

Beaumont Basin Watermaster

2018 Consolidated Annual Report and Engineering Report

DRAFT

2018 Watermaster Board

Art Vela, City of Banning, **Chairman**

George Jorritsma, South Mesa Water Company, **Vice Chairman**

Daniel Jagers, Beaumont Cherry Valley Water District, **Secretary**

Joseph Zoba, Yucaipa Valley Water District, **Treasurer**

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Alvarado Smith, **Legal Counsel**

ALDA Inc. in Association with Thomas Harder & Company, **Engineering**

Rogers, Anderson, Malody, and Scott. LLP, **Financial Auditors**

February 2019

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February 6, 2019

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

Subject: **Beaumont Basin Watermaster
Draft Annual Report for Calendar Year 2018**

Dear Mr. Vela:

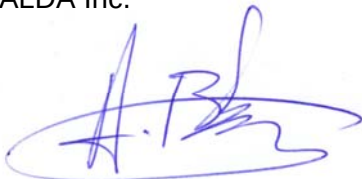
ALDA Inc., in association with Thomas Harder & Co. is pleased to submit to you, as Chairman of the Beaumont Basin Watermaster, a draft of the Beaumont Basin Watermaster Annual Report for Calendar Year 2018. This draft report expands on the earlier format of the annual report by incorporating information previously presented in the biannual Engineering Report. As such, this report summarizes all production, spreading, and storage activities that took place during calendar year 2018. Further, it documents changes in water levels and storage conditions, as well as, an estimate of the Basin Operating Safe Yield for 2018. Finally, the report presents an evaluation of water quality conditions for all domestic wells during the 2014-2018 five-year period. Additional water quality information from the Maximum Benefit Monitoring Program was not available at the time of this writing but will be incorporated into the final report.

We will make a formal presentation to the Watermaster Committee during the upcoming Board meeting on February 6th, 2019. 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

Table of Contents

Section 1 Background	1-1
1.1 History of the Beaumont Basin Stipulated Judgment	1-1
1.2 Essential Elements of the Judgment	1-2
1.3 Watermaster Responsibilities	1-3
1.4 Watermaster Address	1-4
1.5 Watermaster Website	1-5
1.6 Mission Statement	1-5
 Section 2 Watermaster Activities	 2-1
2.1 Makeup of the Board	2-1
2.2 Watermaster Accomplishments and Activities During 2018	2-1
2.2.1 Watermaster Meetings	2-1
2.2.2 Watermaster Committee Resolutions	2-2
2.2.3 Items Discussed in 2018	2-2
2.2.4 Redetermination of Safe Yield	2-7
2.3 Storage Applications and Agreements	2-7
2.4 Rules and Regulations	2-8
2.5 Active Party List	2-8
2.6 Financial Management	2-9
2.6.1 Budget	2-9
2.6.2 Financial Audit	2-10
 Section 3 Status of the Basin and Administration of the Judgment 3-1	
3.1 Climate, Hydrology and Hydrogeology	3-1
3.1.1 Climate	3-1
3.1.2 Surface Water Hydrology	3-2
3.1.3 Hydrogeology	3-2
3.1.3.1 Regional Geologic Context	3-2
3.1.3.2 Faults	3-2
3.1.3.3 Groundwater Occurrence and Flow	3-3
3.2 Production	3-3
3.2.1 Appropriative Party Production	3-3
3.2.2 Overlying Party Production	3-4
3.2.3 2003-2018 Annual Production Summary	3-5
3.3 Groundwater Recharge	3-6
3.3.1 State Water Project Water Recharge	3-6
3.3.2 Recycled Water Recharge	3-7
3.3.3 New Yield Stormwater Recharge	3-7
3.4 Water Transfers and Adjustments of Rights	3-8
3.4.1 Transfers between Appropriators	3-8

3.4.2	Transfers of Overlying Rights for Service by an Appropriator	3-9
3.4.3	Allocation of Unused Overlying Water.....	3-10
3.5	Storage Accounting	3-10
3.5.1	Annual Storage Consolidation.....	3-11
3.6	Changes in Groundwater Levels in the Beaumont Basin	3-12
3.6.1	Analysis of Groundwater Level Changes	3-12
3.6.2	Analysis of Change in Groundwater Storage	3-12
3.7	Operating Safe Yield	3-13
3.8	Recommendations	3-15
Section 4 Water Quality Conditions		4-1
4.1	Comparison with Management Zone Objectives.....	4-1
4.1.1	Total Dissolved Solids	4-2
4.1.2	Nitrate-Nitrogen.....	4-3
4.1.3	Nitrate Studies in the Beaumont Management Zone	4-4
4.2	Comparison with Federal and State Drinking Water Standards	4-8
4.2.1	Nitrate and Total Dissolved Solids (TDS).....	4-8
4.2.2	Trace Metals.....	4-9
4.2.3	Organic Compounds.....	4-11
4.2.4	pH	4-11
4.2.5	Turbidity.....	4-11
Section 5 Land Subsidence		5-1

List of Figures

Figure 3-1	Historical Precipitation (1993-2017) at Beaumont Station 013.....	3-16
Figure 3-2	Geology of the Beaumont Basin.....	3-17
Figure 3-3	Appropriator and Overlyer Wells in the Beaumont Basin	3-18
Figure 3-4	Annual Groundwater Production in the Beaumont Basin (2003-18)	3-19
Figure 3-5	Groundwater Storage by Agency/User as of 2018	3-20
Figure 3-6	Groundwater Elevation Contours in the Beaumont Basin – Fall 2017	3-21
Figure 3-7	Groundwater Elevation Contours in the Beaumont Basin – Fall 2018	3-22
Figure 3-8	Change in Groundwater Elevation - 2017-2018	3-23
Figure 3-9	Groundwater Level Trends at Key Wells	3-24
Figure 4-1	Wells with Water Quality Data in the Beaumont Basin.....	4-10
Figure 4-2	Total Dissolved Solids in Groundwater (Max Concentrations 2013-17)	4-11
Figure 4-3	Nitrate as N in Groundwater (Max Concentrations 2013-17)	4-12

List of Tables

Table 3-1A	Appropriator Producer Summary of Annual Production Calendar Years 2003 through 2013	3-25
Table 3-1B	Appropriator Producer Production Summary for CY 2014	3-26
Table 3-1C	Appropriator Producer Production Summary for CY 2015	3-27
Table 3-1D	Appropriator Producer Production Summary for CY 2016	3-28
Table 3-1E	Appropriator Producer Production Summary for CY 2017	3-29
Table 3-1F	Appropriator Producer Production Summary for CY 2018	3-30
Table 3-2A	Overlying Producer Summary of Annual Production Calendar Years 2003 through 2013	3-31
Table 3-2B	Overlying Producer Production Summary for CY 2014	3-32
Table 3-2C	Overlying Producer Production Summary for CY 2015	3-33
Table 3-2D	Overlying Producer Production Summary for CY 2016	3-34
Table 3-2E	Overlying Producer Production Summary for CY 2017	3-35
Table 3-2F	Overlying Producer Production Summary for CY 2018	3-36

Table 3-3a	Production Summary for Appropriator and Overlying Producers in the Beaumont Basin for Calendar Years 2003 through 2010.....	3-37
Table 3-3b	Production Summary for Appropriator and Overlying Producers in the Beaumont Basin for Calendar Years 2011 through 2018.....	3-38
Table 3-4	Annual Supplemental Recharge to the Beaumont Basin: Calendar Years 2003 through 2018	3-39
Table 3-5	City of Beaumont Recycled Water Deliveries to DP-001 and DP-007 Calendar Years 2007 through 2018	3-40
Table 3-6	Overlying Parties Production Rights Allocation Based on Revised Safe Yield.	3-41
Table 3-7	Summary of Unused Overlying Water and allocation to Appropriators Calendar Years 2003 through 2018	3-42
Table 3-8	Consolidation of Appropriator Production and Storage Accounts Calendar Years 2003 through 2018	3-43
Table 4-1	Nitrate (NO ₃) and TDS Summary for Domestic Wells (2014-18)	4-9

Appendices

Appendix A	Copies of Resolution 2018-01
Appendix B	Active and Interested Party List
Appendix C	Fiscal Year 2017-18 Audit Letter
Appendix D	Production Estimation Methods for Unmetered Overlying Producers
Appendix E	Copies of YVWD's letters notifying the Watermaster of the transfer of water rights from Oak Valley Partners
Appendix F	Water Quality Analysis Summary (2014-2018) for Drinking Water Production Wells

Abbreviations

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

Section 1

Background

The Fifteenth 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 2018. Section 3 of the original annual report has been expanded and retitled as "Status of the Basin and Administration of the Judgment"; it documents the Administration of the Judgment as well as provides a status of conditions in the basin addressing water production, water levels, and storage activities. In addition, a Water Quality section, Section 4, has been added to document water quality of selected compounds at selected wells, as well as, basin wide concentrations for the 2014-18 period.

1.1 History of the Beaumont Basin Stipulated Judgment

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

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

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

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

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

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

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

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

1.2 Essential Elements of the Judgment

Elements of the 2004 Judgment are as follows:

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

✓ Beaumont Cherry Valley WD	42.51 percent or 6,802 ac-ft/yr
✓ City of Banning	31.43 percent or 5,029 ac-ft/yr
✓ South Mesa Water Company	12.48 percent or 1,997 ac-ft/yr
✓ Yucaipa Valley Water District	13.58 percent or 2,173 ac-ft/yr
- After the first 10 years of operation, Appropriators can extract only the amount each has in storage or credited to them. An Appropriator shall provide Watermaster with sufficient funds to replace any amount of overproduction that may have occurred over a five-year consecutive period.
- The Watermaster has the authority to enter into Groundwater Storage Agreements with producers for the storage of supplemental water, wellhead protection and recharge, well

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

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

1.3 Watermaster Responsibilities

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

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

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

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

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

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

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

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

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

7.- Develop Contracts for Beneficial Programs and Services. Watermaster is responsible for developing and entering into contracts for programs and services that are beneficial to the Basin on behalf of the Parties to the Judgment. This includes programs for conjunctively utilizing the Basin for the storage of supplemental water with other agencies and programs to implement and expand the direct or indirect use of recycled water.

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

1.4 Watermaster Address

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

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

1.5 Watermaster Website

Watermaster website address is www.beaumontbasinwatermaster.org. This website is maintained by the YVWD and it is used by the Watermaster to communicate its activities to the Parties and the public. The website contains copies of the Judgment, the Rules and Regulations, Annual Reports, and Engineer's Reports. In addition, it contains meeting minutes, meeting agendas, and other documents of interest.

1.6 Mission Statement

Watermaster adopted the following mission statement in October 2004:

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

Section 2

Watermaster Activities

2.1 Makeup of the Board

During the February 1, 2017 regular meeting of the Beaumont Basin Watermaster, elections were held with the results as follows.

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

No elections were held, or the positions reaffirmed during the remainder of calendar years 2017 and throughout 2018. However, a number of agencies changed their representatives to the Watermaster during these two years. The Watermaster Representatives serving each Appropriative Party at the end of CY 2018 were as follows:

Agency	Representative	Alternate
City of Banning	Art Vela	Luis Cardenas
City of Beaumont	Vacant	Kyle Warsinski
Beaumont Cherry Valley Water District	Daniel Jagers	Mark Swanson
South Mesa Water Company	George Jorritsma	Dave Armstrong
Yucaipa Valley Water District	Joseph Zoba	Jennifer Ares

Legal counsel during CY 2018 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 2018

2.2.1 Watermaster Meetings

A total of six regular meetings were held during CY 2018 on the following dates:

- February 7, 2018
- June 6, 2018
- October 3, 2018
- March 28, 2018
- August 1, 2018
- December 5, 2018

In addition, there was a Special Meeting conducted on January 10, 2018.

Agendas and approved minutes from each of the above regular and special meetings can be viewed at and/or downloaded from Watermaster's website or by making a request to the Watermaster Secretary. Pursuant to Resolution 2009-01, all of Watermaster's public records are open for inspection during office hours, provided that a written request to inspect said records has been submitted.

2.2.2 Watermaster Committee Resolutions

During CY 2018, one resolution was adopted.

Resolution 18-01, a Resolution of the Beaumont Basin Watermaster rescinds Resolution 2017-01 and accepts San Geronio Pass Water Agency's Application for Groundwater Storage. This resolution, approved on February 7th, 2018, gives SGPWA the right to store up to 10,000 ac-ft of water in the Beaumont Basin under certain conditions. A copy of the resolution is included under Appendix A.

2.2.3 Items Discussed in 2018

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

The following items were discussed during the six regular meetings and one special meeting held in CY 2018 along with their resulting outcome.

Items Discussed During the January 10, 2018 Special Watermaster Committee Meeting

- Closed Session-Conference with Legal Counsel on Existing Litigation, Government Code section 54956.9. Case: San Geronio Pass Water Agency v. Beaumont Basin Watermaster, et al., Riverside County Superior Court Case No. RIC 1716346.
- Open session followed the closed session with no reportable action taken.

Items Discussed During the February 7, 2018 Watermaster Committee Meeting

- Status Report on Water Level Monitoring throughout the Beaumont Basin through Jan 24, 2018 [Memorandum 18-01]. Engineer Blandon gave a status report of the water level monitoring throughout the basin and indicated that new wells are being considered in the western portion of the basin and the need to buy additional monitoring equipment.
- Presentation of the Draft Consolidated Annual Report and Engineering Report [Memorandum 18-02]. Engineer Blandon reviewed two resolutions passed in 2017, noted that the 100-year average precipitation was 17.16 inches, and indicated that a total of 13,462 ac-ft was produced in 2017. Mr. Harder said that the preliminary Operating Safe Yield for 2017 was 2,289 ac-ft which is significantly lower than the 2012-17 average of approximately 6,000 ac-ft/yr. Mr. Blandon said that area water quality meets state and

federal standards with the exception of a well which exceeds the notification level for Vanadium.

- Discussion Regarding Task Order No. 15 with ALDA Inc. for the Preparation of the 2017 Consolidated Annual Report, Estimate of the Safe Yield, Update of the Groundwater Model, and Associated Consulting Services for 2018 [Memorandum 18-03]. Mr. Blandon explained the scope of services and indicated that it was the same scope and cost as for 2017. The task order was approved unanimously for the amount not to exceed \$95,970.
- Discussion Regarding Task Order No. 16 with ALDA Inc. for the Installation, Maintenance, and Data Collection of Water Level Monitoring Equipment in CY 2018 [Memorandum 18-04]. After Engineer Blandon provided an overview of the consulting services provided under this task, the Committee approved Task Order No. 16 for a sum not to exceed \$21,520.00.
- Presentation of Preliminary Recharge and Recovery Scenarios for Analysis to Estimate Storage Losses in the Beaumont Basin – Project Progress Update [Memorandum 18-05]. Mr. Harder explained that a number of scenarios were evaluated, explained the model, and indicated that on the east side of the basin about 20 percent of the water put into recharge is lost. He further indicated that additional imported water recharged by the SGPWA will increase water losses from the basin by an estimated 17 percent.
- Watermaster Committee Adjourn to Closed Session.
- Consideration of Resolution No. 2018-01 Rescinding Resolution No. 2017-01 and Approving the Groundwater Storage Application in the Beaumont Basin for the San Gorgonio Pass Water Agency in the Amount of 10,000 ac-ft [Memorandum 18-06]. Counsel Thierry Montoya reported that in an effort to resolve the ongoing litigation with the SGPWA there have been ongoing dialog with SGPWA's counsel and a resolution has been discussed. The Watermaster Committee agreed to accept the changes with some exceptions related to the Section 8 of the Rules and Regulations. A Resolution to Confirm and Adopt SGPWA's Application for Groundwater Storage Agreement was unanimously approved subject to stated conditions. A copy of the final resolution is attached under Appendix "A".

Items Discussed During the March 28, 2018 Regular Watermaster Committee Meeting

- Status Report on Water Level Monitoring throughout the Beaumont Basin through March 19, 2018 [Memorandum 18-07]. Engineer Blandon indicated that he is considering one or two additional monitoring wells in the Banning area. He reported that the well casing in Banning 8 may have collapsed during his visit as the water level probe was lost at 350 ft below surface. He reported that YVWD has been subject to vandalism resulting in the loss of three water level and barometric probes.
- 2017 Consolidated Annual Report and Engineering Report – Presentation of Final Report [Memorandum 18-08]. Engineer Blandon reported that the draft report was presented at the previous meeting and comments were incorporated into the final document. He

pointed out that the 100-year precipitation histogram was replaced with a 25-year histogram. He also discussed in more detailed water quality conditions in the basin. The report was adopted and approved by the Board.

- Presentation of Recharge and Recovery Scenarios for Analysis to Estimate Storage Losses in the Beaumont Basin [Memorandum 18-09]. Mr. Harder presented a contour map and pointed out that when artificial recharge is done, it creates a mound that can accelerate the flow out of the basin if it is not captured. In addition, he indicated that six scenarios were analyzed and determine the baseline loss at about 20 percent of recharge. Additional losses, estimated at 15 percent, may result from spreading of additional imported water by SGPWA.
- Presentation of Production and Allowable Extractions through February 2018 [Memorandum 18-10]. Engineer Blandon introduced a new topic whose purpose is to report production, transfers, and spreading throughout the year.
- Consideration of a Change in the Rate of Professional Fees for Legal Expenses Charged by Alvarado Smith [Memorandum 18-11]. Request was approved by the Board.

Items Discussed During the June 6, 2018 Regular Watermaster Committee Meeting

- Status Report on Water Level Monitoring throughout the Beaumont Basin through May 29, 2018 [Memorandum 18-12]. Engineer Blandon advised that a new probe was installed at BCVWD Well 25 and a new communications cable at Oak Valley No. 5 was needed. He reported that the Noble Creek observations wells have experienced a significant rise over the last year and a half. He identified a potential new monitoring well in the middle portion of the basin on property owned by the Catholic Diocese.
- Consideration of the Watermaster Budget for Fiscal Year 2018-19 [Memorandum 18-13]. Mr. Zoba introduced the budget and indicated that there is no need to collect additional funds from the members. He indicated that the balance as of the end of April is \$213,502. Proposed budget was approved unanimously.
- Review of Memorandum Regarding the Transfer and Conversion of Overlying Water Rights to Appropriative Rights and Accounting for Such [Memorandum 18-14]. A significant discussion on this topic was led by Mr. Montoya, Legal Counsel, with back and forth participation by all Watermaster Committee members. Mr. Zoba suggested creating a new category to track overlying rights and appropriative rights and asked Legal Counsel to develop a resolution that better explains this issue.

Items Discussed During the August 1, 2018 Regular Watermaster Committee Meeting

- Status Report on Water Level Monitoring throughout the Beaumont Basin through July 24, 2018 [Memorandum No. 18-15]. Engineer Blandon gave an overview of water level conditions in the basin and indicated that the vandalism issues at YVWD 34 have been addressed with additional security and locks. Chairman Vela noted that the City of Banning has plans to relocate Joshua Palmer Way which will affect access to the monitoring well at the Chevron Station.

- A comparison of Production and Allowable Extractions through June 2018 [Memorandum 18-16]. Engineer Blandon indicated that for the year there was a total production right of approximately 12,000 ac-ft and a current production of 5,241 ac-ft representing 43 percent of the allowable right.
- Discussion Regarding the Perfection of Appropriative Rights Following the Conversion of Overlying Water Rights to Appropriative Rights [Memorandum 18-17]. Counsel Montoya presented the issues related to the transfer of overlying rights to an appropriator, pointing out the example of YVWD and Oak Valley's transfers. Much discussion ensued between members of the Board, Legal Counsel and supporting engineering staff as to when water transferred to an appropriator is perfected. Chairman Vela concluded the discussion requesting that Mr. Montoya revise the memo for future discussion at the October meeting.

Items Discussed During the October 3, 2018 Regular Watermaster Committee Meeting

- Independent Accountant's Financial Report of Agreed-Upon Procedures for the Beaumont Basin Watermaster [Memorandum 18-18]. Mr. Zoba noted that this was a routine item and no discussion was held. Item was approved unanimously.
- Status Report on Water Level Monitoring throughout the Beaumont Basin through September 25, 2018 [Memorandum No. 18-19]. Engineer Blandon indicated that monitoring problems continue a YVWD 34 and that water levels are slightly declining at Banning M-8 and M-9. He further indicated that the communications cable needs to be replaced at BCVWD No. 2.
- Comparative Groundwater Production and Allowable Extractions through August 2018 [Memorandum 18-20]. Engineer Blandon reported that allowable extractions were 14,424 ac-ft while production through August 2018 was 9,040 ac-ft.
- Consideration of Task Order No. 17 with ALDA Inc. for the Development of a Return Flow Methodology for the Beaumont Basin [Memorandum 18-21]. Mr. Harder explained the various tasks under this Task Order along with the estimated budget and completion time. Task Order was approved unanimously with a cost not to exceed \$40,140.00; cost to be split between BCVWD, YVWSD, and the City of Banning.
- Discussion Regarding the Perfection of Appropriative Rights Following the Conversion of Overlying Water Rights to Appropriative Rights [Memorandum 18-22]. Counsel Montoya presented an updated memo and summarized its content. Much discussion ensued and concluded with Member Zoba suggested reviewing the transfer steps at the December meeting.

Items Discussed During the December 5, 2018 Regular Watermaster Committee Meeting

- Status Report on Water Level Monitoring throughout the Beaumont Basin through November 15, 2018 [Memorandum 18-23]. Engineer Blandon indicated that new monitoring wells are being pursued in the Desert Lawn/Calimesa area. He reported that water levels are in the northern and eastern portions of the basin are fairly stable and that

some maintenance issues need to be addressed at BCVWD No. 2 and Oak Valley No. 5 wells.

- Comparative Groundwater Production and Allowable Extractions through October 2018 [Memorandum 18-24]. Mr. Blandon presented current production and allowable pumping rights and indicated that all four agencies will be adding to their storage accounts. He documented that total extractions through the month of October were about 60 percent of the allowable right.
- Status Report on the Development of a Return Flow Methodology for the Beaumont Basin [Memorandum 18-25]. Mr. Lewis, representing Thomas Harder & Co., indicated that after all data is received, the company will conduct an analysis to determine how much of the water deliveries became return flow and analyze the lag time for percolating water to reach the groundwater table.
- Discussion Regarding Task Order No. 18 with ALDA Inc. for the Preparation of the 2018 Consolidated Annual Report, Estimate of the Basin Safe Yield, Update of the Groundwater Model, and Associated Consulting Services for 2019 [Memorandum 18-26]. Engineer Blandon reported that the scope of service and associated consulting fee was the same as in 2017 and 2018. Task Order No. 18 was approved unanimously for a sum not to exceed \$97,970.00.
- Discussion Regarding Task Order No. 19 with ALDA Inc. for the Installation, Maintenance, and Data Collection of Water Level Monitoring Equipment in 2019 [Memorandum 18-27]. Mr. Blandon pointed to Task Order #16 for 2018 monitoring. This new task order replicates the services and the cost for 2019, including maintenance, operation, data collection, and reporting of the water level monitoring locations. Task Order No. 19 was approved unanimously for a sum not to exceed \$21,250.00.
- Discussion Regarding Draft Resolution No. 2019-01 Amending the Judgment at the Riverside Superior Court's Request to Correct a Clerical Error – An Incorrect Reference to 8,610 Acre-Feet on Judgment, Page 7, Line 26 – Correcting Such to 8,650 Acre-feet [Memorandum 18-28]. Counsel Montoya reminded the Committee that the Court's desire had been discussed. He noted that he has prepared the resolution and attached amended judgment for first review then decision at the Feb. 6, 2019 meeting. He further indicated that this resolution was necessary to address a clerical error.
- Discussion Regarding the "Facts about the Beaumont Basin Watermaster" [Memorandum 18-29]. Member Zoba reminded that at the last Committee meeting, Watermaster members requested certain information compiled that shows the amount of overlying water rights transferred from Oak Valley Partners to YVWD. At that meeting, Zoba indicated he would put together some facts about the Beaumont Basin Watermaster and he explained the example included in the packet. There were no questions from the Committee.

2.2.4 Redetermination of Safe Yield

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

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

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

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

2.3 Storage Applications and Agreements

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

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

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

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

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

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

As of December 31, 2018, the total storage allowed stands at 290,000 ac-ft; storage limits by participant are presented below. Amounts of water in storage by participant are discussed under Section 3.

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

2.4 Rules and Regulations

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

No changes to the Rules and Regulations were made during Calendar Year 2018.

2.5 Active Party List

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

2.6 Financial Management

The Watermaster must develop and administer a budget for all administrative, operational, and capital costs it incurs. The following discussion summarizes the budget established for the Fiscal Year 2018 operations.

2.6.1 Budget

The budget for Fiscal Year 2018-19 was initially approved at the June 6, 2018 Watermaster Committee meeting under Memorandum 18-13. The approved budget provided funding for Administrative expenses in the amount of \$171,300.00, an increase of \$4,520.00 or 2.71 percent from the final budget for prior year of \$166,780.00. Funding for administrative expenses was covered from a carryover of \$213,502.00 from FY 2017-18; there were no contributions from water agencies to fund the approved 2018-19 budget. The approved budget did not include any funds for Special Projects.

The following table presents a comparison between the final budgets for FY 2016-17, final budget for FY 2017-18, and approved budget for FY 2018-19.

<i>Operating Expense</i>	<i>FY 2016-17 Final Budget</i>	<i>FY 2017-18 Final Budget</i>	<i>FY 2018-19 Approved Budget</i>
<u>Administrative Expenses</u>			
Bank Fees and Interest	\$ 50.00	\$ 80.00	\$ 100.00
Miscellaneous and Meetings	\$ 500.00	\$ 0.00	\$ 0.00
Acquisition/computation & Annual Report	\$ 90,000.00	\$ 100,000.00	\$ 100,000.00
Annual Audit	\$ 2,500.00	\$ 1,200.00	\$ 1,200.00
Engineering Services	\$ 20,000.00	\$ 5,000.00	\$ 15,000.00
Monitoring and Data Acquisition	\$ 25,000.00	\$ 23,000.00	\$ 25,000.00
Meter Installation and Repair	\$ 10,000.00	\$ 0.00	\$ 10,000.00
Legal Expenses	\$ 20,000.00	\$ 37,500.00	\$ 20,000.00
Reserve Funding	\$ 15,000.00	\$ 0.00	\$ 0.00
	\$ 183,050.00	\$ 166,780.00	\$ 171,300.00
<u>Special Project Expenses</u>			
Engineering	\$ 0.00	\$ 0.00	\$ 0.00
Litigation	\$ 0.00	\$ 0.00	\$ 0.00
	\$ 0.00	\$ 0.00	\$ 0.00
Total Operating Expense	\$ 183,050.00	\$ 166,780.00	\$ 171,300.00

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 2018, prepared by Rogers, Anderson, Malody, and Scott, LLP, was presented, received and filed as Watermaster under Memorandum No. 18-18 on October 3, 2018. This report is included under Appendix C.

Section 3

Status of the Basin and Administration of the Judgment

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

Through the adoption of Resolution No. 2011-01, on September 21, 2011, Watermaster changed the accounting from a fiscal year basis to a calendar year basis starting in CY 2011. The conversion of Fiscal Year basis to Calendar Year basis was documented in the Annual Report for CY 2011 adopted by the Board in early 2013. The annual report for CY 2018 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 17.05 inches over the 100-year period between 1919 and 2018. On the average during this 100-year period, 11.91 inches of precipitation, or 69.8 percent of total, fell during the winter between December and March. Over the last 25 years (1994-2018), precipitation has averaged 14.32 inches of rain which is approximately 84 percent of the 100-year average precipitation. The 1994-2018 average precipitation is almost one-inch lower than the 1993-2017 average (15.23 inches) since the precipitation in 1993 was 34.8 inches which is twice the annual average precipitation. Unconfirmed totals for 2018 were obtained from the County of Riverside for Station 13 and other weather sources resulting in an annual precipitation of 12.11 inches. It is anticipated that this information will be confirmed for inclusion into the final annual report.

Figure 3-1 illustrates annual precipitation at this station for the 25-year reporting period between 1994 and 2018 including a plot of the cumulative departure from the mean (CDFM) precipitation. This parameter is used to assess the occurrence, duration, and extent of wet and dry precipitation cycles. Upper trending periods in the graph represent periods with above average precipitation such as the 1993-98 period; average precipitation during this period was 22.6 inches or close to 50 percent above the long-term average. Other above average precipitation periods include the 2003-05 period. Conversely, down trending periods indicate periods of below average precipitation as in the 2011-18 period when average precipitation was only 11.22 inches or approximately 78 percent of the 25-year average.

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

3.1.2 Surface Water Hydrology

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

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

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; applicable only between Fiscal Years 2004 and 2013
- Transfers from other Appropriators,
- Transfers of unused production from Overlying Producers,

- Conversion of Overlying rights to Appropriative rights
- Water withdrawn from their storage account, and
- New yield created by the Appropriator.

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

Annual production by well for each of the five Appropriative Parties for the CY 2003-2013 period is summarized in Table 3-1A; this table also includes the Temporary Surplus Allocation and the amount of unused production that is eligible for storage for each Appropriator. Monthly production for the last five years of operation (CY 2014-18) are presented in a series of tables starting with Table 3-1B for CY 2014 and continuing on an annual basis through Table 3-1F for CY 2018. 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 2018, Appropriators pumped a combined amount of 15,026.10 ac-ft of groundwater from the Beaumont Basin. Production for the year was 11.6 percent higher than in CY 2017 and 25.3 percent higher than in CY 2016. Groundwater production in CY 2018 was 12.8 percent higher than the five-year average of 13,326 ac-ft.

Compared to groundwater production totals for CY 2017, production for individual agencies in CY 2018 was by and large higher. The City of Banning production increased by 48 percent while BCVWD increased by six percent over 2017 production. Production by SMWD was less than one percent lower than in 2017 and YVWD produced close to 200 ac-ft in 2018 compared to less than one ac-ft the preceding year.

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 21 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 2018.

The remaining wells, operated by smaller producers, did not have meters for some or most of 2018 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 2018 Annual Report uses the updated method developed by WEI as detailed in Appendix D.

Similar to the production reported for the Appropriators, a series of tables was developed to report monthly and annual production from the Overlying Parties on a calendar year basis. Starting with Table 3-2A, annual production is documented for CY 2003-13; Table 3-2B through 3-2F summarize monthly production by Overlying well for CY 2014 through CY 2018 respectively. In addition, these tables show their share of the Safe Yield and the amount of unused water for each Overlying Party is shown. It should be noted that these tables have been revised to reflect updated production records from Plantation by the Lake since 2013.

Production by Plantation by the Lake has been corrected for the 2013 to 2016 period. During those years, monthly production records were provided by this Overlying Producer in million gallons; however, research conducted early in the year indicated that the number should have been reported in million cubic feet instead. This result in a documented under production by a factor of 7.48 since there are 7.48 gallons of water in a cubic foot. Production by this Overlying user continues to be refined and has been confirmed for 2017 and 2018.

During CY 2018, Overlying Producers produced an estimated 2,220.7 ac-ft; this level of production is approximately eight percent lower than in CY 2017 and 15 percent higher than in CY 2016. Compared to the five-year average of 2,173.4 ac-ft/yr, Overlying Producers pumped two percent more water than the average.

3.2.3 2003-2018 Annual Production Summary

Annual production for all Appropriators and Overlying Parties since 2003 is summarized in Table 3-3A on a calendar year basis for the 2003 to 2010 calendar years while Table 3-3B documents annual production for CY 2011 through CY 2018. It should be noted that production from 2003 only includes production for the second half of the year. Since July 2003, a total of 246,260 ac-ft have been pumped from the Beaumont Basin; an estimated 83 percent of this total has been pumped by Appropriators. The percentage of groundwater production from Appropriators has steadily increased since the Judgment inception from a low of 74.3 percent registered in CY 2003 to a high of 87.2 percent recorded in CY 2014 and has averaged 85.4 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 26.1 percent to 17,281 ac-ft. Since 2014, production declined significantly in 2015 by over 4,000 ac-ft and began climbing again. Production in CY 2018 was approximately 31 percent higher than in CY 2015 and just below the 2014 peak. Total groundwater production from the basin in CY 2018 was 17,246.8 ac-ft; approximately 11 percent higher than the five-year average of 15,499 ac-ft/yr. Annual production for each of the Appropriators and for the Overlying Producers combined is depicted in Figure 3-4.

3.3 Groundwater Recharge

The Watermaster is responsible for maintaining an annual account of all water artificially recharged in the Beaumont Basin and any losses of water supplies or Safe Yield resulting from such recharge water. Sources of groundwater recharge include imported water from the State Water Project (SWP), recycled water, and new yield sources developed in the basin since the Judgment inception in July 2003. The Watermaster has maintained the accounting of groundwater recharge; however, losses from the basin, estimated in the recently completed (Sep 2018) Beaumont Basin Storage Analysis, have not been incorporated into the accounting of storage in the basin. The Watermaster may adopt a policy to address storage losses in the future. 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

Deliveries of imported water are conducted through the San Geronio Pass Water Agency, which is the State Water Contractor for this area. BCVWD's Noble Creek spreading facility located in the vicinity of Beaumont Avenue and Cherry Valley Boulevard, has been until now the only facility in the Beaumont Basin where imported water can be delivered to recharge the groundwater basin. The location of this spreading facility is depicted in Figure 3-3. Currently, the SGPWA is constructing a new facility southwest of the intersection of Beaumont Avenue and Brookside Avenue to spread imported water in the basin; this second facility is anticipated to be operational in 2019.

The BCVWD began taking deliveries of imported water for groundwater recharge in the Fall of 2006 when 3,501 ac-ft were spread pursuant to the storage and recharge agreement on file with Watermaster. Deliveries of imported water for BCVWD increased over the next five years peaking in CY 2011 at 7,979 ac-ft and declining through 2015 to an all-time low of 2,773 ac-ft. Over the last three years, BCVWD has spread over 35,000 ac-ft of imported water at the Noble Creek facilities. A total of 84,242 ac-ft of imported water have been spread by BCVWD since CY 2006 as documented in Table 3-4.

The City of Banning began purchasing imported water for recharge at the BCVWD's Noble Creek facility in July 2008 and has since recharged 13,442 ac-ft. in accordance with their storage agreement on file with Watermaster. During CY 2012 and 2013, the City of Banning spread an average of 100 ac-ft per month; spreading in CY 2014 and 2015 was reduced to approximately half of that amount. However, spreading in CY 2016 and 2017 increased significantly to 1,477 ac-ft and 1,350 ac-ft respectively. In CY 2018 the city of Banning spread 500 ac-ft.

In addition to imported water deliveries to BCVWD and the City of Banning at BCVWD's Noble Creek facility, SGPWA has also delivered significant quantities of imported water at the Little San Geronio 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 Geronio Creek Spreading Ponds began in August 2003; the agency has since recharged a total of 10,508 ac-ft averaging 808 ac-ft/yr. Deliveries in CY 2013, at 881 ac-ft, were less than half of the amount spread in CY 2011 and CY 2012. Deliveries in CY 2014 through CY 2018 were basically non-existent as less than 44 ac-ft were spread in those five years combined. Under Resolution 17-01, adopted on June 7, 2017, the SGPWA entered into a storage agreement with the Beaumont Basin Watermaster to spread up to 10,000 ac-ft of imported water in the Beaumont Basin subject to certain conditions. As part of their application, the SGPWA is in the process of completing the construction of their own spreading facilities in the southwest corner of Brookside Avenue and Beaumont Avenue as described earlier in this section.

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

In CY 2018, the City of Beaumont discharged an estimated 3,799 ac-ft of recycled water at DP-001 in Cooper's Canyon. Recycled water discharges were approximately four percent higher than in CY 2017. Monthly discharges at DP-001 varied slightly from a low 3.28 mgd in February to a high of 3.51 mgd in August; the average for the year was 3.39 mgd. Monthly recycled water discharges by the City of Beaumont since 2007 are summarized in Table 3-5.

3.3.3 New Yield Stormwater Recharge

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

3.4 Water Transfers and Adjustments of Rights

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

- ✓ Transfer of water rights and/or water in storage between Appropriator
- ✓ Transfer of water rights from Overlying producers to an Appropriator in exchange for water service, and
- ✓ Allocation of unused Overlying Water to the Appropriator Parties based on their share of the Operating Safe Yield.

According to Part VI, Administration, Paragraph 5Y of the Judgment, the Safe Yield of the Beaumont Basin shall be re-determined at least every 10 years after the date of entry of the Judgment, February 4, 2004. In 2015 the Safe Yield of the Beaumont Basin was re-determined and estimated at 6,700 ac-ft/yr. This amount represents a 22.54 percent reduction from the previous estimate of 8,650 ac-ft/yr. Table 3-6 presents the initial and revised production rights from individual Overlying producers and compares them against actual groundwater production during the 2014-18 five-year period for each user. Annual average groundwater production during this period for all Overlying producers combined was estimated at 2,173.3 ac-ft/yr; representing approximately 32.4 percent of the revised Safe Yield. Individually, none of the Overlying producers produced more than their allowable production rights during this five-year period; California Oak Valley Golf and Resort LLC averaged the highest percentage of their respective allocation at 84.9 percent followed by Plantation by the Lake at 83.9 percent and Sharondale Mesa Owner Association at 71.1 percent. Tukwet Canyon Golf Club followed at an average of 59.7 percent of their Overlying right.

3.4.1 Transfers between Appropriators

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

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

Water transfers between Appropriators were not reported during CY 2018.

3.4.2 Transfers of Overlying Rights for Service by an Appropriator

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

Under Resolution 17-02, adopted on August 30, 2017, the Oak Valley Partners LP transferred all of its Overlying rights to the YVWD to serve a number of parcels in the Beaumont Basin. The Stipulated Judgment allocated OVP an overlying production right of 1,806 ac-ft based on the initial Safe Yield of 8,650 ac-ft/yr. OVPs rights have been adjusted to 1,398.86 ac-ft based on the recalculated Safe Yield of 6,700 ac-ft/yr as approved by the Watermaster on April 1, 2015. Overlying rights and Overlying-Appropriative rights will be adjusted every 10 years based on the recalculation of the Safe Yield of the Beaumont Basin.

The process of converting Overlying Water Rights from Oak Valley Partners to YVWD's Appropriative Rights consists of the following five steps:

1. Consolidation and Identification of Overlying Water Rights to Specific Parcels – This step is completed when Resolution 17-02 was adopted by Watermaster on August 30, 2017.
2. Transfer of Overlying Water Rights to an Appropriator – This step involves a letter from the Developer to the Appropriator. This transfer letter documents the relinquishment of production rights by the Overlyer in exchange for water service.
3. Acceptance of Overlying Water Rights by the Appropriator – This step involves formal action by YV WD's Board as the legislative body of the Appropriator.
4. Notice of Acceptance of Overlying Water Rights by the Appropriator. This step involves a letter to the Watermaster from YVWD notify them of the transfer.
5. Execution of a Development Agreement – A development agreement is executed by the Appropriator based on the completion of the four steps above.

In 2018 Oak Valley Partners transferred a combined total of 180.4 ac-ft in Overlying Rights to YVWD to serve certain parcels in the Beaumont Basin. Transfers are as follows:

Assigned Overlying-Appropriative Right	Watermaster Notification Date	Earmarked Amount (ac-ft)
Assignment No. 1	3/28/2018	90.94
Assignment No. 2	8/1/2018	59.89
Assignment No. 3	10/3/2018	29.57
	Total	180.40

The transfer of the above amount reduced OVP Overlying rights to 1,218.46 ac-ft/yr for 2018. In the future OVPs rights will remain at this level or adjusted down as additional rights are transferred to YVWD. Starting in 2018, YVWD is free to use its Appropriative right by either pumping from the basin, transferring to other Appropriators, or adding to its storage account. Copies of the letters sent by YVWD in CY 2018 notifying the Beaumont Basin Watermaster of the above transfers are included in Appendix E.

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 2018 were based on unused production from Overlying Users in CY 2013. This required the recalculation of Overlying Users production, back to July 2003, on a calendar year basis. Under this format, unused production from the second half of 2003, with adjusted water rights for half of the year, was allocated to Appropriators for CY 2008. Table 3-7 summarizes the volume of unused Overlying water for CY 2003 through CY 2018. While groundwater production by Overlying Users has decreased by over 40 percent since 2004, the volume of unused overlying water has correspondingly increased from 5,053 ac-ft/yr in CY 2006 to a maximum of 6,679 ac-ft during CY 2011. The amount of unused production decreased starting in CY 2014 to slightly over 4,600 ac-ft/yr as a result of reduced Overlying allocations resulting from the new basin Safe Yield of 6,700 ac-ft/yr.

Table 3-7 presents the allocation of unused Overlying water to each Appropriator based on their shares of the Safe Yield and the schedule set forth under Section 7.8 of the Rules and Regulations. It should be noted that this schedule has been modified to reflect a calendar year basis for allocation. Under the modified schedule, unused Overlying production in CY 2013, estimated at 6,365 ac-ft, is allocated to Appropriators during CY 2018. Unused Overlying production during CY 2018, adjusted by reductions on OVP's rights, is estimated at 4,299 ac-ft. This amount would be allocated to Appropriators during CY 2023.

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. The completion of the “Beaumont Basin Storage Loss Analysis” in September 2018 estimates storage losses under various spreading scenarios; however, Watermaster has not develop a methodology to adjust storage accounts and their corresponding losses.

3.5.1 Annual Storage Consolidation

Consistent with the new reporting format to document extractions, spreading and other groundwater activities on a calendar year basis, Table 3-8 represents the consolidation of each Appropriator's storage account from CY 2003 through CY 2018. This table includes annual production by Appropriator, their share of Temporary Surplus, Appropriative rights, 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 2017, an overall total of 109,164 ac-ft of water were stored in the Basin for future use; this total increased in CY 2018 by 4,114.50 ac-ft to a cumulative total of 113,308.50 ac-ft. Increased spreading of imported water by BCVWD and the City of Banning along with newly acquired Appropriative rights by YVWD were the primary reasons for the increase in storage. Despite of the expiration of the Temporary Surplus allocation at the end of CY 2013, the amount of water in storage at the end of CY 2018 was 12,496 ac-ft higher. The amount of water in storage by party at the beginning and end of CY 2018 is presented below. Figure 3-5 compares the amount of water in storage to the storage limit for each party with storage accounts

Agency / Party to the Judgment	Calendar Year 2018 (ac-ft)		
	Beginning	Ending	Change
City of Banning	51,960.6	52,320.1	359.5
BCVWD	32,295.7	34,793.7	2,497.9
City of Beaumont	0.0	0.0	0.0
South Mesa Water Company	9,132.5	9,562.0	429.5
Yucaipa Valley Water District	15,775.2	16,632.8	857.6
Morongo Band of Mission Indians	0.0	0.0	0.0
San Gorgonio Pass Water Agency	0.0	0.0	0.0
TOTAL in storage	109,164.0	109,165.0	4,144.5

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 2017 and 2018 were evaluated using a calibrated groundwater flow model that was previously developed to reevaluate the Safe Yield of the Beaumont Basin (TH&Co, 2015) and refined in May 2016 (TH&Co, 2016). For this analysis, the existing calibrated model was updated with groundwater pumping, recharge, and groundwater levels through the end of 2018. A model-generated groundwater contour map was created for December 2018 and compared to the model-generated December 2017 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 2017 and 2018 are shown on Figures 3-6 and 3-7, respectively.

Groundwater flow direction and gradient within the Beaumont Basin varies depending on location with respect to a groundwater flow divide which occurs in the center of the basin approximately coincident with the Noble Creek drainage. In the western portion of the basin, groundwater generally flows toward a groundwater depression near BCVWD Well 29 or west towards San Timoteo Wash. In the eastern part of the basin, groundwater flows to the southeast towards the City of Banning. The groundwater flow directions did not change significantly between 2017 and 2018.

Basin-wide groundwater level trends in the Beaumont Basin were evaluated based on hydrographs from eight key wells and the groundwater level change map developed by subtracting the 2017 groundwater surface from the 2018 groundwater surface. The total change in storage between the Fall 2017 and the Fall 2018 is shown in Figure 3-8. In the northwest portion of the basin (YVWD 34 and Singleton Ranch 7), groundwater levels remained stable in CY 2018. At Tukwet Canyon Golf Club C, groundwater levels continued a steady decline in 2018 that has been observed since 2003. When evaluated on a long-term basis, groundwater levels in wells in the western portion of the basin have shown a general long-term decline since approximately 2005.

As shown on Figure 3-9, groundwater levels in the north central portion of the basin were relatively stable or increasing in the vicinity of the Noble Creek Artificial Recharge facility. Groundwater levels in BCVWD NC-4D, located on the center of the recharge facility rose approximately 17 ft between November 2017 and November 2018 (see Figure 3-8). The groundwater flow model did not replicate the magnitude of measured groundwater level rise in the Nobel Creek Recharge area and, as such, the groundwater storage change from the model (Figure 3-8) appears to underestimate the storage change suggested by the groundwater levels.

In the south-central portion of the basin, groundwater levels at Oak Valley No. 1 continue to decline in 2018, but started to recover at the end of the year. At BCVWD Well No. 2, groundwater levels rose in January 2018, declined in April, and began rising again in July. At Banning Well C-4 (southeast Beaumont Basin), groundwater levels were rising in April, declined in the summer, and began increasing in December.

The variability of groundwater levels at BCVWD Well No. 2 and Banning Well C4 are likely due to seasonal pumping patterns in these areas. Groundwater levels in the northeast portion of the basin (USGS Highland Springs Monitoring Well - 335714116565002) have been trending upward since 2010 and have remained mostly stable in 2018.

3.6.2 Analysis of Change in Groundwater Storage

Basin-wide change in groundwater storage between December 2017 and December 2018 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 December 2017 and 2018 model-generated groundwater contour maps were each converted into three-dimensional raster surfaces.
2. The basin was discretized into 100-ft by 100-ft grid cells.
3. Attributes were assigned to each grid cell including groundwater level change and specific yield.
4. The resulting attribute table was processed in a Geographic Information System (GIS) for calculating the change in storage.

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

Results of the analysis show an increase in groundwater storage within the adjudicated basin of approximately 173 acre-ft during this one-year period. The model may be underestimating the positive storage change in the Noble Creek Recharge area. Most of the western area showed decreases in groundwater in storage

3.7 Operating Safe Yield

For purposes of this annual report, the annual operating Safe Yield (OSY) describes the net infiltration to the adjudicated groundwater basin (not including artificial recharge) for any given year. It is noted that the OSY is different than the Operating Yield, which is a function of the unused overlying 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 2018 was 17,279 ac-ft (see Table 3-3). Total artificial recharge in calendar year 2018 was 12,621 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 Geronio 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 analysis. The period of time over which the OSY is evaluated is one year. The resulting OSY is estimated as:

$$\text{OSY} = \frac{17,279 + 173 - 12,621}{1} = 4,831 \text{ ac-ft}$$

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

It is noted that the change in groundwater storage used to estimate the annualized Safe Yield is based on a calibrated model, as described herein. As additional hydrogeological data are collected and incorporated into the model, it can be refined to produce more representative groundwater storage change estimates. It is also noted that there are a number of data limitations that could impact the OSY estimate. These limitations include:

- Accuracy of Overlyer Production Data – Production data from many of the Overlying Parties is not metered but is estimated based on a water duty method (Wildermuth Environmental, 2012). In addition to inherent limitations in this methodology, there are, in some cases, discrepancies between groundwater production estimated using the water duty method and production reported by individual parties to the California State Water Resources Control Board. Resolution of Overlyer Production is anticipated to affect the OSY (plus or minus) on the order of hundreds of ac-ft (not thousands).
- Change in Storage Calculation – Although groundwater storage change estimates will always have inherent uncertainty, it is possible to develop more representative results through collection and analysis of additional data. These data include:
 - ✓ Static groundwater levels from dedicated non-pumping wells. There is evidence that groundwater levels measured in some wells had not recovered fully between pumping cycles in the 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.

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

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

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

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

- Develop a protocol to increase the accuracy and consistency of data reported to the Watermaster. Watermaster should identify a person and/or entity to be the central repository for data collection, transfer, and exchange. This person/entity shall be responsible for the collection and distribution of all groundwater production, water level, groundwater recharge, and water quality information. Quality control of the data in its various forms including checks for errors, omissions, and inconsistencies between the reporting agencies and/or parties should be part of this process.

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.

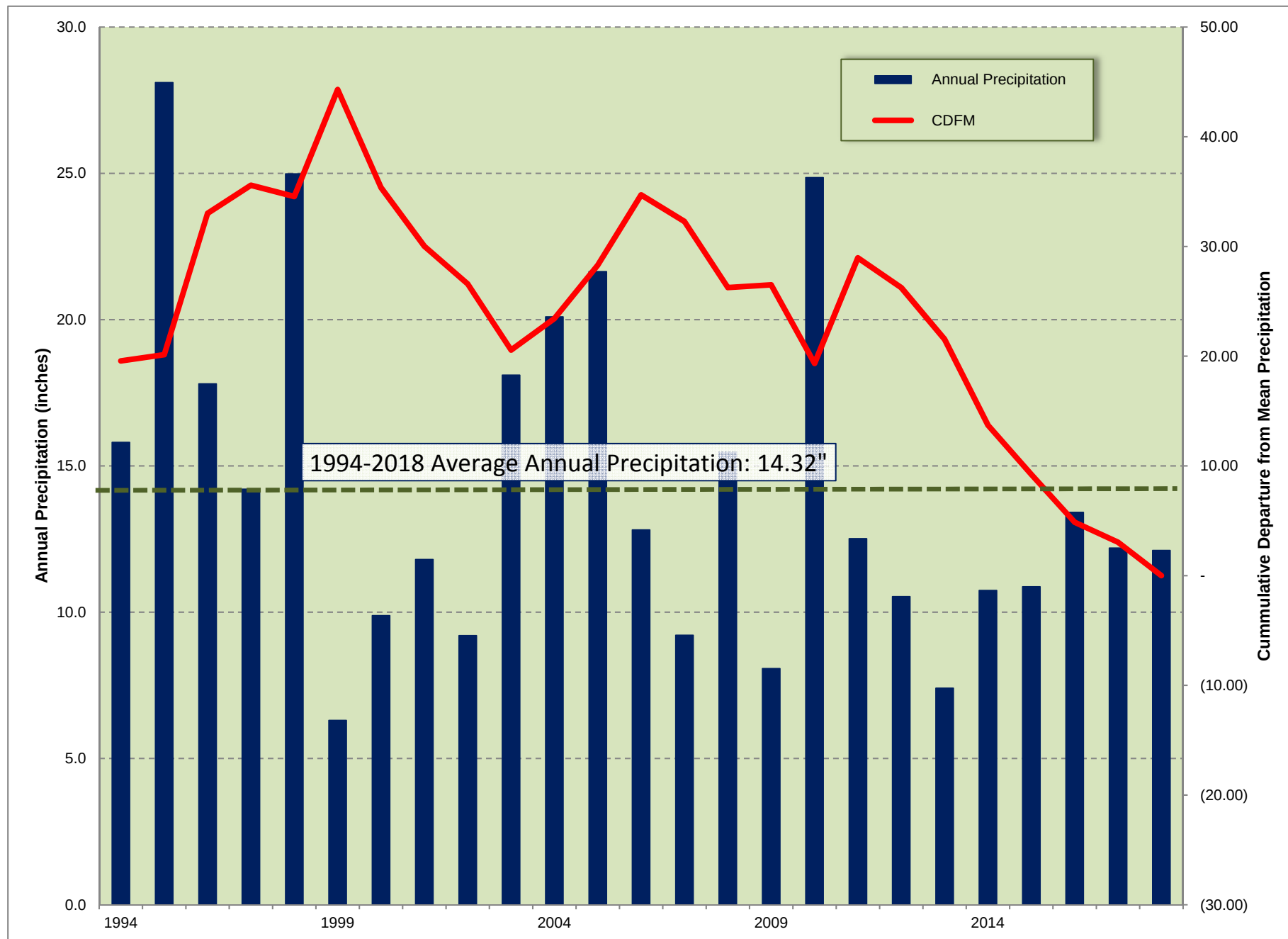
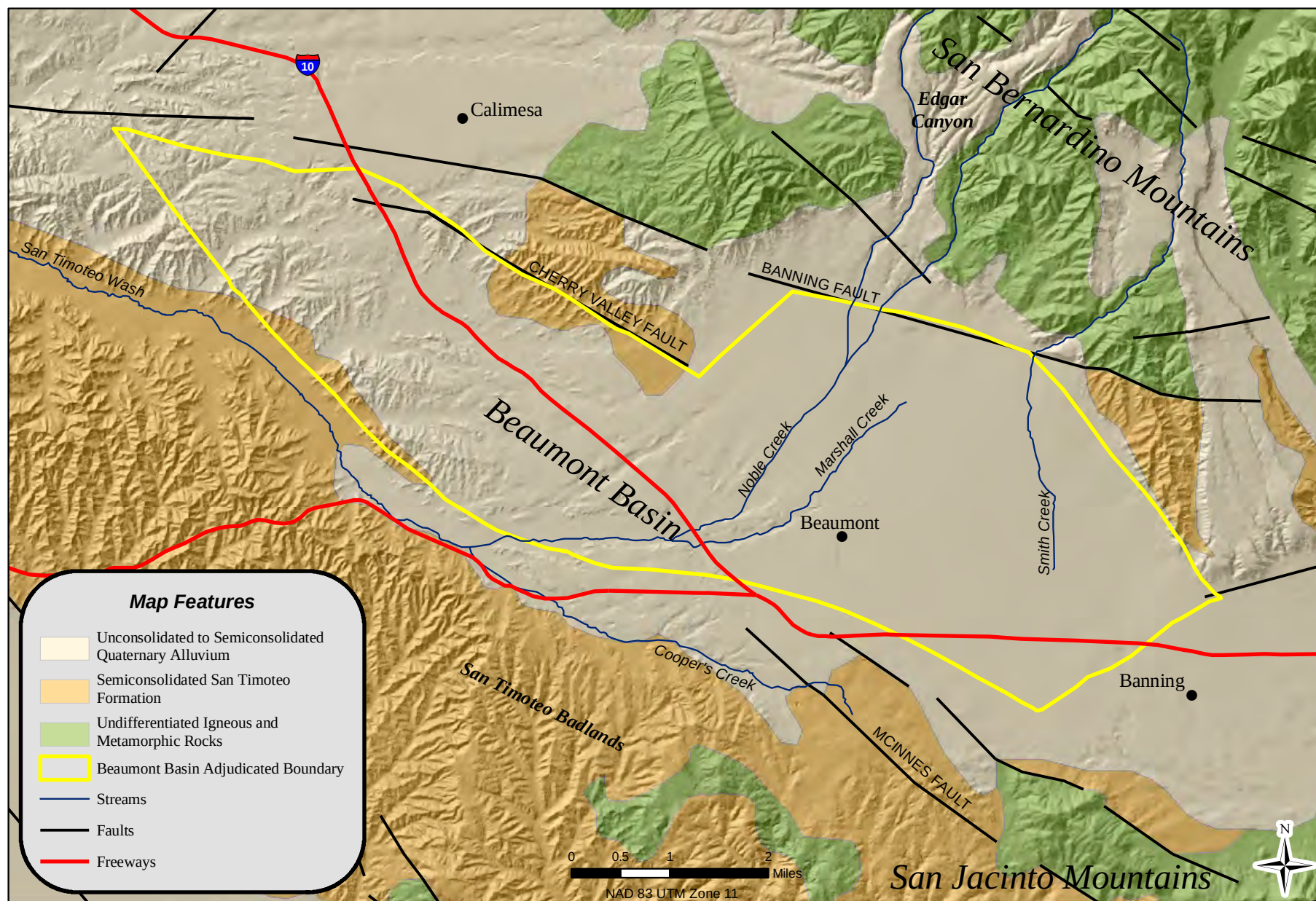
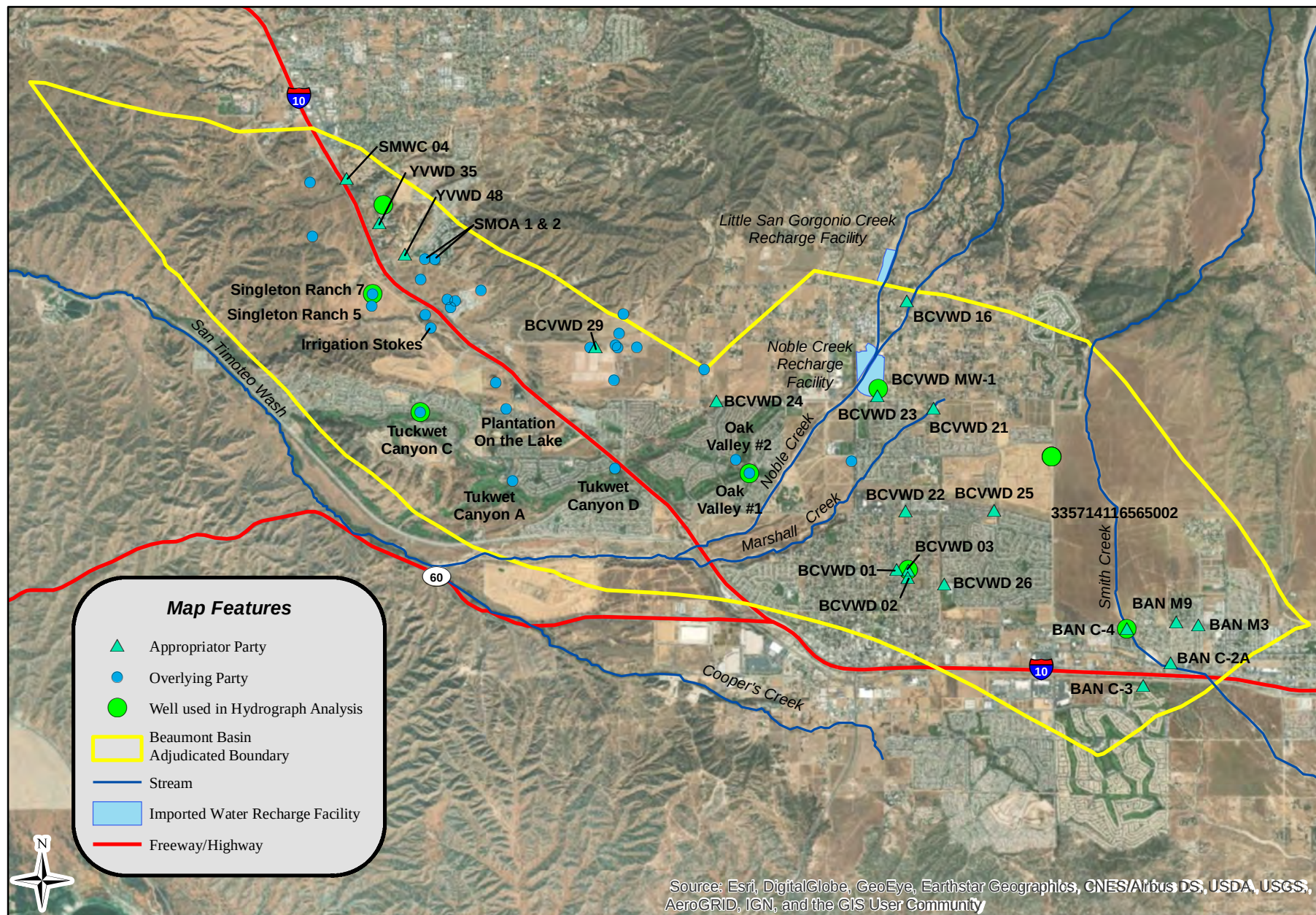


Figure 3-1
Annual Precipitation with Cumulative Departure from the Mean (1994-2018)





Alda, Inc. in association with

Thomas Harder & Co.
Groundwater Consulting

0 0.5 1 2 Miles
NAD 83 UTM Zone 11

**Well Locations in the
Beaumont Basin**

Figure 3-3

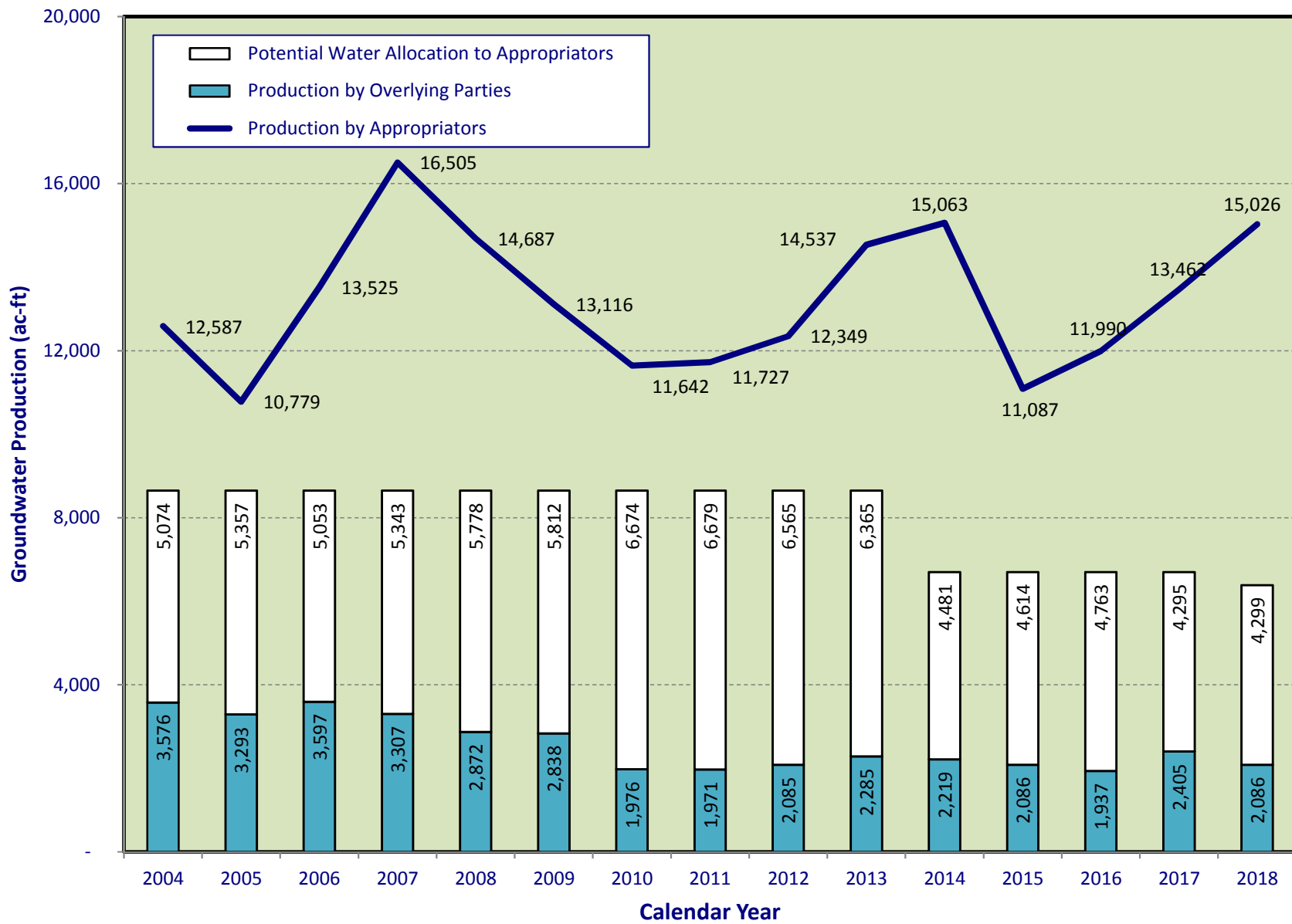


Figure 3-4
Annual Production by Appropriators and Overlying Users (2004-18)

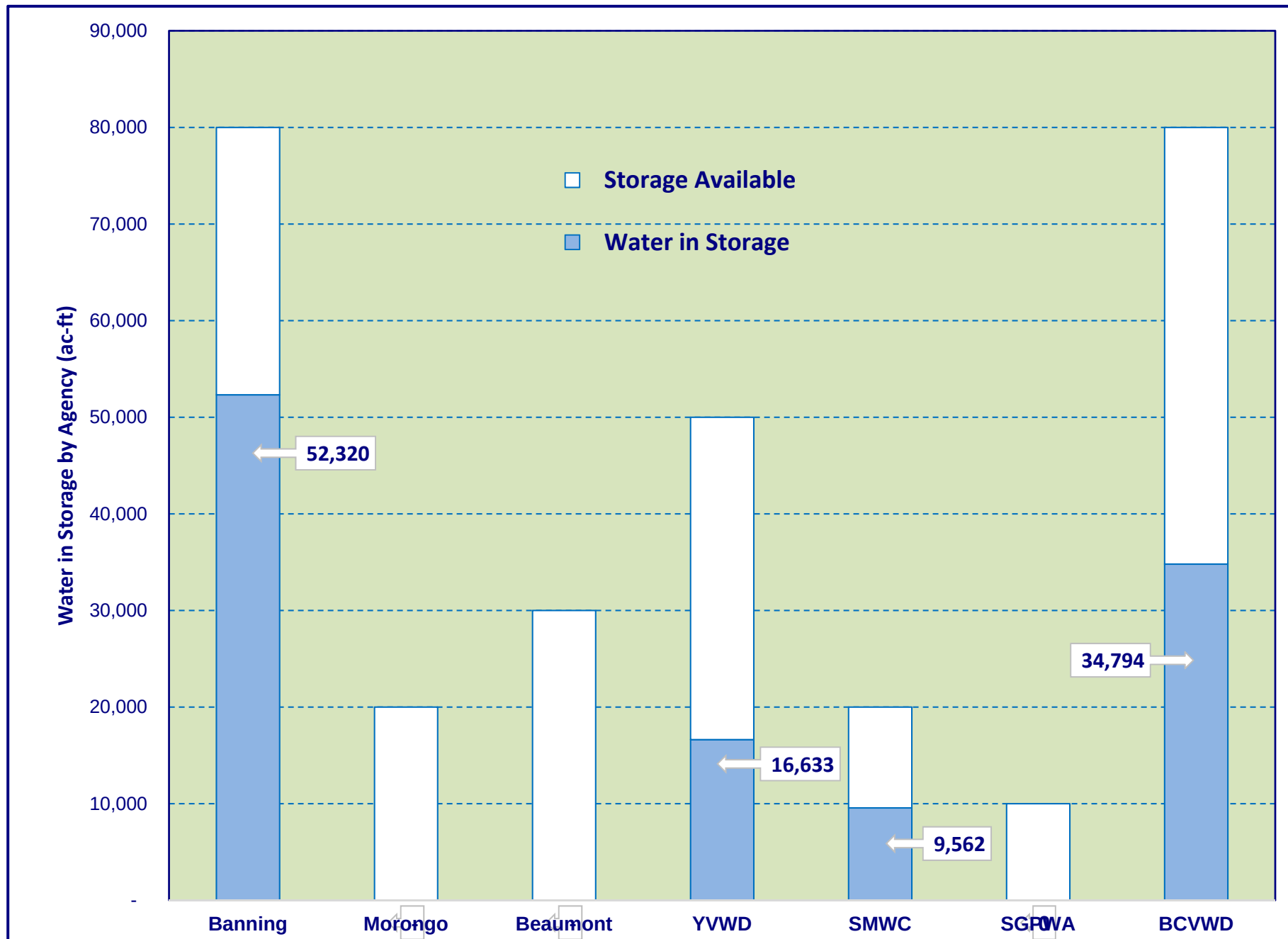
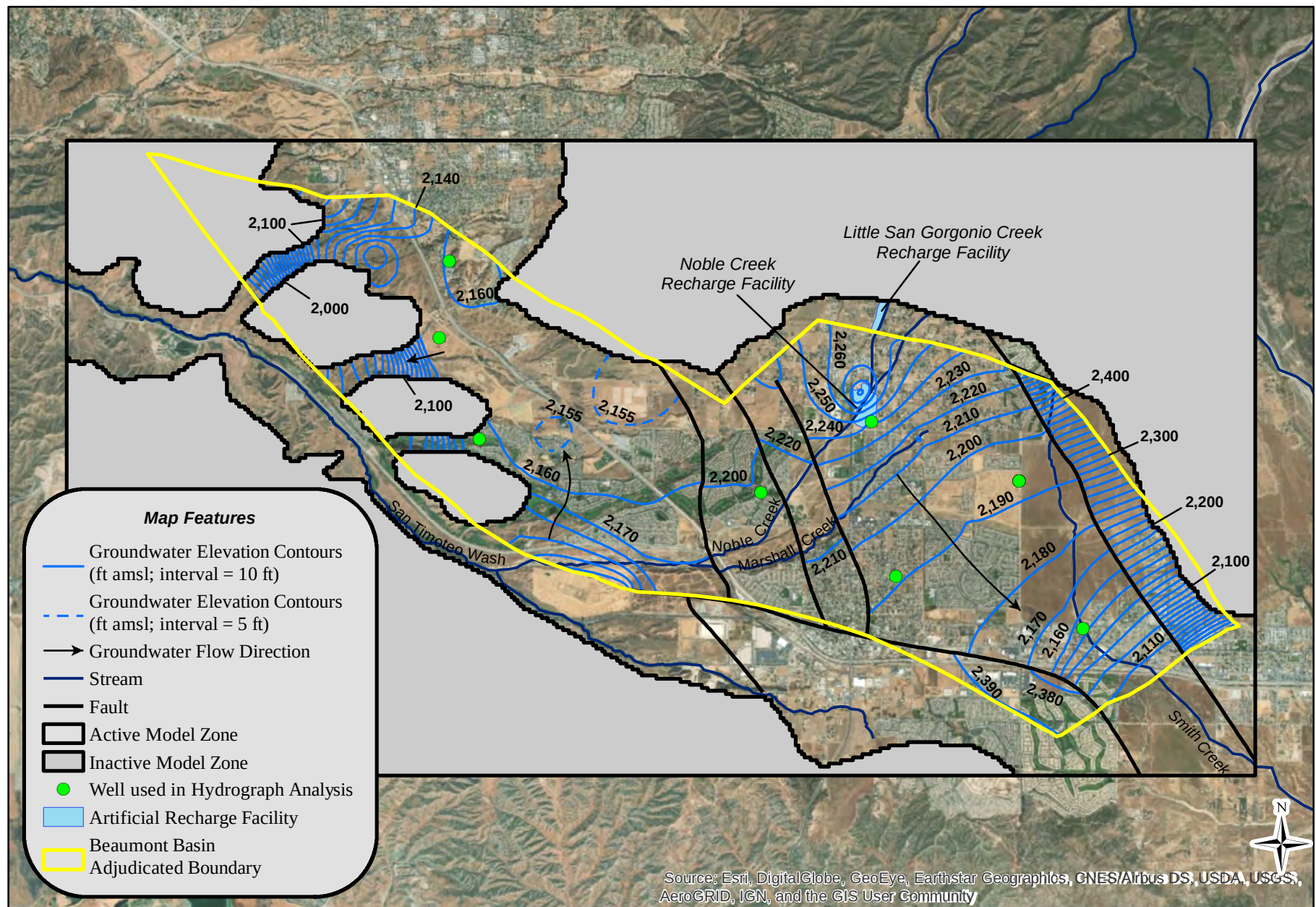


Figure 3-5
Groundwater Storage by Agency/User as of 2018



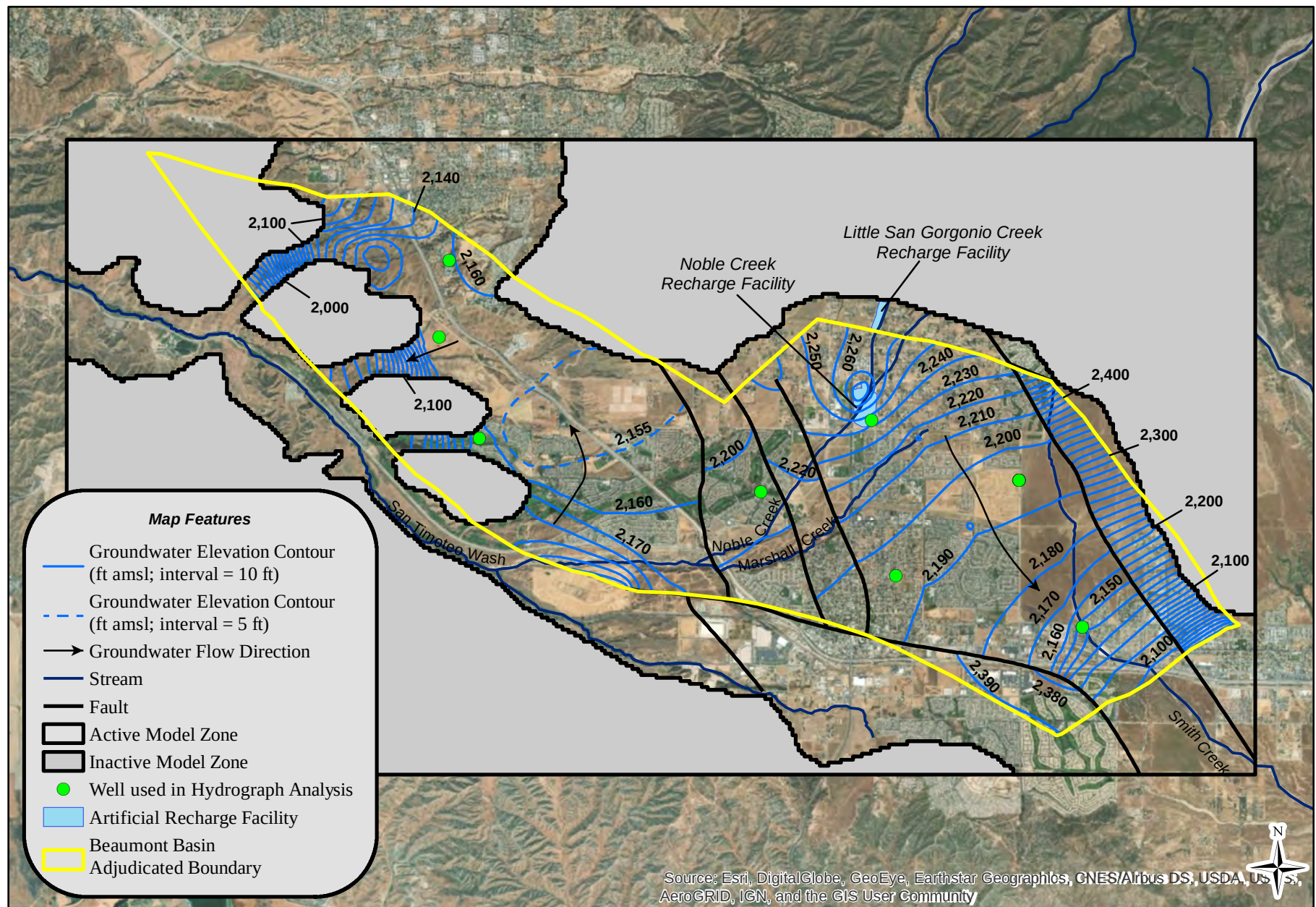
Alda, Inc. in association with

Thomas Harder & Co.
Groundwater Consulting

0 0.5 1 2
Miles
NAD 83 CA State Plane Zone 6

**Groundwater Elevation Contours
in the Beaumont Basin - December 2017**

Figure 3-6



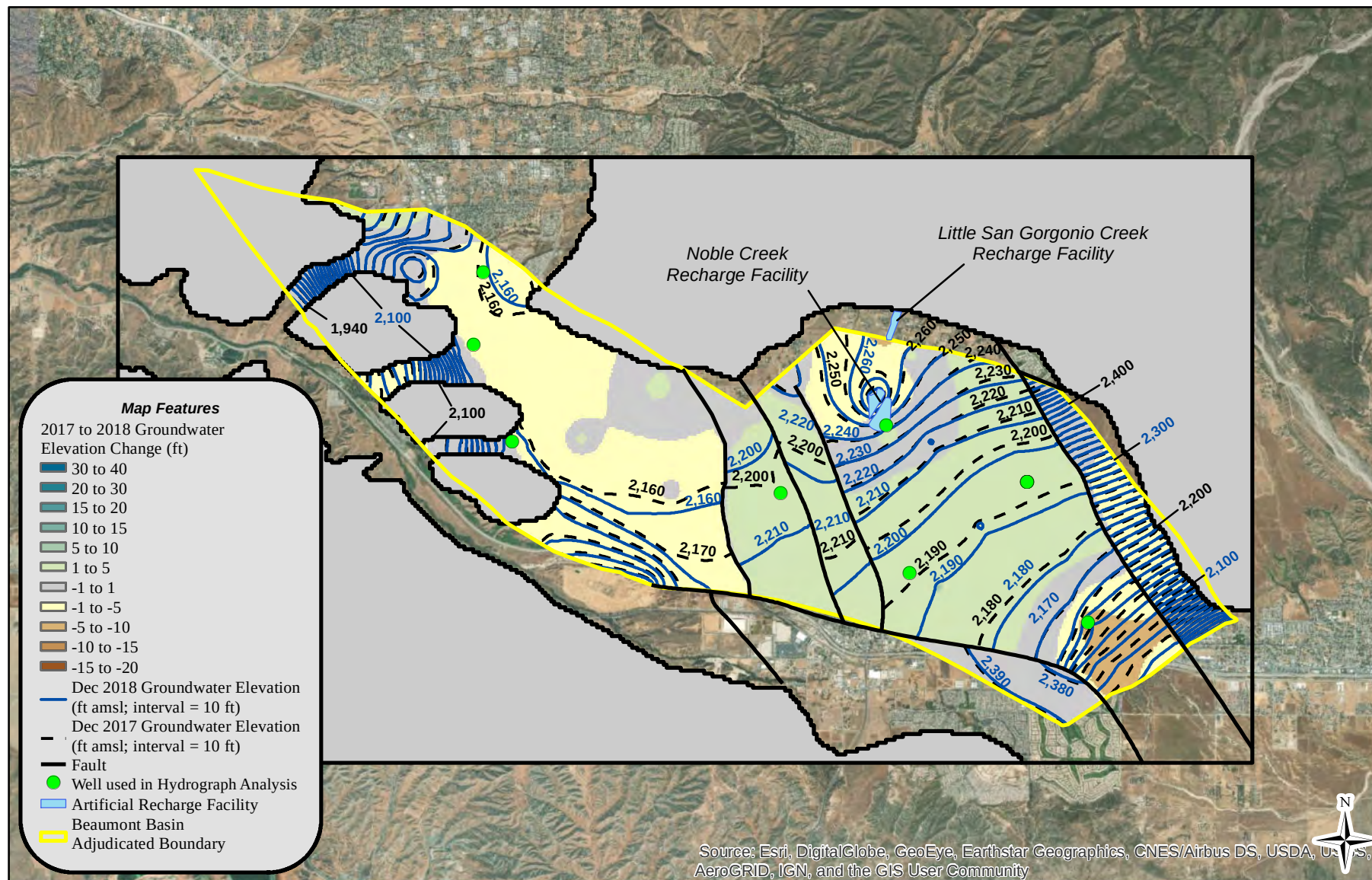
Alda, Inc. in association with

Thomas Harder & Co.
Groundwater Consulting

0 0.5 1 2 Miles
NAD 83 CA State Plane Zone 6

**Groundwater Elevation Contours
in the Beaumont Basin - December 2018**

Figure 3-7

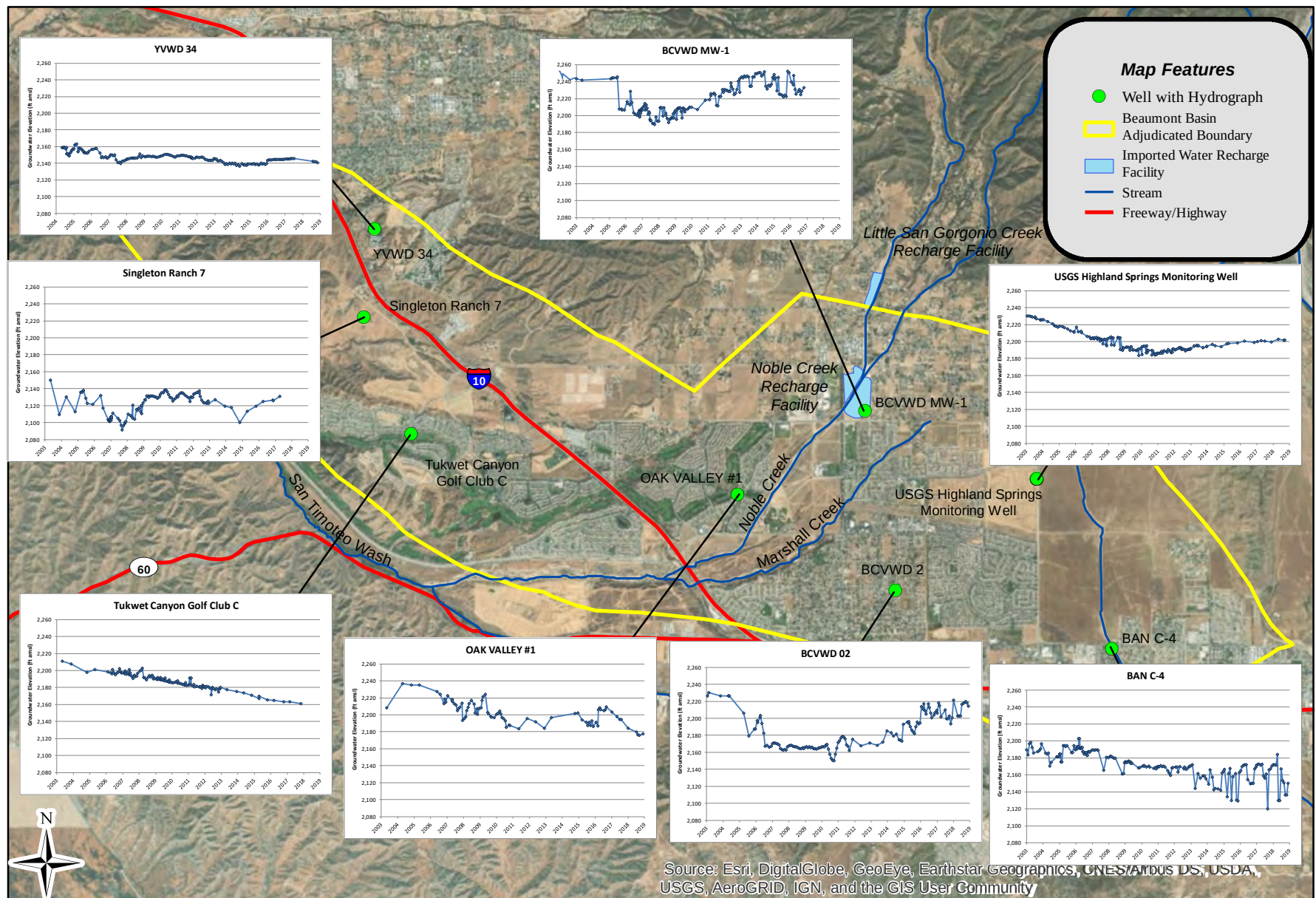


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Groundwater Consulting

0 0.5 1 2
Miles
NAD 83 CA State Plane Zone 6

**Change in Groundwater Elevation
2017 - 2018**
Figure 3-8



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 Groundwater Consulting

0 0.5 1 2
 Miles
 NAD 83 UTM Zone 11

**Groundwater Level Trends
 at Key Wells**

Figure 3-9

Table 3-1A
Appropriator Producer - Summary of Annual Production (2003 to 2013)

Owner & Well Name	Water Production by Well (ac-ft/yr) ⁽¹⁾										
	2003 ⁽²⁾	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Banning, City of											
	Temporary Surplus Allocation: 5,029 ac-ft										
Well C2-A	619.2	710.7	0.4	6.8	288.1	382.3	119.8	26.8	32.5	13.1	115.5
Well C3	517.7	1,026.6	521.2	235.3	511.6	552.5	733.0	843.0	776.6	607.9	626.7
Well C4	448.3	1,135.7	387.8	276.8	673.9	664.3	472.6	51.4	197.5	73.0	858.5
Well M3	525.7	169.8	532.8	671.9	726.0	583.3	294.8	80.0	335.1	344.2	499.9
Well M9	63.3	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
From BCVWD ⁽³⁾	0.0	354.5	366.4	636.7	572.9	751.3	474.8	142.5	0.0	0.0	0.0
<i>Annual Production</i>	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
Eligible for Storage ⁽⁴⁾	340.3	1,631.7	3,220.4	3,201.5	2,256.4	2,095.4	2,934.0	3,885.4	3,687.3	3,990.7	413.8
Beaumont Cherry Valley Water District											
	Temporary Surplus Allocation: 6,802 ac-ft										
Well 1	5.9	978.3	1,244.2	1,149.1	1,283.8	976.9	894.1	809.1	461.7	93.9	294.9
Well 2	960.2	1,628.2	117.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Well 3	675.1	936.0	841.6	749.7	1,357.3	1,310.2	1,139.5	775.6	535.6	716.6	789.2
Well 16	554.6	1,103.7	735.6	537.7	348.3	414.9	452.0	11.9	153.8	255.0	360.8
Well 21	832.8	1,252.5	2,299.5	1,996.3	2,424.7	2,446.1	1,784.1	8.7	1,473.3	2,035.0	2,141.1
Well 22	483.3	1,125.3	405.7	1,062.6	1,056.8	1,105.3	265.1	381.7	95.1	514.7	358.9
Well 23	0.0	204.3	1,747.9	1,963.9	3,018.3	2,491.7	982.7	1,930.4	982.1	854.6	787.3
Well 24				2,231.7	2,467.1	2,093.1	2,045.4	2,199.6	2,045.7	1,764.1	1,526.5
Well 25						127.6	1,060.7	1,300.4	1,188.6	1,680.9	2,033.4
Well 26						495.9	1,187.9	1,312.2	1,435.3	1,280.9	1,257.9
Well 29							797.1	834.4	1,060.3	966.1	1,547.3
To Banning ⁽³⁾	0.0	-354.5	-366.4	-636.7	-572.9	-751.3	-474.8	-142.5	0.0	0.0	0.0
<i>Annual Production</i>	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
Eligible for Storage ⁽⁴⁾	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											
	Temporary Surplus Allocation: 1,996 ac-ft										
3rd No. 4 Well	223.2	482.5	663.2	616.0	665.8	470.9	382.2	405.0	419.9	448.5	308.4
<i>Annual Production</i>	223.2	482.5	663.2	616.0	665.8	470.9	382.2	405.0	419.9	448.5	308.4
Eligible for Storage ⁽⁴⁾	774.8	1,513.5	1,332.8	1,380.0	1,330.2	1,525.2	1,613.8	1,591.0	1,576.1	1,547.5	689.7
Yucaipa Valley Water District											
	Temporary Surplus Allocation: 2,173 ac-ft										
Well 35	58.9	226.3	117.5	220.0	163.8	3.2	0.0	0.0	0.0	0.0	0.0
Well 48	1,103.5	1,607.4	1,163.7	1,807.2	1,519.1	568.8	504.4	672.4	534.1	700.1	1,030.8
<i>Annual Production</i>	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
Eligible for Storage ⁽⁴⁾	0.0	339.3	891.7	145.7	490.1	1,601.0	1,668.6	1,500.6	1,638.9	1,472.9	55.7
<i>Annual Production</i>	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
Eligible for Storage	1,115.1	3,484.5	5,445.0	4,727.2	4,076.7	5,221.5	6,216.4	6,977.0	6,902.3	7,011.1	1,159.2

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 and 2013 are based on 50 percent of the annual allocation to account for half of the year only.

Table 3-1B
Appropriator Producer - Summary of Production for Calendar Year 2014 (ac-ft)

Owner & Well Name	Water Production by Appropriator (ac-ft) ⁽¹⁾												Total Production
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Banning, City of													
Well C2-A	0.9	26.3	93.5	87.4	73.1	71.3	71.2	52.3	9.2	15.6	29.4	0.3	530.5
Well C3	68.2	26.7	2.4	26.9	58.6	66.8	73.0	61.9	46.7	49.2	41.3	5.2	526.8
Well C4	64.1	1.5	21.2	39.4	124.4	112.9	110.1	103.3	118.1	114.5	47.7	0.2	857.7
Well M3	98.4	71.4	96.7	80.2	26.2	68.4	29.3	37.7	92.0	69.4	0.0	0.4	670.0
Well M9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
From BCVWD ⁽²⁾	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal	231.7	125.9	213.9	233.9	282.2	319.4	283.6	255.2	265.9	248.7	118.4	6.0	2,585.1
Beaumont Cherry Valley Water District													
Well 1	0.0	0.0	0.0	6.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.9
Well 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Well 3	7.4	81.4	72.5	140.9	143.4	161.8	192.3	124.1	135.0	122.2	85.1	15.6	1,281.8
Well 16	21.7	0.0	0.0	0.0	0.0	0.0	0.0	35.1	45.5	51.3	20.7	7.8	182.2
Well 21	229.5	181.2	184.3	170.1	231.5	242.0	283.3	262.8	211.4	212.5	177.6	174.4	2,560.7
Well 22	0.1	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Well 23	0.0	0.0	0.0	0.0	76.2	208.3	211.0	133.9	92.7	90.6	165.2	103.3	1,081.0
Well 24	198.6	80.7	128.0	104.6	110.0	94.1	2.4	0.0	86.1	147.6	108.7	5.9	1,066.7
Well 25	227.3	164.1	175.4	234.7	259.9	279.0	372.6	285.9	188.3	170.9	26.3	2.4	2,386.8
Well 26	0.0	0.0	8.2	9.1	0.3	0.0	0.0	55.6	142.3	123.2	89.8	93.3	521.9
Well 29	119.0	88.7	102.0	128.1	172.9	198.3	210.9	180.6	172.3	158.4	120.1	65.2	1,716.5
To Banning ⁽²⁾	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal	803.6	596.1	671.3	794.4	994.3	1,183.5	1,272.5	1,078.1	1,073.7	1,076.7	793.6	467.8	10,805.5
South Mesa Water Company													
3rd No. 4 Well	17.43	24.26	56.87	30.32	38.34	50.25	56.87	46.55	54.69	45.88	33.22	19.04	473.7
Subtotal	17.4	24.3	56.9	30.3	38.3	50.3	56.9	46.6	54.7	45.9	33.2	19.0	473.7
Yucaipa Valley Water District													
Well 35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Well 48	5.1	57.0	81.7	143.3	96.6	127.1	136.5	108.9	127.9	156.6	117.9	39.9	1,198.5
Subtotal	5.1	57.0	81.7	143.3	96.6	127.1	136.5	108.9	127.9	156.6	117.9	39.9	1,198.5
Total	1,057.8	803.4	1,023.8	1,201.9	1,411.5	1,680.2	1,749.4	1,488.8	1,522.2	1,527.9	1,063.1	532.8	15,062.8

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

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

Table 3-1C
Appropriator Producer - Summary of Production for Calendar Year 2015 (ac-ft)

Owner & Well Name	Water Production by Appropriator (ac-ft) ⁽¹⁾												Total Production
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Banning, City of													
Well C2-A	3.8	13.0	55.3	3.3	2.0	1.7	3.2	2.6	28.2	4.6	0.4	0.5	118.6
Well C3	1.7	-1.4	35.3	41.0	22.9	59.5	43.9	60.0	38.3	26.5	50.9	11.6	390.2
Well C4	3.2	2.7	7.5	1.4	5.1	94.0	100.4	89.4	55.1	103.0	69.9	39.9	571.8
Well M3	0.1	10.1	58.3	88.6	91.9	84.8	94.2	83.6	53.8	1.2	18.1	13.1	597.7
Well M9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
From BCVWD ⁽²⁾	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal	8.8	24.5	156.5	134.2	122.0	240.0	241.7	235.6	175.3	135.2	139.3	65.1	1,678.3
Beaumont Cherry Valley Water District													
Well 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Well 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Well 3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Well 16	5.6	24.4	49.7	75.3	81.7	83.1	72.5	60.3	51.4	73.6	57.0	41.8	0.0
Well 21	166.9	184.6	230.4	218.9	185.3	218.2	216.1	224.9	200.5	204.2	192.8	191.9	0.0
Well 22	40.0	108.3	30.6	86.1	7.5	74.6	128.2	116.1	121.1	55.5	13.4	3.0	0.0
Well 23	184.7	121.3	199.1	246.6	232.9	267.5	261.9	241.3	216.7	226.2	167.1	143.9	0.0
Well 24	54.6	5.7	97.1	69.0	64.7	179.4	124.6	106.8	60.1	24.5	49.4	27.3	0.0
Well 25	0.0	61.1	10.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Well 26	16.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Well 29	80.4	95.7	102.6	113.2	112.0	156.7	155.7	163.3	151.3	138.4	114.5	93.0	0.0
Egg Ranch Well	10.5	8.1	7.1	15.1	0.0	34.0	6.8	14.9	25.3	0.0	17.3	0.5	0.0
To Banning ⁽²⁾	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal	559.6	609.2	727.4	824.2	684.2	1,013.4	965.6	927.5	826.4	722.4	611.4	501.5	8,972.8
South Mesa Water Company													
3rd No. 4 Well	20.10	19.95	21.55	27.08	21.72	36.95	34.27	37.80	28.89	27.91	21.03	19.90	317.2
Subtotal	20.1	20.0	21.6	27.1	21.7	37.0	34.3	37.8	28.9	27.9	21.0	19.9	317.2
Yucaipa Valley Water District													
Well 35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Well 48	7.5	10.0	43.0	12.8	4.3	5.8	6.1	20.4	3.4	0.0	0.1	5.8	119.2
Subtotal	7.5	10.0	43.0	12.8	4.3	5.8	6.1	20.4	3.4	0.0	0.1	5.8	119.2
Total	596.0	663.6	948.6	998.3	832.2	1,296.2	1,247.7	1,221.3	1,034.0	885.5	771.9	592.3	11,087.4

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

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

Table 3-1D
Appropriator Producer - Summary of Production for Calendar Year 2016 (ac-ft)

Owner & Well Name	Water Production by Appropriator (ac-ft) ⁽¹⁾												Total Production
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Banning, City of													
Well C2-A	4.1	0.7	0.2	0.2	1.9	17.4	32.9	30.1	1.1	2.0	0.0	3.5	94.2
Well C3	15.5	21.9	0.2	5.8	20.1	50.0	50.9	70.6	55.5	23.0	3.0	1.5	317.8
Well C4	25.5	0.9	12.0	8.3	11.8	92.8	121.5	121.2	101.9	91.9	14.2	0.5	602.3
Well M3	0.4	0.4	0.0	0.4	22.3	92.9	95.7	95.8	90.3	58.4	1.7	0.1	458.5
Well M9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
From BCVWD ⁽²⁾	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal	45.4	23.9	12.5	14.8	56.0	253.0	301.0	317.7	248.8	175.3	18.8	5.5	1,472.7
Beaumont Cherry Valley Water District													
Well 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Well 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Well 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Well 16	68.6	67.5	61.8	66.6	80.2	75.0	91.4	74.0	37.7	70.1	47.9	20.8	761.5
Well 21	221.1	196.3	223.2	201.2	234.2	246.1	245.0	295.8	258.9	225.3	193.1	153.3	2,693.3
Well 22	0.0	2.6	0.0	0.0	40.5	111.8	144.7	177.7	164.2	155.8	67.5	7.0	871.8
Well 23	19.9	85.8	113.9	152.0	213.6	250.9	273.2	257.9	228.1	228.1	160.6	153.7	2,137.8
Well 24	30.4	48.9	19.1	1.5	0.0	188.0	241.6	216.5	145.8	38.6	104.9	62.2	1,097.3
Well 25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Well 26	23.3	65.8	54.6	74.6	101.9	123.3	151.8	293.5	25.1	99.6	82.8	31.7	1,127.9
Well 29	77.3	101.7	98.7	104.3	91.7	141.6	198.7	36.8	181.8	89.9	183.7	84.2	1,390.4
Egg Ranch Well	11.6	8.4	2.6	7.0	3.1	11.1	7.4	11.2	11.4	0.2	2.7	3.0	79.8
To Banning ⁽²⁾	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal	452.1	577.0	573.9	607.2	765.2	1,147.9	1,353.7	1,363.4	1,052.9	907.6	843.2	515.9	10,159.8
South Mesa Water Company													
3rd No. 4 Well	16.9	21.9	23.3	24.7	28.1	38.4	47.1	45.6	37.6	27.9	23.6	17.6	352.6
Subtotal	16.9	21.9	23.3	24.7	28.1	38.4	47.1	45.6	37.6	27.9	23.6	17.6	352.6
Yucaipa Valley Water District													
Well 35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Well 48	0.7	0.7	1.0	0.0	0.0	1.4	0.0	0.0	0.9	0.0	0.0	0.0	4.6
Subtotal	0.7	0.7	1.0	0.0	0.0	1.4	0.0	0.0	0.9	0.0	0.0	0.0	4.6
Total	515.0	623.5	610.6	646.6	849.3	1,440.7	1,701.9	1,726.7	1,340.2	1,110.8	885.6	539.0	11,989.7

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

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

Table 3-1E
Appropriator Producer - Summary of Production for Calendar Year 2017 (ac-ft)

Owner & Well Name	Water Production by Appropriator (ac-ft) ⁽¹⁾												Total Production
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Banning, City of													
Well C2-A	0.8	0.3	0.8	0.3	0.0	4.6	3.8	2.0	0.7	3.7	1.4	0.2	18.6
Well C3	0.9	0.3	1.5	69.3	113.5	87.0	92.5	76.4	49.9	4.6	16.0	0.1	512.1
Well C4	1.2	0.5	48.5	20.8	7.6	73.5	91.4	76.8	73.3	64.2	26.6	14.2	498.4
Well M3	0.0	0.3	0.4	1.5	14.3	76.4	94.3	92.1	87.5	47.2	0.2	0.2	414.4
Well M9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
From BCVWD ⁽²⁾	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal	3.0	1.4	51.2	91.9	135.4	241.5	282.0	247.2	211.4	119.7	44.1	14.7	1,443.5
Beaumont Cherry Valley Water District													
Well 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Well 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Well 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Well 16	9.0	10.3	3.6	2.3	50.3	89.4	112.4	113.8	84.6	68.2	78.8	58.0	680.6
Well 21	141.5	87.6	144.2	196.3	39.5	394.9	290.1	294.4	240.9	210.7	196.2	169.5	2,405.7
Well 22	0.0	0.0	2.1	1.6	37.3	111.1	172.9	167.2	140.1	102.8	1.0	2.6	738.6
Well 23	147.7	169.0	113.3	209.2	264.7	265.3	268.8	263.6	178.5	0.0	107.1	256.8	2,244.0
Well 24	0.0	6.9	152.6	227.0	194.4	171.2	129.7	121.1	187.7	212.5	149.0	159.0	1,711.1
Well 25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	232.4	120.2	0.0	352.6
Well 26	9.0	10.4	57.8	133.6	154.5	163.9	174.9	170.0	152.5	161.1	127.4	130.1	1,445.1
Well 29	54.7	54.3	95.7	161.8	174.9	221.8	324.2	255.6	231.5	189.2	144.2	142.7	2,050.5
Egg Ranch Well	0.0	1.9	11.6	8.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.4
To Banning ⁽²⁾	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal	361.8	340.4	580.9	940.7	915.5	1,417.6	1,472.8	1,385.7	1,215.8	1,176.9	923.8	918.7	11,650.7
South Mesa Water Company													
3rd No. 4 Well	15.7	12.9	17.7	25.0	36.7	41.9	45.6	51.0	37.1	34.7	27.6	22.2	368.1
Subtotal	15.7	12.9	17.7	25.0	36.7	41.9	45.6	51.0	37.1	34.7	27.6	22.2	368.1
Yucaipa Valley Water District													
Well 35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Well 48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1
Subtotal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1
Total	380.5	354.8	649.8	1,057.6	1,087.7	1,700.9	1,800.4	1,684.0	1,464.2	1,331.4	995.5	955.6	13,462.4

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

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

Table 3-1F
Appropriator Producer - Summary of Production for Calendar Year 2018 (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	3.2	1.1	0.5	0.5	0.4	22.8	24.8	37.9	69.0	11.0	4.0	0.1	175.5
Well C3	0.0	0.9	0.2	0.2	0.7	68.6	67.8	79.1	79.8	103.7	107.2	13.4	521.7
Well C4	0.6	4.3	3.2	30.6	66.6	58.2	87.2	100.5	118.3	135.0	139.7	109.2	853.4
Well M3	0.2	0.2	0.1	56.6	86.7	81.5	89.4	86.6	86.0	56.6	46.6	0.1	590.5
Well M9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
From BCVWD ⁽²⁾	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal	4.1	6.5	4.0	87.9	154.4	231.2	269.2	304.1	353.0	306.3	297.5	122.8	2,141.1
Beaumont Cherry Valley Water District													
Well 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Well 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Well 3	0.0	0.0	0.0	0.0	7.8	99.0	19.0	0.0	0.0	0.0	0.0	0.0	125.9
Well 16	20.6	6.3	15.6	12.7	12.7	54.5	22.5	21.2	2.8	5.5	0.8	0.6	176.0
Well 21	193.0	163.9	179.2	215.1	258.0	284.3	294.3	294.0	284.3	196.7	242.6	186.1	2,791.4
Well 22	0.7	18.6	16.8	80.4	155.1	53.2	0.0	0.0	0.0	0.0	0.0	0.0	324.9
Well 23	247.9	177.8	125.8	189.6	201.8	214.9	268.5	248.1	237.7	208.8	157.3	81.0	2,359.3
Well 24	72.9	147.1	110.0	201.9	166.2	237.9	261.0	237.9	217.0	206.1	222.4	142.0	2,222.5
Well 25	0.0	0.0	2.5	108.9	227.8	261.2	272.7	251.9	273.4	224.5	247.7	190.3	2,060.8
Well 26	94.1	75.3	6.1	0.0	0.0	0.0	88.1	183.6	159.8	120.7	111.6	50.0	889.4
Well 29	112.3	119.8	89.5	111.2	0.0	94.5	233.3	238.8	185.5	150.2	29.8	13.9	1,378.7
Egg Ranch Well	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
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	741.6	708.9	545.4	919.9	1,029.6	1,299.5	1,459.3	1,475.6	1,360.7	1,112.6	1,012.1	663.9	12,328.9
South Mesa Water Company													
3rd No. 4 Well	20.1	14.5	14.4	26.9	30.0	42.7	51.4	46.5	44.0	31.4	26.9	16.1	364.9
Subtotal	20.1	14.5	14.4	26.9	30.0	42.7	51.4	46.5	44.0	31.4	26.9	16.1	364.9
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	0.0	0.0	0.0	92.1	0.0	0.0	0.1	60.8	0.2	7.7	30.3	0.0	191.2
Subtotal	0.0	0.0	0.0	92.1	0.0	0.0	0.1	60.8	0.2	7.7	30.3	0.0	191.2
Total	765.7	729.9	563.9	1,126.8	1,214.0	1,573.3	1,779.9	1,886.9	1,757.9	1,458.0	1,366.8	802.9	15,026.1

(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 2013 (ac-ft)

Owner and Well Name	Metered	Annual Water Production by Overlying Producer ^{(1) (2)}											Overlying Water Right (ac-ft/yr)
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
Beckman, Walter M.	No	16.2	27.0	22.4	11.5	8.3	12.7	12.9	6.4	9.0	9.0	2.1	75.0
California Oak Valley Golf and Resort LLC⁽³⁾													
Oak Valley #1	Yes			523.2	453.6	181.7	596.9	135.7	304.2	0.0	0.0	266.8	
Oak Valley #2	Yes			180.7	377.9	597.3	183.5	631.0	260.9	0.0	0.0	359.0	
Subtotal		736.2	728.6	703.9	831.5	779.0	780.4	766.7	565.1	517.3	517.3	625.8	950.0
Merlin Properties	No	3.6	1.6	1.6	1.6	1.6	1.6	1.6	1.5	1.6	1.6	1.6	550.0
Oak Valley Partners, LP⁽⁴⁾													
Haskell Ranch-Main	N/A	29.4	19.6	300.0	300.0	300.0	0.0	0.0	0.0	0.0	0.0	0.0	
Singleton Ranch #5	No	180.0	300.0	40.2	2.1	2.1	2.5	2.5	2.5	2.5	2.5	2.5	
Singleton Ranch #7	Yes	85.8	111.1	10.0	10.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	
Irrigation Stokes	No	6.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Subtotal		301.2	440.7	350.2	312.1	312.1	2.5	2.5	2.5	2.5	2.5	2.5	1,806.0
Plantation on the Lake LLC⁽⁶⁾	Yes	178.6	340.9	310.2	350.1	344.2	354.0	352.3	337.2	344.7	344.7	326.7	581.0
Rancho Calimesa Mobile Home Park	No	35.4	68.3	68.3	68.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	150.0
Roman Catholic Bishop of San Bernardino	No	46.8	59.1	55.6	59.0	0.7	0.7	0.7	0.0	0.0	0.0	0.0	154.0
Sharondale Mesa Owners Association													
Well No.1	Yes	98.6	111.0	98.4	97.0	130.1	102.9	80.3	67.7	81.0	79.2	72.0	
Well No.2	Yes	5.7	47.0	82.6	91.6	52.3	90.4	74.0	64.6	52.0	66.0	75.0	
Subtotal		104.3	158.0	181.0	188.6	182.3	193.3	154.3	132.3	133.0	145.3	147.0	200.0
Tukwet Canyon Golf Club⁽⁵⁾													
Well A	Yes	130.8	268.0	217.2	341.7	329.1	11.2	204.4	118.6	118.4	217.5	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	
Well D	Yes	660.6	1,078.6	995.9	1,411.6	1,269.9	1,126.4	954.2	733.2	764.5	766.8	900.3	
Subtotal		791.4	1,346.7	1,213.1	1,753.4	1,599.1	1,137.6	1,158.6	851.8	882.9	984.3	1,098.4	2,200.0
Stearns, Leonard M. and Dorothy D.	No	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.7	0.7	0.7	0.7	200.0
Sunny-Cal Egg and Poultry Company	N/A	226.0	404.4	385.4	2.6	2.7	4.2	4.2	3.8	4.2	4.3	4.3	1,439.5
Sunny-Cal North - Manheim, M & Berman	No				13.2	2.3	2.3	2.3	2.1	2.3	2.4	2.4	300.0
Nikodinov, Nick	No				0.7	0.8	0.8	0.7	0.7	0.8	0.8	0.8	20.0
McAmis, Ronald L.	No				0.5	0.6	0.6	0.5	0.5	0.6	0.6	0.6	5.0
Aldama, Nicolas and Amalia	No				0.8	0.8	0.9	0.8	0.8	0.9	0.9	0.9	7.0
Gutierrez, Hector, et al.	No				1.4	1.4	1.4	1.4	1.3	1.4	1.4	1.4	10.0
Darmont, Boris and Miriam	No				0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	2.5
TOTAL		2,440.8	3,576.3	3,292.6	3,596.7	3,306.5	2,563.6	2,530.1	1,976.5	1,971.4	2,085.4	2,284.8	8,650.0

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

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

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

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

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

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

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

Owner and Well Name	Metered	Monthly Water Production by Overlying Producer ¹												Total ² Production	Overlying Water Right	Unused Overlying Allocation
		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⁾														2.5	1,398.9	1,396.4
Plantation on the Lake LLC ⁽⁷⁾	Yes	20.2	23.6	25.7	44.3	31.7	32.4	37.6	42.7	39.0	32.8	34.0	39.7	403.8	450.0	46.2
Rancho Calimesa Mobile Home Park ⁽⁵⁾	Yes	0.9	0.9	0.9	1.0	1.0	1.1	2.6	1.1	0.6	2.0	1.7	2.3	16.2	116.2	100.0
Roman Catholic Bishop of San Bernardino		Water Duty Method Used to Estimate Annual Production												0.0	119.3	119.3
Sharondale Mesa Owners Association ⁽⁵⁾																
Well No.1	Yes	5.1	4.0	4.9	7.0	9.0	8.7	10.1	7.0	6.5	8.8	4.9	1.8	78.0		
Well No.1	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 D	Yes	55.4	30.0	34.6	63.1	114.4	127.5	119.3	111.5	134.5	85.8	58.4	16.0	950.3		
Subtotal		79.4	45.8	54.7	92.4	148.7	170.9	160.3	141.1	146.6	109.3	61.9	16.7	1,227.9	1,704.0	476.1
Stearns, Leonard M. and Dorothy D.	No	Water Duty Method Used to Estimate Annual Production												0.7	154.9	154.2
Sunny-Cal Egg and Poultry Company	No	Water Duty Method Used to Estimate Annual Production												4.3	1,115.0	1,110.6
Albor Properties III, LP	No	Water Duty Method Used to Estimate Annual Production												2.4	232.4	229.9
Nikodinov, Nick	No	Water Duty Method Used to Estimate Annual Production												0.8	15.5	14.7
McAmis, Ronald L.	No	Water Duty Method Used to Estimate Annual Production												0.6	3.9	3.3
Aldama, Nicolas and Amalia	No	Water Duty Method Used to Estimate Annual Production												0.9	5.4	4.6
Gutierrez, Hector, et al.	No	Water Duty Method Used to Estimate Annual Production												1.4	7.7	6.3
Darmont, Boris and Miriam	No	Water Duty Method Used to Estimate Annual Production												0.4	1.9	1.6
TOTAL														2,218.7	6,700.0	4,481.3

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

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

3.- Monthly production used to be provided by user, but user has not provided data since 2014.

4.- Starting in 2008, the parcels owned by Oak Valley Partners were no longer used for agricultural purposes. Groundwater production was estimated at 2.5 ac-ft/yr based on water use by a single farm house, a small office, and a small cattle population. Only the Singleton Ranch No. 5 and the office wells are currently producing. The Singleton Ranch No. 7 and Irrigation Stokes wells are either abandoned or have not produced since 2008.

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

6.- Actual monthly production provided by the Morongo Band of Mission Indians - March 2014. Well C is currently out of service.

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

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

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

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

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

3.- Monthly production used to be provided by user, but user has not provided data since 2014.

4.- Starting in 2008, the parcels owned by Oak Valley Partners were no longer used for agricultural purposes. Groundwater production was estimated at 2.5 ac-ft/yr based on water use by a single farm house, a small office, and a small cattle population. Only the Singleton Ranch No. 5 and the office wells are currently producing. The Singleton Ranch No. 7 and Irrigation Stokes wells are either abandoned or have not produced since 2008.

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

6.- Actual monthly production provided by Clearwater Ops, a contractor in charge of operating their wells.

7.- Actual monthly production provided by the Morongo Band of Mission Indians - March 2016. Well C is currently out of service.

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

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

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

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

3.- Monthly production used to be provided by user, but user has not provided data since 2014.

4.- Starting in 2008, the parcels owned by Oak Valley Partners were no longer used for agricultural purposes. Groundwater production was estimated at 2.5 ac-ft/yr based on water use by a single farm house, a small office, and a small cattle population. Only the Singleton Ranch No. 5 and the office wells are currently producing. The Singleton Ranch No. 7 and Irrigation Stokes wells are either abandoned or have not produced since 2008.

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

6.- Actual monthly production provided by the Morongo Band of Mission Indians - March 2015. Well C is currently out of service.

7.- Production by Plantation on the Lake LLC was provided for 2016; however, it is subject to revision pending updated information to be provided by Overlying User.

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

Owner and Well Name	Metered	Monthly Water Production by Overlying Producer ¹												Total ² Production	Overlying Water Right	Unused Overlying Allocation
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
Beckman, Walter M. ⁽³⁾	Yes	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	58.1	57.2
California Oak Valley Golf and Resort LLC ⁽³⁾																
Oak Valley #1	Yes	0.0	0.0	0.0	0.0	0.0	0.0	38.9	88.3	40.8	0.0	0.0	0.0	168.1		
Oak Valley #2	Yes	6.3	6.5	125.4	54.7	61.6	75.0	129.4	0.0	52.7	10.1	80.1	60.1	661.9		
Subtotal		6.3	6.5	125.4	54.7	61.6	75.0	168.3	88.3	93.5	10.1	80.1	60.1	830.0	735.8	0.0
Merlin Properties	No	Water Duty Method Used to Estimate Annual Production												1.6	426.0	424.4
Oak Valley Partners, LP ⁽⁴⁾														2.5	1,398.9	1,396.4
Plantation on the Lake LLC ⁽⁷⁾	Yes	11.7	9.0	9.6	20.2	26.9	28.9	35.8	38.6	73.5	55.6	61.1	47.1	417.8	450.0	32.2
Rancho Calimesa Mobile Home Park ⁽⁵⁾																
Well No.1	Yes	1.0	1.0	0.6	1.7	2.5	3.3	3.0	3.4	3.7	2.8	2.7	1.1	26.9		
Well No.2	No	0.7	0.6	0.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.9	4.2		
Subtotal		1.7	1.6	1.1	2.9	2.5	3.3	3.0	3.4	3.7	2.8	3.1	2.0	31.2	116.2	85.0
Roman Catholic Bishop of San Bernardino		Water Duty Method Used to Estimate Annual Production												0.0	119.3	119.3
Sharondale Mesa Owners Association ⁽⁵⁾																
Well No.1	Yes	1.4	1.3	4.2	5.4	5.2	8.4	10.5	9.2	9.1	8.7	6.0	5.4	74.7		
Well No.2	Yes	1.4	1.2	3.3	4.0	3.8	4.1	4.0	3.7	3.9	4.3	5.1	4.4	43.2		
Subtotal		2.7	2.5	7.4	9.3	9.0	12.5	14.5	13.0	13.0	13.0	11.2	9.8	117.9	154.9	37.0
Tukwet Canyon Golf Club ⁽⁶⁾																
Well A	Yes	0.4	0.8	0.6	7.9	6.2	15.4	12.3	6.1	2.9	12.4	0.7	0.5	66.3		
Well C	Yes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Well D	Yes	0.0	4.7	48.3	94.9	111.7	130.5	58.2	137.6	112.1	101.8	58.4	67.1	925.1		
Subtotal		0.4	5.5	48.8	102.8	117.9	145.9	70.5	143.7	115.0	114.1	59.1	67.6	991.4	1,704.0	712.7
Stearns, Leonard M. and Dorothy D.	No	Water Duty Method Used to Estimate Annual Production												0.7	154.9	154.2
Sunny-Cal Egg and Poultry Company	No	Water Duty Method Used to Estimate Annual Production												4.3	1,115.0	1,110.6
Albor Properties III, LP	No	Water Duty Method Used to Estimate Annual Production												2.4	232.4	229.9
Nikodinov, Nick	No	Water Duty Method Used to Estimate Annual Production												0.8	15.5	14.7
McAmis, Ronald L.	No	Water Duty Method Used to Estimate Annual Production												0.6	3.9	3.3
Aldama, Nicolas and Amalia	No	Water Duty Method Used to Estimate Annual Production												0.9	5.4	4.6
Gutierrez, Hector, et al.	No	Water Duty Method Used to Estimate Annual Production												1.4	7.7	6.3
Darmont, Boris and Miriam	No	Water Duty Method Used to Estimate Annual Production												0.4	1.9	1.6
TOTAL														2,404.7	6,700.0	4,389.4

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

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

3.- Monthly production used to be provided by user, but user has not provided data since 2014.

4.- Starting in 2008, the parcels owned by Oak Valley Partners were no longer used for agricultural purposes. Groundwater production was estimated at 2.5 ac-ft/yr based on water use by a single farm house, a small office, and a small cattle population. Only the Singleton Ranch No. 5 and the office wells are currently producing. The Singleton Ranch No. 7 and Irrigation Stokes wells are either abandoned or have not produced since 2008.

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

6.- Actual monthly production provided by the Morongo Band of Mission Indians - Jan 2018. Well C is currently out of service.

7.- Production information provided by Plantation on the Lake staff

Table 3-2F
Overlying Producer - Summary of Production for Calendar Year 2018 (ac-ft)

Owner and Well Name	Metered	Monthly Water Production by Overlying Producer ¹												Total ² Production	Overlying Water Right	Unused Overlying Allocation
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
Beckman, Walter M. ⁽³⁾	Yes	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	58.1	57.2
California Oak Valley Golf and Resort LLC ⁽³⁾																
Oak Valley #1	Yes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Oak Valley #2	Yes	34.8	8.7	23.1	16.3	39.5	72.5	76.2	91.6	68.0	75.2	53.8	13.4	573.0		
Subtotal		34.8	8.7	23.1	16.3	39.5	72.5	76.2	91.6	68.0	75.2	53.8	13.4	573.1	735.8	162.8
Merlin Properties	No	Water Duty Method Used to Estimate Annual Production												1.6	426.0	424.4
Oak Valley Partners, LP ⁽⁴⁾														2.5	1,218.5	1,216.0
Plantation on the Lake LLC ⁽⁷⁾	Yes	42.0	44.5	27.6	23.0	30.6	33.1	40.8	44.1	83.9	63.6	33.7	4.2	471.2	450.0	-21.2
Rancho Calimesa Mobile Home Park ⁽⁵⁾																
Well No.1	Yes	2.3	2.0	2.1	2.7	2.4	2.9	3.9	3.7	2.9	3.3	2.3	2.2	32.7		
Well No.2	No	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		2.3	2.0	2.1	2.7	2.4	2.9	3.9	3.7	2.9	3.3	2.3	2.2	32.7	116.2	83.4
Roman Catholic Bishop of San Bernardino		Water Duty Method Used to Estimate Annual Production												0.0	119.3	119.3
Sharondale Mesa Owners Association ⁽⁵⁾																
Well No.1	Yes	3.2	4.4	2.4	5.4	8.0	8.5	8.0	10.4	12.8	10.9	7.6	3.8	85.4		
Well No.2	Yes	2.7	3.2	2.1	3.9	2.4	2.9	5.1	3.1	1.3	0.0	1.4	2.8	31.0		
Subtotal		5.9	7.7	4.4	9.3	10.4	11.4	13.1	13.5	14.2	10.9	9.0	6.6	116.4	154.9	38.5
Tukwet Canyon Golf Club ⁽⁶⁾																
Well A	Yes	0.9	0.5	0.7	1.4	0.9	4.1	13.6	13.5	7.5	2.9	0.7	0.8	47.5		
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	37.3	40.8	18.3	88.3	78.9	124.6	149.1	133.8	120.0	81.4	67.6	23.4	963.5		
Subtotal		38.2	41.2	19.0	89.8	79.8	128.7	162.7	147.3	127.5	84.2	68.3	24.2	1,010.9	1,704.0	693.1
Stearns, Leonard M. and Dorothy D.	No	Water Duty Method Used to Estimate Annual Production												0.7	154.9	154.2
Sunny-Cal Egg and Poultry Company	No	Water Duty Method Used to Estimate Annual Production												4.3	1,115.0	1,110.6
Albor Properties III, LP	No	Water Duty Method Used to Estimate Annual Production												2.4	232.4	229.9
Nikodinov, Nick	No	Water Duty Method Used to Estimate Annual Production												0.8	15.5	14.7
McAmis, Ronald L.	No	Water Duty Method Used to Estimate Annual Production												0.6	3.9	3.3
Aldama, Nicolas and Amalia	No	Water Duty Method Used to Estimate Annual Production												0.9	5.4	4.6
Gutierrez, Hector, et al.	No	Water Duty Method Used to Estimate Annual Production												1.4	7.7	6.3
Darmont, Boris and Miriam	No	Water Duty Method Used to Estimate Annual Production												0.4	1.9	1.6
TOTAL														2,220.7	6,519.6	4,298.9

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 used to be provided by user, but user has not provided data since 2014.

4.- Starting in 2008, the parcels owned by Oak Valley Partners were no longer used for agricultural purposes. Groundwater production was estimated at 2.5 ac-ft/yr based on water use by a single farm house, a small office, and a small cattle population. Only the Singleton Ranch No. 5 and the office wells are currently producing. The Singleton Ranch No. 7 and Irrigation Stokes wells are either abandoned or have not produced since 2008. In 2018 Oak Valley Partners Overlying water rights were reduced by 180.40 ac-ft as a result of a water transfer with YVWD.

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

6.- Actual monthly production provided by the Morongo Band of Mission Indians - Jan 2019. Well C is currently out of service.

7.- Production information provided by Plantation on the Lake staff

Table 3-3A
Production Summary for Appropriator and Overlying Producers in the Beaumont Basin
2003 through 2010 - Calendar Year Accounting (ac-ft)

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

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

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

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

Table 3-3B
Production Summary for Appropriator and Overlying Producers in the Beaumont Basin
2011 through 2018 - Calendar Year Accounting (ac-ft)

	Annual Production (ac-ft)							
	2011	2012	2013	2014	2015	2016	2017	2018
Appropriator Parties								
Banning, City of	1,341.7	1,038.3	2,100.7	2,585.1	1,678.3	1,472.7	1,443.5	2,141.1
Beaumont-Cherry Valley Water District	9,431.3	10,162.0	11,097.4	10,805.5	8,972.8	10,159.8	11,650.7	12,328.9
South Mesa Water Company	419.9	448.5	308.4	473.7	317.2	352.6	368.1	364.9
Yucaipa Valley Water District	534.1	700.1	1,030.8	1,198.5	119.2	4.6	0.1	191.2
Subtotal	11,727.1	12,348.9	14,537.2	15,062.8	11,087.4	11,989.7	13,462.4	15,026.1
Overlying Parties								
Beckman, Walter M	9.0	9.0	2.1	0.9	0.9	0.9	0.9	0.9
California Oak Valley Golf and Resort LLC	517.3	517.3	625.8	417.0	751.1	552.3	830.0	573.1
Merlin Properties	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Oak Valley Partners, LP	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Plantation on the Lake LLC	344.7	344.7	326.7	403.8	302.1	293.4	417.8	471.2
Rancho Calimesa Mobile Home Park	69.3	69.3	69.3	16.2	23.4	31.2	31.2	32.7
Roman Catholic Bishop of San Bernardino	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sharondale Mesa Owners Association	133.0	145.3	147.0	137.3	94.1	84.8	117.9	116.4
Tukwet Canyon Golf Club ²	882.9	984.3	1,098.4	1,227.9	898.6	958.6	991.4	1,010.9
Stearns, Leonard M. and Dorothy D.	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Sunny-Cal Egg and Poultry Company	4.2	4.3	4.3	4.3	4.3	4.3	4.3	4.3
Albor Properties III, LP ³	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.4
Nikodinov, Nick	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
McAmis, Ronald L.	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Aldama, Nicolas and Amalia	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Gutierrez, Hector, et. al.	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Darmont, Boris and Miriam	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Subtotal	1,971.4	2,085.4	2,284.8	2,218.7	2,085.7	1,936.7	2,404.7	2,220.7
Total	13,698.4	14,434.3	16,821.9	17,281.5	13,173.1	13,926.4	15,867.1	17,246.8

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

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

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

Table 3-4
Annual Supplemental Recharge to the Beaumont Basin -- Calendar Year Accounting

Year	Supplemental Recharge (ac-ft)				
	Banning ¹	Beaumont ²	BCVWD ¹	SGPWA ³	Total
2003	-	-	-	-	-
2004	-	-	-	813.8	813.8
2005	-	-	-	687.4	687.4
2006	-	-	3,501.0	777.7	4,278.7
2007	-	-	4,501.0	541.3	5,042.3
2008	1,534.0	-	2,399.0	1,047.4	4,980.4
2009	2,741.2	-	2,741.2	823.4	6,305.8
2010	1,338.0	-	5,727.0	1,222.3	8,287.3
2011	800.0	-	7,979.0	1,842.0	10,621.0
2012	1,200.0	-	7,783.0	1,827.2	10,810.2
2013	1,200.0	-	7,403.0	881.8	9,484.8
2014	608.0	-	4,405.0	16.5	5,029.5
2015	694.0	-	2,773.0	9.2	3,476.2
2016	1,477.0	-	9,319.0	17.8	10,813.8
2017	1,350.0	-	13,590.0	-	14,940.0
2018	500.0	-	12,121.0	-	12,621.0
Totals	13,442.2	-	84,242.2	10,507.8	108,192.2

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

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

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

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

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average (mgd)	Annual (ac-ft)
2007	2.32	2.17	2.25	2.23	2.61	2.57	2.57	2.66	2.66	2.67	2.63	2.50	2.49	2,786
2008	2.44	2.79	2.49	2.65	2.55	2.59	2.55	2.59	2.60	2.50	2.57	2.65	2.58	2,889
2009	2.52	2.66	2.56	2.58	2.59	2.56	2.44	2.63	2.60	2.61	2.63	2.69	2.59	2,902
2010	2.83	2.65	2.66	2.60	2.00	1.88	1.94	1.96	1.94	2.00	2.04	2.22	2.23	2,495
2011	2.07	2.12	2.06	2.01	2.04	2.25	2.23	2.13	2.10	2.08	2.19	2.13	2.12	2,371
2012	2.19	2.64	2.19	2.23	2.29	2.24	2.28	2.29	2.24	2.70	2.38	2.33	2.33	2,614
2013	2.76	2.80	2.80	2.81	2.78	2.78	2.81	2.82	2.89	2.83	2.21	2.50	2.73	3,061
2014	2.62	2.22	2.45	2.48	2.61	2.62	2.61	2.74	2.87	2.74	2.99	3.12	2.67	2,992
2015	2.87	2.94	2.97	2.90	2.92	2.98	2.99	3.10	3.08	3.08	3.06	3.11	3.00	3,360
2016	3.15	3.06	3.01	3.07	3.11	3.15	3.15	3.26	3.22	3.18	3.19	3.30	3.15	3,533
2017	3.36	3.26	3.17	3.35	3.22	3.18	3.21	3.31	3.32	3.26	3.29	3.31	3.27	3,663
2018	3.37	3.28	3.33	3.32	3.30	3.31	3.41	3.51	3.47	3.42	3.51	3.47	3.39	3,799

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

[illegible]

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 (2014-18) Average Production (ac-ft)	5-Year (2014-18) Running Avg % of Water Right
California Oak Valley Golf and Resort LLC ⁽¹⁾	950.0	735.8	624.7	84.9%
Plantation on the Lake LLC	581.0	450.0	377.7	83.9%
Sharondale Mesa Owners Association	200.0	154.9	110.1	71.1%
Tukwet Canyon Golf Club	2,200.0	1,704.0	1,017.5	59.7%
Rancho Calimesa Mobile Home Park	150.0	116.2	26.9	23.2%
Gutierrez, Hector, et al.	10.0	7.7	1.4	18.5%
Darmont, Boris and Miriam	2.5	1.9	0.4	18.1%
Aldama, Nicolas and Amalia	7.0	5.4	0.9	16.0%
McAmis, Ronald L.	5.0	3.9	0.6	14.5%
Nikodinov, Nick	20.0	15.5	0.8	5.0%
Beckman, Walter M.	75.0	58.1	0.9	1.5%
Albor Properties III, LP	300.0	232.4	2.4	1.0%
Stearns, Leonard M. and Dorothy D.	200.0	154.9	0.7	0.5%
Sunny-Cal Egg and Poultry Company	1,439.5	1,115.0	4.3	0.4%
Merlin Properties	550.0	426.0	1.6	0.4%
Oak Valley Partners, LP ⁽²⁾	1,806.0	1,398.9	2.5	0.2%
Roman Catholic Bishop of San Bernardino	154.0	119.3	0.0	0.0%
	8,650.0	6,700.0	2,173.3	32.4%

(1) - California Oak Valley Golf and Resort LLC exceeded its annual production right in 2015 and 2017; however, their average production over any five-year period has been below their production level.

(2) - Under Resolution 17-02, adopted August 30, 2017, Oak Valley Partners LP transferred all of its Overlying rights to the Yucaipa Valley Water District to serve a number of parcels in the Beaumont Basin. In 2018 OVP transferred a combined total of 180.40 ac-ft of overlying rights to YVWD. OVP's overlying rights are now 1,218.50 ac-ft.

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

Accounting Year	Overlying Water Right	Overlying Production	Unused Overlying Water Right	Allocation Year	City of Banning	City of Beaumont	Beaumont Cherry Valley WD	South Mesa Water Co.	Yucaipa Valley Water District	Total
2003	4,325	2,441	1,884	2008	592	0	801	235	256	1,884
2004	8,650	3,576	5,074	2009	1,595	0	2,157	633	689	5,074
2005	8,650	3,293	5,357	2010	1,684	0	2,277	669	728	5,357
2006	8,650	3,597	5,053	2011	1,588	0	2,148	631	686	5,053
2007	8,650	3,307	5,343	2012	1,679	0	2,272	667	726	5,343
2008	8,650	2,872	5,778	2013	1,816	0	2,456	721	785	5,778
2009	8,650	2,838	5,812	2014	1,827	0	2,471	725	789	5,812
2010	8,650	1,976	6,674	2015	2,097	0	2,837	833	906	6,674
2011	8,650	1,971	6,679	2016	2,099	0	2,839	833	907	6,679
2012	8,650	2,085	6,565	2017	2,063	0	2,791	819	891	6,565
2013	8,650	2,285	6,365	2018	2,001	0	2,706	794	864	6,365
2014	6,700	2,219	4,481	2019	1,408	0	1,905	559	609	4,481
2015	6,700	2,086	4,614	2020	1,450	0	1,962	576	627	4,614
2016	6,700	1,937	4,763	2021	1,497	0	2,025	594	647	4,763
2017	6,700	2,405	4,295	2022	1,350	0	1,826	536	583	4,295
2018¹	6,520	2,221	4,299	2023	1,351	0	1,827	536	584	4,299

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

1.- Overlying rights were reduced in 2018 by 180.40 ac-ft as a result Oak Valley Partners transferring to Yucaipa Valley Water District to serve certain parcels in the Beaumont Basin.

Table 3-8
Consolidation of Appropriator Production and Storage Accounts
Calendar Year Accounting (ac-ft) 2003 through 2018

Calendar Year	Storage Account Balance at Beginning of CY	Share of Surplus Water	Appropriative Rights	Production	Additions to Storage Account						Ending Account Balance
					Under / Over Production ⁽¹⁾	Unused Overlying Production Allocation	Transfers Among Appropriators	SWP Water Recharge	Local Recharge	Total Additions to Storage Account	
City of Banning - Authorized Storage Account: 80,000 ac-ft											
2003	0.0	2,514.5	0.0	2,174.2	340.3	0.0	0.0	0.0	0.0	340.3	340.3
2004	340.3	5,029.0	0.0	3,397.3	1,631.7	0.0	0.0	0.0	0.0	1,631.7	1,972.0
2005	1,972.0	5,029.0	0.0	1,808.6	3,220.4	0.0	0.0	0.0	0.0	3,220.4	5,192.5
2006	5,192.5	5,029.0	0.0	1,827.5	3,201.5	0.0	0.0	0.0	0.0	3,201.5	8,393.9
2007	8,393.9	5,029.0	0.0	2,772.6	2,256.4	0.0	1,500.0	0.0	0.0	3,756.4	12,150.3
2008	12,150.3	5,029.0	0.0	2,933.6	2,095.4	592.2	0.0	1,534.0	0.0	4,221.6	16,371.9
2009	16,371.9	5,029.0	0.0	2,095.0	2,934.0	1,594.7	0.0	2,741.2	0.0	7,269.8	23,641.8
2010	23,641.8	5,029.0	0.0	1,143.6	3,885.4	1,683.8	0.0	1,338.0	0.0	6,907.2	30,549.0
2011	30,549.0	5,029.0	0.0	1,341.7	3,687.3	1,588.2	0.0	800.0	0.0	6,075.6	36,624.5
2012	36,624.5	5,029.0	0.0	1,038.3	3,990.7	1,679.5	0.0	1,200.0	0.0	6,870.2	43,494.7
2013	43,494.7	2,514.5	0.0	2,100.7	413.8	1,816.1	0.0	1,200.0	0.0	3,430.0	46,924.7
2014	46,924.7	0.0	0.0	2,585.1	-2,585.1	1,826.7	0.0	608.0	0.0	-150.4	46,774.3
2015	46,774.3	0.0	0.0	1,678.3	-1,678.3	2,097.5	0.0	694.0	0.0	1,113.2	47,887.5
2016	47,887.5	0.0	0.0	1,472.7	-1,472.7	2,099.1	0.0	1,477.0	0.0	2,103.4	49,990.8
2017	49,990.8	0.0	0.0	1,443.5	-1,443.5	2,063.2	0.0	1,350.0	0.0	1,969.8	51,960.6
2018	51,960.6	0.0	0.0	2,141.1	-2,141.1	2,000.6	0.0	500.0	0.0	359.5	52,320.1

Table 3-8
Consolidation of Appropriator Production and Storage Accounts
Calendar Year Accounting (ac-ft) 2003 through 2018

Calendar Year	Storage Account Balance at Beginning of CY	Share of Surplus Water	Appropriative Rights	Production	Additions to Storage Account						Ending Account Balance
					Under / Over Production ⁽¹⁾	Unused Overlying Production Allocation	Transfers Among Appropriators	SWP Water Recharge	Local Recharge	Total Additions to Storage Account	
Beaumont Cherry Valley Water District - Authorized Storage Account: 80,000 ac-ft											
2003	0.0	3,401.0	0.0	3,511.9	-110.9	0.0	0.0	0.0	0.0	-110.9	-110.9
2004	-110.9	6,802.0	0.0	6,873.9	-71.9	0.0	0.0	0.0	0.0	-71.9	-182.8
2005	-182.8	6,802.0	0.0	7,025.6	-223.6	0.0	0.0	0.0	0.0	-223.6	-406.4
2006	-406.4	6,802.0	0.0	9,054.1	-2,252.1	0.0	0.0	3,501.0	0.0	1,248.9	842.5
2007	842.5	6,802.0	0.0	11,383.3	-4,581.3	0.0	1,500.0	4,501.0	0.0	1,419.7	2,262.2
2008	2,262.2	6,802.0	0.0	10,710.5	-3,908.5	801.0	2,500.0	2,399.0	0.0	1,791.5	4,053.7
2009	4,053.7	6,802.0	0.0	10,133.9	-3,331.9	2,156.8	2,000.0	2,741.2	0.0	3,566.1	7,619.8
2010	7,619.8	6,802.0	0.0	9,421.3	-2,619.3	2,277.4	0.0	5,727.0	0.0	5,385.1	13,004.9
2011	13,004.9	6,802.0	0.0	9,431.3	-2,629.3	2,148.1	3,500.0	7,979.0	0.0	10,997.8	24,002.8
2012	24,002.8	6,802.0	0.0	10,162.0	-3,360.0	2,271.5	0.0	7,783.0	0.0	6,694.5	30,697.3
2013	30,697.3	3,401.0	0.0	11,097.4	-7,696.4	2,456.4	0.0	7,403.0	0.0	2,163.0	32,860.3
2014	32,860.3	0.0	0.0	10,805.5	-10,805.5	2,470.6	0.0	4,405.0	0.0	-3,929.9	28,930.4
2015	28,930.4	0.0	0.0	8,972.8	-8,972.8	2,836.9	0.0	2,773.0	0.0	-3,362.8	25,567.6
2016	25,567.6	0.0	0.0	10,159.8	-10,159.8	2,839.1	0.0	9,319.0	0.0	1,998.3	27,565.9
2017	27,565.9	0.0	0.0	11,650.7	-11,650.7	2,790.6	0.0	13,590.0	0.0	4,729.9	32,295.7
2018	32,295.7	0.0	0.0	12,328.9	-12,328.9	2,705.9	0.0	12,121.0	0.0	2,497.9	34,793.7

Table 3-8
Consolidation of Appropriator Production and Storage Accounts
Calendar Year Accounting (ac-ft) 2003 through 2018

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Table 3-8
Consolidation of Appropriator Production and Storage Accounts
Calendar Year Accounting (ac-ft) 2003 through 2018

Calendar Year	Storage Account Balance at Beginning of CY	Share of Surplus Water	Appropriative Rights	Production	Additions to Storage Account						Ending Account Balance
					Under / Over Production ⁽¹⁾	Unused Overlying Production Allocation	Transfers Among Appropriators	SWP Water Recharge	Local Recharge	Total Additions to Storage Account	
South Mesa Water Company - Authorized Storage Account: 20,000 ac-ft											
2003	0.0	998.0	0.0	223.2	774.8	0.0	0.0	0.0	0.0	774.8	774.8
2004	774.8	1,996.0	0.0	482.5	1,513.5	0.0	0.0	0.0	0.0	1,513.5	2,288.3
2005	2,288.3	1,996.0	0.0	663.2	1,332.8	0.0	0.0	0.0	0.0	1,332.8	3,621.1
2006	3,621.1	1,996.0	0.0	616.0	1,380.0	0.0	0.0	0.0	0.0	1,380.0	5,001.1
2007	5,001.1	1,996.0	0.0	665.8	1,330.2	0.0	-3,000.0	0.0	0.0	-1,669.8	3,331.3
2008	3,331.3	1,996.0	0.0	470.9	1,525.2	235.2	-2,500.0	0.0	0.0	-739.7	2,591.6
2009	2,591.6	1,996.0	0.0	382.2	1,613.8	633.2	-2,000.0	0.0	0.0	247.0	2,838.6
2010	2,838.6	1,996.0	0.0	405.0	1,591.0	668.6	0.0	0.0	0.0	2,259.6	5,098.2
2011	5,098.2	1,996.0	0.0	419.9	1,576.1	630.6	-3,500.0	0.0	0.0	-1,293.3	3,805.0
2012	3,805.0	1,996.0	0.0	448.5	1,547.5	666.9	0.0	0.0	0.0	2,214.4	6,019.3
2013	6,019.3	998.0	0.0	308.4	689.7	721.1	0.0	0.0	0.0	1,410.8	7,430.1
2014	7,430.1	0.0	0.0	473.7	-473.7	725.3	0.0	0.0	0.0	251.6	7,681.7
2015	7,681.7	0.0	0.0	317.2	-317.2	832.9	0.0	0.0	0.0	516.7	8,198.4
2016	8,198.4	0.0	0.0	352.6	-352.6	833.5	0.0	0.0	0.0	482.9	8,681.3
2017	8,681.3	0.0	0.0	368.1	-368.1	819.3	0.0	0.0	0.0	451.2	9,132.5
2018	9,132.5	0.0	0.0	364.9	-364.9	794.4	0.0	0.0	0.0	429.5	9,562.0

Table 3-8

[illegible]

Table 3-8
Consolidation of Appropriator Production and Storage Accounts
Calendar Year Accounting (ac-ft) 2003 through 2018

Calendar Year	Storage Account Balance at Beginning of CY	Share of Surplus Water	Appropriative Rights	Production	Additions to Storage Account						Ending Account Balance
					Under / Over Production ⁽¹⁾	Unused Overlying Production Allocation	Transfers Among Appropriators	SWP Water Recharge	Local Recharge	Total Additions to Storage Account	
Yucaipa Valley Water District - Authorized Storage Account: 50,000 ac-ft											
2003	0.0	1,086.5	0.0	1,162.4	-75.9	0.0	0.0	0.0	0.0	-75.9	-75.9
2004	-75.9	2,173.0	0.0	1,833.7	339.3	0.0	0.0	0.0	0.0	339.3	263.4
2005	263.4	2,173.0	0.0	1,281.3	891.7	0.0	0.0	0.0	0.0	891.7	1,155.1
2006	1,155.1	2,173.0	0.0	2,027.3	145.7	0.0	0.0	0.0	0.0	145.7	1,300.8
2007	1,300.8	2,173.0	0.0	1,682.9	490.1	0.0	0.0	0.0	0.0	490.1	1,790.9
2008	1,790.9	2,173.0	0.0	572.0	1,601.0	255.9	0.0	0.0	0.0	1,856.8	3,647.8
2009	3,647.8	2,173.0	0.0	504.4	1,668.6	689.0	0.0	0.0	0.0	2,357.6	6,005.4
2010	6,005.4	2,173.0	0.0	672.4	1,500.6	727.5	0.0	0.0	0.0	2,228.1	8,233.5
2011	8,233.5	2,173.0	0.0	534.1	1,638.9	686.2	0.0	0.0	0.0	2,325.1	10,558.6
2012	10,558.6	2,173.0	0.0	700.1	1,472.9	725.6	0.0	0.0	0.0	2,198.5	12,757.1
2013	12,757.1	1,086.5	0.0	1,030.8	55.7	784.7	0.0	0.0	0.0	840.4	13,597.6
2014	13,597.6	0.0	0.0	1,198.5	-1,198.5	789.2	0.0	0.0	0.0	-409.2	13,188.4
2015	13,188.4	0.0	0.0	119.2	-119.2	906.3	0.0	0.0	0.0	788.1	13,976.4
2016	13,976.4	0.0	0.0	4.6	-4.6	907.0	0.0	0.0	0.0	904.4	14,880.8
2017	14,880.8	0.0	0.0	0.1	-0.1	891.5	0.0	0.0	0.0	894.3	15,775.2
2018	15,775.2	0.0	180.4	191.2	-10.8	864.4	0.0	0.0	0.0	857.6	16,632.8

Table 3-8
Consolidation of Appropriator Production and Storage Accounts
Calendar Year Accounting (ac-ft) 2003 through 2018

Calendar Year	Storage Account Balance at Beginning of CY	Share of Surplus Water	Appropriative Rights	Production	Additions to Storage Account						Ending Account Balance
					Under / Over Production ⁽¹⁾	Unused Overlying Production Allocation	Transfers Among Appropriators	SWP Water Recharge	Local Recharge	Total Additions to Storage Account	
Totals											
2003	0.0	8,000.0	0.0	7,071.7	928.3	0.0	0.0	0.0	0.0	928.3	928.3
2004	928.3	16,000.0	0.0	12,587.4	3,412.6	0.0	0.0	0.0	0.0	3,412.6	4,340.9
2005	4,340.9	16,000.0	0.0	10,778.6	5,221.4	0.0	0.0	0.0	0.0	5,221.4	9,562.3
2006	9,562.3	16,000.0	0.0	13,524.9	2,475.1	0.0	0.0	3,501.0	0.0	5,976.1	15,538.3
2007	15,538.3	16,000.0	0.0	16,504.6	-504.6	0.0	0.0	4,501.0	0.0	3,996.4	19,534.8
2008	19,534.8	16,000.0	0.0	14,687.0	1,313.0	1,884.2	0.0	3,933.0	0.0	7,130.2	26,665.0
2009	26,665.0	16,000.0	0.0	13,115.6	2,884.4	5,073.7	0.0	5,482.4	0.0	13,440.6	40,105.6
2010	40,105.6	16,000.0	0.0	11,642.3	4,357.7	5,357.4	0.0	7,065.0	0.0	16,780.0	56,885.6
2011	56,885.6	16,000.0	0.0	11,727.1	4,272.9	5,053.3	0.0	8,779.0	0.0	18,105.2	74,990.9
2012	74,990.9	16,000.0	0.0	12,348.9	3,651.1	5,343.5	0.0	8,983.0	0.0	17,977.6	92,968.5
2013	92,968.5	8,000.0	0.0	14,537.2	-6,537.2	5,778.4	0.0	8,603.0	0.0	7,844.2	100,812.7
2014	100,812.7	0.0	0.0	15,062.8	-15,062.8	5,811.8	0.0	5,013.0	0.0	-4,237.9	96,574.8
2015	96,574.8	0.0	0.0	11,087.4	-11,087.4	6,673.5	0.0	3,467.0	0.0	-944.9	95,629.9
2016	95,629.9	0.0	0.0	11,989.7	-11,989.7	6,678.6	0.0	10,796.0	0.0	5,488.9	101,118.8
2017	101,118.8	0.0	0.0	13,462.4	-13,462.4	6,564.6	0.0	14,940.0	0.0	8,045.2	109,164.0
2018	109,164.0	0.0	180.4	15,026.1	-14,845.7	6,365.2	0.0	12,621.0	0.0	4,144.5	113,308.5

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 2014-2018 reporting period. TDS and nitrate concentrations in the basin are compared against groundwater quality objectives for anti-degradation and maximum benefit as established by the Regional Board for TDS and Nitrate (as N) in the Beaumont Management Zone (BMZ). In addition, water quality concentrations for a number of compounds are compared against Federal and State Drinking Water Standards. Figure 4-1 depicts all the wells that have groundwater quality data for the reporting period.

Sources and Availability of Water Quality Information

There are two main sources of data used in the assessment of water quality conditions in the Beaumont Basin and near surroundings; namely, the California Department of Public Health database and the Beaumont Management Zone Maximum Benefit Monitoring Program. The database obtained from the CDPH, which focuses on drinking water sources, contains water quality information for the 2014-2018 reporting period. Water quality from the BMZ Maximum

Benefit Monitoring Program is not available at the time of this writing for the Draft report; however, it will soon be available and will be incorporated in the Final report to be presented at the end of March to the Watermaster Executive Committee.

Water Quality from the BMZ Maximum Benefit Program is not available and will be incorporated in the FINAL Report

As a result, the Comparison with Management Zone Objectives described below is for the 2013-17 period and not for the 2014-18 reporting period. This comparison will be updated for the Final Report

4.1 Comparison with Management Zone Objectives

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

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

4.1.1 Total Dissolved Solids

Figure 4-2 shows the maximum TDS concentrations for 55 wells measured within and in the vicinity of the Beaumont Basin wells during the 2013-2018 reporting period. A total of 30 wells are located inside the basin with the remaining 25 in the Singleton Basin / Edgar Canyon and the South Beaumont Basin areas.

The maximum TDS concentrations for domestic wells within the basin ranged from 190 to 370 mg/L and averaged 245 mg/L; this average value is 25 mg/L lower than the average maximum TDS concentration reported in the 2008-11 Engineering Report indicating that TDS concentrations have been fairly stable in the last 10 years.

*This section to be Updated in the
FINAL Report*

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

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

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

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

Of the 26 potable wells, 11 wells had a maximum concentration below the anti-degradation objective of 230 mg/L, 14 wells were between the anti-degradation and maximum benefit objective of 330 mg/L, and one exceeded the maximum benefit objective for the BMZ at 370 mg/L. None of the production wells samples exceeded the secondary federal or state drinking

water standard for TDS (500 mg/L). BCVWD wells along Edgar Canyon were not included in the analysis of domestic wells.

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

In the South Beaumont Basin, none of the wells had a maximum TDS concentration below the anti-degradation objective, two wells were between this and the maximum objective, and the remaining seven wells exceeded the maximum objective. Most of the wells with the highest TDS concentrations are located in the South Beaumont Basin. Table 4-1 presents the average and maximum TDS and Nitrate (as N) concentration for all the wells in the Beaumont Basin and surrounding areas.

4.1.2 Nitrate-Nitrogen

Figure 4-3 shows the maximum Nitrate-N concentrations for 53 wells measured within and in the vicinity of the Beaumont Basin wells during the 2014-2018 reporting period. A total of 30 wells are located inside the basin with the remaining 23 in the Singleton Basin / Edgar Canyon and the South Beaumont Basin areas.

*This section to be Updated in the
FINAL Report*

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

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

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

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

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

Of the 26 potable wells, only two wells had a maximum concentration below the anti-degradation objective of 1.5 mg/L, 18 wells were between this objective and maximum benefit objective of 5.0 mg/L; six wells exceeded the maximum benefit objective for the BMZ. None of the production wells samples exceeded the primary federal or state drinking water standard for Nitrate-N (10 mg/L).

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

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

4.1.3 Nitrate Studies in the Beaumont Management Zone

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

The results of this study were disputed by the Beaumont Board of Supervisors' Groundwater Quality Evaluation Committee (Committee) as they identified potential shortcomings in sampling design and project execution. The Committee recommended that an independent assessment be conducted. They recommended that the second study should expand the study area, consider reasonable build-out projections and other sources of groundwater

contamination. This independent study was conducted by scientist at the University of California, Riverside and funded as a Supplemental Environmental Project by the State Water Resources Control Board. The results of this study were published in early 2012. A brief summary and their findings is presented below for information purposes only.

Summary of Wildermuth Environmental Inc. Study

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

- A review of scientific literature,
- A field study to estimate nitrogen concentrations in soil water below selected OSWDS,
- A tracer study of nitrogen isotope and pharmaceutical and personal care products (PPCP) to confirm the presence of effluent from OSWDS,
- An estimation of current and future discharge from OSWDS to groundwater,
- A planning-level evaluation of basin impacts using the groundwater flow and nitrate transport model, and
- A review of the threshold used in California to compel sewerage 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 Geronio 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 2014-2018 reporting period for 20 domestic production wells in the Beaumont Basin. The objective of this analysis was to determine whether any of these potable wells exceeded the Primary or Secondary Federal and State standards or the notification levels set by the state. Federal standards are set by the United States Environmental Protection Agency (USEPA) while state standards in California are set by CDPH. Primary standards at the federal and state level are enforceable criteria that have been established to protect the public against consumption of drinking water contaminants that present a risk to human health. Secondary standards are not enforceable standards; they have been established for aesthetic qualities of water, such as taste, color, and others. Contaminants with a secondary MCL are not considered to present a risk to human health at the established maximum level. Notification levels (NL) are not enforceable standards; however, they require that municipal water suppliers notify the public if the NL for a chemical has been exceeded.

A total of 3,774 water quality results were extracted from the CDPH database for all production wells in the Beaumont Basin. Results were obtained for 31 minerals and inorganic chemicals and over 140 organic compounds sampled between 2014 and 2018. The results of the analysis indicate that not a single well exceeded the primary Federal or State MCL for any of the analytes tested; however, one well (BCVWD No. 3 – August 2016) exceeded the secondary MCL for Iron during the reporting period. In addition, the California Notification Limit for Vanadium (100 ug/day) was exceeded once at SMWC Well No. 4 during the reporting period.

Appendix F contains summary statistics of the analytical results for the 2014-2018 period for all chemicals that have a federal or state drinking water standard as reported in the CDPH website. The Final report will also include water quality information from the Maximum Benefit Monitoring Program database.

4.2.1 Nitrate and Total Dissolved Solids (TDS)

A total of 221 samples were collected and analyzed for Nitrate; 34 of these samples were also analyzed for TDS. The current primary MCL for Nitrate is 45 ppm (mg/L) as NO₃; the secondary MCL for TDS is 500 mg/L. The table below presents a summary of Nitrate and TDS concentration, including the number of samples taken, average and maximum concentrations recorded, for all 20 domestic wells in the Beaumont Basin. This table indicates that none of the domestic wells in the Beaumont Basin are near the MCL or the notification level of 80 percent MCL, 36 mg/L for Nitrate and 400 mg/L for TDS. Highest concentrations during the reporting period were recorded at BCVWD Well No. 16 with 33.0 mg/L of Nitrates and 330 mg/L of dissolved salts.

Table 4-1
Nitrate (NO₃) and TDS Summary for Domestic Wells (2014-18)

Agency/ Well No.	Nitrate as NO ₃			Total Dissolved Solids (TDS)		
	Count	Avg	Max	Count	Ave	Max
City of Banning						
Well C-2A	6	9.0	11.0	1	240	240
Well C-3	7	7.0	9.0	2	180	190
Well C-4	7	4.0	5.0	2	185	190
Well M-3	7	9.0	10.0	2	290	300
Beaumont Cherry Valley Water District						
Well 03	2	4.8	7.7	1	240	240
Well 16	42	27.0	33.0	1	330	330
Well 21	41	15.0	16.2	2	280	290
Well 22	3	7.0	14.0	1	260	260
Well 23	14	11.0	15.0	3	230	260
Well 24	5	7.0	8.1	1	210	210
Well 25	3	6.0	7.2	1	230	230
Well 26	1	4.0	4.0	1	180	180
Well 29	3	10.0	10.0	2	215	220
Yucaipa Valley Water District						
Well 48	6	9.0	10.0	5	180	220
South Mesa Water Company						
Well 4	11	16.0	22.1	1	190	190
Overlying Users						
Sharondale 1	21	21.0	27.0	2	290	320
Sharondale 2	11	21.0	24.0	2	290	320
Plantation 1	6	7.0	9.0	2	260	270
RCMHP 1	7	20.0	28.0	1	260	260
RCMHP 2	18	25.0	30.0	1	270	270

4.2.2 Trace Metals

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

Aluminum. There were 31 water samples taken during the reporting period and tested for aluminum. Aluminum concentration at all wells, except the city of Banning M-3 Well, was below 50 ug/L, significantly below the secondary MCL of 200 ug/L. Banning M-3 had a maximum concentration of 57 ug/L. Aluminum above the MCL can add color to water. One well exceeded the MCL during the FY 2004-08 reporting period.

Arsenic. The current MCL for Arsenic has been set to 10 ug/L. There were 33 water samples collected and tested for arsenic during the reporting period with most wells reporting under 2.0 ug/L. The highest arsenic concentration was observed at SMWC's Well No. 4; arsenic concentration at this well has increased from 4.2 ug/L in 2009, to 4.6 ug/L in 2012, to the highest value of 5.2 ug/L in April 2013. Latest value, recorded in April 2016, arsenic concentration was down to 4.4 ug/L.

Iron. A total of 31 water samples were taken during the reporting period and tested for iron. In most cases iron concentration was below 100 ug/L., which is significantly below the current secondary MCL of 300 ug/L. However, there is one well that exceeded the MCL during the 2014-18 period; BCVWD Well No. 3 at 450 ug/L. Iron at a concentration above the MCL can impact color, odor, and taste in water. Five wells exceeded the MCL during the FY 2004-08 reporting period.

Lead. There were 31 water samples collected and tested for lead during the reporting period. Lead concentrations were all below 0.005 mg/L (5 ppb), which is well below the current primary MCL of 0.015 mg/L (15 ppb). Slightly higher concentrations were reported before 2014 at BCVWD Well No. 25 (0.0065 mg/L) and at Rancho Calimesa Mobile Home Park Well No. 1 (0.0058 mg/L). One well exceeded the MCL during the FY 2004-08 reporting period.

Manganese. There were 31 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 secondary MCL during the FY 2004-08 reporting period.

Total Chromium. A total of 31 water samples were taken during the reporting period and tested for total chromium. The highest reported concentrations of total chromium were observed in December 2018 at BCVWD Well 26 at 16 ug/L and in March 2017 at Banning C-3 at 15 ug/L. Both of these values are significantly below the current state primary MCL of 50 ug/L. One well exceeded the state primary MCL during the FY 2004-08 reporting period.

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

Copper. There were 31 water samples collected and tested for copper during the reporting period. None of the wells tested during the reporting period exceeded the detection limit of 50

ug/L. This concentration is significantly below the state primary MCL of 1,300 ug/L. This is consistent with previous reporting periods.

Zinc. There were 31 water samples collected and tested for zinc during the reporting period. Zinc concentration in all wells was below 50 ug/L (ppb), which is significantly lower than the current secondary MCL of 50 mg/l (ppm).

4.2.3 Organic Compounds

There were over 2,200 lab results for 143 organic compounds during the reporting period. Concentrations of these compounds in most cases were below the detection limit for purpose of reporting or just above it. Organics of special concern include the following:

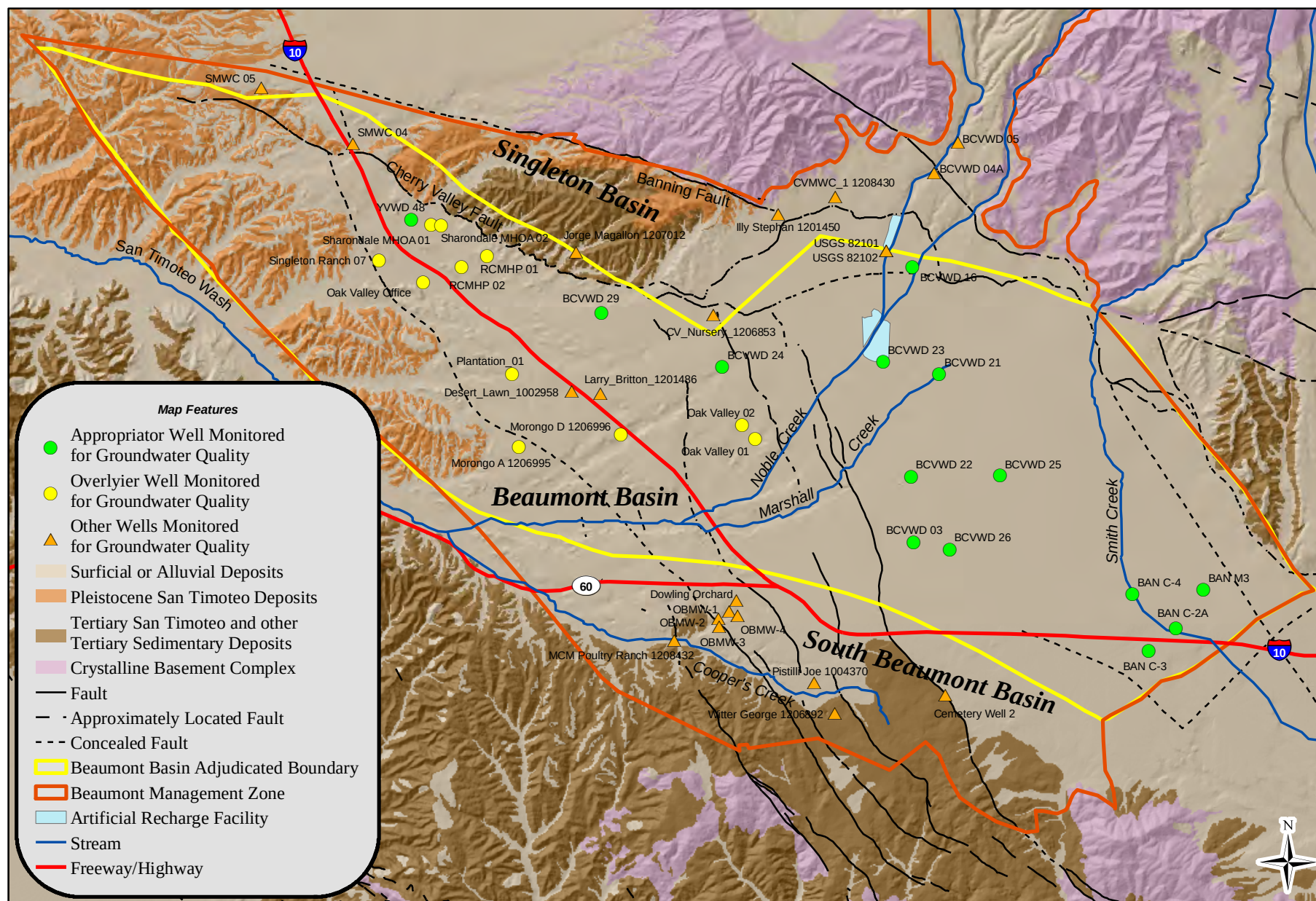
- ✓ TCE – Trichloroethylene (TCE) – 25 samples collected all reported below detection limit of 0.5 ug/L. Current MCL is 5 ug/L.
- ✓ Tetrachloroethylene (PCE) - 25 samples collected all reported below detection limit of 0.5 ug/L. Current MCL is 5 ug/L.
- ✓ Dibromo-chloropropane (DBCP) - 18 samples collected with most below the detection limit of 0.01 ug/L; just two samples above this limit at BCVWD Well No. 23 at 0.044 ug/L (Dec 2018) and at 0.028 ug/L (Dec 2015). These concentrations are significantly below the current MCL of 0.2 ug/L.

4.2.4 pH

There are two secondary standards for pH, a lower limit of 6.5 and an upper limit of 8.5. There were two wells exceeding the upper MCL for pH during the reporting period, SMWC Well No. 4 at 8.8 (April 2016) and YVWD Well 48 at 8.7 (Jul 17). In addition, there are several wells with pH in the 8.0 to 8.4 range including Sharondale Mesa HOA Well No. 1 at 8.4, BCVWD Wells No. 23, 25, and 26 and Sharondale Mesa HOA Well No. 2 at 8.3, BCVWD Wells No. 21 and 29 and the City of Banning Well M-3 at 8.2. The lowest pH was reported from BCVWD Well No. 22 at 7.4. Four wells in the basin exceeded the upper limit for pH during the FY 2004-08 reporting period.

4.2.5 Turbidity

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



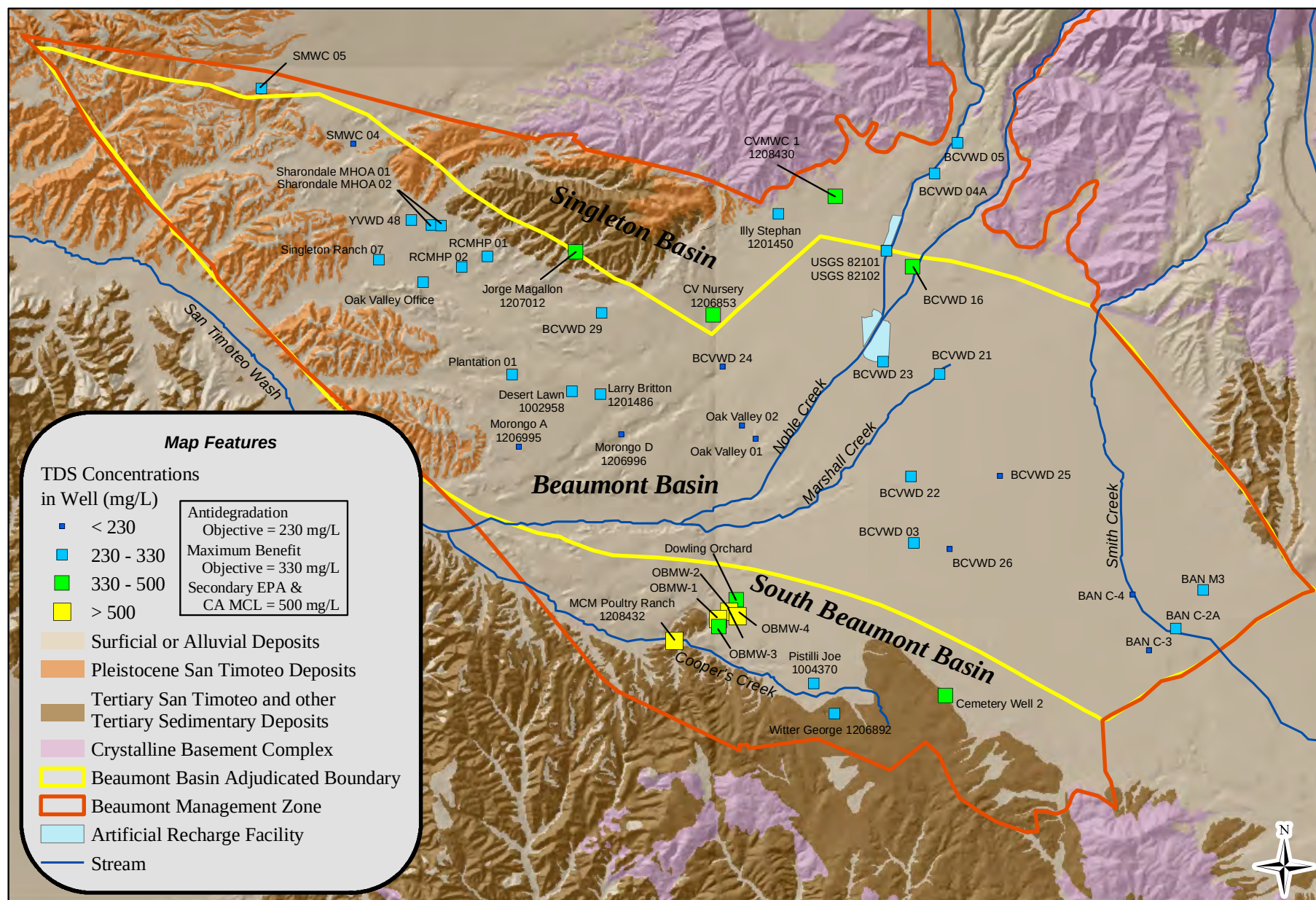
Alda, Inc. in association with

Thomas Harder & Co.
Groundwater Consulting

0 0.5 1 2 Miles
NAD 83 UTM Zone 11

**Wells with Groundwater Quality Data
in the Beaumont Basin**

Figure 4-1



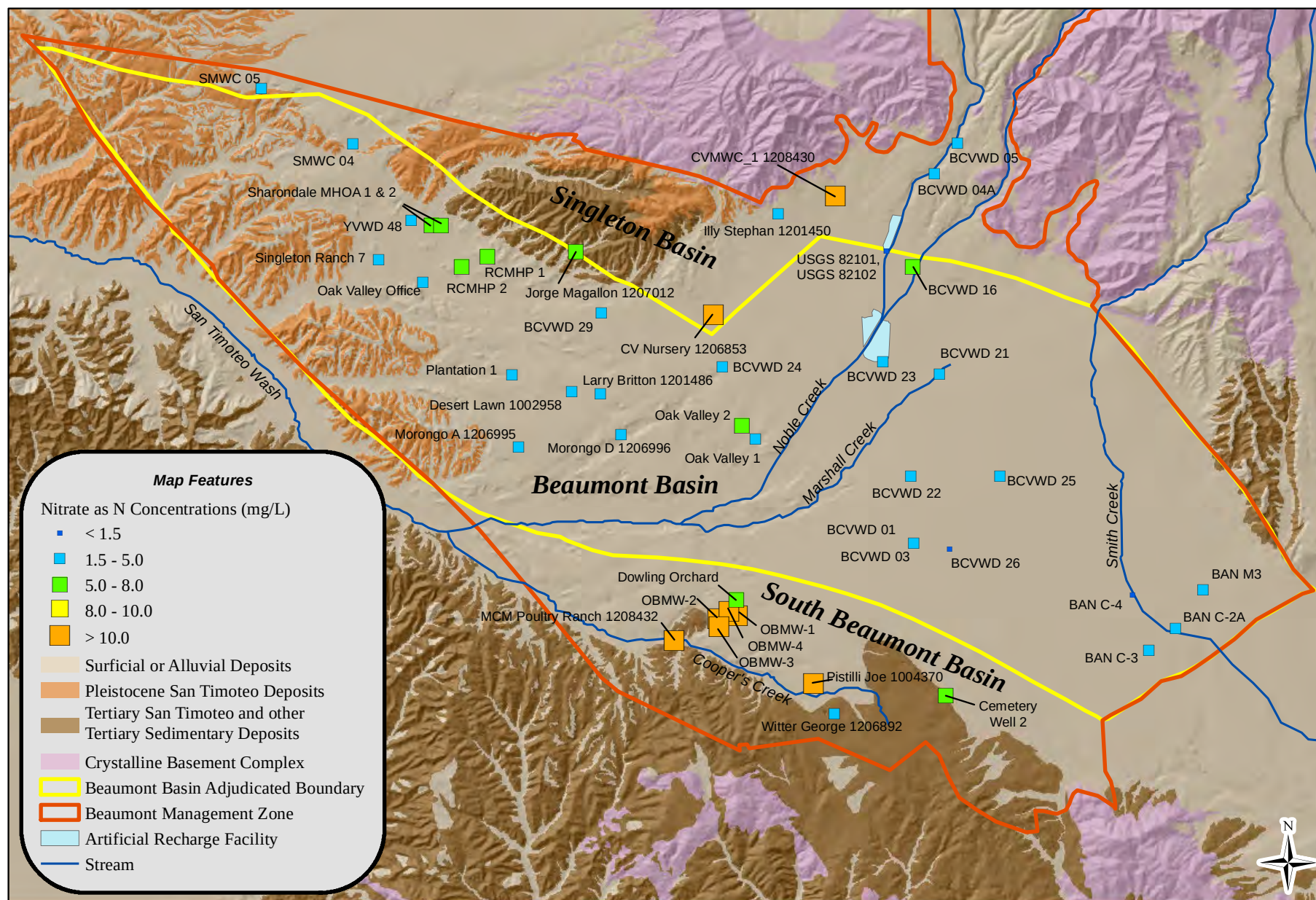
Alda, Inc. in association with

Thomas Harder & Co.
Groundwater Consulting

0 0.5 1 2 Miles
NAD 83 UTM Zone 11

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

Figure 4-2



Alda, Inc. in association with

Thomas Harder & Co.
Groundwater Consulting

0 0.5 1 2 Miles
NAD 83 UTM Zone 11

**Nitrate in Groundwater
(Maximum Concentrations 2012 to 2017)**

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

Board Resolutions 18-01

RESOLUTION 2018-01
A RESOLUTION OF THE BEAUMONT BASIN WATERMASTER TO CONFIRM AND
ADOPT SAN GORGONIO PASS WATER AGENCY'S ("SGPWA") APPLICATION
FOR GROUNDWATER STORAGE AGREEMENT, SUBJECT TO STATED
CONDITIONS

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

WHEREAS, pursuant to its authority, the Beaumont Basin Watermaster established principles of groundwater storage in the Beaumont Basin via Resolution No. 2005-01, the foundation for SGPWA's Application for Groundwater Storage Agreement;

WHEREAS, SGPWA is a state water contractor formed in 1961 for the primary purpose of importing water from the State Water Project into the San Gorgonio Pass. SGPWA's service area includes the Beaumont Basin;

WHEREAS, SGPWA submitted to the Beaumont Basin Watermaster a Groundwater Storage Application, a copy of which is attached as Exhibit "A," hereto, seeking approval to, subject to all applicable law: i) store up to 10,000 acre-feet of water in the Beaumont Basin; ii) add water to the SGPWA's Storage Account when the quantity of imported water available to the Region exceeds the annual orders for imported water submitted to SGPWA; and, iii) make water stored in the Beaumont Basin by the SGPWA available to the members of the Beaumont Basin Watermaster.

WHEREAS, the Beaumont Basin Watermaster issued copies of SGPWA's Groundwater Storage Application to members of its Watermaster Committee for review in advance of the February 7, 2018, Beaumont Basin Watermaster meeting; and,

WHEREAS, the Beaumont Basin Watermaster met on February 7, 2018 to take this matter up, finding that the foregoing is true and accurate, and;

NOW, THEREFORE, BE IT RESOLVED BY THE BEAUMONT BASIN WATERMASTER that it does hereby rescind approval of Watermaster Resolution No. 2017-01, accept SGPWA's Groundwater Storage Application and does hereby grant SGPWA a water storage account pursuant to SGPWA's Groundwater Storage Application, subject to the conditions set forth in this Resolution, and subject to the Judgment establishing the Beaumont Basin Watermaster (Riverside Superior Court Case No. 389197), its rules and regulations for the Beaumont Basin – to include– coordination with the San Gorgonio Pass Water Agency and Other Agencies--a classification applying to SGPWA.

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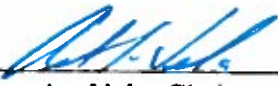
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PASSED AND ADOPTED this 7th day of February, 2018.

BEAUMONT BASIN WATERMASTER

By: 
Art Vela, Chairman of the
Beaumont Basin Watermaster

Appendix B

Active and Interested Party List

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Appendix C

Fiscal Year 2017-18 Audit Letter

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

June 30, 2018



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



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of the Beaumont Basin Watermaster
Yucaipa, California

We have performed the procedures enumerated below, which were agreed to by the Yucaipa Valley Water District (District), as treasurer of the Beaumont Basin Watermaster (Watermaster), solely to assist the District in evaluating certain amounts reported in the Watermaster Schedules (Schedules), attached as Exhibit A and Exhibit B, on the full accrual basis of accounting as of June 30, 2018 and for the year then ended and its compliance with the Rules and Regulations regarding assessments and expenses. The District's and Watermaster's management are responsible for the accuracy of the Schedules. The sufficiency of these procedures is solely the responsibility of those parties specified in this report. Consequently, we make no representation regarding the sufficiency of the procedures enumerated below either for the purpose for which this report has been requested or for any other purpose.

Our procedures and findings are as follows:

1. Procedure

Agree the opening equity on Exhibit B to the ending equity noted on the trial balance for the fiscal year ended June 30, 2017.

Finding

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

2. Procedure

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

Finding

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



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3. Procedure

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

Finding

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

4. Procedure

Compare the ending check number for the fiscal year ended June 30, 2017 to the beginning check number for the period beginning on July 1, 2017. Note any breaks in check sequence for the period of July 1, 2017 through June 30, 2018.

Finding

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

5. Procedure

Based on the population of checks issued during July 1, 2017 through June 30, 2018, select all payments and trace the check to supporting invoice noting whether the activity pertains to the Watermaster. Agree the dollar amount and vendor on the invoice to the check for accuracy.

Finding

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

6. Procedure

Obtain the general ledger detail for the period of July 1, 2017 to June 30, 2018. Select all journal entries and trace the transaction to an approved journal entry and documentation supporting the nature and rationale of the journal entry.

Finding

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

This agreed-upon procedures engagement was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. We were not engaged to and did not conduct an examination or review, the objective of which would be the expression of an opinion or conclusion, respectively, on the schedules of assets, liabilities and net position (Exhibit A) and revenues and expenses (Exhibit B). Accordingly, we do not express such an opinion or conclusion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you.

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

Rogers, Anderson, Malody & Scott, LLP.

August 29, 2018
San Bernardino, California

Beaumont Basin Watermaster
Schedule of Assets, Liabilities and Net Position
(Unaudited)
June 30, 2018

Assets

Cash and cash equivalents

\$ 136,442**Liabilities**

Accounts payable

1,259**Net position**

Unrestricted

\$ 135,183

**Beaumont Basin Watermaster
Schedule of Revenues and Expenses
(Unaudited)
For the Year Ended June 30, 2018**

Revenues

Assessments	\$ 190,862
Interest	<u>101</u>
Total revenues	<u>190,963</u>

Expenses

Special projects	
Acquisition/computation and annual report	174,653
Engineering	3,083
Monitoring and data acquisition	28,957
Administrative	
Legal and professional	38,323
Bank charges	<u>24</u>
Total expenses	<u>245,040</u>

Change in net position	(54,077)
Unrestricted net position, beginning of year	<u>189,260</u>
Unrestricted net position, end of year	<u><u>\$ 135,183</u></u>

Appendix D

Production Estimation Methods for Unmetered Overlying Producers

University of California Riverside - CIMIS Station 44
Monthly Evapotranspiration Values - 2002 through 2018

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2003	3.05	2.57	4.61	5.00	5.65	5.16	7.05	7.46	5.54	4.08	2.23	2.07	54.47
2004	2.49	2.76	4.81	5.90	7.10	6.50	7.55	6.81	5.83	3.39	2.44	2.30	57.88
2005	2.02	2.21	3.93	5.41	6.47	6.49	7.28	6.68	5.32	3.65	2.84	2.15	54.45
2006	2.92	3.35	3.42	4.26	6.02	7.16	7.73	7.20	5.70	3.95	3.14	2.94	57.79
2007	3.28	2.91	5.02	5.04	6.47	7.16	7.57	7.09	5.44	4.34	2.81	2.24	59.37
2008	1.69	2.31	5.30	6.04	6.28	7.59	7.53	7.23	5.79	5.02	3.14	1.89	59.81
2009	3.32	2.41	4.62	5.58	6.32	5.37	7.60	6.68	5.89	4.40	3.18	2.08	57.45
2010	2.35	2.44	4.67	5.11	6.18	6.25	6.57	6.99	5.45	2.10	3.22	1.78	53.11
2011	2.91	2.91	4.22	5.57	6.67	6.95	7.76	7.65	5.47	4.03	2.45	2.82	59.41
2012	3.02	3.41	4.51	5.85	7.00	7.62	7.93	7.83	6.44	4.38	2.72	1.70	62.41
2013	2.72	3.18	4.80	5.71	7.01	7.36	7.13	7.37	6.14	4.27	2.76	2.80	61.25
2014	3.27	3.03	4.95	6.52	7.65	7.62	7.76	7.29	6.19	4.40	3.21	2.01	63.90
2015	2.76	3.33	5.83	6.30	5.38	7.42	6.76	7.67	5.83	3.81	2.77	1.84	59.70
2016	2.09	4.28	4.91	6.00	5.34	6.95	7.26	6.67	4.84	3.67	3.10	1.83	56.94
2017	2.41	2.08	5.01	6.13	5.95	6.98	7.11	6.40	4.92	4.54	2.35	3.09	56.97
2018	2.41	3.17	3.81	5.69	5.57	7.61	8.04	7.35	5.86	4.30	3.13	2.24	59.18

Crop Coefficient (Warm Season Bermuda Grass)

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

Monthly Water Requirements (inches)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2004	1.74	1.93	3.37	4.13	4.97	4.55	5.29	4.77	4.08	2.37	1.71	1.61	40.52
2005	1.41	1.55	2.75	3.79	4.53	4.54	5.10	4.68	3.72	2.56	1.99	1.51	38.12
2006	2.04	2.35	2.39	2.98	4.21	5.01	5.41	5.04	3.99	2.77	2.20	2.06	40.45
2007	2.30	2.04	3.51	3.53	4.53	5.01	5.30	4.96	3.81	3.04	1.97	1.57	41.56
2008	1.18	1.62	3.71	4.23	4.40	5.31	5.27	5.06	4.05	3.51	2.20	1.32	41.87
2009	2.32	1.69	3.23	3.91	4.42	3.76	5.32	4.68	4.12	3.08	2.23	1.46	40.22
2010	1.65	1.71	3.27	3.58	4.33	4.38	4.60	4.89	3.82	1.47	2.25	1.25	37.18
2011	2.04	2.04	2.95	3.90	4.67	4.87	5.43	5.36	3.83	2.82	1.72	1.97	41.59
2012	2.11	2.39	3.16	4.10	4.90	5.33	5.55	5.48	4.51	3.07	1.90	1.19	43.69
2013	1.90	2.23	3.36	4.00	4.91	5.15	4.99	5.16	4.30	2.99	1.93	1.96	42.88
2014	2.29	2.12	3.47	4.56	5.36	5.33	5.43	5.10	4.33	3.08	2.25	1.41	44.73
2015	1.93	2.33	4.08	4.41	3.77	5.19	4.73	5.37	4.08	2.67	1.94	1.29	41.79
2016	1.46	3.00	3.44	4.20	3.74	4.87	5.08	4.67	3.39	2.57	2.17	1.28	39.86
2017	1.69	1.46	3.51	4.29	4.17	4.89	4.98	4.48	3.44	3.18	1.65	2.16	39.88
2018	1.69	2.22	2.67	3.98	3.90	5.33	5.63	5.15	4.10	3.01	2.19	1.57	41.43

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

Estimated Pumping - All Unmetered Accounts

Year	Total Use (ac-ft/yr)
2004	466.11
2005	443.64
2006	81.28
2007	12.23
2008	13.78
2009	13.47
2010	11.85
2011	12.67
2012	13.07
2013	12.98
2014	13.17
2015	12.87
2016	12.67
2017	12.67
2018	12.67

Estimated Pumping by Merlin Properties

Year	Parcel Size (acres)	0	Indoor Water Use (ac-ft/yr)	Irrigated Acres	Irrigation Requirement (ac-ft/yr)	Outdoor Water Use (ac-ft/yr)	Total Use (ac-ft/yr)
2004	48	3	1.05	0.11	0.37	0.53	1.58
2005	48	3	1.05	0.11	0.35	0.50	1.55
2006	48	3	1.05	0.11	0.37	0.53	1.58
2007	48	3	1.05	0.11	0.38	0.54	1.59
2008	48	3	1.05	0.11	0.38	0.55	1.60
2009	48	3	1.05	0.11	0.37	0.53	1.58
2010	48	3	1.05	0.11	0.34	0.49	1.54
2011	48	3	1.05	0.11	0.38	0.54	1.59
2012	48	3	1.05	0.11	0.40	0.57	1.62
2013	48	3	1.05	0.11	0.39	0.56	1.61
2014	48	3	1.05	0.11	0.41	0.59	1.64
2015	48	3	1.05	0.11	0.38	0.55	1.60
2016	48	3	1.05	0.11	0.37	0.52	1.57
2017	48	3	1.05	0.11	0.37	0.52	1.57
2017	48	3	1.05	0.11	0.37	0.52	1.57

Estimated Pumping by Roman Catholic Bishop of San Bernardino

Year	Parcel Size (acres)	No. DU	Indoor Water Use (ac-ft/yr)	Irrigated Acres	Irrigation Requirement (ac-ft/yr)	Outdoor Water Use (ac-ft/yr)	Total Use (ac-ft/yr)
2004	34	2	0.70	12.10	40.85	58.36	59.06
2005	34	2	0.70	12.10	38.43	54.90	55.60
2006	34	2	0.70	12.10	40.79	58.27	58.97
2007	34	2	0.70	0.00	0.00	0.00	0.70
2008	34	2	0.70	0.00	0.00	0.00	0.70
2009	34	2	0.70	0.00	0.00	0.00	0.70
2010	34	0	0.00	0.00	0.00	0.00	0.00
2011	34	0	0.00	0.00	0.00	0.00	0.00
2012	34	0	0.00	0.00	0.00	0.00	0.00
2013	34	0	0.00	0.00	0.00	0.00	0.00
2014	34	0	0.00	0.00	0.00	0.00	0.00
2015	34	0	0.00	0.00	0.00	0.00	0.00
2016	34	0	0.00	0.00	0.00	0.00	0.00
2017	34	0	0.00	0.00	0.00	0.00	0.00
2017	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
2016	91	2	0.70	0.00	0.00	0.00	0.70
2017	91	2	0.70	0.00	0.00	0.00	0.70
2018	91	2	0.70	0.00	0.00	0.00	0.70

Estimated Pumping by Sunny Cal

Year	Parcel Size (acres)	No. DU	Indoor Water Use (ac-ft/yr)	Number of Chickens	Chicken Water Use (ac-ft/yr)	Irrigated Acres	Irrigation Requirement (ac-ft/yr)	Outdoor Water Use (ac-ft/yr)	Total Use (ac-ft/yr)
2004	200	10	3.50	1,200,000	80.65	66.40	224.19	320.27	404.42
2005	200	10	3.50	1,200,000	80.65	66.40	210.90	301.29	385.44
2006	185	2	0.70	0.00	0.00	0.40	1.35	1.93	2.63
2007	185	2	0.70	0.00	0.00	0.40	1.39	1.98	2.68
2008	185	2	0.70	0.00	0.00	0.70	2.44	3.49	4.19
2009	185	2	0.70	0.00	0.00	0.70	2.35	3.35	4.05
2010	185	2	0.70	0.00	0.00	0.70	2.17	3.10	3.80
2011	185	2	0.70	0.00	0.00	0.70	2.43	3.47	4.17
2012	185	2	0.70	0.00	0.00	0.70	2.55	3.64	4.34
2013	185	2	0.70	0.00	0.00	0.70	2.55	3.64	4.34
2014	185	2	0.70	0.00	0.00	0.70	2.55	3.64	4.34
2015	185	2	0.70	0.00	0.00	0.70	2.55	3.64	4.34
2015	185	2	0.70	0.00	0.00	0.70	2.55	3.64	4.34
2016	185	2	0.70	0.00	0.00	0.70	2.55	3.64	4.34
2017	185	2	0.70	0.00	0.00	0.70	2.55	3.64	4.34
2018	185	2	0.70	0.00	0.00	0.70	2.55	3.64	4.34

Water consumption per chicken estimated at 6.0 gal/100 chickens

Estimated Pumping by Albor Properties

Year	Parcel Size (acres)	No. DU	Indoor Water Use (ac-ft/yr)	Irrigated Acres	Irrigation Requirement (ac-ft/yr)	Outdoor Water Use (ac-ft/yr)	Total Use (ac-ft/yr)
2004	0	0	0.00	0.00	0.00	0.00	0.00
2005	0	0	0.00	0.00	0.00	0.00	0.00
2006	122	2	0.70	2.60	8.76	12.52	13.22
2007	122	1	0.35	0.40	1.39	1.98	2.33
2008	122	1	0.35	0.40	1.40	1.99	2.34
2009	122	1	0.35	0.40	1.34	1.92	2.27
2010	122	1	0.35	0.40	1.24	1.77	2.12
2011	122	1	0.35	0.40	1.39	1.98	2.33
2012	122	1	0.35	0.40	1.46	2.08	2.43
2013	122	1	0.35	0.40	1.43	2.04	2.39
2014	122	1	0.35	0.40	1.49	2.13	2.48
2015	122	1	0.35	0.40	1.39	1.99	2.34
2016	122	1	0.35	0.40	1.33	1.90	2.25
2017	122	1	0.35	0.40	1.33	1.90	2.25
2018	122	1	0.35	0.40	1.33	1.90	2.25

Estimated Pumping by Nikodinov

Year	Parcel Size (acres)	No. DU	Indoor Water Use (ac-ft/yr)	Irrigated Acres	Irrigation Requirement (ac-ft/yr)	Outdoor Water Use (ac-ft/yr)	Total Use (ac-ft/yr)
2004	0	0	0.00	0.00	0.00	0.00	0.00
2005	0	0	0.00	0.00	0.00	0.00	0.00
2006	10	1	0.35	0.08	0.27	0.39	0.74
2007	10	1	0.35	0.08	0.28	0.40	0.75
2008	10	1	0.35	0.08	0.28	0.40	0.75
2009	10	1	0.35	0.08	0.27	0.38	0.73
2010	10	1	0.35	0.08	0.25	0.35	0.70
2011	10	1	0.35	0.08	0.28	0.40	0.75
2012	10	1	0.35	0.08	0.29	0.42	0.77
2013	10	1	0.35	0.08	0.29	0.41	0.76
2014	10	1	0.35	0.08	0.30	0.43	0.78
2015	10	1	0.35	0.08	0.28	0.40	0.75
2016	10	1	0.35	0.08	0.27	0.38	0.73
2017	10	1	0.35	0.08	0.27	0.38	0.73
2018	10	1	0.35	0.08	0.27	0.38	0.73

Estimated Pumping by McAmis

Year	Parcel Size (acres)	No. DU	Indoor Water Use (ac-ft/yr)	Irrigated Acres	Irrigation Requirement (ac-ft/yr)	Outdoor Water Use (ac-ft/yr)	Total Use (ac-ft/yr)
2004	0	0	0.00	0.00	0.00	0.00	0.00
2005	0	0	0.00	0.00	0.00	0.00	0.00
2006	0.9	1	0.35	0.04	0.13	0.19	0.54
2007	0.9	1	0.35	0.04	0.14	0.20	0.55
2008	0.9	1	0.35	0.04	0.14	0.20	0.55
2009	0.9	1	0.35	0.04	0.13	0.19	0.54
2010	0.9	1	0.35	0.04	0.12	0.18	0.53
2011	0.9	1	0.35	0.04	0.14	0.20	0.55
2012	0.9	1	0.35	0.04	0.15	0.21	0.56
2013	0.9	1	0.35	0.04	0.14	0.20	0.55
2014	0.9	1	0.35	0.04	0.15	0.21	0.56
2015	0.9	1	0.35	0.04	0.14	0.20	0.55
2016	0.9	1	0.35	0.04	0.13	0.19	0.54
2017	0.9	1	0.35	0.04	0.13	0.19	0.54
2018	0.9	1	0.35	0.04	0.13	0.19	0.54

Estimated Pumping by Aldama

Year	Parcel Size (acres)	No. DU	Indoor Water Use (ac-ft/yr)	Irrigated Acres	Irrigation Requirement (ac-ft/yr)	Outdoor Water Use (ac-ft/yr)	Total Use (ac-ft/yr)
2004	0	0	0.00	0.00	0.00	0.00	0.00
2005	0	0	0.00	0.00	0.00	0.00	0.00
2006	1.4	1	0.35	0.10	0.34	0.48	0.83
2007	1.4	1	0.35	0.10	0.35	0.49	0.84
2008	1.4	1	0.35	0.10	0.35	0.50	0.85
2009	1.4	1	0.35	0.10	0.34	0.48	0.83
2010	1.4	1	0.35	0.10	0.31	0.44	0.79
2011	1.4	1	0.35	0.10	0.35	0.50	0.85
2012	1.4	1	0.35	0.10	0.36	0.52	0.87
2013	1.4	1	0.35	0.10	0.36	0.51	0.86
2014	1.4	1	0.35	0.10	0.37	0.53	0.88
2015	1.4	1	0.35	0.10	0.35	0.50	0.85
2016	1.4	1	0.35	0.10	0.33	0.47	0.82
2017	1.4	1	0.35	0.10	0.33	0.47	0.82
2018	1.4	1	0.35	0.10	0.33	0.47	0.82

Estimated Pumping by Gutierrez

Year	Parcel Size (acres)	No. DU	Indoor Water Use (ac-ft/yr)	Irrigated Acres	Irrigation Requirement (ac-ft/yr)	Outdoor Water Use (ac-ft/yr)	Total Use (ac-ft/yr)
2004	0	0	0.00	0.00	0.00	0.00	0.00
2005	0	0	0.00	0.00	0.00	0.00	0.00
2006	2	2	0.70	0.14	0.47	0.67	1.37
2007	2	2	0.70	0.14	0.48	0.69	1.39
2008	2	2	0.70	0.14	0.49	0.70	1.40
2009	2	2	0.70	0.14	0.47	0.67	1.37
2010	2	2	0.70	0.14	0.43	0.62	1.32
2011	2	2	0.70	0.14	0.49	0.69	1.39
2012	2	2	0.70	0.14	0.51	0.73	1.43
2013	2	2	0.70	0.14	0.50	0.71	1.41
2014	2	2	0.70	0.14	0.52	0.75	1.45
2015	2	2	0.70	0.14	0.49	0.70	1.40
2016	2	2	0.70	0.14	0.47	0.66	1.36
2017	2	2	0.70	0.14	0.47	0.66	1.36
2018	2	2	0.70	0.14	0.47	0.66	1.36

Estimated Pumping by Damont

Year	Parcel Size (acres)	No. DU	Indoor Water Use (ac-ft/yr)	Irrigated Acres	Irrigation Requirement (ac-ft/yr)	Outdoor Water Use (ac-ft/yr)	Total Use (ac-ft/yr)
2004	0	0	0.00	0.00	0.00	0.00	0.00
2005	0	0	0.00	0.00	0.00	0.00	0.00
2006	0.5	1	0.35	0.00	0.00	0.00	0.35
2007	0.5	1	0.35	0.00	0.00	0.00	0.35
2008	0.5	1	0.35	0.00	0.00	0.00	0.35
2009	0.5	1	0.35	0.00	0.00	0.00	0.35
2010	0.5	1	0.35	0.00	0.00	0.00	0.35
2011	0.5	1	0.35	0.00	0.00	0.00	0.35
2012	0.5	1	0.35	0.00	0.00	0.00	0.35
2013	0.5	1	0.35	0.00	0.00	0.00	0.35
2014	0.5	1	0.35	0.00	0.00	0.00	0.35
2015	0.5	1	0.35	0.00	0.00	0.00	0.35
2016	0.5	1	0.35	0.00	0.00	0.00	0.35
2017	0.5	1	0.35	0.00	0.00	0.00	0.35
2018	0.5	1	0.35	0.00	0.00	0.00	0.35

Appendix E

**Copies of YVWD's letters notifying
Watermaster of the transfer of water rights
from Oak Valley Partners**



Yucaipa Valley Water District

12770 Second Street • P. O. Box 730 • Yucaipa, California 92399-0730
(909) 797-5117 • Fax: (909) 797-6381 • www.yvwd.dst.ca.us

March 21, 2018

Mr. Tony Lara, Secretary
Beaumont Basin Watermaster
c/o Beaumont Cherry Valley Water District
560 Magnolia Avenue
Beaumont, California 92223

Thierry Montoya
Alvarado Smith
1 MacArthur Place, Suite 200
Santa Ana, California 92707

Hannibal Blandon
ALDA Engineering
5928 Vineyard Avenue
Alta Loma, California 91701

Subject: Transfer of Overlying Water Rights in the Beaumont Basin for Tract No. 32702 (141 lots) and Tract No. 32702-5 (105 lots) Pursuant to Beaumont Basin Watermaster Resolution No. 2017-02

Gentlemen:

On March 20, 2018, the Board of Directors of the Yucaipa Valley Water District accepted the transfer of Overlying Water Rights from Oak Valley Partners for Tract No. 32702 (141 lots) and Tract No. 32702-5 (105 lots) pursuant to Beaumont Basin Watermaster Resolution No. 2017-02 adopted on August 30, 2017.

The attached correspondence dated March 9, 2018, confirms the transfer of 90.94 acre-feet of overlying water rights from Oak Valley Partners and the acceptance of said overlying-appropriative water rights by Yucaipa Valley Water District.

Sincerely,

Joseph B. Zoba
General Manager

Copies to:

- John Ohanian, Oak Valley Partners
- Mike Turner, Argent Management

Directors and Officers

CHRISTOPHER MANN
Division 1

BRUCE GRANLUND
Division 2

JAY BOGH
Division 3

LONNI GRANLUND
Division 4

THOMAS SHALHOUB
Division 5

JOSEPH B. ZOBA
General Manager
and Secretary



Yucaipa Valley Water District

12770 Second Street • P. O. Box 730 • Yucaipa, California 92399-0730
(909) 797-5117 • Fax: (909) 797-6381 • www.yvwd.dst.ca.us

July 27, 2018

Mr. Dan Jagers, Secretary
Beaumont Basin Watermaster
c/o Beaumont Cherry Valley Water District
560 Magnolia Avenue
Beaumont, California 92223

Thierry Montoya
Alvarado Smith
1 MacArthur Place, Suite 200
Santa Ana, California 92707

Hannibal Blandon
ALDA Engineering
5928 Vineyard Avenue
Alta Loma, California 91701

Subject: Transfer of 59.89 Acre Feet of Overlying Water Rights in the Beaumont Basin for Tract Nos. 32702-1 (121 lots) and 32702-2 (41 lots) Pursuant to Beaumont Basin Watermaster Resolution No. 2017-02

Gentlemen:

The Yucaipa Valley Water District has accepted the transfer of Overlying Water Rights from Oak Valley Partners for Tract Nos. 32702-1 and 32702-2 (162 lots) pursuant to Beaumont Basin Watermaster Resolution No. 2017-02 adopted on August 30, 2017.

The attached correspondence dated July 5, 2018, confirms the transfer of 59.89 acre-feet of overlying water rights from Oak Valley Partners and the acceptance of said overlying-appropriative water rights by Yucaipa Valley Water District.

Sincerely,

/s/ Joseph B. Zoba

Joseph B. Zoba
General Manager

Copies to:

- John Ohanian, Oak Valley Partners
- Mike Turner, Argent Management



Yucaipa Valley Water District

12770 Second Street • P. O. Box 730 • Yucaipa, California 92399-0730
(909) 797-5117 • Fax: (909) 797-6381 • www.yvwd.dst.ca.us

September 26, 2018

Mr. Dan Jagers, Secretary
Beaumont Basin Watermaster
c/o Beaumont Cherry Valley Water District
560 Magnolia Avenue
Beaumont, California 92223

Thierry Montoya
Alvarado Smith
1 MacArthur Place, Suite 200
Santa Ana, California 92707

Hannibal Blandon
ALDA Engineering
5928 Vineyard Avenue
Alta Loma, California 91701

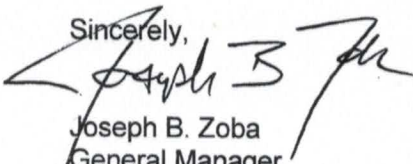
Subject: Transfer of 29.57 Acre Feet of Overlying Water Rights in the Beaumont Basin for Tract No. 32702-3 (80 lots) Pursuant to Beaumont Basin Watermaster Resolution No. 2017-02

Gentlemen:

The Yucaipa Valley Water District has accepted the transfer of Overlying Water Rights from Oak Valley Partners for Tract Nos. 32702-3 (80 lots) pursuant to Beaumont Basin Watermaster Resolution No. 2017-02 adopted on August 30, 2017.

The attached correspondence dated September 17, 2018, confirms the transfer of 29.57 acre-feet of overlying water rights from Oak Valley Partners and the acceptance of said overlying-appropriative water rights by Yucaipa Valley Water District.

Sincerely,


Joseph B. Zoba
General Manager

Copies to:

- John Ohanian, Oak Valley Partners
- Mike Turner, Argent Management

Directors and Officers

CHRISTOPHER MANN
Division 1

BRUCE GRANLUND
Division 2

JAY BOGH
Division 3

LONNI GRANLUND
Division 4

THOMAS SHALHOUB
Division 5

JOSEPH B. ZOBA
General Manager
and Secretary

Appendix F

Water Quality Analysis Summary (2014-2018) for Production Wells

Well Name	Date	Analyte	Concent.	Unit
Banning - C02A	18-Mar-14	ALKALINITY (TOTAL) AS CaCO3	160	MG/L
Banning - C02A	18-Mar-14	ALUMINUM	< 50	UG/L
Banning - C02A	18-Mar-14	ARSENIC	< 2	UG/L
Banning - C02A	18-Mar-14	BICARBONATE ALKALINITY	200	MG/L
Banning - C02A	18-Mar-14	CALCIUM	44	MG/L
Banning - C02A	18-Mar-14	CARBONATE ALKALINITY	< 3	MG/L
Banning - C02A	18-Mar-14	CHLORIDE	11	MG/L
Banning - C02A	18-Mar-14	CHROMIUM (TOTAL)	15	UG/L
Banning - C02A	04-Dec-14	CHROMIUM, HEXAVALENT	17	UG/L
Banning - C02A	19-Mar-15	CHROMIUM, HEXAVALENT	17	UG/L
Banning - C02A	24-Jun-15	CHROMIUM, HEXAVALENT	17	UG/L
Banning - C02A	29-Sep-15	CHROMIUM, HEXAVALENT	17	UG/L
Banning - C02A	28-Dec-15	CHROMIUM, HEXAVALENT	16	UG/L
Banning - C02A	24-Mar-16	CHROMIUM, HEXAVALENT	15	UG/L
Banning - C02A	22-Jun-16	CHROMIUM, HEXAVALENT	15	UG/L
Banning - C02A	21-Sep-16	CHROMIUM, HEXAVALENT	16	UG/L
Banning - C02A	21-Dec-16	CHROMIUM, HEXAVALENT	16	UG/L
Banning - C02A	13-Nov-17	CHROMIUM, HEXAVALENT	16	UG/L
Banning - C02A	18-Mar-14	COPPER	< 50	UG/L
Banning - C02A	18-Mar-14	DIBROMOCHLOROPROPANE (DBCP)	< 0.01	UG/L
Banning - C02A	18-Mar-14	FLUORIDE (F) (NATURAL-SOURCE)	0.3	MG/L
Banning - C02A	18-Mar-14	HARDNESS (TOTAL) AS CaCO3	150	MG/L
Banning - C02A	18-Mar-14	HYDROXIDE ALKALINITY	< 3	MG/L
Banning - C02A	18-Mar-14	IRON	< 100	UG/L
Banning - C02A	18-Mar-14	LEAD	< 5	UG/L
Banning - C02A	18-Mar-14	MAGNESIUM	9.5	MG/L
Banning - C02A	18-Mar-14	MANGANESE	< 20	UG/L
Banning - C02A	27-Apr-16	NITRATE (AS N)	1.8	MG/L
Banning - C02A	26-Apr-17	NITRATE (AS N)	1.9	MG/L
Banning - C02A	13-Jun-18	NITRATE (AS N)	2	MG/L
Banning - C02A	18-Mar-14	NITRATE (AS NO3)	8.5	MG/L
Banning - C02A	28-May-14	NITRATE (AS NO3)	11	MG/L
Banning - C02A	29-Apr-15	NITRATE (AS NO3)	8.1	MG/L
Banning - C02A	18-Mar-14	NITRITE (AS N)	< 100	MG/L
Banning - C02A	27-Apr-16	NITRITE (AS N)	< 0.1	MG/L
Banning - C02A	26-Apr-17	NITRITE (AS N)	< 0.1	MG/L
Banning - C02A	13-Jun-18	NITRITE (AS N)	< 0.1	MG/L
Banning - C02A	18-Mar-14	POTASSIUM	1.3	MG/L
Banning - C02A	18-Mar-14	SODIUM	26	MG/L
Banning - C02A	18-Mar-14	SPECIFIC CONDUCTANCE	380	US
Banning - C02A	18-Mar-14	SULFATE	10	MG/L
Banning - C02A	18-Mar-14	TETRACHLOROETHYLENE	< 0.5	UG/L
Banning - C02A	18-Mar-14	TOTAL DISSOLVED SOLIDS	240	MG/L
Banning - C02A	18-Mar-14	TRICHLOROETHYLENE	< 0.5	UG/L
Banning - C02A	18-Mar-14	TURBIDITY, LABORATORY	< 0.2	NTU

Well Name	Date	Analyte	Concent.	Unit
Banning - C02A	18-Mar-14	ALKALINITY (TOTAL) AS CaCO3	160	MG/L
Banning - C02A	18-Mar-14	ZINC	< 50	UG/L
Banning - C03	18-Mar-14	ALKALINITY (TOTAL) AS CaCO3	140	MG/L
Banning - C03	08-Mar-17	ALKALINITY (TOTAL) AS CaCO3	140	MG/L
Banning - C03	18-Mar-14	ALUMINUM	< 50	UG/L
Banning - C03	08-Mar-17	ALUMINUM	< 50	UG/L
Banning - C03	18-Mar-14	ARSENIC	< 2	UG/L
Banning - C03	08-Mar-17	ARSENIC	< 2	UG/L
Banning - C03	18-Mar-14	BICARBONATE ALKALINITY	160	MG/L
Banning - C03	08-Mar-17	BICARBONATE ALKALINITY	160	MG/L
Banning - C03	18-Mar-14	CALCIUM	32	MG/L
Banning - C03	08-Mar-17	CALCIUM	31	MG/L
Banning - C03	18-Mar-14	CARBONATE ALKALINITY	< 3	MG/L
Banning - C03	08-Mar-17	CARBONATE ALKALINITY	< 3	MG/L
Banning - C03	18-Mar-14	CHLORIDE	12	MG/L
Banning - C03	08-Mar-17	CHLORIDE	9.9	MG/L
Banning - C03	18-Mar-14	CHROMIUM (TOTAL)	13	UG/L
Banning - C03	08-Mar-17	CHROMIUM (TOTAL)	15	UG/L
Banning - C03	04-Dec-14	CHROMIUM, HEXAVALENT	16	UG/L
Banning - C03	23-Mar-15	CHROMIUM, HEXAVALENT	15	UG/L
Banning - C03	24-Jun-15	CHROMIUM, HEXAVALENT	16	UG/L
Banning - C03	29-Sep-15	CHROMIUM, HEXAVALENT	14	UG/L
Banning - C03	30-Dec-15	CHROMIUM, HEXAVALENT	16	UG/L
Banning - C03	24-Mar-16	CHROMIUM, HEXAVALENT	15	UG/L
Banning - C03	22-Jun-16	CHROMIUM, HEXAVALENT	14	UG/L
Banning - C03	21-Sep-16	CHROMIUM, HEXAVALENT	15	UG/L
Banning - C03	12-May-17	CHROMIUM, HEXAVALENT	14	UG/L
Banning - C03	14-Aug-17	CHROMIUM, HEXAVALENT	14	UG/L
Banning - C03	13-Nov-17	CHROMIUM, HEXAVALENT	15	UG/L
Banning - C03	18-Mar-14	COPPER	< 50	UG/L
Banning - C03	08-Mar-17	COPPER	< 50	UG/L
Banning - C03	18-Mar-14	DIBROMOCHLOROPROPANE (DBCP)	< 0.01	UG/L
Banning - C03	08-Mar-17	DIBROMOCHLOROPROPANE (DBCP)	< 0.01	UG/L
Banning - C03	18-Mar-14	FLUORIDE (F) (NATURAL-SOURCE)	0.5	MG/L
Banning - C03	08-Mar-17	FLUORIDE (F) (NATURAL-SOURCE)	0.4	MG/L
Banning - C03	18-Mar-14	HARDNESS (TOTAL) AS CaCO3	100	MG/L
Banning - C03	08-Mar-17	HARDNESS (TOTAL) AS CaCO3	100	MG/L
Banning - C03	18-Mar-14	HYDROXIDE ALKALINITY	< 3	MG/L
Banning - C03	08-Mar-17	HYDROXIDE ALKALINITY	< 3	MG/L
Banning - C03	18-Mar-14	IRON	< 100	UG/L
Banning - C03	08-Mar-17	IRON	< 100	UG/L
Banning - C03	18-Mar-14	LEAD	< 5	UG/L
Banning - C03	08-Mar-17	LEAD	< 5	UG/L
Banning - C03	18-Mar-14	MAGNESIUM	5.9	MG/L
Banning - C03	08-Mar-17	MAGNESIUM	5.7	MG/L

Well Name	Date	Analyte	Concent.	Unit
Banning - C02A	18-Mar-14	ALKALINITY (TOTAL) AS CaCO3	160	MG/L
Banning - C03	18-Mar-14	MANGANESE	< 20	UG/L
Banning - C03	08-Mar-17	MANGANESE	< 20	UG/L
Banning - C03	22-Apr-16	NITRATE (AS N)	1.6	MG/L
Banning - C03	08-Mar-17	NITRATE (AS N)	1.6	MG/L
Banning - C03	25-Apr-17	NITRATE (AS N)	1.8	MG/L
Banning - C03	13-Jun-18	NITRATE (AS N)	1.8	MG/L
Banning - C03	18-Mar-14	NITRATE (AS NO3)	8.5	MG/L
Banning - C03	28-May-14	NITRATE (AS NO3)	7.5	MG/L
Banning - C03	21-Apr-15	NITRATE (AS NO3)	7.1	MG/L
Banning - C03	18-Mar-14	NITRITE (AS N)	< 100	MG/L
Banning - C03	22-Apr-16	NITRITE (AS N)	< 0.1	MG/L
Banning - C03	08-Mar-17	NITRITE (AS N)	< 0.1	MG/L
Banning - C03	25-Apr-17	NITRITE (AS N)	< 0.1	MG/L
Banning - C03	13-Jun-18	NITRITE (AS N)	< 0.1	MG/L
Banning - C03	18-Mar-14	POTASSIUM	1.6	MG/L
Banning - C03	08-Mar-17	POTASSIUM	1.5	MG/L
Banning - C03	18-Mar-14	SODIUM	31	MG/L
Banning - C03	08-Mar-17	SODIUM	29	MG/L
Banning - C03	18-Mar-14	SPECIFIC CONDUCTANCE	320	US
Banning - C03	08-Mar-17	SPECIFIC CONDUCTANCE	330	US
Banning - C03	18-Mar-14	SULFATE	5.9	MG/L
Banning - C03	08-Mar-17	SULFATE	6	MG/L
Banning - C03	18-Mar-14	TETRACHLOROETHYLENE	< 0.5	UG/L
Banning - C03	08-Mar-17	TETRACHLOROETHYLENE	< 0.5	UG/L
Banning - C03	18-Mar-14	TOTAL DISSOLVED SOLIDS	190	MG/L
Banning - C03	08-Mar-17	TOTAL DISSOLVED SOLIDS	170	MG/L
Banning - C03	18-Mar-14	TRICHLOROETHYLENE	< 0.5	UG/L
Banning - C03	08-Mar-17	TRICHLOROETHYLENE	< 0.5	UG/L
Banning - C03	18-Mar-14	TURBIDITY, LABORATORY	< 0.2	NTU
Banning - C03	08-Mar-17	TURBIDITY, LABORATORY	0.18	NTU
Banning - C03	18-Mar-14	ZINC	< 50	UG/L
Banning - C03	08-Mar-17	ZINC	< 50	UG/L
Banning - C04	13-Mar-14	ALKALINITY (TOTAL) AS CaCO3	160	MG/L
Banning - C04	06-Mar-17	ALKALINITY (TOTAL) AS CaCO3	120	MG/L
Banning - C04	13-Mar-14	ALUMINUM	< 50	UG/L
Banning - C04	06-Mar-17	ALUMINUM	< 50	UG/L
Banning - C04	13-Mar-14	ARSENIC	< 2	UG/L
Banning - C04	06-Mar-17	ARSENIC	< 2	UG/L
Banning - C04	13-Mar-14	BICARBONATE ALKALINITY	190	MG/L
Banning - C04	06-Mar-17	BICARBONATE ALKALINITY	140	MG/L
Banning - C04	13-Mar-14	CALCIUM	37	MG/L
Banning - C04	06-Mar-17	CALCIUM	22	MG/L
Banning - C04	13-Mar-14	CARBONATE ALKALINITY	< 3	MG/L
Banning - C04	06-Mar-17	CARBONATE ALKALINITY	< 3	MG/L

Well Name	Date	Analyte	Concent.	Unit
Banning - C02A	18-Mar-14	ALKALINITY (TOTAL) AS CaCO3	160	MG/L
Banning - C04	13-Mar-14	CHLORIDE	7.1	MG/L
Banning - C04	06-Mar-17	CHLORIDE	5.6	MG/L
Banning - C04	13-Mar-14	CHROMIUM (TOTAL)	13	UG/L
Banning - C04	06-Mar-17	CHROMIUM (TOTAL)	9.9	UG/L
Banning - C04	04-Dec-14	CHROMIUM, HEXAVALENT	13	UG/L
Banning - C04	30-Mar-15	CHROMIUM, HEXAVALENT	13	UG/L
Banning - C04	24-Jun-15	CHROMIUM, HEXAVALENT	17	UG/L
Banning - C04	29-Sep-15	CHROMIUM, HEXAVALENT	16	UG/L
Banning - C04	28-Dec-15	CHROMIUM, HEXAVALENT	17	UG/L
Banning - C04	24-Mar-16	CHROMIUM, HEXAVALENT	10	UG/L
Banning - C04	22-Jun-16	CHROMIUM, HEXAVALENT	15	UG/L
Banning - C04	21-Sep-16	CHROMIUM, HEXAVALENT	15	UG/L
Banning - C04	21-Dec-16	CHROMIUM, HEXAVALENT	13	UG/L
Banning - C04	25-May-17	CHROMIUM, HEXAVALENT	11	UG/L
Banning - C04	14-Aug-17	CHROMIUM, HEXAVALENT	15	UG/L
Banning - C04	13-Nov-17	CHROMIUM, HEXAVALENT	15	UG/L
Banning - C04	13-Mar-14	COPPER	< 50	UG/L
Banning - C04	06-Mar-17	COPPER	< 50	UG/L
Banning - C04	13-Mar-14	DIBROMOCHLOROPROPANE (DBCP)	< 0.01	UG/L
Banning - C04	06-Mar-17	DIBROMOCHLOROPROPANE (DBCP)	< 0.01	UG/L
Banning - C04	13-Mar-14	FLUORIDE (F) (NATURAL-SOURCE)	0.3	MG/L
Banning - C04	06-Mar-17	FLUORIDE (F) (NATURAL-SOURCE)	0.4	MG/L
Banning - C04	13-Mar-14	HARDNESS (TOTAL) AS CaCO3	120	MG/L
Banning - C04	06-Mar-17	HARDNESS (TOTAL) AS CaCO3	67	MG/L
Banning - C04	13-Mar-14	HYDROXIDE ALKALINITY	< 3	MG/L
Banning - C04	06-Mar-17	HYDROXIDE ALKALINITY	< 3	MG/L
Banning - C04	13-Mar-14	IRON	< 100	UG/L
Banning - C04	06-Mar-17	IRON	< 100	UG/L
Banning - C04	13-Mar-14	LEAD	< 5	UG/L
Banning - C04	06-Mar-17	LEAD	< 5	UG/L
Banning - C04	13-Mar-14	MAGNESIUM	7.4	MG/L
Banning - C04	06-Mar-17	MAGNESIUM	3.1	MG/L
Banning - C04	13-Mar-14	MANGANESE	< 20	UG/L
Banning - C04	06-Mar-17	MANGANESE	< 20	UG/L
Banning - C04	27-Apr-16	NITRATE (AS N)	0.89	MG/L
Banning - C04	06-Mar-17	NITRATE (AS N)	0.79	MG/L
Banning - C04	26-Apr-17	NITRATE (AS N)	0.91	MG/L
Banning - C04	13-Jun-18	NITRATE (AS N)	1.1	MG/L
Banning - C04	13-Mar-14	NITRATE (AS NO3)	4.9	MG/L
Banning - C04	28-May-14	NITRATE (AS NO3)	4.7	MG/L
Banning - C04	29-Apr-15	NITRATE (AS NO3)	5	MG/L
Banning - C04	13-Mar-14	NITRITE (AS N)	< 100	MG/L
Banning - C04	27-Apr-16	NITRITE (AS N)	< 0.1	MG/L
Banning - C04	06-Mar-17	NITRITE (AS N)	< 0.1	MG/L

Well Name	Date	Analyte	Concent.	Unit
Banning - C02A	18-Mar-14	ALKALINITY (TOTAL) AS CaCO3	160	MG/L
Banning - C04	26-Apr-17	NITRITE (AS N)	< 0.1	MG/L
Banning - C04	13-Jun-18	NITRITE (AS N)	< 0.1	MG/L
Banning - C04	13-Mar-14	POTASSIUM	1.5	MG/L
Banning - C04	06-Mar-17	POTASSIUM	1.4	MG/L
Banning - C04	13-Mar-14	SODIUM	27	MG/L
Banning - C04	06-Mar-17	SODIUM	37	MG/L
Banning - C04	13-Mar-14	SPECIFIC CONDUCTANCE	360	US
Banning - C04	06-Mar-17	SPECIFIC CONDUCTANCE	290	US
Banning - C04	13-Mar-14	SULFATE	11	MG/L
Banning - C04	06-Mar-17	SULFATE	13	MG/L
Banning - C04	13-Mar-14	TETRACHLOROETHYLENE	< 0.5	UG/L
Banning - C04	06-Mar-17	TETRACHLOROETHYLENE	< 0.5	UG/L
Banning - C04	13-Mar-14	TOTAL DISSOLVED SOLIDS	180	MG/L
Banning - C04	06-Mar-17	TOTAL DISSOLVED SOLIDS	190	MG/L
Banning - C04	13-Mar-14	TRICHLOROETHYLENE	< 0.5	UG/L
Banning - C04	06-Mar-17	TRICHLOROETHYLENE	< 0.5	UG/L
Banning - C04	13-Mar-14	TURBIDITY, LABORATORY	< 0.2	NTU
Banning - C04	06-Mar-17	TURBIDITY, LABORATORY	< 0.1	NTU
Banning - C04	13-Mar-14	ZINC	< 50	UG/L
Banning - C04	06-Mar-17	ZINC	< 50	UG/L
Banning - M03	18-Mar-15	ALKALINITY (TOTAL) AS CaCO3	150	MG/L
Banning - M03	14-Feb-18	ALKALINITY (TOTAL) AS CaCO3	180	MG/L
Banning - M03	18-Mar-15	ALUMINUM	< 50	UG/L
Banning - M03	14-Feb-18	ALUMINUM	57	UG/L
Banning - M03	18-Mar-15	ARSENIC	< 2	UG/L
Banning - M03	14-Feb-18	ARSENIC	< 2	UG/L
Banning - M03	18-Mar-15	BICARBONATE ALKALINITY	190	MG/L
Banning - M03	14-Feb-18	BICARBONATE ALKALINITY	180	MG/L
Banning - M03	18-Mar-15	CALCIUM	39	MG/L
Banning - M03	14-Feb-18	CALCIUM	41	MG/L
Banning - M03	18-Mar-15	CARBONATE ALKALINITY	< 3	MG/L
Banning - M03	14-Feb-18	CARBONATE ALKALINITY	< 5	MG/L
Banning - M03	18-Mar-15	CHLORIDE	14	MG/L
Banning - M03	14-Feb-18	CHLORIDE	16	MG/L
Banning - M03	18-Mar-15	CHROMIUM (TOTAL)	8.5	UG/L
Banning - M03	14-Feb-18	CHROMIUM (TOTAL)	9.9	UG/L
Banning - M03	04-Dec-14	CHROMIUM, HEXAVALENT	9.3	UG/L
Banning - M03	19-Mar-15	CHROMIUM, HEXAVALENT	9.7	UG/L
Banning - M03	24-Jun-15	CHROMIUM, HEXAVALENT	10	UG/L
Banning - M03	29-Sep-15	CHROMIUM, HEXAVALENT	10	UG/L
Banning - M03	28-Dec-15	CHROMIUM, HEXAVALENT	9.9	UG/L
Banning - M03	24-Mar-16	CHROMIUM, HEXAVALENT	9.4	UG/L
Banning - M03	22-Jun-16	CHROMIUM, HEXAVALENT	9.1	UG/L
Banning - M03	21-Sep-16	CHROMIUM, HEXAVALENT	9.3	UG/L

Well Name	Date	Analyte	Concent.	Unit
Banning - C02A	18-Mar-14	ALKALINITY (TOTAL) AS CaCO3	160	MG/L
Banning - M03	21-Dec-16	CHROMIUM, HEXAVALENT	9.4	UG/L
Banning - M03	25-May-17	CHROMIUM, HEXAVALENT	9.9	UG/L
Banning - M03	14-Aug-17	CHROMIUM, HEXAVALENT	9.2	UG/L
Banning - M03	15-Nov-17	CHROMIUM, HEXAVALENT	9.1	UG/L
Banning - M03	18-Mar-15	COPPER	< 50	UG/L
Banning - M03	14-Feb-18	COPPER	< 50	UG/L
Banning - M03	18-Mar-15	DIBROMOCHLOROPROPANE (DBCP)	< 0.01	UG/L
Banning - M03	14-Feb-18	DIBROMOCHLOROPROPANE (DBCP)	< 0.01	UG/L
Banning - M03	18-Mar-15	FLUORIDE (F) (NATURAL-SOURCE)	0.3	MG/L
Banning - M03	14-Feb-18	FLUORIDE (F) (NATURAL-SOURCE)	0.32	MG/L
Banning - M03	18-Mar-15	HARDNESS (TOTAL) AS CaCO3	150	MG/L
Banning - M03	14-Feb-18	HARDNESS (TOTAL) AS CaCO3	160	MG/L
Banning - M03	18-Mar-15	HYDROXIDE ALKALINITY	< 3	MG/L
Banning - M03	14-Feb-18	HYDROXIDE ALKALINITY	< 5	MG/L
Banning - M03	18-Mar-15	IRON	< 100	UG/L
Banning - M03	14-Feb-18	IRON	120	UG/L
Banning - M03	18-Mar-15	LEAD	< 5	UG/L
Banning - M03	14-Feb-18	LEAD	< 5	UG/L
Banning - M03	18-Mar-15	MAGNESIUM	13	MG/L
Banning - M03	14-Feb-18	MAGNESIUM	14	MG/L
Banning - M03	18-Mar-15	MANGANESE	< 20	UG/L
Banning - M03	14-Feb-18	MANGANESE	< 20	UG/L
Banning - M03	27-Apr-16	NITRATE (AS N)	2.1	MG/L
Banning - M03	26-Apr-17	NITRATE (AS N)	2.2	MG/L
Banning - M03	14-Feb-18	NITRATE (AS N)	2.2	MG/L
Banning - M03	13-Jun-18	NITRATE (AS N)	1.9	MG/L
Banning - M03	18-Jun-14	NITRATE (AS NO3)	8	MG/L
Banning - M03	18-Mar-15	NITRATE (AS NO3)	7.2	MG/L
Banning - M03	21-Apr-15	NITRATE (AS NO3)	7.8	MG/L
Banning - M03	18-Mar-15	NITRITE (AS N)	< 100	MG/L
Banning - M03	27-Apr-16	NITRITE (AS N)	< 0.1	MG/L
Banning - M03	26-Apr-17	NITRITE (AS N)	< 0.1	MG/L
Banning - M03	14-Feb-18	NITRITE (AS N)	< 0.1	MG/L
Banning - M03	13-Jun-18	NITRITE (AS N)	< 0.1	MG/L
Banning - M03	18-Mar-15	POTASSIUM	2	MG/L
Banning - M03	14-Feb-18	POTASSIUM	2.1	MG/L
Banning - M03	18-Mar-15	SODIUM	39	MG/L
Banning - M03	14-Feb-18	SODIUM	39	MG/L
Banning - M03	18-Mar-15	SPECIFIC CONDUCTANCE	460	US
Banning - M03	14-Feb-18	SPECIFIC CONDUCTANCE	460	US
Banning - M03	18-Mar-15	SULFATE	35	MG/L
Banning - M03	14-Feb-18	SULFATE	36	MG/L
Banning - M03	18-Mar-15	TETRACHLOROETHYLENE	< 0.5	UG/L
Banning - M03	14-Feb-18	TETRACHLOROETHYLENE	< 0.5	UG/L

Well Name	Date	Analyte	Concent.	Unit
Banning - C02A	18-Mar-14	ALKALINITY (TOTAL) AS CaCO3	160	MG/L
Banning - M03	18-Mar-15	TOTAL DISSOLVED SOLIDS	300	MG/L
Banning - M03	14-Feb-18	TOTAL DISSOLVED SOLIDS	280	MG/L
Banning - M03	18-Mar-15	TRICHLOROETHYLENE	< 0.5	UG/L
Banning - M03	14-Feb-18	TRICHLOROETHYLENE	< 0.5	UG/L
Banning - M03	18-Mar-15	TURBIDITY, LABORATORY	< 0.2	NTU
Banning - M03	14-Feb-18	TURBIDITY, LABORATORY	1.2	NTU
Banning - M03	18-Mar-15	ZINC	< 50	UG/L
Banning - M03	14-Feb-18	ZINC	< 50	UG/L
BCVWD - 03	18-Aug-16	ALKALINITY (TOTAL) AS CaCO3	150	MG/L
BCVWD - 03	18-Aug-16	ALUMINUM	< 50	UG/L
BCVWD - 03	18-Aug-16	ARSENIC	< 2	UG/L
BCVWD - 03	18-Aug-16	BICARBONATE ALKALINITY	190	MG/L
BCVWD - 03	18-Aug-16	CALCIUM	37	MG/L
BCVWD - 03	18-Aug-16	CARBONATE ALKALINITY	< 3	MG/L
BCVWD - 03	18-Aug-16	CHLORIDE	13	MG/L
BCVWD - 03	18-Aug-16	CHROMIUM (TOTAL)	8.4	UG/L
BCVWD - 03	14-Oct-14	CHROMIUM, HEXAVALENT	11	UG/L
BCVWD - 03	31-Mar-15	CHROMIUM, HEXAVALENT	9.5	UG/L
BCVWD - 03	18-Aug-16	CHROMIUM, HEXAVALENT	7.3	UG/L
BCVWD - 03	18-Aug-16	COPPER	< 50	UG/L
BCVWD - 03	18-Aug-16	DIBROMOCHLOROPROPANE (DBCP)	< 0.01	UG/L
BCVWD - 03	18-Aug-16	FLUORIDE (F) (NATURAL-SOURCE)	0.5	MG/L
BCVWD - 03	18-Aug-16	HYDROXIDE ALKALINITY	< 3	MG/L
BCVWD - 03	18-Aug-16	IRON	450	UG/L
BCVWD - 03	18-Aug-16	LEAD	< 5	UG/L
BCVWD - 03	18-Aug-16	MAGNESIUM	13	MG/L
BCVWD - 03	18-Aug-16	MANGANESE	< 20	UG/L
BCVWD - 03	18-Aug-16	NITRATE (AS N)	1.7	MG/L
BCVWD - 03	20-Dec-18	NITRATE (AS N)	0.42	MG/L
BCVWD - 03	18-Aug-16	NITRITE (AS N)	< 0.1	MG/L
BCVWD - 03	18-Aug-16	POTASSIUM	1.5	MG/L
BCVWD - 03	18-Aug-16	SODIUM	24	MG/L
BCVWD - 03	18-Aug-16	SPECIFIC CONDUCTANCE	380	US
BCVWD - 03	18-Aug-16	SULFATE	11	MG/L
BCVWD - 03	18-Aug-16	TETRACHLOROETHYLENE	< 0.5	UG/L
BCVWD - 03	18-Aug-16	TOTAL DISSOLVED SOLIDS	240	MG/L
BCVWD - 03	18-Aug-16	TRICHLOROETHYLENE	< 0.5	UG/L
BCVWD - 03	18-Aug-16	TURBIDITY, LABORATORY	1.7	NTU
BCVWD - 03	18-Aug-16	ZINC	< 50	UG/L
BCVWD - 16	08-Dec-16	ALKALINITY (TOTAL) AS CaCO3	180	MG/L
BCVWD - 16	08-Dec-16	ALUMINUM	< 50	UG/L
BCVWD - 16	08-Dec-16	ARSENIC	< 2	UG/L
BCVWD - 16	18-Dec-18	ARSENIC	< 2	UG/L
BCVWD - 16	08-Dec-16	BICARBONATE ALKALINITY	220	MG/L

Well Name	Date	Analyte	Concent.	Unit
Banning - C02A	18-Mar-14	ALKALINITY (TOTAL) AS CaCO ₃	160	MG/L
BCVWD - 16	08-Dec-16	CALCIUM	53	MG/L
BCVWD - 16	08-Dec-16	CARBONATE ALKALINITY	< 3	MG/L
BCVWD - 16	08-Dec-16	CHLORIDE	20	MG/L
BCVWD - 16	08-Dec-16	CHROMIUM (TOTAL)	4.1	UG/L
BCVWD - 16	14-Oct-14	CHROMIUM, HEXAVALENT	4.4	UG/L
BCVWD - 16	04-Nov-15	CHROMIUM, HEXAVALENT	4.6	UG/L
BCVWD - 16	08-Dec-16	COPPER	< 50	UG/L
BCVWD - 16	08-Dec-16	FLUORIDE (F) (NATURAL-SOURCE)	0.8	MG/L
BCVWD - 16	08-Dec-16	HARDNESS (TOTAL) AS CaCO ₃	210	MG/L
BCVWD - 16	08-Dec-16	HYDROXIDE ALKALINITY	< 3	MG/L
BCVWD - 16	08-Dec-16	IRON	< 100	UG/L
BCVWD - 16	08-Dec-16	LEAD	< 5	UG/L
BCVWD - 16	08-Dec-16	MAGNESIUM	18	MG/L
BCVWD - 16	08-Dec-16	MANGANESE	< 20	UG/L
BCVWD - 16	14-Dec-15	NITRATE (AS N)	5.7	MG/L
BCVWD - 16	11-Jan-16	NITRATE (AS N)	5.9	MG/L
BCVWD - 16	09-Feb-16	NITRATE (AS N)	5.8	MG/L
BCVWD - 16	12-Apr-16	NITRATE (AS N)	6.2	MG/L
BCVWD - 16	25-May-16	NITRATE (AS N)	5.9	MG/L
BCVWD - 16	14-Jun-16	NITRATE (AS N)	5.8	MG/L
BCVWD - 16	14-Jun-16	NITRATE (AS N)	5.8	MG/L
BCVWD - 16	20-Sep-16	NITRATE (AS N)	5.3	MG/L
BCVWD - 16	08-Dec-16	NITRATE (AS N)	6.1	MG/L
BCVWD - 16	31-Jan-17	NITRATE (AS N)	6.9	MG/L
BCVWD - 16	23-May-17	NITRATE (AS N)	6.6	MG/L
BCVWD - 16	19-Jun-17	NITRATE (AS N)	6.2	MG/L
BCVWD - 16	18-Jul-17	NITRATE (AS N)	6.1	MG/L
BCVWD - 16	14-Aug-17	NITRATE (AS N)	6.2	MG/L
BCVWD - 16	11-Sep-17	NITRATE (AS N)	6.1	MG/L
BCVWD - 16	23-Oct-17	NITRATE (AS N)	5.8	MG/L
BCVWD - 16	22-Nov-17	NITRATE (AS N)	5.7	MG/L
BCVWD - 16	11-Dec-17	NITRATE (AS N)	5.6	MG/L
BCVWD - 16	08-Jan-18	NITRATE (AS N)	5.8	MG/L
BCVWD - 16	18-Dec-18	NITRATE (AS N)	6	MG/L
BCVWD - 16	25-Feb-14	NITRATE (AS NO ₃)	26	MG/L
BCVWD - 16	18-Mar-14	NITRATE (AS NO ₃)	28	MG/L
BCVWD - 16	15-Apr-14	NITRATE (AS NO ₃)	27	MG/L
BCVWD - 16	12-May-14	NITRATE (AS NO ₃)	24	MG/L
BCVWD - 16	09-Jun-14	NITRATE (AS NO ₃)	25	MG/L
BCVWD - 16	22-Jul-14	NITRATE (AS NO ₃)	25	MG/L
BCVWD - 16	12-Aug-14	NITRATE (AS NO ₃)	22	MG/L
BCVWD - 16	17-Sep-14	NITRATE (AS NO ₃)	24	MG/L
BCVWD - 16	07-Oct-14	NITRATE (AS NO ₃)	24	MG/L
BCVWD - 16	08-Dec-14	NITRATE (AS NO ₃)	28	MG/L

Well Name	Date	Analyte	Concent.	Unit
Banning - C02A	18-Mar-14	ALKALINITY (TOTAL) AS CaCO3	160	MG/L
BCVWD - 16	21-Jan-15	NITRATE (AS NO3)	33	MG/L
BCVWD - 16	18-Feb-15	NITRATE (AS NO3)	26	MG/L
BCVWD - 16	17-Mar-15	NITRATE (AS NO3)	27	MG/L
BCVWD - 16	21-Apr-15	NITRATE (AS NO3)	26	MG/L
BCVWD - 16	12-May-15	NITRATE (AS NO3)	26	MG/L
BCVWD - 16	08-Jun-15	NITRATE (AS NO3)	25	MG/L
BCVWD - 16	29-Jul-15	NITRATE (AS NO3)	27	MG/L
BCVWD - 16	31-Aug-15	NITRATE (AS NO3)	25	MG/L
BCVWD - 16	29-Sep-15	NITRATE (AS NO3)	28	MG/L
BCVWD - 16	26-Oct-15	NITRATE (AS NO3)	27	MG/L
BCVWD - 16	03-Nov-15	NITRATE (AS NO3)	27	MG/L
BCVWD - 16	02-Dec-15	NITRATE (AS NO3)	26	MG/L
BCVWD - 16	08-Dec-16	NITRITE (AS N)	< 0.1	MG/L
BCVWD - 16	08-Dec-16	POTASSIUM	1.2	MG/L
BCVWD - 16	08-Dec-16	SODIUM	38	MG/L
BCVWD - 16	22-Nov-17	SPECIFIC CONDUCTANCE	550	US
BCVWD - 16	08-Dec-16	SULFATE	46	MG/L
BCVWD - 16	08-Dec-16	TETRACHLOROETHYLENE	< 0.5	UG/L
BCVWD - 16	08-Dec-16	TOTAL DISSOLVED SOLIDS	330	MG/L
BCVWD - 16	08-Dec-16	TRICHLOROETHYLENE	< 0.5	UG/L
BCVWD - 16	08-Dec-16	TURBIDITY, LABORATORY	< 0.1	NTU
BCVWD - 16	08-Dec-16	ZINC	< 50	UG/L
BCVWD - 21	02-Dec-15	ALKALINITY (TOTAL) AS CaCO3	180	MG/L
BCVWD - 21	18-Dec-18	ALKALINITY (TOTAL) AS CaCO3	180	MG/L
BCVWD - 21	02-Dec-15	ALUMINUM	< 50	UG/L
BCVWD - 21	18-Dec-18	ALUMINUM	< 50	UG/L
BCVWD - 21	02-Dec-15	ARSENIC	< 2	UG/L
BCVWD - 21	18-Dec-18	ARSENIC	< 2	UG/L
BCVWD - 21	02-Dec-15	BICARBONATE ALKALINITY	220	MG/L
BCVWD - 21	18-Dec-18	BICARBONATE ALKALINITY	180	MG/L
BCVWD - 21	02-Dec-15	CALCIUM	49	MG/L
BCVWD - 21	18-Dec-18	CALCIUM	48	MG/L
BCVWD - 21	02-Dec-15	CARBONATE ALKALINITY	< 3	MG/L
BCVWD - 21	18-Dec-18	CARBONATE ALKALINITY	< 5	MG/L
BCVWD - 21	02-Dec-15	CHLORIDE	14	MG/L
BCVWD - 21	18-Dec-18	CHLORIDE	24	MG/L
BCVWD - 21	02-Dec-15	CHROMIUM (TOTAL)	6.4	UG/L
BCVWD - 21	18-Dec-18	CHROMIUM (TOTAL)	< 10	UG/L
BCVWD - 21	14-Oct-14	CHROMIUM, HEXAVALENT	6.8	UG/L
BCVWD - 21	09-Nov-15	CHROMIUM, HEXAVALENT	6.7	UG/L
BCVWD - 21	02-Dec-15	COPPER	< 50	UG/L
BCVWD - 21	18-Dec-18	COPPER	< 50	UG/L
BCVWD - 21	02-Dec-15	FLUORIDE (F) (NATURAL-SOURCE)	0.5	MG/L
BCVWD - 21	18-Dec-18	FLUORIDE (F) (NATURAL-SOURCE)	0.45	MG/L

Well Name	Date	Analyte	Concent.	Unit
Banning - C02A	18-Mar-14	ALKALINITY (TOTAL) AS CaCO3	160	MG/L
BCVWD - 21	02-Dec-15	HARDNESS (TOTAL) AS CaCO3	200	MG/L
BCVWD - 21	18-Dec-18	HARDNESS (TOTAL) AS CaCO3	190	MG/L
BCVWD - 21	02-Dec-15	HYDROXIDE ALKALINITY	< 3	MG/L
BCVWD - 21	18-Dec-18	HYDROXIDE ALKALINITY	< 5	MG/L
BCVWD - 21	02-Dec-15	IRON	< 100	UG/L
BCVWD - 21	18-Dec-18	IRON	< 100	UG/L
BCVWD - 21	02-Dec-15	LEAD	< 5	UG/L
BCVWD - 21	18-Dec-18	LEAD	< 5	UG/L
BCVWD - 21	02-Dec-15	MAGNESIUM	18	MG/L
BCVWD - 21	18-Dec-18	MAGNESIUM	17	MG/L
BCVWD - 21	02-Dec-15	MANGANESE	< 20	UG/L
BCVWD - 21	18-Dec-18	MANGANESE	< 20	UG/L
BCVWD - 21	14-Dec-15	NITRATE (AS N)	3.3	MG/L
BCVWD - 21	11-Jan-16	NITRATE (AS N)	3.2	MG/L
BCVWD - 21	12-Apr-16	NITRATE (AS N)	3.4	MG/L
BCVWD - 21	25-May-16	NITRATE (AS N)	3.2	MG/L
BCVWD - 21	14-Jun-16	NITRATE (AS N)	3.1	MG/L
BCVWD - 21	20-Sep-16	NITRATE (AS N)	2.8	MG/L
BCVWD - 21	01-Dec-16	NITRATE (AS N)	3.4	MG/L
BCVWD - 21	31-Jan-17	NITRATE (AS N)	3.6	MG/L
BCVWD - 21	23-May-17	NITRATE (AS N)	3.4	MG/L
BCVWD - 21	19-Jun-17	NITRATE (AS N)	3.4	MG/L
BCVWD - 21	18-Jul-17	NITRATE (AS N)	3.4	MG/L
BCVWD - 21	14-Aug-17	NITRATE (AS N)	3.2	MG/L
BCVWD - 21	11-Sep-17	NITRATE (AS N)	3.2	MG/L
BCVWD - 21	23-Oct-17	NITRATE (AS N)	3.1	MG/L
BCVWD - 21	22-Nov-17	NITRATE (AS N)	3.2	MG/L
BCVWD - 21	11-Dec-17	NITRATE (AS N)	3.2	MG/L
BCVWD - 21	08-Jan-18	NITRATE (AS N)	3.4	MG/L
BCVWD - 21	27-Feb-18	NITRATE (AS N)	3.2	MG/L
BCVWD - 21	18-Dec-18	NITRATE (AS N)	3	MG/L
BCVWD - 21	25-Feb-14	NITRATE (AS NO3)	15	MG/L
BCVWD - 21	18-Mar-14	NITRATE (AS NO3)	16	MG/L
BCVWD - 21	15-Apr-14	NITRATE (AS NO3)	16	MG/L
BCVWD - 21	12-May-14	NITRATE (AS NO3)	16	MG/L
BCVWD - 21	09-Jun-14	NITRATE (AS NO3)	16	MG/L
BCVWD - 21	22-Jul-14	NITRATE (AS NO3)	16	MG/L
BCVWD - 21	12-Aug-14	NITRATE (AS NO3)	14	MG/L
BCVWD - 21	17-Sep-14	NITRATE (AS NO3)	15	MG/L
BCVWD - 21	07-Oct-14	NITRATE (AS NO3)	15	MG/L
BCVWD - 21	08-Dec-14	NITRATE (AS NO3)	16	MG/L
BCVWD - 21	21-Jan-15	NITRATE (AS NO3)	16	MG/L
BCVWD - 21	18-Feb-15	NITRATE (AS NO3)	15	MG/L
BCVWD - 21	17-Mar-15	NITRATE (AS NO3)	16	MG/L

Well Name	Date	Analyte	Concent.	Unit
Banning - C02A	18-Mar-14	ALKALINITY (TOTAL) AS CaCO3	160	MG/L
BCVWD - 21	21-Apr-15	NITRATE (AS NO3)	15	MG/L
BCVWD - 21	12-May-15	NITRATE (AS NO3)	15	MG/L
BCVWD - 21	08-Jun-15	NITRATE (AS NO3)	14	MG/L
BCVWD - 21	29-Jul-15	NITRATE (AS NO3)	15	MG/L
BCVWD - 21	31-Aug-15	NITRATE (AS NO3)	14	MG/L
BCVWD - 21	29-Sep-15	NITRATE (AS NO3)	15	MG/L
BCVWD - 21	26-Oct-15	NITRATE (AS NO3)	14	MG/L
BCVWD - 21	03-Nov-15	NITRATE (AS NO3)	15	MG/L
BCVWD - 21	02-Dec-15	NITRATE (AS NO3)	14	MG/L
BCVWD - 21	02-Dec-15	NITRITE (AS N)	< 100	MG/L
BCVWD - 21	01-Dec-16	NITRITE (AS N)	< 0.1	MG/L
BCVWD - 21	18-Dec-18	NITRITE (AS N)	< 0.4	MG/L
BCVWD - 21	02-Dec-15	POTASSIUM	1.6	MG/L
BCVWD - 21	18-Dec-18	POTASSIUM	1.6	MG/L
BCVWD - 21	02-Dec-15	SODIUM	25	MG/L
BCVWD - 21	18-Dec-18	SODIUM	24	MG/L
BCVWD - 21	02-Dec-15	SPECIFIC CONDUCTANCE	450	US
BCVWD - 21	18-Dec-18	SPECIFIC CONDUCTANCE	480	US
BCVWD - 21	02-Dec-15	SULFATE	26	MG/L
BCVWD - 21	18-Dec-18	SULFATE	28	MG/L
BCVWD - 21	01-Dec-16	TETRACHLOROETHYLENE	< 0.5	UG/L
BCVWD - 21	02-Dec-15	TOTAL DISSOLVED SOLIDS	290	MG/L
BCVWD - 21	18-Dec-18	TOTAL DISSOLVED SOLIDS	270	MG/L
BCVWD - 21	01-Dec-16	TRICHLOROETHYLENE	< 0.5	UG/L
BCVWD - 21	02-Dec-15	TURBIDITY, LABORATORY	< 0.1	NTU
BCVWD - 21	18-Dec-18	TURBIDITY, LABORATORY	< 0.1	NTU
BCVWD - 21	02-Dec-15	ZINC	< 50	UG/L
BCVWD - 21	18-Dec-18	ZINC	< 50	UG/L
BCVWD - 22	01-Dec-16	ALKALINITY (TOTAL) AS CaCO3	180	MG/L
BCVWD - 22	01-Dec-16	ALUMINUM	< 50	UG/L
BCVWD - 22	01-Dec-16	ARSENIC	< 2	UG/L
BCVWD - 22	01-Dec-16	BICARBONATE ALKALINITY	210	MG/L
BCVWD - 22	01-Dec-16	CALCIUM	40	MG/L
BCVWD - 22	01-Dec-16	CARBONATE ALKALINITY	< 3	MG/L
BCVWD - 22	01-Dec-16	CHLORIDE	7.6	MG/L
BCVWD - 22	01-Dec-16	CHROMIUM (TOTAL)	7.9	UG/L
BCVWD - 22	14-Oct-14	CHROMIUM, HEXAVALENT	7.1	UG/L
BCVWD - 22	09-Nov-15	CHROMIUM, HEXAVALENT	7.2	UG/L
BCVWD - 22	01-Dec-16	COPPER	< 50	UG/L
BCVWD - 22	01-Dec-16	FLUORIDE (F) (NATURAL-SOURCE)	0.4	MG/L
BCVWD - 22	01-Dec-16	HARDNESS (TOTAL) AS CaCO3	170	MG/L
BCVWD - 22	01-Dec-16	HYDROXIDE ALKALINITY	< 3	MG/L
BCVWD - 22	01-Dec-16	IRON	< 100	UG/L
BCVWD - 22	01-Dec-16	LEAD	< 5	UG/L

Well Name	Date	Analyte		Concent.	Unit
Banning - C02A	18-Mar-14	ALKALINITY (TOTAL) AS CaCO3		160	MG/L
BCVWD - 22	01-Dec-16	MAGNESIUM		17	MG/L
BCVWD - 22	01-Dec-16	MANGANESE	<	20	UG/L
BCVWD - 22	01-Dec-16	NITRATE (AS N)		3	MG/L
BCVWD - 22	14-Dec-17	NITRATE (AS N)		0.89	MG/L
BCVWD - 22	03-Dec-15	NITRATE (AS NO3)		3.7	MG/L
BCVWD - 22	01-Dec-16	NITRITE (AS N)	<	0.1	MG/L
BCVWD - 22	01-Dec-16	POTASSIUM		1.4	MG/L
BCVWD - 22	01-Dec-16	SODIUM		18	MG/L
BCVWD - 22	01-Dec-16	SPECIFIC CONDUCTANCE		430	US
BCVWD - 22	01-Dec-16	SULFATE		24	MG/L
BCVWD - 22	01-Dec-16	TETRACHLOROETHYLENE	<	0.5	UG/L
BCVWD - 22	01-Dec-16	TOTAL DISSOLVED SOLIDS		260	MG/L
BCVWD - 22	01-Dec-16	TRICHLOROETHYLENE	<	0.5	UG/L
BCVWD - 22	01-Dec-16	TURBIDITY, LABORATORY	<	0.1	NTU
BCVWD - 22	01-Dec-16	ZINC	<	50	UG/L
BCVWD - 23	02-Dec-15	ALKALINITY (TOTAL) AS CaCO3		170	MG/L
BCVWD - 23	03-Dec-15	ALKALINITY (TOTAL) AS CaCO3		160	MG/L
BCVWD - 23	18-Dec-18	ALKALINITY (TOTAL) AS CaCO3		170	MG/L
BCVWD - 23	02-Dec-15	ALUMINUM	<	50	UG/L
BCVWD - 23	03-Dec-15	ALUMINUM	<	50	UG/L
BCVWD - 23	18-Dec-18	ALUMINUM	<	50	UG/L
BCVWD - 23	02-Dec-15	ARSENIC	<	2	UG/L
BCVWD - 23	03-Dec-15	ARSENIC	<	2	UG/L
BCVWD - 23	18-Dec-18	ARSENIC	<	2	UG/L
BCVWD - 23	02-Dec-15	BICARBONATE ALKALINITY		210	MG/L
BCVWD - 23	03-Dec-15	BICARBONATE ALKALINITY		190	MG/L
BCVWD - 23	18-Dec-18	BICARBONATE ALKALINITY		170	MG/L
BCVWD - 23	02-Dec-15	CALCIUM		46	MG/L
BCVWD - 23	03-Dec-15	CALCIUM		42	MG/L
BCVWD - 23	18-Dec-18	CALCIUM		47	MG/L
BCVWD - 23	02-Dec-15	CARBONATE ALKALINITY	<	3	MG/L
BCVWD - 23	03-Dec-15	CARBONATE ALKALINITY	<	3	MG/L
BCVWD - 23	18-Dec-18	CARBONATE ALKALINITY	<	5	MG/L
BCVWD - 23	02-Dec-15	CHLORIDE		9.9	MG/L
BCVWD - 23	03-Dec-15	CHLORIDE		15	MG/L
BCVWD - 23	18-Dec-18	CHLORIDE		21	MG/L
BCVWD - 23	02-Dec-15	CHROMIUM (TOTAL)		6.3	UG/L
BCVWD - 23	03-Dec-15	CHROMIUM (TOTAL)		8.4	UG/L
BCVWD - 23	18-Dec-18	CHROMIUM (TOTAL)	<	10	UG/L
BCVWD - 23	14-Oct-14	CHROMIUM, HEXAVALENT		5.4	UG/L
BCVWD - 23	04-Nov-15	CHROMIUM, HEXAVALENT		6.7	UG/L
BCVWD - 23	02-Dec-15	COPPER	<	50	UG/L
BCVWD - 23	03-Dec-15	COPPER	<	50	UG/L
BCVWD - 23	18-Dec-18	COPPER	<	50	UG/L

Well Name	Date	Analyte	Concent.	Unit
Banning - C02A	18-Mar-14	ALKALINITY (TOTAL) AS CaCO3	160	MG/L
BCVWD - 23	02-Dec-15	DIBROMOCHLOROPROPANE (DBCP)	0.028	UG/L
BCVWD - 23	03-Dec-15	DIBROMOCHLOROPROPANE (DBCP)	< 0.01	UG/L
BCVWD - 23	18-Dec-18	DIBROMOCHLOROPROPANE (DBCP)	0.044	UG/L
BCVWD - 23	02-Dec-15	FLUORIDE (F) (NATURAL-SOURCE)	0.4	MG/L
BCVWD - 23	03-Dec-15	FLUORIDE (F) (NATURAL-SOURCE)	0.3	MG/L
BCVWD - 23	18-Dec-18	FLUORIDE (F) (NATURAL-SOURCE)	0.37	MG/L
BCVWD - 23	02-Dec-15	HARDNESS (TOTAL) AS CaCO3	170	MG/L
BCVWD - 23	03-Dec-15	HARDNESS (TOTAL) AS CaCO3	170	MG/L
BCVWD - 23	18-Dec-18	HARDNESS (TOTAL) AS CaCO3	180	MG/L
BCVWD - 23	02-Dec-15	HYDROXIDE ALKALINITY	< 3	MG/L
BCVWD - 23	03-Dec-15	HYDROXIDE ALKALINITY	< 3	MG/L
BCVWD - 23	18-Dec-18	HYDROXIDE ALKALINITY	< 5	MG/L
BCVWD - 23	02-Dec-15	IRON	< 100	UG/L
BCVWD - 23	03-Dec-15	IRON	< 100	UG/L
BCVWD - 23	18-Dec-18	IRON	< 100	UG/L
BCVWD - 23	02-Dec-15	LEAD	< 5	UG/L
BCVWD - 23	03-Dec-15	LEAD	< 5	UG/L
BCVWD - 23	18-Dec-18	LEAD	< 5	UG/L
BCVWD - 23	02-Dec-15	MAGNESIUM	14	MG/L
BCVWD - 23	03-Dec-15	MAGNESIUM	15	MG/L
BCVWD - 23	18-Dec-18	MAGNESIUM	15	MG/L
BCVWD - 23	02-Dec-15	MANGANESE	< 20	UG/L
BCVWD - 23	03-Dec-15	MANGANESE	< 20	UG/L
BCVWD - 23	18-Dec-18	MANGANESE	< 20	UG/L
BCVWD - 23	08-Dec-16	NITRATE (AS N)	2.8	MG/L
BCVWD - 23	23-May-17	NITRATE (AS N)	2.4	MG/L
BCVWD - 23	19-Jun-17	NITRATE (AS N)	2.4	MG/L
BCVWD - 23	18-Jul-17	NITRATE (AS N)	2.3	MG/L
BCVWD - 23	14-Aug-17	NITRATE (AS N)	2.4	MG/L
BCVWD - 23	11-Sep-17	NITRATE (AS N)	2.4	MG/L
BCVWD - 23	22-Nov-17	NITRATE (AS N)	2.9	MG/L
BCVWD - 23	11-Dec-17	NITRATE (AS N)	2.4	MG/L
BCVWD - 23	08-Jan-18	NITRATE (AS N)	2.4	MG/L
BCVWD - 23	27-Feb-18	NITRATE (AS N)	2.3	MG/L
BCVWD - 23	18-Dec-18	NITRATE (AS N)	2.7	MG/L
BCVWD - 23	24-Jun-14	NITRATE (AS NO3)	15	MG/L
BCVWD - 23	02-Dec-15	NITRATE (AS NO3)	10	MG/L
BCVWD - 23	03-Dec-15	NITRATE (AS NO3)	10	MG/L
BCVWD - 23	02-Dec-15	NITRITE (AS N)	< 100	MG/L
BCVWD - 23	03-Dec-15	NITRITE (AS N)	< 100	MG/L
BCVWD - 23	18-Dec-18	NITRITE (AS N)	< 0.4	MG/L
BCVWD - 23	02-Dec-15	POTASSIUM	1.6	MG/L
BCVWD - 23	03-Dec-15	POTASSIUM	1.7	MG/L
BCVWD - 23	18-Dec-18	POTASSIUM	1.5	MG/L

Well Name	Date	Analyte	Concent.	Unit
Banning - C02A	18-Mar-14	ALKALINITY (TOTAL) AS CaCO ₃	160	MG/L
BCVWD - 23	02-Dec-15	SODIUM	24	MG/L
BCVWD - 23	03-Dec-15	SODIUM	19	MG/L
BCVWD - 23	18-Dec-18	SODIUM	21	MG/L
BCVWD - 23	02-Dec-15	SPECIFIC CONDUCTANCE	410	US
BCVWD - 23	03-Dec-15	SPECIFIC CONDUCTANCE	390	US
BCVWD - 23	18-Dec-18	SPECIFIC CONDUCTANCE	440	US
BCVWD - 23	02-Dec-15	SULFATE	16	MG/L
BCVWD - 23	03-Dec-15	SULFATE	13	MG/L
BCVWD - 23	18-Dec-18	SULFATE	19	MG/L
BCVWD - 23	02-Dec-15	TETRACHLOROETHYLENE	< 0.5	UG/L
BCVWD - 23	03-Dec-15	TETRACHLOROETHYLENE	< 0.5	UG/L
BCVWD - 23	18-Dec-18	TETRACHLOROETHYLENE	< 0.5	UG/L
BCVWD - 23	02-Dec-15	TOTAL DISSOLVED SOLIDS	180	MG/L
BCVWD - 23	03-Dec-15	TOTAL DISSOLVED SOLIDS	250	MG/L
BCVWD - 23	18-Dec-18	TOTAL DISSOLVED SOLIDS	260	MG/L
BCVWD - 23	02-Dec-15	TRICHLOROETHYLENE	< 0.5	UG/L
BCVWD - 23	03-Dec-15	TRICHLOROETHYLENE	< 0.5	UG/L
BCVWD - 23	18-Dec-18	TRICHLOROETHYLENE	< 0.5	UG/L
BCVWD - 23	02-Dec-15	TURBIDITY, LABORATORY	< 0.1	NTU
BCVWD - 23	03-Dec-15	TURBIDITY, LABORATORY	< 0.1	NTU
BCVWD - 23	18-Dec-18	TURBIDITY, LABORATORY	< 0.1	NTU
BCVWD - 23	02-Dec-15	ZINC	< 50	UG/L
BCVWD - 23	03-Dec-15	ZINC	< 50	UG/L
BCVWD - 23	18-Dec-18	ZINC	< 50	UG/L
BCVWD - 24	01-Dec-16	ALKALINITY (TOTAL) AS CaCO ₃	160	MG/L
BCVWD - 24	01-Dec-16	ALUMINUM	< 50	UG/L
BCVWD - 24	01-Dec-16	ARSENIC	< 2	UG/L
BCVWD - 24	18-Dec-18	ARSENIC	< 2	UG/L
BCVWD - 24	01-Dec-16	BICARBONATE ALKALINITY	190	MG/L
BCVWD - 24	01-Dec-16	CALCIUM	37	MG/L
BCVWD - 24	01-Dec-16	CARBONATE ALKALINITY	< 3	MG/L
BCVWD - 24	01-Dec-16	CHLORIDE	5.6	MG/L
BCVWD - 24	01-Dec-16	CHROMIUM (TOTAL)	7.2	UG/L
BCVWD - 24	14-Oct-14	CHROMIUM, HEXAVALENT	7.5	UG/L
BCVWD - 24	09-Nov-15	CHROMIUM, HEXAVALENT	7.7	UG/L
BCVWD - 24	01-Dec-16	COPPER	< 50	UG/L
BCVWD - 24	01-Dec-16	FLUORIDE (F) (NATURAL-SOURCE)	0.5	MG/L
BCVWD - 24	01-Dec-16	HARDNESS (TOTAL) AS CaCO ₃	140	MG/L
BCVWD - 24	01-Dec-16	HYDROXIDE ALKALINITY	< 3	MG/L
BCVWD - 24	01-Dec-16	IRON	< 100	UG/L
BCVWD - 24	01-Dec-16	LEAD	< 5	UG/L
BCVWD - 24	01-Dec-16	MAGNESIUM	12	MG/L
BCVWD - 24	01-Dec-16	MANGANESE	< 20	UG/L
BCVWD - 24	01-Dec-16	NITRATE (AS N)	1.7	MG/L

Well Name	Date	Analyte	Concent.	Unit
Banning - C02A	18-Mar-14	ALKALINITY (TOTAL) AS CaCO ₃	160	MG/L
BCVWD - 24	22-Nov-17	NITRATE (AS N)	1.7	MG/L
BCVWD - 24	18-Dec-18	NITRATE (AS N)	1.8	MG/L
BCVWD - 24	24-Jun-14	NITRATE (AS NO ₃)	5.8	MG/L
BCVWD - 24	03-Dec-15	NITRATE (AS NO ₃)	6.4	MG/L
BCVWD - 24	01-Dec-16	NITRITE (AS N)	< 0.1	MG/L
BCVWD - 24	01-Dec-16	POTASSIUM	1.4	MG/L
BCVWD - 24	01-Dec-16	SODIUM	19	MG/L
BCVWD - 24	01-Dec-16	SPECIFIC CONDUCTANCE	360	US
BCVWD - 24	01-Dec-16	SULFATE	11	MG/L
BCVWD - 24	01-Dec-16	TETRACHLOROETHYLENE	< 0.5	UG/L
BCVWD - 24	01-Dec-16	TOTAL DISSOLVED SOLIDS	210	MG/L
BCVWD - 24	01-Dec-16	TRICHLOROETHYLENE	< 0.5	UG/L
BCVWD - 24	01-Dec-16	TURBIDITY, LABORATORY	< 0.1	NTU
BCVWD - 24	01-Dec-16	ZINC	< 50	UG/L
BCVWD - 25	18-Dec-18	ALKALINITY (TOTAL) AS CaCO ₃	180	MG/L
BCVWD - 25	18-Dec-18	ALUMINUM	< 50	UG/L
BCVWD - 25	18-Dec-18	ARSENIC	< 2	UG/L
BCVWD - 25	18-Dec-18	BICARBONATE ALKALINITY	180	MG/L
BCVWD - 25	18-Dec-18	CALCIUM	43	MG/L
BCVWD - 25	18-Dec-18	CARBONATE ALKALINITY	< 5	MG/L
BCVWD - 25	18-Dec-18	CHLORIDE	9.7	MG/L
BCVWD - 25	18-Dec-18	CHROMIUM (TOTAL)	12	UG/L
BCVWD - 25	14-Oct-14	CHROMIUM, HEXAVALENT	11	UG/L
BCVWD - 25	31-Mar-15	CHROMIUM, HEXAVALENT	8.3	UG/L
BCVWD - 25	07-Aug-15	CHROMIUM, HEXAVALENT	11	UG/L
BCVWD - 25	27-Aug-15	CHROMIUM, HEXAVALENT	11	UG/L
BCVWD - 25	18-Dec-18	COPPER	< 50	UG/L
BCVWD - 25	18-Dec-18	DIBROMOCHLOROPROPANE (DBCP)	< 0.01	UG/L
BCVWD - 25	18-Dec-18	FLUORIDE (F) (NATURAL-SOURCE)	0.23	MG/L
BCVWD - 25	18-Dec-18	HARDNESS (TOTAL) AS CaCO ₃	160	MG/L
BCVWD - 25	18-Dec-18	HYDROXIDE ALKALINITY	< 5	MG/L
BCVWD - 25	18-Dec-18	IRON	< 100	UG/L
BCVWD - 25	18-Dec-18	LEAD	< 5	UG/L
BCVWD - 25	18-Dec-18	MAGNESIUM	13	MG/L
BCVWD - 25	18-Dec-18	MANGANESE	< 20	UG/L
BCVWD - 25	15-May-17	NITRATE (AS N)	1.6	MG/L
BCVWD - 25	23-Oct-17	NITRATE (AS N)	1.1	MG/L
BCVWD - 25	18-Dec-18	NITRATE (AS N)	1.1	MG/L
BCVWD - 25	18-Dec-18	NITRITE (AS N)	< 0.4	MG/L
BCVWD - 25	18-Dec-18	POTASSIUM	1.5	MG/L
BCVWD - 25	18-Dec-18	SODIUM	22	MG/L
BCVWD - 25	18-Dec-18	SPECIFIC CONDUCTANCE	400	US
BCVWD - 25	18-Dec-18	SULFATE	13	MG/L
BCVWD - 25	18-Dec-18	TETRACHLOROETHYLENE	< 0.5	UG/L

Well Name	Date	Analyte	Concent.	Unit
Banning - C02A	18-Mar-14	ALKALINITY (TOTAL) AS CaCO ₃	160	MG/L
BCVWD - 25	18-Dec-18	TOTAL DISSOLVED SOLIDS	230	MG/L
BCVWD - 25	18-Dec-18	TRICHLOROETHYLENE	< 0.5	UG/L
BCVWD - 25	18-Dec-18	TURBIDITY, LABORATORY	< 0.1	NTU
BCVWD - 25	18-Dec-18	ZINC	< 50	UG/L
BCVWD - 26	18-Dec-18	ALKALINITY (TOTAL) AS CaCO ₃	160	MG/L
BCVWD - 26	18-Dec-18	ALUMINUM	< 50	UG/L
BCVWD - 26	18-Dec-18	ARSENIC	< 2	UG/L
BCVWD - 26	18-Dec-18	BICARBONATE ALKALINITY	160	MG/L
BCVWD - 26	18-Dec-18	CALCIUM	33	MG/L
BCVWD - 26	18-Dec-18	CARBONATE ALKALINITY	< 5	MG/L
BCVWD - 26	18-Dec-18	CHLORIDE	8.8	MG/L
BCVWD - 26	18-Dec-18	CHROMIUM (TOTAL)	16	UG/L
BCVWD - 26	14-Oct-14	CHROMIUM, HEXAVALENT	14	UG/L
BCVWD - 26	31-Mar-15	CHROMIUM, HEXAVALENT	13	UG/L
BCVWD - 26	18-Dec-18	COPPER	< 50	UG/L
BCVWD - 26	18-Dec-18	DIBROMOCHLOROPROPANE (DBCP)	< 0.01	UG/L
BCVWD - 26	18-Dec-18	FLUORIDE (F) (NATURAL-SOURCE)	0.28	MG/L
BCVWD - 26	18-Dec-18	HARDNESS (TOTAL) AS CaCO ₃	120	MG/L
BCVWD - 26	18-Dec-18	HYDROXIDE ALKALINITY	< 5	MG/L
BCVWD - 26	18-Dec-18	IRON	< 100	UG/L
BCVWD - 26	18-Dec-18	LEAD	< 5	UG/L
BCVWD - 26	18-Dec-18	MAGNESIUM	9.2	MG/L
BCVWD - 26	18-Dec-18	MANGANESE	< 20	UG/L
BCVWD - 26	18-Dec-18	NITRATE (AS N)	0.89	MG/L
BCVWD - 26	18-Dec-18	NITRITE (AS N)	< 0.4	MG/L
BCVWD - 26	18-Dec-18	POTASSIUM	1.5	MG/L
BCVWD - 26	18-Dec-18	SODIUM	26	MG/L
BCVWD - 26	18-Dec-18	SPECIFIC CONDUCTANCE	340	US
BCVWD - 26	18-Dec-18	SULFATE	10	MG/L
BCVWD - 26	18-Dec-18	TETRACHLOROETHYLENE	< 0.5	UG/L
BCVWD - 26	18-Dec-18	TOTAL DISSOLVED SOLIDS	180	MG/L
BCVWD - 26	18-Dec-18	TRICHLOROETHYLENE	< 0.5	UG/L
BCVWD - 26	18-Dec-18	TURBIDITY, LABORATORY	< 0.1	NTU
BCVWD - 26	18-Dec-18	ZINC	< 50	UG/L
BCVWD - 29	08-Dec-16	ALKALINITY (TOTAL) AS CaCO ₃	160	MG/L
BCVWD - 29	18-Dec-18	ALKALINITY (TOTAL) AS CaCO ₃	130	MG/L
BCVWD - 29	08-Dec-16	ALUMINUM	< 50	UG/L
BCVWD - 29	18-Dec-18	ALUMINUM	< 50	UG/L
BCVWD - 29	08-Dec-16	ARSENIC	< 2	UG/L
BCVWD - 29	18-Dec-18	ARSENIC	< 2	UG/L
BCVWD - 29	08-Dec-16	BICARBONATE ALKALINITY	190	MG/L
BCVWD - 29	18-Dec-18	BICARBONATE ALKALINITY	130	MG/L
BCVWD - 29	08-Dec-16	CALCIUM	42	MG/L
BCVWD - 29	18-Dec-18	CALCIUM	39	MG/L

Well Name	Date	Analyte	Concent.	Unit
Banning - C02A	18-Mar-14	ALKALINITY (TOTAL) AS CaCO3	160	MG/L
BCVWD - 29	08-Dec-16	CARBONATE ALKALINITY	< 3	MG/L
BCVWD - 29	18-Dec-18	CARBONATE ALKALINITY	< 5	MG/L
BCVWD - 29	08-Dec-16	CHLORIDE	13	MG/L
BCVWD - 29	18-Dec-18	CHLORIDE	11	MG/L
BCVWD - 29	08-Dec-16	CHROMIUM (TOTAL)	7.6	UG/L
BCVWD - 29	18-Dec-18	CHROMIUM (TOTAL)	< 10	UG/L
BCVWD - 29	14-Oct-14	CHROMIUM, HEXAVALENT	8.1	UG/L
BCVWD - 29	14-Dec-17	CHROMIUM, HEXAVALENT	8	UG/L
BCVWD - 29	08-Dec-16	COPPER	< 50	UG/L
BCVWD - 29	18-Dec-18	COPPER	< 50	UG/L
BCVWD - 29	08-Dec-16	DIBROMOCHLOROPROPANE (DBCP)	< 0.01	UG/L
BCVWD - 29	18-Dec-18	DIBROMOCHLOROPROPANE (DBCP)	< 0.01	UG/L
BCVWD - 29	08-Dec-16	FLUORIDE (F) (NATURAL-SOURCE)	0.4	MG/L
BCVWD - 29	18-Dec-18	FLUORIDE (F) (NATURAL-SOURCE)	0.3	MG/L
BCVWD - 29	08-Dec-16	HARDNESS (TOTAL) AS CaCO3	170	MG/L
BCVWD - 29	18-Dec-18	HARDNESS (TOTAL) AS CaCO3	150	MG/L
BCVWD - 29	08-Dec-16	HYDROXIDE ALKALINITY	< 3	MG/L
BCVWD - 29	18-Dec-18	HYDROXIDE ALKALINITY	< 5	MG/L
BCVWD - 29	08-Dec-16	IRON	< 100	UG/L
BCVWD - 29	18-Dec-18	IRON	< 100	UG/L
BCVWD - 29	08-Dec-16	LEAD	< 5	UG/L
BCVWD - 29	18-Dec-18	LEAD	< 5	UG/L
BCVWD - 29	08-Dec-16	MAGNESIUM	15	MG/L
BCVWD - 29	18-Dec-18	MAGNESIUM	13	MG/L
BCVWD - 29	08-Dec-16	MANGANESE	< 20	UG/L
BCVWD - 29	18-Dec-18	MANGANESE	< 20	UG/L
BCVWD - 29	08-Dec-16	NITRATE (AS N)	2.3	MG/L
BCVWD - 29	14-Dec-17	NITRATE (AS N)	2.3	MG/L
BCVWD - 29	18-Dec-18	NITRATE (AS N)	1.8	MG/L
BCVWD - 29	08-Dec-16	NITRITE (AS N)	< 0.1	MG/L
BCVWD - 29	18-Dec-18	NITRITE (AS N)	< 0.4	MG/L
BCVWD - 29	08-Dec-16	POTASSIUM	1.5	MG/L
BCVWD - 29	18-Dec-18	POTASSIUM	1.6	MG/L
BCVWD - 29	08-Dec-16	SODIUM	19	MG/L
BCVWD - 29	18-Dec-18	SODIUM	19	MG/L
BCVWD - 29	14-Dec-17	SPECIFIC CONDUCTANCE	400	US
BCVWD - 29	18-Dec-18	SPECIFIC CONDUCTANCE	360	US
BCVWD - 29	08-Dec-16	SULFATE	11	MG/L
BCVWD - 29	18-Dec-18	SULFATE	11	MG/L
BCVWD - 29	08-Dec-16	TETRACHLOROETHYLENE	< 0.5	UG/L
BCVWD - 29	18-Dec-18	TETRACHLOROETHYLENE	< 0.5	UG/L
BCVWD - 29	08-Dec-16	TOTAL DISSOLVED SOLIDS	220	MG/L
BCVWD - 29	18-Dec-18	TOTAL DISSOLVED SOLIDS	210	MG/L
BCVWD - 29	08-Dec-16	TRICHLOROETHYLENE	< 0.5	UG/L

Well Name	Date	Analyte	Concent.	Unit
Banning - C02A	18-Mar-14	ALKALINITY (TOTAL) AS CaCO ₃	160	MG/L
BCVWD - 29	18-Dec-18	TRICHLOROETHYLENE	< 0.5	UG/L
BCVWD - 29	08-Dec-16	TURBIDITY, LABORATORY	< 0.1	NTU
BCVWD - 29	18-Dec-18	TURBIDITY, LABORATORY	0.14	NTU
BCVWD - 29	08-Dec-16	ZINC	< 50	UG/L
BCVWD - 29	18-Dec-18	ZINC	< 50	UG/L
Plantation - 01	18-Mar-14	ALKALINITY (TOTAL) AS CaCO ₃	200	MG/L
Plantation - 01	20-Mar-17	ALKALINITY (TOTAL) AS CaCO ₃	200	MG/L
Plantation - 01	18-Mar-14	ALUMINUM	< 50	UG/L
Plantation - 01	20-Mar-17	ALUMINUM	< 50	UG/L
Plantation - 01	18-Mar-14	ARSENIC	< 2	UG/L
Plantation - 01	20-Mar-17	ARSENIC	< 2	UG/L
Plantation - 01	18-Mar-14	BICARBONATE ALKALINITY	240	MG/L
Plantation - 01	20-Mar-17	BICARBONATE ALKALINITY	240	MG/L
Plantation - 01	18-Mar-14	CALCIUM	53	MG/L
Plantation - 01	20-Mar-17	CALCIUM	50	MG/L
Plantation - 01	18-Mar-14	CARBONATE ALKALINITY	< 3	MG/L
Plantation - 01	20-Mar-17	CARBONATE ALKALINITY	< 3	MG/L
Plantation - 01	18-Mar-14	CHLORIDE	14	MG/L
Plantation - 01	20-Mar-17	CHLORIDE	14	MG/L
Plantation - 01	18-Mar-14	CHROMIUM (TOTAL)	4.8	UG/L
Plantation - 01	20-Mar-17	CHROMIUM (TOTAL)	5.4	UG/L
Plantation - 01	23-Dec-14	CHROMIUM, HEXAVALENT	4.9	UG/L
Plantation - 01	18-Mar-14	COPPER	< 50	UG/L
Plantation - 01	20-Mar-17	COPPER	< 50	UG/L
Plantation - 01	18-Mar-14	DIBROMOCHLOROPROPANE (DBCP)	< 0.01	UG/L
Plantation - 01	18-Mar-14	FLUORIDE (F) (NATURAL-SOURCE)	0.5	MG/L
Plantation - 01	20-Mar-17	FLUORIDE (F) (NATURAL-SOURCE)	0.5	MG/L
Plantation - 01	18-Mar-14	HARDNESS (TOTAL) AS CaCO ₃	210	MG/L
Plantation - 01	20-Mar-17	HARDNESS (TOTAL) AS CaCO ₃	200	MG/L
Plantation - 01	18-Mar-14	HYDROXIDE ALKALINITY	< 3	MG/L
Plantation - 01	20-Mar-17	HYDROXIDE ALKALINITY	< 3	MG/L
Plantation - 01	18-Mar-14	IRON	< 100	UG/L
Plantation - 01	20-Mar-17	IRON	< 100	UG/L
Plantation - 01	18-Mar-14	LEAD	< 5	UG/L
Plantation - 01	20-Mar-17	LEAD	< 5	UG/L
Plantation - 01	18-Mar-14	MAGNESIUM	18	MG/L
Plantation - 01	20-Mar-17	MAGNESIUM	17	MG/L
Plantation - 01	18-Mar-14	MANGANESE	< 20	UG/L
Plantation - 01	20-Mar-17	MANGANESE	< 20	UG/L
Plantation - 01	23-Feb-16	NITRATE (AS N)	1.8	MG/L
Plantation - 01	21-Oct-16	NITRATE (AS N)	1.8	MG/L
Plantation - 01	20-Mar-17	NITRATE (AS N)	1.8	MG/L
Plantation - 01	23-Jul-18	NITRATE (AS N)	2	MG/L
Plantation - 01	18-Mar-14	NITRATE (AS NO ₃)	8.6	MG/L

Well Name	Date	Analyte		Concent.	Unit
Banning - C02A	18-Mar-14	ALKALINITY (TOTAL) AS CaCO3		160	MG/L
Plantation - 01	30-May-14	NITRATE (AS NO3)		1.8	MG/L
Plantation - 01	18-Mar-14	NITRITE (AS N)	<	100	MG/L
Plantation - 01	20-Mar-17	NITRITE (AS N)	<	0.1	MG/L
Plantation - 01	18-Mar-14	SODIUM		20	MG/L
Plantation - 01	20-Mar-17	SODIUM		20	MG/L
Plantation - 01	18-Mar-14	SPECIFIC CONDUCTANCE		440	US
Plantation - 01	20-Mar-17	SPECIFIC CONDUCTANCE		450	US
Plantation - 01	18-Mar-14	SULFATE		12	MG/L
Plantation - 01	20-Mar-17	SULFATE		10	MG/L
Plantation - 01	23-Feb-16	TETRACHLOROETHYLENE	<	0.5	UG/L
Plantation - 01	18-Mar-14	TOTAL DISSOLVED SOLIDS		250	MG/L
Plantation - 01	20-Mar-17	TOTAL DISSOLVED SOLIDS		270	MG/L
Plantation - 01	23-Feb-16	TRICHLOROETHYLENE	<	0.5	UG/L
Plantation - 01	18-Mar-14	TURBIDITY, LABORATORY		0.28	NTU
Plantation - 01	20-Mar-17	TURBIDITY, LABORATORY	<	0.1	NTU
Plantation - 01	18-Mar-14	ZINC	<	50	UG/L
Plantation - 01	20-Mar-17	ZINC	<	50	UG/L
RCMHP - 01	05-Feb-16	ALKALINITY (TOTAL) AS CaCO3		170	MG/L
RCMHP - 01	05-Feb-16	ALUMINUM	<	50	UG/L
RCMHP - 01	05-Feb-16	ARSENIC	<	2	UG/L
RCMHP - 01	05-Feb-16	BICARBONATE ALKALINITY		210	MG/L
RCMHP - 01	05-Feb-16	CALCIUM		44	MG/L
RCMHP - 01	05-Feb-16	CARBONATE ALKALINITY	<	3	MG/L
RCMHP - 01	05-Feb-16	CHLORIDE		14	MG/L
RCMHP - 01	05-Feb-16	CHROMIUM (TOTAL)		6	UG/L
RCMHP - 01	01-Aug-14	CHROMIUM, HEXAVALENT		5.3	UG/L
RCMHP - 01	05-Feb-16	CHROMIUM, HEXAVALENT		6	UG/L
RCMHP - 01	05-Feb-16	COPPER	<	50	UG/L
RCMHP - 01	05-Feb-16	FLUORIDE (F) (NATURAL-SOURCE)		0.5	MG/L
RCMHP - 01	05-Feb-16	HARDNESS (TOTAL) AS CaCO3		180	MG/L
RCMHP - 01	05-Feb-16	HYDROXIDE ALKALINITY	<	3	MG/L
RCMHP - 01	05-Feb-16	IRON	<	100	UG/L
RCMHP - 01	05-Feb-16	LEAD	<	5	UG/L
RCMHP - 01	05-Feb-16	MAGNESIUM		16	MG/L
RCMHP - 01	05-Feb-16	MANGANESE	<	20	UG/L
RCMHP - 01	05-Jan-16	NITRATE (AS N)		4.6	MG/L
RCMHP - 01	05-Feb-16	NITRATE (AS N)		4.1	MG/L
RCMHP - 01	16-Jan-17	NITRATE (AS N)		4.6	MG/L
RCMHP - 01	22-Jan-18	NITRATE (AS N)		2.9	MG/L
RCMHP - 01	03-Jan-14	NITRATE (AS NO3)		19	MG/L
RCMHP - 01	04-Apr-14	NITRATE (AS NO3)		28	MG/L
RCMHP - 01	02-Jan-15	NITRATE (AS NO3)		19	MG/L
RCMHP - 01	05-Feb-16	NITRITE (AS N)	<	0.1	MG/L
RCMHP - 01	05-Feb-16	SODIUM		22	MG/L

Well Name	Date	Analyte	Concent.	Unit
Banning - C02A	18-Mar-14	ALKALINITY (TOTAL) AS CaCO3	160	MG/L
RCMHP - 01	05-Feb-16	SPECIFIC CONDUCTANCE	440	US
RCMHP - 01	05-Feb-16	SULFATE	9	MG/L
RCMHP - 01	05-Feb-16	TETRACHLOROETHYLENE	< 0.5	UG/L
RCMHP - 01	05-Feb-16	TOTAL DISSOLVED SOLIDS	260	MG/L
RCMHP - 01	05-Feb-16	TRICHLOROETHYLENE	< 0.5	UG/L
RCMHP - 01	05-Feb-16	TURBIDITY, LABORATORY	0.11	NTU
RCMHP - 01	05-Feb-16	ZINC	< 50	UG/L
RCMHP - 02	05-Feb-16	ALKALINITY (TOTAL) AS CaCO3	170	MG/L
RCMHP - 02	05-Feb-16	ALUMINUM	< 50	UG/L
RCMHP - 02	05-Feb-16	ARSENIC	< 2	UG/L
RCMHP - 02	05-Feb-16	BICARBONATE ALKALINITY	210	MG/L
RCMHP - 02	05-Feb-16	CALCIUM	40	MG/L
RCMHP - 02	05-Feb-16	CARBONATE ALKALINITY	< 3	MG/L
RCMHP - 02	05-Feb-16	CHLORIDE	20	MG/L
RCMHP - 02	05-Feb-16	CHROMIUM (TOTAL)	13	UG/L
RCMHP - 02	01-Aug-14	CHROMIUM, HEXAVALENT	6.7	UG/L
RCMHP - 02	05-Feb-16	CHROMIUM, HEXAVALENT	12	UG/L
RCMHP - 02	29-Aug-16	CHROMIUM, HEXAVALENT	7	UG/L
RCMHP - 02	02-Dec-16	CHROMIUM, HEXAVALENT	8.3	UG/L
RCMHP - 02	16-Jan-17	CHROMIUM, HEXAVALENT	10	UG/L
RCMHP - 02	10-Jul-17	CHROMIUM, HEXAVALENT	11	UG/L
RCMHP - 02	16-Oct-17	CHROMIUM, HEXAVALENT	11	UG/L
RCMHP - 02	22-Jan-18	CHROMIUM, HEXAVALENT	9.1	UG/L
RCMHP - 02	18-Apr-18	CHROMIUM, HEXAVALENT	9.5	UG/L
RCMHP - 02	05-Jul-18	CHROMIUM, HEXAVALENT	10	UG/L
RCMHP - 02	01-Oct-18	CHROMIUM, HEXAVALENT	8.7	UG/L
RCMHP - 02	05-Feb-16	COPPER	< 50	UG/L
RCMHP - 02	05-Feb-16	FLUORIDE (F) (NATURAL-SOURCE)	0.7	MG/L
RCMHP - 02	05-Feb-16	HARDNESS (TOTAL) AS CaCO3	170	MG/L
RCMHP - 02	05-Feb-16	HYDROXIDE ALKALINITY	< 3	MG/L
RCMHP - 02	05-Feb-16	IRON	< 100	UG/L
RCMHP - 02	05-Feb-16	LEAD	< 5	UG/L
RCMHP - 02	05-Feb-16	MAGNESIUM	16	MG/L
RCMHP - 02	05-Feb-16	MANGANESE	< 20	UG/L
RCMHP - 02	05-Jan-16	NITRATE (AS N)	4.9	MG/L
RCMHP - 02	05-Feb-16	NITRATE (AS N)	4.9	MG/L
RCMHP - 02	01-Jul-16	NITRATE (AS N)	5.5	MG/L
RCMHP - 02	02-Dec-16	NITRATE (AS N)	6.2	MG/L
RCMHP - 02	16-Jan-17	NITRATE (AS N)	6.1	MG/L
RCMHP - 02	10-Jul-17	NITRATE (AS N)	6.6	MG/L
RCMHP - 02	16-Oct-17	NITRATE (AS N)	4.8	MG/L
RCMHP - 02	22-Jan-18	NITRATE (AS N)	4.6	MG/L
RCMHP - 02	18-Apr-18	NITRATE (AS N)	4.7	MG/L
RCMHP - 02	05-Jul-18	NITRATE (AS N)	5.9	MG/L

Well Name	Date	Analyte	Concent.	Unit
Banning - C02A	18-Mar-14	ALKALINITY (TOTAL) AS CaCO3	160	MG/L
RCMHP - 02	01-Oct-18	NITRATE (AS N)	6.2	MG/L
RCMHP - 02	03-Jan-14	NITRATE (AS NO3)	29	MG/L
RCMHP - 02	11-Jul-14	NITRATE (AS NO3)	28	MG/L
RCMHP - 02	10-Oct-14	NITRATE (AS NO3)	27	MG/L
RCMHP - 02	02-Jan-15	NITRATE (AS NO3)	25	MG/L
RCMHP - 02	03-Apr-15	NITRATE (AS NO3)	26	MG/L
RCMHP - 02	09-Jul-15	NITRATE (AS NO3)	23	MG/L
RCMHP - 02	16-Oct-15	NITRATE (AS NO3)	27	MG/L
RCMHP - 02	05-Feb-16	NITRITE (AS N)	< 0.1	MG/L
RCMHP - 02	01-Jul-16	NITRITE (AS N)	< 0.1	MG/L
RCMHP - 02	05-Feb-16	SODIUM	32	MG/L
RCMHP - 02	05-Feb-16	SPECIFIC CONDUCTANCE	470	US
RCMHP - 02	05-Feb-16	SULFATE	10	MG/L
RCMHP - 02	05-Feb-16	TETRACHLOROETHYLENE	< 0.5	UG/L
RCMHP - 02	05-Feb-16	TOTAL DISSOLVED SOLIDS	270	MG/L
RCMHP - 02	05-Feb-16	TRICHLOROETHYLENE	< 0.5	UG/L
RCMHP - 02	05-Feb-16	TURBIDITY, LABORATORY	0.33	NTU
RCMHP - 02	05-Feb-16	ZINC	< 50	UG/L
SMHOA - 01	09-Jul-15	ALKALINITY (TOTAL) AS CaCO3	200	MG/L
SMHOA - 01	10-Aug-18	ALKALINITY (TOTAL) AS CaCO3	230	MG/L
SMHOA - 01	09-Jul-15	ALUMINUM	< 50	UG/L
SMHOA - 01	10-Aug-18	ALUMINUM	< 50	UG/L
SMHOA - 01	09-Jul-15	ARSENIC	< 2	UG/L
SMHOA - 01	10-Aug-18	ARSENIC	< 2	UG/L
SMHOA - 01	09-Jul-15	BICARBONATE ALKALINITY	240	MG/L
SMHOA - 01	10-Aug-18	BICARBONATE ALKALINITY	230	MG/L
SMHOA - 01	09-Jul-15	CALCIUM	43	MG/L
SMHOA - 01	10-Aug-18	CALCIUM	48	MG/L
SMHOA - 01	09-Jul-15	CARBONATE ALKALINITY	< 3	MG/L
SMHOA - 01	10-Aug-18	CARBONATE ALKALINITY	7.5	MG/L
SMHOA - 01	09-Jul-15	CHLORIDE	20	MG/L
SMHOA - 01	10-Aug-18	CHLORIDE	27	MG/L
SMHOA - 01	09-Jul-15	CHROMIUM (TOTAL)	6.2	UG/L
SMHOA - 01	10-Aug-18	CHROMIUM (TOTAL)	6.3	UG/L
SMHOA - 01	01-Aug-14	CHROMIUM, HEXAVALENT	5.4	UG/L
SMHOA - 01	09-Jul-15	COPPER	< 50	UG/L
SMHOA - 01	10-Aug-18	COPPER	< 50	UG/L
SMHOA - 01	09-Jul-15	FLUORIDE (F) (NATURAL-SOURCE)	0.5	MG/L
SMHOA - 01	10-Aug-18	FLUORIDE (F) (NATURAL-SOURCE)	0.5	MG/L
SMHOA - 01	09-Jul-15	HARDNESS (TOTAL) AS CaCO3	170	MG/L
SMHOA - 01	10-Aug-18	HARDNESS (TOTAL) AS CaCO3	190	MG/L
SMHOA - 01	09-Jul-15	HYDROXIDE ALKALINITY	< 3	MG/L
SMHOA - 01	10-Aug-18	HYDROXIDE ALKALINITY	< 5	MG/L
SMHOA - 01	09-Jul-15	IRON	< 100	UG/L

Well Name	Date	Analyte	Concent.	Unit
Banning - C02A	18-Mar-14	ALKALINITY (TOTAL) AS CaCO3	160	MG/L
SMHOA - 01	10-Aug-18	IRON	< 100	UG/L
SMHOA - 01	09-Jul-15	LEAD	< 5	UG/L
SMHOA - 01	10-Aug-18	LEAD	< 5	UG/L
SMHOA - 01	09-Jul-15	MAGNESIUM	16	MG/L
SMHOA - 01	10-Aug-18	MAGNESIUM	17	MG/L
SMHOA - 01	09-Jul-15	MANGANESE	< 20	UG/L
SMHOA - 01	10-Aug-18	MANGANESE	< 20	UG/L
SMHOA - 01	05-Jan-16	NITRATE (AS N)	4.3	MG/L
SMHOA - 01	01-Jul-16	NITRATE (AS N)	4.3	MG/L
SMHOA - 01	03-Oct-16	NITRATE (AS N)	4.3	MG/L
SMHOA - 01	02-Dec-16	NITRATE (AS N)	4.9	MG/L
SMHOA - 01	07-Jan-17	NITRATE (AS N)	5.2	MG/L
SMHOA - 01	07-Apr-17	NITRATE (AS N)	2.5	MG/L
SMHOA - 01	10-Jul-17	NITRATE (AS N)	4.6	MG/L
SMHOA - 01	13-Sep-17	NITRATE (AS N)	4.8	MG/L
SMHOA - 01	16-Oct-17	NITRATE (AS N)	4.4	MG/L
SMHOA - 01	22-Jan-18	NITRATE (AS N)	5.6	MG/L
SMHOA - 01	18-Apr-18	NITRATE (AS N)	5	MG/L
SMHOA - 01	05-Jul-18	NITRATE (AS N)	4.2	MG/L
SMHOA - 01	10-Aug-18	NITRATE (AS N)	4.8	MG/L
SMHOA - 01	03-Jan-14	NITRATE (AS NO3)	22	MG/L
SMHOA - 01	04-Apr-14	NITRATE (AS NO3)	23	MG/L
SMHOA - 01	11-Jul-14	NITRATE (AS NO3)	21	MG/L
SMHOA - 01	10-Oct-14	NITRATE (AS NO3)	21	MG/L
SMHOA - 01	02-Jan-15	NITRATE (AS NO3)	27	MG/L
SMHOA - 01	06-May-15	NITRATE (AS NO3)	18	MG/L
SMHOA - 01	09-Jul-15	NITRATE (AS NO3)	19	MG/L
SMHOA - 01	16-Oct-15	NITRATE (AS NO3)	22	MG/L
SMHOA - 01	09-Jul-15	NITRITE (AS N)	< 100	MG/L
SMHOA - 01	18-Apr-18	NITRITE (AS N)	< 0.1	MG/L
SMHOA - 01	10-Aug-18	NITRITE (AS N)	< 0.1	MG/L
SMHOA - 01	09-Jul-15	SODIUM	43	MG/L
SMHOA - 01	10-Aug-18	SODIUM	44	MG/L
SMHOA - 01	09-Jul-15	SPECIFIC CONDUCTANCE	500	US
SMHOA - 01	10-Aug-18	SPECIFIC CONDUCTANCE	550	US
SMHOA - 01	09-Jul-15	SULFATE	16	MG/L
SMHOA - 01	10-Aug-18	SULFATE	20	MG/L
SMHOA - 01	09-Jul-15	TOTAL DISSOLVED SOLIDS	260	MG/L
SMHOA - 01	10-Aug-18	TOTAL DISSOLVED SOLIDS	320	MG/L
SMHOA - 01	09-Jul-15	TURBIDITY, LABORATORY	0.53	NTU
SMHOA - 01	10-Aug-18	TURBIDITY, LABORATORY	0.18	NTU
SMHOA - 01	09-Jul-15	ZINC	< 50	UG/L
SMHOA - 01	10-Aug-18	ZINC	< 50	UG/L
SMHOA - 02	09-Jul-15	ALKALINITY (TOTAL) AS CaCO3	200	MG/L

Well Name	Date	Analyte	Concent.	Unit
Banning - C02A	18-Mar-14	ALKALINITY (TOTAL) AS CaCO3	160	MG/L
SMHOA - 02	10-Aug-18	ALKALINITY (TOTAL) AS CaCO3	220	MG/L
SMHOA - 02	09-Jul-15	ALUMINUM	< 50	UG/L
SMHOA - 02	10-Aug-18	ALUMINUM	< 50	UG/L
SMHOA - 02	09-Jul-15	ARSENIC	< 2	UG/L
SMHOA - 02	10-Aug-18	ARSENIC	< 2	UG/L
SMHOA - 02	09-Jul-15	BICARBONATE ALKALINITY	240	MG/L
SMHOA - 02	10-Aug-18	BICARBONATE ALKALINITY	220	MG/L
SMHOA - 02	09-Jul-15	CALCIUM	46	MG/L
SMHOA - 02	10-Aug-18	CALCIUM	52	MG/L
SMHOA - 02	09-Jul-15	CARBONATE ALKALINITY	< 3	MG/L
SMHOA - 02	10-Aug-18	CARBONATE ALKALINITY	< 5	MG/L
SMHOA - 02	09-Jul-15	CHLORIDE	28	MG/L
SMHOA - 02	10-Aug-18	CHLORIDE	32	MG/L
SMHOA - 02	09-Jul-15	CHROMIUM (TOTAL)	8.9	UG/L
SMHOA - 02	10-Aug-18	CHROMIUM (TOTAL)	8.9	UG/L
SMHOA - 02	01-Aug-14	CHROMIUM, HEXAVALENT	7.9	UG/L
SMHOA - 02	09-Jul-15	COPPER	< 50	UG/L
SMHOA - 02	10-Aug-18	COPPER	< 50	UG/L
SMHOA - 02	09-Jul-15	FLUORIDE (F) (NATURAL-SOURCE)	0.7	MG/L
SMHOA - 02	10-Aug-18	FLUORIDE (F) (NATURAL-SOURCE)	0.59	MG/L
SMHOA - 02	09-Jul-15	HARDNESS (TOTAL) AS CaCO3	190	MG/L
SMHOA - 02	10-Aug-18	HARDNESS (TOTAL) AS CaCO3	200	MG/L
SMHOA - 02	09-Jul-15	HYDROXIDE ALKALINITY	< 3	MG/L
SMHOA - 02	10-Aug-18	HYDROXIDE ALKALINITY	< 5	MG/L
SMHOA - 02	09-Jul-15	IRON	< 100	UG/L
SMHOA - 02	10-Aug-18	IRON	< 100	UG/L
SMHOA - 02	09-Jul-15	LEAD	< 5	UG/L
SMHOA - 02	10-Aug-18	LEAD	< 5	UG/L
SMHOA - 02	09-Jul-15	MAGNESIUM	18	MG/L
SMHOA - 02	10-Aug-18	MAGNESIUM	18	MG/L
SMHOA - 02	09-Jul-15	MANGANESE	< 20	UG/L
SMHOA - 02	10-Aug-18	MANGANESE	< 20	UG/L
SMHOA - 02	05-Jan-16	NITRATE (AS N)	4.9	MG/L
SMHOA - 02	07-Jan-17	NITRATE (AS N)	5.1	MG/L
SMHOA - 02	13-Sep-17	NITRATE (AS N)	4.9	MG/L
SMHOA - 02	16-Oct-17	NITRATE (AS N)	4.7	MG/L
SMHOA - 02	22-Jan-18	NITRATE (AS N)	4.6	MG/L
SMHOA - 02	18-Apr-18	NITRATE (AS N)	5.2	MG/L
SMHOA - 02	05-Jul-18	NITRATE (AS N)	5.4	MG/L
SMHOA - 02	10-Aug-18	NITRATE (AS N)	4.6	MG/L
SMHOA - 02	03-Jan-14	NITRATE (AS NO3)	19	MG/L
SMHOA - 02	02-Jan-15	NITRATE (AS NO3)	19	MG/L
SMHOA - 02	09-Jul-15	NITRATE (AS NO3)	21	MG/L
SMHOA - 02	09-Jul-15	NITRITE (AS N)	< 100	MG/L

Well Name	Date	Analyte	Concent.	Unit
Banning - C02A	18-Mar-14	ALKALINITY (TOTAL) AS CaCO ₃	160	MG/L
SMHOA - 02	18-Apr-18	NITRITE (AS N)	< 0.1	MG/L
SMHOA - 02	10-Aug-18	NITRITE (AS N)	< 0.1	MG/L
SMHOA - 02	09-Jul-15	SODIUM	39	MG/L
SMHOA - 02	10-Aug-18	SODIUM	45	MG/L
SMHOA - 02	09-Jul-15	SPECIFIC CONDUCTANCE	510	US
SMHOA - 02	10-Aug-18	SPECIFIC CONDUCTANCE	530	US
SMHOA - 02	09-Jul-15	SULFATE	14	MG/L
SMHOA - 02	10-Aug-18	SULFATE	16	MG/L
SMHOA - 02	09-Jul-15	TOTAL DISSOLVED SOLIDS	260	MG/L
SMHOA - 02	10-Aug-18	TOTAL DISSOLVED SOLIDS	320	MG/L
SMHOA - 02	09-Jul-15	TURBIDITY, LABORATORY	0.22	NTU
SMHOA - 02	10-Aug-18	TURBIDITY, LABORATORY	< 0.1	NTU
SMHOA - 02	09-Jul-15	ZINC	< 50	UG/L
SMHOA - 02	10-Aug-18	ZINC	< 50	UG/L
SMWC - 04	11-Apr-16	ALKALINITY (TOTAL) AS CaCO ₃	110	MG/L
SMWC - 04	11-Apr-16	ALUMINUM	< 0	UG/L
SMWC - 04	11-Apr-16	ARSENIC	4.4	UG/L
SMWC - 04	11-Apr-16	BICARBONATE ALKALINITY	110	MG/L
SMWC - 04	11-Apr-16	CALCIUM	8.8	MG/L
SMWC - 04	11-Apr-16	CARBONATE ALKALINITY	12	MG/L
SMWC - 04	11-Apr-16	CHLORIDE	17	MG/L
SMWC - 04	11-Apr-16	CHROMIUM (TOTAL)	< 0	UG/L
SMWC - 04	08-Dec-14	CHROMIUM, HEXAVALENT	2.7	UG/L
SMWC - 04	04-Dec-17	CHROMIUM, HEXAVALENT	2.3	UG/L
SMWC - 04	11-Apr-16	COPPER	< 0	UG/L
SMWC - 04	16-Sep-15	DIBROMOCHLOROPROPANE (DBCP)	< 0	UG/L
SMWC - 04	11-Apr-16	FLUORIDE (F) (NATURAL-SOURCE)	0.41	MG/L
SMWC - 04	11-Apr-16	HARDNESS (TOTAL) AS CaCO ₃	29	MG/L
SMWC - 04	11-Apr-16	HYDROXIDE ALKALINITY	< 0	MG/L
SMWC - 04	11-Apr-16	IRON	< 0	UG/L
SMWC - 04	11-Apr-16	LEAD	< 0	UG/L
SMWC - 04	11-Apr-16	MAGNESIUM	1.7	MG/L
SMWC - 04	11-Apr-16	MANGANESE	< 0	UG/L
SMWC - 04	11-Apr-16	NITRATE (AS N)	3.2	MG/L
SMWC - 04	01-Jun-16	NITRATE (AS N)	3	MG/L
SMWC - 04	01-Sep-16	NITRATE (AS N)	3	MG/L
SMWC - 04	01-Dec-16	NITRATE (AS N)	4	MG/L
SMWC - 04	03-Mar-17	NITRATE (AS N)	3.8	MG/L
SMWC - 04	05-Jun-17	NITRATE (AS N)	3.1	MG/L
SMWC - 04	12-Sep-17	NITRATE (AS N)	4.9	MG/L
SMWC - 04	04-Dec-17	NITRATE (AS N)	3.2	MG/L
SMWC - 04	04-Dec-18	NITRATE (AS N)	4.3	MG/L
SMWC - 04	14-Jul-14	NITRATE (AS NO ₃)	13	MG/L
SMWC - 04	07-Jul-15	NITRATE (AS NO ₃)	18	MG/L

Well Name	Date	Analyte	Concent.	Unit
Banning - C02A	18-Mar-14	ALKALINITY (TOTAL) AS CaCO ₃	160	MG/L
SMWC - 04	11-Apr-16	NITRITE (AS N)	< 0	MG/L
SMWC - 04	11-Apr-16	POTASSIUM	1	MG/L
SMWC - 04	11-Apr-16	SODIUM	61	MG/L
SMWC - 04	11-Apr-16	SPECIFIC CONDUCTANCE	330	US
SMWC - 04	11-Apr-16	SULFATE	16	MG/L
SMWC - 04	02-Aug-16	TETRACHLOROETHYLENE	< 0	UG/L
SMWC - 04	11-Apr-16	TOTAL DISSOLVED SOLIDS	190	MG/L
SMWC - 04	02-Aug-16	TRICHLOROETHYLENE	< 0	UG/L
SMWC - 04	11-Apr-16	TURBIDITY, LABORATORY	0.3	NTU
SMWC - 04	11-Apr-16	VANADIUM	100	UG/L
SMWC - 04	11-Apr-16	ZINC	< 0	UG/L
YVWD - 48	20-May-14	ALKALINITY (TOTAL) AS CaCO ₃	140	MG/L
YVWD - 48	13-Jul-17	ALKALINITY (TOTAL) AS CaCO ₃	96	MG/L
YVWD - 48	20-May-14	ALUMINUM	< 0	UG/L
YVWD - 48	13-Jul-17	ALUMINUM	< 0	UG/L
YVWD - 48	20-May-14	ARSENIC	< 0	UG/L
YVWD - 48	13-Jul-17	ARSENIC	2.5	UG/L
YVWD - 48	20-May-14	BICARBONATE ALKALINITY	170	MG/L
YVWD - 48	13-Jul-17	BICARBONATE ALKALINITY	75	MG/L
YVWD - 48	20-May-14	CALCIUM	31	MG/L
YVWD - 48	13-Jul-17	CALCIUM	11	MG/L
YVWD - 48	20-May-14	CARBONATE ALKALINITY	< 0	MG/L
YVWD - 48	13-Jul-17	CARBONATE ALKALINITY	21	MG/L
YVWD - 48	20-May-14	CHLORIDE	12	MG/L
YVWD - 48	13-Jul-17	CHLORIDE	8.8	MG/L
YVWD - 48	20-May-14	CHROMIUM (TOTAL)	< 0	UG/L
YVWD - 48	13-Jul-17	CHROMIUM (TOTAL)	< 0	UG/L
YVWD - 48	13-Jul-17	CHROMIUM, HEXAVALENT	5.8	UG/L
YVWD - 48	20-May-14	COPPER	< 0	UG/L
YVWD - 48	13-Jul-17	COPPER	< 0	UG/L
YVWD - 48	26-Aug-15	DIBROMOCHLOROPROPANE (DBCP)	< 0	UG/L
YVWD - 48	20-May-14	FLUORIDE (F) (NATURAL-SOURCE)	0.43	MG/L
YVWD - 48	13-Jul-17	FLUORIDE (F) (NATURAL-SOURCE)	0.63	MG/L
YVWD - 48	20-May-14	HARDNESS (TOTAL) AS CaCO ₃	96	MG/L
YVWD - 48	13-Jul-17	HARDNESS (TOTAL) AS CaCO ₃	38	MG/L
YVWD - 48	20-May-14	HYDROXIDE ALKALINITY	< 0	MG/L
YVWD - 48	13-Jul-17	HYDROXIDE ALKALINITY	< 0	MG/L
YVWD - 48	20-May-14	IRON	< 0	UG/L
YVWD - 48	13-Jul-17	IRON	< 0	UG/L
YVWD - 48	20-May-14	LEAD	< 0	UG/L
YVWD - 48	13-Jul-17	LEAD	< 0	UG/L
YVWD - 48	20-May-14	MAGNESIUM	4.5	MG/L
YVWD - 48	13-Jul-17	MAGNESIUM	2.8	MG/L
YVWD - 48	20-May-14	MANGANESE	< 0	UG/L

Well Name	Date	Analyte	Concent.	Unit
Banning - C02A	18-Mar-14	ALKALINITY (TOTAL) AS CaCO3	160	MG/L
YVWD - 48	13-Jul-17	MANGANESE	< 0	UG/L
YVWD - 48	22-Sep-16	NITRATE (AS N)	1.8	MG/L
YVWD - 48	13-Jul-17	NITRATE (AS N)	1.6	MG/L
YVWD - 48	16-Jul-18	NITRATE (AS N)	2.1	MG/L
YVWD - 48	20-May-14	NITRATE (AS NO3)	9.9	MG/L
YVWD - 48	14-Aug-14	NITRATE (AS NO3)	10	MG/L
YVWD - 48	26-Aug-15	NITRATE (AS NO3)	9.9	MG/L
YVWD - 48	20-May-14	NITRITE (AS N)	< 0	MG/L
YVWD - 48	13-Jul-17	NITRITE (AS N)	< 0	MG/L
YVWD - 48	20-May-14	POTASSIUM	2	MG/L
YVWD - 48	13-Jul-17	POTASSIUM	1.5	MG/L
YVWD - 48	20-May-14	SODIUM	36	MG/L
YVWD - 48	13-Jul-17	SODIUM	43	MG/L
YVWD - 48	20-May-14	SPECIFIC CONDUCTANCE	340	US
YVWD - 48	13-Jul-17	SPECIFIC CONDUCTANCE	260	US
YVWD - 48	20-May-14	SULFATE	16	MG/L
YVWD - 48	13-Jul-17	SULFATE	14	MG/L
YVWD - 48	09-Dec-15	TETRACHLOROETHYLENE	< 0	UG/L
YVWD - 48	23-Jun-16	TETRACHLOROETHYLENE	< 0	UG/L
YVWD - 48	20-May-14	TOTAL DISSOLVED SOLIDS	220	MG/L
YVWD - 48	14-Aug-14	TOTAL DISSOLVED SOLIDS	210	MG/L
YVWD - 48	26-Aug-15	TOTAL DISSOLVED SOLIDS	210	MG/L
YVWD - 48	22-Sep-16	TOTAL DISSOLVED SOLIDS	130	MG/L
YVWD - 48	13-Jul-17	TOTAL DISSOLVED SOLIDS	130	MG/L
YVWD - 48	09-Dec-15	TRICHLOROETHYLENE	< 0	UG/L
YVWD - 48	23-Jun-16	TRICHLOROETHYLENE	< 0	UG/L
YVWD - 48	20-May-14	TURBIDITY, LABORATORY	< 0	NTU
YVWD - 48	13-Jul-17	TURBIDITY, LABORATORY	0.4	NTU
YVWD - 48	20-May-14	VANADIUM	25	UG/L
YVWD - 48	13-Jul-17	VANADIUM	90	UG/L
YVWD - 48	20-May-14	ZINC	< 0	UG/L
YVWD - 48	13-Jul-17	ZINC	< 0	UG/L

ALDA Inc.

In Association with

Thomas Harder & Co.
Groundwater Consulting

