L
BCVWD 21	3/29/2012	Nitrate-Nitrogen	=	4.06	mg/L
BCVWD 21	4/30/2012	Nitrate-Nitrogen	=	4.06	mg/L
BCVWD 21	5/17/2012	Nitrate-Nitrogen	=	4.06	mg/L
BCVWD 21	6/19/2012	Nitrate-Nitrogen	=	3.84	mg/L
BCVWD 21	8/7/2012	Nitrate-Nitrogen	=	3.16	mg/L
BCVWD 21	9/18/2012	Nitrate-Nitrogen	=	3.61	mg/L

Well Name	Sample Date	Analyte	Result Value		Unit
BCVWD 03	7/7/2010	Total Hardness (as CaCO3)	=	122.00	mg/L
BCVWD 03	6/19/2013	Total Hardness (as CaCO3)	=	132.00	mg/L
BCVWD 03	10/22/2013	Total Hardness (as CaCO3)	=	130.00	mg/L
BCVWD 03	3/24/2010	Turbidity	<	0.200	NTU
BCVWD 03	10/22/2013	Turbidity	<	0.200	NTU
BCVWD 04A	12/18/2012	Alkalinity	=	180.00	mg/L
BCVWD 04A	5/10/2011	Bicarbonate	=	224.93	mg/L
BCVWD 04A	7/19/2011	Bicarbonate	=	228.64	mg/L
BCVWD 04A	12/18/2012	Bicarbonate	=	220.00	mg/L
BCVWD 04A	5/10/2011	Calcium	=	61.93	mg/L
BCVWD 04A	7/19/2011	Calcium	=	64.82	mg/L
BCVWD 04A	12/18/2012	Calcium	=	64.00	mg/L
BCVWD 04A	12/18/2012	Carbonate (C03--)	<	3.00	mg/L
BCVWD 04A	5/10/2011	Chloride	=	26.20	mg/L
BCVWD 04A	7/19/2011	Chloride	=	24.29	mg/L
BCVWD 04A	12/18/2012	Chloride	=	23.00	mg/L
BCVWD 04A	5/10/2011	Dissolved Oxygen (field)	=	5.92	mg/L
BCVWD 04A	7/19/2011	Dissolved Oxygen (field)	=	6.00	mg/L
BCVWD 04A	12/18/2012	Hydroxide (as OH-)	<	3.00	mg/L
BCVWD 04A	5/10/2011	Magnesium	=	20.24	mg/L
BCVWD 04A	7/19/2011	Magnesium	=	21.30	mg/L
BCVWD 04A	12/18/2012	Magnesium	=	21.00	mg/L
BCVWD 04A	3/18/2010	Nitrate-Nitrogen	=	1.99	mg/L
BCVWD 04A	5/10/2011	Nitrate-Nitrogen	=	2.10	mg/L
BCVWD 04A	7/19/2011	Nitrate-Nitrogen	=	2.06	mg/L
BCVWD 04A	11/30/2011	Nitrate-Nitrogen	=	1.96	mg/L
BCVWD 04A	12/18/2012	Nitrate-Nitrogen	=	1.78	mg/L
BCVWD 04A	8/28/2013	Nitrate-Nitrogen	=	1.85	mg/L
BCVWD 04A	5/10/2011	Nitrite-Nitrogen	ND		mg/L
BCVWD 04A	7/19/2011	Nitrite-Nitrogen	ND		mg/L
BCVWD 04A	12/18/2012	Nitrite-Nitrogen	<	0.100	mg/L
BCVWD 04A	5/10/2011	pH	=	7.33	-
BCVWD 04A	7/19/2011	pH	=	7.36	-
BCVWD 04A	12/18/2012	pH	=	7.50	-

Well Name	Sample Date	Analyte	Result Value		Unit
BCVWD 21	10/29/2012	Nitrate-Nitrogen	=	4.06	mg/L
BCVWD 21	12/18/2012	Nitrate-Nitrogen	=	7.90	mg/L
BCVWD 21	3/5/2013	Nitrate-Nitrogen	=	4.06	mg/L
BCVWD 21	5/21/2013	Nitrate-Nitrogen	=	3.84	mg/L
BCVWD 21	6/12/2013	Nitrate-Nitrogen	=	3.84	mg/L
BCVWD 21	8/19/2013	Nitrate-Nitrogen	=	3.61	mg/L
BCVWD 21	9/16/2013	Nitrate-Nitrogen	=	3.61	mg/L
BCVWD 21	10/15/2013	Nitrate-Nitrogen	=	3.84	mg/L
BCVWD 21	10/22/2013	Nitrate-Nitrogen	=	3.61	mg/L
BCVWD 21	11/25/2013	Nitrate-Nitrogen	=	3.16	mg/L
BCVWD 21	12/10/2013	Nitrate-Nitrogen	=	4.06	mg/L
BCVWD 21	2/25/2014	Nitrate-Nitrogen	=	3.39	mg/L
BCVWD 21	3/18/2014	Nitrate-Nitrogen	=	3.61	mg/L
BCVWD 21	4/15/2014	Nitrate-Nitrogen	=	3.61	mg/L
BCVWD 21	5/12/2014	Nitrate-Nitrogen	=	3.61	mg/L
BCVWD 21	6/9/2014	Nitrate-Nitrogen	=	3.61	mg/L
BCVWD 21	7/22/2014	Nitrate-Nitrogen	=	3.61	mg/L
BCVWD 21	8/12/2014	Nitrate-Nitrogen	=	3.16	mg/L
BCVWD 21	9/17/2014	Nitrate-Nitrogen	=	3.39	mg/L
BCVWD 21	10/7/2014	Nitrate-Nitrogen	=	3.39	mg/L
BCVWD 21	12/8/2014	Nitrate-Nitrogen	=	3.61	mg/L
BCVWD 21	5/11/2011	Nitrite-Nitrogen	ND		mg/L
BCVWD 21	7/19/2011	Nitrite-Nitrogen	ND		mg/L
BCVWD 21	12/18/2012	Nitrite-Nitrogen	<	0.100	mg/L
BCVWD 21	5/11/2011	pH	=	7.36	-
BCVWD 21	7/19/2011	pH	=	7.61	-
BCVWD 21	12/18/2012	pH	=	7.80	-
BCVWD 21	5/11/2011	Potassium	=	1.43	mg/L
BCVWD 21	7/19/2011	Potassium	=	1.70	mg/L
BCVWD 21	12/18/2012	Potassium	=	1.40	mg/L
BCVWD 21	5/11/2011	Sodium	=	24.58	mg/L
BCVWD 21	7/19/2011	Sodium	=	25.63	mg/L
BCVWD 21	12/18/2012	Sodium	=	26.00	mg/L
BCVWD 21	5/11/2011	Specific Conductance	=	475.00	uS/cm

Well Name	Sample Date	Analyte	Result Value		Unit
BCVWD 04A	5/10/2011	Potassium	=	1.58	mg/L
BCVWD 04A	7/19/2011	Potassium	=	1.79	mg/L
BCVWD 04A	12/18/2012	Potassium	=	1.60	mg/L
BCVWD 04A	5/10/2011	Sodium	=	22.99	mg/L
BCVWD 04A	7/19/2011	Sodium	=	21.81	mg/L
BCVWD 04A	12/18/2012	Sodium	=	24.00	mg/L
BCVWD 04A	5/10/2011	Specific Conductance	=	579.00	uS/cm
BCVWD 04A	7/19/2011	Specific Conductance	=	590.00	uS/cm
BCVWD 04A	12/18/2012	Specific Conductance	=	560.00	uS/cm
BCVWD 04A	5/10/2011	Sulfate	=	49.12	mg/L
BCVWD 04A	7/19/2011	Sulfate	=	46.19	mg/L
BCVWD 04A	12/18/2012	Sulfate	=	46.00	mg/L
BCVWD 04A	5/10/2011	TDS	=	387.93	mg/L
BCVWD 04A	7/19/2011	TDS	=	395.30	mg/L
BCVWD 04A	12/18/2012	TDS	=	320.00	mg/L
BCVWD 04A	5/10/2011	Temperature (field)	=	15.20	°C
BCVWD 04A	7/19/2011	Temperature (field)	=	19.30	°C
BCVWD 04A	12/18/2012	Total Hardness (as CaCO3)	=	250.00	mg/L
BCVWD 04A	12/18/2012	Turbidity	<	0.200	NTU
BCVWD 05	12/18/2012	Alkalinity	=	160.00	mg/L
BCVWD 05	5/10/2011	Bicarbonate	=	192.66	mg/L
BCVWD 05	7/19/2011	Bicarbonate	=	190.20	mg/L
BCVWD 05	12/18/2012	Bicarbonate	=	200.00	mg/L
BCVWD 05	5/10/2011	Calcium	=	51.09	mg/L
BCVWD 05	7/19/2011	Calcium	=	50.40	mg/L
BCVWD 05	12/18/2012	Calcium	=	52.00	mg/L
BCVWD 05	12/18/2012	Carbonate (C03--)	<	3.00	mg/L
BCVWD 05	5/10/2011	Chloride	=	13.37	mg/L
BCVWD 05	7/19/2011	Chloride	=	12.09	mg/L
BCVWD 05	12/18/2012	Chloride	=	12.00	mg/L
BCVWD 05	5/10/2011	Dissolved Oxygen (field)	=	7.50	mg/L
BCVWD 05	7/19/2011	Dissolved Oxygen (field)	=	8.32	mg/L
BCVWD 05	12/18/2012	Hydroxide (as OH-)	<	3.00	mg/L
BCVWD 05	5/10/2011	Magnesium	=	15.81	mg/L

Well Name	Sample Date	Analyte	Result Value		Unit
BCVWD 21	7/19/2011	Specific Conductance	=	480.00	uS/cm
BCVWD 21	12/18/2012	Specific Conductance	=	460.00	uS/cm
BCVWD 21	5/11/2011	Sulfate	=	30.97	mg/L
BCVWD 21	7/19/2011	Sulfate	=	28.04	mg/L
BCVWD 21	12/18/2012	Sulfate	=	24.00	mg/L
BCVWD 21	5/11/2011	TDS	=	318.25	mg/L
BCVWD 21	7/19/2011	TDS	=	321.60	mg/L
BCVWD 21	12/18/2012	TDS	=	280.00	mg/L
BCVWD 21	5/11/2011	Temperature (field)	=	18.10	°C
BCVWD 21	7/19/2011	Temperature (field)	=	25.00	°C
BCVWD 21	12/18/2012	Total Hardness (as CaCO3)	=	180.00	mg/L
BCVWD 21	12/18/2012	Turbidity	<	0.200	NTU
BCVWD 22	3/24/2010	Alkalinity	=	180.00	mg/L
BCVWD 22	10/22/2013	Alkalinity	=	170.00	mg/L
BCVWD 22	3/24/2010	Bicarbonate	=	220.00	mg/L
BCVWD 22	5/11/2011	Bicarbonate	=	208.09	mg/L
BCVWD 22	10/22/2013	Bicarbonate	=	210.00	mg/L
BCVWD 22	3/24/2010	Calcium	=	40.00	mg/L
BCVWD 22	5/11/2011	Calcium	=	32.77	mg/L
BCVWD 22	10/22/2013	Calcium	=	40.00	mg/L
BCVWD 22	3/24/2010	Carbonate (C03--)	<	3.00	mg/L
BCVWD 22	10/22/2013	Carbonate (C03--)	<	3.00	mg/L
BCVWD 22	3/24/2010	Chloride	=	6.70	mg/L
BCVWD 22	5/11/2011	Chloride	=	9.05	mg/L
BCVWD 22	10/22/2013	Chloride	=	9.20	mg/L
BCVWD 22	5/11/2011	Dissolved Oxygen (field)	=	9.40	mg/L
BCVWD 22	3/24/2010	Hydroxide (as OH-)	<	3.00	mg/L
BCVWD 22	10/22/2013	Hydroxide (as OH-)	<	3.00	mg/L
BCVWD 22	3/24/2010	Magnesium	=	17.00	mg/L
BCVWD 22	5/11/2011	Magnesium	=	9.38	mg/L
BCVWD 22	10/22/2013	Magnesium	=	17.00	mg/L
BCVWD 22	3/24/2010	Nitrate-Nitrogen	=	0.700	mg/L
BCVWD 22	5/11/2011	Nitrate-Nitrogen	=	1.09	mg/L
BCVWD 22	12/14/2011	Nitrate-Nitrogen	=	0.971	mg/L

Well Name	Sample Date	Analyte	Result Value		Unit
BCVWD 05	7/19/2011	Magnesium	=	15.94	mg/L
BCVWD 05	12/18/2012	Magnesium	=	16.00	mg/L
BCVWD 05	3/18/2010	Nitrate-Nitrogen	=	2.71	mg/L
BCVWD 05	5/10/2011	Nitrate-Nitrogen	=	2.86	mg/L
BCVWD 05	7/19/2011	Nitrate-Nitrogen	=	2.46	mg/L
BCVWD 05	11/30/2011	Nitrate-Nitrogen	=	2.71	mg/L
BCVWD 05	12/18/2012	Nitrate-Nitrogen	=	2.71	mg/L
BCVWD 05	10/22/2013	Nitrate-Nitrogen	=	3.16	mg/L
BCVWD 05	5/10/2011	Nitrite-Nitrogen	ND		mg/L
BCVWD 05	7/19/2011	Nitrite-Nitrogen	ND		mg/L
BCVWD 05	12/18/2012	Nitrite-Nitrogen	<	0.100	mg/L
BCVWD 05	5/10/2011	pH	=	7.35	-
BCVWD 05	7/19/2011	pH	=	7.45	-
BCVWD 05	12/18/2012	pH	=	7.60	-
BCVWD 05	5/10/2011	Potassium	=	1.49	mg/L
BCVWD 05	7/19/2011	Potassium	=	1.71	mg/L
BCVWD 05	12/18/2012	Potassium	=	1.50	mg/L
BCVWD 05	5/10/2011	Sodium	=	18.13	mg/L
BCVWD 05	7/19/2011	Sodium	=	19.36	mg/L
BCVWD 05	12/18/2012	Sodium	=	21.00	mg/L
BCVWD 05	5/10/2011	Specific Conductance	=	463.00	uS/cm
BCVWD 05	7/19/2011	Specific Conductance	=	460.00	uS/cm
BCVWD 05	12/18/2012	Specific Conductance	=	450.00	uS/cm
BCVWD 05	5/10/2011	Sulfate	=	33.75	mg/L
BCVWD 05	7/19/2011	Sulfate	=	29.52	mg/L
BCVWD 05	12/18/2012	Sulfate	=	30.00	mg/L
BCVWD 05	5/10/2011	TDS	=	310.21	mg/L
BCVWD 05	7/19/2011	TDS	=	308.20	mg/L
BCVWD 05	12/18/2012	TDS	=	260.00	mg/L
BCVWD 05	5/10/2011	Temperature (field)	=	15.10	°C
BCVWD 05	7/19/2011	Temperature (field)	=	18.10	°C
BCVWD 05	12/18/2012	Total Hardness (as CaCO3)	=	200.00	mg/L
BCVWD 05	12/18/2012	Turbidity	<	0.200	NTU
BCVWD 06	12/18/2012	Alkalinity	=	180.00	mg/L

Well Name	Sample Date	Analyte	Result Value		Unit
BCVWD 22	12/18/2012	Nitrate-Nitrogen	=	0.768	mg/L
BCVWD 22	10/22/2013	Nitrate-Nitrogen	=	1.15	mg/L
BCVWD 22	3/24/2010	Nitrite-Nitrogen	<	0.100	mg/L
BCVWD 22	5/11/2011	Nitrite-Nitrogen	ND		mg/L
BCVWD 22	10/22/2013	Nitrite-Nitrogen	<	0.100	mg/L
BCVWD 22	3/24/2010	pH	=	7.80	-
BCVWD 22	5/11/2011	pH	=	7.47	-
BCVWD 22	10/22/2013	pH	=	8.00	-
BCVWD 22	3/24/2010	Potassium	=	1.30	mg/L
BCVWD 22	5/11/2011	Potassium	=	1.51	mg/L
BCVWD 22	10/22/2013	Potassium	=	1.50	mg/L
BCVWD 22	3/24/2010	Sodium	=	18.00	mg/L
BCVWD 22	5/11/2011	Sodium	=	24.68	mg/L
BCVWD 22	10/22/2013	Sodium	=	19.00	mg/L
BCVWD 22	3/24/2010	Specific Conductance	=	400.00	uS/cm
BCVWD 22	5/11/2011	Specific Conductance	=	408.00	uS/cm
BCVWD 22	10/22/2013	Specific Conductance	=	390.00	uS/cm
BCVWD 22	3/24/2010	Sulfate	=	9.70	mg/L
BCVWD 22	5/11/2011	Sulfate	=	9.87	mg/L
BCVWD 22	10/22/2013	Sulfate	=	11.00	mg/L
BCVWD 22	3/24/2010	TDS	=	200.00	mg/L
BCVWD 22	5/11/2011	TDS	=	273.36	mg/L
BCVWD 22	10/22/2013	TDS	=	210.00	mg/L
BCVWD 22	5/11/2011	Temperature (field)	=	16.50	°C
BCVWD 22	3/24/2010	Total Hardness (as CaCO3)	=	170.00	mg/L
BCVWD 22	10/22/2013	Total Hardness (as CaCO3)	=	170.00	mg/L
BCVWD 22	3/24/2010	Turbidity	<	0.200	NTU
BCVWD 22	10/22/2013	Turbidity	<	0.200	NTU
BCVWD 23	12/13/2012	Alkalinity	=	180.00	mg/L
BCVWD 23	5/11/2011	Bicarbonate	=	214.39	mg/L
BCVWD 23	7/19/2011	Bicarbonate	=	209.23	mg/L
BCVWD 23	12/13/2012	Bicarbonate	=	220.00	mg/L
BCVWD 23	5/11/2011	Calcium	=	39.51	mg/L
BCVWD 23	7/19/2011	Calcium	=	45.17	mg/L

Well Name	Sample Date	Analyte	Result Value		Unit
BCVWD 06	5/10/2011	Bicarbonate	=	210.91	mg/L
BCVWD 06	7/19/2011	Bicarbonate	=	207.68	mg/L
BCVWD 06	12/18/2012	Bicarbonate	=	220.00	mg/L
BCVWD 06	5/10/2011	Calcium	=	49.89	mg/L
BCVWD 06	7/19/2011	Calcium	=	49.37	mg/L
BCVWD 06	12/18/2012	Calcium	=	51.00	mg/L
BCVWD 06	12/18/2012	Carbonate (C03--)	<	3.00	mg/L
BCVWD 06	5/10/2011	Chloride	=	8.13	mg/L
BCVWD 06	7/19/2011	Chloride	=	6.45	mg/L
BCVWD 06	12/18/2012	Chloride	=	5.30	mg/L
BCVWD 06	5/10/2011	Dissolved Oxygen (field)	=	7.63	mg/L
BCVWD 06	7/19/2011	Dissolved Oxygen (field)	=	8.44	mg/L
BCVWD 06	12/18/2012	Hydroxide (as OH-)	<	3.00	mg/L
BCVWD 06	5/10/2011	Magnesium	=	16.18	mg/L
BCVWD 06	7/19/2011	Magnesium	=	16.38	mg/L
BCVWD 06	12/18/2012	Magnesium	=	17.00	mg/L
BCVWD 06	3/18/2010	Nitrate-Nitrogen	=	2.94	mg/L
BCVWD 06	5/10/2011	Nitrate-Nitrogen	=	2.81	mg/L
BCVWD 06	7/19/2011	Nitrate-Nitrogen	=	2.41	mg/L
BCVWD 06	11/30/2011	Nitrate-Nitrogen	=	2.48	mg/L
BCVWD 06	12/18/2012	Nitrate-Nitrogen	=	2.48	mg/L
BCVWD 06	8/28/2013	Nitrate-Nitrogen	=	2.48	mg/L
BCVWD 06	5/10/2011	Nitrite-Nitrogen	ND		mg/L
BCVWD 06	7/19/2011	Nitrite-Nitrogen	ND		mg/L
BCVWD 06	12/18/2012	Nitrite-Nitrogen	<	0.100	mg/L
BCVWD 06	5/10/2011	pH	=	7.30	-
BCVWD 06	7/19/2011	pH	=	7.36	-
BCVWD 06	12/18/2012	pH	=	7.50	-
BCVWD 06	5/10/2011	Potassium	=	1.15	mg/L
BCVWD 06	7/19/2011	Potassium	=	1.47	mg/L
BCVWD 06	12/18/2012	Potassium	=	1.10	mg/L
BCVWD 06	5/10/2011	Sodium	=	16.67	mg/L
BCVWD 06	7/19/2011	Sodium	=	18.77	mg/L
BCVWD 06	12/18/2012	Sodium	=	17.00	mg/L

Well Name	Sample Date	Analyte	Result Value		Unit
BCVWD 23	12/13/2012	Calcium	=	47.00	mg/L
BCVWD 23	12/13/2012	Carbonate (C03--)	<	3.00	mg/L
BCVWD 23	5/11/2011	Chloride	=	9.89	mg/L
BCVWD 23	7/19/2011	Chloride	=	8.02	mg/L
BCVWD 23	12/13/2012	Chloride	=	11.00	mg/L
BCVWD 23	5/11/2011	Dissolved Oxygen (field)	=	8.86	mg/L
BCVWD 23	7/19/2011	Dissolved Oxygen (field)	=	8.96	mg/L
BCVWD 23	12/13/2012	Hydroxide (as OH-)	<	3.00	mg/L
BCVWD 23	5/11/2011	Magnesium	=	16.77	mg/L
BCVWD 23	7/19/2011	Magnesium	=	14.27	mg/L
BCVWD 23	12/13/2012	Magnesium	=	17.00	mg/L
BCVWD 23	3/24/2010	Nitrate-Nitrogen	=	1.87	mg/L
BCVWD 23	5/11/2011	Nitrate-Nitrogen	=	1.12	mg/L
BCVWD 23	7/19/2011	Nitrate-Nitrogen	=	1.68	mg/L
BCVWD 23	12/14/2011	Nitrate-Nitrogen	=	3.84	mg/L
BCVWD 23	12/13/2012	Nitrate-Nitrogen	=	3.61	mg/L
BCVWD 23	6/24/2014	Nitrate-Nitrogen	=	3.39	mg/L
BCVWD 23	5/11/2011	Nitrite-Nitrogen	ND		mg/L
BCVWD 23	7/19/2011	Nitrite-Nitrogen	ND		mg/L
BCVWD 23	12/13/2012	Nitrite-Nitrogen	<	0.100	mg/L
BCVWD 23	5/11/2011	pH	=	7.51	-
BCVWD 23	7/19/2011	pH	=	7.74	-
BCVWD 23	12/13/2012	pH	=	7.80	-
BCVWD 23	5/11/2011	Potassium	=	1.28	mg/L
BCVWD 23	7/19/2011	Potassium	=	1.73	mg/L
BCVWD 23	5/11/2011	Sodium	=	17.44	mg/L
BCVWD 23	7/19/2011	Sodium	=	23.32	mg/L
BCVWD 23	12/13/2012	Sodium	=	18.00	mg/L
BCVWD 23	5/11/2011	Specific Conductance	=	458.00	uS/cm
BCVWD 23	7/19/2011	Specific Conductance	=	429.00	uS/cm
BCVWD 23	12/13/2012	Specific Conductance	=	420.00	uS/cm
BCVWD 23	5/11/2011	Sulfate	=	11.08	mg/L
BCVWD 23	7/19/2011	Sulfate	=	15.99	mg/L
BCVWD 23	12/13/2012	Sulfate	=	19.00	mg/L

Well Name	Sample Date	Analyte	Result Value		Unit
BCVWD 06	5/10/2011	Specific Conductance	=	456.00	uS/cm
BCVWD 06	7/19/2011	Specific Conductance	=	447.00	uS/cm
BCVWD 06	12/18/2012	Specific Conductance	=	430.00	uS/cm
BCVWD 06	5/10/2011	Sulfate	=	24.55	mg/L
BCVWD 06	7/19/2011	Sulfate	=	22.54	mg/L
BCVWD 06	12/18/2012	Sulfate	=	21.00	mg/L
BCVWD 06	5/10/2011	TDS	=	305.52	mg/L
BCVWD 06	7/19/2011	TDS	=	299.49	mg/L
BCVWD 06	12/18/2012	TDS	=	260.00	mg/L
BCVWD 06	5/10/2011	Temperature (field)	=	14.00	°C
BCVWD 06	7/19/2011	Temperature (field)	=	16.40	°C
BCVWD 06	12/18/2012	Total Hardness (as CaCO3)	=	200.00	mg/L
BCVWD 06	12/18/2012	Turbidity	<	0.200	NTU
BCVWD 10	12/18/2012	Alkalinity	=	180.00	mg/L
BCVWD 10	5/10/2011	Bicarbonate	=	206.85	mg/L
BCVWD 10	7/19/2011	Bicarbonate	=	200.86	mg/L
BCVWD 10	12/18/2012	Bicarbonate	=	210.00	mg/L
BCVWD 10	5/10/2011	Calcium	=	47.58	mg/L
BCVWD 10	7/19/2011	Calcium	=	48.64	mg/L
BCVWD 10	12/18/2012	Calcium	=	49.00	mg/L
BCVWD 10	12/18/2012	Carbonate (C03--)	<	3.00	mg/L
BCVWD 10	5/10/2011	Chloride	=	5.48	mg/L
BCVWD 10	7/19/2011	Chloride	=	4.94	mg/L
BCVWD 10	12/18/2012	Chloride	=	4.20	mg/L
BCVWD 10	5/10/2011	Dissolved Oxygen (field)	=	7.20	mg/L
BCVWD 10	7/19/2011	Dissolved Oxygen (field)	=	6.26	mg/L
BCVWD 10	12/18/2012	Hydroxide (as OH-)	<	3.00	mg/L
BCVWD 10	5/10/2011	Magnesium	=	15.41	mg/L
BCVWD 10	7/19/2011	Magnesium	=	16.12	mg/L
BCVWD 10	12/18/2012	Magnesium	=	17.00	mg/L
BCVWD 10	3/18/2010	Nitrate-Nitrogen	=	1.31	mg/L
BCVWD 10	5/10/2011	Nitrate-Nitrogen	=	1.59	mg/L
BCVWD 10	7/19/2011	Nitrate-Nitrogen	=	2.07	mg/L
BCVWD 10	11/30/2011	Nitrate-Nitrogen	=	2.08	mg/L

Well Name	Sample Date	Analyte	Result Value		Unit
BCVWD 23	5/11/2011	TDS	=	306.86	mg/L
BCVWD 23	7/19/2011	TDS	=	287.43	mg/L
BCVWD 23	12/13/2012	TDS	=	300.00	mg/L
BCVWD 23	5/11/2011	Temperature (field)	=	16.50	°C
BCVWD 23	7/19/2011	Temperature (field)	=	19.20	°C
BCVWD 23	12/13/2012	Total Hardness (as CaCO3)	=	190.00	mg/L
BCVWD 23	12/13/2012	Turbidity	=	0.440	NTU
BCVWD 24	11/30/2011	Alkalinity	=	150.00	mg/L
BCVWD 24	5/11/2011	Bicarbonate	=	180.73	mg/L
BCVWD 24	11/30/2011	Bicarbonate	=	180.00	mg/L
BCVWD 24	5/11/2011	Calcium	=	48.56	mg/L
BCVWD 24	11/30/2011	Calcium	=	37.00	mg/L
BCVWD 24	11/30/2011	Carbonate (C03--)	<	3.00	mg/L
BCVWD 24	5/11/2011	Chloride	=	12.43	mg/L
BCVWD 24	11/30/2011	Chloride	=	5.90	mg/L
BCVWD 24	5/11/2011	Dissolved Oxygen (field)	=	8.53	mg/L
BCVWD 24	11/30/2011	Hydroxide (as OH-)	<	3.00	mg/L
BCVWD 24	5/11/2011	Magnesium	=	17.09	mg/L
BCVWD 24	11/30/2011	Magnesium	=	12.00	mg/L
BCVWD 24	3/24/2010	Nitrate-Nitrogen	=	1.20	mg/L
BCVWD 24	5/11/2011	Nitrate-Nitrogen	=	2.64	mg/L
BCVWD 24	11/30/2011	Nitrate-Nitrogen	=	1.51	mg/L
BCVWD 24	12/18/2012	Nitrate-Nitrogen	=	1.45	mg/L
BCVWD 24	10/22/2013	Nitrate-Nitrogen	=	1.58	mg/L
BCVWD 24	6/24/2014	Nitrate-Nitrogen	=	1.31	mg/L
BCVWD 24	5/11/2011	Nitrite-Nitrogen	ND		mg/L
BCVWD 24	11/30/2011	Nitrite-Nitrogen	<	0.400	mg/L
BCVWD 24	5/11/2011	pH	=	7.49	-
BCVWD 24	11/30/2011	pH	=	7.70	-
BCVWD 24	5/11/2011	Potassium	=	1.41	mg/L
BCVWD 24	11/30/2011	Potassium	=	1.70	mg/L
BCVWD 24	5/11/2011	Sodium	=	18.85	mg/L
BCVWD 24	11/30/2011	Sodium	=	19.00	mg/L
BCVWD 24	5/11/2011	Specific Conductance	=	365.00	uS/cm

Well Name	Sample Date	Analyte	Result Value		Unit
BCVWD 10	12/18/2012	Nitrate-Nitrogen	=	1.51	mg/L
BCVWD 10	3/5/2013	Nitrate-Nitrogen	=	8.13	mg/L
BCVWD 10	8/28/2013	Nitrate-Nitrogen	=	1.29	mg/L
BCVWD 10	5/10/2011	Nitrite-Nitrogen	ND		mg/L
BCVWD 10	7/19/2011	Nitrite-Nitrogen	ND		mg/L
BCVWD 10	12/18/2012	Nitrite-Nitrogen	<	0.100	mg/L
BCVWD 10	5/10/2011	pH	=	7.14	-
BCVWD 10	7/19/2011	pH	=	7.25	-
BCVWD 10	12/18/2012	pH	=	7.30	-
BCVWD 10	5/10/2011	Potassium	=	1.64	mg/L
BCVWD 10	7/19/2011	Potassium	=	1.74	mg/L
BCVWD 10	12/18/2012	Potassium	=	1.60	mg/L
BCVWD 10	5/10/2011	Sodium	=	12.35	mg/L
BCVWD 10	7/19/2011	Sodium	=	13.89	mg/L
BCVWD 10	12/18/2012	Sodium	=	15.00	mg/L
BCVWD 10	5/10/2011	Specific Conductance	=	424.00	uS/cm
BCVWD 10	7/19/2011	Specific Conductance	=	424.00	uS/cm
BCVWD 10	12/18/2012	Specific Conductance	=	410.00	uS/cm
BCVWD 10	5/10/2011	Sulfate	=	24.41	mg/L
BCVWD 10	7/19/2011	Sulfate	=	19.79	mg/L
BCVWD 10	12/18/2012	Sulfate	=	19.00	mg/L
BCVWD 10	5/10/2011	TDS	=	284.08	mg/L
BCVWD 10	7/19/2011	TDS	=	284.08	mg/L
BCVWD 10	12/18/2012	TDS	=	290.00	mg/L
BCVWD 10	5/10/2011	Temperature (field)	=	13.10	°C
BCVWD 10	7/19/2011	Temperature (field)	=	15.70	°C
BCVWD 10	12/18/2012	Total Hardness (as CaCO3)	=	190.00	mg/L
BCVWD 10	12/18/2012	Turbidity	=	0.380	NTU
BCVWD 11	12/18/2012	Alkalinity	=	170.00	mg/L
BCVWD 11	8/28/2013	Alkalinity	=	180.00	mg/L
BCVWD 11	5/11/2011	Bicarbonate	=	217.90	mg/L
BCVWD 11	12/18/2012	Bicarbonate	=	210.00	mg/L
BCVWD 11	8/28/2013	Bicarbonate	=	210.00	mg/L
BCVWD 11	5/11/2011	Calcium	=	51.02	mg/L
BCVWD 24	11/30/2011	Specific Conductance	=	360.00	uS/cm
BCVWD 24	5/11/2011	Sulfate	=	20.28	mg/L
BCVWD 24	11/30/2011	Sulfate	=	11.00	mg/L
BCVWD 24	5/11/2011	TDS	=	244.55	mg/L
BCVWD 24	11/30/2011	TDS	=	180.00	mg/L
BCVWD 24	5/11/2011	Temperature (field)	=	17.00	°C
BCVWD 24	11/30/2011	Total Hardness (as CaCO3)	=	140.00	mg/L
BCVWD 24	11/30/2011	Turbidity	ND		NTU
BCVWD 25	12/18/2012	Alkalinity	=	160.00	mg/L
BCVWD 25	7/9/2012	Ammonia-Nitrogen	<	0.010	mg/L
BCVWD 25	5/11/2011	Bicarbonate	=	197.81	mg/L
BCVWD 25	12/18/2012	Bicarbonate	=	200.00	mg/L
BCVWD 25	5/11/2011	Calcium	=	38.17	mg/L
BCVWD 25	7/9/2012	Calcium	=	42.00	mg/L
BCVWD 25	12/18/2012	Calcium	=	43.00	mg/L
BCVWD 25	12/18/2012	Carbonate (C03--)	<	3.00	mg/L
BCVWD 25	5/11/2011	Chloride	=	6.58	mg/L
BCVWD 25	7/9/2012	Chloride	=	9.70	mg/L
BCVWD 25	12/18/2012	Chloride	=	7.00	mg/L
BCVWD 25	5/11/2011	Dissolved Oxygen (field)	=	8.40	mg/L
BCVWD 25	12/18/2012	Hydroxide (as OH-)	<	3.00	mg/L
BCVWD 25	5/11/2011	Magnesium	=	12.28	mg/L
BCVWD 25	7/9/2012	Magnesium	=	13.40	mg/L
BCVWD 25	12/18/2012	Magnesium	=	13.00	mg/L
BCVWD 25	3/24/2010	Nitrate-Nitrogen	=	0.994	mg/L
BCVWD 25	5/11/2011	Nitrate-Nitrogen	=	1.48	mg/L
BCVWD 25	11/30/2011	Nitrate-Nitrogen	=	1.02	mg/L
BCVWD 25	7/9/2012	Nitrate-Nitrogen	=	1.07	mg/L
BCVWD 25	12/18/2012	Nitrate-Nitrogen	=	0.723	mg/L
BCVWD 25	10/22/2013	Nitrate-Nitrogen	=	1.04	mg/L
BCVWD 25	5/11/2011	Nitrite-Nitrogen	ND		mg/L
BCVWD 25	7/9/2012	Nitrite-Nitrogen	<	0.001	mg/L
BCVWD 25	12/18/2012	Nitrite-Nitrogen	<	0.100	mg/L
BCVWD 25	5/11/2011	pH	=	7.55	-

Well Name	Sample Date	Analyte	Result Value		Unit
BCVWD 11	12/18/2012	Calcium	=	48.00	mg/L
BCVWD 11	8/28/2013	Calcium	=	47.00	mg/L
BCVWD 11	12/18/2012	Carbonate (C03--)	<	3.00	mg/L
BCVWD 11	8/28/2013	Carbonate (C03--)	<	3.00	mg/L
BCVWD 11	5/11/2011	Chloride	=	5.65	mg/L
BCVWD 11	12/18/2012	Chloride	=	3.40	mg/L
BCVWD 11	8/28/2013	Chloride	=	3.90	mg/L
BCVWD 11	5/11/2011	Dissolved Oxygen (field)	=	8.22	mg/L
BCVWD 11	12/18/2012	Hydroxide (as OH-)	<	3.00	mg/L
BCVWD 11	8/28/2013	Hydroxide (as OH-)	<	3.00	mg/L
BCVWD 11	5/11/2011	Magnesium	=	17.01	mg/L
BCVWD 11	12/18/2012	Magnesium	=	17.00	mg/L
BCVWD 11	8/28/2013	Magnesium	=	16.00	mg/L
BCVWD 11	3/18/2010	Nitrate-Nitrogen	=	1.56	mg/L
BCVWD 11	5/11/2011	Nitrate-Nitrogen	=	2.43	mg/L
BCVWD 11	11/30/2011	Nitrate-Nitrogen	=	1.33	mg/L
BCVWD 11	8/28/2013	Nitrate-Nitrogen	=	0.971	mg/L
BCVWD 11	5/11/2011	Nitrite-Nitrogen	ND		mg/L
BCVWD 11	12/18/2012	Nitrite-Nitrogen	<	0.100	mg/L
BCVWD 11	8/28/2013	Nitrite-Nitrogen	<	0.100	mg/L
BCVWD 11	5/11/2011	pH	=	7.28	-
BCVWD 11	12/18/2012	pH	=	7.20	-
BCVWD 11	8/28/2013	pH	=	7.20	-
BCVWD 11	5/11/2011	Potassium	=	2.06	mg/L
BCVWD 11	12/18/2012	Potassium	=	2.00	mg/L
BCVWD 11	8/28/2013	Potassium	=	2.00	mg/L
BCVWD 11	5/11/2011	Sodium	=	12.05	mg/L
BCVWD 11	12/18/2012	Sodium	=	13.00	mg/L
BCVWD 11	8/28/2013	Sodium	=	13.00	mg/L
BCVWD 11	5/11/2011	Specific Conductance	=	454.00	uS/cm
BCVWD 11	12/18/2012	Specific Conductance	=	400.00	uS/cm
BCVWD 11	8/28/2013	Specific Conductance	=	460.00	uS/cm
BCVWD 11	5/11/2011	Sulfate	=	25.22	mg/L
BCVWD 11	12/18/2012	Sulfate	=	19.00	mg/L

Well Name	Sample Date	Analyte	Result Value		Unit
BCVWD 25	7/9/2012	pH	=	7.90	-
BCVWD 25	12/18/2012	pH	=	7.90	-
BCVWD 25	7/9/2012	pH (field)	=	7.70	-
BCVWD 25	5/11/2011	Potassium	=	1.39	mg/L
BCVWD 25	7/9/2012	Potassium	=	1.56	mg/L
BCVWD 25	12/18/2012	Potassium	=	1.50	mg/L
BCVWD 25	5/11/2011	Sodium	=	17.97	mg/L
BCVWD 25	7/9/2012	Sodium	=	23.00	mg/L
BCVWD 25	12/18/2012	Sodium	=	22.00	mg/L
BCVWD 25	5/11/2011	Specific Conductance	=	402.00	uS/cm
BCVWD 25	7/9/2012	Specific Conductance	=	382.00	uS/cm
BCVWD 25	12/18/2012	Specific Conductance	=	400.00	uS/cm
BCVWD 25	7/9/2012	Specific Conductance (field)	=	357.00	uS/cm
BCVWD 25	5/11/2011	Sulfate	=	11.32	mg/L
BCVWD 25	7/9/2012	Sulfate	=	13.40	mg/L
BCVWD 25	12/18/2012	Sulfate	=	12.00	mg/L
BCVWD 25	5/11/2011	TDS	=	269.34	mg/L
BCVWD 25	7/9/2012	TDS	=	227.00	mg/L
BCVWD 25	12/18/2012	TDS	=	220.00	mg/L
BCVWD 25	5/11/2011	Temperature (field)	=	17.30	°C
BCVWD 25	7/9/2012	Temperature (field)	=	19.70	°C
BCVWD 25	7/9/2012	Total Hardness (as CaCO3)	=	160.00	mg/L
BCVWD 25	12/18/2012	Total Hardness (as CaCO3)	=	160.00	mg/L
BCVWD 25	12/18/2012	Turbidity	<	0.200	NTU
BCVWD 26	8/22/2011	Alkalinity	=	142.00	mg/L
BCVWD 26	12/18/2012	Alkalinity	=	140.00	mg/L
BCVWD 26	8/22/2011	Ammonia-Nitrogen	<	0.010	mg/L
BCVWD 26	5/10/2011	Bicarbonate	=	171.05	mg/L
BCVWD 26	7/19/2011	Bicarbonate	=	170.40	mg/L
BCVWD 26	8/22/2011	Bicarbonate	=	171.00	mg/L
BCVWD 26	12/18/2012	Bicarbonate	=	170.00	mg/L
BCVWD 26	5/10/2011	Calcium	=	42.20	mg/L
BCVWD 26	7/19/2011	Calcium	=	32.43	mg/L
BCVWD 26	8/22/2011	Calcium	=	29.60	mg/L

Well Name	Sample Date	Analyte	Result Value		Unit
BCVWD 11	8/28/2013	Sulfate	=	20.00	mg/L
BCVWD 11	5/11/2011	TDS	=	304.18	mg/L
BCVWD 11	12/18/2012	TDS	=	230.00	mg/L
BCVWD 11	8/28/2013	TDS	=	230.00	mg/L
BCVWD 11	5/11/2011	Temperature (field)	=	13.50	°C
BCVWD 11	12/18/2012	Total Hardness (as CaCO3)	=	190.00	mg/L
BCVWD 11	8/28/2013	Total Hardness (as CaCO3)	=	180.00	mg/L
BCVWD 11	12/18/2012	Turbidity	=	3.80	NTU
BCVWD 11	8/28/2013	Turbidity	=	1.60	NTU
BCVWD 12	12/18/2012	Alkalinity	=	160.00	mg/L
BCVWD 12	5/11/2011	Bicarbonate	=	194.54	mg/L
BCVWD 12	7/19/2011	Bicarbonate	=	190.42	mg/L
BCVWD 12	12/18/2012	Bicarbonate	=	200.00	mg/L
BCVWD 12	5/11/2011	Calcium	=	46.50	mg/L
BCVWD 12	7/19/2011	Calcium	=	46.05	mg/L
BCVWD 12	12/18/2012	Calcium	=	46.00	mg/L
BCVWD 12	12/18/2012	Carbonate (C03--)	<	3.00	mg/L
BCVWD 12	5/11/2011	Chloride	=	5.06	mg/L
BCVWD 12	7/19/2011	Chloride	=	3.95	mg/L
BCVWD 12	12/18/2012	Chloride	=	3.40	mg/L
BCVWD 12	5/11/2011	Dissolved Oxygen (field)	=	6.78	mg/L
BCVWD 12	7/19/2011	Dissolved Oxygen (field)	=	7.31	mg/L
BCVWD 12	12/18/2012	Hydroxide (as OH-)	<	3.00	mg/L
BCVWD 12	5/11/2011	Magnesium	=	15.20	mg/L
BCVWD 12	7/19/2011	Magnesium	=	15.42	mg/L
BCVWD 12	12/18/2012	Magnesium	=	15.00	mg/L
BCVWD 12	3/18/2010	Nitrate-Nitrogen	=	1.47	mg/L
BCVWD 12	5/11/2011	Nitrate-Nitrogen	=	2.48	mg/L
BCVWD 12	7/19/2011	Nitrate-Nitrogen	=	1.67	mg/L
BCVWD 12	11/30/2011	Nitrate-Nitrogen	=	1.24	mg/L
BCVWD 12	12/18/2012	Nitrate-Nitrogen	=	0.971	mg/L
BCVWD 12	8/28/2013	Nitrate-Nitrogen	=	0.948	mg/L
BCVWD 12	5/11/2011	Nitrite-Nitrogen	ND		mg/L
BCVWD 12	7/19/2011	Nitrite-Nitrogen	ND		mg/L

Well Name	Sample Date	Analyte	Result Value		Unit
BCVWD 26	12/18/2012	Calcium	=	33.00	mg/L
BCVWD 26	12/18/2012	Carbonate (C03--)	<	3.00	mg/L
BCVWD 26	5/10/2011	Chloride	=	9.17	mg/L
BCVWD 26	7/19/2011	Chloride	=	7.79	mg/L
BCVWD 26	8/22/2011	Chloride	=	9.56	mg/L
BCVWD 26	12/18/2012	Chloride	=	7.00	mg/L
BCVWD 26	5/10/2011	Dissolved Oxygen (field)	=	7.08	mg/L
BCVWD 26	7/19/2011	Dissolved Oxygen (field)	=	8.06	mg/L
BCVWD 26	12/18/2012	Hydroxide (as OH-)	<	3.00	mg/L
BCVWD 26	5/10/2011	Magnesium	=	13.11	mg/L
BCVWD 26	7/19/2011	Magnesium	=	9.27	mg/L
BCVWD 26	8/22/2011	Magnesium	=	8.87	mg/L
BCVWD 26	12/18/2012	Magnesium	=	9.70	mg/L
BCVWD 26	3/24/2010	Nitrate-Nitrogen	=	0.948	mg/L
BCVWD 26	5/10/2011	Nitrate-Nitrogen	=	1.01	mg/L
BCVWD 26	7/19/2011	Nitrate-Nitrogen	=	0.903	mg/L
BCVWD 26	8/22/2011	Nitrate-Nitrogen	=	1.17	mg/L
BCVWD 26	12/14/2011	Nitrate-Nitrogen	=	1.06	mg/L
BCVWD 26	12/18/2012	Nitrate-Nitrogen	=	0.971	mg/L
BCVWD 26	10/22/2013	Nitrate-Nitrogen	=	1.06	mg/L
BCVWD 26	5/10/2011	Nitrite-Nitrogen	ND		mg/L
BCVWD 26	7/19/2011	Nitrite-Nitrogen	ND		mg/L
BCVWD 26	8/22/2011	Nitrite-Nitrogen	<	0.001	mg/L
BCVWD 26	12/18/2012	Nitrite-Nitrogen	<	0.100	mg/L
BCVWD 26	5/10/2011	pH	=	7.54	-
BCVWD 26	7/19/2011	pH	=	7.78	-
BCVWD 26	8/22/2011	pH	=	8.20	-
BCVWD 26	12/18/2012	pH	=	8.00	-
BCVWD 26	8/22/2011	pH (field)	=	7.90	-
BCVWD 26	5/10/2011	Potassium	=	1.54	mg/L
BCVWD 26	7/19/2011	Potassium	=	1.74	mg/L
BCVWD 26	8/22/2011	Potassium	=	1.53	mg/L
BCVWD 26	12/18/2012	Potassium	=	1.40	mg/L
BCVWD 26	5/10/2011	Sodium	=	21.35	mg/L

Well Name	Sample Date	Analyte	Result Value		Unit
BCVWD 12	12/18/2012	Nitrite-Nitrogen	<	0.100	mg/L
BCVWD 12	5/11/2011	pH	=	7.08	-
BCVWD 12	7/19/2011	pH	=	7.11	-
BCVWD 12	12/18/2012	pH	=	7.10	-
BCVWD 12	5/11/2011	Potassium	=	1.73	mg/L
BCVWD 12	7/19/2011	Potassium	=	1.93	mg/L
BCVWD 12	12/18/2012	Potassium	=	1.70	mg/L
BCVWD 12	5/11/2011	Sodium	=	11.62	mg/L
BCVWD 12	7/19/2011	Sodium	=	12.92	mg/L
BCVWD 12	12/18/2012	Sodium	=	13.00	mg/L
BCVWD 12	5/11/2011	Specific Conductance	=	416.00	uS/cm
BCVWD 12	7/19/2011	Specific Conductance	=	408.00	uS/cm
BCVWD 12	12/18/2012	Specific Conductance	=	390.00	uS/cm
BCVWD 12	5/11/2011	Sulfate	=	25.16	mg/L
BCVWD 12	7/19/2011	Sulfate	=	22.97	mg/L
BCVWD 12	12/18/2012	Sulfate	=	21.00	mg/L
BCVWD 12	5/11/2011	TDS	=	278.72	mg/L
BCVWD 12	7/19/2011	TDS	=	273.36	mg/L
BCVWD 12	12/18/2012	TDS	=	220.00	mg/L
BCVWD 12	5/11/2011	Temperature (field)	=	13.70	°C
BCVWD 12	7/19/2011	Temperature (field)	=	14.30	°C
BCVWD 12	12/18/2012	Total Hardness (as CaCO3)	=	180.00	mg/L
BCVWD 12	12/18/2012	Turbidity	<	0.200	NTU
BCVWD 13	12/9/2010	Alkalinity	=	170.00	mg/L
BCVWD 13	12/9/2010	Bicarbonate	=	200.00	mg/L
BCVWD 13	12/9/2010	Calcium	=	46.00	mg/L
BCVWD 13	12/9/2010	Carbonate (C03--)	<	3.00	mg/L
BCVWD 13	12/9/2010	Chloride	=	3.50	mg/L
BCVWD 13	12/9/2010	Hydroxide (as OH-)	<	3.00	mg/L
BCVWD 13	12/9/2010	Magnesium	=	15.00	mg/L
BCVWD 13	12/9/2010	Nitrate-Nitrogen	=	1.22	mg/L
BCVWD 13	11/30/2011	Nitrate-Nitrogen	=	1.20	mg/L
BCVWD 13	8/28/2013	Nitrate-Nitrogen	=	0.813	mg/L
BCVWD 13	12/9/2010	Nitrite-Nitrogen	<	0.100	mg/L

Well Name	Sample Date	Analyte	Result Value		Unit
BCVWD 26	7/19/2011	Sodium	=	26.09	mg/L
BCVWD 26	8/22/2011	Sodium	=	24.90	mg/L
BCVWD 26	12/18/2012	Sodium	=	26.00	mg/L
BCVWD 26	5/10/2011	Specific Conductance	=	348.00	uS/cm
BCVWD 26	7/19/2011	Specific Conductance	=	346.00	uS/cm
BCVWD 26	8/22/2011	Specific Conductance	=	320.00	uS/cm
BCVWD 26	12/18/2012	Specific Conductance	=	340.00	uS/cm
BCVWD 26	8/22/2011	Specific Conductance (field)	=	317.00	uS/cm
BCVWD 26	5/10/2011	Sulfate	=	12.71	mg/L
BCVWD 26	7/19/2011	Sulfate	=	8.56	mg/L
BCVWD 26	8/22/2011	Sulfate	=	10.20	mg/L
BCVWD 26	12/18/2012	Sulfate	=	8.30	mg/L
BCVWD 26	5/10/2011	TDS	=	233.16	mg/L
BCVWD 26	7/19/2011	TDS	=	231.82	mg/L
BCVWD 26	8/22/2011	TDS	=	193.00	mg/L
BCVWD 26	12/18/2012	TDS	=	190.00	mg/L
BCVWD 26	5/10/2011	Temperature (field)	=	19.60	°C
BCVWD 26	7/19/2011	Temperature (field)	=	25.00	°C
BCVWD 26	8/22/2011	Temperature (field)	=	20.90	°C
BCVWD 26	8/22/2011	Total Hardness (as CaCO3)	=	110.00	mg/L
BCVWD 26	12/18/2012	Total Hardness (as CaCO3)	=	120.00	mg/L
BCVWD 26	12/18/2012	Turbidity	<	0.200	NTU
BCVWD 29	12/18/2012	Alkalinity	=	150.00	mg/L
BCVWD 29	5/11/2011	Bicarbonate	=	190.23	mg/L
BCVWD 29	12/18/2012	Bicarbonate	=	180.00	mg/L
BCVWD 29	5/11/2011	Calcium	=	41.20	mg/L
BCVWD 29	12/18/2012	Calcium	=	42.00	mg/L
BCVWD 29	12/18/2012	Carbonate (C03--)	<	3.00	mg/L
BCVWD 29	5/11/2011	Chloride	=	12.86	mg/L
BCVWD 29	12/18/2012	Chloride	=	12.00	mg/L
BCVWD 29	5/11/2011	Dissolved Oxygen (field)	=	8.80	mg/L
BCVWD 29	12/18/2012	Hydroxide (as OH-)	<	3.00	mg/L
BCVWD 29	5/11/2011	Magnesium	=	14.21	mg/L
BCVWD 29	12/18/2012	Magnesium	=	15.00	mg/L

Well Name	Sample Date	Analyte	Result Value		Unit
BCVWD 13	12/9/2010	pH	=	7.00	-
BCVWD 13	12/9/2010	Potassium	=	1.90	mg/L
BCVWD 13	12/9/2010	Sodium	=	12.00	mg/L
BCVWD 13	12/9/2010	Specific Conductance	=	400.00	uS/cm
BCVWD 13	12/9/2010	Sulfate	=	25.00	mg/L
BCVWD 13	12/9/2010	TDS	=	240.00	mg/L
BCVWD 13	12/9/2010	Total Hardness (as CaCO3)	=	180.00	mg/L
BCVWD 13	12/9/2010	Turbidity	=	0.430	NTU
BCVWD 14	12/18/2012	Alkalinity	=	200.00	mg/L
BCVWD 14	5/11/2011	Bicarbonate	=	229.81	mg/L
BCVWD 14	7/19/2011	Bicarbonate	=	231.60	mg/L
BCVWD 14	12/18/2012	Bicarbonate	=	240.00	mg/L
BCVWD 14	5/11/2011	Calcium	=	55.37	mg/L
BCVWD 14	7/19/2011	Calcium	=	55.89	mg/L
BCVWD 14	12/18/2012	Calcium	=	54.00	mg/L
BCVWD 14	12/18/2012	Carbonate (C03--)	<	3.00	mg/L
BCVWD 14	5/11/2011	Chloride	=	5.25	mg/L
BCVWD 14	7/19/2011	Chloride	=	4.25	mg/L
BCVWD 14	12/18/2012	Chloride	=	3.50	mg/L
BCVWD 14	5/11/2011	Dissolved Oxygen (field)	=	7.72	mg/L
BCVWD 14	7/19/2011	Dissolved Oxygen (field)	=	8.20	mg/L
BCVWD 14	12/18/2012	Hydroxide (as OH-)	<	3.00	mg/L
BCVWD 14	5/11/2011	Magnesium	=	16.55	mg/L
BCVWD 14	7/19/2011	Magnesium	=	17.23	mg/L
BCVWD 14	12/18/2012	Magnesium	=	17.00	mg/L
BCVWD 14	6/8/2010	Nitrate-Nitrogen	=	1.40	mg/L
BCVWD 14	5/11/2011	Nitrate-Nitrogen	=	1.71	mg/L
BCVWD 14	7/19/2011	Nitrate-Nitrogen	=	1.56	mg/L
BCVWD 14	11/30/2011	Nitrate-Nitrogen	=	1.40	mg/L
BCVWD 14	12/18/2012	Nitrate-Nitrogen	=	0.655	mg/L
BCVWD 14	8/28/2013	Nitrate-Nitrogen	=	0.610	mg/L
BCVWD 14	5/11/2011	Nitrite-Nitrogen	ND		mg/L
BCVWD 14	7/19/2011	Nitrite-Nitrogen	ND		mg/L
BCVWD 14	12/18/2012	Nitrite-Nitrogen	<	0.100	mg/L
BCVWD 29	6/8/2010	Nitrate-Nitrogen	=	1.72	mg/L
BCVWD 29	5/11/2011	Nitrate-Nitrogen	=	1.80	mg/L
BCVWD 29	12/14/2011	Nitrate-Nitrogen	=	1.58	mg/L
BCVWD 29	12/18/2012	Nitrate-Nitrogen	=	1.85	mg/L
BCVWD 29	10/22/2013	Nitrate-Nitrogen	=	2.10	mg/L
BCVWD 29	5/11/2011	Nitrite-Nitrogen	ND		mg/L
BCVWD 29	12/18/2012	Nitrite-Nitrogen	<	0.100	mg/L
BCVWD 29	5/11/2011	pH	=	7.58	-
BCVWD 29	12/18/2012	pH	=	7.90	-
BCVWD 29	5/11/2011	Potassium	=	1.56	mg/L
BCVWD 29	12/18/2012	Potassium	=	1.60	mg/L
BCVWD 29	5/11/2011	Sodium	=	16.84	mg/L
BCVWD 29	12/18/2012	Sodium	=	19.00	mg/L
BCVWD 29	5/11/2011	Specific Conductance	=	396.00	uS/cm
BCVWD 29	12/18/2012	Specific Conductance	=	390.00	uS/cm
BCVWD 29	5/11/2011	Sulfate	=	11.68	mg/L
BCVWD 29	12/18/2012	Sulfate	=	10.00	mg/L
BCVWD 29	5/11/2011	TDS	=	265.32	mg/L
BCVWD 29	12/18/2012	TDS	=	280.00	mg/L
BCVWD 29	5/11/2011	Temperature (field)	=	17.30	°C
BCVWD 29	12/18/2012	Total Hardness (as CaCO3)	=	170.00	mg/L
BCVWD 29	12/18/2012	Turbidity	<	0.200	NTU
BCVWD 9A	12/9/2010	Nitrate-Nitrogen	=	2.48	mg/L
BCVWD 9A	11/30/2011	Nitrate-Nitrogen	=	3.16	mg/L
SMWC 04	7/15/2010	Alkalinity	=	120.00	mg/L
SMWC 04	4/3/2013	Alkalinity	=	100.00	mg/L
SMWC 04	7/15/2010	Bicarbonate	=	140.00	mg/L
SMWC 04	4/3/2013	Bicarbonate	=	89.00	mg/L
SMWC 04	7/15/2010	Calcium	=	21.00	mg/L
SMWC 04	4/3/2013	Calcium	=	6.80	mg/L
SMWC 04	7/15/2010	Carbonate (C03--)	<	5.00	mg/L
SMWC 04	4/3/2013	Carbonate (C03--)	<	5.00	mg/L
SMWC 04	3/22/2010	Chloride	=	39.00	mg/L
SMWC 04	4/3/2013	Chloride	=	17.00	mg/L

Well Name	Sample Date	Analyte	Result Value		Unit
BCVWD 14	5/11/2011	pH	=	7.58	-
BCVWD 14	7/19/2011	pH	=	7.59	-
BCVWD 14	12/18/2012	pH	=	7.70	-
BCVWD 14	5/11/2011	Potassium	=	1.09	mg/L
BCVWD 14	7/19/2011	Potassium	=	1.38	mg/L
BCVWD 14	12/18/2012	Potassium	=	1.00	mg/L
BCVWD 14	5/11/2011	Sodium	=	16.76	mg/L
BCVWD 14	7/19/2011	Sodium	=	18.53	mg/L
BCVWD 14	12/18/2012	Sodium	=	18.00	mg/L
BCVWD 14	5/11/2011	Specific Conductance	=	478.00	uS/cm
BCVWD 14	7/19/2011	Specific Conductance	=	477.00	uS/cm
BCVWD 14	12/18/2012	Specific Conductance	=	450.00	uS/cm
BCVWD 14	5/11/2011	Sulfate	=	30.28	mg/L
BCVWD 14	7/19/2011	Sulfate	=	26.79	mg/L
BCVWD 14	12/18/2012	Sulfate	=	24.00	mg/L
BCVWD 14	5/11/2011	TDS	=	320.26	mg/L
BCVWD 14	7/19/2011	TDS	=	319.59	mg/L
BCVWD 14	12/18/2012	TDS	=	250.00	mg/L
BCVWD 14	5/11/2011	Temperature (field)	=	15.30	°C
BCVWD 14	7/19/2011	Temperature (field)	=	16.60	°C
BCVWD 14	12/18/2012	Total Hardness (as CaCO3)	=	210.00	mg/L
BCVWD 14	12/18/2012	Turbidity	<	0.200	NTU
BCVWD 18	3/18/2010	Alkalinity	=	160.00	mg/L
BCVWD 18	8/28/2013	Alkalinity	=	180.00	mg/L
BCVWD 18	3/18/2010	Bicarbonate	=	200.00	mg/L
BCVWD 18	8/28/2013	Bicarbonate	=	210.00	mg/L
BCVWD 18	3/18/2010	Calcium	=	41.00	mg/L
BCVWD 18	8/28/2013	Calcium	=	45.00	mg/L
BCVWD 18	3/18/2010	Carbonate (C03--)	<	3.00	mg/L
BCVWD 18	8/28/2013	Carbonate (C03--)	<	3.00	mg/L
BCVWD 18	3/18/2010	Chloride	=	6.00	mg/L
BCVWD 18	8/28/2013	Chloride	=	5.00	mg/L
BCVWD 18	3/18/2010	Hydroxide (as OH-)	<	3.00	mg/L
BCVWD 18	8/28/2013	Hydroxide (as OH-)	<	3.00	mg/L

Well Name	Sample Date	Analyte	Result Value		Unit
SMWC 04	7/15/2010	Hydroxide (as OH-)	<	5.00	mg/L
SMWC 04	4/3/2013	Hydroxide (as OH-)	<	5.00	mg/L
SMWC 04	7/15/2010	Magnesium	=	4.30	mg/L
SMWC 04	4/3/2013	Magnesium	=	1.10	mg/L
SMWC 04	3/22/2010	Nitrate-Nitrogen	=	4.06	mg/L
SMWC 04	7/11/2011	Nitrate-Nitrogen	=	2.94	mg/L
SMWC 04	7/9/2012	Nitrate-Nitrogen	=	2.71	mg/L
SMWC 04	4/3/2013	Nitrate-Nitrogen	=	2.94	mg/L
SMWC 04	7/15/2013	Nitrate-Nitrogen	=	2.94	mg/L
SMWC 04	7/14/2014	Nitrate-Nitrogen	=	2.94	mg/L
SMWC 04	3/22/2010	Nitrite-Nitrogen	<	0.400	mg/L
SMWC 04	4/3/2013	Nitrite-Nitrogen	<	0.400	mg/L
SMWC 04	7/15/2010	pH	=	8.10	-
SMWC 04	4/3/2013	pH	=	8.90	-
SMWC 04	4/3/2013	pH (field)	=	8.40	-
SMWC 04	7/15/2010	Sodium	=	57.00	mg/L
SMWC 04	4/3/2013	Sodium	=	62.00	mg/L
SMWC 04	7/15/2010	Specific Conductance	=	360.00	uS/cm
SMWC 04	4/3/2013	Specific Conductance	=	320.00	uS/cm
SMWC 04	3/22/2010	Sulfate	=	20.00	mg/L
SMWC 04	4/3/2013	Sulfate	=	16.00	mg/L
SMWC 04	3/22/2010	TDS	=	310.00	mg/L
SMWC 04	4/3/2013	TDS	=	170.00	mg/L
SMWC 04	7/15/2010	Temperature (field)	=	20.00	°C
SMWC 04	4/3/2013	Temperature (field)	=	21.70	°C
SMWC 04	7/15/2010	Total Hardness (as CaCO3)	=	87.00	mg/L
SMWC 04	4/3/2013	Total Hardness (as CaCO3)	=	22.00	mg/L
SMWC 04	3/22/2010	Turbidity	<	0.100	NTU
SMWC 04	4/3/2013	Turbidity	<	0.100	NTU
SMWC 05	7/15/2010	Alkalinity	=	160.00	mg/L
SMWC 05	4/3/2013	Alkalinity	=	120.00	mg/L
SMWC 05	7/15/2010	Bicarbonate	=	200.00	mg/L
SMWC 05	4/3/2013	Bicarbonate	=	140.00	mg/L
SMWC 05	7/15/2010	Calcium	=	46.00	mg/L

Well Name	Sample Date	Analyte	Result Value		Unit
BCVWD 18	3/18/2010	Magnesium	=	14.00	mg/L
BCVWD 18	8/28/2013	Magnesium	=	15.00	mg/L
BCVWD 18	3/18/2010	Nitrate-Nitrogen	=	1.83	mg/L
BCVWD 18	11/30/2011	Nitrate-Nitrogen	=	2.48	mg/L
BCVWD 18	12/18/2012	Nitrate-Nitrogen	=	1.49	mg/L
BCVWD 18	8/28/2013	Nitrate-Nitrogen	=	1.38	mg/L
BCVWD 18	3/18/2010	Nitrite-Nitrogen	<	0.100	mg/L
BCVWD 18	8/28/2013	Nitrite-Nitrogen	<	0.100	mg/L
BCVWD 18	3/18/2010	pH	=	7.20	-
BCVWD 18	8/28/2013	pH	=	7.50	-
BCVWD 18	3/18/2010	Potassium	=	1.20	mg/L
BCVWD 18	8/28/2013	Potassium	=	1.50	mg/L
BCVWD 18	3/18/2010	Sodium	=	17.00	mg/L
BCVWD 18	8/28/2013	Sodium	=	16.00	mg/L
BCVWD 18	3/18/2010	Specific Conductance	=	400.00	uS/cm
BCVWD 18	8/28/2013	Specific Conductance	=	450.00	uS/cm
BCVWD 18	3/18/2010	Sulfate	=	19.00	mg/L
BCVWD 18	8/28/2013	Sulfate	=	19.00	mg/L
BCVWD 18	3/18/2010	TDS	=	230.00	mg/L
BCVWD 18	8/28/2013	TDS	=	240.00	mg/L
BCVWD 18	3/18/2010	Total Hardness (as CaCO3)	=	160.00	mg/L
BCVWD 18	8/28/2013	Total Hardness (as CaCO3)	=	180.00	mg/L
BCVWD 18	3/18/2010	Turbidity	=	0.960	NTU
BCVWD 18	8/28/2013	Turbidity	<	0.200	NTU
BCVWD 19	12/18/2012	Alkalinity	=	180.00	mg/L
BCVWD 19	5/10/2011	Bicarbonate	=	224.73	mg/L
BCVWD 19	7/19/2011	Bicarbonate	=	215.69	mg/L
BCVWD 19	12/18/2012	Bicarbonate	=	230.00	mg/L
BCVWD 19	5/10/2011	Calcium	=	52.63	mg/L
BCVWD 19	7/19/2011	Calcium	=	50.70	mg/L
BCVWD 19	12/18/2012	Calcium	=	50.00	mg/L
BCVWD 19	12/18/2012	Carbonate (C03--)	<	3.00	mg/L
BCVWD 19	5/10/2011	Chloride	=	5.66	mg/L
BCVWD 19	7/19/2011	Chloride	=	4.15	mg/L

Well Name	Sample Date	Analyte	Result Value		Unit
SMWC 05	4/3/2013	Calcium	=	17.00	mg/L
SMWC 05	7/15/2010	Carbonate (C03--)	<	5.00	mg/L
SMWC 05	4/3/2013	Carbonate (C03--)	<	5.00	mg/L
SMWC 05	3/22/2010	Chloride	=	35.00	mg/L
SMWC 05	4/3/2013	Chloride	=	25.00	mg/L
SMWC 05	7/15/2010	Hydroxide (as OH-)	<	5.00	mg/L
SMWC 05	4/3/2013	Hydroxide (as OH-)	<	5.00	mg/L
SMWC 05	7/15/2010	Magnesium	=	12.00	mg/L
SMWC 05	4/3/2013	Magnesium	=	3.40	mg/L
SMWC 05	3/22/2010	Nitrate-Nitrogen	=	2.94	mg/L
SMWC 05	7/11/2011	Nitrate-Nitrogen	=	1.02	mg/L
SMWC 05	4/3/2013	Nitrate-Nitrogen	=	1.31	mg/L
SMWC 05	5/23/2013	Nitrate-Nitrogen	=	1.24	mg/L
SMWC 05	7/15/2013	Nitrate-Nitrogen	=	1.29	mg/L
SMWC 05	7/14/2014	Nitrate-Nitrogen	=	1.11	mg/L
SMWC 05	3/22/2010	Nitrite-Nitrogen	<	0.400	mg/L
SMWC 05	4/3/2013	Nitrite-Nitrogen	<	0.400	mg/L
SMWC 05	7/15/2010	pH	=	8.00	-
SMWC 05	4/3/2013	pH	=	8.30	-
SMWC 05	4/3/2013	pH (field)	=	8.20	-
SMWC 05	4/3/2013	Potassium	=	1.00	mg/L
SMWC 05	7/15/2010	Sodium	=	46.00	mg/L
SMWC 05	4/3/2013	Sodium	=	52.00	mg/L
SMWC 05	7/15/2010	Specific Conductance	=	480.00	uS/cm
SMWC 05	4/3/2013	Specific Conductance	=	350.00	uS/cm
SMWC 05	3/22/2010	Sulfate	=	11.00	mg/L
SMWC 05	4/3/2013	Sulfate	=	13.00	mg/L
SMWC 05	3/22/2010	TDS	=	290.00	mg/L
SMWC 05	4/3/2013	TDS	=	190.00	mg/L
SMWC 05	7/15/2010	Temperature (field)	=	20.00	°C
SMWC 05	4/3/2013	Temperature (field)	=	21.10	°C
SMWC 05	7/15/2010	Total Hardness (as CaCO3)	=	150.00	mg/L
SMWC 05	4/3/2013	Total Hardness (as CaCO3)	=	56.00	mg/L
SMWC 05	3/22/2010	Turbidity	<	0.100	NTU

Well Name	Sample Date	Analyte	Result Value		Unit
BCVWD 19	12/18/2012	Chloride	=	3.50	mg/L
BCVWD 19	5/10/2011	Dissolved Oxygen (field)	=	6.00	mg/L
BCVWD 19	7/19/2011	Dissolved Oxygen (field)	=	6.82	mg/L
BCVWD 19	12/18/2012	Hydroxide (as OH-)	<	3.00	mg/L
BCVWD 19	5/10/2011	Magnesium	=	17.92	mg/L
BCVWD 19	7/19/2011	Magnesium	=	17.59	mg/L
BCVWD 19	12/18/2012	Magnesium	=	17.00	mg/L
BCVWD 19	3/18/2010	Nitrate-Nitrogen	=	1.63	mg/L
BCVWD 19	5/10/2011	Nitrate-Nitrogen	=	2.35	mg/L
BCVWD 19	7/19/2011	Nitrate-Nitrogen	=	1.15	mg/L
BCVWD 19	11/30/2011	Nitrate-Nitrogen	=	0.723	mg/L
BCVWD 19	12/18/2012	Nitrate-Nitrogen	=	0.723	mg/L
BCVWD 19	8/28/2013	Nitrate-Nitrogen	=	0.790	mg/L
BCVWD 19	5/10/2011	Nitrite-Nitrogen	ND		mg/L
BCVWD 19	7/19/2011	Nitrite-Nitrogen	ND		mg/L
BCVWD 19	12/18/2012	Nitrite-Nitrogen	<	0.100	mg/L
BCVWD 19	5/10/2011	pH	=	7.01	-
BCVWD 19	7/19/2011	pH	=	7.22	-
BCVWD 19	12/18/2012	pH	=	7.20	-
BCVWD 19	5/10/2011	Potassium	=	2.03	mg/L
BCVWD 19	7/19/2011	Potassium	=	2.43	mg/L
BCVWD 19	12/18/2012	Potassium	=	1.90	mg/L
BCVWD 19	5/10/2011	Sodium	=	11.59	mg/L
BCVWD 19	7/19/2011	Sodium	=	11.74	mg/L
BCVWD 19	12/18/2012	Sodium	=	13.00	mg/L
BCVWD 19	5/10/2011	Specific Conductance	=	462.00	uS/cm
BCVWD 19	7/19/2011	Specific Conductance	=	439.00	uS/cm
BCVWD 19	12/18/2012	Specific Conductance	=	420.00	uS/cm
BCVWD 19	5/10/2011	Sulfate	=	27.96	mg/L
BCVWD 19	7/19/2011	Sulfate	=	22.00	mg/L
BCVWD 19	12/18/2012	Sulfate	=	20.00	mg/L
BCVWD 19	5/10/2011	TDS	=	309.54	mg/L
BCVWD 19	7/19/2011	TDS	=	294.13	mg/L
BCVWD 19	12/18/2012	TDS	=	230.00	mg/L

Well Name	Sample Date	Analyte	Result Value		Unit
SMWC 05	4/3/2013	Turbidity	<	0.100	NTU
YVWD 48	4/27/2011	Alkalinity	=	140.00	mg/L
YVWD 48	10/9/2012	Alkalinity	=	140.00	mg/L
YVWD 48	5/20/2014	Alkalinity	=	140.00	mg/L
YVWD 48	4/27/2011	Bicarbonate	=	170.00	mg/L
YVWD 48	10/9/2012	Bicarbonate	=	170.00	mg/L
YVWD 48	5/20/2014	Bicarbonate	=	170.00	mg/L
YVWD 48	4/27/2011	Calcium	=	31.00	mg/L
YVWD 48	10/9/2012	Calcium	=	31.00	mg/L
YVWD 48	5/20/2014	Calcium	=	31.00	mg/L
YVWD 48	4/27/2011	Carbonate (C03--)	=	3.00	mg/L
YVWD 48	5/20/2014	Carbonate (C03--)	=	3.00	mg/L
YVWD 48	4/27/2011	Chloride	=	9.70	mg/L
YVWD 48	10/9/2012	Chloride	=	9.70	mg/L
YVWD 48	5/20/2014	Chloride	=	12.00	mg/L
YVWD 48	4/27/2011	Hydroxide (as OH-)	=	3.00	mg/L
YVWD 48	5/20/2014	Hydroxide (as OH-)	=	2.00	mg/L
YVWD 48	4/27/2011	Magnesium	=	4.60	mg/L
YVWD 48	10/9/2012	Magnesium	=	4.60	mg/L
YVWD 48	5/20/2014	Magnesium	=	4.50	mg/L
YVWD 48	8/5/2010	Nitrate-Nitrogen	=	1.56	mg/L
YVWD 48	12/9/2010	Nitrate-Nitrogen	=	1.63	mg/L
YVWD 48	4/27/2011	Nitrate-Nitrogen	=	1.81	mg/L
YVWD 48	8/9/2011	Nitrate-Nitrogen	=	2.01	mg/L
YVWD 48	8/15/2012	Nitrate-Nitrogen	=	1.65	mg/L
YVWD 48	8/15/2012	Nitrate-Nitrogen	=	1.65	mg/L
YVWD 48	10/9/2012	Nitrate-Nitrogen	=	3.10	mg/L
YVWD 48	2/26/2013	Nitrate-Nitrogen	=	2.48	mg/L
YVWD 48	8/14/2013	Nitrate-Nitrogen	=	2.17	mg/L
YVWD 48	5/20/2014	Nitrate-Nitrogen	=	2.24	mg/L
YVWD 48	8/14/2014	Nitrate-Nitrogen	=	2.26	mg/L
YVWD 48	4/27/2011	Nitrite-Nitrogen	<	0.400	mg/L
YVWD 48	5/20/2014	Nitrite-Nitrogen	<	0.400	mg/L
YVWD 48	4/27/2011	pH	=	7.90	-

Well Name	Sample Date	Analyte	Result Value		Unit
BCVWD 19	5/10/2011	Temperature (field)	=	11.60	°C
BCVWD 19	7/19/2011	Temperature (field)	=	17.50	°C
BCVWD 19	12/18/2012	Total Hardness (as CaCO3)	=	200.00	mg/L
BCVWD 19	12/18/2012	Turbidity	=	0.910	NTU

Well Name	Sample Date	Analyte	Result Value		Unit
YVWD 48	5/20/2014	pH	=	7.60	-
YVWD 48	4/27/2011	Potassium	=	1.90	mg/L
YVWD 48	10/9/2012	Potassium	=	1.90	mg/L
YVWD 48	5/20/2014	Potassium	=	2.00	mg/L
YVWD 48	4/27/2011	Sodium	=	33.00	mg/L
YVWD 48	10/9/2012	Sodium	=	33.00	mg/L
YVWD 48	5/20/2014	Sodium	=	36.00	mg/L
YVWD 48	4/27/2011	Specific Conductance	=	350.00	uS/cm
YVWD 48	5/20/2014	Specific Conductance	=	340.00	uS/cm
YVWD 48	4/27/2011	Sulfate	=	12.00	mg/L
YVWD 48	10/9/2012	Sulfate	=	12.00	mg/L
YVWD 48	5/20/2014	Sulfate	=	16.00	mg/L
YVWD 48	8/5/2010	TDS	=	210.00	mg/L
YVWD 48	4/27/2011	TDS	=	200.00	mg/L
YVWD 48	8/9/2011	TDS	=	220.00	mg/L
YVWD 48	4/20/2012	TDS	=	170.00	mg/L
YVWD 48	8/15/2012	TDS	=	210.00	mg/L
YVWD 48	8/15/2012	TDS	=	210.00	mg/L
YVWD 48	10/9/2012	TDS	=	250.00	mg/L
YVWD 48	2/26/2013	TDS	=	230.00	mg/L
YVWD 48	8/14/2013	TDS	=	200.00	mg/L
YVWD 48	5/20/2014	TDS	=	220.00	mg/L
YVWD 48	8/14/2014	TDS	=	210.00	mg/L
YVWD 48	4/27/2011	Total Hardness (as CaCO3)	=	98.00	mg/L
YVWD 48	10/9/2012	Total Hardness (as CaCO3)	=	98.00	mg/L
YVWD 48	5/20/2014	Total Hardness (as CaCO3)	=	96.00	mg/L
YVWD 48	4/27/2011	Turbidity	=	0.200	NTU