## **Beaumont Basin Watermaster**

## 2020 Consolidated Annual Report and Engineering Report

## DRAFT

### **2020 Watermaster Board**

Art Vela, City of Banning, **Chairman** George Jorritsma, South Mesa Water Company, **Vice Chairman** Daniel Jaggers, Beaumont Cherry Valley Water District, **Secretary** Joseph Zoba, Yucaipa Valley Water District, **Treasurer** Jeff Hart, City of Beaumont

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

**April 2021** 



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March 31<sup>st</sup>, 2021

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

#### Subject: Beaumont Basin Watermaster Draft Annual Report for Calendar Year 2020

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 2020. This draft report summarizes all production, spreading, water rights issues, and storage activities that took place during calendar year 2020. Further, it documents changes in water levels and storage conditions, as well as an estimate of the Basin Operating Safe Yield for 2020. Finally, the report presents an evaluation of water quality conditions for all domestic wells during the 2016-2020 five-year period and for the Maximum Benefit Monitoring Program.

We will make a formal presentation to the Watermaster Committee during the upcoming Board meeting on April 7<sup>th</sup>, 2021. We welcome your review and comments on this report and look forward to answering any questions you may have.

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

Very truly yours

ALDA Inc.

F. Anibal Blandon, P.E. Principal

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### **Abbreviations**

ac-ft	acre-feet
ac-ft/yr	acre-feet per year
Banning	City of Banning
Basin	Beaumont Basin
BCVWD	Beaumont-Cherry Valley Water District
BMZ	Beaumont Management Zone
Beaumont	City of Beaumont
CDPH	California Department of Public Health
CVCOI	Cherry Valley Community of Interest
CY	calendar year
du	dwelling unit
FY	fiscal year
IRWMP	Integrated Regional Water Management Program
MCL	Maximum Contaminant Level
NL	Notification Level
NTU	Nephelometric Turbidity Units
OSWDS	On-Site Waste Disposal Systems
Pass Agency	San Gorgonio Pass Water Agency
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 Sixteenth 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 2020. 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, recharge of supplemental water, water transfers, 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 2016-20 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 was allowed to create enough additional storage capacity to prevent the waste of water. This controlled overdraft, also known as <u>Temporary Surplus</u>, 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 was 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 local and regional agencies 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 was 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 Rules and Regulations were most recently amended in 2019. 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 groundwater production, recharge activities, water transfers between appropriators, transfers of water rights from an overlying member to an appropriator 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 <u>www.beaumontbasinwatermaster.org</u>. 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 5, 2020 regular meeting of the Beaumont Basin Watermaster, the current Watermaster Committee Officers were re-affirmed to their respective positions for 2020 as follows:

- ✓ Mr. Art Vela Chairman
- ✓ Mr. George Jorritsma Vice Chairman
- ✓ Mr. Dan Jaggers Secretary
- ✓ Mr. Joseph Zoba Treasurer

The Watermaster Representatives serving each Appropriative Party at the end of CY 2020 were as follows:

Agency	Representative	Alternate
City of Banning	Art Vela	Luis Cardenas
City of Beaumont	Jeff Hart	Robert Vestal
Beaumont Cherry Valley Water District	Daniel Jaggers	Mark Swanson
South Mesa Water Company	George Jorritsma	Dave Armstrong
Yucaipa Valley Water District	Joseph Zoba	Jennifer Ares

Legal counsel during CY 2020 was provided by Alvarado Smith APC, represented by Keith McCullough and Thierry Montoya, while Engineering Services were provided by ALDA Inc., represented by Anibal Blandon, in association with Thomas Harder & Company, represented by Thomas Harder.

### 2.2 Watermaster Accomplishments and Activities During 2020

#### 2.2.1 Watermaster Meetings

A total of five regular meetings were held during CY 2020 on the following dates:

- ✓ February 5, 2020
- ✓ August 5, 2020
- ✓ December 2, 2020

- ✓ June 3, 2020
- ✓ October 7, 2020

In addition, there was one Special Meeting conducted on August 27, 2020. The regular meeting scheduled for the month of April was cancelled due to COVID-19 guidelines.

Agendas for 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

There were no resolutions adopted during CY 2020.

#### 2.2.3 Items Discussed in 2020

This section is a 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. Signed official copies of the minutes for all the regular and special meetings that took place in 2020 are included in Appendix A with the exception of the October 7, 2020 meeting, which are in a draft format. A signed copy of the final minutes for the October meeting will be included in the Final report. Official meeting minutes may also be accessed at the Beaumont Basin Watermaster website:

The following items were discussed during the five regular meetings and one special meeting held in CY 2020 along with their resulting outcome.

#### Items Discussed During the February 5, 2020 Regular Watermaster Committee Meeting

- ✓ Reorganization of the Beaumont Basin Watermaster Committee Chairman, Vice-Chairman, Secretary, and Treasurer [Memorandum 20-01]. The current Watermaster Committee Officers were re-affirmed to their respective positions for 2020.
- ✓ Consideration of the Watermaster Budget for Fiscal Year 2019-20 and Fiscal Year 2020-21 [Memorandum 20-02]. Treasurer Zoba explained the budget for these two fiscal years. Budget was approved 5-0.
- ✓ Status Report on Water Level Monitoring throughout the Beaumont Basin through Jan 23, 2020 [Memorandum 20-03]. Engineer Blandon explained YVWD Well No. 34 has seen a significant decline in water level and indicated problems with the probe. He further indicated that water level at the Noble Creek observation wells continue to rise and the City of Banning wells continue to recover.
- ✓ A Comparison of Production and Allowable Extractions through December 2019 [Memorandum 20-04]. Mr. Blandon compared production and allowable extractions through the end of 2019 and indicated that the City of Banning exceeded its allowable production for the year and would need to use water from its storage account. Member Jagger indicated that the numbers show did not include transfers between BCVWD and the City of Banning and he explained the well co-ownership. Member Zoba asked if

there was a way to provide that information on a quarterly basis so that it could be reported at the BBWM meetings.

- ✓ Consideration of Change Order No. 2 for Task Order No. 17 for the Development of a Return Flow Methodology for the Beaumont Basin [Memorandum 20-05]. Mr. Harder advised that the change order included items such as the re-evaluation of indoor/outdoor water use estimates, landscape irrigation efficiency assumptions, additional water delivery account types, and accounting of pipeline losses. Member Zoba suggested dropping Task 4 on pipeline and sewer losses and indicated that the return flows in general do not comply with the basin plan objectives and suggested the quality issues should be addressed. Chair Vela suggested further analysis of needs. Mr. Harder indicated that he could look at the recommended information and revise the scope of services for consideration by the Watermaster Committee at the next meeting.
- ✓ 2019 Annual Report Status and Rescheduling [Memorandum 20-06]. Mr. Blandon recommended moving the March 25 meeting to April 1. He noted that the draft report would be available at the April meeting and a final report at the June meeting. Member Zoba asked Mr. Blandon how the water rights transfer between OVP and YVWD would be handled in the 2019 annual report. Mr. Blandon noted that in previous discussions have been stated that YVWD would receive 1,398.9 ac-ft for 2019. Member Zoba clarified that the full amount would be transferred; Mr. Blandon confirmed. The request to change the meeting date to April 1 was approved unanimously.
- ✓ 2018 Consolidated Annual Report and Engineering Report Presentation of Final Report [Memorandum 20-07]. Mr. Blandon review the process of the preparation of the report and shared highlights including the new storage agreement with SGPWA and production totals by agency. Chair Vela pointed out that some minor adjustments needed to be made to address transfers between BCVWD and Banning. Member Jaggers indicated that BCVWD delivered approximately 119.75 ac-ft during CY 2018. On another matter, member Zoba expressed concern that the annual report is inconsistent with the Judgment, specifically the transfer of 180 ac-ft is not done by Form 5. He further indicated that Tables 3.7 and 3.8 would be wrong if this is not addressed. Member Zoba indicated his intent to vote against approval of the annual report. The report was approved on a 4-1 vote with Member Zoba voting against it. Mr. Blandon clarified that the 2018 report will reflect the conditions in the basin as of the end of 2018.

## April 1, 2020 Regular Watermaster Committee Meeting – Cancelled per government guidelines related to the COVID-19 pandemic

#### Items Discussed During the June 3, 2020 Regular Watermaster Committee Meeting

✓ Status Report on Water Level Monitoring throughout the Beaumont Basin through May 18, 2020 [Memorandum 20-08]. Mr. Blandon indicated that there continue to be problems with Oak Valley No. 5 communications cable and may need to be replaced again. He indicated that water levels at the Noble Creek observation wells have risen approximately 90 feet over the last four years and they have been fairly stable over the last two years.

✓ A Comparison of Production and Allowable Extractions through April 2020 [Memorandum 20-09]. After Mr. Blandon explained the comparison table, Chair Vela noted that SGPWA delivered water to the City of Banning and that the table needed to be updated. Member Jaggers expressed concern that SGPWA spread water in their ponds to alleviate concern about possible carryover water left in the San Luis Reservoir due to rain. Mr. Jaggers advised that according to the agreement with SGPWA, the agency was required to notify all the parties in the basin to determine if anyone wanted the water supply before it is credited to the agency. He did not receive a notification for the available water. Mr. Jaggers further recommended review of the agreement to assure the approach is understood by all parties given that a new general manager is expected at the SGPWA.

A discussion on the submittal of Form 5 by YVWD ensued; Mr. Jaggers indicated that he did not feel this issue was resolved and that a formal discussion should be included in the agenda for a future meeting. Chair Vela asked that the record reflect that there are questions regarding the 1,399 ac-ft under the YVWD column of the report and this issue can be included as a future agenda item. Mr. Zoba disagreed and suggested that this is not the appropriate item to have this discussion.

- ✓ Updated 2018 Consolidated Annual Report and Engineering Report Delivery of Final Report [Memorandum 20-10]. Mr. Blandon reported that the 2018 Consolidated Annual Report has been completed and includes only events and actions that took place in 2018. He indicated that committee members have a PDF of the report, and hard copies will be delivered at the August meeting provided the meeting takes place.
- Consideration of Change Order No. 2 for Task Order No. 17 for the Development of a Return Flow Methodology for the Beaumont Basin [Memorandum 20-11]. Mr. Harder reviewed the basic tasks 1 through 6 and optional tasks 7 and 8. SMWC was excluded for participating in cost sharing of the basic and optional tasks while the City of Beaumont was excluded from cost sharing in the basic tasks only. A change order to Task Order No. 17 for \$25,510.00 to address Tasks 1 through 6 was approved on a 4-0 vote with Mr. Jorristma abstaining. A new Task 22 for Task 7 and 8 was approved for \$41,410.00 on a 4-0 vote with Mr. Jorristma abstaining.

#### Items Discussed During the August 5, 2020 Regular Watermaster Committee Meeting

✓ Status Report of Water Level Monitoring throughout the Beaumont Basin through July 20, 2020 [Memorandum No. 20-12]. Engineer Blandon advised that water levels in the northwest portion of the basin are declining with YVWD Well No. 34 dropping over five feet in the last year and a more severe decline at Oak Valley No. 5 with 30 feet over the last year despite of the absence of pumping from this well. However, declines have not been observed at BCVWD Well No. 29. Mr. Blandon reported that Oak Valley No. 5 seems to have collapsed and the communications cable and probe removed until the well is rehabbed; Mr. Zoba indicated that there were no near-term plans for this well.

- ✓ A comparison of Production and Allowable Extractions through June 2020 [Memorandum 20-13]. Mr. Blandon provided an update on the amount of water produced from the basin by each agency and the amount of imported water spread. He also documented the percentage of actual production versus allowable production by agency through June 2020.
- ✓ Update on Progress to Develop a Return Flow Accounting Methodology (Task 17) and Conduct a Water Quality Impact Evaluation for the Beaumont Basin Adjudicated Area (Task 22) [Memorandum No. 20-14]. Mr. Harder advised that work has begun in eight tasks and anticipated preliminary results at the October meeting.
- Discussion Regarding Various Legal Memorandums Regarding the Transfer of Overlying Water Rights to Appropriative Rights [Memorandum 20-15]. Legal counsel Montoya discussed the July 20 memorandum to Watermaster addressing their legal opinion on this matter. He indicated that in accordance with Resolution 2017-02, in 2018 OVP transferred 180.4 ac-ft of Overlying water rights to YVWD in exchange for YVWD to provided water service to its phased residential development projects. In this memorandum, Mr. Montoya also explained the submittal of YVWD's Form 5, requesting the transfer of the entirety of OVPs overlying water rights to YVWD.

Mr. Montoya pointed out that on July 30, 2020, Alvarado Smith received a new agreement, dated June 2, 2020, on this matter. Discussion of this agreement was not included in the July 20, 2020 memorandum. He continued that the new agreement between OVP and YVWD appeared to be a marked departure from Resolution 2017-02. He further noted that Form 5 is not a water transfer mechanism, but a notice provision. He indicated that Alvarado Smith had not had the opportunity to analyze the new agreement and that the agreement raised some issues worthy of analysis and Watermaster consideration.

There was extensive discussion on this matter with some members of the Watermaster Committee indicating that OVP incremental transfers needed to be consistent with Resolution 2017-02. Member Zoba disagreed and noted that through the submission of Form 5 all OVP's overlying rights were transferred to YVWD effective October 9, 2018. Legal counsel for both YVWD and BCVWD also expressed their opinions on the matter. After much discussion, it was agreed that legal counsel from the various agencies and Watermaster should get together and find common ground to achieve a fair playing field for everyone. A special meeting on this matter was scheduled for August 27, 2020.

#### Items Discussed During the August 27, 2020 Special Watermaster Committee Meeting

✓ Discussion Regarding Various Legal Memorandums Regarding the Transfer of Overlying Water Rights to Appropriative Rights [Memorandum 20-16]. Counsel Montoya indicated that after meeting with attorneys Newmark, Markman, and Brenner, he is still at the fundamental sticking point regarding water service commitment on behalf of YVWD, making sure that the judgment is being adhered to, and when to characterize a water right change as change in use. With regards to the June 2, 2020 (identified as July 20, 2020 in the minutes) agreement, counsel Montoya indicated that he had problems with Items E and F. In Item E, he does not agree that Form 5 is a transfer mechanism, but a notice provision. In Item F, he was looking for evidence as to YVWD commitment to provide water to the overlying property other than the 180.4 ac-ft transferred previously. He pointed out that YVWD was asked to provide supporting documents, but none were received. Montoya said that he could not conclude that this agreement is consistent with the Judgment's water transfer provisions as there is no water service commitment being made by YVWD.

Counsel Newmark, representing YVWD, rejected Montoya's point that the transfer provisions in Section 7 and the use of Form 5 does not itself effectuate a transfer, that is a notice provision. He noted that OVP and YVWD submitted Form 5 reflecting their completion of all the predicate actions to have the adjustment of rights and are providing notice and at that point when the Watermaster receives the notice, the adjustment is a ministerial act. He pointed out that this is what YVWD is asking for, and believes it is incumbent upon the Watermaster upon receipt of Form 5.

There was extensive discussion between the members of the Watermaster Committee, legal counsel representatives and members of the public in support of one position and against the other. Without reaching an agreement on this issue, a motion was made to continue this discussion at the October 7, 2020 meeting. The motion was approved unanimously.

#### Items Discussed During the October 7, 2020 Regular Watermaster Committee Meeting

- ✓ Status Report of Water Level Monitoring throughout the Beaumont Basin through September 23, 2020 [Memorandum 20-17]. There was no discussion
- A Comparison of Production vs. Allowable Extractions through August 2020 [Memorandum 20-18]. Mr. Blandon presented a comparison of production rights from the basin against actual production. There was no discussion.
- ✓ Update on Progress to Develop a Return Flow Accounting Methodology (Task 17) and Conduct a Water Quality Impact Evaluation for the Beaumont Adjudicated Area (Task 22) [Memorandum 20-19]. Mr. Harder advised the Committee that he has proceeded as far as possible and now requires data from BCVWD and YVWD. BCVWD is pulling the requested data but needs some additional time.
- San Gorgonio Pass Water Agency Request for Data and Model Files [Memorandum 20-20]. A motion was made for the Watermaster to authorize an expenditure of up to \$6,900.00 under Task 8 On-Call Services, to cover the expenses associated with the data request. The motion was approved unanimously.
- ✓ Discussion Regarding Various Legal Memorandums Regarding the Transfer of Overlying Water Rights to Appropriative Rights [Memorandum 20-21]. It was determined that the 2019 Annual Report would be considered at the December 2, 2020 Watermaster Committee meeting. It was also discussed that certain members of the Watermaster

Committee would not approve the 2019 report at this time. Finally, it was discussed that once the 2019 Annual Report was approved without the November 2019 Form 5 transfer accounted for, such approval would constitute an action by the Watermaster and subject the issues related to the November 2019 YVWD/OVP overlying rights transfer to judicial review under the Stipulated Judgment.

#### Items Discussed During the December 2, 2020 Regular Watermaster Committee Meeting

✓ Status Report on Water Level Monitoring throughout the Beaumont Basin through November 18, 2020 [Memorandum 20-22]. Engineer Blandon indicated that the barometric pressure probe at YVWD 34 was missing and probably fell to the bottom of the well. He further indicated that this well has been in decline over the last year. He advised that water levels at Noble Creek observation wells continue to rise and that BCVWD No. 2 and No. 25 have experience significant declines since BCVWD No. 3 began to pump.

Mr. Zoba noted that he had visited YVWD 34 and expressed that he was not impressed with the way in which the cables were attached to the well. Member Zoba and Engineer Blandon discussed the cable assembly.

A Comparison of Production and Allowable Extractions through October 2020 [Memorandum 20-23]. Mr. Blandon advised the Committee that production was about 96 percent of the total allowable for the appropriators combined. He noted that the City of Banning and YVWD were exceeding their allotment and would have to draw from their storage local accounts.

Member Zoba pointed out that if Form 5 had been reflected as it was in previous tables and the overlying water rights had been included, YVWD would not be exceeding its allotment. Mr. Blandon explained that since this issue continue to be unresolved, legal counsel indicated that the real number listed should reflect OVPs assignments to YVWD. Member Zoba registered an objection to the table as presented.

Member Jaggers indicated that BCVWD numbers will go down and the City of Beaumont will go up due to transfer of water produced from co-owned wells during the Apple Fire and El Dorado Fire.

Consolidated Annual Report and Engineering Report – Presentation of Draft Report [Memorandum 20-24]. Mr. Blandon presented an overview of historical precipitation and production by agency. He noted the significant variation in production by Appropriators in the 2015-19 period; production by Overlying users has declined to about half of what was produced at the beginning of the Judgment.

Member Zoba pointed out that discussion of Form 5, initially discussed at the December 2019 meeting and further discussed through 2020 should be properly documented in the report. He further indicated that it was part of the Engineer's responsibility to document the activities surrounding the overlier relinquishing their rights and putting the rights in the appropriative pool. Mr. Blandon acknowledged.

Mr. Blandon reported on 2014 underproduction conversion to 2019 and presented the allocation. He detailed the conversion of OVP's 183.05 ac-ft in overlying rights to YVWD Appropriative right under Resolution 2017-02. Member Zoba opined that the report was not accurate. Member Jaggers indicated there is an impasse related to what legal counsel reported out as transfer and what YVWD identifies. Member Zoba suggested adding an Appendix to include all comment letters received on the report.

Mr. Harder presented the 2019 Operating Safe Yield and responded to comments by member Jaggers related to groundwater elevation. Mr. Harder pointed out wells experiencing declines in water levels while others are gaining. Mr. Blandon shared water quality data and presented recommendations to account for groundwater storage losses and to develop a protocol to increase accuracy and consistency in data reporting.

Chair Vela confirmed that a revised draft should be prepared including all the comments received. Mr. Blandon stated that he would work with legal counsel and address the comments made by member Zoba. Counsel Montoya agreed that a new draft would be appropriate and said the report must be full and comprehensive.

✓ Discussion Regarding Task Order No. 23 with ALDA Inc. for the Preparation of the 2020 Consolidated Annual Report, Estimate of the Basin Safe Yield, Update of the Groundwater Model, and Associated Consulting Services for 2021 [Memorandum 20-25]. After Mr. Blandon explained the basis for the cost of this task, member Zoba suggested the Committee discuss bringing on an administrator to provide more assistance with administration including the preparation of the meeting packets and make better use of the funds. Member Jaggers pointed to the scope of services and indicated that the numbers seem reasonable. Chair Vela concurred that the hours were appropriate and noted that ALDA was doing a great job.

Further discussion of this item was moved to the next meeting. A motion was introduced to table this item until next meeting, the motion passed on a 4-1 vote with member Jorritsma voting no.

 Discussion Regarding Task Order No. 24 with ALDA Inc. for the Installation, Maintenance, and Data Collection of Water Level Monitoring Equipment in 2021 [Memorandum 20-26]. Engineer Blandon explained that this task is for the continuation of water level monitoring in 2021 and the consulting cost was the same since 2017. A motion to approve this task was approved unanimously.

#### 2.2.3 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 reevaluation of the Safe Yield of the basin. At the February 2015 Watermaster Committee 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 Committee meeting.

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

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

### 2.3 Storage Applications and Agreements

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

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

An application for a storage agreement was also received from the Morongo Band of Mission Indians at the December 2012 meeting. The Watermaster Committee deemed the application incomplete and requested further information from the applicant to address questions posed by members of the 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 imported water in the Beaumont Groundwater Basin.

As of December 31, 2020, the total storage allowed stands at 290,000 ac-ft; storage limits by participant are presented below. Amounts of water in storage by participant are discussed under Section 3.

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

### 2.4 Rules and Regulations

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

The latest change to the Rules and Regulations came under Resolution 2019-02, adopted on June 25, 2019, by which the Beaumont Basin Watermaster rescinded Section 7 of the Beaumont Basin Watermaster Rules and Regulations in its entirety and replaced it as provided in Attachment A of the resolution. Under this resolution, the Beaumont Basin Watermaster also updated Form 5 entitled, "Notice to Adjust Rights of an Overlying Party due to Proposed Provision of Water Service by an Appropriator" and Form 7 entitled, "Notice to Transfers of Appropriator Production Right of Operating Yield Between Appropriators" as provided in Attachment "A" to the Resolution.

### 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 2020 operations.

### 2.6.1 Budget

The budget for Fiscal Year 2019-20 and 2020-21 were initially approved at the Feb 5, 2020 Watermaster Committee meeting under Memorandum 20-02. The approved budget provided funding for Administrative expenses in the amount of \$246,600.00, an increase of \$115,383.00 or 66.6 percent from the final budget for FY 2019-20 of \$131,217.00. The approved budget did not include any funds for Special Projects.

The following table presents a comparison between the final budgets for FY 2018-19, final budget for FY 2019-20, and approved budget for FY 2020-21.

Operating Expense	FY 2018-19 Final Budget		FY 2019-20 Final Budget		FY 2020-21 Approved Budget	
Administrative Expenses						
Bank Fees and Interest	\$	18.00	\$	14.00	\$	50.00
Miscellaneous and Meetings	\$	0.00	\$	0.00	\$	250.00
Acquisition/computation & Annual Report	\$	15,078.00	\$	0.00	\$	100,000.00
Annual Audit	\$	0.00	\$	1,300.00	\$	1,300.00
Engineering Services	\$	65,313.00	\$	24,527.00	\$	50,000.00
Monitoring and Data Acquisition	\$	44,567.00	\$	96,644.00	\$	50,000.00
Meter Installation and Repair	\$	0.00	\$	0.00	\$	10,000.00
Legal Expenses	\$	23,034.00	\$	10,032.00	\$	25,000.00
Reserve Funding	\$	0.00	\$	0.00	\$	10,000.00
	\$ 1	48,010.00	<b>\$</b> 1	31,217.00	\$ 2	46,600.00
Special Project Expenses						
Engineering		\$ 0.00		\$ 0.00		\$ 0.00
Litigation		\$ 0.00		\$ 0.00		\$ 0.00
		\$ 0.00		\$ 0.00		\$ 0.00
Total Operating Expense	\$ 1	48,010.00	\$ 1	31,217.00	\$ 2	46,600.00

### 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 2020, prepared by Rogers, Anderson, Malody, and Scott, LLP, 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 2020 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 17.04 inches over the 100-year period between 1921 and 2020. On the average during this 100-year period, 11.90 inches of precipitation, or 69.8 percent of total, fell during the winter between December and March. Over the last 25 years (1996-2020), precipitation has averaged 13.97 inches of rain which is approximately 82 percent of the 100-year average precipitation. Precipitation during CY 2020 at Station 13 was 11.70 inches, approximately 70 percent of the 100-year average.

Figure 3-1 illustrates annual precipitation at this station for the 25-year reporting period between 1996 and 2020 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 1997-98 period; average precipitation during this period was 19.59 inches or close to 15 percent above the long-term average. Other above average precipitation periods include the 2002-05 period. Conversely, down trending periods indicate periods of below average precipitation as in the 2011-18 period when average precipitation was only 11.23 inches or approximately 66 percent of the 100-year average.

Notwithstanding the significantly above average precipitation recorded in 2019, the Basin has been in a dry period that began in 2011. During the last 12 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 21 percent below the 100-year long-term average for the Basin and approximately four percent below the 25-year precipitation average of 14.05 inches.

### 3.1.2 Surface Water Hydrology

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

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

### 3.1.3 Hydrogeology

#### 3.1.3.1 Regional Geologic Context

The Beaumont Basin is located in the San Gorgonio Pass, a low-relief highland that is bordered on the north by the San Bernardino Mountains, on the southeast by the San Jacinto Mountains, and on the west by the San Timoteo Badlands. Surface sediments in the Beaumont Basin and nearby lowlands consist of unconsolidated to semi consolidated Quaternary alluvium. Surrounding the alluvial sediments are semi consolidated 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.

Monthly production for the last five years of operation (CY 2016-20) are presented in a series of tables starting with Table 3-1A for CY 2016 and continuing on an annual basis through Table 3-1E for CY 2020. 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 2020, Appropriators pumped a combined amount of 16,724.70 ac-ft of groundwater from the Beaumont Basin. Production for CY 2020 is the highest production ever recorded from the Basin and represents an increase of approximately 2,600 ac-ft over CY 2019. It is 17.2 percent higher than the 2016-20 five-year average of 14,265 ac-ft per year.

With the exception of SMWC, all other agencies produced more in CY 2020 than in CY 2019. The City of Banning production increased by over 20 percent while BCVWD pumped close to 13 percent more water than in CY 2019. Production for these two agencies does include water transfers from BCVWD to the City of Banning. Production by YVWD increased by 166 percent when compared to CY 2019 at 1,408 ac-ft. SMWC pumped only 69 percent of the amount pumped the previous 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 over 99 percent of the total production by Overlying Parties in CY 2020.

The remaining wells, operated by smaller producers, did not have meters for some or most of 2020 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 2020 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 were developed to report monthly and annual production from the Overlying Parties on a calendar year basis. Starting with Table 3-2A, monthly production by well is documented for CY 2016. In a similar manner, Tables 3-2B through 3-2E summarize monthly overlying production for CY 2017 through CY 2020 respectively. In addition, these tables show their share of the Safe Yield and the amount of unused water for each Overlying Party is shown. During CY 2020, Overlying Producers produced an estimated 1,911.40 ac-ft; this level of production is approximately eight percent higher than in CY 2019, a record low year. Production in CY 2020 was however 14 percent lower than in CY 2018. Compared to the 2016-20 five-year average of 2,049.5 ac-ft/yr, Overlying Producers pumped seven percent less water.

#### 3.2.3 2003-2020 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 2011 calendar years while Table 3-3B documents annual production for CY 2012 through CY 2020. It should be noted that production from 2003 only includes production for the second half of the year. Since July 2003, a total of 280,792 ac-ft has been pumped from the Beaumont Basin; an estimated 84.0 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 to an all-time high of 89.7 percent in CY 2020. Over the last five years, production by appropriators has averaged 87.3 percent of total extractions.

Groundwater production peaked in CY 2007 when close to 20,000 ac-ft were pumped from the basin; since, it declined steadily through CY 2010 to approximately 13,600 ac-ft. Production during the CY 2011-14 period increased by 26.2 percent to 17,281 ac-ft. Since 2014, production declined significantly in CY 2015 by over 4,000 ac-ft and began climbing again through CY 2018. Production in CY 2020 of 18,636 ac-ft exceeded CY 2014 production for the first time. Figure 3-4 depicts annual total production by appropriators and overlying parties on a calendar year basis. Also depicted on this figure is the amount of annual Overlying underproduction to be allocated to Appropriators.

### 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 Gorgonio 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 Blvd., has been until now the primary facility in the Beaumont Basin where imported water can be delivered for groundwater recharge. The location of this spreading facility is depicted in Figure 3-3. In 2019, the SGPWA

completed the construction of a new spreading facility southwest of the intersection of Beaumont Avenue and Brookside Avenue; spreading of imported water at this location took place for the first time in December when the SGPWA spread close to 257.80 ac-ft.

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 five years, BCVWD has spread close to 60,000 ac-ft of imported water at the Noble Creek facilities. A total of 108,892 ac-ft of imported water have been spread by BCVWD since CY 2006 (See 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 13,942 ac-ft. in accordance with their storage agreement on file with Watermaster. During CY 2012 and 2013, 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 2019 and again in CY 2020, the City of Banning spread only 250 ac-ft of imported water per year.

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

Deliveries of imported water by the SGPWA to the Little San Gorgonio Creek Spreading Ponds began in August 2003. Between 2004 and 2013, SGPWA recharged a total of 10,464 ac-ft or an average of 1,046.4 ac-ft/yr. Deliveries in CY 2014 through CY 2018 were practically 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. SGPWA recently completed the construction of their spreading facilities, as noted earlier, and has spread 471.8 ac-ft at this new location. No spreading by SGPWA has taken place at the Little San Gorgonio Creek Spreading Ponds since CY 2016.

### 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 ceased deliveries to DP-007 in the Fall of 2015.

In CY 2020, the City of Beaumont discharged an estimated 4,305 ac-ft of recycled water at DP-001 in Cooper's Canyon. Recycled water discharges were approximately five percent higher than in CY 2019. Monthly discharges at DP-001 varied slightly from a low 3.46 mgd in November to a high of 4.09 mgd in August; the average for the year was 3.83 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 the City of 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 replaced by Resolution 2019-2 in June 2019, 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 Appropriators
- ✓ 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 redetermined and estimated at 6,700 ac-ft/yr. This amount represents a 22.54 percent reduction from the previous estimate of 8,650 ac-ft/yr. Table 3-6 presents the initial and revised production rights from individual Overlying producers and compares them against actual groundwater production during the 2016-20 five-year period for each user. Annual average groundwater production during this period for all Overlying producers combined was estimated at 2,049.5 ac-ft/yr; representing approximately 30.6 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 82.1 percent followed by Plantation by the Lake at 72.7 percent and Sharondale Mesa Owner Association at 70.1 percent. Tukwet Canyon Golf Club followed at an average of 56.4 percent of their Overlying right.

### 3.4.1 Transfers between Appropriators

According to Section 7.2 of the Rules and Regulations, as replaced under Resolution 2019-02, 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 allowed 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 2020.

### 3.4.2 Transfers of Overlying Rights for Service by an Appropriator

The Stipulated Judgment, under Part III, Declaration of Adjustment of Rights, Section 3(B), provides that to the extent any Overlying Party requests, and uses its Exhibit "B", Column 4 water to obtain water service from an Appropriative Party, an equivalent volume of potable groundwater shall be earmarked by the Appropriative Party which will serve the Overlying Party, up to the volume of the Overlying Water Rights as reflected in Column 4 of Exhibit "B" for the purpose of serving the Overlying Party.

The Stipulated Judgment, under Part III, Section 3(C), states that in the event that an Overlying Party receives water service from an Appropriative Party, the Overlying Party shall forebear the use of that volume of the Overlying Water Right earmarked by the Appropriative Party. The Appropriator Party providing such service shall have the right to produce the volume of water foregone by the Overlying Party, in addition to other rights otherwise allocated to the Appropriator Party.

Under Resolution 17-02, adopted on August 30, 2017, Oak Valley Partners L.P. ("OVP") agreed to transfer its Overlying water rights to particular development parcels, intending to secure commitments from YVWD to provide water services to development phases of OVP's Summerwind Ranch Specific Plan (Project), located 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.

In 2018 Oak Valley Partners transferred a combined total of 180.4 ac-ft in Overlying rights to YVWD upon YVWD's water service commitments to serve certain Project parcels in the Beaumont Basin. In a similar manner, an additional 2.65 ac-ft of former OVP's Overlying rights were transferred to YVWD in early 2019 for a combined total of 183.05 ac-ft. There were no transfers of Overlying rights from OVP to YVWD in 2020.

The transfer of the above amount reduced OVP's Overlying rights to 1,215.81 ac-ft/yr for 2020. In the future OVP's 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 rights, as denoted above, by either pumping from the basin, transferring to other Appropriators, or adding to its storage account.

Under Resolution 2019-02, adopted on June 25, 2019, the Beaumont Basin Watermaster rescinded Section 7 of the Beaumont Basin Watermaster Rules and Regulations in its entirety and replaced it as provided in Attachment A of the resolution. Under this resolution, the Beaumont Basin Watermaster also updated Form 5 entitled, "Notice to Adjust Rights of an Overlying Party due to Proposed Provision of Water Service by an Appropriator" and Form 7 entitled, "Notice to Transfers of Appropriator Production Right of Operating Yield Between Appropriators".

At the Dec 4, 2019 Watermaster Meeting, YVWD submitted a Form 5, signed Nov 19, 2019, documenting the transfer of OVP's all original 1,806 / revised 1,398.90 ac-ft ("Earmarked Water") of Overlying Water Rights to the YVWD effective on October 9, 2018. This issue was extensively discussed at that meeting and throughout the various meetings in 2020 between legal counsel and members of the Watermaster Committee.

A summary of the meeting minutes for each meeting is included in Section 2.2.3. Complete minutes for all Watermaster meetings in 2020 are presented in Appendix A. A copy of Form 5 submitted by YVWD is included under Appendix E.

### 3.4.3 Allocation of Unused Overlying Water

Section 7.3 of the Rules and Regulations, as replaced under Resolution 2019-02, 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 have 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 2020 were based on unused production from Overlying Users in CY 2015. 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 2020. While groundwater production by Overlying Users has decreased by over 45 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 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 share of the Safe Yield and the schedule set forth under Section 7.3 of the Rules and Regulations, as replaced under Resolution 2019-02. 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 2015, estimated at 4,614 ac-ft, is allocated to Appropriators during CY 2020. Unused Overlying production during CY 2020, adjusted by reductions on OVP's rights, is estimated at 4,606 ac-ft. This amount would be allocated to Appropriators during CY 2025.

### 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 2020. 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 2019, an overall total of 117,991.20 ac-ft of water were stored in the Basin for future use; this total decreased in CY 2020 by 458.40 ac-ft to a cumulative total of 117,532.80 ac-ft. 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 2020 was 16,720.00 ac-ft higher. The amount of water in storage by party at the beginning and end of CY 2020 is presented below. Figure 3-5 compares the amount of water in storage to the storage limit for

each party with storage accounts. Figure 3-6 presents storage totals by agency for the CY 2011-20 period.

Agency / Party to the Judgment	Calendar Year 2020 (ac-ft)					
Agency / r arty to the studgment	Beginning	Ending	Change			
City of Banning	51,737.5	50,889.2	-848.4			
BCVWD	39,322.50	39,749.8	427.3			
City of Beaumont	0.0	0.0	0.0			
South Mesa Water Company	9,787.5	10,134.2	346.7			
Yucaipa Valley Water District	16,885.8	16,287.7	-598.1			
Morongo Band of Mission Indians	0.0	0.0	0.0			
San Gorgonio Pass Water Agency	257.8	471.8	214.0			
TOTAL in Storage	117,991.2	117,532.8	-458.4			

# 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 2019 and 2020 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 2020. A manual-generated groundwater contour map was created for December 2018 and compared to the corresponding map for December 2019 in order to evaluate changes in groundwater flow patterns and basin-wide changes in groundwater levels. The manual generated groundwater contour maps for 2019 and 2020 are shown on Figures 3-7 and 3-8, 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 2019 and 2020.

Basin-wide groundwater level trends in the Beaumont Basin were evaluated based on hydrographs from eights key wells and the groundwater level change map developed by subtracting the 2019 groundwater surface from the 2020 groundwater surface. The total

change in storage between the Fall 2019 and the Fall 2020 is shown in Figure 3-9. In the northwest portion of the basin (YVWD 34 and Singleton Ranch 7), groundwater levels began decreasing in CY 2020. At Tukwet Canyon Golf Club C, although groundwater levels had been steadily declining between 2003 and 2018, they were relatively stable between December 2019 and December 2020. 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 eight feet between December 2019 and December 2020 (see Figure 3-9).

In the south-central portion of the basin, groundwater levels at Oak Valley No. 1 began to recover in CY 2020. At BCVWD Well No. 2, groundwater levels have been steadily increasing since February 2020. At Banning Well C-4 (southeast Beaumont Basin), groundwater levels are highly variable and likely influenced by groundwater pumping. As judged by the highest peaks in the hydrograph, the overall groundwater level trend at this well has been downward from approximately 2016.

Groundwater levels in the northeast portion of the basin (USGS Highland Springs Monitoring Well - 335714116565002) have been trending upward since 2010.

### 3.6.2 Analysis of Change in Groundwater Storage

Basin-wide change in groundwater storage between December 2019 and December 2020 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:

- ✓ The December 2019 and 2020 manual generated groundwater contour maps were each converted into three-dimensional raster surfaces.
- ✓ The basin was discretized into 100-ft by 100-ft grid cells.
- ✓ Attributes were assigned to each grid cell including groundwater level change and specific yield.
- ✓ The resulting attribute table was processed in a Geographic Information System (GIS) for calculating the change in storage.

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

Results of the analysis show a decrease in groundwater storage within the adjudicated basin of approximately 5,577 ac-ft during this one-year period.

### 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 overlier 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:	ΣΡ	=	The sum of groundwater production (ac-ft)
	ΔS	=	The change in groundwater storage (ac-ft)
	$\Sigma AR$	=	The sum of groundwater recharge (ac-ft)
	$\Delta T$	=	The time over which the OSY is estimated (years)

Total Beaumont Basin groundwater production in calendar year 2020 was 18,636 ac-ft (see Table 3-3). Total artificial recharge in calendar year 2020 was 11,469 ac-ft (see Table 3-4). It is noted that only the Noble Creek Recharge Facility recharge was used in the analysis of OSY (recharge at the Little San Gorgonio Creek facility is not included because it is outside the adjudicated area). The change in groundwater storage estimate is based on the analysis of groundwater levels described earlier in this analysis. The period of time over which the OSY is evaluated is one year. The resulting OSY is estimated as:

 $OSY = \frac{18,636 + (-5,577) - 11,469}{1} = 1,590 \text{ ac-ft}$ 

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:

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.
- ✓ Accuracy of Overlier 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 Overlier Production is anticipated to affect the OSY (plus or minus) minimally on the order of a few ac-ft (not hundreds or thousands of ac-ft).

### 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 revisions changing the reporting of Watermaster activities from a fiscal year basis to a calendar year basis and more recently replacing Section 7 in its entirety under Resolution 19-02.

In September 2018, a study to estimate groundwater losses from the basin was completed for Watermaster. In this study groundwater losses from the basin resulting from spreading of imported or outside water at selected locations in the basin was estimated. The study has been accepted by the Watermaster Committee; however, a methodology to address this issue is yet to be developed.

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.

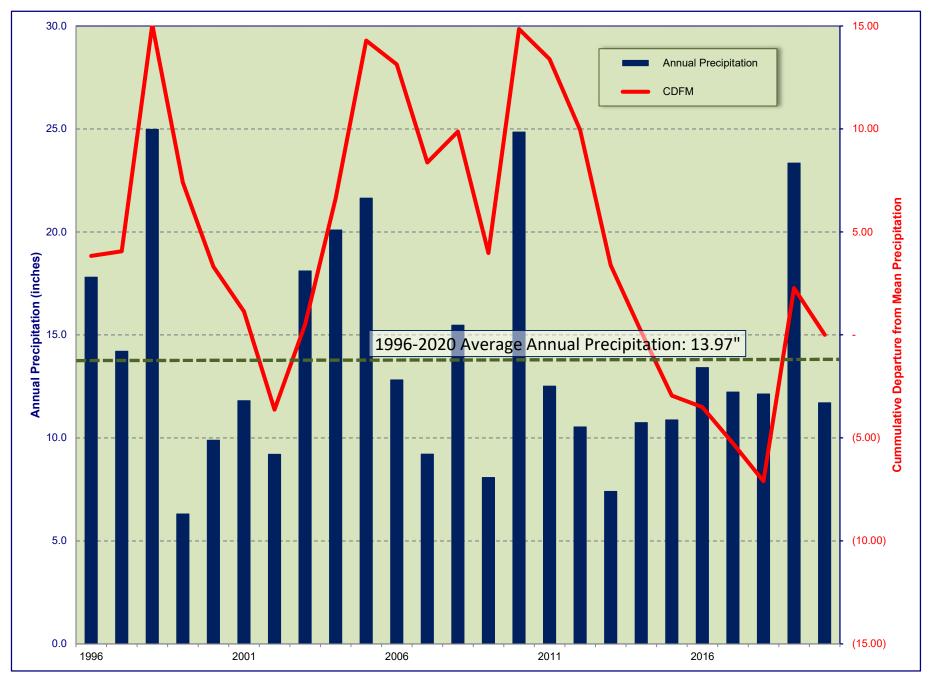
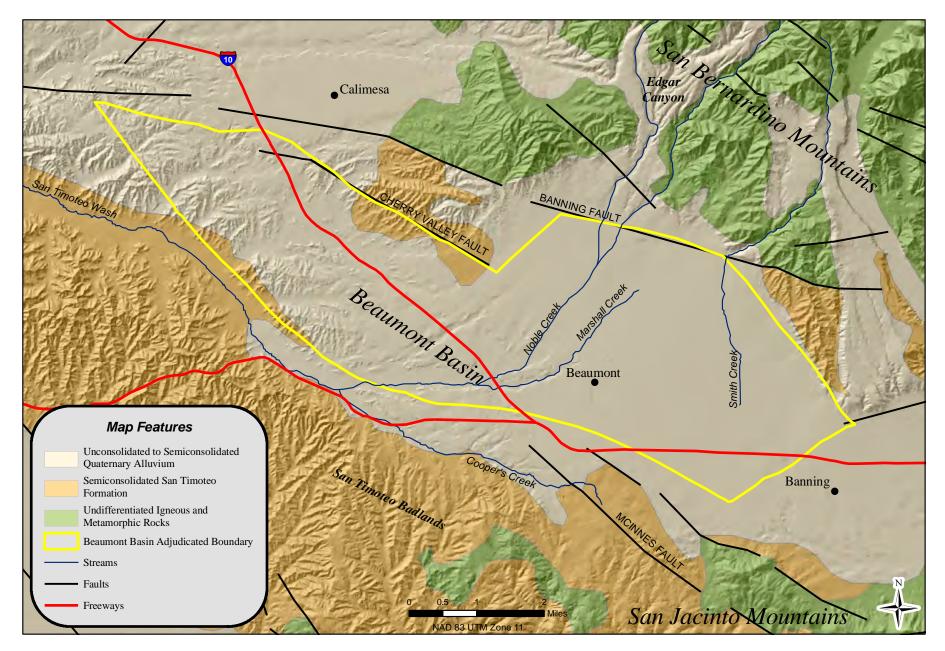


Figure 3-1 Annual Precipitation with Cummulative Departure from the Mean (1996-2020)





Geology of the Beaumont Basin Figure 3-2

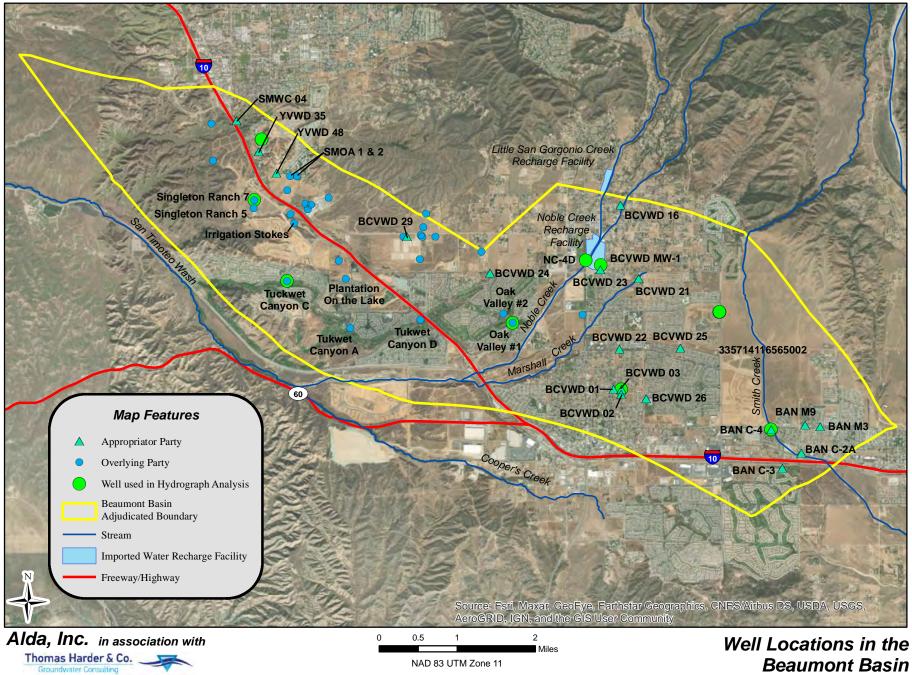


Figure 3-3

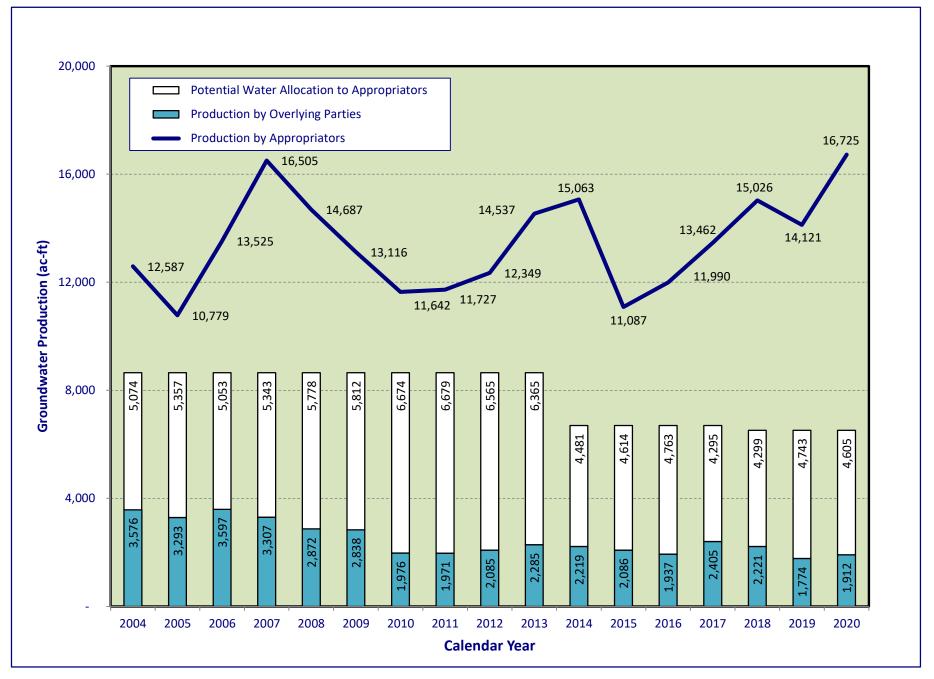


Figure 3-4 Annual Production by Appropriators and Overalying Users (2004-20)

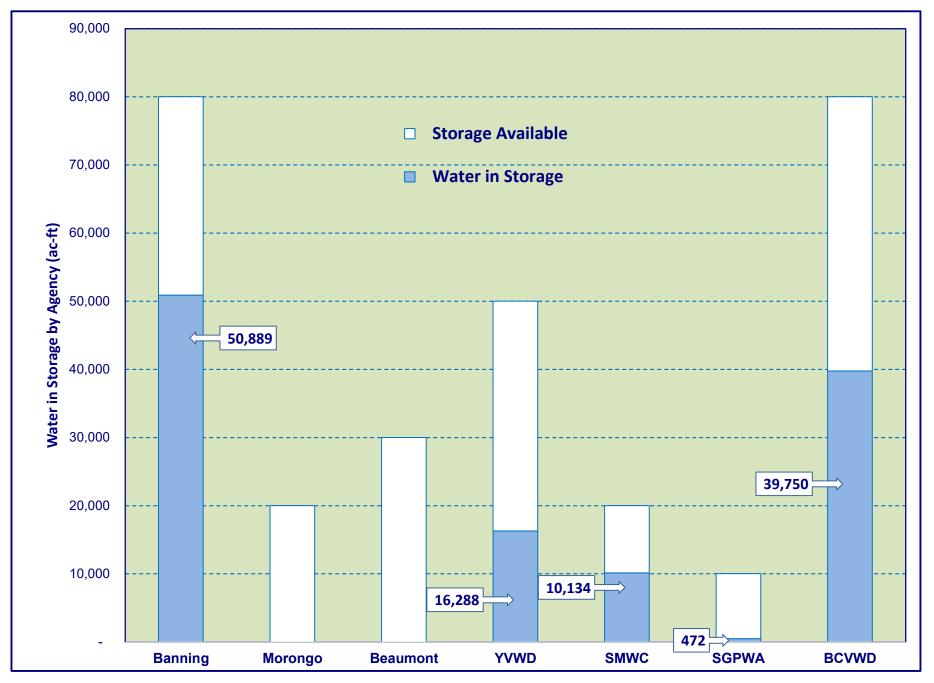


Figure 3-5 Groundwater Storage by Agency/User as of 2020

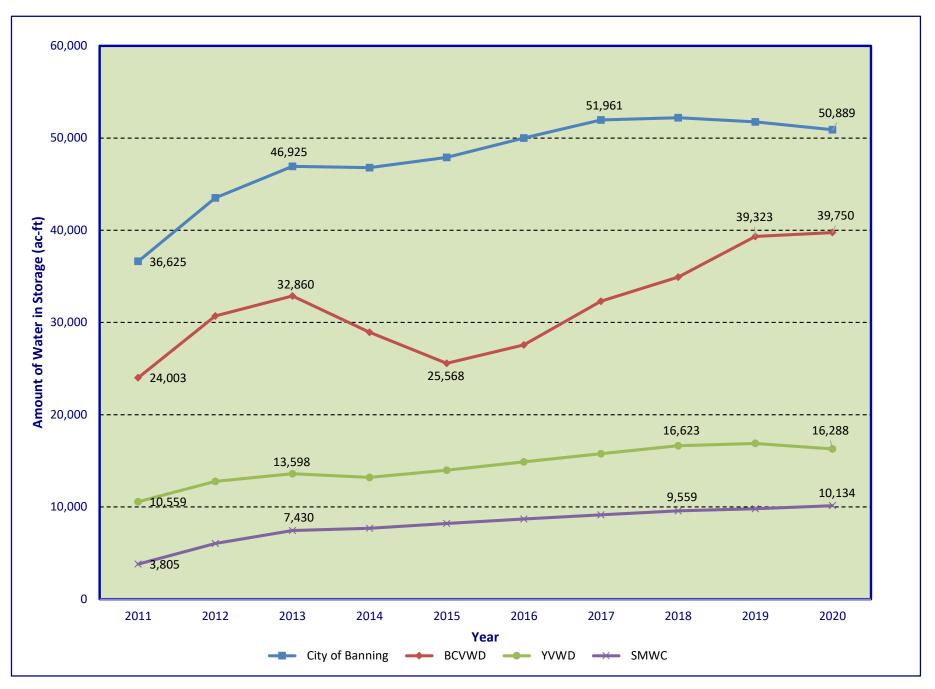


Figure 3-6 Accumulation of Storage by Agency (2011-20)

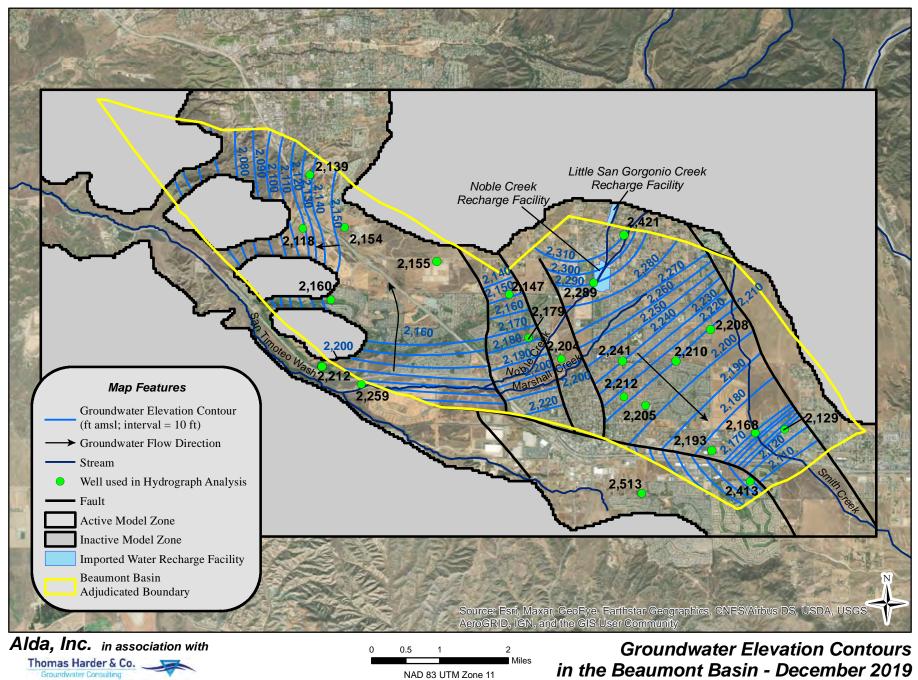


Figure 3-7

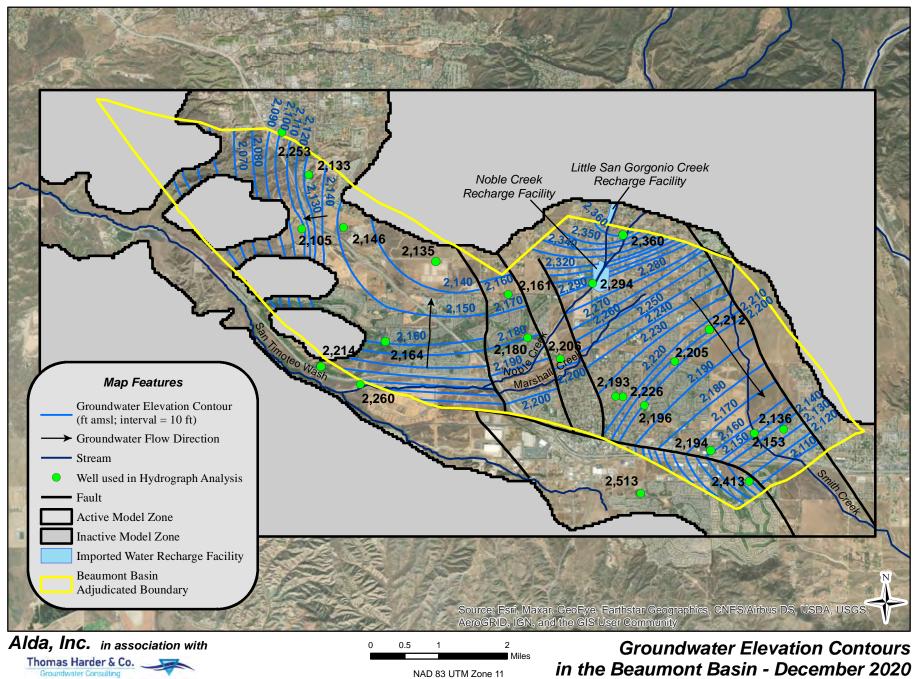
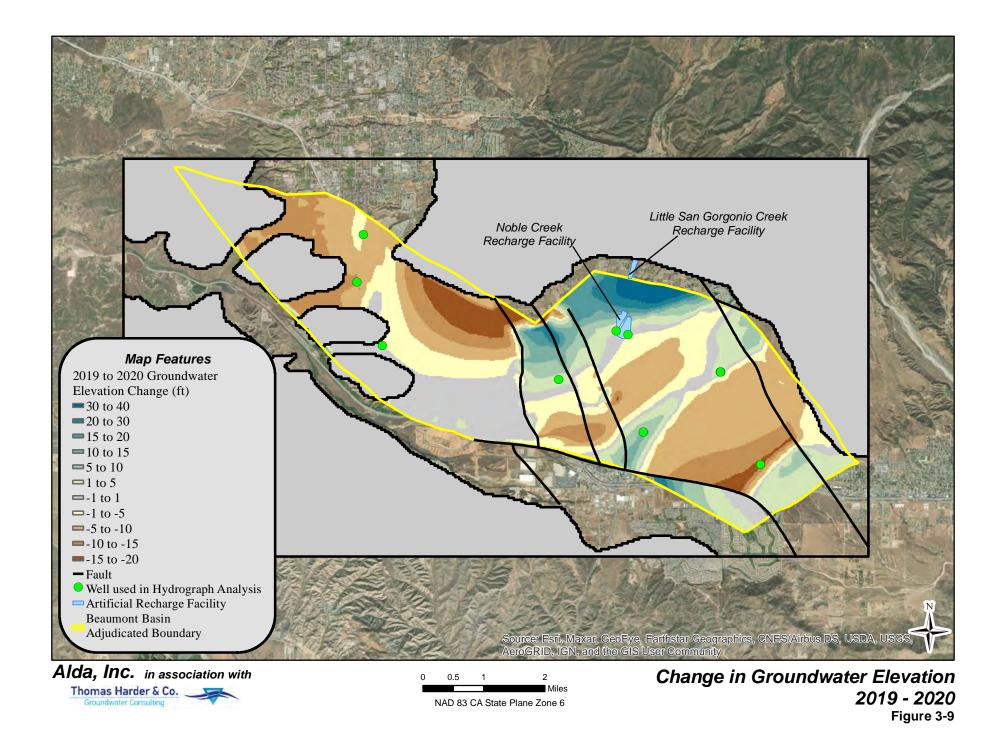
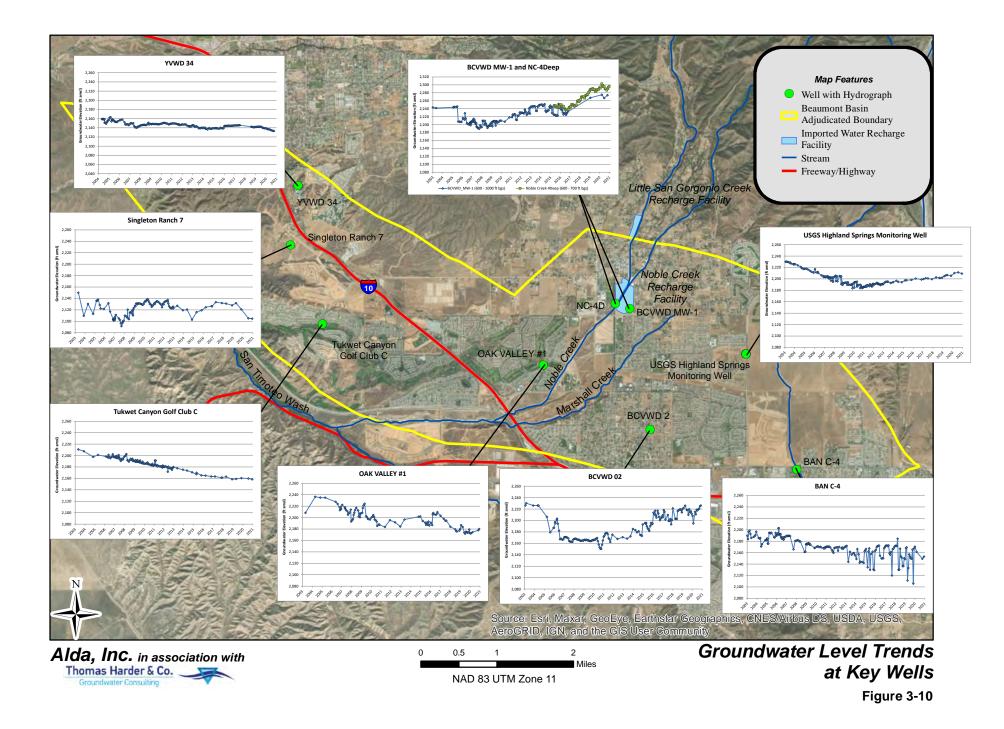


Figure 3-8





#### Table 3-1A

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

Owner &				W	ater Prod	uction by	Appropria	tor (ac-ft)	(1)				Total
Well Name	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Production
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	Vallev Wat	ter District	t										
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 <sup>(2)</sup>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal	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 Wa	ater Distric	t									•		
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

#### Table 3-1B

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

Owner &				W	ater Prod	uction by	Appropria	tor (ac-ft)	(1)				Total
Well Name	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Production
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 Wat	ter 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 <sup>(2)</sup>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal	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 Wa	ater Distric	t									•		
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

#### Table 3-1C

#### Appropriator Producer - Summary of Production for Calendar Year 2018 (ac-ft)

Owner &				W	later Prod	uction by	Appropria	tor (ac-ft)	(1)				Total
Well Name	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Production
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	38.6	52.6	28.6	119.7
Subtotal	4.1	6.5	4.0	87.9	154.4	231.2	269.2	304.1	353.0	344.9	350.1	151.5	2,260.8
Beaumont Cherry	Vallev Wat	ter District	t										
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 <sup>(2)</sup>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-38.6	-52.6	-28.6	-119.7
Subtotal	741.6	708.9	545.4	919.9	1,029.6	1,299.5	1,459.3	1,475.6	1,360.7	1,074.0	959.5	635.3	12,209.2
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 Wa	ater Distric	t									•		
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

#### Table 3-1D

#### Appropriator Producer - Summary of Production for Calendar Year 2019 (ac-ft)

Owner &				W	ater Prod	uction by	Appropria	tor (ac-ft)	(1)				Total
Well Name	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Production
Banning, City of													
Well C2-A	6.0	25.4	17.5	0.6	3.7	11.2	25.7	39.0	44.8	26.3	0.9	1.4	202.4
Well C3	0.8	0.4	0.2	1.3	0.0	38.3	78.8	53.2	0.0	0.0	0.0	0.0	172.8
Well C4	105.4	7.4	15.8	146.7	144.5	110.0	100.0	109.9	118.0	61.6	80.7	6.4	1,006.4
Well M3	4.9	50.2	51.1	32.0	4.4	56.2	84.0	82.8	79.7	81.8	77.0	74.8	679.0
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)	16.9	1.0	4.8	10.0	5.4	6.5	6.0	3.6	0.5	3.6	0.7	1.6	60.7
Subtotal	133.9	84.3	89.3	190.6	157.9	222.2	294.5	288.5	243.0	173.3	159.3	84.2	2,121.3
Beaumont Cherry	Valley Wat	ter District	t										
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	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
Well 16	0.1	0.0	0.4	1.2	0.0	3.1	0.0	8.3	9.2	20.8	6.2	1.9	51.1
Well 21	186.1	168.1	71.1	240.8	206.3	237.4	256.9	242.5	227.1	256.6	237.3	158.7	2,488.8
Well 22	0.0	0.0	0.0	7.5	6.1	123.1	116.2	106.4	91.5	90.7	65.1	5.0	611.7
Well 23	82.1	106.1	42.6	85.9	27.3	113.3	240.6	280.6	229.9	189.5	176.2	172.3	1,746.4
Well 24	89.9	21.6	133.9	211.0	108.1	179.7	201.9	249.7	206.6	195.4	186.7	86.6	1,871.1
Well 25	196.2	95.2	201.4	216.7	249.4	244.6	307.7	298.4	280.5	277.1	171.9	59.1	2,598.4
Well 26	15.7	0.0	26.2	130.2	57.6	130.1	125.9	155.4	151.2	139.3	113.9	17.3	1,062.7
Well 29	6.3	5.4	1.6	0.0	4.4	49.7	194.9	224.4	167.0	76.5	30.1	10.4	770.8
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 <sup>(2)</sup>	-16.9	-1.0	-4.8	-10.0	-5.4	-6.5	-6.0	-3.6	-0.5	-3.6	-0.7	-1.6	-60.7
Subtotal	560.2	395.5	472.5	883.2	653.9	1,074.5	1,438.0	1,562.1	1,362.5	1,242.4	986.5	509.7	11,140.9
South Mesa Water	Company												
3rd No. 4 Well	12.8	11.8	14.2	25.5	22.5	38.9	53.6	54.4	39.8	22.9	20.7	13.5	330.7
Subtotal	12.8	11.8	14.2	25.5	22.5	38.9	53.6	54.4	39.8	22.9	20.7	13.5	330.7
Yucaipa Valley Wa	ater Distric	t									•		
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	148.0	110.4	83.6	76.7	110.0	528.6
Subtotal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	148.0	110.4	83.6	76.7	110.0	528.6
Total	706.9	491.6	576.1	1,099.3	834.3	1,335.5	1,786.1	2,053.0	1,755.8	1,522.2	1,243.2	717.4	14,121.5

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

### Table 3-1EAppropriator Producer - Summary of Production for Calendar Year 2020 (ac-ft)

Owner &				v	later Prod	uction by	Appropria	tor (ac-ft)	(1)				Total
Well Name	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Production
Banning, City of												••	
Well C2-A	4.0	20.3	2.7	0.5	7.8	16.8	27.6	23.5	17.8	13.4	19.5	4.8	158.8
Well C3	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 C4	25.1	90.6	101.3	106.1	115.8	133.3	146.6	149.0	142.6	135.1	125.6	137.4	1,408.7
Well M3	80.9	0.1	0.3	0.3	72.1	77.9	85.1	82.8	82.8	52.1	40.2	42.3	616.8
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)	1.9	6.4	2.5	0.6	0.0	0.0	0.0	84.5	98.3	110.8	43.2	16.1	364.4
Subtotal	111.9	117.5	106.9	107.6	195.7	228.0	259.4	339.7	341.5	311.4	228.5	200.6	2,548.6
Beaumont Cherry	Vallev Wa	ter District	t										
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	3.0	26.3	47.7	50.7	113.0	126.8	165.9	163.7	61.1	59.8	34.7	852.6
Well 16	0.0	9.1	19.0	4.0	18.2	52.6	21.2	56.4	8.9	9.3	0.5	2.0	201.1
Well 21	157.8	129.3	19.4	0.0	0.0	0.0	69.9	221.0	199.9	218.0	125.2	113.2	1,253.7
Well 22	0.5	5.6	17.0	35.6	134.4	160.7	106.7	71.2	172.7	149.7	86.7	75.8	1,016.5
Well 23	256.7	145.4	64.9	163.0	209.7	271.2	273.1	276.1	269.4	236.8	178.5	159.2	2,504.0
Well 24	164.9	144.1	120.2	155.8	186.9	153.0	225.1	130.2	1.9	57.1	0.0	2.1	1,341.3
Well 25	55.9	74.2	33.5	29.8	144.8	151.6	182.1	151.6	145.7	160.0	122.5	125.0	1,376.7
Well 26	0.0	139.6	191.8	123.7	251.1	178.6	280.3	300.0	307.6	297.6	226.1	210.7	2,507.1
Well 29	5.9	59.6	44.4	0.0	185.2	209.0	224.8	286.9	291.9	212.7	166.9	163.4	1,850.7
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 <sup>(2)</sup>	-1.9	-6.4	-2.5	-0.6	0.0	0.0	0.0	-84.5	-98.3	-110.8	-43.2	-16.1	-364.4
Subtotal	639.8	703.4	533.9	558.9	1,181.0	1,289.7	1,509.9	1,574.8	1,463.4	1,291.5	923.0	870.0	12,539.2
South Mesa Water	Company	,											
3rd No. 4 Well	17.1	14.9	13.0	16.9	26.2	24.7	36.6	44.8	26.7	-	-	8.3	229.2
Subtotal	17.1	14.9	13.0	16.9	26.2	24.7	36.6	44.8	26.7	0.0	0.0	8.3	229.2
Yucaipa Valley Wa	ater Distric	t									•		
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	152.2	142.1	83.4	122.9	133.1	158.5	167.4	148.1	127.2	119.7	53.3	0.0	1,407.7
Subtotal	152.2	142.1	83.4	122.9	133.1	158.5	167.4	148.1	127.2	119.7	53.3	0.0	1,407.7
Total	920.9	977.9	737.1	806.2	1,536.0	1,700.8	1,973.2	2,107.5	1,958.8	1,722.6	1,204.9	1,078.9	16,724.7

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

		-				-								1		
Owner and Well Name	Metered				Monthly	y Water I	Producti	on by Ov	erlying F	Producer	1			Total <sup>2</sup>	Overlying Water	Unused Overlying
	Wetered	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Production	Right	Allocation
Beckman, Walter M. <sup>(3)</sup>	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 <sup>(4)</sup>																
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 Met	hod Used	I to Estima	ate Annua	l Producti	on						1.6	426.0	424.4
Oak Valley Partners, LP <sup>(5)</sup>														2.5	1,398.9	1,396.4
Plantation on the Lake LLC	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 <sup>(6)</sup>																
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 Met	hod Used	I to Estima	ate Annua	l Producti	on						0.0	119.3	119.3
Sharondale Mesa Owners Association <sup>(6)</sup>																
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 <sup>(7)</sup>																
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	Wa	ter Duty N	lethod Us	sed to Esti	mate Ann	ual Produ	ction						0.7	154.9	154.2
Sunny-Cal Egg and Poultry Company	No	Wa	ter Duty N	lethod Us	sed to Esti	mate Ann	ual Produ	ction						4.3	1,115.0	1,110.6
Albor Properties III, LP	No	Wa	ter Duty N	lethod Us	sed to Esti	mate Ann	ual Produ	ction						2.4	232.4	229.9
Nikodinov, Nick	No	Wa	ter Duty N	lethod Us	sed to Esti	mate Ann	ual Produ	ction						0.8	15.5	14.7
McAmis, Ronald L.	No	Wa	ter Duty N	lethod Us	sed to Esti	mate Ann	ual Produ	ction						0.6	3.9	3.3
Aldama, Nicolas and Amalia	No	Wa	ter Duty N	lethod Us	sed to Esti	mate Ann	ual Produ	ction						0.9	5.4	4.6
Gutierrez, Hector, et al.	No	Wa	ter Duty N	lethod Us	sed to Esti	mate Ann	ual Produ	ction						1.4	7.7	6.3
Darmont, Boris and Miriam	No	Wa	ter Duty N	lethod Us	sed to Esti	mate Ann	ual Produ	ction						0.4	1.9	1.6
TOTAL														1,936.7	6,700.0	4,763.3

 Table 3-2A

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

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

3.- Mr. Beckman has not provided production information since 2014.

4.- Monthly production provided by BCVWD.

5.- Starting in 2008, the parcels owned by Oak Valley Partners (OVP) were no longer used for agricultural purposes. An annual production of 2.5 ac-ft has been estimated since.

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

Owner and Well Name	Metered				Monthly	/ Water F	Productio	on by Ov	erlying P	roducer				Total <sup>2</sup>	Overlying Water	Unused Overlying
Owner and wen Name	Wetereu	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Production	Right	Allocation
Beckman, Walter M. <sup>(3)</sup>	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 <sup>(4)</sup>																
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 Met	hod Used	l to Estima	ate Annua	Production	on						1.6	426.0	424.4
Oak Valley Partners, LP <sup>(5)</sup>														2.5	1,398.87	1,396.4
Plantation on the Lake LLC	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 <sup>(6)</sup>																
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 Met	hod Used	l to Estima	ate Annua	Production	on						0.0	119.3	119.3
Sharondale Mesa Owners Association <sup>(6)</sup>																
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 <sup>(7)</sup>																
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 4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Well D Subtotal	Yes	0.0 <b>0.4</b>	4.7 5.5	48.3 <b>48.8</b>	94.9 <b>102.8</b>	111.7 <b>117.9</b>	130.5 <b>145.9</b>	58.2 <b>70.5</b>	137.6 <b>143.7</b>	112.1 <b>115.0</b>	101.8 <b>114.1</b>	58.4 <b>59.1</b>	67.1 <b>67.6</b>	925.1 <b>991.4</b>	1,704.0	712.7
Stearns, Leonard M. and Dorothy D.	No					mate Ann						00.1	01.0	0.7	154.9	154.2
Sunny-Cal Egg and Poultry Company	No					mate Ann								4.3	1,115.0	1,110.6
Albor Properties III, LP	No					mate Ann								2.4	232.4	229.9
Nikodinov, Nick	No					mate Ann								0.8	15.5	14.7
McAmis, Ronald L.	No	Wat	ter Duty N	/lethod Us	ed to Esti	mate Ann	ual Produ	ction						0.6	3.9	3.3
Aldama, Nicolas and Amalia	No					mate Ann								0.9	5.4	4.6
Gutierrez, Hector, et al.	No	Wat	ter Duty N	/lethod Us	ed to Esti	mate Ann	ual Produ	ction						1.4	7.7	6.3
Darmont, Boris and Miriam	No	Wat	ter Duty N	/lethod Us	ed to Esti	mate Ann	ual Produ	ction						0.4	1.9	1.6
TOTAL														2,404.7	6,700.0	4,389.4

 Table 3-2B

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

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

3.- Mr. Beckman has not provided production information since 2014.

4.- Monthly production provided by BCVWD.

5.- Starting in 2008, the parcels owned by Oak Valley Partners (OVP) were no longer used for agricultural purposes. An annual production of 2.5 ac-ft has been estimated since.

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

			-			-				1					Overlying	Unused
Owner and Well Name	Metered			1	Monthly	/ Water F	Productio	on by Ov	erlying P	Producer				Total <sup>2</sup>	Water	Overlying
		Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Production	Right	Allocation
Beckman, Walter M. <sup>(3)</sup>	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 <sup>(4)</sup>																
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 Met	hod Used	to Estima	ate Annua	Production	on						1.6	426.0	424.4
Oak Valley Partners, LP <sup>(5)</sup>														2.5	1,218.47	1,216.0
Plantation on the Lake LLC	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 <sup>(6)</sup>																
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 Met	hod Used	to Estima	ate Annua	Production	on						0.0	119.3	119.3
Sharondale Mesa Owners Association <sup>(6)</sup>																
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 <sup>(7)</sup>																
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 Well D	Yes	0.0 37.3	0.0 40.8	0.0 18.3	0.0 88.3	0.0	0.0 124.6	0.0 149.1	0.0	0.0 120.0	0.0	0.0 67.6	0.0	0.0 963.5		
Subtotal	Yes	37.5 38.2	40.8 41.2	10.3 19.0	89.8	78.9 <b>79.8</b>	124.0 128.7	149.1 162.7	133.8 <b>147.3</b>	120.0 127.5	81.4 <b>84.2</b>	67.0 68.3	23.4 <b>24.2</b>	903.5 1,010.9	1,704.0	693.1
Stearns, Leonard M. and Dorothy D.	No		ter Duty N		ed to Esti		ual Produc							0.7	154.9	154.2
Sunny-Cal Egg and Poultry Company	No						ual Produ							4.3	1,115.0	1,110.6
Albor Properties III, LP	No	Wat	ter Duty N	lethod Us	ed to Esti	mate Ann	ual Produ	ction						2.4	232.4	229.9
Nikodinov, Nick	No	Wat	ter Duty N	lethod Us	ed to Esti	mate Ann	ual Produ	ction						0.8	15.5	14.7
McAmis, Ronald L.	No						ual Produ							0.6	3.9	3.3
Aldama, Nicolas and Amalia	No	Wat	ter Duty N	lethod Us	ed to Esti	mate Ann	ual Produ	ction						0.9	5.4	4.6
Gutierrez, Hector, et al.	No	Wat	ter Duty N	lethod Us	ed to Esti	mate Ann	ual Produ	ction						1.4	7.7	6.3
Darmont, Boris and Miriam	No	Wat	ter Duty N	lethod Us	ed to Esti	mate Ann	ual Produ	ction						0.4	1.9	1.6
TOTAL														2,220.7	6,519.6	4,298.9

 Table 3-2C

 Overlying Producer - Summary of Production for Calendar Year 2018 (ac-ft)

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

3.- Mr. Beckman has not provided production information since 2014.

4.- Monthly production provided by BCVWD.

5.- Starting in 2008, the parcels owned by Oak Valley Partners (OVP) were no longer used for agricultural purposes. An annual production of 2.5 ac-ft has been estimated since. As part of Resolution 2017-02, OVP transfered 180.40 ac-ft of its Overlying rights to YVWD in 2018; OVP's rights were reduced to 1,218.47 ac-ft.

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

			-			-					. ,				Operation	Harrist
Owner and Well Name	Metered		•		Monthly	/ Water F	Productio	on by Ov	erlying F	roducer	1	-		Total <sup>2</sup>	Overlying Water	Unused Overlying
	metereu	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Production	Right	Allocation
Beckman, Walter M. <sup>(3)</sup>	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 <sup>(4)</sup>																
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	8.9	3.6	8.1	24.1	36.7	58.9	69.3	102.7	63.1	59.0	55.2	0.0	489.6		
Subtotal		8.9	3.6	8.1	24.1	36.7	58.9	69.3	102.7	63.1	59.0	55.2	0.0	489.6	735.8	246.3
Merlin Properties	No	Water	Duty Met	hod Used	l to Estima	ate Annua	Productio	on						1.6	426.0	424.4
Oak Valley Partners, LP <sup>(5)</sup>														2.5	1,215.82	1,213.3
Plantation on the Lake LLC	Yes	12.4	7.8	18.1	25.3	21.3	32.1	34.4	39.0	34.4	8.7	10.1	14.9	258.7	450.0	191.3
Rancho Calimesa Mobile Home Park <sup>(6)</sup>																
Well No.1	Yes	1.5	1.6	1.2	1.4	1.6	1.9	2.8	3.2	3.3	3.1	2.6	2.4	26.7		
Well No.2	No	0.5	0.5	0.8	0.8	0.7	1.5	0.0	0.0	0.0	0.0	0.0	0.6	5.4		
Subtotal		2.0	2.1	2.0	2.2	2.3	3.4	2.8	3.2	3.3	3.1	2.6	3.0	32.1	116.2	84.1
Roman Catholic Bishop of San Bernardino		Water	Duty Met	hod Used	l to Estima	ate Annua	Productio	n						0.0	119.3	119.3
Sharondale Mesa Owners Association <sup>(6)</sup>																
Well No.1	Yes	2.8	2.5	1.5	7.1	3.3	6.2	7.8	7.4	6.9	10.1	8.2	4.0	67.8		
Well No.2	Yes	2.2	1.7	1.8	1.0	2.6	3.9	4.5	3.7	5.2	1.8	0.0	2.0	30.4		
Subtotal		5.0	4.2	3.4	8.1	5.9	10.1	12.3	11.1	12.1	12.0	8.2	6.0	98.3	154.9	56.6
Tukwet Canyon Golf Club <sup>(7)</sup>																
Well A	Yes	0.4	0.7	0.9	1.6	0.9	8.2	6.8	0.0	1.4	0.9	0.8	0.9	23.4		
Well C Well D	Yes Yes	0.0 9.8	0.0 0.1	0.0 1.7	0.0 85.7	0.0 29.4	0.0 103.2	0.0 169.2	0.0 155.5	0.0 128.1	0.0 104.1	0.0 64.5	0.0 4.2	0.0 855.5		
Subtotal	Tes	9.8 10.2	0.1 0.8	2.5	87.3	29.4 30.3	103.2 111.4	109.2 176.0	155.5 155.5	120.1 129.5	104.1 105.0	65.3	4.2 5.0	878.8	1,704.0	825.2
Stearns, Leonard M. and Dorothy D.	No		er Duty N				ual Produc							0.7	154.9	154.2
Sunny-Cal Egg and Poultry Company	No	Wat	er Duty N	lethod Us	ed to Esti	mate Ann	ual Produc	ction						4.3	1,115.0	1,110.6
Albor Properties III, LP	No	Wat	er Duty N	lethod Us	ed to Esti	mate Ann	ual Produc	ction						2.4	232.4	229.9
Nikodinov, Nick	No	Wat	er Duty N	lethod Us	ed to Esti	mate Ann	ual Produc	ction						0.8	15.5	14.7
McAmis, Ronald L.	No						ual Produc							0.6	3.9	3.3
Aldama, Nicolas and Amalia	No	Wat	er Duty N	lethod Us	ed to Esti	mate Ann	ual Produc	ction						0.9	5.4	4.6
Gutierrez, Hector, et al.	No	Wat	er Duty N	lethod Us	ed to Esti	mate Ann	ual Produc	ction						1.4	7.7	6.3
Darmont, Boris and Miriam	No	Wat	er Duty N	lethod Us	ed to Esti	mate Ann	ual Produc	ction						0.4	1.9	1.6
TOTAL														1,773.9	6,517.0	4,743.0

 Table 3-2D

 Overlying Producer - Summary of Production for Calendar Year 2019 (ac-ft)

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

3.- Mr. Beckman has not provided production information since 2014.

4.- Monthly production provided by BCVWD.

5.- Starting in 2008, the parcels owned by Oak Valley Partners (OVP) were no longer used for agricultural purposes. An annual production of 2.5 ac-ft has been estimated since. As part of Resolution 2017-02, OVP transfered 180.40 ac-ft of its Overlying rights to YVWD in 2018, an additional 2.65 ac-ft were transfered in 2019. These transfers have reduced OVP's Overlying rights to 1,215.82 ac-ft.

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

							_								Overlying	Unused
Owner and Well Name	Metered				Monthly	Water F	roductio	on by Ov	erlying P	roducer				Total <sup>2</sup>	Water	Overlying
		Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Production	Right	Allocation
Beckman, Walter M. <sup>(3)</sup>	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 <sup>(4)</sup>																
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	17.3	18.6	8.6	13.0	54.5	70.0	132.0	49.5	83.6	57.8	39.8	32.6	577.3		
Subtotal		17.3	18.6	8.6	13.0	54.5	70.0	132.0	49.5	83.6	57.8	39.8	32.6	577.3	735.8	158.6
Merlin Properties	No	Water	Duty Met	hod Used	to Estima	ate Annua	Producti	on						1.6	426.0	424.4
Oak Valley Partners, LP <sup>(5)</sup>		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,215.82	1,215.8
Plantation on the Lake LLC	Yes	21.3	20.2	7.6	21.1	33.2	38.3	38.9	14.7	0.0	0.0	0.0	0.0	195.2	450.0	254.8
Rancho Calimesa Mobile Home Park <sup>(6)</sup>																
Well No.1	Yes	1.1	0.0	0.0	0.0	0.0	2.0	2.6	3.2	2.6	2.0	2.1	2.1	17.7		
Well No.2	No	0.7	1.8	1.8	2.8	1.3	0.6	0.9	0.4	0.5	1.2	0.0	0.4	12.4		
Subtotal		1.9	1.8	1.8	2.8	1.3	2.5	3.4	3.5	3.2	3.2	2.2	2.6	30.1	116.2	86.1
Roman Catholic Bishop of San Bernardino		Water	Duty Met	hod Used	to Estima	ate Annua	Producti	on						0.0	119.3	119.3
Sharondale Mesa Owners Association <sup>(6)</sup>																
Well No.1	Yes	3.5	6.4	3.6	2.5	6.6	8.2	5.8	11.3	11.9	13.1	7.3	7.4	87.6		
Well No.2	Yes	3.5	1.9	1.7	2.3	4.5	4.4	4.3	5.3	0.7	0.0	5.3	4.5	38.3		
Subtotal		6.9	8.2	5.3	4.8	11.1	12.6	10.1	16.6	12.6	13.2	12.6	11.9	125.8	154.9	29.1
Tukwet Canyon Golf Club <sup>(7)</sup>																
Well A	Yes	1.1	0.8	0.7	0.9	0.7	0.8	1.1	1.6	1.5	1.5	1.9	3.0	15.5		
Well C Well D	Yes	0.0	0.0	0.0 27.9	0.0	0.0	0.0	0.0 173.2	0.0	0.0 153.0	0.0	0.0 67.8	0.0 57.0	0.0		
Subtotal	Yes	18.1 <b>19.1</b>	35.9 <b>36.6</b>	27.9 28.6	35.6 <b>36.4</b>	14.0 <b>14.7</b>	120.7 <b>121.5</b>	173.2 174.3	162.5 <b>164.2</b>	153.0 154.5	88.1 <b>89.6</b>	67.8 69.7	60.0	953.7 <b>969.3</b>	1,704.0	734.8
Stearns, Leonard M. and Dorothy D.	No		ter Duty N									••••		0.7	154.9	154.2
Sunny-Cal Egg and Poultry Company	No	Wat	ter Duty N	lethod Us	ed to Esti	mate Ann	ual Produ	ction						4.2	1,115.0	1,110.8
Albor Properties III, LP	No		, ter Duty N											2.4	232.4	230.0
Nikodinov, Nick	No	Wat	ter Duty N	lethod Us	ed to Esti	mate Ann	ual Produ	ction						0.8	15.5	14.7
McAmis, Ronald L.	No	Wat	ter Duty N	lethod Us	ed to Esti	mate Ann	ual Produ	ction						0.6	3.9	3.3
Aldama, Nicolas and Amalia	No	Wat	ter Duty N	lethod Us	ed to Esti	mate Ann	ual Produ	ction						0.9	5.4	4.6
Gutierrez, Hector, et al.	No	Wat	ter Duty N	lethod Us	ed to Esti	mate Ann	ual Produ	ction						1.4	7.7	6.3
Darmont, Boris and Miriam	No	Wat	ter Duty N	lethod Us	ed to Esti	mate Ann	ual Produ	ction						0.4	1.9	1.6
TOTAL														1,911.4	6,517.0	4,605.6

 Table 3-2E

 Overlying Producer - Summary of Production for Calendar Year 2020 (ac-ft)

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

3.- Mr. Beckman has not provided production information since 2014.

4.- Monthly production provided by BCVWD.

5.- Starting in 2008, the parcels owned by Oak Valley Partners (OVP) were no longer used for agricultural purposes. An annual production of 2.5 ac-ft was estimated through 2019; there was no groundwater production in 2020. As part of Resolution 2017-02, OVP transfered 180.40 ac-ft of its Overlying rights to YVWD in 2018, an additional 2.65 ac-ft were transfered in 2019. These transfers reduced OVP's Overlying rights to 1,215.82 ac-ft. No transfers took place in 2020.

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

#### Table 3-3A

#### Production Summary for Appropriator and Overlying Producers in the Beaumont Basin

#### 2003 through 2011 - Calendar Year Accounting (ac-ft)

				Annua	I Production	(ac-ft)			
	<b>2003</b> <sup>1</sup>	2004	2005	2006	2007	2008	2009	2010	2011
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	1341.7
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	9431.3
South Mesa Water Company	223.2	482.5	663.2	616.0	665.8	470.9	382.2	405.0	419.9
Yucaipa Valley Water District	1,162.4	1,833.7	1,281.3	2,027.3	1,682.9	572.0	504.4	672.4	534.1
Subtotal	7,071.7	12,587.4	10,778.6	13,524.9	16,504.6	14,687.0	13,115.6	11,642.3	11,727.0
Overlying Parties									
Beckman, Walter M	16.2	27.0	22.4	11.5	8.3	12.7	12.9	6.4	9.0
California Oak Valley Golf and Resort LLC	736.2	728.6	703.9	831.5	779.0	780.4	766.7	565.1	517.
Merlin Properties	3.6	1.6	1.6	1.6	1.6	1.6	1.6	1.5	1.
Oak Valley Partners, LP	301.2	440.7	350.2	312.1	312.1	310.5	310.5	2.5	2.
Plantation on the Lake LLC	178.6	340.9	310.2	350.1	344.2	354.0	352.3	337.2	344.
Rancho Calimesa Mobile Home Park	35.4	68.3	68.3	68.3	69.3	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	133.
Tukwet Canyon Golf Club <sup>2</sup>	791.4	1,346.7	1,213.1	1,753.4	1,599.1	1,137.6	1,158.6	851.8	882.
Stearns, Leonard M. and Dorothy D.	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.7	0.
Sunny-Cal Egg and Poultry Company	226.0	404.4	385.4	2.6	2.7	4.2	4.2	3.8	4.
Albor Properties III, LP <sup>3</sup>				13.2	2.3	2.3	2.3	2.1	2.
Nikodinov, Nick				0.7	0.8	0.8	0.7	0.7	0.
McAmis, Ronald L.				0.5	0.6	0.6	0.5	0.5	0.
Aldama, Nicolas and Amalia				0.8	0.8	0.9	0.8	0.8	0.
Gutierrez, Hector, et. al.				1.4	1.4	1.4	1.4	1.3	1.
Darmont, Boris and Miriam				0.4	0.4	0.4	0.4	0.4	0.
Subtotal	2,440.8	3,576.3	3,292.6	3,596.7	3,306.5	2,871.6	2,838.2	1,976.5	1,971.4
Fotal	9,512.5	16,163.6	14,071.3	17,121.6	19,811.1	17,558.6	15,953.7	13,618.8	13,698.4

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 2020 - Calendar Year Accounting (ac-ft)

	Annual Production (ac-ft)201220132014201520162017201820191,038.32,100.72,585.11,678.31,472.71,443.52,260.82,121.3010,162.011,097.410,805.58,972.810,159.811,650.712,209.211,140.87448.5308.4473.7317.2352.6368.1364.9330.69700.11,030.81,198.5119.24.60.1191.2528.6312,348.914,537.215,062.811,087.411,989.713,462.415,026.114,121.59.02.10.90.90.90.90.90.9517.3625.8417.0751.1552.3830.0573.1489.61.61.61.61.61.61.61.61.62.52.52.52.52.52.52.52.5								
	2012	2013	2014	2015	2016	2017	2018	2019	2020
Appropriator Parties									-
Banning, City of	1,038.3	2,100.7	2,585.1	1,678.3	1,472.7	1,443.5	2,260.8	2,121.30	2,548.6
Beaumont-Cherry Valley Water District	10,162.0	11,097.4	10,805.5	8,972.8	10,159.8	11,650.7	12,209.2	11,140.87	12,539.2
South Mesa Water Company	448.5	308.4	473.7	317.2	352.6	368.1	364.9	330.69	229.1
Yucaipa Valley Water District	700.1	1,030.8	1,198.5	119.2	4.6	0.1	191.2	528.63	1,407.7
Subtotal	12,348.9	14,537.2	15,062.8	11,087.4	11,989.7	13,462.4	15,026.1	14,121.5	16,724.
Overlying Parties									
Beckman, Walter M	9.0	2.1	0.9	0.9	0.9	0.9	0.9	0.9	0.
California Oak Valley Golf and Resort LLC	517.3	625.8	417.0	751.1	552.3	830.0	573.1	489.6	577
Merlin Properties	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1
Oak Valley Partners, LP	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	0
Plantation on the Lake LLC	344.7	326.7	403.8	302.1	293.4	417.8	471.2	258.7	195
Rancho Calimesa Mobile Home Park	69.3	69.3	16.2	23.4	31.2	31.2	32.7	32.1	30
Roman Catholic Bishop of San Bernardino	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
Sharondale Mesa Owners Association	145.3	147.0	137.3	94.1	84.8	117.9	116.4	98.3	125
Tukwet Canyon Golf Club <sup>1</sup>	984.3	1,098.4	1,227.9	898.6	958.6	991.4	1,010.9	878.8	969
Stearns, Leonard M. and Dorothy D.	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0
Sunny-Cal Egg and Poultry Company	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4
Albor Properties III, LP <sup>2</sup>	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2
Nikodinov, Nick	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0
McAmis, Ronald L.	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.
Aldama, Nicolas and Amalia	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0
Gutierrez, Hector, et. al.	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1
Darmont, Boris and Miriam	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.
Subtotal	2,085.4	2,284.8	2,218.7	2,085.7	1,936.7	2,404.7	2,220.7	1,773.9	1,911
otal	14,434.3	16,821.9	17,281.5	13,173.1	13,926.4	15,867.1	17,246.8	15,895.4	18,636

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

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

No. or		Supple	emental Recharge (a	c-ft)	
Year	Banning <sup>1</sup>	Beaumont	BCVWD <sup>1</sup>	SGPWA <sup>2</sup>	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
2019	250.0		13,645.0	257.8	14,152.8
2020	250.0		11,005.0	214.0	11,469.0
Totals	13,942.2	-	108,892.2	10,979.6	133,814.0

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

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

2.- Through 2018, the SGPWA regarched imported water at the Little San Gorgonio Creek Spreading Ponds, located just to the north of the basin boundary. Starting in 2019, the SGPWA recharges at their new spreading basins located at the southwest corner of Beaumont Blvd and Brookside Avenue. Imported water recharged at this location will be credited to the agency in their storage account.

#### Table 3-5

#### City of Beaumont Wastewater Treatment Plant - Monthly Discharges Since 2007

Year	Jan	Feb	Mar	Apr	Мау	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	2,789
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	2,896
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	2,901
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	2.22	2,492
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	2,620
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	2,995
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	3,361
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	3,543
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	3,800
2019	3.61	3.61	3.64	3.66	3.69	3.61	3.59	3.72	3.80	3.64	3.77	3.72	3.67	4,112
2020	3.73	3.75	3.92	4.02	3.82	3.81	3.81	4.09	4.05	3.88	3.66	3.46	3.83	4,305

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

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

Year	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average (mgd)	Annual (ac-ft)
2010	0.00	0.00	0.82	0.67	0.57	0.62	0.70	0.69	0.69	0.70	0.67	0.65	0.57	530
2011	0.66	0.63	0.63	0.63	0.58	0.45	0.52	0.63	0.64	0.60	0.55	0.54	0.59	660
2012	0.54	0.54	0.52	0.47	0.45	0.45	0.45	0.49	0.50	0.47	0.41	0.53	0.49	546
2013	0.48	0.52	0.45	0.43	0.25	0.44	0.52	0.61	0.33	0.69	0.57	0.41	0.47	530
2014	0.21	0.65	0.61	0.66	0.61	0.42	0.49	0.35	0.21	0.24	0.02	0.02	0.37	416
2015	0.24	0.20	0.31	0.31	0.22	0.38	0.37	0.23	0.00	0.00	0.00	0.00	0.19	212
2016	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
2017	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
2018	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
2019	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
2020	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-

 Table 3-6

 Overlying Parties Production Rights Allocation Based on Revised Safe Yield

Overlying Party to the 2003 Judgment	Initial Overlying Water Right through 2013	New Overlying Water Right Starting in 2014	5-Year (2016-20) Average Production (ac-ft)	5-Year (2016-20) Running Avg % of Water Right
California Oak Valley Golf and Resort LLC <sup>(1)</sup>	950.0	735.84	604.4	82.1%
Plantation on the Lake LLC	581.0	450.02	327.3	72.7%
Sharondale Mesa Owners Association	200.0	154.91	108.6	70.1%
Tukwet Canyon Golf Club	2,200.0	1,704.05	961.8	56.4%
Rancho Calimesa Mobile Home Park	150.0	116.18	31.5	27.1%
Gutierrez, Hector, et al.	10.0	7.75	1.4	18.4%
Darmont, Boris and Miriam	2.5	1.94	0.4	18.1%
Aldama, Nicolas and Amalia	7.0	5.42	0.9	16.0%
McAmis, Ronald L.	5.0	3.87	0.6	14.4%
Nikodinov, Nick	20.0	15.49	0.8	4.9%
Beckman, Walter M.	75.0	58.09	0.9	1.5%
Albor Properties III, LP	300.0	232.37	2.4	1.0%
Stearns, Leonard M. and Dorothy D.	200.0	154.91	0.7	0.5%
Sunny-Cal Egg and Poultry Company	1,439.5	1,114.99	4.3	0.4%
Merlin Properties	550.0	426.01	1.6	0.4%
Oak Valley Partners, LP <sup>(2)</sup>	1,806.0	1,398.87	2.0	0.1%
Roman Catholic Bishop of San Bernardino	154.0	119.28	0.0	0.0%
	8,650.0	6,700.0	2,049.5	30.6%

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

(2) - Under Resolution 17-02, adopted August 30, 2017, Oak Valley Partners LP (OVP) agreed to transfer its Overlying water rights to particular development parcels, intending to secure commitment from YVWD to provide water service to development phases of OVP's Summerwind Ranch Specific Plan (Project) located in the Beaumont Basin. In 2018 OVP transfered a combined total of 180.40 ac-ft in overlying rights to YVWD. In a similar manner, an additional 2.65 ac-ft of former OVP's Overlying water rights were transfered to YVWD in early 2019. No transfers were recorded in 2020. These transfers have reduced OVP's Overlying water rights to 1,215.82 ac-ft from its adjusted 1,398.87 ac-ft.

Accounting Year	Overlying Water Right	<b>Overlying</b> <b>Production</b>	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
<b>2018</b> <sup>1</sup>	6,520	2,221	4,299	2023	1,351	0	1,827	536	584	4,299
2019 <sup>2</sup>	6,517	1,774	4,743	2024	1,491	0	2,016	592	644	4,743
2020	6,517	1,911	4,606	2025	1,448	0	1,958	575	625	4,606

 Table 3-7

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

1.- In 2018, Oak Valley Partners, through three assignments, transferred a combined total of 180.40 ac-ft of Overlying Rights to the YVWD to serve certain parcels in the Beaumont Basin.

2.- In 2019, Oak Valley Partners, through a single assignment, transferred an additional 2.65 ac-ft of Overlying Rights to the YVWD to serve certain parcels in the Beaumont Basin.

	Storens						Addit	ions to Storage Ad	count			
Calendar Year	Storage Account Balance at Beginning of CY	Share of Surplus Water	Appropriative Rights	Production	Under / Over Production <sup>(1)</sup>	Overlying Users Parcel Conversion	Unused Overlying Production Allocation	Transfers Among Appropriators	SWP Water Recharge	Local Recharge	Total Additions to Storage Account	Ending Account Balance
				_								
	•	zed Storage Acc	-									
2003	0.0	2,514.5	0.0	2,174.2	340.3	0.0	0.0	0.0	0.0	0.0	340.3	340.3
2004	340.3	5,029.0	0.0	3,397.3	1,631.7	0.0	0.0	0.0	0.0	0.0	1,631.7	1,972.0
2005	1,972.0	5,029.0	0.0	1,808.6	3,220.4	0.0	0.0	0.0	0.0	0.0	3,220.4	5,192.
2006	5,192.5	5,029.0	0.0	1,827.5	3,201.5	0.0	0.0	0.0	0.0	0.0	3,201.5	8,393.9
2007	8,393.9	5,029.0	0.0	2,772.6	2,256.4	0.0	0.0	1,500.0	0.0	0.0	3,756.4	12,150.
2008	12,150.3	5,029.0	0.0	2,933.6	2,095.4	0.0	592.2	0.0	1,534.0	0.0	4,221.6	16,371.
2009	16,371.9	5,029.0	0.0	2,095.0	2,934.0	0.0	1,594.7	0.0	2,741.2	0.0	7,269.8	23,641.
2010	23,641.8	5,029.0	0.0	1,143.6	3,885.4	0.0	1,683.8	0.0	1,338.0	0.0	6,907.2	30,549.
2011	30,549.0	5,029.0	0.0	1,341.7	3,687.3	0.0	1,588.2	0.0	800.0	0.0	6,075.5	36,624.
2012	36,624.5	5,029.0	0.0	1,038.3	3,990.7	0.0	1,679.5	0.0	1,200.0	0.0	6,870.2	43,494.
2013	43,494.7	2,514.5	0.0	2,100.7	413.8	0.0	1,816.1	0.0	1,200.0	0.0	3,430.0	46,924.
2014	46,924.7	0.0	0.0	2,585.1	-2,585.1	0.0	1,826.7	0.0	608.0	0.0	-150.4	46,774.
2015	46,774.2	0.0	0.0	1,678.3	-1,678.3	0.0	2,097.5	0.0	694.0	0.0	1,113.2	47,887.
2016	47,887.5	0.0	0.0	1,472.7	-1,472.7	0.0	2,099.1	0.0	1,477.0	0.0	2,103.4	49,990
2017	49,990.8	0.0	0.0	1,443.5	-1,443.5	0.0	2,063.2	0.0	1,350.0	0.0	1,969.8	51,960
2018	51,960.6	0.0	0.0	2,260.8	-2,260.8	0.0	2,000.6	0.0	500.0	0.0	239.8	52,200.
2019	52,200.4	0.0	0.0	2,121.3	-2,121.3	0.0	1,408.5	0.0	250.0	0.0	-462.8	51,737.
2020	51,737.5	0.0	0.0	2,548.6	-2,548.6	0.0	1,450.3	0.0	250.0	0.0	-848.4	50,889.

	0to						Addit	ions to Storage Ad	count			
Calendar Year	Storage Account Balance at Beginning of CY	Share of Surplus Water	Appropriative Rights	Production	Under / Over Production <sup>(1)</sup>	Overlying Users Parcel Conversion	Unused Overlying Production Allocation	Transfers Among Appropriators	SWP Water Recharge	Local Recharge	Total Additions to Storage Account	Ending Account Balance
					000 5							
		Water District - A									440.0	
2003	0.0	3,401.0	0.0	3,511.9	-110.9	0.0	0.0	0.0	0.0	0.0	-110.9	-110.9
2004	-110.9	6,802.0	0.0	6,873.9	-71.9	0.0	0.0	0.0	0.0	0.0	-71.9	-182.8
2005	-182.8	6,802.0	0.0	7,025.6	-223.6	0.0	0.0	0.0	0.0	0.0	-223.6	-406.4
2006	-406.4	6,802.0	0.0	9,054.1	-2,252.1	0.0	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	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	2,790.6	0.0	13,590.0	0.0	4,729.9	32,295.8
2018	32,295.8	0.0	0.0	12,209.2	-12,209.2	0.0	2,705.9	0.0	12,121.0	0.0	2,617.7	34,913.4
2019	34,913.4	0.0	0.0	11,140.9	-11,140.9	0.0	1,905.0	0.0	13,645.0	0.0	4,409.1	39,322.5
2020	39,322.5	0.0	0.0	12,539.2	-12,539.2	0.0	1,961.5	0.0	11,005.0	0.0	427.3	39,749.8

	<b>O</b> tomo						Additi	ions to Storage Ad	count			
Calendar Year	Storage Account Balance at Beginning of CY	Share of Surplus Water	Appropriative Rights	Production	Under / Over Production <sup>(1)</sup>	Overlying Users Parcel Conversion	Unused Overlying Production Allocation	Transfers Among Appropriators	SWP Water Recharge	Local Recharge	Total Additions to Storage Account	Ending Account Balance
		rized Storage Ac	-									
2003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2008	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2012	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2014	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2016	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2017	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
2018	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2019	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2020	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

	Champan						Addit	ions to Storage Ad	count			
Calendar Year	Storage Account Balance at Beginning of CY	Share of Surplus Water	Appropriative Rights	Production	Under / Over Production <sup>(1)</sup>	Overlying Users Parcel Conversion	Unused Overlying Production Allocation	Transfers Among Appropriators	SWP Water Recharge	Local Recharge	Total Additions to Storage Account	Ending Account Balance
	-	any - Authorized	-	-								
2003	0.0	998.0	0.0	223.2	774.8	0.0	0.0	0.0	0.0	0.0	774.8	774.8
2004	774.8	1,996.0	0.0	482.5	1,513.5	0.0	0.0	0.0	0.0	0.0	1,513.5	2,288.3
2005	2,288.3	1,996.0	0.0	663.2	1,332.8	0.0	0.0	0.0	0.0	0.0	1,332.8	3,621.1
2006	3,621.1	1,996.0	0.0	616.0	1,380.0	0.0	0.0	0.0	0.0	0.0	1,380.0	5,001.1
2007	5,001.1	1,996.0	0.0	665.8	1,330.2	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	666.9	0.0	0.0	0.0	2,214.4	6,019.4
2013	6,019.4	998.0	0.0	308.4	689.7	0.0	721.1	0.0	0.0	0.0	1,410.8	7,430.2
2014	7,430.2	0.0	0.0	473.7	-473.7	0.0	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	0.0	832.9	0.0	0.0	0.0	515.7	8,197.5
2016	8,197.5	0.0	0.0	352.6	-352.6	0.0	833.5	0.0	0.0	0.0	480.9	8,678.3
2017	8,678.3	0.0	0.0	368.1	-368.1	0.0	819.3	0.0	0.0	0.0	451.2	9,129.5
2018	9,129.5	0.0	0.0	364.9	-364.9	0.0	794.4	0.0	0.0	0.0	429.5	9,559.0
2019	9,559.0	0.0	0.0	330.7	-330.7	0.0	559.3	0.0	0.0	0.0	228.6	9,787.5
			0.0			0.0		0.0	0.0			10,134.2
2020	9,787.5	0.0	0.0	229.2	-229.2	0.0	575.9	0.0	0.0	0.0	346.7	1

	Otomore						Additi	ions to Storage Ad	count			
Calendar Year	Storage Account Balance at Beginning of CY	Share of Surplus Water	Appropriative Rights	Production	Under / Over Production <sup>(1)</sup>	Overlying Users Parcel Conversion	Unused Overlying Production Allocation	Transfers Among Appropriators	SWP Water Recharge	Local Recharge	Total Additions to Storage Account	Ending Account Balance
Morongo I	Band of Mission	n Indians - Autho	rized Storage A	ccount: 20,000 a	nc-ft							
2013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2014	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2016	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2017	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2018	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2019	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2020	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
San Gorgo	onio Pass Water	r Agency - Autho	orized Storage A	ccount: 10,000 a	ac-ft							
2018	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2019	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	257.8	0.0	257.8	257.8
2020	257.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	214.0	0.0	214.0	471.8

	Storage						Addit	ions to Storage Ad	count			
Calendar Year	Storage Account Balance at Beginning of CY	Share of Surplus Water	Appropriative Rights	Production	Under / Over Production <sup>(1)</sup>	Overlying Users Parcel Conversion	Unused Overlying Production Allocation	Transfers Among Appropriators	SWP Water Recharge	Local Recharge	Total Additions to Storage Account	Ending Account Balance
		trict - Authorized		,								
2003	0.0	1,086.5	0.0	1,162.4	-75.9	0.0	0.0	0.0	0.0	0.0	-75.9	-75.9
2004	-75.9	2,173.0	0.0	1,833.7	339.3	0.0	0.0	0.0	0.0	0.0	339.3	263.4
2005	263.4	2,173.0	0.0	1,281.3	891.7	0.0	0.0	0.0	0.0	0.0	891.7	1,155.1
2006	1,155.1	2,173.0	0.0	2,027.3	145.7	0.0	0.0	0.0	0.0	0.0	145.7	1,300.8
2007	1,300.8	2,173.0	0.0	1,682.9	490.1	0.0	0.0	0.0	0.0	0.0	490.1	1,790.
2008	1,790.9	2,173.0	0.0	572.0	1,601.0	0.0	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	0.0	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	0.0	727.5	0.0	0.0	0.0	2,228.1	8,233.
2011	8,233.5	2,173.0	0.0	534.1	1,638.9	0.0	686.2	0.0	0.0	0.0	2,325.1	10,558.
2012	10,558.6	2,173.0	0.0	700.1	1,472.9	0.0	725.6	0.0	0.0	0.0	2,198.5	12,757.
2013	12,757.2	1,086.5	0.0	1,030.8	55.7	0.0	784.7	0.0	0.0	0.0	840.4	13,597.
2014	13,597.6	0.0	0.0	1,198.5	-1,198.5	0.0	789.2	0.0	0.0	0.0	-409.2	13,188
2015	13,188.4	0.0	0.0	119.2	-119.2	0.0	906.3	0.0	0.0	0.0	787.1	13,975
2016	13,975.5	0.0	0.0	4.6	-4.6	0.0	907.0	0.0	0.0	0.0	902.4	14,877.
2017	14,877.9	0.0	0.0	0.1	-0.1	0.0	891.5	0.0	0.0	0.0	891.3	15,769
2018	15,769.2	0.0	0.0	191.2	-191.2	180.4	864.4	0.0	0.0	0.0	853.6	16,622
2019	16,622.8	0.0	0.0	528.6	-528.6	183.1	608.6	0.0	0.0	0.0	263.0	16,885
2020	16,885.8	0.0	0.0	1,407.7	-1,407.7	183.1	626.6	0.0	0.0	0.0	-598.1	16,287.

Calendar Year	Storage Account Balance at Beginning of CY	Share of Surplus Water	Appropriative Rights	Production	Additions to Storage Account							
					Under / Over Production <sup>(1)</sup>	Overlying Users Parcel Conversion	Unused Overlying Production Allocation	Transfers Among Appropriators	SWP Water Recharge	Local Recharge	Total Additions to Storage Account	Ending Account Balance
		h Storage Accou										
2003	0.0	8,000.0	0.0	7,071.7	928.3	0.0	0.0	0.0	0.0	0.0	928.3	928.3
2004	928.3	16,000.0	0.0	12,587.4	3,412.6	0.0	0.0	0.0	0.0	0.0	3,412.6	4,340.9
2005	4,340.9	16,000.0	0.0	10,778.6	5,221.4	0.0	0.0	0.0	0.0	0.0	5,221.4	9,562.3
2006	9,562.3	16,000.0	0.0	13,524.9	2,475.1	0.0	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	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	0.0	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	0.0	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	0.0	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	11,727.0	4,273.0	0.0	5,053.3	0.0	8,779.0	0.0	18,105.3	74,990.9
2012	74,990.9	16,000.0	0.0	12,348.9	3,651.1	0.0	5,343.5	0.0	8,983.0	0.0	17,977.6	92,968.6
2013	92,968.6	8,000.0	0.0	14,537.2	-6,537.2	0.0	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	0.0	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	0.0	6,673.5	0.0	3,467.0	0.0	-946.9	95,628.0
2016	95,628.0	0.0	0.0	11,989.7	-11,989.7	0.0	6,678.6	0.0	10,796.0	0.0	5,484.9	101,112.9
2017	101,112.9	0.0	0.0	13,462.4	-13,462.4	0.0	6,564.6	0.0	14,940.0	0.0	8,042.2	109,155.0
2018	109,155.0	0.0	0.0	15,026.1	-15,026.1	180.4	6,365.2	0.0	12,621.0	0.0	4,140.5	113,295.6
2019	113,295.6	0.0	0.0	14,121.5	-14,121.5	183.1	4,481.3	0.0	14,152.8	0.0	4,695.6	117,991.2
2020	117,991.2	0.0		16,724.7	-16,724.7	183.1	4,614.3	0.0	11,469.0	0.0	-458.4	117,532.8
	,		1.0	,	,		,		,		,	

# Section 4 Water Quality Conditions

The purpose of this section is to document the water quality conditions in the Beaumont Basin during the 2016-2020 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 5,059 water quality results for the 2016-2020 reporting period. Water quality from the BMZ Maximum Benefit Monitoring Program was also available for the same period.

# 4.1 Comparison with Management Zone Objectives

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

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 (as 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 (as N) concentration exceeds the BMZ maximum benefit objectives.

# 4.1.1 Total Dissolved Solids

Figure 4-2 shows the maximum TDS concentrations for 50 wells measured within and in the vicinity of the Beaumont Basin wells during the 2016-2020 reporting period. A total of 32 wells are located inside the basin, 17 in the Singleton Basin / Edgar Canyon and the remaining 11 in the South Beaumont Basin.

The maximum TDS concentrations for wells owned by appropriators within the basin ranged from 170 to 350 mg/L and averaged 232 mg/L; this average of maximum values at each well is

23 mg/L lower than the average maximum TDS concentration reported in the 2008-11 Engineering Report of 255 mg/L. Of the 13 overlying wells, TDS concentrations ranged from 100 to 320 mg/L and average 249 mg/L, 17 mg/L higher than the average for appropriator's wells.

In the Singleton Basin / Edgar Canyon area, the maximum TDS concentration ranged from 236 to 400 mg/L and averaged 282 mg/L.

In the South Beaumont Basin, the maximum TDS concentration ranged from 270 to 840 mg/L and averaged 482 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 Groundwat	ter Basin			
Appropriators	15	25	220	232
Overliers	13	52	222	249
Other	4	20	232	273
Total	32	97	223	244
Singleton Basin / Edgar Canyon Area				
All Wells	17	36	291	282
South Beaumont Basin				
All Wells	11	64	429	482

Of the 26 wells owned by appropriators and overliers, 12 wells had a maximum concentration below the anti-degradation objective of 230 mg/L, 19 wells were between the anti-degradation and maximum benefit objective of 330 mg/L, and one (BCVWD No. 16) exceeded the maximum benefit objective for the BMZ at 350 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, none of the wells had a maximum concentration below the anti-degradation objective, 15 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, three wells were between this and the maximum objective, and the

remaining eight wells exceeded the maximum objective. Most of the wells with the highest TDS concentrations are located in the South Beaumont Basin.

# 4.1.2 Nitrate-Nitrogen

Figure 4-3 shows the maximum Nitrate (as N) concentrations for 60 wells measured within and in the vicinity of the Beaumont Basin wells during the 2016-2020 reporting period. A total of 32 wells are located inside the basin, 17 wells in the Singleton Basin / Edgar Canyon and the remaining 11 in the South Beaumont Basin.

Maximum Nitrate (as N) concentrations for domestic wells owned by Appropriators ranged from 0.89 to 7.00 mg/L (BCVWD No. 16) and averaged 2.62 mg/L. Maximum concentrations for overlying wells were slightly higher as they ranged from 0.26 to 6.20 mg/L and averaged 3.23 mg/L. The average concentration for all potable wells was 3.00 mg/L.

In the Singleton Basin / Edgar Canyon area, the maximum Nitrate (as N) concentration ranged from 0.60 to 14.0 mg/L and averaged 3.58 mg/L. The average concentration for all samples in this area was 4.06 mg/L.

In the South Beaumont Basin, the maximum Nitrate (as N) concentration ranged from 3.10 to 22.0 mg/L and averaged 11.06 mg/L. The average concentration for all samples in this area was 9.64 mg/L.

Well Classification	No. of Wells	Samples	Average Concentration	Avg Max Concentration
Beaumont Groundw	vater Basin			
Appropriators	15	124	3.06	2.62
Overliers	13	116	3.73	3.23
Other	4	20	1.49	1.80
Total	32	260		
Singleton Basin / Edgar Canyon Area				
All Wells	17	65	4.06	3.58
South Beaumont Basin				
All Wells	11	68	9.64	11.06

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

Of the 26 wells owned by appropriators and overliers, six wells had a maximum concentration below the anti-degradation objective of 1.5 mg/L, 21 wells were between this objective and maximum benefit objective of 5.0 mg/L; five 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 (as N) of 10 mg/L.

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

In the South Beaumont Basin, only two wells had a maximum concentration below the maximum objective while the remaining nine exceed it with six of these wells also exceeding drinking water standards. There were no wells with nitrate concentrations below the anti-degradation limit.

### 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 are presented below for information purposes only.

#### Summary of Wildermuth Environmental Inc. Study

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

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

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

The results of the investigation are summarized as follows:

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

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

#### Summary of University of California, Riverside Study

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

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

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

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

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

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

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

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

According to the study,

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

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

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

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

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

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

The report indicates that in Zone 1 the isotopes of nitrate values overlap those expected for human or animal waste. Similarly, in Zone 3 the isotopic composition of water suggests 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 2016-2020 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 5,059 water quality results were extracted from the CDPH database for all domestic production wells in the Beaumont Basin. Results were obtained for 31 minerals and inorganic chemicals and over 140 organic compounds sampled between 2016 and 2020. 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 (300 ug/L) during the reporting period. In addition, the California

Notification Limit for Vanadium (100 ug/day) was exceeded three times, twice by SMWC's 4 and once by YVWD's 48 during the reporting period.

Appendix F contains summary statistics of the analytical results for the 2016-2020 period for selected chemicals that have a federal or state drinking water standard as reported in the CDPH website.

# 4.2.1 Nitrate and Total Dissolved Solids (TDS)

A total of 205 samples were collected and analyzed for Nitrate; 36 of these samples were also analyzed for TDS. The current primary MCL for Nitrate is 45 ppm (mg/L) as NO<sub>3</sub>; the secondary MCL for TDS is 500 mg/L. Table 4-1 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 31.5 mg/L of Nitrates and 350 mg/L of dissolved salts.

## 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 35 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 37 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 Tukwet Well A and SMWC's Well No. 4. The rise in arsenic concentration at Tukwet's A from 3.7 ug/L in June 2017 to 6.5 ug/L in August 2020 is relatively a new event. Arsenic at SMWC's 4 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 2019, arsenic concentration was down to 3.8 ug/L. YVWD reported a concentration of 2.5 ug/L in July 2017 at Well No. 48; however, the latest analysis (Jul 2020) did not show the presence of Arsenic. Based on the latest values reported, arsenic continues to be a non-issue in the Beaumont basin.

**Iron.** A total of 35 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, in August 2016, BCVWD Well No. 3 showed a concentration of 450 ug/L, exceeding the secondary MCL. Iron concentration at this well was

below 100 ug/L in the latest sample taken (Dec 2020). Iron at a concentration above the MCL can impact color, odor, and taste in water. Five wells exceeded the secondary MCL during the FY 2004-08 reporting period.

Agency/	Nitrate as NO <sub>3</sub>		Total Dissolved Solids (TDS)			
Well No.	Count	Avg	Max	Count	Ave	Max
City of Bannin	g					
Well C-2A	5	8.1	9.0	1	220	220
Well C-3	5	7.7	8.1	1	170	170
Well C-4	6	4.2	5.0	2	195	200
Well M-3	5	9.5	9.9	1	280	280
Beaumont Che	erry Valley W	ater District				
Well 03	3	4.5	7.7	2	215	240
Well 16	25	27.3	31.5	2	340	350
Well 21	23	14.4	16.2	1	270	270
Well 22	3	6.5	13.5	2	240	260
Well 23	13	10.9	13.1	1	260	260
Well 24	5	7.1	8.1	2	205	210
Well 25	5	5.1	7.2	1	230	230
Well 26	3	3.4	4.0	1	180	180
Well 29	5	9.5	10.8	2	215	220
Yucaipa Valley	y Water Distr	ict				
Well 48	5	8.7	10.8	3	153	200
South Mesa W	ater Compar	ıy				
Well 4	12	16.4	22.1	2	185	190
Overlying Users						
Sharondale 1	21	21.0	25.2	1	320	320
Sharondale 2	16	23.0	26.6	1	320	320
Plantation 1	6	8.7	9.9	2	265	270
RCMHP 1	9	21.1	24.8	2	260	260
RCMHP 2	18	24.5	28.8	2	270	270

Table 4-1Nitrate (NO3) and TDS Summary for Domestic Wells (2016-20)

**Lead.** There were 35 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 35 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. The highest Manganese concentration during the reporting period was observed at BCVWD Well No. 16 at 20 ug/L (Dec 2019). 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 35 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 2020 at Banning C-2A also at 16 ug/L. Both 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.** Four 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, increasing to 90 ug/L in the summer of 2017. Latest concentration at this well was down to 22 ug/L.

**Copper.** There were 35 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 35 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 5.0 mg/l (ppm).

# 4.2.3 Organic Compounds

There were over 2,900 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) 33 samples collected all reported below detection limit of 0.5 ug/L. Current MCL is 5 ug/L.
- Tetrachloroethylene (PCE) 33 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 0.048 ug/L (Jun 2019) and 0.044 ug/L (Dec 2018). 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 three wells exceeding the upper MCL for pH during the reporting period, SMWC' 4 at 9.0 (April 2019), Tukwet's A at 8.8 (Aug 2020) and YVWD's 48 at 8.7 (Jul 2017). In addition, there are a number of wells with pH in the 8.0 to 8.4 range including SMHOA Well No. 1 at 8.4, BCVWD's No. 23, 25, and 26 and SMHOA's 2 at 8.3; BCVWD Wells No. 16, 21, 24 and 29, Banning Well M-2A and M-3, Tukwet's D and SMHOA's 1 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. A total of 42 water samples were tested for turbidity.

# 4.3 Historical Nitrate (as N) Concentrations for Selected Wells in the Beaumont, Singleton, and South Beaumont Basins

Historical water quality records since 1974 from The California Department of Health Services (CDPH) and water quality collected as part of the Beaumont Management Zone Maximum Benefit Monitoring Program was used to develop historical nitrate concentrations. The following figures illustrate historical water quality for selected well around the basin.

- ✓ Figure 4-4 Noble Creek Area
- ✓ Figure 4-5 East of Marshall Creek
- ✓ Figure 4-6 Banning Area
- ✓ Figure 4-7 West of Noble Creek
- ✓ Figure 4-8 Northwest Area
- ✓ Figure 4-9 Singleton Basin
- ✓ Figure 4-10 South Beaumont Basin

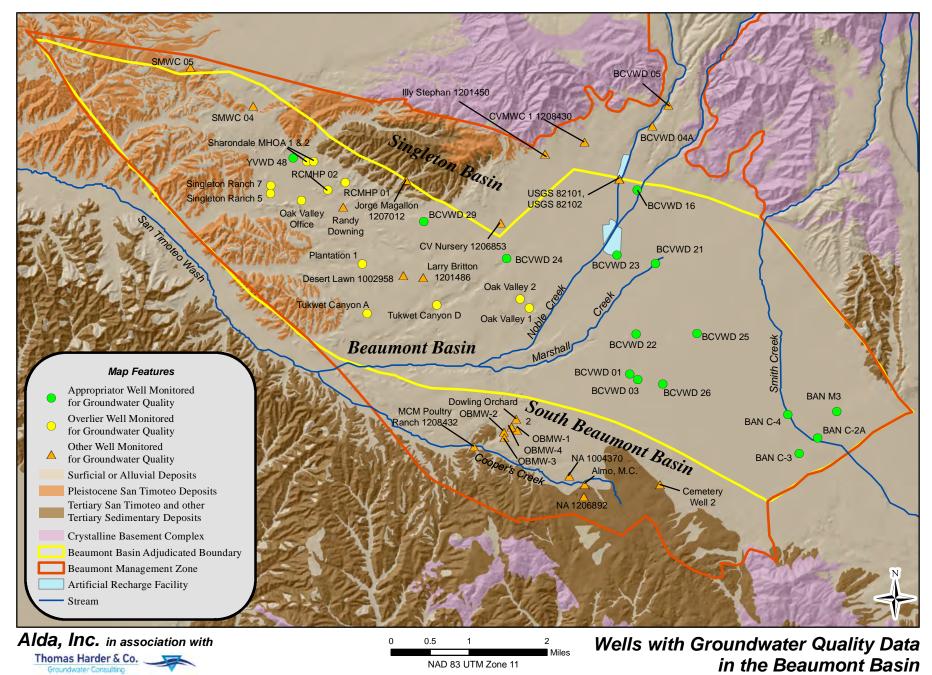


Figure 4-1

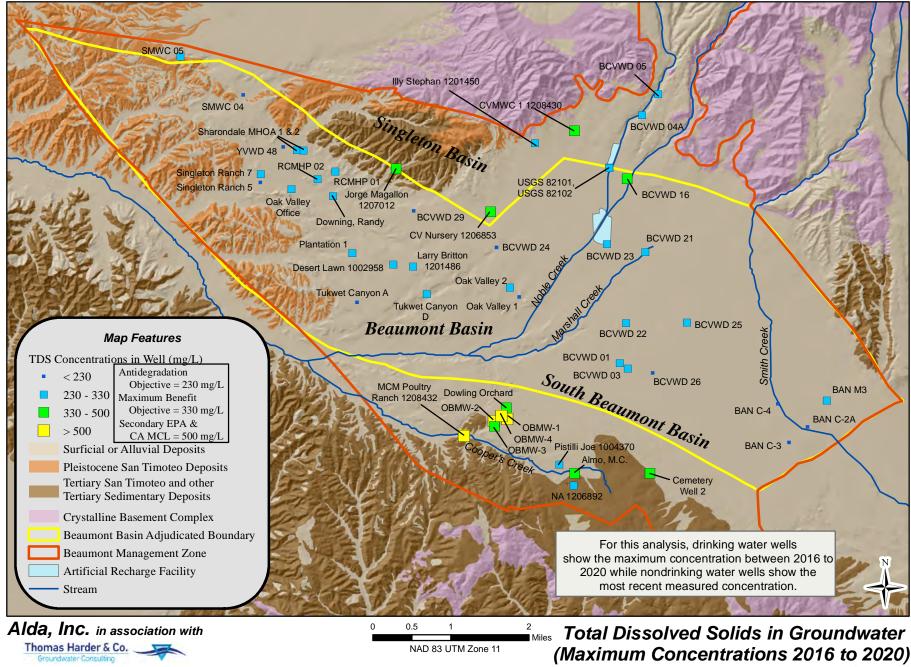
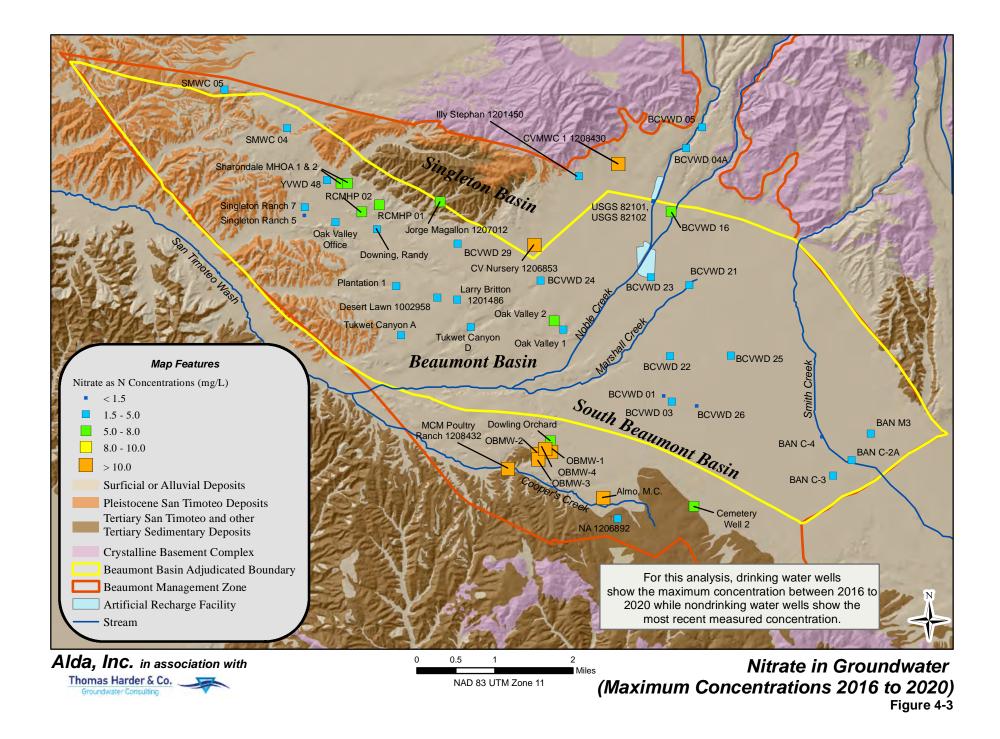
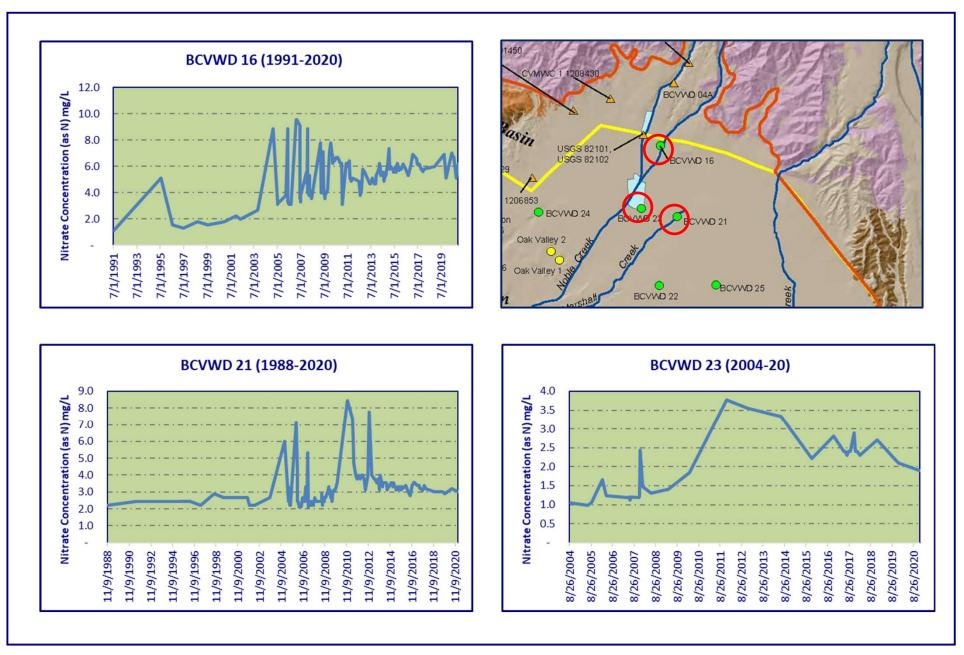
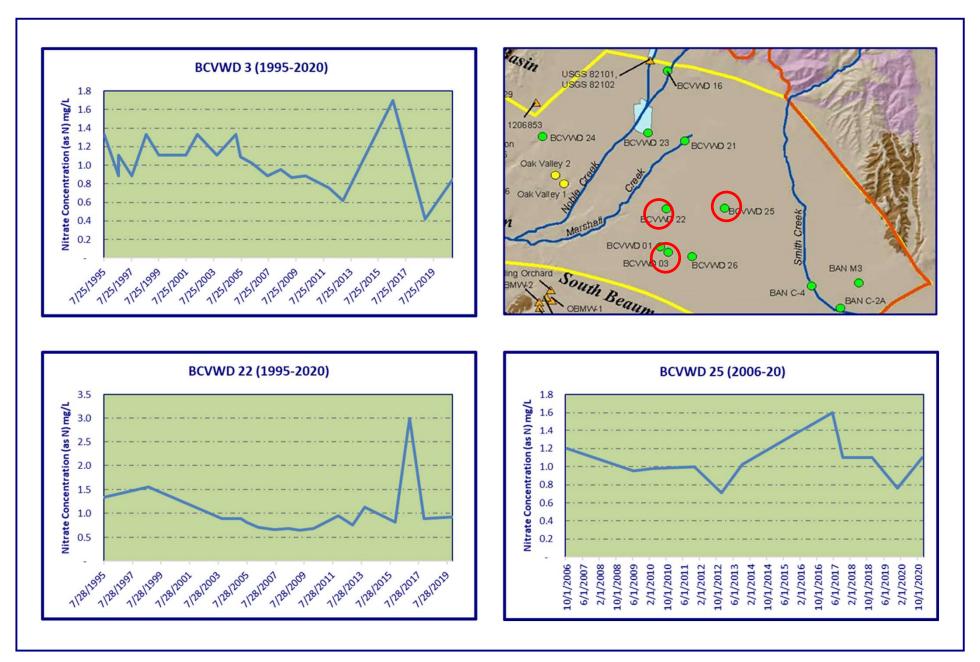


Figure 4-2







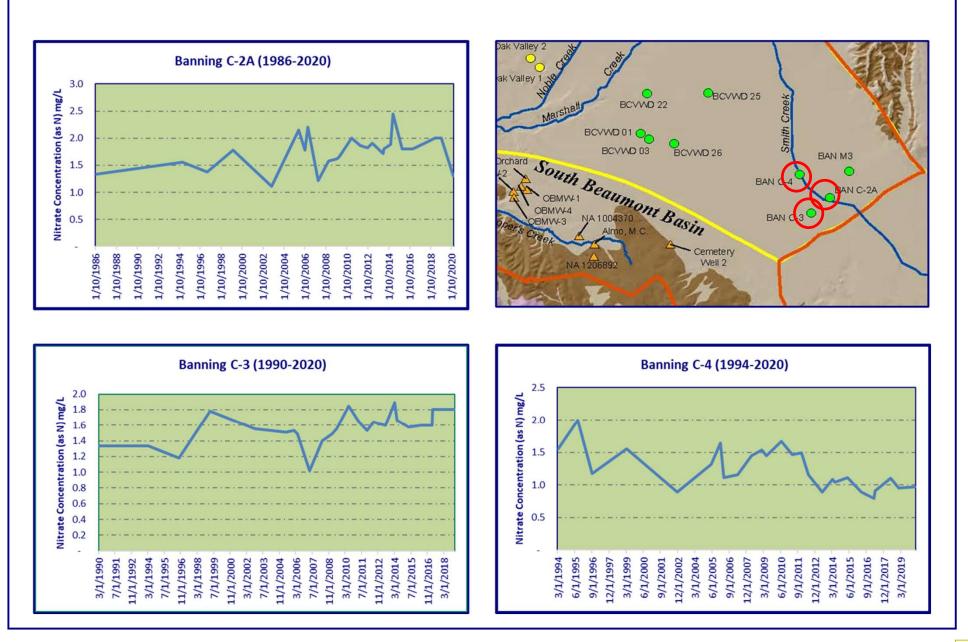


Figure 4-6 AB1 Banning Area – Historical Nitrate Concentration

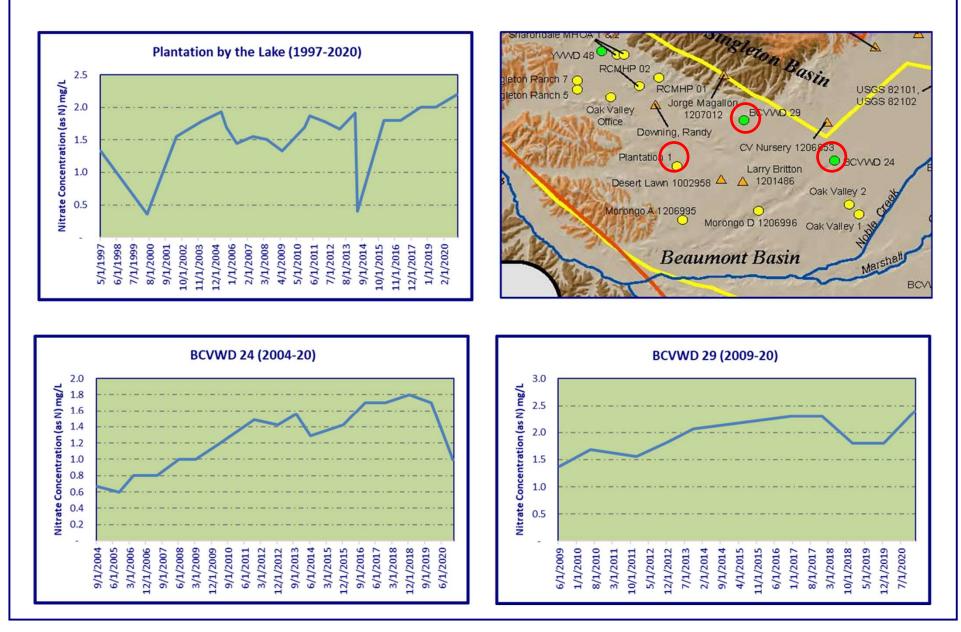


Figure 4-7 West of Noble Creek – Historical Nitrate Concentration

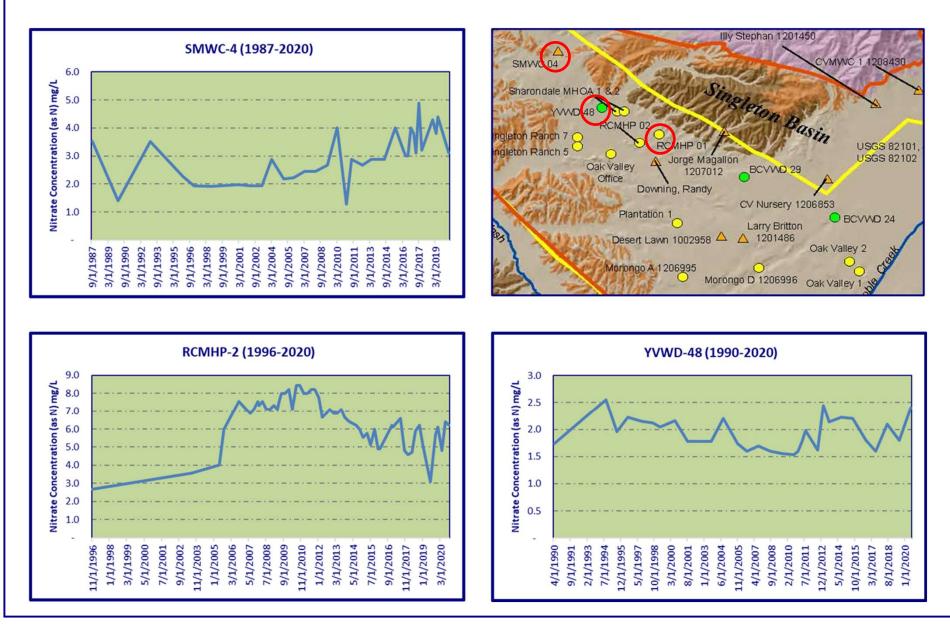
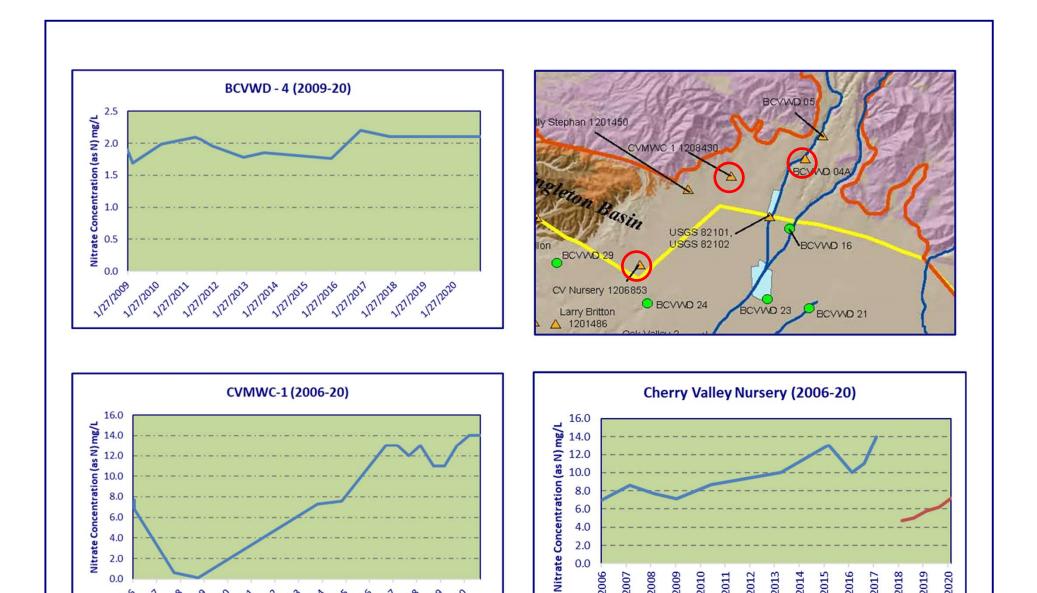


Figure 4-8 Northwest Area – Historical Nitrate Concentration



0.0

3/6/2006 3/6/2001 3/6/2008

31612009

3/6/2010

3/6/2013

010 316/2011 6/2012

3/6/2014

3/6/2015 31612016

3/6/2018

018 1012 31612020

3/6/2017

9/22/2014

9/22/2013

9/22/2015 9/22/2016 9/22/2017

9/22/2018 9/22/2019 9/22/2020

9/22/2012

9/22/2010

9/22/2011

9/22/2009

9/22/2008

9/22/2006

9/22/2007

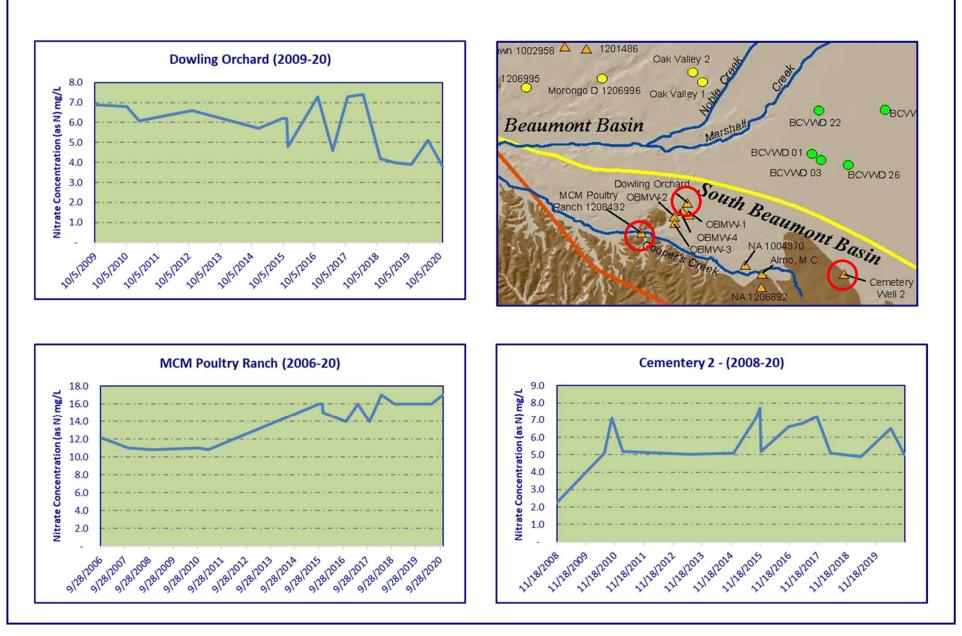


Figure 4-10 South Beaumont Basin – Historical Nitrate Concentration

# 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 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**

Beaumont Basin Watermaster Minutes for the Regular and Special Committee Meetings held in 2020

#### Record of the Minutes of the Beaumont Basin Committee Meeting of the Beaumont Basin Watermaster Regular Meeting Wednesday, February 5, 2020

#### Meeting Location:

Beaumont-Cherry Valley Water District 560 Magnolia Avenue Beaumont, CA 92223

#### I. Call to Order

Chairman Arturo Vela called the meeting to order at 10:03 a.m.

#### II. Roll Call

City of Banning	Arturo Vela	Present
City of Beaumont	Kyle Warsinski	Present
Beaumont-Cherry Valley Water District	Daniel Jaggers	Present
South Mesa Water Company	George Jorritsma	Present
Yucaipa Valley Water District	Joseph Zoba	Present

Thierry Montoya was present representing legal counsel for the Beaumont Basin Watermaster (BBWM). Hannibal Blandon and Thomas Harder were present as engineers for the BBWM.

*Staff present: Yolanda Rodriguez, Mark Swanson, James Bean, Bill Clayton and Erica Gonzales from BCVWD.* 

Members of the public who registered and / or attended: Steve Lehtonen, Jeff Davis, David Fenn and Ron Duncan from the San Gorgonio Pass Water Agency (SGPWA), Jennifer Ayres from Yucaipa Valley Water District (YVWD), John Covington from the Morongo Band of Mission Indians, Fran Flanders, and Jim Ohanian

#### III. Pledge of Allegiance

Chairman Vela led the pledge of allegiance.

#### IV. Public Comments:

None.

#### V. Consent Calendar

It was moved by Member Zoba and seconded by Member Jaggers to approve the Meeting Minutes of the following dates as amended:

1. Meeting Minutes for December 4, 2019

AYES:	Jaggers, Vela, Warsinski, Zoba
NOES:	None.
ABSTAIN:	Jorritsma
ABSENT:	None.
STATUS:	Motion Approved

#### VI. Reports

A. Report from Engineering Consultant – Hannibal Blandon, ALDA Engineering

No report.

B. Report from Hydrogeological Consultant – Thomas Harder, Thomas Harder & Co.

No report.

C. Report from Legal Counsel – Thierry Montoya, Alvarado Smith

*Mr.* Montoya reported that he followed up in response to a public comment from *Mr.* Wood of Sharondale with a voice mail message explaining that the reduction in their water rates was likely due to a ramp-down given to all members pursuant to storage losses. Montoya said he had not heard back from *Mr.* Wood.

*Mr.* Montoya reported he received an email from Member Zoba raising some objections to the vote taken on the allocation of water rights.

#### VII. Discussion Items

A. Reorganization of the Beaumont Basin Watermaster Committee -Chairman, Vice-Chairman, Secretary, and Treasurer

It was moved by Member Jaggers and seconded by Member Zoba to continue with the current officers:

- Chair Arturo Vela
- Vice Chair George Jorritsma
- Secretary Dan Jaggers
- Treasurer Joe Zoba

and approved by the following vote:

Jaggers, Jorritsma, Vela, Warsinski, Zoba
None.
None.
None.
Motion Approved

B. Consideration of the Watermaster Budget for Fiscal Year 2019-2020 and Fiscal Year 2020-2021

Treasurer Zoba explained the budget process.

It was moved by Member Jaggers and seconded by Member Jorritsma to approve the Watermaster Budget for Fiscal Year 2019-2020 and Fiscal Year 2020-2021 and approved by the following vote:

AYES:	Jaggers, Jorritsma, Vela, Warsinski, Zoba
NOES:	None.
ABSTAIN:	None.
ABSENT:	None.
STATUS:	Motion Approved

C. Status Report on Water Level Monitoring throughout the Beaumont Basin through January 23, 2020

Recommendation: No recommendation.

Engineering Consultant Hannibal Blandon explained that no new wells have been added to the program. Sixteen existing wells continue to be monitored for water level, and two for barometric pressure, he said.

Yucaipa 34 has seen a significant drop, Blandon advised, and explained a problem with the probe. There has been no significant production in the area of Oak Valley 5, he continued, but water levels continue to decline.

The Noble Creek observation wells show that the aquifer continues to rise, Blandon said. There have been no significant changes at other wells, he said. The Banning wells continue to recover, he added.

A communications cable at Banning M9 needs replacement, and potential replacement is needed again at Valley 5, Blandon noted.

D. A Comparison of Production and Allowable Extractions through December 2019.

Recommendation: No recommendation. Information only.

*Mr.* Blandon compared production and allowable extractions through the end of 2019. For the four appropriators, it takes into consideration the transfer of overlying rights that occurred from Oak Valley Partners to YVWD, allocating the full amount of 1,399 acre-feet (AF). The amount of water imported in 2019 was 13,895 AF. Total production, Blandon stated, was 14,121 which is 71 percent of the allowable amount.

The City of Banning exceeded its total and will be using some of its storage account, Blandon noted. Member Jaggers suggested adjustments be made to the BCVWD and City of Banning accounts due to some deliveries made from BCVWD's Well 25 in 2019 to the City of Banning as part of its co-ownership. Member Jaggers explained the well co-ownership and processes. Member Zoba asked if there was a way to provide the information to Mr. Blandon more quickly; Mr. Jaggers suggested reporting quarterly. Member Zoba suggested a quarterly report on the BBWM agenda, Jaggers was amenable.

E. Consideration of Change Order No. 2 for Task Order No. 17 for the Development of a Return Flow Methodology for the Beaumont Basin

Recommendation: That the Watermaster Committee approve Change Order No. 2 to Task Order No. 17 for the sum not to exceed \$27,850.00 and to direct the Treasurer to invoice specific Appropriators based on anticipated benefits.

Mr. Harder advised that ALDA Inc. and Thomas Harder & Company have been working over the past year on evaluating return flow by appropriator and a draft technical memo was finished last October. Significant comments were received, and a scope of services has been produced to address those comments. Included in the Change Order are items such as re-evaluation of indoor/outdoor water use estimates, landscape irrigation efficiency assumptions, additional water delivery account types, and accounting for pipeline losses, Harder stated. He detailed the related tasks and methodology and advised the Committee about some of the comments that will be addressed.

The initial budget for the project was about \$40,000, Harder noted. A change order over the summer totaled \$4,780 for reconciling the water account types, and this change order is \$27,850 which brings the revised budget to \$72,770, Harder advised.

Member Jaggers suggested that the districts provide their data on water losses to Harder. Member Zoba suggested dropping Task 4 on pipeline and sewer losses; Mr. Harder explained this analysis would result in a detailed estimate. Member Zoba pointed out that return flows in general do not comply with the basin plan objective and suggested the quality issues should be addressed, which would further increase the cost. He questioned the value of the study. Chair Vela suggested further analysis of needs. Mr. Harder indicated he could look at the recommended information and revise the scope of services.

The original task, Harder pointed out, was to receive credit from the appropriators for water that they are using and is returning to the groundwater. Zoba explained his quality concerns in response to a question from Chair Vela. Member Jaggers added that there are sources of higher quality water also being added to the basin and the Committee should take a holistic approach to all water quality issues that take place over time in the basin.

Member Zoba pointed out that state regulations will require reduction of losses and said he did not see value in accounting for that. Chair Vela said system losses are real, and although a leaky system should not be rewarded, the analysis seems worthwhile. Member Jaggers suggested that an accounting of losses and how they affect the adjudicated basin and safe yield would be of value whether credit is given or not.

Per the request of Mr. Harder, the City of Banning will provide data on infiltration and inflow to its plant during rain events.

*Mr.* Harder will revise the scope of services with Task 4 remaining, for consideration at the next meeting.

F. 2019 Annual Report Status and Rescheduling

Recommendation: That the Board considers moving the April meeting to its regular schedule on the first Wednesday of the month.

*Mr.* Blandon said he had anticipated having a draft of the annual report to present at this meeting, but some needed data is not yet available. In order to accommodate preparation of the report, Blandon recommended moving the March 25 meeting to April 1. Blandon noted that the draft report would be available at the April meeting, and a final report at the June meeting.

Member Jaggers pointed out that the SGPWA has begun operating their recharge ponds and there are some deliveries being made. Mr. Blandon indicated he was aware.

Member Zoba asked Mr. Blandon how the overlying water right transfer between Oak Valley Partners and YVWD would be handled in the 2019 report. Mr. Blandon noted that in previous discussion (Item VII. D) it was stated that YVWD would receive 1,399 AF for 2019, so for 2018 is 181.4; for 2019 it is 1,398.9. Member Zoba clarified that the full amount would be transferred; Mr. Blandon confirmed.

It was moved by Member Zoba and seconded by Member Jorritsma to move the April meeting to its regular schedule on the first Wednesday of the month in 2020 and thereafter. The motion was approved by the following vote:

AYES:	Jaggers, Jorritsma, Vela, Warsinski, Zoba
NOES:	None.
ABSTAIN:	None.
ABSENT:	None.
STATUS:	Motion Approved

G. 2018 Consolidated Annual Report and Engineering Report – Presentation of Final Report

Recommendation: That the Watermaster Committee adopts the Final 2018 Consolidated Annual Report and Engineering Report.

*Mr.* Blandon reviewed the process of the preparation of the 2018 report and shared highlights.

Resolution 2017-01 allowed the SGPWA to store up to 10,000 AF of imported water in the basin, Blandon reminded the Committee. Groundwater production total listed by appropriators totaled 15,026 AF for 2018, Blandon stated, and Member Vela pointed out this will require a minor adjustment. Mr. Blandon agreed, based on the transfers between Beaumont and Banning.

*Mr.* Blandon explained the report makes some recommendations: some work has been done to develop a policy to account for groundwater storage losses, but it has not yet been finalized; and develop a protocol to increase accuracy and consistency of data reporting.

Member Jaggers shared a handout from March 2019 and noted the changes had not been reflected in the report. He said he believes Banning and BCVWD have come to terms on the amount of water delivered to Banning: approximately 119.75 AF through 2018, and provided documentation, requesting the report include the data. Jaggers also noted some corrections to the handout. Mr. Blandon acknowledged the revisions.

*Mr. Jaggers advised that BCWVD and Banning will meet to assure the numbers are in agreement then will forward that to the consultant and bring back the information to the Watermaster.* 

Member Zoba noted that at the last meeting, Counsel Montoya had addressed the intent of Form 5 and whether the parties (YVWD and Oak Valley Partners) intended to transfer all of the overlying water rights from Oak Valley to YVWD, and asked if any correspondence had been received from the parties to disagree with that intent. Mr. Montoya said he had not. Member Zoba asked if Mr. Montoya's view had changed at all whether that was intended to be the full transfer. Mr. Montoya responded that his comments were his comments at the last meeting.

Member Zoba expressed concern that the annual report is inconsistent with the judgment, specifically the transfer of 180 AF is not done by Form 5 which is required by the Watermaster. The net result in Table 3.7 and 3.8 is wrong, Zoba continued, and said he thinks they will always be wrong in every annual report moving forward. He indicated his intent to vote against approval of the annual report.

It was moved by Member Jaggers and seconded by Member Jorritsma to adopt the Final 2018 Consolidated Annual Report and Engineering Report including the clarifications on the water transfers between Beaumont-Cherry Valley Water District and the City of Banning from production at Well 25 and delivered to a point of connection to the City of Banning, as reflected in the handout and minor verbal modification noted by Member Jaggers. The motion was approved by the following vote:

Jaggers, Jorritsma, Vela, Warsinski
Zoba
None.
None.
Motion Approved

*Mr.* Blandon clarified that the 2018 report will reflect the conditions as of the end of 2018; anything that happened in 2019 will not be included and will be part of the 2019 report.

#### **VIII.** Topics for Future Meetings

- A. Development of a methodology and policy to account for groundwater storage losses in the basin resulting from the artificial recharge of water resources.
- B. Development of a methodology and policy to account for recycled water recharge.

- C. Discussion of return flow credit and how it might be managed.
- D. Quarterly production reports for City of Banning through jointly owned well

#### IX. Comments from the Watermaster Committee Members:

Member Zoba explained the website is making a transition to a WordPress format so there may be glitches over the next few weeks. Mr. Jaggers advised that he had tried to retrieve the minutes from the last meeting and currently only page 1 was shown.

#### X. Announcements

- A. The next regular meeting of the Beaumont Basin Watermaster is scheduled for Wednesday, April 1, 2020 at 10:00 a.m.
- B. Future Meeting Dates:
  - i. Wednesday, June 3, 2020 at 10:00 a.m.
  - ii. Wednesday, August 5, 2020 at 10:00 a.m.
  - iii. Wednesday, October 7, 2020 at 10:00 a.m.
  - iv. Wednesday, December 2, 2020 at 10:00 a.m.
  - v. Wednesday, February 3, 2021 at 10:00 a.m.

#### XI. Adjournment

Chairman Vela adjourned the meeting at 11:15 a.m.

Attest:

Daniel Jaggers, Secretary

Beaumont Basin Watermaster

#### Record of the Minutes of the Beaumont Basin Committee Meeting of the Beaumont Basin Watermaster Regular Meeting Wednesday, June 3, 2020

#### Meeting Location:

There was no public physical meeting location due to the coronavirus pandemic. Meeting held via video teleconference pursuant to: California Government Code Section 54950 et. seq. and California Governor's Executive Orders N-29-20 and N-33-20

#### I. Call to Order

Chairman Arturo Vela called the meeting to order at 10:00 a.m.

#### II. Roll Call

City of Banning	Arturo Vela	Present
City of Beaumont	Kyle Warsinski	Present
Beaumont-Cherry Valley Water District	Daniel Jaggers	Present
South Mesa Water Company	George Jorritsma	Present
Yucaipa Valley Water District	Joseph Zoba	Present

Thierry Montoya was present representing legal counsel for the Beaumont Basin Watermaster (BBWM). Hannibal Blandon and Thomas Harder were present as engineers for the BBWM.

Staff present: Mark Swanson and Erica Gonzales from BCVWD.

*Members of the public who registered and / or attended: None acknowledged on the teleconference.* 

#### III. Pledge of Allegiance

Tabled due to teleconference limitations.

#### IV. Public Comments:

None.

#### V. Reports

A. Report from Engineering Consultant – Hannibal Blandon, ALDA Engineering

*Mr.* Blandon advised that the 2019 Draft Report will be presented at the August 2020 meeting provided that public meetings are allowed by that time.

B. Report from Hydrogeological Consultant – Thomas Harder, Thomas Harder & Co.

*Mr.* Harder noted a data request from Joe Reichenberger who indicated that the website is down. *Mr.* Zoba noted that the Committee is in the process of transitioning to a WordPress site and should be back up by the end of the week.

#### C. Report from Legal Counsel – Thierry Montoya, Alvarado Smith

*Mr.* Montoya reported that he received an email from Art Vela regarding the interest of the City of Banning to add another well to the Beaumont Basin and requested policies and procedures. Upon research, Mr. Montoya discovered the adoption of a Riverside County ordinance regarding well installation and maintenance. Montoya discussed with Mr. Jaggers the need for policy regarding well requests, locations, backup supporting information, and engineering documentation for the Watermaster to make an informed decision.

*Mr.* Vela added that the proposed well location is near the intersection of Wilson and Highland Home roads. He said he would keep the group apprised and would more than likely submit a formal letter.

*Mr. Jaggers advised that the Watermaster had adopted the Riverside County standards and there is one additional item to provide for groundwater monitoring. BCVWD is also looking at re-drilling Wells 1 and 2, existing wells which have reached the end of their service lives, Jaggers advised, as well as drilling two wells in the future. He indicated he will submit a similar letter.* 

#### VI. Discussion Items

A. Status Report on Water Level Monitoring throughout the Beaumont Basin through May 18, 2020

Recommendation: No recommendation.

Engineering Consultant Hannibal Blandon explained that after four months of not checking wells, they were visited on May 19. The Watermaster has 16 monitoring wells of the goal of 18 in the basin, he noted, and said that based on the location of the potential wells described by Banning and BCWVD, the engineer may use them as monitoring wells. *Mr.* Blandon pointed to Oak Valley Well 5 and reported there have been problems with communicating with the probe and suggested the cable may need replacement again.

*Mr.* Blandon pointed out that water level in the Noble Creek observation wells has risen by approximately 90 feet over the last 40 years and it has been fairly stable or the last two years, but with a 60-foot rise over the last two months, which continues to increase. He explained additional water level trends and equipment issues.

To address all the equipment repair, Mr. Blandon estimated costs between \$2,000 and \$2,500. In response to Chair Vela, Mr. Bandon said he would coordinate with YVWD staff to make the request to the manufacturer, and he will check on the amount available in the budget.

B. A Comparison of Production and Allowable Extractions through April 2020

Recommendation: No recommendation. Information only.

*Mr.* Blandon compared production and allowable extractions through April 2020. Actual production has been 3,442 for a total of 37.7 percent production. He noted the numbers change with additional summer production and as additional water is spread.

Chair Vela noted that the San Gorgonio Pass Water Agency (SGPWA) delivered imported water to the City of Banning last month which will needed to be updated in the table.

Member Jaggers identified that the SGPWA delivered approximately 215 AF of water to their Fiesta storage facility in December 2019. Between BCVWD and the SGPWA approximately 2,000 AF was delivered in March, which is part of the 3,100 AF shown as imported water. A portion of that was delivered to the SGPWA's ponds to alleviate concern about possible carryover water left in San Luis Reservoir due to rain, Jaggers continued. Deliveries were stopped in March due to COVID-19, and restarted in May, Jaggers advised. He said he believes that the SGPWA agreement with the BBWM for the storage account requires them to determine if anyone wants that water supply before it is credited to them; Jaggers said he did not receive an inquiry. With a new general manager expected at the SGPWA, Jaggers recommended review of the agreement to assure the approach is understood by all parties regarding recharge and what is offered or ordered by the BBWM members and others. He suggested tracking the storage account on a chart. In December, the YVWD submitted a Form 5 Notice of Adjustment Rights for transfer of overlying water rights from the Oak Valley Partners, and there was discussion, Jaggers reminded the Committee. He said he did not feel this was resolved to where it should be showing up on the chart and this appears to need future discussion, Jaggers stated. He pointed to Resolution 2017-02 adopted by the Board related to the transfer of overlier rights and indicated there were several things this Committee resolved to do when those transfers were made. He suggested agendizing the discussion.

In response to Mr. Jaggers, Engineer Blandon noted that the 1,399 AF was added to the report based on discussion during the meetings. He noted this would impact the 2019 report and must be documented and concurred with agendizing for the next meeting to resolve the issue.

Chair Vela asked that the record reflect that there are questions regarding the 1,399 AF under the YVWD column of the report, and this issue can be included as a future agenda item. Mr. Zoba disagreed, and pointed out this document is prepared by the consultant and is consistent with the adjudication, with the judgment, and with the Form 5 that was filed. He suggested this is not the appropriate item under which to have this discussion.

To track the SGPWA deliveries, Mr. Blandon suggested a line to be added to the report "SGPWA spread X number of acre-feet through April 2020." Mr. Jaggers clarified that his concern is to memorialize other additions to the Beaumont Basin groundwater.

C. Updated 2018 Consolidated Annual Report and Engineering Report – Delivery of Final Report

Recommendation: Information only.

*Mr.* Blandon reminded that the final 2018 report was approved at the February 5 meeting with agreement that the report include only events and actions that took place in 2018. Blandon reported that all 2019 items were excluded, and a note was placed at the bottom of each page that this version supersedes that dated February 5, 2020. Committee members have a pdf of the report, and hard copies will be delivered at the August meeting, provided the meeting takes place, Blandon advised.

D. Consideration of Change Order No. 2 for Task Order No. 17 for the Development of a Return Flow Methodology for the Beaumont Basin Recommendation: That the Watermaster Committee consider the approval of basic tasks 1 through 6 and optional tasks 7 and 8 as presented under Change Order No. 2. The estimate to complete the basic tasks 1 through 6 is \$25,510.00 while the estimated cost to complete optional tasks 7 and 8 is an additional \$43,750.00. If approved, the Watermaster Committee should direct the Treasurer to invoice specific Appropriators based on anticipated benefits.

*Mr.* Harder reviewed the history of the item. He pointed out that significant comments were received at the October 2019 Board meeting resulting in changes to the original scope of work. The recommendation was to return at the February meeting to address the scope and comments.

The nature of the October comments, Harder explained, related to the accounting for indoor and outdoor water use, refinement of categories, accounting for pipeline leakage, and lag time factor over time. The scope of work in February included seven tasks to address the comments, Harder continued.

The original proposed budget amendment to address the Return Flow Methodology was \$27,850, Harder noted, but there was concern over the depth of detail and projected water quality impacts that were not included in the scope. Harder presented a revised scope which reduced the cost to \$25,510. Evaluating Water Quality was added as an optional task, Harder noted. Including the water quality would add about \$43,750 to the cost, he advised. Tasks 1 through 8 would total \$69,060.

*Mr. Jorritsma noted that the South Mesa Water Company is not included in this. Harder concurred and noted that by virtue of its location within the BCVWD, the City of Beaumont is included.* 

*Mr.* Warsinski clarified that the SMWC and the City of Beaumont would not derive any benefit from the study and were therefore not included for billing purposes in the original task order that was approved.

Member Zoba concurred with Mr. Jorritsma that tasks 1 through 6 would be divided between YVWD, BCVWD, and the City of Banning; however he said Task 8 appears to be a requirement of the maximum benefit obligations with the regional board and tracking salt content is important to YVWD and the City of Beaumont.

Chair Vela concurred and noted concern regarding the assumptions included in the analysis and that it is important for all to understand the impacts and determine how to approach each one. Mr. Jaggers and Mr. Warsinski indicated interest in Task 7 - Accounting for Pipeline Losses and Infiltration and Inflow.

It was moved by Member Zoba and seconded by Member Jaggers to approve basic tasks 1 through 6 of Task Order 17 for a sum not to exceed \$25,510 and directed the Treasurer to invoice specific Appropriators Yucaipa Valley Water District, Beaumont-Cherry Valley Water District and the City of Banning based on anticipated benefits. The motion was approved by the following vote:

AYES:	Jaggers, Vela, Warsinski, Zoba
NOES:	None.
ABSTAIN:	Jorritsma
ABSENT:	None.
STATUS:	Motion Approved

It was moved by Member Zoba and seconded by Member Vela to approve optional tasks 7 and 8 as new Task Order 22 for a sum not to exceed \$41,410 and directed the Treasurer to invoice specific Appropriators Yucaipa Valley Water District, Beaumont-Cherry Valley Water District, the City of Beaumont and the City of Banning based on anticipated benefits. The motion was approved by the following vote:

AYES:	Jaggers, Vela, Warsinski, Zoba
NOES:	None.
ABSTAIN:	Jorritsma
ABSENT:	None.
STATUS:	Motion Approved

# **VII.** Topics for Future Meetings

- A. Development of a methodology and policy to account for groundwater storage losses in the basin resulting from the artificial recharge of water resources.
- B. Development of a methodology and policy to account for recycled water recharge.

Member Jaggers reminded the Committee of his earlier comments related to Item VI-B and recommended moving forward with an ad hoc committee. Chair Vela appointed the City of Beaumont and Yucaipa Valley Water District.

- C. Discussion of return flow credit and how it might be managed.
- D. Quarterly production reports for City of Banning through jointly owned well

The following topics were added:

E. Review of the SGPWA Storage Account agreement, activity and accounting

- F. Review of Resolution 2017-02, the amended Rules of the Watermaster and the judgement, and the YVWD Notice of Adjustment of Right of an Overlier Party due to Proposed Provision of Water Service by an Appropriator dated December 2017 and determination of what constitutes perfection of water right (under Legal Review)
- G. 2019 Draft Report

Requested by Mr. Blandon. Mr. Jaggers suggested making legal counsel available to Mr. Blandon for guidance. Chair Vela concurred. Mr. Montoya noted the importance of time frame of documents and order of precedence.

# VIII. Comments from the Watermaster Committee Members:

None.

# **IX.** Announcements

- A. The next regular meeting of the Beaumont Basin Watermaster is scheduled for Wednesday, August 5, 2020 at 10:00 a.m.
- B. Future Meeting Dates:
  - i. Wednesday, October 7, 2020 at 10:00 a.m.
  - ii. Wednesday, December 2, 2020 at 10:00 a.m.
  - iii. Wednesday, February 3, 2021 at 10:00 a.m.

# X. Adjournment

Chairman Vela adjourned the meeting at 11:04 a.m.

Attest:

Daniel Jaggers, Secretary

Beaumont Basin Watermaster

# Record of the Minutes of the Beaumont Basin Committee Meeting of the Beaumont Basin Watermaster Regular Meeting Wednesday, August 5, 2020

#### Meeting Location:

There was no public physical meeting location due to the coronavirus pandemic. Meeting held via video teleconference pursuant to: California Government Code Section 54950 et. seq. and California Governor's Executive Orders N-29-20 and N-33-20

#### I. Call to Order

Chairman Arturo Vela called the meeting to order at 10:00 a.m.

#### II. Roll Call

City of Banning	Arturo Vela	Present
City of Beaumont	Kyle Warsinski	Present
Beaumont-Cherry Valley Water District	Daniel Jaggers	Present
South Mesa Water Company	George Jorritsma	Present
Yucaipa Valley Water District	Joseph Zoba	Present

Thierry Montoya was present representing legal counsel for the Beaumont Basin Watermaster (BBWM). Hannibal Blandon and Thomas Harder were present as engineers for the BBWM.

Members of the public who registered and / or attended: Jennifer Ares, Yucaipa Valley Water District Madeline Blua, Yucaipa Valley Water District Bryan Brown, Meyers Nave William Clayton, Beaumont Cherry Valley Water District John Covington, Beaumont Cherry Valley Water District / Morongo Lance Eckhart, San Gorgonio Pass Water Agency Allison Edmisten, Yucaipa Valley Water District Erica Gonzales, Beaumont Cherry Valley Water District Lonni Granlund, Yucaipa Valley Water District Mike Kostelecky, Yucaipa Valley Water District Steve Lehtonen, San Gorgonio Pass Water Agency Jim Markman, Richards, Watson & Gershon Joyce McIntire, Yucaipa Valley Water District Greg Newmark, Meyers Nave Matt Porras, Yucaipa Valley Water District Mark Swanson, Beaumont Cherry Valley Water District Dave Armstrong – South Mesa Water Company

## III. Pledge of Allegiance

Chair Vela led the pledge.

#### IV. Public Comments:

None.

## V. Consent Calendar

It was moved by Member Zoba and seconded by Member Warsinski to approve the Meeting Minutes of the following dates:

- 1. Meeting Minutes for February 5, 2020
- 2. Meeting Minutes for June 3, 2020

AYES:	Jaggers, Jorritsma, Vela, Warsinski, Zoba
NOES:	None.
ABSTAIN:	None.
ABSENT:	None.
STATUS:	Motion Approved
ABSTAIN: ABSENT:	None. None.

#### VI. Reports

A. Report from Engineering Consultant – Hannibal Blandon, ALDA Engineering

*Mr.* Blandon noted that the Draft Annual Report was scheduled to be presented at this meeting but has been postponed to October due to not meeting in person.

B. Report from Hydrogeological Consultant – Thomas Harder, Thomas Harder & Co.

No report.

C. Report from Legal Counsel – Thierry Montoya, Alvarado Smith

*Mr.* Montoya advised that he had received a letter from the City of Beaumont requesting appointment of a member and alternate, and he has sent a draft motion for court approval of the appointment. Beaumont will send the resumes and declarations of the candidates for appointment of the required designated member and alternate.

# VII. Discussion Items

A. Status Report on Water Level Monitoring throughout the Beaumont Basin through July 20, 2020 Recommendation: No recommendation.

Engineering Consultant Hannibal Blandon pointed to the northwest portion of the Basin and advised that in the last year water level at Yucaipa Well No. 34 has declined by 5 feet. The most significant decline, he continued, has been in Oak Valley Well No. 5 which has not been pumped for quite a while but has dropped almost 30 feet in the last year.

Water levels in the deep aquifer continue to increase, he noted, with 60 feet over the last four years, whereas the shallow aquifer levels have plateaued over the last two years, he explained.

He compared Sun Lakes and Summit Cemetery well levels and advised that Banning Well M-8 continues to decline. Beaumont-Cherry Valley Water District (BCVWD) Wells 2 and 25 show higher highs and lower lows over the last few months, he noted. Blandon said he understands that BCVWD has been pumping one of the nearby wells which may result in the decline. Member Jaggers explained that Well 2 is in close proximity to Well 3 which was returned to service a month ago and this likely affected Well 2.

*Mr. Blandon pointed to BCVWD Well 29 and Tukwet Canyon Well B which are located in the northwesterly portion of the Basin but have not seen the decline as have Yucaipa Well 34 and Oak Valley Well 5.* 

*Mr.* Blandon reported that Oak Valley Well 5 seems to have collapsed. The probe and communications cable have been removed and will not reinstall until the well is back in service, he said. Mr. Zoba indicated that the well is not on near-term efforts.

*Mr.* Blandon indicated there may be another Oak Valley well nearby that can be used; he will explore the option.

Mr. Blandon reminded the Committee of equipment repairs needed.

B. A Comparison of Production and Allowable Extractions through June 2020

Recommendation: No recommendation. Information only.

*Mr.* Blandon compared production and allowable extractions through June 2020. The City of Banning has imported 250 AF whereas BCVWD has imported close to 4,300 feet, for a total of 4,550 AF. Allowable production for the agencies is 10,500 AF and actual production for the year is 63 percent of the allowable. This is dependent on imported water, he noted.

C. Update on Progress to Develop a Return Flow Accounting Methodology (Task 17) and Conduct a Water Quality Impact Evaluation for the Beaumont Basin Adjudicated Area (Task 22)

Recommendation: Information only.

*Mr.* Tom Harder reminded the Committee that a scope of work and cost estimate had been presented at the last meeting and advised that work has begun on eight tasks. He anticipates providing a revised technical memo of the Return Flow Methodology at the next meeting in October.

The last two tasks were approved as a new Task Order 22, a water quality impact evaluation, Harder reminded. This work has also begun, he noted and preliminary results are anticipated at the October 2020 Committee meeting.

D. Discussion Regarding Various Legal Memorandums Regarding the Transfer of Overlying Water Rights to Appropriative Rights

Member Zoba introduced the discussion item. Legal Counsel Montoya explained that the Watermaster requested Alvarado Smith to analyze the water transfer and accounting of Oak Valley Partners' (OVP) overlying water rights transferred to Yucaipa Valley Water District (YVWD). He pointed to the July 20, 2020 memorandum which speaks to the YVWD's Resolution 2017-02 which complies with the stipulated judgment.

Prior to that, Montoya continued, OVP on July 5, 2017 had asked the BBWM to convert its overlying rights as reduced by the judgment to a parcel-by-parcel basis.

The resolution signified a change in the character of the water via change of use, Montoya explained. The July 20 Memorandum speaks to YVWD's November 29, 2019 Form 5 which serves as a notice provision of the water transfers. The Memo also speaks to the 180.4 AF of former OVP overlying water rights transferred to YVWD based on YVWD's notices of water service commitments to specific OVP tract numbers.

On July 30, 2020, Montoya said, Alvarado Smith received a new agreement regarding consideration for overlying water rights transfers dated June 2, 2020 which was not addressed in the July 20 Memo. The Oak Valley Development Company / OVP and YVWD agreement appears to be a marked departure from Resolution 2017-02 and its overlying request for water service, he explained.

The June 2, 2020 agreements contain some inaccuracies, Montoya continued. Form 5 is not a water transfer mechanism, it is a notice provision, he explained. The Watermaster has never produced any water service commitments from YVWD to OVP other than reflected in the 180.4 AF transferred to OVP tracts.

The June 2, 2020 memo also contains a new forbearance by OVDC / OVP provision which has never previously been offered to the Watermaster or counsel, Montoya noted. Forbearance is an aspect of water transfer, he explained, but for it to have any meaning, OVDC / OVP would have to ask YVWD to provide water service for all parcels, a request that YVWD would then accept.

Alvarado Smith had not had the opportunity to analyze the new June 2, 2020 agreement for today's meeting, Montoya advised. Based on review, the June 2 agreement raises some issues worthy of analysis and Watermaster consideration, he added. First, did OVDC / OVP obligate itself to transfer all of its overlying water rights to YVWD, and second, did YVWD obligate itself to provide water service to all of OVDC / OVP's parcels at any time, Montoya noted.

Forbearance may be meaningless and revocable unless YVWD issued a water service letter to provide water to all their parcels, Montoya noted.

Member Jaggers pointed out that one of the key provisions in Resolution 2017-02 identifies that whereas OVP intends to secure commitments from the YVWD to provide service and requests that when these commitments are made and water service is provided to the designated parcels, that the overlying water rights for those parcels are transferred, Jaggers read. He said discussion is needed on what is water service and past procedure. The overlying theme of the judgment seems to be providing for service to the overliers for conversion of their properties in some future developed condition, Jaggers noted. Is it a conversion right to be used for beneficial use on those particular parcels listed under the judgement, as they convert, he asked.

*Mr. Jaggers pointed to the legal recommendation that Resolution 2017-02 should be followed. The judgment clearly identifies what constitutes water service and the earmarked water transfers when service is provided, he stated. Jaggers questioned: Does the intent to serve various parcels constitute water service, and that water is available to the appropriator in whole, or does it convert parcel by parcel along the lines of what has been done with the identification of those water commitments and the transfer in conjunction with Resolution 2017-02?* 

Member Zoba pointed to legal opinions included in the agenda packet and indicated they are clear in terms of the transfer of water. Overlying water rights have essentially three phases, he noted: 1. Overlier could use the water on their property, 2. Overlier could opt not to use it on their property at which point it comes back as an unused overlying water right and that gets distributed, and 3. It can be transferred to an appropriator for an appropriative use. It seems clear that the agreement provides for that and it is clear that Oak Valley has forgone its right, Zoba opined.

Zoba cautioned against making up portions of the judgment that don't exist and pointed to section 3B regarding transfer of overlying rights to appropriative use. The intent has to do with projects, not individual lots, he opined. The intent stated in the judgment and the transfers taking place have to do with a master planned community, not on a lot-by-lot basis, he said. Zoba explained the history and development of Form 5. He stated that the record shows a progressive process by YVWD and BBWM; there is nothing inconsistent with the judgment and the overlying water rights should be transferred as of the effective date of the Form 5 signed by OVP.

*Mr. Jaggers pointed to the judgment section 3C and recalled legal opinions regarding when credit was to be given for the timing of the conversions and definition of "receives water service."* 

Member Warsinski indicated he had read the documents and noted that the transfer of rights has been consistent with Resolution 2017-02 and subsequent documents provided by YVWD regarding the transfers to certain tract map numbers moving towards development. He said he believes this is consistent with the judgment and appropriate for BBWM to recognize those transfers of the earmarked rights into appropriative rights. It did not get down to metering of each house, which is a cumbersome and onerous process, he opined.

But when YVWD was requesting transfer of an amount of acre-feet for a tract map which is going to be developed within a certain amount of time, Warsinski stated, that is the most appropriate time to transfer those earmarked rights into appropriative rights. It did not get down to exactly when water was served, he noted, but it is apparent what YVWD and OVP were doing and the timing was going to be soon, which met the intent of the judgment, he said.

Warsinski pointed to the Alvarado Smith memo dated July 16, 2018 which referenced Water Code 1241 and a five-year period in which a transferred overlier right to appropriative right needs to be utilized. The YVWD tract maps would coincide with water being served to those parcels when each home was constructed within the five years, he noted. If that did not occur, Warsinski continued, the memo states that the State Water Resources Control Board does not permit revival of that appropriative right. He deferred to legal counsel to address. Warsinski said that in his opinion, what was being done before made sense. YVWD's legal premise has merit, he noted, but Warsinski said he would rather wait to comment until BBWM legal has had time to analyze it.

Member Jorritsma said he leans toward what was done in the past – transfer the amount of water requested for the tract and not set a precedent, otherwise all those water rights just sit out there and are applied to YVWD at the expense of the rest of the members. The right should be applied as the parcels are developed and it seems to be so in the Alvarado Smith opinion.

Chair Vela agreed that it is critical to remain in compliance with the judgment. Resolution 2017-02 was developed by the group and vetted by legal counsel to assure compliance with the judgment. The Resolution provides guidelines and a process by which the water transfers are going to occur, Vela said. Subsequent to the approval of 2017-02, the Watermaster received notice and request from YVWD for transfers to be made from OVP to UVWD and those requests were compliant with 2017-02 and its intent, he stated.

It was not until the request for transfer of all of the OVP's right in September 20, 2019 that the perfection of the water right was questioned, Vela said. He indicated he will rely on legal counsel to review and determine impact.

Member Zoba read Section 3 B of the judgment and pointed out the capitalization of "Overlying Party," meaning a specific defined term; therefore, Section C applies to OVP, and OVP received water service on October 9, 2018, so YVWD followed the judgment. He reminded the Committee that the ad hoc committee of himself, Member Jaggers and counsel Montoya discussed these things which are now being altered to suit the need. He opined that the judgment is clear.

Chair Vela invited public comment.

BCVWD Legal Counsel Jim Markman referred to his work on the judgment seven or eight years ago and indicated the important thing is to get a policy on transfers or conversions that is clear and upon which all agree so that a firm opinion can be given that a transfer actually entitles an agency to the water. He pointed out that the key term is "water service" which means a conversion, as defined by the writer of the judgment. Without it, overliers who are not exercising their right could, instead of distribution among appropriators, sell the right and create competition among the agencies. The conversion would be addressed in the Will-Serve Letter, he continued. This conversion right also exists in the Chino Basin, Markman pointed out. The Ohanian agreement indicates that the overlier is selling or leasing that water, Markman opined, in the interim to YVWD which creates monetary consideration flowing to that developer. If that were the intent of the judgment, it would say that water rights are transferable. The land brings with it a water right that can be converted to serve a project, Markman noted, and that puts a lot of value in the hands of the overlying owner. The problem, he said, is there is no value until they sell or participate in development of their land.

In good faith, BCVWD does not believe this is a broad transfer provision, it is a conversion provision, Markman stated. So, at the point of a Will-Serve Letter for part of a large development or all of a small development, that is when service is ready for the project and billing begins and when the conversion should occur, Markman opined.

*Mr.* Greg Newmark of Meyers Nave, Special Counsel for YVWD, pointed out that Mr. Montoya had not had an opportunity to review the additional documentation provided by YVWD and had not reached an opinion on the effect of the agreement. Newmark agreed with Markman that the attorneys could have a productive discussion prior to debate.

Newmark concurred that the most important guiding principle is the judgment itself. The court will interpret the judgment and try to define the intent of the parties as they were entering the agreement, he noted. *Mr. Markman had indicated some knowledge of intent, Newmark said, but there is nothing in water law that would preclude the type of water rights transfer between OVP and YVWD.* 

Newmark said he believes YVWD has complied with the intent of the parties of the judgment and it is not as vague as Mr. Markman suggested. The only way to change is to modify the judgment, and the parties could do that, Newmark advised. He said he believes the provision was to enable developers to use the value of their water rights to develop their property, and that is what should be considered in how it is applied. Continuing a benefit to the other member appropriator water agencies the expense of the appropriator is not likely to be interpreted as the intent of the parties as reflected in the judgment, Newmark stated.

The main thing that Resolution 2017-02 did was to allow OVP to load the entirety of its water rights under the judgment onto 39 of their 89 parcels, Newmark noted. They could access the entirety of their overlying right to facilitate the development of one set of parcels. The Watermaster rules and regulations were amended by Resolution 2019-02, he continued, regarding the way the rights were to be transferred using Form 5 and changed the procedure from just a notice provision. These are rights, not discretionary calls that the Watermaster Committee may decide, he advised. With that amendment, the provisions of 2017-02 are limited, Newmark posited. YVWD's position is that once it has complied with the provisions of the judgment, it is ministerial for the Watermaster to make the transfer of credits as set forth in the revised Section 7.

YVWD does not agree that the Form 5 constitutes a request, or that the Watermaster needs to agree, Newmark continued. The requirements of the judgment have been satisfied; there is no discretion to deny the parties their rights, Newmark posited.

Mr. Newmark stated that it is not a reasonable interpretation of the intent of the parties under the judgment to suggest that water only transfers meter by meter or lot by lot when the intent of the parties was to allow the overlying party to transfer the rights before the development happens, at the water supply assessment phase to show that there is water available to serve that development. The appropriator, he said, needs to have possession of the water before it serves it.

Once there is commitment of service to the parcel is when the rights transfer to the appropriator, Newmark stated. It was also suggested, Newmark continued, that the water is only supposed to be used to serve a particular parcel or projects. He said he does not believe that is what was contemplated by the judgment, and Section 2 makes it clear that appropriators can use their production rights anywhere within their service area. Both OVP and YVWD are entitled to their rights under the judgment, he concluded.

Member Jaggers noted that a conclusion is needed and said he hears different opinions on the judgment and its intent. It seems there is an impasse at the moment on what constitutes water service, he observed, and said further discussion between legal counsel may be productive.

Member Warsinski agreed with Member Jaggers that Mr. Montoya should review the new document and digest Mr. Newmark's comments. He referenced the language of the judgment – "receives water service" and how to figure out what "water service" means. It should be done on a Will-Serve Letter basis, he suggested, and noted the attorneys can work it out. Mr. Warsinski noted he has also been working with the judgment for eight or nine years and has had the opportunity to work with the people who drafted the judgment and said it was his understanding that the intent of the process was to convert water rights.

Transfers have been talked about, Warsinski continued, but no one has ever done a transfer and there have been opportunities with developers who wanted to transfer water rights to BCVWD for money, and it was never done. It comes back to the judgment, as the contemplations within the judgment were always conversions to the appropriator to serve a project, Warsinski said.

Member Zoba indicated he was part of the group that transitioned from the San Timoteo Watershed Management Authority to the Beaumont Basin Watermaster who sat down with developers, landowners and attorneys to draft the documents. His institutional knowledge, he stated, is what he is trying to convey in letters and interpretation of the judgment, he said. Landowners wanted certainty that they would receive water service so there was no hiccups in the development process and the ability to transfer water early, Zoba said. The key provision is that when the large landowner forgoes a well and moves to municipal water service – that is the receiving of water service and that conversion of not pumping a well and instead paying a higher rate and receiving treated water from an appropriator. Zoba said he appreciates the discussion and believes this will end up in the right place.

In response to Member Jorritsma, Mr. Montoya said he would look at the agreement and acknowledged the concepts offered by Mr. Markman and Mr. Newmark. He said he does not believe the judgment is written in that kind of expansive manner that the two suggest. He said he is not against the idea of changing it to bring it up to more current language and needs.

Water service, Montoya continued, has never been what water being provided. He said he thinks the judgement and case law define water service as a commitment from YVWD to provide service. He said he is hung up on not seeing that commitment from YVWD for the balance of the project. He said he will look at the judgment again and the new agreement provided by YVWD and will reach out to Mr. Markman and Mr. Newmark. Even if the language needs to be changed to facilitate transfers, Montoya continued, certainly that is what the stipulated judgment wants to encourage.

Chair Vela acknowledged the lack of agreement and indicated it is important to include legal counsel and agencies that want to be included in the discussions.

Member Jaggers concurred and indicated BCVWD counsel would be interested in participating to get this resolved in a public forum and suggested a special meeting. Warsinski concurred. Member Jorritsma stressed an equitable conclusion.

Member Zoba added he would not object to Mr. Montoya reaching out to Markman or Newmark prior to a future meeting. *Mr.* Montoya agreed counsel should get together and find common ground to achieve a fair playing field for everyone. Modifications should be made to the judgment if necessary, he noted.

Zoba pointed out there are additional stakeholders who might be interested in making alterations. He recommended working within the judgment. Vela agreed that the goal should be to come to consensus under the existing guidelines of the judgment. Restructuring the judgment should not be the first option considered, he said.

A special meeting was scheduled for August 27, 2020 at 9 a.m.

# VIII. Topics for Future Meetings

- A. Development of a methodology and policy to account for groundwater storage losses in the basin resulting from the artificial recharge of water resources.
- B. Development of a methodology and policy to account for recycled water recharge.

#### IX. Comments from the Watermaster Committee Members:

Member Jaggers noted that as of August 3, BCVWD in conjunction with the San Gorgonio Pass Water Agency is recharging 24 cubic feet per second. He acknowledged the SGPWA new General Manager Lance Eckhart.

Chair Vela advised that due to the Apple Fire, the City of Banning lost power for a couple of days in the canyon where most of its water is obtained. The emergency intertie with BCVWD has been opened for the co-owned wells in the Beaumont Basin, so there will likely be an uptick in the City's production during the next report.

#### X. Announcements

- A. The next regular meeting of the Beaumont Basin Watermaster is scheduled for Wednesday, October 7, 2020 at 10:00 a.m.
- B. Future Meeting Dates:
  - i. Wednesday, August 27, 2020 at 9:00 a.m. (Special Meeting)
  - ii. Wednesday, December 2, 2020 at 10:00 a.m.
  - iii. Wednesday, February 3, 2021 at 10:00 a.m.

# XI. Adjournment

Chairman Vela adjourned the meeting at 11:37 a.m.

Attest:

Daniel Jaggers, Secretary Beaumont Basin Watermaster

# Record of the Minutes of the Beaumont Basin Committee Meeting of the Beaumont Basin Watermaster Special Meeting Wednesday, August 27, 2020

#### Meeting Location:

There was no public physical meeting location due to the coronavirus pandemic. Meeting held via video teleconference pursuant to: California Government Code Section 54950 et. seq. and California Governor's Executive Orders N-29-20 and N-33-20

#### I. Call to Order

Chairman Arturo Vela called the meeting to order at 9:09 a.m.

## II. Roll Call

City of Banning	Arturo Vela	Present
City of Beaumont	Kyle Warsinski	Present
Beaumont-Cherry Valley Water District	Daniel Jaggers	Present
South Mesa Water Company	George Jorritsma	Present
Yucaipa Valley Water District	Joseph Zoba	Present

Thierry Montoya was present representing legal counsel for the Beaumont Basin Watermaster (BBWM). Hannibal Blandon and Thomas Harder were present as engineers for the BBWM.

Members of the public who registered and / or attended: Jennifer Ares, Yucaipa Valley Water District David Armstrong, South Mesa Water Company Hannibal Blandon, Alda Madeline Blua, Yucaipa Valley Water District Barbara Brenner, Churchwell White Bryan Brown, Meyers Nave Luis Cardenas, City of Banning John Covington, Beaumont Cherry Valley Water District / Morongo Allison Edmisten, Yucaipa Valley Water District Erica Gonzales, Beaumont Cherry Valley Water District Lonni Granlund, Yucaipa Valley Water District T. Milford Harrison, San Bernardino Valley Municipal Water District Jeff Hart, City of Beaumont Mike Kostelecky, Yucaipa Valley Water District Jim Markman, Richards, Watson & Gershon Jovce McIntire, Yucaipa Valley Water District Greg Newmark, Meyers Nave John Ohanian, Oak Valley Development Company / Oak Valley Partners Mark Swanson, Beaumont Cherry Valley Water District Robert Vestal, City of Beaumont

#### III. Pledge of Allegiance

Chair Vela led the pledge.

#### IV. Public Comments:

None.

#### V. Consent Calendar

It was moved by Member Zoba and seconded by Member Warsinski to approve the Meeting Minutes of the following dates:

1. Meeting Minutes for August 5, 2020, with corrections

AYES:	Jaggers, Jorritsma, Vela, Warsinski, Zoba
NOES:	None.
ABSTAIN:	None.
ABSENT:	None.
STATUS:	Motion Approved

#### VI. Reports

A. Report from Engineering Consultant – Hannibal Blandon, ALDA Engineering

No Report.

B. Report from Hydrogeological Consultant – Thomas Harder, Thomas Harder & Co.

No report.

C. Report from Legal Counsel – Thierry Montoya, Alvarado Smith

*Mr.* Montoya advised that a motion will be filed today with the court to add Mr. Hart as a new member and Mr. Vestal as alternate representing the City of Beaumont.

He advised that he met with counsel for YVWD and BCVWD to talk about the agreement and noted he received additional documents from Greg Newmark on Tuesday.

# VII. Discussion Items

A. Discussion Regarding Various Legal Memorandums Regarding the Transfer of Overlying Water Rights to Appropriative Rights

Counsel Thierry Montoya reiterated that he met with attorneys Greg Newmark, James Markman and Barbara Brenner. Discussions were professional and open, he reported. He said he is still at the fundamental sticking point regarding water service commitment on behalf of YVWD: making sure the judgment is being adhered to, and when to characterize a water rights change as change in use.

Under the amended judgment, Montoya continued, when an overlying party (OP) transfers its overlying rights to an appropriator (Appropriative Party, or AP) in exchange for water service, the nature and character of the overlying rights change to an appropriative one. The first key issue is that the amended judgment sets forth that change in character in Section 3, Subsection 1 which states that OPs shall continue to have the right to exercise their overlying water rights except to the extent their respective properties receive water service from an AP. The key is the receipt of water service and the water serving the overlying properties. Section 3B, Montoya explained, states to the extent any OP requests water service based on its water rights in Column 4 from an AP, the equivalent volume of groundwater shall be earmarked by the AP which will service the OP up to the volume of their water rights for the purpose of serving the OP. The key is that exchange, Montoya explained; "I have rights, I want water service, when I get the service, it is serving the overlying property."

Section 3C, Montoya stated, indicates when an OP receives that water service, the OP shall forbear the use of the volume of the overlying water right earmarked by the AP. The AP providing that service shall have the right to produce that water to the extent forgone by the OP. The key is that exchange, Montoya opined: the requirement by the overlying party and the AP's agreement to provide water service cinches that forbearance obligation on behalf of the OP.

Previous to the July 20, 2020 agreement, Montoya explained, the Committee did have that transfer consistent with the stipulated judgment. YVWD received a transfer of 180.4 AF of rights based on its Board's acknowledgment that it would provide water service commitments. Montoya said that Board acknowledgement is not what he would consider a traditional will serve letter (WSL), but it serves the purpose. The Committee then received a Form 5 which was written in the future conditional format, "We will provide water service to the OP at some period in time," and Montoya said he talked about his concerns with the language. Montoya said he was asked to look at the July 20, 2020 agreement. He indicated that he has problems with recitals E and F:

*E* – Montoya said he does not agree. Form 5 is not a water transfer mechanism, it is a notice provision based on the overlying water rights holder's required offer of water service and the AP's water service commitment to provide the water to the overlying water holder's properties. That process in Sec 3.1 and 3A through C and confirmed by Rule 7 is the key sought here.

*F* – Montoya said he was asking for evidence as to the YVWD commitment to provide water to the overlying property other than what was reflected in the 180.4 transferred previously. YVWD was asked for documents confirming that YVWD would provide water service in the form of a WSL or Board of Directors water service acceptance letter as previously provided to the BBWM as part of Resolution 2017-02, but those kinds of documentation were not received, Montoya noted.

Montoya noted that his memorandum presumes that no such customary water service confirmation exists. He said he received on August 26, 2020 the Oak Valley Specific Plan Environmental Impact Report and a March 2, 2005 Water Supply Assessment (WSA) for the Oak Valley (OV) development and found a representation that a distillation of the change in character consistent with the judgment – page 12, sec 7.1 – "overlying right holders may have their water rights credited against deliveries made to them by one of the public purveyors serving the OV area, which overlies the basin." Again, he said, it is consistent that if asked, the OP commits to give it. In terms of written confirmation, this is something less traditional but the Board of Directors saying that the District will provide water service cinches the transfer and changes the character from Overlying to Appropriator, Montoya posited.

Also, Montoya continued, he received a Resolution of the YVWD Board of Directors approving the WSA on March 19, 2004 with authorization to initiate the facility master plan for the OV development, engineering studies relative to providing water service for the project, and an August 15, 2007 Summerwind Development Agreement. Montoya opined that the agreement still appears inconsistent with the amended judgment Section 3.3 procedures as reflected in the Beaumont Rules and Regulations Section 7. The key, he said, is that the agreement does not obligate YVWD to provide water service to any or all of OV's overlying properties at either the June 2, 2020 effective date or any time thereafter. The agreement is unclear as to whether an OV water service commitment could ever be effectuated – there is no time limit.

The agreement doesn't state that a certain amount of water is presently committed for the development in upcoming phases and doesn't state that a water service requirement would be coming at any time in the future, Montoya stated. The agreement indicates that YVWD is leasing OV's overlying rights for use in its service areas and standing ready and waiting for water service commitment to be coming at some time in the future. But that is not a request for water service from OV, Montoya explained.

He outlined his concerns relative to the amended judgment:

1 – An appropriator's water service commitment cinches an OP's forbearance from using that volume of overlying water right earmarked by an AP for water service: Amended judgment Sections 3b and c. This is key, Montoya posited, because the agreement's forbearance by OV provision may be meaningless and revokable absent YVWD's issuance of a WSL or commitment by the Board of Directors to provide water to any or all of OV's property. OV Partners has a statutory judgment right to 1,398.90 AF of overlying water rights and the agreement is ambiguous as to whether OV has obligated itself to transfer all of its overlying water rights to YVWD. It leaves open the possibility that OV could later claim that its forbearance obligations were never triggered under the amended judgment as it never requested service from YVWD and YVWD didn't commit to provide water service to the overlying property., That request and commitment is what cinches the forbearance obligation.

Montoya noted there are dispute resolution provisions included so the parties could be contemplating that there may be a later dispute. But he said his concern is whether the obligation been cinched.

2 – The other concern, Montoya continued, is as it is possible under the agreement that OV's request for water service may come tomorrow, may come years from now, may never come, or when it comes in it is not necessarily clear that it will come in for all of the remaining overlying water rights. This raises an issue of unused water rights and the remaining APs at some time having a claim for their own usage under judgment Sections 3.1.3 and BBWM Rules 7.3.

Montoya pointed out that if water is not put to use for the OP, it will, with time, revert back as water available for other parties; their share dictated by BBWM Rule 7.3. The agreement contemplates that YVWD is going to be leasing the water from OV, putting it to use within their service district and waiting for a request that may or may not come. The amended judgment requires overlying water to be ultimately put to use on the overlying property, not for YVWD use in its district at large. This is not key to the transfer issue, he noted. The agreement's open and unspecified water service commitment deadline is inconsistent with the amended judgment's overlying use requirement and may conflict with the other appropriators' rights to claim some of the water for their own usage, he advised.

Montoya said he could not conclude that this agreement is consistent with the judgment's water transfer provisions as there is no water service commitment being made by YVWD. That raises two corollary issues, he explained: Is there really a forbearance of the overlying water rights? And the unclear timing of the agreement: How long does the BBWM have to wait for a water service requirement to come in? It might not come in, Montoya posited, which at some point is not fair to the other APs who say the unused overlying water rights should be credited to their accounts.

Chair Vela said he appreciated the time spent on the discussion and asked about the anticipated memo.

Robert Vestal pointed to the memo dated July 20, 2020 and said it seems the review with the new documentation is consistent. He requested clarification on the overlier water rights turning into vested appropriator rights. He questioned if the committee would want to see the WSL or WSA detailed in terms of tract map numbers, or would it be able to accept a WSL for the remaining lots of the entire development, which would create a lengthy time until the last tract map is built out.

Montoya said he believes that any appropriator will have obligated themselves to provide water with the issuance of some sort of WSL. The YVWD Board acceptance of the parcel by parcel request for water service suffices, although it is not a traditional WSL. Montoya suggested that at this point, the parties OV and YVWD would at least be able to quantify an amount of water service that would be necessary for the OP. It does not have to be a parcel by parcel designation, he said. The parties would know the status of construction and could at least commit to providing water service up to the remaining balance or a lesser amount within a certain period of time. The parties would know what tranches of what remains of the water could be put to use and could be confirmed by YVWD. None of that was forthcoming, he stated.

The service doesn't have to be consistent with each parcel, Montoya posited; it could be confirmed in some sort of water service commitment in a set period of time that would make sense to the remaining Appropriators.

Member Warsinski suggested a similar process via tract maps.

Chair Vela said he understands the importance of the commitment but that is only one of two conditions that need to be met: the commitment needs to be made, and the water service must be provided. Montoya said the appropriator must merely commit (that is the delivery of water under the judgment, not the actual service). Chair Vela pointed to a May 15, 2018 memo from Montoya regarding when the overlying right becomes appropriative. It stated there are two conditions for conversion once YVWD would require appropriative rights to provide water service to the OV development: "1. once it commits to do so, and 2. once it begins providing water service to OV's parcels. Once these conditions are met, the OV overlying water rights become YVWD's appropriative rights," Vela read.

Counsel Montoya said he would look it over again. Water service under the judgment and water service consistent with other judgments and case law is just the commitment via a WSL or something along those lines.

Chair Vela questioned that if the water was committed via WSL for the remaining balance of the overlying right, time passes, the development goes under, and an agency says it has a right to that water – for accounting purposes how the watermaster would process that. If it has gone unused for the original purpose, he continued, what would the AP have right to and how far back would it go to exercise that right? Montoya answered that Rule 7.3 talks about overlying water that hasn't been used for a period five years, so that would be the triggering point; the agreement date.

Member Jaggers pointed out the example of Sunny Cal Egg Ranch. BCVWD offered a WSL to Sunny Cal in preparation for annexation. During an EIR challenge, the court found that Sunny Cal had water service to serve their property and therefore was exempt from a water planning study. BCVWD has had an outstanding WSL for quite some time and has processed plans. He said he was unsure as to how to convert their overlying water right to an appropriative water right as far back as those WSLs were issued. The District sets an expiration on WSLs of 12 months to be able to assess the water right activity, he explained. The District may still want some control over when service can be provided based on existing facilities, Jaggers explained.

Jaggers suggested that the Watermaster discuss some of those activities as the memo comes out, because of the existing condition at BCVWD and offering an opportunity to reflect back on the Sunny Cal WSL and begin the conversion process to appropriative rights from overlier rights.

Chair Vela invited public comment.

On behalf of YVWD, Counsel Greg Newmark acknowledged there was a productive set of discussions and exchange of ideas. In Montoya's judgment, Newmark said, it's the request for water service that cinches the forbearance obligation. Those obligations are provided in the agreement as part of the transaction between YVWD and OV. OV was surprised to hear that there is a question as to whether OV has requested water service, and whether YVWD has committed service. Between the two parties that is clear and is reflected in the recitals of the agreement, Newmark stated.

The agreement states that water service was provided in October 2018 and the nature of the transfer is set forth in the agreement itself, Newmark advised. YVWD considered the water demand that would be required to serve the parcels in the 2005 WSA, he said. The WSA was adopted by Board action: that the project could be and would be served. Relying on that, OV fully entitled the project and has proceeded with construction. A great deal of money has been invested on the strength of the commitment that is being questioned, he noted.

One of the issues may be that YVWD does not issue typical WSLs, Newmark posited, but the long history and documentation should have been sufficient. Once the next memo from Montoya is available, YVWD will be able to provide documentation of the understanding and agreement bet YVWD and OV that service was requested and YVWD has committed, and in fact service has been provided to the parcels, cinching the transfer of rights, Newmark stated.

Counsel Newmark rejected Montoya's point that the transfer provisions in Section 7 and use of the Form 5 does not itself effectuate a transfer, that it is a notice provision. The OV and YVWD submitted Form 5 reflecting their completion of all the predicate actions to have the adjustment of rights and are providing notice and at that point when the BBWM receives the notice, the adjustment is a ministerial act. This is what YVWD is asking for, and believes it is incumbent upon the BBWM upon receipt of the Form 5.

Newmark noted that Montoya is suggesting is that the notice is not effective and the underlying acts have been demonstrated. Form 5 does not actually require that demonstration, he said, and indicated he is not sure it is appropriate to require that sort of proof. Nevertheless, YVWD will be able to provide that, he noted.

Newmark suggested that Montoya's concern that the OP's forbearance is meaningless and revocable creates a risk that if there is an adjustment of rights given to YVWD that the OP could then claim they did not really transfer their right. That is difficult to reconcile with the language of the agreement provided, he said. OV has made an enforceable commitment that it had the authority to transfer, had not encumbered, and did in fact transfer all right, title and interest in its overlying right. Under the agreement, there is zero risk that OV is going to attempt to exercise the rights that it transferred to YWVD, Newmark stated. Covenants physically prevent OV or its successors from physically accessing the water, he explained. Newmark opined on the concept that that the Appropriator needs to earmark the water that the OP needs to forbear and said there is no doubt about the commitment between OV and YVWD and the agency will provide any further documentation necessary. "But you can't earmark something you don't already have," he noted. All these things need to happen at the same time, he pointed out. The water needs to be in the possession of the Appropriator before anything can be earmarked.

Apparently, Newmark continued, one of the real concerns that is underlying the resistance to making the accounting change that YVWD is entitled to under Form 5, is the distribution of unappropriated water rights under Rule 7.3. The adjustment of water rights provision in the judgment is included to provide the overlying owner with some of the benefit of their property right that the judgment confirms, he advised. It is not intended to provide benefit to the appropriators and he questioned the appropriateness of the redistribution of those unused overlying rights as having any support in the judgment at all. Newmark cautioned the Committee that that concept doesn't really speak to the correct interpretation of the judgment provisions, and it is concerning that it appears to be driving a lot of the decision. He offered to continue to cooperate and offered additional documentation as necessary.

Mr. John Ohanian, Oak Valley Development Company / Oak Valley Partners (OV) told the Committee that developers must rely upon the representations of the Appropriators to have the authority and willingness to serve. Once the letter and agreement is received, developers move forward and spend a substantial amount of money. OV, he said, has built infrastructure on behalf of the District to serve its properties. The transfer should have been done from 2005, based on when pipelines, reservoirs and other facilities were built, he said. It is not just this provision of service – it is a two-way street. The District has entered into contractual obligations to the developer to make certain that the people buying land have service, Ohanian noted. He pointed out that overliers from the beginning have tried to have some voice at the Watermaster Committee and have been thwarted in their requests. The Appropriators have relied on the fragmentation of the overliers and have built up their storage accounts via the benefit of all the water rights, Ohanian posited. But now OV is getting ready to develop its property and must rely on those rights, he stated.

Counsel Barbara Brenner said she appreciates the legal team conversation. She stated that under her review of the materials, her view is consistent with Mr. Montoya's. The conversation is getting lost in the commitment for the water supply vs. when the demand for the water supply is triggered, she said. Looking at Section 7, it is when the actual demand arises that perfects the transfer and when the accounting actually changes accounts. She said she understands that there is a commitment for the water supply and no one is questioning that, but when does the demand arise and what is that demand is the key in looking at Section 7.

Member Dan Jaggers said he is surprised that anyone is surprised that there is earmarking going on, and suggested everyone read the discussion on pages 10 and 11 of the judgment about commitments and earmarking, the Urban Water Management Plan that clearly identified the intent to plan for service to those developments, and BCVWD's commitment to serve as well as YVWD's.

Member Warsinski said after hearing the comments from the public and other attorneys his opinion is still where he was at the last meeting. There is probably a path forward, he opined, and concurred with Ms. Brenner who said it was regarding commitments vs. demand. The BBWM Committee is pretty much firm on the commitment related to what YVWD is doing with OV - the Committee is not jeopardizing agreements with builders and is on the same page that YVWD will service these parcels and will get the overlier water rights.

Warsinski pointed out that Beaumont will not receive any of the share of the unpumped overlier water rights so he has no skin in the game, but it is when the water is served – when the demand comes out – that alleviates the issues with Sunny Cal and is more of an accounting function as to when the water goes into YVWDs storage account to serve the parcels within OV, similar to the process in Resolution 2017-02 and subsequent submitting of requirements for water transfers on a tract map basis. He said that's where he is comfortable – not with the water commitment and demand being done at the same time because a WSL was issued.

From an accounting basis, Warsinski continued, how does the Committee deal with an agreement that backdates water service? He pointed to the example of BCVWD and Sunny Cal: in 2004 all water rights were transferred and all of those AF that were split up among the APs would have to be re-accounted for because the overlier water was not pumped.

Chair Vela suggested that the unclear part of Sunny Cal is whether there is documentation that the OP has clear intent to transfer those rights – that is the only missing piece, setting aside the fact that water has not been delivered.

Regarding the development that OV is moving forward, Vela continued, the developer needs to be assured that the BBWM Committee is not debating the availability or the water right, it is trying to agree on the process for transferring the right to the AP. Members Zoba reiterated the typical phases of water right; it only exists in three phases. He said he will take a closer look at Section 7.3 to see how that is supported in the judgment. He advised that there is an order of precedence in documents between the judgment, Rules and Regulations, and resolutions. He moved to continue this item for further discussion at the October 7 meeting.

Member Jorritsma recalled a similar discussion in 2017. He said he asked a question at that time and was assured the right would be transferred when each individual tract or parcel was actually being served. He said he therefore agrees with Montoya that this would be the proper time to transfer those rights.

Jaggers seconded the motion.

It was moved by Member Zoba and seconded by Member Jaggers to continue this item to the October 7, 2020 Regular Meeting and approved by the following vote:

AYES:	Jaggers, Jorritsma, Vela, Warsinski, Zoba
NOES:	None.
ABSTAIN:	None.
ABSENT:	None.
STATUS:	Motion Approved

#### VIII. Topics for Future Meetings

- a. Development of a methodology and policy to account for groundwater storage losses in the basin resulting from the artificial recharge of water resources.
- b. Development of a methodology and policy to account for recycled water recharge.

#### IX. Comments from the Watermaster Committee Members:

No comments.

#### X. Announcements

a. The next regular meeting of the Beaumont Basin Watermaster is scheduled for Wednesday, October 7, 2020 at 10:00 a.m.

- i. Wednesday, December 2, 2020 at 10:00 a.m.
- ii. Wednesday, February 3, 2021 at 10:00 a.m.

# XI. Adjournment

Chairman Vela adjourned the meeting at 10:19 a.m.

Attest:

Daniel Jaggers, Secretary Beaumont Basin Watermaster

# Record of the Minutes of the Beaumont Basin Committee Meeting of the Beaumont Basin Watermaster Regular Meeting Wednesday, October 7, 2020

#### Meeting Location:

There was no public physical meeting location due to the coronavirus pandemic. Meeting held via video teleconference pursuant to: California Government Code Section 54950 et. seq. and California Governor's Executive Orders N-29-20 and N-33-20

#### I. Call to Order

Chairman Arturo Vela called the meeting to order at 10:00 a.m.

#### II. Roll Call

City of Banning	Arturo Vela	Present
City of Beaumont	Kyle Warsinski	Present
Beaumont-Cherry Valley Water District	Daniel Jaggers	Present
South Mesa Water Company	George Jorritsma	Present
Yucaipa Valley Water District	Joseph Zoba	Present

Thierry Montoya was present representing legal counsel for the Beaumont Basin Watermaster (BBWM). Hannibal Blandon and Thomas Harder were present as engineers for the BBWM.

Thierry Montoya announced that as of October 1, 2002, Jeff Hart has been appointed as the Watermaster Committee member representing the City of Beaumont, with Robert Vestal as alternate.

Members of the public who registered and / or attended: Allison Edmisten, Yucaipa Valley Water District Byran Brown, Meyers Nave David Armstrong, South Mesa Mutual Water Company David Wysocki, Law Offices of David Wysocki Greg Newmark, Meyers Nave Jennifer Ares, Yucaipa Valley Water District Jim Markman, Richards, Watson and Gershon John Covington, Beaumont Cherry Valley Water District / Morongo Band of Mission Indians John Ohanian, Oak Valley Development Company / Oak Valley Partners Lance Eckhart, San Gorgonio Pass Water Agency Logan Largent Lonni Granlund, Yucaipa Valley Water District Madeline Blua, Yucaipa Valley Water District Mark Swanson, Beaumont-Cherry Valley Water District Mike Thompson, San Gorgonio Pass Water Agency Robert Vestal, City of Beaumont

## III. Pledge of Allegiance

Chair Vela led the pledge.

#### IV. Public Comments:

None.

#### V. Reports

It was moved by Chair Vela and seconded by Member Zoba to continue items A and B to the December 2, 2020 Regular Meeting and approved by the following vote:

AYES:	Jaggers, Jorritsma, Vela, Warsinski, Zoba
NOES:	None.
ABSTAIN:	None.
ABSENT:	None.
STATUS:	Motion Approved

# Due to technical issues with recording the teleconference, the remainder of the meeting is transcribed as action only.

A. Report from Engineering Consultant – Hannibal Blandon, ALDA Engineering

Report continued to December 2, 2020.

B. Report from Hydrogeological Consultant – Thomas Harder, Thomas Harder & Co.

Report continued to December 2, 2020.

C. Report from Legal Counsel – Thierry Montoya, Alvarado Smith *Mr. Montoya gave a brief report.* 

#### VI. Discussion Items

A. Status Report on the Beaumont Basin Water Level Monitoring Program through September 23, 2020

Recommendation: Presentation - no recommendation

There was no discussion.

B. A Comparison of Production and Allowable Extractions through August 2020

Recommendation: No recommendation; informational only

There was no discussion.

C. Update on Progress to Develop a Return Flow Accounting Methodology (Task 17) and Conduct a Water Quality Impact Evaluation for the Beaumont Basin Adjudicated Area (Task 22)

Recommendation: No recommendation; informational only

Engineer Tom Harder of Thomas Harder & Associates advised the Committee that the company has proceeded as far as possible and now requires data from BCVWD and YVWD. BCVWD is pulling data, but needs some time.

D. San Gorgonio Pass Water Agency Request for Data and Model Files

Recommendation: That the Watermaster authorize an expenditure of up to \$6,900 under Task 8 On-Call Services, to cover the expenses associated with the data request

It was moved by Member Zoba and seconded by Member Jaggers to authorize an expenditure of up to \$6,900 under Task 8 On-Call Services, to cover the expenses associated with the data request and approved by the following vote:

AYES:	Jaggers, Jorritsma, Vela, Warsinski, Zoba
NOES:	None.
ABSTAIN:	None.
ABSENT:	None.
STATUS:	Motion Approved

E. Discussion Regarding Various Legal Memorandums Regarding the Transfer of Overlying Water Rights to Appropriative Rights

It was determined that the 2019 Annual Report would be considered at the December 2, 2020 Watermaster Committee meeting.

It was further discussed that certain of the Watermaster Committee members would not approve a 2019 Annual Report that accounted for the YVWD / Oak Valley Partners transfer described in the November 2019 Form 5 between YVWD and Oak Valley Partners.

Finally, it was discussed that once the 2019 Annual Report was approved without the November 2019 Form 5 transfer accounted for, such approval would constitute an action by the Watermaster and subject the issues related to the November 2019 YVWD / Oak Valley Partners overlying rights transfer to judicial review under the Stipulated Judgment.

#### VII. Topics for Future Meetings

- a. Development of a methodology and policy to account for groundwater storage losses in the basin resulting from the artificial recharge of water resources.
- b. Development of a methodology and policy to account for recycled water recharge.

# VIII. Comments from the Watermaster Committee Members

Members of the Committee offered comments.

#### IX. Announcements

- a. The next regular meeting of the Beaumont Basin Watermaster is scheduled for Wednesday, December 2, 2020 at 10:00 a.m.
- b. Future Meeting Dates:
  - i. Wednesday, February 3, 2021 at 10:00 a.m.
  - ii. Wednesday, April 7, 2021 at 10:00 a.m.
  - iii. Wednesday, June 2, 2021 at 10:00 a.m.
  - iv. Wednesday, August 4, 2021 at 10:00 a.m.
  - v. Wednesday, October 6, 2021 at 10:00 a.m.
  - vi. Wednesday, December 1, 2021 at 10:00 a.m.

#### XI. Adjournment

Chairman Vela adjourned the meeting at 11:29 a.m.

Attest:

DRAFT UNTIL APPROVED

Daniel Jaggers, Secretary Beaumont Basin Watermaster

# Record of the Minutes of the Beaumont Basin Committee Meeting of the Beaumont Basin Watermaster Regular Meeting Wednesday, December 2, 2020

#### Meeting Location:

There was no public physical meeting location due to the coronavirus pandemic. Meeting held via video teleconference pursuant to: California Government Code Section 54950 et. seq. and California Governor's Executive Orders N-29-20 and N-33-20

# I. Call to Order

Chairman Arturo Vela called the meeting to order at 10:05 a.m.

## II. Roll Call

City of Banning	Arturo Vela	Present
City of Beaumont	Robert Vestal	Present
Beaumont-Cherry Valley Water District	Daniel Jaggers	Present
South Mesa Water Company	George Jorritsma	Present
Yucaipa Valley Water District	Joseph Zoba	Present

Thierry Montoya was present representing legal counsel for the Beaumont Basin Watermaster (BBWM). Hannibal Blandon and Thomas Harder were present as engineers for the BBWM.

Members of the public who registered and / or attended: Lance Eckhart, San Gorgonio Pass Water Agency Mark Swanson, Beaumont-Cherry Valley Water District

# III. Pledge of Allegiance

Chair Vela led the pledge.

#### IV. Public Comments:

None.

# V. Consent Calendar

1. Meeting Minutes for August 27, 2020

It was moved by Member Jaggers and seconded by Member Jorritsma to approve the Meeting Minutes of August 27, 2020:

AYES:	Jaggers, Jorritsma, Vela, Vestal, Zoba
NOES:	None.
ABSTAIN:	None.
ABSENT:	None.
STATUS:	Motion Approved

2. Meeting Minutes for October 7, 2020

The Meeting Minutes of October 7, 2020 were pulled for discussion. Member Dan Jaggers explained that due to technical difficulties there was no recording of the meeting. Minutes were prepared using notes, he explained, but it is important that Item 5C and Item 6E regarding the transfer of water rights should be reviewed by legal counsel. He recommended bringing back the minutes to the next meeting. Member Zoba concurred. Mr. Jaggers recommended the minutes be circulated to the members for comment and then agendized for discussion to assure completeness.

# VI. Reports

A. Report from Engineering Consultant – Hannibal Blandon, ALDA Engineering

No report.

B. Report from Hydrogeological Consultant – Thomas Harder, Thomas Harder & Co.

Task Order 8 San Gorgonio Pass Water Agency Model Data Request: Mr. Harder reported that the requested data has been provided to the San Gorgonio Pass Water Agency's (SGPWA) consultants and his staff is working with them further to provide additional information. The item is within budget, he assured.

Task Order 17 Return Flow Analysis: Mr. Harder indicated that he is working with Yucaipa Valley to obtain data needed to finalize the analysis.

Task Order 22 Water Quality Analysis: work is ongoing. Preliminary results must be checked before presentation to the Committee.

C. Report from Legal Counsel – Thierry Montoya, Alvarado Smith

*Mr.* Montoya advised that he received a call last month from a party requesting an opinion on water rights which presented a conflict of interest. Mr. Montoya said he advised the party to seek his own counsel and ended the call. In response to a question from Mr. Zoba, Mr. Montoya indicated the caller was a property owner.

#### VII. Discussion Items

A. Status Report on the Beaumont Basin Water Level Monitoring Program through November 18, 2020

Recommendation: Presentation - no recommendation

*Mr.* Blandon reported there are 16 water monitoring wells. At Yucaipa 34, the barometric pressure probe was missing, and probably fell to the bottom of the well. A new probe has been ordered. The level has been in decline over the last year, which is something to monitor, he said.

The observation wells at Noble Creek continue to rise, he advised. The Summit Cemetery Well continues to fluctuate due to nearby pumping, Blandon reported. He noted that Banning M-8 has lost 37 feet since 2015.

*Mr.* Blandon advised that Beaumont-Cherry Valley No. 2 and No. 25 have experienced significant decline since No. 3 began pumping.

Mr. Blandon advised the Committee of some needed equipment.

Member Zoba noted that he had visited Yucaipa Well 34 and expressed said he was not impressed with the way in which the cables were attached to the well. Zoba and Blandon discussed the cable assembly.

B. A Comparison of Production and Allowable Extractions through October 2020

Recommendation: No recommendation; informational only

*Mr.* Blandon shared the table of Production vs. Allowable Extractions and advised the Committee total production was about 96 percent of the total allowable for the appropriators combined. He noted that Banning and Yucaipa Valley Water District (YVWD) at this point were exceeding their production and will need to withdraw from the local storage accounts.

*Mr.* Zoba pointed out that if the Form 5 had been reflected as it was in previous tables and the overlying water rights had been included, that YVWD would not be exceeding its portion of the basins. He asked about the change. Mr. Blandon explained that it had previously been shown including the water rights from Oak Valley Partners (OVP) being

transferred to YVWD which would have shown a credit of 380 acre-feet. However, he continued, because that issue continues to be unresolved, legal counsel indicated the actual number listed should be prior to assignments from OVP.

Member Zoba registered an objection to the Table of Production vs. Allowable Extractions (through October 2020) as presented.

Member Jaggers noted that Beaumont-Cherry Valley Water District's (BCVWD) numbers will go down, and Banning's will go up due to transfer of water produced from co-owned wells during the Apple Fire and Eldorado Fire. He noted additional demand related to grading water for a Banning development. Mr. Jaggers suggested he and Mr. Vela confer. Mr. Blandon requested the actual quantities be provided monthly in order to be allocated to each producer. Chair Vela concurred.

C. 2019 Consolidated Annual Report and Engineering Report – Presentation of Draft Report

Recommendation: No recommendation; informational only

*Mr.* Blandon reminded the Committee that the presentation of the report had been delayed in hopes of doing so in person, but it is time to present.

*Mr.* Blandon reminded the Board of the approval of Resolution 2019-01 accepting the application for groundwater storage from SGPWA, and 2019-02 approving a new Section 7 of the Rules and Regulations.

Blandon presented an overview of historical precipitation, production by agency totaling 14,121 acre-feet. He noted that there has been significant fluctuation in average production from 2015 through 2019. BCVWD's total production grew from 72 to 79 percent of the total production over a five-year period. Member Jaggers commented on anomalies - that 2014 included drought restrictions and 2019 was a wet year. Mr. Blandon will provide additional graphs.

Annual production by overlying users has declined to about half of what was produced since the beginning of the judgment, Blandon advised. He compared the five-year average and listed the highest use of overlying rights.

Member Zoba asked about Oak Valley Partners. Mr. Blandon pointed out the OVP property was formerly a cattle ranch and estimated use was 2.5 acre-foot at a minimum, but that use will cease to be included in 2020. Member Zoba suggested discussion of the water rights transfer and the forbearance of water for documentation. In response to Member Zoba, Mr. Blandon indicated the Form 5 was included in Appendix A. Mr. Zoba reminded the Committee of discussion in December 2019 that indicated everything during the calendar year would be documented, and suggested discussion of the Form 5 be included.

In response to Member Zoba, Mr. Blandon pointed to the discrepancy of opinion between YVWD and other Committee members regarding the credit and continuing discussion. Zoba posited that it is part of the Engineer's responsibility to document the activities surrounding the overlier relinquishing their rights and putting the rights into an appropriative pool. The annual report is to build a record and by being silent on these important points it does a disservice to the Watermaster, as it gets lost over time, Zoba stated.

Chair Vela indicated it is appropriate to include receipt of the Form 5 and reflect that discussion had occurred. Member Zoba suggested including a compilation of the minutes. Mr. Blandon acknowledged and suggested an Appendix to include the meeting minutes for the year. Member Zoba indicated that may be helpful for historic purposes. Chair Vela concurred.

Engineer Blandon reviewed upward trends in water production by Appropriators. Overlying production in 2019 was the lowest on record, he added. Only two agencies imported water in 2019 totaling 12,621. Mr. Jaggers indicated this figure will also need to include spreading by the SGPWA in their new facility. Mr. Blandon indicated it was on a different chart.

*Mr.* Blandon reported on 2014 underproduction conversion to 2019 and presented the allocation. He detailed the conversion of OVP's 183.05 acre-feet in overlying rights to YVWD appropriative rights under Resolution 2017-02. Member Zoba opined that with the assumptions drawn related to the cattle ranch the report is not accurate. He pointed to the Form 5 transfer of rights from an overlier which subsequently did not produce water, and other activities in 2019 related to production, water rights, and transfers. Member Jaggers indicated there is an impasse related to what legal counsel reported out as transfer and what YVWD identifies. He suggested that Member Zoba note his concerns in response comments to the report and that subsequent discussion in the modified report could address the facts submitted. Chair Vela suggested that comments be reviewed by legal counsel.

Member Zoba advised that there is a reliance moving forward that the Appropriator has been accommodating and extracted 1,400 acre-feet that now looks like it is going to hit YVWD's storage account when it was actually a transfer. To replenish will cost a half million dollars, Zoba opined, and said the Rules and Regulations were clear and were followed.

Member Zoba suggested adding an Appendix to include all comment letters received on the report. He also suggested the production by BCVWD from the co-owned wells be reported as a transfer to Banning. Counsel Montoya indicated that would not be a transfer. Discussion ensued on past practice and how to report. Mr. Blandon will research.

*Mr.* Blandon reported that 4,696 acre-feet were added to storage and the detailed the conversion of underproduction from 2014. *Mr.* Zoba pointed out an issue with reporting of the 183.5 acre-feet of OVP.

*Mr.* Tom Harder presented the 2019 Operating Safe Yield estimate and reminded there is no safe yield in the judgment. *Mr.* Harder responded to comments by *Mr.* Jaggers related to groundwater elevation and reminded the Committee that the safe yield is to be recalculated in 2022.

*Mr.* Harder pointed out three wells experiencing declines and three in which long term levels are rising. Mr. Blandon shared water quality data.

Engineer Blandon presented recommendations to develop a policy to account for groundwater storage losses, develop a protocol to increase accuracy and consistency of data reporting and to file an annual report with the Court.

Chair Vela confirmed that a revised draft including all comments would come back to the Committee for final approval depending on when agency comments are submitted.

SGPWA General Manager Lance Eckhart suggested addressing water losses and discussion of the ability to potentially store water over the 10,000 SGPWA account threshold to assure a robust water portfolio and secure local supplies. Member Jaggers pointed to levels showing decline on the west side and east side of the Basin and said he is interested in losses over time and relationship to production vs. leakage. Chair Vela agreed with wrap up of the water loss analysis and said the Committee could entertain Mr. Eckhart's points.

Member Zoba indicated he does not want to delay the report but said that he does not see this as being a fair report on which to comment, as it overlooks a lot of what actually occurred. He opined that Mr. Blandon should provide a revised edition for comment. Chair Vela recommended that Mr. Blandon work with legal counsel on any language to be included and suggested that all members provide comments. *Mr.* Blandon stated he would work with legal and address the comments made by Member Zoba. *Mr.* Montoya agreed that a new draft would be appropriate and said the report must be full and comprehensive.

D. Discussion Regarding Task Order No. 23 with ALDA Inc. for the Preparation of the 2020 Consolidated Annual Report, Estimate of Basin Safe Yield, Update of the Groundwater Model, and Associated Consulting Services for 2021

Recommendation: That the Watermaster approves Task Order No. 23 for a sum not to exceed \$95,970

Engineer Blandon explained this is a new task order to continue providing the services that have been over the last few years including preparation of the 2020 Annual Report, estimate of basin safe yield for 2020, update of the groundwater model, and consulting services. The fee is the same as it has been since 2017 at \$95,970.

Member Zoba provided historical background and suggested the Committee discuss bringing on an administrator to provide more assistance with administration including assembling the meeting packets to make better use of the funds. He mentioned retired water managers who may assist the Committee with a guiding hand and assist in building a good working relationship between all the resources in the Valley. He indicated it may be worthwhile to consider how to proceed in the future.

*Mr.* Blandon said he understands the issues raised over water rights and said he would be happy to provide additional assistance if desired. Member Jaggers pointed to the scope of services and indicated the numbers seem reasonable for the hours of work being done. He said it seems unlikely to find more value in the hours presented. Jaggers acknowledged the administrative needs, noted that all agencies are busy and said that if greater expenditure is needed for additional services it could be discussed. Chair Vela concurred that the hours are appropriate for the tasks and suggested if desired, the group work collectively to develop a scope of work. He noted that ALDA is doing a great job, but the public expects the contract to be competitive.

It was moved by Member Zoba to continue this item to the next meeting.

*Mr.* Blandon indicated that the contract expires at the end of 2020 but there were funds remaining in the budget to continue the work into 2021.

Member Zoba acknowledged delays but suggested setting an expectation that the annual report should be scheduled for completion within four months of the calendar year end. He assured that this is not about ALDA, but to look at how things can be done better.

*Mr.* Blandon reminded the Committee about the reasons for delays in 2018 and 2019 and noted that prior reports had been timely. Jaggers concurred. Chair Vela pointed out that if the Committee chooses to take a different approach, it will take a lot more time for the RFP process. He recommended amending the ALDA contract to continue services until a new consultant was on board or the ALDA contract was renewed.

It was moved by Member Zoba and seconded by Chair Vela to table Task Order No. 23 to the February 3, 2021 meeting. The motion was approved by the following vote:

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E. Discussion Regarding Task Order No. 24 with ALDA Inc. for the Installation, Maintenance, and Data Collection of Water Level Monitoring Equipment in 2021

Recommendation: That the Watermaster approves Task Order No. 24 for a sum not to exceed \$21,520

Engineer Blandon explained this is to continue the water level monitoring work at the same cost since 2017.

Chair Vela recommended continuance of the item given the tabling of the item above. Member Zoba noted this item could stand alone and there is value to Mr. Blandon working throughout the year.

It was moved by Member Jaggers and seconded by Member Zoba to approve Task Order No. 24 for a sum not to exceed \$21,520. The motion was approved by the following vote:

AYES:	Jaggers, Jorritsma, Vela, Vestal, Zoba
NOES:	None.
ABSTAIN:	None.
ABSENT:	None.
STATUS:	Motion Approved

## **VIII.** Topics for Future Meetings

- a. Development of a methodology and policy to account for groundwater storage losses in the basin resulting from the artificial recharge of water resources.
- b. Development of a methodology and policy to account for recycled water recharge.

## **IX.** Comments from the Watermaster Committee Members

Mr. Jaggers indicated hope for rain to green the hillsides.

## X. Announcements

- a. The next regular meeting of the Beaumont Basin Watermaster is scheduled for Wednesday, February 3, 2021 at 10:00 a.m.
- b. Future Meeting Dates:
  - i. Wednesday, April 7, 2021 at 10:00 a.m.
  - ii. Wednesday, June 2, 2021 at 10:00 a.m.
  - iii. Wednesday, August 4, 2021 at 10:00 a.m.
  - iv. Wednesday, October 6, 2021 at 10:00 a.m.
  - v. Wednesday, December 1, 2021 at 10:00 a.m.

## XI. Adjournment

Chairman Vela adjourned the meeting at 11:53 a.m.

Attest:

Daniel Jaggers, Secretary Beaumont Basin Watermaster

# Appendix B Active and Interested Party List

#### Beaumont Basin - 2020 Active and Interested Party List

*City of Banning* Arturo Vela - Director of Public Works / City Eng. 99 E. Ramsey Street Banning, CA 92220 avela@ci.banning.ca.us

Yucaipa Valley Water District Joseph Zoba, General Manager 12770 Second Street Yucaipa, CA 92399 jzoba@yvwd.dst.ca.us

South Mesa Mutual Water Company George Jorritsma Post Office Box 458 Calimesa, CA 92320 smwc@verizon.net

Beaumont-Cherry Valley Water District Dan Jaggers, General Manager 560 Magnolia Avenue Beaumont, CA 92223 dan.jaggers@bcvwd.org

*City of Beaumont* Jeff Hart - Public Works Director 550 East Sixth Street Beaumont, CA 92223 Jhart@beumontca.gov

*City of Beaumont* Kyle Warsinski 550 East Sixth Street Beaumont, CA 92223 <u>kwarsinski@ci.beaumont.ca.us</u>

*Oak Valley Partners, LP.* John Ohanian Post Office Box 645 10410 Roberts Road Calimesa, CA 92320

## Sunny Cal Egg and Poultry Company

Steve Anderson, Esq. c/o Best, Best and Krieger 3750 University Avenue, Suite 400 Riverside, CA 92501

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

Sharondale Mesa Owners Association Ira Pace 9525 Sharon Way Calimesa, CA 92320 rbnjp@msn.com *City of Banning* Luis Cardenas - Senior Engineer 99 E. Ramsey Street Banning, CA 92220 <u>Icardenas@ci.banning.ca.us</u>

Yucaipa Valley Water District Jennifer Ares 12770 Second Street Yucaipa, CA 92399 Jennifer Ares (jares@yvwd.dst.ca.us)

South Mesa Mutual Water Company Dave Armstrong Post Office Box 458 Calimesa, CA 92320 darmstrongsmwc@yahoo.com

Beaumont-Cherry Valley Water District Mark Swanson - P rincipal Engineer 560 Magnolia Avenue Beaumont, CA 92223 mark.swanson@bcvwd.org

*City of Beaumont* Robert Vestal, Principal Engineer 550 East Sixth Street Beaumont, CA 92223 rvestal@beaumontca.gov

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

Merlin Properties, LLC. Fred and Richard Reidman 6475 East Pacific Coast Highway, Suite 399 Long Beach, CA 90803 riedman@gte.net

Southern California Professional Golfers Association of America Tom Addis 36201 Champions Drive Beaumont, CA 92223

*California Oak Valley Golf and Resort, LLC.* Ron Sullivan 27710 Jefferson Avenue, Suite 301 Temecula, CA 92590

#### Beaumont-Cherry Valley Water District

Daniel Slawson, President 560 Magnolia Avenue Beaumont, CA 92223 daniel.slawson@bcvwd.org

## Beaumont-Cherry Valley Water District David Hoffman, Treasurer 560 Magnolia Avenue Beaumont, CA 92223 david.hoffman@bcvwd.org

Beaumont-Cherry Valley Water District John Covington, Director 560 Magnolia Avenue Beaumont, CA 92223 john.covington@bcvwd.org

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# Appendix C Fiscal Year 2019-20 Audit Letter

## BEAUMONT BASIN WATERMASTER

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

JUNE 30, 2020



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

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## INDEPENDENT ACCOUNTANT'S REPORT ON APPLYING AGREED-UPON PROCEDURES

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

We have performed the procedures enumerated below, which were agreed to by the Yucaipa Valley Water District (District), as treasurer of the Beaumont Basin Watermaster (Watermaster), solely to assist the District in evaluating certain amounts reported in the Watermaster Schedules (Schedules), attached as Exhibit A and Exhibit B, on the full accrual basis of accounting as of June 30, 2020 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 unrestricted net position, beginning of year amount on the Schedule of Revenues and Expenses (Exhibit B) to the unrestricted net position, end of year amount noted on the trial balance for the fiscal year ended June 30, 2019.

#### Finding

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

#### 2. Procedure

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

## Finding

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

#### 3. Procedure

Trace all member agency assessments recorded in the schedule of revenues and expenses (Exhibit B) to the 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, 2019 to the beginning check number for the period beginning on July 1, 2019. Note any breaks in check sequence for the period of July 1, 2019 through June 30, 2020.

#### Finding

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

#### 5. Procedure

Based on the population of checks issued during July 1, 2019 through June 30, 2020, 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, 2019 to June 30, 2020. 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.

Kogens, Andereon, Malody & Scott, LLP.

August 17, 2020 San Bernardino, California

## Exhibit A

## Beaumont Basin Watermaster Schedule of Assets, Liabilities and Net Position (Unaudited) June 30, 2020

Assets Cash and cash equivalents	\$ 136,846
Liabilities Accounts payable	825
Net position Unrestricted	\$ 136,021

## Beaumont Basin Watermaster Schedule of Revenues and Expenses (Unaudited) For the Year Ended June 30, 2020

Revenues Assessments Interest	\$ 122,270 66
Total revenues	122,336
Expenses Special projects	
Engineering	24,527 96,644
Monitoring and data acquisition Administrative Legal and professional Bank charges	10,032 14
Total expenses	131,217
Change in net position	(8,881)
Unrestricted net position, beginning of year	144,902
Unrestricted net position, end of year	\$ 136,021

# Appendix D Production Estimation Methods for Unmetered Overlying Producers

## University of California Riverside - CIMIS Station 44

Monthly E	1onthly Evapotranspiration Values - 2003 through 2020												
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
2019	2.29	2.37	4.36	5.90	4.95	6.49	8.03	7.68	5.76	5.11	3.05	1.81	57.80
2020	2.65	3.71	3.66	4.83	7.25	6.42	8.17	7.74	6.33	4.81	3.22	2.70	61.49

## Crop Coefficient (Warm Season Bermuda Grass)

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
[	Кс	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
2019	1.60	1.66	3.05	4.13	3.47	4.54	5.62	5.38	4.03	3.58	2.14	1.27	40.46
2020	1.86	2.60	2.56	3.38	5.08	4.49	5.72	5.42	4.43	3.37	2.14	1.27	42.30

#### Indoor Water Use:

0.35 ac-ft/yr/du

Irrigation Efficienty:

70%

#### **Estimated Pumping - All Unmetered Accounts**

Year	Total Use
rear	(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	12.91
2014	13.26
2015	12.71
2016	12.35
2017	12.35
2018	12.64
2019	12.46
2020	12.78

#### 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
2018	48	3	1.05	0.11	0.38	0.54	1.59
2019	48	3	1.05	0.11	0.37	0.53	1.58
2020	48	3	1.05	0.11	0.37	0.53	1.58

#### 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
2018	34	0	0.00	0.00	0.00	0.00	0.00
2019	34	0	0.00	0.00	0.00	0.00	0.00
2020	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
2019	91	2	0.70	0.00	0.00	0.00	0.70
2020	91	2	0.70	0.00	0.00	0.00	0.70

#### Estimated Pumping by Sunny Cal

Lotinated	Fumping by	Sunny cui							
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	2.50	3.57	4.27
2014	185	2	0.70	0.00	0.00	0.70	2.61	3.73	4.43
2015	185	2	0.70	0.00	0.00	0.70	2.44	3.48	4.18
2016	185	2	0.70	0.00	0.00	0.70	2.33	3.32	4.02
2017	185	2	0.70	0.00	0.00	0.70	2.33	3.32	4.02
2018	185	2	0.70	0.00	0.00	0.70	2.42	3.45	4.15
2019	185	2	0.70	0.00	0.00	0.70	2.36	3.37	4.07
2020	185	2	0.70	0.00	0.00	0.70	2.47	3.53	4.23

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	1.38	1.97	2.32
2019	122	1	0.35	0.40	1.35	1.93	2.28
2020	122	1	0.35	0.40	1.41	2.01	2.36

#### 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	0.28	0.39	0.74
2019	10	1	0.35	0.08	0.27	0.39	0.74
2020	10	1	0.35	0.08	0.28	0.40	0.75

#### 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	0.14	0.20	0.55
2019	0.9	1	0.35	0.04	0.13	0.19	0.54
2020	0.9	1	0.35	0.04	0.14	0.20	0.55

#### 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	0.35	0.49	0.84
2019	1.4	1	0.35	0.10	0.34	0.48	0.83
2020	1.4	1	0.35	0.10	0.35	0.50	0.85

#### 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	0.48	0.69	1.39
2019	2	2	0.70	0.14	0.47	0.67	1.37
2020	2	2	0.70	0.14	0.49	0.71	1.41

#### 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
2019	0.5	1	0.35	0.00	0.00	0.00	0.35
2020	0.5	1	0.35	0.00	0.00	0.00	0.35

# **Appendix E**

Copy of Form 5, signed Nov 19, 2019, submitted by YVWD to the Watermaster

Beaumont Watermaster - Form 5

## NOTICE TO ADJUST RIGHTS OF AN OVERLYING PARTY DUE TO PROPOSED PROVISION OF WATER SERVICE BY AN APPROPRIATOR

Please take notice that <u>Yucaipa Valley Water District</u> ("Appropriator") proposes to provide retail water service to <u>Oak Valley Partners</u> ("Overlying Owner") and that <u>all original 1,806 / revised</u> <u>1.398.90</u> acre feet ("Earmarked Water") of Overlying Water Rights will be transferred to the Appropriator when the Overlying Owner received water service <u>on October 9, 2018</u>.

Notice is hereby given that the Watermaster will reduce the Overlying Owner's Overlying Water Right(s) (as shown in Exhibit B, Column 4 of the Judgment and modified by the redetermination of safe yield) by the amount of Earmarked Water and adjust the Appropriative Water Rights of the Appropriator effective on the day when water service is first provided by the Appropriator.

Appropriator Party Joseph B. Zoba Authorized Agent – Print Name General Manager Title
Joseph B. Zoba Authorized Agent – Print Name General Manager
General Manager
-
Title
1,071
DANGED Me
Xov, 19, 2019
Date
Post Office Box 730
Yucaipa, California 92399
Address for Notice
(909) 797-5119 x2
Telephone
jzoba@yvwd.us

Date Form is Received:

Date Earmarked Water is First Used:

Beaumont Basin Watermaster - December 4, 2019 - Page 37 of 39

# Appendix F Water Quality Analysis Summary (2016-2020) for Drinking Water Production Wells

Beaumont Basin Watermaster 2020 Annual Report – DRAFT – April 7, 2021

Well Name	Sample Date	Analyte	Concentration	Unit
RCMHP-01	2/5/2016	ALKALINITY (TOTAL) AS CACO3	170	MG/L
RCMHP-01	4/29/2019	ALKALINITY (TOTAL) AS CACO3	190	MG/L
RCMHP-01	2/5/2016	ALUMINUM	< 50	UG/L
RCMHP-01	4/29/2019	ALUMINUM	< 50	UG/L
RCMHP-01	2/5/2016	ARSENIC	< 2	UG/L
RCMHP-01	4/29/2019	ARSENIC	< 2	UG/L
RCMHP-01	2/5/2016	BICARBONATE ALKALINITY	210	MG/L
RCMHP-01	4/29/2019	BICARBONATE ALKALINITY	190	MG/L
RCMHP-01	2/5/2016	CALCIUM	44	MG/L
RCMHP-01	4/29/2019	CALCIUM	42	MG/L
RCMHP-01	2/5/2016	CARBONATE ALKALINITY	< 3	MG/L
RCMHP-01	4/29/2019	CARBONATE ALKALINITY	< 5	MG/L
RCMHP-01	2/5/2016	CHLORIDE	14	MG/L
RCMHP-01	4/29/2019	CHLORIDE	23	MG/L
RCMHP-01	2/5/2016	CHROMIUM (TOTAL)	6	UG/L
RCMHP-01	4/29/2019	CHROMIUM (TOTAL)	< 10	UG/L
RCMHP-01	2/5/2016	CHROMIUM, HEXAVALENT	6	UG/L
RCMHP-01	2/5/2016	COPPER	< 50	UG/L
RCMHP-01	4/29/2019	COPPER	< 50	UG/L
RCMHP-01	2/5/2016	FLUORIDE (F) (NATURAL-SOURCE)	0.5	MG/L
RCMHP-01	4/29/2019	FLUORIDE (F) (NATURAL-SOURCE)	0.55	MG/L
RCMHP-01	2/5/2016	HARDNESS (TOTAL) AS CACO3	180	MG/L
RCMHP-01	4/29/2019	HARDNESS (TOTAL) AS CACO3	170	MG/L
RCMHP-01	2/5/2016	HYDROXIDE ALKALINITY	< 3	MG/L
RCMHP-01	4/29/2019	HYDROXIDE ALKALINITY	< 5	MG/L
RCMHP-01	2/5/2016	IRON	< 100	UG/L
RCMHP-01	4/29/2019	IRON	< 100	UG/L
RCMHP-01	2/5/2016	LEAD	< 5	UG/L
RCMHP-01	4/29/2019	LEAD	< 5	UG/L
RCMHP-01	2/5/2016	MAGNESIUM	16	MG/L
RCMHP-01	4/29/2019	MAGNESIUM	15	MG/L
RCMHP-01	2/5/2016	MANGANESE	< 20	UG/L
RCMHP-01	4/29/2019	MANGANESE	< 20	UG/L
RCMHP-01	2/5/2016	MERCURY	< 1	UG/L
RCMHP-01	4/29/2019	MERCURY	< 1	UG/L
RCMHP-01	1/5/2016	NITRATE (AS N)	4.6	MG/L
RCMHP-01	2/5/2016	NITRATE (AS N)	4.1	MG/L
RCMHP-01	1/16/2017	NITRATE (AS N)	4.6	MG/L
RCMHP-01	1/22/2018	NITRATE (AS N)	2.9	MG/L
RCMHP-01	1/3/2019	NITRATE (AS N)	5.5	MG/L
RCMHP-01	10/7/2019	NITRATE (AS N)	5.3	MG/L
RCMHP-01	1/13/2020	NITRATE (AS N)	5.2	MG/L
RCMHP-01	7/6/2020	NITRATE (AS N)	4.7	MG/L
RCMHP-01	10/5/2020	NITRATE (AS N)	5.2	MG/L

Well Name	Sample Date	Analyte	Concentration	Unit
RCMHP-01	2/5/2016	NITRITE (AS N)	< 0.1	MG/L
RCMHP-01	4/29/2019	NITRITE (AS N)	< 0.4	MG/L
RCMHP-01	2/5/2016	SODIUM	22	MG/L
RCMHP-01	4/29/2019	SODIUM	27	MG/L
RCMHP-01	2/5/2016	SPECIFIC CONDUCTANCE	440	USiemens/cm
RCMHP-01	4/29/2019	SPECIFIC CONDUCTANCE	460	USiemens/cm
RCMHP-01	2/5/2016	SULFATE	9	MG/L
RCMHP-01	4/29/2019	SULFATE	12	MG/L
RCMHP-01	2/5/2016	TETRACHLOROETHYLENE	< 0.5	UG/L
RCMHP-01	2/5/2016	TOTAL DISSOLVED SOLIDS	260	MG/L
RCMHP-01	4/29/2019	TOTAL DISSOLVED SOLIDS	260	MG/L
RCMHP-01	2/5/2016	TRICHLOROETHYLENE	< 0.5	UG/L
RCMHP-01	2/5/2016	TURBIDITY, LABORATORY	0.11	NTU
RCMHP-01	4/29/2019	TURBIDITY, LABORATORY	0.38	NTU
RCMHP-01	2/5/2016	ZINC	< 50	UG/L
RCMHP-01	4/29/2019	ZINC	< 50	UG/L
RCMHP-02	2/5/2016	ALKALINITY (TOTAL) AS CACO3	170	MG/L
RCMHP-02	4/29/2019	ALKALINITY (TOTAL) AS CACO3	190	MG/L
RCMHP-02	2/5/2016	ALUMINUM	< 50	UG/L
RCMHP-02	4/29/2019	ALUMINUM	< 50	UG/L
RCMHP-02	2/5/2016	ARSENIC	< 2	UG/L
RCMHP-02	4/29/2019	ARSENIC	< 2	UG/L
RCMHP-02	2/5/2016	BICARBONATE ALKALINITY	210	MG/L
RCMHP-02	4/29/2019	BICARBONATE ALKALINITY	190	MG/L
RCMHP-02	2/5/2016	CALCIUM	40	MG/L
RCMHP-02	4/29/2019	CALCIUM	43	MG/L
RCMHP-02	2/5/2016	CARBONATE ALKALINITY	< 3	MG/L
RCMHP-02	4/29/2019	CARBONATE ALKALINITY	< 5	MG/L
RCMHP-02	2/5/2016	CHLORIDE	20	MG/L
RCMHP-02	4/29/2019	CHLORIDE	25	MG/L
RCMHP-02	2/5/2016	CHROMIUM (TOTAL)	13	UG/L
RCMHP-02	4/29/2019	CHROMIUM (TOTAL)	< 10	UG/L
RCMHP-02	2/5/2016	CHROMIUM, HEXAVALENT	12	UG/L
RCMHP-02	8/29/2016	CHROMIUM, HEXAVALENT	7	UG/L
RCMHP-02	12/2/2016	CHROMIUM, HEXAVALENT	8.3	UG/L
RCMHP-02	1/16/2017	CHROMIUM, HEXAVALENT	10	UG/L
RCMHP-02	7/10/2017	CHROMIUM, HEXAVALENT	11	UG/L
RCMHP-02	10/16/2017	CHROMIUM, HEXAVALENT	11	UG/L
RCMHP-02	1/22/2018	CHROMIUM, HEXAVALENT	9.1	UG/L
RCMHP-02	4/18/2018	CHROMIUM, HEXAVALENT	9.5	UG/L
RCMHP-02	7/5/2018	CHROMIUM, HEXAVALENT	10	UG/L
RCMHP-02	10/1/2018	CHROMIUM, HEXAVALENT	8.7	UG/L
RCMHP-02	1/4/2019	CHROMIUM, HEXAVALENT	12	UG/L
RCMHP-02	2/5/2016	COPPER	< 50	UG/L

CDPH W	ater Quality for	the 2016-20 period	or Domestic Wells	in the Beaumon	t Basin.

Well Name	Sample Date	Analyte	Concentration	
RCMHP-02	4/29/2019	COPPER	< 50	UG/L
RCMHP-02	2/5/2016	FLUORIDE (F) (NATURAL-SOURCE)	0.7	MG/L
RCMHP-02	4/29/2019	FLUORIDE (F) (NATURAL-SOURCE)	0.63	
RCMHP-02	2/5/2016	HARDNESS (TOTAL) AS CACO3	170	-
RCMHP-02	4/29/2019	HARDNESS (TOTAL) AS CACO3	170	
RCMHP-02	2/5/2016	HYDROXIDE ALKALINITY	< 3	
RCMHP-02	4/29/2019	HYDROXIDE ALKALINITY	< 5	
RCMHP-02	2/5/2016	IRON	< 100	
RCMHP-02	4/29/2019	IRON	< 100	
RCMHP-02	2/5/2016	LEAD	< 5	
RCMHP-02	4/29/2019	LEAD	< 5	
RCMHP-02	2/5/2016	MAGNESIUM	16	
RCMHP-02	4/29/2019	MAGNESIUM	15	
RCMHP-02	2/5/2016	MANGANESE	< 20	· · ·
RCMHP-02	4/29/2019	MANGANESE	< 20	
RCMHP-02	2/5/2016	MERCURY	< 1	UG/L
RCMHP-02	4/29/2019	MERCURY	< 1	
RCMHP-02	1/5/2016	NITRATE (AS N)	4.9	
RCMHP-02	2/5/2016	NITRATE (AS N)	4.9	
RCMHP-02	7/1/2016	NITRATE (AS N)	5.5	
RCMHP-02	12/2/2016	NITRATE (AS N)	6.2	MG/L
RCMHP-02	1/16/2017	NITRATE (AS N)	6.1	MG/L
RCMHP-02	7/10/2017	NITRATE (AS N)	6.6	
RCMHP-02	10/16/2017	NITRATE (AS N)	4.8	
RCMHP-02	1/22/2018	NITRATE (AS N)	4.6	
RCMHP-02	4/18/2018	NITRATE (AS N)	4.7	MG/L
RCMHP-02	7/5/2018	NITRATE (AS N)	5.9	
RCMHP-02	10/1/2018	NITRATE (AS N)	6.2	MG/L
RCMHP-02	1/4/2019	NITRATE (AS N)	5.1	MG/L
RCMHP-02	7/1/2019	NITRATE (AS N)	3.1	MG/L
RCMHP-02	11/25/2019	NITRATE (AS N)	5.7	MG/L
RCMHP-02	1/13/2020	NITRATE (AS N)	6.1	MG/L
RCMHP-02	4/20/2020	NITRATE (AS N)	4.8	MG/L
RCMHP-02	7/7/2020	NITRATE (AS N)	6.4	MG/L
RCMHP-02	10/5/2020	NITRATE (AS N)	6.2	MG/L
RCMHP-02	2/5/2016	NITRITE (AS N)	< 0.1	MG/L
RCMHP-02	7/1/2016	NITRITE (AS N)	< 0.1	MG/L
RCMHP-02	4/29/2019	NITRITE (AS N)	< 0.4	MG/L
RCMHP-02	2/5/2016	SODIUM	32	MG/L
RCMHP-02	4/29/2019	SODIUM	31	MG/L
RCMHP-02	2/5/2016	SPECIFIC CONDUCTANCE	470	USiemens/cm
RCMHP-02	4/29/2019	SPECIFIC CONDUCTANCE	460	USiemens/cm
RCMHP-02	2/5/2016	SULFATE	10	MG/L
RCMHP-02	4/29/2019	SULFATE	12	MG/L

## CDPH Water Quality for the 2016-20 period for Domestic Wells in the Beaumont Basin.

Well Name	Sample Date	Analyte	Concentration	Unit
RCMHP-02	2/5/2016	TETRACHLOROETHYLENE	< 0.5	UG/L
RCMHP-02	2/5/2016	TOTAL DISSOLVED SOLIDS	270	MG/L
RCMHP-02	4/29/2019	TOTAL DISSOLVED SOLIDS	270	MG/L
RCMHP-02	2/5/2016	TRICHLOROETHYLENE	< 0.5	UG/L
RCMHP-02	2/5/2010	TURBIDITY, LABORATORY	0.33	NTU
RCMHP-02	4/29/2019	TURBIDITY, LABORATORY	0.7	NTU
RCMHP-02	2/5/2016	ZINC	< 50	UG/L
RCMHP-02	4/29/2019	ZINC	< 50	UG/L
SMHOA-01	8/10/2018	ALKALINITY (TOTAL) AS CACO3	230	MG/L
SMHOA-01	8/10/2018	ALUMINUM	< 50	UG/L
SMHOA-01	8/10/2018	ARSENIC	< 2	UG/L
SMHOA-01	8/10/2018	BICARBONATE ALKALINITY	230	MG/L
SMHOA-01	8/10/2018	CALCIUM	48	MG/L
SMHOA-01	8/10/2018	CARBONATE ALKALINITY	7.5	MG/L
SMHOA-01	8/10/2018	CHLORIDE	27	MG/L MG/L
SMHOA-01	8/10/2018	CHROMIUM (TOTAL)	6.3	UG/L
SMHOA-01	8/10/2018	COPPER	< 50	UG/L
SMHOA-01	8/10/2018	FLUORIDE (F) (NATURAL-SOURCE)	0.5	MG/L
SMHOA-01	8/10/2018	HARDNESS (TOTAL) AS CACO3	190	MG/L
SMHOA-01	8/10/2018	HYDROXIDE ALKALINITY	< 5	MG/L
SMHOA-01	8/10/2018	IRON	< 100	UG/L
SMHOA-01	8/10/2018	LEAD	< 5	UG/L
SMHOA-01	8/10/2018	MAGNESIUM	17	MG/L
SMHOA-01	8/10/2018	MANGANESE	< 20	UG/L
SMHOA-01	8/10/2018	MERCURY	< 1	UG/L
SMHOA-01	1/5/2016	NITRATE (AS N)	4.3	MG/L
SMHOA-01	7/1/2016	NITRATE (AS N)	4.3	MG/L
SMHOA-01	10/3/2016	NITRATE (AS N)	4.3	MG/L
SMHOA-01	12/2/2016	NITRATE (AS N)	4.9	MG/L
SMHOA-01	1/7/2017	NITRATE (AS N)	5.2	MG/L
SMHOA-01	4/7/2017	NITRATE (AS N)	2.5	MG/L
SMHOA-01	7/10/2017	NITRATE (AS N)	4.6	MG/L
SMHOA-01	9/13/2017	NITRATE (AS N)	4.8	MG/L
SMHOA-01	10/16/2017	NITRATE (AS N)	4.4	MG/L
SMHOA-01	1/22/2018	NITRATE (AS N)	5.6	MG/L
SMHOA-01	4/18/2018	NITRATE (AS N)	5	MG/L
SMHOA-01	7/5/2018	NITRATE (AS N)	4.2	MG/L
SMHOA-01	8/10/2018	NITRATE (AS N)	4.8	MG/L
SMHOA-01	10/1/2018	NITRATE (AS N)	4.3	MG/L
SMHOA-01	1/2/2019	NITRATE (AS N)	5	MG/L
SMHOA-01	4/29/2019	NITRATE (AS N)	5.1	MG/L
SMHOA-01	10/7/2019	NITRATE (AS N)	4.6	MG/L
SMHOA-01	1/13/2020	NITRATE (AS N)	4.7	MG/L
SMHOA-01	4/20/2020	NITRATE (AS N)	5.1	MG/L

Well Name	Sample Date	Analyte	Concentration	Unit
	•	· · · · · · · · · · · · · · · · · · ·		
SMHOA-01	7/6/2020	NITRATE (AS N)	5.2	MG/L
SMHOA-01	10/5/2020	NITRATE (AS N)	4.9	MG/L
SMHOA-01	4/18/2018	NITRITE (AS N)	< 0.1	MG/L
SMHOA-01	8/10/2018	NITRITE (AS N)	< 0.1	MG/L
SMHOA-01	4/29/2019	NITRITE (AS N)	< 0.4	MG/L
SMHOA-01	8/10/2018	SODIUM	44	MG/L
SMHOA-01	8/10/2018	SPECIFIC CONDUCTANCE	550	USiemens/cm
SMHOA-01	8/10/2018	SULFATE	20	MG/L
SMHOA-01	4/29/2019	TETRACHLOROETHYLENE	< 0.5	UG/L
SMHOA-01	8/10/2018	TOTAL DISSOLVED SOLIDS	320	MG/L
SMHOA-01	4/29/2019	TRICHLOROETHYLENE	< 0.5	UG/L
SMHOA-01	8/10/2018	TURBIDITY, LABORATORY	0.18	NTU
SMHOA-01	8/10/2018	ZINC	< 50	UG/L
SMHOA-02	8/10/2018	ALKALINITY (TOTAL) AS CACO3	220	MG/L
SMHOA-02	8/10/2018	ALUMINUM	< 50	UG/L
SMHOA-02	8/10/2018	ARSENIC	< 2	UG/L
SMHOA-02	8/10/2018	BICARBONATE ALKALINITY	220	MG/L
SMHOA-02	8/10/2018	CALCIUM	52	MG/L
SMHOA-02	8/10/2018	CARBONATE ALKALINITY	< 5	MG/L
SMHOA-02	8/10/2018	CHLORIDE	32	MG/L
SMHOA-02	8/10/2018	CHROMIUM (TOTAL)	8.9	UG/L
SMHOA-02	8/10/2018	COPPER	< 50	UG/L
SMHOA-02	8/10/2018	FLUORIDE (F) (NATURAL-SOURCE)	0.59	MG/L
SMHOA-02	8/10/2018	HARDNESS (TOTAL) AS CACO3	200	MG/L
SMHOA-02	8/10/2018	HYDROXIDE ALKALINITY	< 5	MG/L
SMHOA-02	8/10/2018	IRON	< 100	UG/L
SMHOA-02	8/10/2018	LEAD	< 5	UG/L
SMHOA-02	8/10/2018	MAGNESIUM	18	MG/L
SMHOA-02	8/10/2018	MANGANESE	< 20	UG/L
SMHOA-02	8/10/2018	MERCURY	< 1	UG/L
SMHOA-02	1/5/2016	NITRATE (AS N)	4.9	MG/L
SMHOA-02	1/7/2017	NITRATE (AS N)	5.1	MG/L
SMHOA-02	9/13/2017	NITRATE (AS N)	4.9	MG/L
SMHOA-02	10/16/2017	NITRATE (AS N)	4.7	MG/L
SMHOA-02	1/22/2018	NITRATE (AS N)	4.6	MG/L
SMHOA-02	4/18/2018	NITRATE (AS N)	5.2	MG/L
SMHOA-02	7/5/2018	NITRATE (AS N)	5.4	MG/L
SMHOA-02	8/10/2018	NITRATE (AS N)	4.6	MG/L
SMHOA-02	10/1/2018	NITRATE (AS N)	5	MG/L
SMHOA-02	1/2/2019	NITRATE (AS N)	4.6	MG/L
SMHOA-02	4/29/2019	NITRATE (AS N)	5.9	MG/L
SMHOA-02	10/7/2019	NITRATE (AS N)	5.1	MG/L
SMHOA-02	1/13/2020	NITRATE (AS N)	5.5	MG/L
SMHOA-02	4/20/2020	NITRATE (AS N)	5.5	MG/L

CDPH W	ater Quality for	the 2016-20 period	or Domestic Wells	in the Beaumon	t Basin.

Well Name	Sample Date	Analyte	Concentration	Unit
	Sample Date	· · · · · · · · · · · · · · · · · · ·		
SMHOA-02	7/6/2020	NITRATE (AS N)	5.3	MG/L
SMHOA-02	10/5/2020	NITRATE (AS N)	5.6	MG/L
SMHOA-02	4/18/2018	NITRITE (AS N)	< 0.1	MG/L
SMHOA-02	8/10/2018	NITRITE (AS N)	< 0.1	MG/L
SMHOA-02	4/29/2019	NITRITE (AS N)	< 0.4	MG/L
SMHOA-02	8/10/2018	SODIUM	45	MG/L
SMHOA-02	8/10/2018	SPECIFIC CONDUCTANCE	530	USiemens/cm
SMHOA-02	8/10/2018	SULFATE	16	MG/L
SMHOA-02	4/29/2019	TETRACHLOROETHYLENE	< 0.5	UG/L
SMHOA-02	8/10/2018	TOTAL DISSOLVED SOLIDS	320	MG/L
SMHOA-02	4/29/2019	TRICHLOROETHYLENE	< 0.5	UG/L
SMHOA-02	8/10/2018	TURBIDITY, LABORATORY	< 0.1	NTU
SMHOA-02	8/10/2018	ZINC	< 50	UG/L
Plantation-01	3/20/2017	ALKALINITY (TOTAL) AS CACO3	200	MG/L
Plantation-01	3/24/2020	ALKALINITY (TOTAL) AS CACO3	190	MG/L
Plantation-01	3/20/2017	ALUMINUM	< 50	UG/L
Plantation-01	3/24/2020	ALUMINUM	0	UG/L
Plantation-01	3/20/2017	ARSENIC	< 2	UG/L
Plantation-01	3/24/2020	ARSENIC	0	UG/L
Plantation-01	3/20/2017	BICARBONATE ALKALINITY	240	MG/L
Plantation-01	3/24/2020	BICARBONATE ALKALINITY	240	MG/L
Plantation-01	3/20/2017	CALCIUM	50	MG/L
Plantation-01	3/24/2020	CALCIUM	52	MG/L
Plantation-01	3/20/2017	CARBONATE ALKALINITY	< 3	MG/L
Plantation-01	3/24/2020	CARBONATE ALKALINITY	0	MG/L
Plantation-01	3/20/2017	CHLORIDE	14	MG/L
Plantation-01	3/24/2020	CHLORIDE	17	MG/L
Plantation-01	3/20/2017	CHROMIUM (TOTAL)	5.4	UG/L
Plantation-01	3/24/2020	CHROMIUM (TOTAL)	0	UG/L
Plantation-01	3/20/2017	COPPER	< 50	UG/L
Plantation-01	3/24/2020	COPPER	0	UG/L
Plantation-01	3/20/2017	FLUORIDE (F) (NATURAL-SOURCE)	0.5	MG/L
Plantation-01	3/24/2020	FLUORIDE (F) (NATURAL-SOURCE)	0.41	MG/L
Plantation-01	3/20/2017	HARDNESS (TOTAL) AS CACO3	200	MG/L
Plantation-01	3/24/2020	HARDNESS (TOTAL) AS CACO3	210	MG/L
Plantation-01	3/20/2017	HYDROXIDE ALKALINITY	< 3	MG/L
Plantation-01	3/24/2020	HYDROXIDE ALKALINITY	0	MG/L
Plantation-01	3/20/2017	IRON	< 100	UG/L
Plantation-01	3/24/2020	IRON	0	UG/L
Plantation-01	3/20/2017	LEAD	< 5	UG/L
Plantation-01	3/24/2020	LEAD	0	UG/L
Plantation-01	3/20/2017	MAGNESIUM	17	MG/L
Plantation-01	3/24/2020	MAGNESIUM	18	MG/L
Plantation-01	3/20/2017	MANGANESE	< 20	UG/L

Well Name	Sample Date	Analyte	Concentration	Unit
Plantation-01	3/20/2017	MERCURY	< 1	UG/L
Plantation-01	3/24/2020	MERCURY	0	UG/L
Plantation-01	2/23/2016	NITRATE (AS N)	1.8	MG/L
Plantation-01	10/21/2016	NITRATE (AS N)	1.8	MG/L
Plantation-01	3/20/2017	NITRATE (AS N)	1.8	MG/L
Plantation-01	7/23/2018	NITRATE (AS N)	2	MG/L
Plantation-01	7/22/2019	NITRATE (AS N)	2	MG/L
Plantation-01	12/16/2020	NITRATE (AS N)	2.2	MG/L
Plantation-01	3/20/2017	NITRITE (AS N)	< 0.1	MG/L
Plantation-01	3/24/2020	NITRITE (AS N)	0	MG/L
Plantation-01	3/20/2017	SODIUM	20	MG/L
Plantation-01	3/24/2020	SODIUM	19	MG/L
Plantation-01	3/20/2017	SPECIFIC CONDUCTANCE	450	USiemens/cm
Plantation-01	3/24/2020	SPECIFIC CONDUCTANCE	450	USiemens/cm
Plantation-01	3/20/2017	SULFATE	10	MG/L
Plantation-01	3/24/2020	SULFATE	12	MG/L
Plantation-01	2/23/2016	TETRACHLOROETHYLENE	< 0.5	UG/L
Plantation-01	3/20/2017	TOTAL DISSOLVED SOLIDS	270	MG/L
Plantation-01	3/24/2020	TOTAL DISSOLVED SOLIDS	260	MG/L
Plantation-01	2/23/2016	TRICHLOROETHYLENE	< 0.5	UG/L
Plantation-01	3/20/2017	TURBIDITY, LABORATORY	< 0.1	NTU
Plantation-01	3/24/2020	TURBIDITY, LABORATORY	0.24	NTU
Plantation-01	3/20/2017	ZINC	< 50	UG/L
Plantation-01	3/24/2020	ZINC	0	UG/L
Tukwet-A	6/20/2017	ALKALINITY (TOTAL) AS CACO3	130	MG/L
Tukwet-A	8/6/2020	ALKALINITY (TOTAL) AS CACO3	120	MG/L
Tukwet-A	6/20/2017	ALUMINUM	< 50	UG/L
Tukwet-A	8/6/2020	ALUMINUM	< 50	UG/L
Tukwet-A	6/20/2017	ARSENIC	3.7	UG/L
Tukwet-A	8/6/2020	ARSENIC	6.5	UG/L
Tukwet-A	6/20/2017	BICARBONATE ALKALINITY	120	MG/L
Tukwet-A	8/6/2020	BICARBONATE ALKALINITY	110	MG/L
Tukwet-A	6/20/2017	CALCIUM	17	MG/L
Tukwet-A	8/6/2020	CALCIUM	7.8	MG/L
Tukwet-A	6/20/2017	CARBONATE ALKALINITY	6.6	MG/L
Tukwet-A	8/6/2020	CARBONATE ALKALINITY	12	MG/L
Tukwet-A	6/20/2017	CHLORIDE	14	MG/L
Tukwet-A	8/6/2020	CHLORIDE	17	MG/L
Tukwet-A	6/20/2017	CHROMIUM (TOTAL)	9.3	UG/L
Tukwet-A	8/6/2020	CHROMIUM (TOTAL)	10	UG/L
Tukwet-A	6/20/2017	COPPER	< 50	UG/L
Tukwet-A	8/6/2020	COPPER	< 50	UG/L
Tukwet-A	6/20/2017	FLUORIDE (F) (NATURAL-SOURCE)	0.7	MG/L
Tukwet-A	8/6/2020	FLUORIDE (F) (NATURAL-SOURCE)	0.65	MG/L

Well Name	Sample Date	Analyte	Concentration	
Tukwet-A	6/20/2017	HARDNESS (TOTAL) AS CACO3	68	MG/L
Tukwet-A	8/6/2020	HARDNESS (TOTAL) AS CACO3	29	MG/L
Tukwet-A	6/20/2017	HYDROXIDE ALKALINITY	< 3	MG/L
Tukwet-A	8/6/2020	HYDROXIDE ALKALINITY	< 5	MG/L
Tukwet-A	6/20/2017	IRON	< 100	UG/L
Tukwet-A	8/6/2020	IRON	< 100	UG/L
Tukwet-A	6/20/2017	LEAD	< 5	UG/L
Tukwet-A	8/6/2020	LEAD	< 5	UG/L
Tukwet-A	6/20/2017	MAGNESIUM	5.8	MG/L
Tukwet-A	8/6/2020	MAGNESIUM	2.2	MG/L
Tukwet-A	6/20/2017	MANGANESE	< 20	UG/L
Tukwet-A	8/6/2020	MANGANESE	< 20	UG/L
Tukwet-A	6/20/2017	MERCURY	< 1	UG/L
Tukwet-A	8/6/2020	MERCURY	< 1	UG/L
Tukwet-A	8/15/2016	NITRATE (AS N)	1.3	MG/L
Tukwet-A	6/20/2017	NITRATE (AS N)	1.5	MG/L
Tukwet-A	8/10/2018	NITRATE (AS N)	1.2	MG/L
Tukwet-A	9/26/2019	NITRATE (AS N)	1.4	MG/L
Tukwet-A	8/6/2020	NITRATE (AS N)	1.4	MG/L
Tukwet-A	6/20/2017	NITRITE (AS N)	< 0.1	MG/L
Tukwet-A	8/6/2020	NITRITE (AS N)	< 0.4	MG/L
Tukwet-A	6/20/2017	POTASSIUM	1.3	MG/L
Tukwet-A	8/6/2020	POTASSIUM	< 1	MG/L
Tukwet-A	6/20/2017	SODIUM	47	MG/L
Tukwet-A	8/6/2020	SODIUM	56	MG/L
Tukwet-A	6/20/2017	SPECIFIC CONDUCTANCE	330	USiemens/cm
Tukwet-A	8/6/2020	SPECIFIC CONDUCTANCE	280	USiemens/cm
Tukwet-A	6/20/2017	SULFATE	6.4	MG/L
Tukwet-A	8/6/2020	SULFATE	5.1	MG/L
Tukwet-A	6/20/2017	TETRACHLOROETHYLENE	< 0.5	UG/L
Tukwet-A	8/6/2020	TETRACHLOROETHYLENE	< 0.5	UG/L
Tukwet-A	6/20/2017	TOTAL DISSOLVED SOLIDS	180	MG/L
Tukwet-A	8/6/2020	TOTAL DISSOLVED SOLIDS	160	MG/L
Tukwet-A	6/20/2017	TRICHLOROETHYLENE	< 0.5	UG/L
Tukwet-A	8/6/2020	TRICHLOROETHYLENE	< 0.5	UG/L
Tukwet-A	6/20/2017	TURBIDITY, LABORATORY	0.3	NTU
Tukwet-A	8/6/2020	TURBIDITY, LABORATORY	0.49	NTU
Tukwet-A	6/20/2017	ZINC	< 50	UG/L
Tukwet-A	8/6/2020	ZINC	< 50	UG/L
Tukwet-D	6/20/2017	ALKALINITY (TOTAL) AS CACO3	150	MG/L
Tukwet-D	8/11/2020	ALKALINITY (TOTAL) AS CACO3	150	MG/L
Tukwet-D	6/20/2017	ALUMINUM	< 50	UG/L
Tukwet-D	8/11/2020	ALUMINUM	< 50	UG/L
Tukwet-D	6/20/2017	ARSENIC	< 2	UG/L

Well Name	Sample Date	Analyte	Concentration	Unit
Tukwet-D	8/11/2020	ARSENIC	< 2	UG/L
Tukwet-D	6/20/2017	BICARBONATE ALKALINITY	150	MG/L
Tukwet-D	8/11/2020	BICARBONATE ALKALINITY	150	MG/L
Tukwet-D	6/20/2017	CALCIUM	30	MG/L
Tukwet-D	8/11/2020	CALCIUM	30	MG/L
Tukwet-D	6/20/2017	CARBONATE ALKALINITY	< 3	MG/L
Tukwet-D	8/11/2020	CARBONATE ALKALINITY	< 5	
Tukwet-D	6/20/2017	CHLORIDE	9.2	MG/L
Tukwet-D	8/11/2020	CHLORIDE	11	MG/L
Tukwet-D	6/20/2017	CHROMIUM (TOTAL)	6.3	UG/L
Tukwet-D	8/11/2020	CHROMIUM (TOTAL)	< 10	UG/L
Tukwet-D	6/20/2017	COPPER	< 50	UG/L
Tukwet-D	8/11/2020	COPPER	< 50	UG/L
Tukwet-D	6/20/2017	FLUORIDE (F) (NATURAL-SOURCE)	0.6	MG/L
Tukwet-D	8/11/2020	FLUORIDE (F) (NATURAL-SOURCE)	0.52	MG/L
Tukwet-D	6/20/2017	HARDNESS (TOTAL) AS CACO3	130	MG/L
Tukwet-D	8/11/2020	HARDNESS (TOTAL) AS CACO3	130	MG/L
Tukwet-D	6/20/2017	HYDROXIDE ALKALINITY	< 3	MG/L
Tukwet-D	8/11/2020	HYDROXIDE ALKALINITY	< 5	MG/L
Tukwet-D	6/20/2017	IRON	< 100	UG/L
Tukwet-D	8/11/2020	IRON	< 100	UG/L
Tukwet-D	6/20/2017	LEAD	< 5	UG/L
Tukwet-D	8/11/2020	LEAD	< 5	UG/L
Tukwet-D	6/20/2017	MAGNESIUM	14	MG/L
Tukwet-D	8/11/2020	MAGNESIUM	13	MG/L
Tukwet-D	6/20/2017	MANGANESE	< 20	UG/L
Tukwet-D	8/11/2020	MANGANESE	< 20	UG/L
Tukwet-D	6/20/2017	MERCURY	< 1	UG/L
Tukwet-D	8/11/2020	MERCURY	< 1	UG/L
Tukwet-D	8/15/2016	NITRATE (AS N)	1.9	MG/L
Tukwet-D	6/20/2017	NITRATE (AS N)	2.1	MG/L
Tukwet-D	8/10/2018	NITRATE (AS N)	1.9	MG/L
Tukwet-D	8/13/2019	NITRATE (AS N)	2.2	MG/L
Tukwet-D	9/26/2019	NITRATE (AS N)	2	MG/L
Tukwet-D	8/11/2020	NITRATE (AS N)	2.3	MG/L
Tukwet-D	6/20/2017	NITRITE (AS N)	< 0.1	MG/L
Tukwet-D	8/11/2020	NITRITE (AS N)	< 0.4	MG/L
Tukwet-D	6/20/2017	POTASSIUM	1.3	MG/L
Tukwet-D	8/11/2020	POTASSIUM	1.4	MG/L
Tukwet-D	6/20/2017	SODIUM	24	MG/L
Tukwet-D	8/11/2020	SODIUM	23	MG/L
Tukwet-D	6/20/2017	SPECIFIC CONDUCTANCE	350	· ·
Tukwet-D	8/11/2020	SPECIFIC CONDUCTANCE	350	-
Tukwet-D	6/20/2017	SULFATE	8.9	MG/L

CDPH W	ater Quality for	the 2016-20 pe	eriod for D	Oomestic '	Wells i	n the Beaumon	t Basin.

		the 2010-20 period for Domestic wens		
Well Name	Sample Date	Analyte	Concentration	Unit
Tukwet-D	8/11/2020	SULFATE	9.3	MG/L
Tukwet-D	6/20/2017	TETRACHLOROETHYLENE	< 0.5	UG/L
Tukwet-D	8/11/2020	TETRACHLOROETHYLENE	< 0.5	UG/L
Tukwet-D	6/20/2017	TOTAL DISSOLVED SOLIDS	230	MG/L
Tukwet-D	8/11/2020	TOTAL DISSOLVED SOLIDS	200	MG/L
Tukwet-D	6/20/2017	TRICHLOROETHYLENE	< 0.5	UG/L
Tukwet-D	8/11/2020	TRICHLOROETHYLENE	< 0.5	UG/L
Tukwet-D	6/20/2017	TURBIDITY, LABORATORY	< 0.1	NTU
Tukwet-D	8/13/2019	TURBIDITY, LABORATORY	< 0.1	NTU
Tukwet-D	8/11/2020	TURBIDITY, LABORATORY	0.17	NTU
Tukwet-D	6/20/2017	ZINC	< 50	UG/L
Tukwet-D	8/11/2020	ZINC	< 50	UG/L
BCVWD-03	8/18/2016	ALKALINITY (TOTAL) AS CACO3	150	MG/L
BCVWD-03	12/16/2020	ALKALINITY (TOTAL) AS CACO3	160	MG/L
BCVWD-03	8/18/2016	ALUMINUM	< 50	UG/L
BCVWD-03	12/16/2020	ALUMINUM	< 50	UG/L
BCVWD-03	8/18/2016	ARSENIC	< 2	UG/L
BCVWD-03	12/16/2020	ARSENIC	< 2	UG/L
BCVWD-03	8/18/2016	BICARBONATE ALKALINITY	190	MG/L
BCVWD-03	12/16/2020	BICARBONATE ALKALINITY	160	MG/L
BCVWD-03	8/18/2016	CALCIUM	37	MG/L
BCVWD-03	12/16/2020	CALCIUM	35	MG/L
BCVWD-03	8/18/2016	CARBONATE ALKALINITY	< 3	MG/L
BCVWD-03	12/16/2020	CARBONATE ALKALINITY	< 5	MG/L
BCVWD-03	8/18/2016	CHLORIDE	13	MG/L
BCVWD-03	12/16/2020	CHLORIDE	8	MG/L
BCVWD-03	8/18/2016	CHROMIUM (TOTAL)	8.4	UG/L
BCVWD-03	12/16/2020	CHROMIUM (TOTAL)	11	UG/L
BCVWD-03	8/18/2016	CHROMIUM, HEXAVALENT	7.3	UG/L
BCVWD-03	8/18/2016	COPPER	< 50	UG/L
BCVWD-03	12/16/2020	COPPER	< 50	UG/L
BCVWD-03	8/18/2016	DIBROMOCHLOROPROPANE (DBCP)	< 0.01	UG/L
BCVWD-03	12/16/2020	DIBROMOCHLOROPROPANE (DBCP)	< 0.01	UG/L
BCVWD-03	8/18/2016	FLUORIDE (F) (NATURAL-SOURCE)	0.5	MG/L
BCVWD-03	12/16/2020	FLUORIDE (F) (NATURAL-SOURCE)	0.32	MG/L
BCVWD-03	12/16/2020	HARDNESS (TOTAL) AS CACO3	120	MG/L
BCVWD-03	8/18/2016	HYDROXIDE ALKALINITY	< 3	MG/L
BCVWD-03	12/16/2020	HYDROXIDE ALKALINITY	< 5	MG/L
BCVWD-03	8/18/2016	IRON	450	UG/L
BCVWD-03	12/16/2020	IRON	< 100	UG/L
BCVWD-03	8/18/2016	LEAD	< 5	UG/L
BCVWD-03	12/16/2020	LEAD	< 5	UG/L
BCVWD-03	8/18/2016	MAGNESIUM	13	MG/L
BCVWD-03	12/16/2020	MAGNESIUM	8.5	MG/L

Well Name	Sample Date	Analyte	Concentration	Unit
BCVWD-03	8/18/2016	MANGANESE	< 20	UG/L
BCVWD-03	12/16/2020	MANGANESE	< 20	UG/L
BCVWD-03	8/18/2016	MERCURY	< 1	UG/L
BCVWD-03	12/16/2020	MERCURY	< 1	UG/L
BCVWD-03	8/18/2016	NITRATE (AS N)	1.7	MG/L
BCVWD-03	12/20/2018	NITRATE (AS N)	0.42	MG/L
BCVWD-03	12/16/2020	NITRATE (AS N)	0.85	MG/L
BCVWD-03	8/18/2016	NITRITE (AS N)	< 0.1	MG/L
BCVWD-03	12/16/2020	NITRITE (AS N)	< 0.4	MG/L
BCVWD-03	8/18/2016	POTASSIUM	1.5	MG/L
BCVWD-03	12/16/2020	POTASSIUM	1.5	MG/L
BCVWD-03	8/18/2016	SODIUM	24	MG/L
BCVWD-03	12/16/2020	SODIUM	23	MG/L
BCVWD-03	8/18/2016	SPECIFIC CONDUCTANCE	380	USiemens/cm
BCVWD-03	12/16/2020	SPECIFIC CONDUCTANCE	350	USiemens/cm
BCVWD-03	8/18/2016	SULFATE	11	MG/L
BCVWD-03	12/16/2020	SULFATE	11	MG/L
BCVWD-03	8/18/2016	TETRACHLOROETHYLENE	< 0.5	UG/L
BCVWD-03	12/16/2020	TETRACHLOROETHYLENE	< 0.5	UG/L
BCVWD-03	8/18/2016	TOTAL DISSOLVED SOLIDS	240	MG/L
BCVWD-03	12/16/2020	TOTAL DISSOLVED SOLIDS	190	MG/L
BCVWD-03	8/18/2016	TRICHLOROETHYLENE	< 0.5	UG/L
BCVWD-03	12/16/2020	TRICHLOROETHYLENE	< 0.5	UG/L
BCVWD-03	8/18/2016	TURBIDITY, LABORATORY	1.7	NTU
BCVWD-03	12/16/2020	TURBIDITY, LABORATORY	< 0.1	NTU
BCVWD-03	8/18/2016	ZINC	< 50	UG/L
BCVWD-03	12/16/2020	ZINC	< 50	UG/L
BCVWD-16	12/8/2016	ALKALINITY (TOTAL) AS CACO3	180	MG/L
BCVWD-16	12/4/2019	ALKALINITY (TOTAL) AS CACO3	180	MG/L
BCVWD-16	12/8/2016	ALUMINUM	< 50	UG/L
BCVWD-16	12/4/2019	ALUMINUM	< 50	UG/L
BCVWD-16	12/8/2016	ARSENIC	< 2	UG/L
BCVWD-16	12/18/2018	ARSENIC	< 2	UG/L
BCVWD-16	12/4/2019	ARSENIC	< 2	UG/L
BCVWD-16	12/8/2016	BICARBONATE ALKALINITY	220	MG/L
BCVWD-16	12/4/2019	BICARBONATE ALKALINITY	180	MG/L
BCVWD-16	12/8/2016	CALCIUM	53	MG/L
BCVWD-16	12/4/2019	CALCIUM	54	MG/L
BCVWD-16	12/8/2016	CARBONATE ALKALINITY	< 3	MG/L
BCVWD-16	12/4/2019	CARBONATE ALKALINITY	< 5	MG/L
BCVWD-16	12/8/2016	CHLORIDE	20	MG/L
BCVWD-16	12/4/2019	CHLORIDE	46	MG/L
BCVWD-16	12/8/2016	CHROMIUM (TOTAL)	4.1	UG/L
BCVWD-16	12/4/2019	CHROMIUM (TOTAL)	< 10	UG/L

CDPH Water Quality for the 2016-20 period for Domestic Wells in the Beaumont Basin.

Well Name	Sample Date	Analyte	Concentration	Unit
BCVWD-16	12/8/2016	COPPER	< 50	UG/L
BCVWD-16	12/8/2010	COPPER	< 50	UG/L
BCVWD-16	12/4/2019	DIBROMOCHLOROPROPANE (DBCP)	< 0.01	UG/L
BCVWD-16	12/8/2016	FLUORIDE (F) (NATURAL-SOURCE)	0.8	MG/L
BCVWD-16	12/4/2019	FLUORIDE (F) (NATURAL-SOURCE)	0.64	MG/L
BCVWD-16	12/8/2016	HARDNESS (TOTAL) AS CACO3	210	MG/L
BCVWD-16	12/4/2019	HARDNESS (TOTAL) AS CACO3	220	MG/L
BCVWD-16	12/8/2016	HYDROXIDE ALKALINITY	< 3	MG/L
BCVWD-16	12/4/2019	HYDROXIDE ALKALINITY	< 5	MG/L
BCVWD-16	12/8/2016	IRON	< 100	UG/L
BCVWD-16	12/4/2019	IRON	< 100	UG/L
BCVWD-16	12/8/2016	LEAD	< 5	UG/L
BCVWD-16	12/4/2019	LEAD	< 5	UG/L
BCVWD-16	12/8/2016	MAGNESIUM	18	MG/L
BCVWD-16	12/4/2019	MAGNESIUM	20	MG/L
BCVWD-16	12/8/2016	MANGANESE	< 20	UG/L
BCVWD-16	12/4/2019	MANGANESE	< 20	UG/L
BCVWD-16	12/8/2016	MERCURY	< 1	UG/L
BCVWD-16	12/4/2019	MERCURY	< 1	UG/L
BCVWD-16	1/11/2016	NITRATE (AS N)	5.9	MG/L
BCVWD-16	2/9/2016	NITRATE (AS N)	5.8	MG/L
BCVWD-16	4/12/2016	NITRATE (AS N)	6.2	MG/L
BCVWD-16	5/25/2016	NITRATE (AS N)	5.9	MG/L
BCVWD-16	6/14/2016	NITRATE (AS N)	5.8	MG/L
BCVWD-16	9/20/2016	NITRATE (AS N)	5.3	MG/L
BCVWD-16	12/8/2016	NITRATE (AS N)	6.1	MG/L
BCVWD-16	1/31/2017	NITRATE (AS N)	6.9	MG/L
BCVWD-16	5/23/2017	NITRATE (AS N)	6.6	MG/L
BCVWD-16	6/19/2017	NITRATE (AS N)	6.2	MG/L
BCVWD-16	7/18/2017	NITRATE (AS N)	6.1	MG/L
BCVWD-16	8/14/2017	NITRATE (AS N)	6.2	MG/L
BCVWD-16	9/11/2017	NITRATE (AS N)	6.1	MG/L
BCVWD-16	10/23/2017	NITRATE (AS N)	5.8	MG/L
BCVWD-16	11/22/2017	NITRATE (AS N)	5.7	MG/L
BCVWD-16	12/11/2017	NITRATE (AS N)	5.6	MG/L
BCVWD-16	1/8/2018	NITRATE (AS N)	5.8	MG/L
BCVWD-16	12/18/2018	NITRATE (AS N)	6	MG/L
BCVWD-16	10/1/2019	NITRATE (AS N)	6.9	MG/L
BCVWD-16	12/4/2019	NITRATE (AS N)	5.1	MG/L
BCVWD-16	5/26/2020	NITRATE (AS N)	7	MG/L
BCVWD-16	6/16/2020	NITRATE (AS N)	6.8	MG/L
BCVWD-16	7/27/2020	NITRATE (AS N)	6.7	MG/L
BCVWD-16	10/27/2020	NITRATE (AS N)	5.1	MG/L
BCVWD-16	12/10/2020	NITRATE (AS N)	6.2	MG/L

Well Name	Sample Date	Analyte	Concentration	Unit
BCVWD-16	12/8/2016	NITRITE (AS N)	< 0.1	MG/L
BCVWD-16	12/4/2019	NITRITE (AS N)	< 0.4	MG/L
BCVWD-16	12/8/2016	POTASSIUM	1.2	MG/L
BCVWD-16	12/4/2019	POTASSIUM	1.3	MG/L
BCVWD-16	12/8/2016	SODIUM	38	MG/L
BCVWD-16	12/4/2019	SODIUM	35	MG/L
BCVWD-16	11/22/2017	SPECIFIC CONDUCTANCE	550	-
BCVWD-16	12/4/2019	SPECIFIC CONDUCTANCE	590	
BCVWD-16	12/8/2016	SULFATE	46	MG/L
BCVWD-16	12/4/2019	SULFATE	45	MG/L
BCVWD-16	12/8/2016	TETRACHLOROETHYLENE	< 0.5	UG/L
BCVWD-16	12/4/2019	TETRACHLOROETHYLENE	< 0.5	UG/L
BCVWD-16	12/8/2016	TOTAL DISSOLVED SOLIDS	330	MG/L
BCVWD-16	12/4/2019	TOTAL DISSOLVED SOLIDS	350	MG/L
BCVWD-16	12/8/2016	TRICHLOROETHYLENE	< 0.5	UG/L
BCVWD-16	12/4/2019	TRICHLOROETHYLENE	< 0.5	UG/L
BCVWD-16	12/8/2016	TURBIDITY, LABORATORY	< 0.1	NTU
BCVWD-16	12/4/2019	TURBIDITY, LABORATORY	0.18	NTU
BCVWD-16	12/8/2016	ZINC	< 50	UG/L
BCVWD-16	12/4/2019	ZINC	< 50	UG/L
BCVWD-21	12/18/2018	ALKALINITY (TOTAL) AS CACO3	180	MG/L
BCVWD-21	12/18/2018	ALUMINUM	< 50	UG/L
BCVWD-21	12/18/2018	ARSENIC	< 2	UG/L
BCVWD-21	12/18/2018	BICARBONATE ALKALINITY	180	MG/L
BCVWD-21	12/18/2018	CALCIUM	48	MG/L
BCVWD-21	12/18/2018	CARBONATE ALKALINITY	< 5	MG/L
BCVWD-21	12/18/2018	CHLORIDE	24	MG/L
BCVWD-21	12/18/2018	CHROMIUM (TOTAL)	< 10	UG/L
BCVWD-21	12/18/2018	COPPER	< 50	UG/L
BCVWD-21	12/4/2019	DIBROMOCHLOROPROPANE (DBCP)	< 0.01	UG/L
BCVWD-21	12/18/2018	FLUORIDE (F) (NATURAL-SOURCE)	0.45	MG/L
BCVWD-21	12/18/2018	HARDNESS (TOTAL) AS CACO3	190	MG/L
BCVWD-21	12/18/2018	HYDROXIDE ALKALINITY	< 5	MG/L
BCVWD-21	12/18/2018	IRON	< 100	UG/L
BCVWD-21	12/18/2018	LEAD	< 5	UG/L
BCVWD-21	12/18/2018	MAGNESIUM	17	MG/L
BCVWD-21	12/18/2018	MANGANESE	< 20	UG/L
BCVWD-21	12/18/2018	MERCURY	< 1	UG/L
BCVWD-21	1/11/2016	NITRATE (AS N)	3.2	MG/L
BCVWD-21	4/12/2016	NITRATE (AS N)	3.4	MG/L
BCVWD-21	5/25/2016	NITRATE (AS N)	3.2	MG/L
BCVWD-21	6/14/2016	NITRATE (AS N)	3.1	MG/L
BCVWD-21	9/20/2016	NITRATE (AS N)	2.8	MG/L
BCVWD-21	12/1/2016	NITRATE (AS N)	3.4	MG/L

CDPH W	ater Quality for	the 2016-20 period	for Domestic Wells	in the Beaumon	t Basin.

		the 2018-20 period for Domestic Weils		
Well Name	Sample Date	Analyte	Concentration	Unit
BCVWD-21	1/31/2017	NITRATE (AS N)	3.6	MG/L
BCVWD-21	5/23/2017	NITRATE (AS N)	3.4	MG/L
BCVWD-21	6/19/2017	NITRATE (AS N)	3.4	MG/L
BCVWD-21	7/18/2017	NITRATE (AS N)	3.4	MG/L
BCVWD-21	8/14/2017	NITRATE (AS N)	3.2	MG/L
BCVWD-21	9/11/2017	NITRATE (AS N)	3.2	MG/L
BCVWD-21	10/23/2017	NITRATE (AS N)	3.1	MG/L
BCVWD-21	11/22/2017	NITRATE (AS N)	3.2	MG/L
BCVWD-21	12/11/2017	NITRATE (AS N)	3.2	MG/L
BCVWD-21	1/8/2018	NITRATE (AS N)	3.4	MG/L
BCVWD-21	2/27/2018	NITRATE (AS N)	3.2	MG/L
BCVWD-21	12/18/2018	NITRATE (AS N)	3	MG/L
BCVWD-21	10/1/2019	NITRATE (AS N)	3	MG/L
BCVWD-21	12/4/2019	NITRATE (AS N)	2.9	MG/L
BCVWD-21	7/27/2020	NITRATE (AS N)	3.2	MG/L
BCVWD-21	10/27/2020	NITRATE (AS N)	3.1	MG/L
BCVWD-21	12/10/2020	NITRATE (AS N)	3.1	MG/L
BCVWD-21	12/1/2016	NITRITE (AS N)	< 0.1	MG/L
BCVWD-21	12/18/2018	NITRITE (AS N)	< 0.4	MG/L
BCVWD-21	12/18/2018	POTASSIUM	1.6	MG/L
BCVWD-21	12/18/2018	SODIUM	24	MG/L
BCVWD-21	12/18/2018	SPECIFIC CONDUCTANCE	480	USiemens/cm
BCVWD-21	12/18/2018	SULFATE	28	MG/L
BCVWD-21	12/1/2016	TETRACHLOROETHYLENE	< 0.5	UG/L
BCVWD-21	12/4/2019	TETRACHLOROETHYLENE	< 0.5	UG/L
BCVWD-21	12/18/2018	TOTAL DISSOLVED SOLIDS	270	MG/L
BCVWD-21	12/1/2016	TRICHLOROETHYLENE	< 0.5	UG/L
BCVWD-21	12/4/2019	TRICHLOROETHYLENE	< 0.5	UG/L
BCVWD-21	12/18/2018	TURBIDITY, LABORATORY	< 0.1	NTU
BCVWD-21	12/18/2018	ZINC	< 50	UG/L
BCVWD-22	12/1/2016	ALKALINITY (TOTAL) AS CACO3	180	MG/L
BCVWD-22	12/4/2019	ALKALINITY (TOTAL) AS CACO3	180	MG/L
BCVWD-22	12/1/2016	ALUMINUM	< 50	UG/L
BCVWD-22	12/4/2019	ALUMINUM	< 50	UG/L
BCVWD-22	12/1/2016	ARSENIC	< 2	UG/L
BCVWD-22	12/4/2019	ARSENIC	< 2	UG/L
BCVWD-22	12/1/2016	BICARBONATE ALKALINITY	210	MG/L
BCVWD-22	12/4/2019	BICARBONATE ALKALINITY	180	MG/L
BCVWD-22	12/1/2016	CALCIUM	40	MG/L
BCVWD-22	12/4/2019	CALCIUM	38	MG/L
BCVWD-22	12/1/2016	CARBONATE ALKALINITY	< 3	MG/L
BCVWD-22	12/4/2019	CARBONATE ALKALINITY	< 5	MG/L
BCVWD-22	12/1/2016	CHLORIDE	7.6	MG/L
BCVWD-22	12/4/2019	CHLORIDE	8	MG/L

CDPH W	ater Quality for	for the 2016-20 period for Domestic Wells in the Beaumont Basin.			
Nama	Cample Date	Analyta	Concentration	أصليا	

Well Name	Sample Date	Analyte	Concentration	Unit
BCVWD-22	12/1/2016	CHROMIUM (TOTAL)	7.9	UG/L
BCVWD-22	12/4/2019	CHROMIUM (TOTAL)	< 10	UG/L
BCVWD-22	12/1/2016	COPPER	< 50	UG/L
BCVWD-22	12/4/2019	COPPER	< 50	UG/L
BCVWD-22	12/4/2019	DIBROMOCHLOROPROPANE (DBCP)	< 0.01	UG/L
BCVWD-22	12/1/2016	FLUORIDE (F) (NATURAL-SOURCE)	0.4	MG/L
BCVWD-22	12/4/2019	FLUORIDE (F) (NATURAL-SOURCE)	0.31	MG/L
BCVWD-22	12/1/2016	HARDNESS (TOTAL) AS CACO3	170	MG/L
BCVWD-22	12/4/2019	HARDNESS (TOTAL) AS CACO3	160	MG/L
BCVWD-22	12/1/2016	HYDROXIDE ALKALINITY	< 3	
BCVWD-22	12/4/2019	HYDROXIDE ALKALINITY	< 5	
BCVWD-22	12/1/2016	IRON	< 100	UG/L
BCVWD-22	12/4/2019	IRON	< 100	UG/L
BCVWD-22	12/1/2016	LEAD	< 5	UG/L
BCVWD-22	12/4/2019	LEAD	< 5	
BCVWD-22	12/1/2016	MAGNESIUM	17	MG/L
BCVWD-22	12/4/2019	MAGNESIUM	16	
BCVWD-22	12/1/2016	MANGANESE	< 20	UG/L
BCVWD-22	12/4/2019	MANGANESE	< 20	UG/L
BCVWD-22	12/1/2016	MERCURY	< 1	UG/L
BCVWD-22	12/4/2019	MERCURY	< 1	UG/L
BCVWD-22	12/1/2016	NITRATE (AS N)	3	MG/L
BCVWD-22	12/14/2017	NITRATE (AS N)	0.89	MG/L
BCVWD-22	12/4/2019	NITRATE (AS N)	0.93	MG/L
BCVWD-22	12/10/2020	NITRATE (AS N)	0.94	MG/L
BCVWD-22	12/1/2016	NITRITE (AS N)	< 0.1	MG/L
BCVWD-22	12/4/2019	NITRITE (AS N)	< 0.4	MG/L
BCVWD-22	12/1/2016	POTASSIUM	1.4	MG/L
BCVWD-22	12/4/2019	POTASSIUM	1.3	MG/L
BCVWD-22	12/1/2016	SODIUM	18	MG/L
BCVWD-22	12/4/2019	SODIUM	18	MG/L
BCVWD-22	12/1/2016	SPECIFIC CONDUCTANCE	430	USiemens/cm
BCVWD-22	12/4/2019	SPECIFIC CONDUCTANCE	380	USiemens/cm
BCVWD-22	12/1/2016	SULFATE	24	MG/L
BCVWD-22	12/4/2019	SULFATE	10	MG/L
BCVWD-22	12/1/2016	TETRACHLOROETHYLENE	< 0.5	UG/L
BCVWD-22	12/4/2019	TETRACHLOROETHYLENE	< 0.5	UG/L
BCVWD-22	12/1/2016	TOTAL DISSOLVED SOLIDS	260	MG/L
BCVWD-22	12/4/2019	TOTAL DISSOLVED SOLIDS	220	MG/L
BCVWD-22	12/1/2016	TRICHLOROETHYLENE	< 0.5	UG/L
BCVWD-22	12/4/2019	TRICHLOROETHYLENE	< 0.5	UG/L
BCVWD-22	12/1/2016	TURBIDITY, LABORATORY	< 0.1	NTU
BCVWD-22	12/4/2019	TURBIDITY, LABORATORY	0.18	NTU
BCVWD-22	12/1/2016	ZINC	< 50	UG/L

Well Name	Sample Date	Analyte	Concentration	Unit
BCVWD-22	12/4/2019	ZINC	< 50	UG/L
BCVWD-23	12/18/2018	ALKALINITY (TOTAL) AS CACO3	170	MG/L
BCVWD-23	12/18/2018	ALUMINUM	< 50	UG/L
BCVWD-23	12/18/2018	ARSENIC	< 2	UG/L
BCVWD-23	12/18/2018	BICARBONATE ALKALINITY	170	MG/L
BCVWD-23	12/18/2018	CALCIUM	47	MG/L
BCVWD-23	12/18/2018	CARBONATE ALKALINITY	< 5	MG/L
BCVWD-23	12/18/2018	CHLORIDE	21	MG/L
BCVWD-23	12/18/2018	CHROMIUM (TOTAL)	< 10	UG/L
BCVWD-23	12/18/2018	COPPER	< 50	UG/L
BCVWD-23	12/18/2018	DIBROMOCHLOROPROPANE (DBCP)	0.044	UG/L
BCVWD-23	6/27/2019	DIBROMOCHLOROPROPANE (DBCP)	0.048	UG/L
BCVWD-23	12/18/2018	FLUORIDE (F) (NATURAL-SOURCE)	0.37	MG/L
BCVWD-23	12/18/2018	HARDNESS (TOTAL) AS CACO3	180	MG/L
BCVWD-23	12/18/2018	HYDROXIDE ALKALINITY	< 5	MG/L
BCVWD-23	12/18/2018	IRON	< 100	UG/L
BCVWD-23	12/18/2018	LEAD	< 5	UG/L
BCVWD-23	12/18/2018	MAGNESIUM	15	MG/L
BCVWD-23	12/18/2018	MANGANESE	< 20	UG/L
BCVWD-23	12/18/2018	MERCURY	< 1	UG/L
BCVWD-23	12/8/2016	NITRATE (AS N)	2.8	MG/L
BCVWD-23	5/23/2017	NITRATE (AS N)	2.4	MG/L
BCVWD-23	6/19/2017	NITRATE (AS N)	2.4	MG/L
BCVWD-23	7/18/2017	NITRATE (AS N)	2.3	MG/L
BCVWD-23	8/14/2017	NITRATE (AS N)	2.4	MG/L
BCVWD-23	9/11/2017	NITRATE (AS N)	2.4	MG/L
BCVWD-23	11/22/2017	NITRATE (AS N)	2.9	MG/L
BCVWD-23	12/11/2017	NITRATE (AS N)	2.4	MG/L
BCVWD-23	1/8/2018	NITRATE (AS N)	2.4	MG/L
BCVWD-23	2/27/2018	NITRATE (AS N)	2.3	MG/L
BCVWD-23	12/18/2018	NITRATE (AS N)	2.7	MG/L
BCVWD-23	12/4/2019	NITRATE (AS N)	2.1	MG/L
BCVWD-23	12/10/2020	NITRATE (AS N)	1.9	MG/L
BCVWD-23	12/18/2018	NITRITE (AS N)	< 0.4	MG/L
BCVWD-23	12/18/2018	POTASSIUM	1.5	MG/L
BCVWD-23	12/18/2018	SODIUM	21	MG/L
BCVWD-23	12/18/2018	SPECIFIC CONDUCTANCE	440	USiemens/cm
BCVWD-23	12/18/2018	SULFATE	19	MG/L
BCVWD-23	12/18/2018	TETRACHLOROETHYLENE	< 0.5	UG/L
BCVWD-23	12/18/2018	TOTAL DISSOLVED SOLIDS	260	MG/L
BCVWD-23	12/18/2018	TRICHLOROETHYLENE	< 0.5	UG/L
BCVWD-23	12/18/2018	TURBIDITY, LABORATORY	< 0.1	NTU
BCVWD-23	12/18/2018	ZINC	< 50	UG/L
BCVWD-24	12/1/2016	ALKALINITY (TOTAL) AS CACO3	160	MG/L

Well Name	Sample Date	Analyte	Concentration	Unit
BCVWD-24	12/4/2019	ALKALINITY (TOTAL) AS CACO3	160	MG/L
BCVWD-24	12/1/2016	ALUMINUM	< 50	UG/L
BCVWD-24	12/4/2019	ALUMINUM	< 50	UG/L
BCVWD-24	12/1/2016	ARSENIC	< 2	UG/L
BCVWD-24	12/18/2018	ARSENIC	< 2	UG/L
BCVWD-24	12/4/2019	ARSENIC	< 2	UG/L
BCVWD-24	12/1/2016	BICARBONATE ALKALINITY	190	MG/L
BCVWD-24	12/4/2019	BICARBONATE ALKALINITY	160	MG/L
BCVWD-24	12/1/2016	CALCIUM	37	MG/L
BCVWD-24	12/4/2019	CALCIUM	35	MG/L
BCVWD-24	12/1/2016	CARBONATE ALKALINITY	< 3	MG/L
BCVWD-24	12/4/2019	CARBONATE ALKALINITY	< 5	MG/L
BCVWD-24	12/1/2016	CHLORIDE	5.6	MG/L
BCVWD-24	12/4/2019	CHLORIDE	6.6	MG/L
BCVWD-24	12/1/2016	CHROMIUM (TOTAL)	7.2	UG/L
BCVWD-24	12/4/2019	CHROMIUM (TOTAL)	< 10	UG/L
BCVWD-24	12/1/2016	COPPER	< 50	UG/L
BCVWD-24	12/4/2019	COPPER	< 50	UG/L
BCVWD-24	12/4/2019	DIBROMOCHLOROPROPANE (DBCP)	< 0.01	UG/L
BCVWD-24	12/1/2016	FLUORIDE (F) (NATURAL-SOURCE)	0.5	MG/L
BCVWD-24	12/4/2019	FLUORIDE (F) (NATURAL-SOURCE)	0.35	MG/L
BCVWD-24	12/1/2016	HARDNESS (TOTAL) AS CACO3	140	MG/L
BCVWD-24	12/4/2019	HARDNESS (TOTAL) AS CACO3	140	MG/L
BCVWD-24	12/1/2016	HYDROXIDE ALKALINITY	< 3	MG/L
BCVWD-24	12/4/2019	HYDROXIDE ALKALINITY	< 5	MG/L
BCVWD-24	12/1/2016	IRON	< 100	UG/L
BCVWD-24	12/4/2019	IRON	< 100	UG/L
BCVWD-24	12/1/2016	LEAD	< 5	UG/L
BCVWD-24	12/4/2019	LEAD	< 5	UG/L
BCVWD-24	12/1/2016	MAGNESIUM	12	MG/L
BCVWD-24	12/4/2019	MAGNESIUM	12	MG/L
BCVWD-24	12/1/2016	MANGANESE	< 20	UG/L
BCVWD-24	12/4/2019	MANGANESE	< 20	UG/L
BCVWD-24	12/1/2016	MERCURY	< 1	UG/L
BCVWD-24	12/4/2019	MERCURY	< 1	UG/L
BCVWD-24	12/1/2016	NITRATE (AS N)	1.7	MG/L
BCVWD-24	11/22/2017	NITRATE (AS N)	1.7	MG/L
BCVWD-24	12/18/2018	NITRATE (AS N)	1.8	MG/L
BCVWD-24	12/4/2019	NITRATE (AS N)	1.7	MG/L
BCVWD-24	12/10/2020	NITRATE (AS N)	0.99	MG/L
BCVWD-24	12/1/2016	NITRITE (AS N)	< 0.1	MG/L
BCVWD-24	12/4/2019	NITRITE (AS N)	< 0.4	MG/L
BCVWD-24	12/1/2016	POTASSIUM	1.4	MG/L
BCVWD-24	12/4/2019	POTASSIUM	1.3	MG/L

<b>CDPH Water Quality</b>	y for the 2016-20	period for Domestic	Wells in the Beaumont Basin.
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Well Name	Sample Date	Analyte	Concentration	Unit
BCVWD-24	12/1/2016	SODIUM	19	MG/L
BCVWD-24	12/4/2019	SODIUM	17	MG/L
BCVWD-24	12/1/2016	SPECIFIC CONDUCTANCE	360	
BCVWD-24	12/4/2019	SPECIFIC CONDUCTANCE	350	USiemens/cm
BCVWD-24	12/1/2016	SULFATE	11	MG/L
BCVWD-24	12/4/2019	SULFATE	11	MG/L
BCVWD-24	12/1/2016	TETRACHLOROETHYLENE	< 0.5	UG/L
BCVWD-24	12/4/2019	TETRACHLOROETHYLENE	< 0.5	UG/L
BCVWD-24	12/1/2016	TOTAL DISSOLVED SOLIDS	210	MG/L
BCVWD-24	12/4/2019	TOTAL DISSOLVED SOLIDS	200	MG/L
BCVWD-24	12/1/2016	TRICHLOROETHYLENE	< 0.5	UG/L
BCVWD-24	12/4/2019	TRICHLOROETHYLENE	< 0.5	UG/L
BCVWD-24	12/1/2016	TURBIDITY, LABORATORY	< 0.1	NTU
BCVWD-24	12/4/2019	TURBIDITY, LABORATORY	0.15	NTU
BCVWD-24	12/1/2016	ZINC	< 50	UG/L
BCVWD-24	12/4/2019	ZINC	< 50	UG/L
BCVWD-25	12/18/2018	ALKALINITY (TOTAL) AS CACO3	180	MG/L
BCVWD-25	12/18/2018	ALUMINUM	< 50	UG/L
BCVWD-25	12/18/2018	ARSENIC	< 2	UG/L
BCVWD-25	12/18/2018	BICARBONATE ALKALINITY	180	MG/L
BCVWD-25	12/18/2018	CALCIUM	43	MG/L
BCVWD-25	12/18/2018	CARBONATE ALKALINITY	< 5	MG/L
BCVWD-25	12/18/2018	CHLORIDE	9.7	MG/L
BCVWD-25	12/18/2018	CHROMIUM (TOTAL)	12	UG/L
BCVWD-25	12/18/2018	COPPER	< 50	UG/L
BCVWD-25	12/18/2018	DIBROMOCHLOROPROPANE (DBCP)	< 0.01	UG/L
BCVWD-25	12/18/2018	FLUORIDE (F) (NATURAL-SOURCE)	0.23	MG/L
BCVWD-25	12/18/2018	HARDNESS (TOTAL) AS CACO3	160	MG/L
BCVWD-25	12/18/2018	HYDROXIDE ALKALINITY	< 5	MG/L
BCVWD-25	12/18/2018	IRON	< 100	UG/L
BCVWD-25	12/18/2018	LEAD	< 5	UG/L
BCVWD-25	12/18/2018	MAGNESIUM	13	MG/L
BCVWD-25	12/18/2018	MANGANESE	< 20	UG/L
BCVWD-25	12/18/2018	MERCURY	< 1	UG/L
BCVWD-25	5/15/2017	NITRATE (AS N)	1.6	MG/L
BCVWD-25	10/23/2017	NITRATE (AS N)	1.1	MG/L
BCVWD-25	12/18/2018	NITRATE (AS N)	1.1	MG/L
BCVWD-25	12/4/2019	NITRATE (AS N)	0.76	MG/L
BCVWD-25	12/10/2020	NITRATE (AS N)	1.1	MG/L
BCVWD-25	12/18/2018	NITRITE (AS N)	< 0.4	MG/L
BCVWD-25	12/18/2018	POTASSIUM	1.5	MG/L
BCVWD-25	12/18/2018	SODIUM	22	MG/L
BCVWD-25	12/18/2018	SPECIFIC CONDUCTANCE	400	USiemens/cm
BCVWD-25	12/18/2018	SULFATE	13	MG/L

CDPH W	ater Quality for	the 2016-20 pe	riod for	Domestic	Wells i	n the Beaumon	t Basin.

Well Name	Sample Date	Analyte	Concentration	
BCVWD-25	12/18/2018	TETRACHLOROETHYLENE	< 0.	5 UG/L
BCVWD-25	12/18/2018	TOTAL DISSOLVED SOLIDS	23	-
BCVWD-25	12/18/2018	TRICHLOROETHYLENE	< 0.	
BCVWD-25	12/18/2018	TURBIDITY, LABORATORY	< 0.	
BCVWD-25	12/18/2018	ZINC	< 50	
BCVWD-26	12/18/2018	ALKALINITY (TOTAL) AS CACO3	16	
BCVWD-26	12/18/2018	ALUMINUM	< 50	-
BCVWD-26	12/18/2018	ARSENIC		2 UG/L
BCVWD-26	12/18/2018	BICARBONATE ALKALINITY	16	,
BCVWD-26	12/18/2018	CALCIUM	3	-
BCVWD-26	12/18/2018	CARBONATE ALKALINITY		5 MG/L
BCVWD-26	12/18/2018	CHLORIDE	8.	
BCVWD-26	12/18/2018	CHROMIUM (TOTAL)	1	
BCVWD-26	12/18/2018	COPPER	< 50	-
BCVWD-26	12/18/2018	DIBROMOCHLOROPROPANE (DBCP)	< 0.0	-
BCVWD-26	12/18/2018	FLUORIDE (F) (NATURAL-SOURCE)	0.2	
BCVWD-26	12/18/2018	HARDNESS (TOTAL) AS CACO3	12	-
BCVWD-26	12/18/2018	HYDROXIDE ALKALINITY		5 MG/L
BCVWD-26	12/18/2018	IRON	< 10	
BCVWD-26	12/18/2018	LEAD	<	5 UG/L
BCVWD-26	12/18/2018	MAGNESIUM	9.1	-
BCVWD-26	12/18/2018	MANGANESE	< 20	-
BCVWD-26	12/18/2018	MERCURY	<	1 UG/L
BCVWD-26	12/18/2018	NITRATE (AS N)	0.8	) MG/L
BCVWD-26	12/4/2019	NITRATE (AS N)	0.64	4 MG/L
BCVWD-26	12/10/2020	NITRATE (AS N)	0.7	2 MG/L
BCVWD-26	12/18/2018	NITRITE (AS N)	< 0.4	4 MG/L
BCVWD-26	12/18/2018	POTASSIUM	1.	5 MG/L
BCVWD-26	12/18/2018	SODIUM	2	5 MG/L
BCVWD-26	12/18/2018	SPECIFIC CONDUCTANCE	34	0 USiemens/cm
BCVWD-26	12/18/2018	SULFATE	1	D MG/L
BCVWD-26	12/18/2018	TETRACHLOROETHYLENE	< 0.	5 UG/L
BCVWD-26	12/18/2018	TOTAL DISSOLVED SOLIDS	18	D MG/L
BCVWD-26	12/18/2018	TRICHLOROETHYLENE	< 0.	5 UG/L
BCVWD-26	12/18/2018	TURBIDITY, LABORATORY	< 0.	1 NTU
BCVWD-26	12/18/2018	ZINC	< 5	D UG/L
BCVWD-29	12/8/2016	ALKALINITY (TOTAL) AS CACO3	16	D MG/L
BCVWD-29	12/18/2018	ALKALINITY (TOTAL) AS CACO3	13	
BCVWD-29	12/8/2016	ALUMINUM	< 5	D UG/L
BCVWD-29	12/18/2018	ALUMINUM	< 5	
BCVWD-29	12/8/2016	ARSENIC		2 UG/L
BCVWD-29	12/18/2018	ARSENIC		2 UG/L
BCVWD-29	12/8/2016	BICARBONATE ALKALINITY	19	D MG/L
BCVWD-29	12/18/2018	BICARBONATE ALKALINITY	13	D MG/L

Well Name	Sample Date	Analyte	Concentration	
BCVWD-29	12/8/2016	CALCIUM	42	2 MG/L
BCVWD-29	12/18/2018	CALCIUM	39	) MG/L
BCVWD-29	12/8/2016	CARBONATE ALKALINITY	<	3 MG/L
BCVWD-29	12/18/2018	CARBONATE ALKALINITY	< !	5 MG/L
BCVWD-29	12/8/2016	CHLORIDE	1	B MG/L
BCVWD-29	12/18/2018	CHLORIDE	1:	L MG/L
BCVWD-29	12/8/2016	CHROMIUM (TOTAL)	7.0	6 UG/L
BCVWD-29	12/18/2018	CHROMIUM (TOTAL)	< 10	) UG/L
BCVWD-29	12/14/2017	CHROMIUM, HEXAVALENT		3 UG/L
BCVWD-29	12/8/2016	COPPER	< 50	) UG/L
BCVWD-29	12/18/2018	COPPER	< 50	) UG/L
BCVWD-29	12/8/2016	DIBROMOCHLOROPROPANE (DBCP)	< 0.02	L UG/L
BCVWD-29	12/18/2018	DIBROMOCHLOROPROPANE (DBCP)	< 0.02	L UG/L
BCVWD-29	12/8/2016	FLUORIDE (F) (NATURAL-SOURCE)	0.4	1 MG/L
BCVWD-29	12/18/2018	FLUORIDE (F) (NATURAL-SOURCE)	0.3	B MG/L
BCVWD-29	12/8/2016	HARDNESS (TOTAL) AS CACO3	170	) MG/L
BCVWD-29	12/18/2018	HARDNESS (TOTAL) AS CACO3	150	) MG/L
BCVWD-29	12/8/2016	HYDROXIDE ALKALINITY	< :	B MG/L
BCVWD-29	12/18/2018	HYDROXIDE ALKALINITY	< !	5 MG/L
BCVWD-29	12/8/2016	IRON	< 100	) UG/L
BCVWD-29	12/18/2018	IRON	< 100	) UG/L
BCVWD-29	12/8/2016	LEAD	< !	5 UG/L
BCVWD-29	12/18/2018	LEAD	< !	5 UG/L
BCVWD-29	12/8/2016	MAGNESIUM	1	5 MG/L
BCVWD-29	12/18/2018	MAGNESIUM	13	B MG/L
BCVWD-29	12/8/2016	MANGANESE	< 20	UG/L
BCVWD-29	12/18/2018	MANGANESE	< 20	) UG/L
BCVWD-29	12/8/2016	MERCURY	<	L UG/L
BCVWD-29	12/18/2018	MERCURY	<	L UG/L
BCVWD-29	12/8/2016	NITRATE (AS N)	2.3	B MG/L
BCVWD-29	12/14/2017	NITRATE (AS N)	2.3	B MG/L
BCVWD-29	12/18/2018	NITRATE (AS N)	1.8	3 MG/L
BCVWD-29	12/4/2019	NITRATE (AS N)	1.8	3 MG/L
BCVWD-29	12/10/2020	NITRATE (AS N)	2.4	1 MG/L
BCVWD-29	12/8/2016	NITRITE (AS N)	< 0.1	L MG/L
BCVWD-29	12/18/2018	NITRITE (AS N)	< 0.4	1 MG/L
BCVWD-29	12/8/2016	POTASSIUM	1.	5 MG/L
BCVWD-29	12/18/2018	POTASSIUM	1.0	5 MG/L
BCVWD-29	12/8/2016	SODIUM	19	9 MG/L
BCVWD-29	12/18/2018	SODIUM	19	9 MG/L
BCVWD-29	12/14/2017	SPECIFIC CONDUCTANCE	400	) USiemens/cm
BCVWD-29	12/18/2018	SPECIFIC CONDUCTANCE	36	) USiemens/cm
BCVWD-29	12/8/2016	SULFATE	1	l MG/L
BCVWD-29	12/18/2018	SULFATE	1	l MG/L

Well Name	Sample Date	Analyte	Concentration	Unit
BCVWD-29	12/8/2016	TETRACHLOROETHYLENE	< 0.5	UG/L
BCVWD-29	12/18/2018	TETRACHLOROETHYLENE	< 0.5	UG/L
BCVWD-29	12/8/2016	TOTAL DISSOLVED SOLIDS	220	MG/L
BCVWD-29	12/18/2018	TOTAL DISSOLVED SOLIDS	210	MG/L
BCVWD-29	12/8/2016	TRICHLOROETHYLENE	< 0.5	UG/L
BCVWD-29	12/18/2018	TRICHLOROETHYLENE	< 0.5	UG/L
BCVWD-29	12/8/2016	TURBIDITY, LABORATORY	< 0.1	NTU
BCVWD-29	12/18/2018	TURBIDITY, LABORATORY	0.14	NTU
BCVWD-29	12/8/2016	ZINC	< 50	UG/L
BCVWD-29	12/18/2018	ZINC	< 50	UG/L
Banning-C2A	3/17/2020	ALKALINITY (TOTAL) AS CACO3	160	MG/L
Banning-C2A	3/17/2020	ALUMINUM	< 50	UG/L
Banning-C2A	3/17/2020	ARSENIC	< 2	UG/L
Banning-C2A	3/17/2020	BICARBONATE ALKALINITY	160	MG/L
Banning-C2A	3/17/2020	CALCIUM	41	MG/L
Banning-C2A	3/17/2020	CARBONATE ALKALINITY	< 5	MG/L
Banning-C2A	3/17/2020	CHLORIDE	9.2	MG/L
Banning-C2A	3/17/2020	CHROMIUM (TOTAL)	16	UG/L
Banning-C2A	3/24/2016	CHROMIUM, HEXAVALENT	15	UG/L
Banning-C2A	6/22/2016	CHROMIUM, HEXAVALENT	15	UG/L
Banning-C2A	9/21/2016	CHROMIUM, HEXAVALENT	16	UG/L
Banning-C2A	12/21/2016	CHROMIUM, HEXAVALENT	16	UG/L
Banning-C2A	11/13/2017	CHROMIUM, HEXAVALENT	16	UG/L
Banning-C2A	3/17/2020	COPPER	< 50	UG/L
Banning-C2A	3/17/2020	DIBROMOCHLOROPROPANE (DBCP)	< 0.01	UG/L
Banning-C2A	3/17/2020	FLUORIDE (F) (NATURAL-SOURCE)	0.2	MG/L
Banning-C2A	3/17/2020	HARDNESS (TOTAL) AS CACO3	140	MG/L
Banning-C2A	3/17/2020	HYDROXIDE ALKALINITY	< 5	MG/L
Banning-C2A	3/17/2020	IRON	< 100	UG/L
Banning-C2A	3/17/2020	LEAD	< 5	UG/L
Banning-C2A	3/17/2020	MAGNESIUM	8.8	MG/L
Banning-C2A	3/17/2020	MANGANESE	< 20	UG/L
Banning-C2A	3/17/2020	MERCURY	< 1	UG/L
Banning-C2A	4/27/2016	NITRATE (AS N)	1.8	MG/L
Banning-C2A	4/26/2017	NITRATE (AS N)	1.9	MG/L
Banning-C2A	6/13/2018	NITRATE (AS N)	2	MG/L
Banning-C2A	1/23/2019	NITRATE (AS N)	2	MG/L
Banning-C2A	3/17/2020	NITRATE (AS N)	1.3	MG/L
Banning-C2A	4/27/2016	NITRITE (AS N)	< 0.1	MG/L
Banning-C2A	4/26/2017	NITRITE (AS N)	< 0.1	MG/L
Banning-C2A	6/13/2018	NITRITE (AS N)	< 0.1	MG/L
Banning-C2A	1/23/2019	NITRITE (AS N)	< 0.4	MG/L
Banning-C2A	3/17/2020	NITRITE (AS N)	< 0.4	MG/L
Banning-C2A	3/17/2020	POTASSIUM	1.3	MG/L

Well Name	Sample Date	Analyte	Concentration	Unit
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Banning-C2A	3/17/2020	SODIUM	24	MG/L
Banning-C2A	3/17/2020	SPECIFIC CONDUCTANCE	390	USiemens/cm
Banning-C2A	3/17/2020	SULFATE	8.5	MG/L
Banning-C2A	3/17/2020	TETRACHLOROETHYLENE	< 0.5	UG/L
Banning-C2A	3/17/2020	TOTAL DISSOLVED SOLIDS	220	MG/L
Banning-C2A	3/17/2020	TRICHLOROETHYLENE	< 0.5	UG/L
Banning-C2A	3/17/2020	TURBIDITY, LABORATORY	0.17	NTU
Banning-C2A	3/17/2020	ZINC	< 50	UG/L
Banning-C3	3/8/2017	ALKALINITY (TOTAL) AS CACO3	140	MG/L
Banning-C3	3/8/2017	ALUMINUM	< 50	UG/L
Banning-C3	3/8/2017	ARSENIC	< 2	UG/L
Banning-C3	3/8/2017	BICARBONATE ALKALINITY	160	MG/L
Banning-C3	3/8/2017	CALCIUM	31	MG/L
Banning-C3	3/8/2017	CARBONATE ALKALINITY	< 3	MG/L
Banning-C3	3/8/2017	CHLORIDE	9.9	MG/L
Banning-C3	3/8/2017	CHROMIUM (TOTAL)	15	UG/L
Banning-C3	3/24/2016	CHROMIUM, HEXAVALENT	15	UG/L
Banning-C3	6/22/2016	CHROMIUM, HEXAVALENT	14	UG/L
Banning-C3	9/21/2016	CHROMIUM, HEXAVALENT	15	UG/L
Banning-C3	5/12/2017	CHROMIUM, HEXAVALENT	14	UG/L
Banning-C3	8/14/2017	CHROMIUM, HEXAVALENT	14	UG/L
Banning-C3	11/13/2017	CHROMIUM, HEXAVALENT	15	UG/L
Banning-C3	3/8/2017	COPPER	< 50	UG/L
Banning-C3	3/8/2017	DIBROMOCHLOROPROPANE (DBCP)	< 0.01	UG/L
Banning-C3	3/8/2017	FLUORIDE (F) (NATURAL-SOURCE)	0.4	MG/L
Banning-C3	3/8/2017	HARDNESS (TOTAL) AS CACO3	100	MG/L
Banning-C3	3/8/2017	HYDROXIDE ALKALINITY	< 3	MG/L
Banning-C3	3/8/2017	IRON	< 100	UG/L
Banning-C3	3/8/2017	LEAD	< 5	UG/L
Banning-C3	3/8/2017	MAGNESIUM	5.7	MG/L
Banning-C3	3/8/2017	MANGANESE	< 20	UG/L
Banning-C3	3/8/2017	MERCURY	< 1	UG/L
Banning-C3	4/22/2016	NITRATE (AS N)	1.6	MG/L
Banning-C3	3/8/2017	NITRATE (AS N)	1.6	MG/L
Banning-C3	4/25/2017	NITRATE (AS N)	1.8	MG/L
Banning-C3	6/13/2018	NITRATE (AS N)	1.8	MG/L
Banning-C3	1/23/2019	NITRATE (AS N)	1.8	MG/L
Banning-C3	4/22/2016	NITRITE (AS N)	< 0.1	MG/L
Banning-C3	3/8/2017	NITRITE (AS N)	< 0.1	MG/L
Banning-C3	4/25/2017	NITRITE (AS N)	< 0.1	MG/L
Banning-C3	6/13/2018	NITRITE (AS N)	< 0.1	MG/L
Banning-C3	1/23/2019	NITRITE (AS N)	< 0.4	MG/L
Banning-C3	3/8/2017	POTASSIUM	1.5	MG/L
Banning-C3	3/8/2017	SODIUM	29	, MG/L

Well Name	Sample Date	Analyte	Conce	ntration	Unit
Banning-C3	3/8/2017	SPECIFIC CONDUCTANCE		330	USiemens/cm
Banning-C3	3/8/2017	SULFATE		6	MG/L
Banning-C3	3/8/2017	TETRACHLOROETHYLENE	<	0.5	UG/L
Banning-C3	3/8/2017	TOTAL DISSOLVED SOLIDS		170	MG/L
Banning-C3	3/8/2017	TRICHLOROETHYLENE	<	0.5	UG/L
Banning-C3	3/8/2017	TURBIDITY, LABORATORY		0.18	NTU
Banning-C3	3/8/2017	ZINC	<	50	UG/L
Banning-C4	3/6/2017	ALKALINITY (TOTAL) AS CACO3		120	MG/L
Banning-C4	3/11/2020	ALKALINITY (TOTAL) AS CACO3		150	MG/L
Banning-C4	3/6/2017	ALUMINUM	<	50	UG/L
Banning-C4	3/11/2020	ALUMINUM	<	50	UG/L
Banning-C4	3/6/2017	ARSENIC	<	2	UG/L
Banning-C4	3/11/2020	ARSENIC	<	2	UG/L
Banning-C4	3/6/2017	BICARBONATE ALKALINITY		140	MG/L
Banning-C4	3/11/2020	BICARBONATE ALKALINITY		150	MG/L
Banning-C4	3/6/2017	CALCIUM		22	MG/L
Banning-C4	3/11/2020	CALCIUM		36	MG/L
Banning-C4	3/6/2017	CARBONATE ALKALINITY	<	3	MG/L
Banning-C4	3/11/2020	CARBONATE ALKALINITY	<	5	MG/L
Banning-C4	3/6/2017	CHLORIDE		5.6	MG/L
Banning-C4	3/11/2020	CHLORIDE		8.2	MG/L
Banning-C4	3/6/2017	CHROMIUM (TOTAL)		9.9	UG/L
Banning-C4	3/11/2020	CHROMIUM (TOTAL)		16	UG/L
Banning-C4	3/24/2016	CHROMIUM, HEXAVALENT		10	UG/L
Banning-C4	6/22/2016	CHROMIUM, HEXAVALENT		15	UG/L
Banning-C4	9/21/2016	CHROMIUM, HEXAVALENT		15	UG/L
Banning-C4	12/21/2016	CHROMIUM, HEXAVALENT		13	UG/L
Banning-C4	5/25/2017	CHROMIUM, HEXAVALENT		11	UG/L
Banning-C4	8/14/2017	CHROMIUM, HEXAVALENT		15	UG/L
Banning-C4	11/13/2017	CHROMIUM, HEXAVALENT		15	UG/L
Banning-C4	3/6/2017	COPPER	<	50	UG/L
Banning-C4	3/11/2020	COPPER	<	50	UG/L
Banning-C4	3/6/2017	DIBROMOCHLOROPROPANE (DBCP)	<	0.01	UG/L
Banning-C4	3/11/2020	DIBROMOCHLOROPROPANE (DBCP)	<	0.01	UG/L
Banning-C4	3/6/2017	FLUORIDE (F) (NATURAL-SOURCE)		0.4	MG/L
Banning-C4	3/11/2020	FLUORIDE (F) (NATURAL-SOURCE)		0.25	MG/L
Banning-C4	3/6/2017	HARDNESS (TOTAL) AS CACO3		67	MG/L
Banning-C4	3/11/2020	HARDNESS (TOTAL) AS CACO3		120	MG/L
Banning-C4	3/6/2017	HYDROXIDE ALKALINITY	<	3	MG/L
Banning-C4	3/11/2020	HYDROXIDE ALKALINITY	<	5	MG/L
Banning-C4	3/6/2017	IRON	<	100	UG/L
Banning-C4	3/11/2020	IRON	<	100	UG/L
Banning-C4	3/6/2017	LEAD	<	5	UG/L
Banning-C4	3/11/2020	LEAD	<	5	UG/L

Well Name	Sample Date	Analyte	Concentration	Unit
Banning-C4	3/6/2017	MAGNESIUM	3.1	MG/L
Banning-C4	3/11/2020	MAGNESIUM	7.2	, MG/L
Banning-C4	3/6/2017	MANGANESE	< 20	UG/L
Banning-C4	3/11/2020	MANGANESE	< 20	UG/L
Banning-C4	3/6/2017	MERCURY	< 1	UG/L
Banning-C4	3/11/2020	MERCURY	< 1	UG/L
Banning-C4	4/27/2016	NITRATE (AS N)	0.89	MG/L
Banning-C4	3/6/2017	NITRATE (AS N)	0.79	MG/L
Banning-C4	4/26/2017	NITRATE (AS N)	0.91	MG/L
Banning-C4	6/13/2018	NITRATE (AS N)	1.1	MG/L
Banning-C4	1/23/2019	NITRATE (AS N)	0.95	MG/L
Banning-C4	3/11/2020	NITRATE (AS N)	0.97	MG/L
Banning-C4	4/27/2016	NITRITE (AS N)	< 0.1	MG/L
Banning-C4	3/6/2017	NITRITE (AS N)	< 0.1	MG/L
Banning-C4	4/26/2017	NITRITE (AS N)	< 0.1	MG/L
Banning-C4	6/13/2018	NITRITE (AS N)	< 0.1	MG/L
Banning-C4	1/23/2019	NITRITE (AS N)	< 0.4	MG/L
Banning-C4	3/11/2020	NITRITE (AS N)	< 0.4	MG/L
Banning-C4	3/6/2017	POTASSIUM	1.4	MG/L
Banning-C4	3/11/2020	POTASSIUM	1.5	MG/L
Banning-C4	3/6/2017	SODIUM	37	MG/L
Banning-C4	3/11/2020	SODIUM	27	MG/L
Banning-C4	3/6/2017	SPECIFIC CONDUCTANCE	290	USiemens/cm
Banning-C4	3/11/2020	SPECIFIC CONDUCTANCE	350	USiemens/cm
Banning-C4	3/6/2017	SULFATE	13	MG/L
Banning-C4	3/11/2020	SULFATE	12	MG/L
Banning-C4	3/6/2017	TETRACHLOROETHYLENE	< 0.5	UG/L
Banning-C4	3/11/2020	TETRACHLOROETHYLENE	< 0.5	UG/L
Banning-C4	3/6/2017	TOTAL DISSOLVED SOLIDS	190	MG/L
Banning-C4	3/11/2020	TOTAL DISSOLVED SOLIDS	200	MG/L
Banning-C4	3/6/2017	TRICHLOROETHYLENE	< 0.5	UG/L
Banning-C4	3/11/2020	TRICHLOROETHYLENE	< 0.5	UG/L
Banning-C4	3/6/2017	TURBIDITY, LABORATORY	< 0.1	NTU
Banning-C4	3/11/2020	TURBIDITY, LABORATORY	< 0.1	NTU
Banning-C4	3/6/2017	ZINC	< 50	UG/L
Banning-C4	3/11/2020	ZINC	< 50	UG/L
Banning-M3	2/14/2018	ALKALINITY (TOTAL) AS CACO3	180	MG/L
Banning-M3	2/14/2018	ALUMINUM	57	UG/L
Banning-M3	2/14/2018	ARSENIC	< 2	UG/L
Banning-M3	2/14/2018	BICARBONATE ALKALINITY	180	MG/L
Banning-M3	2/14/2018	CALCIUM	41	MG/L
Banning-M3	2/14/2018	CARBONATE ALKALINITY	< 5	MG/L
Banning-M3	2/14/2018	CHLORIDE	16	MG/L
Banning-M3	2/14/2018	CHROMIUM (TOTAL)	9.9	UG/L

CDPH Water Quality for the 2016-20 period for Domestic Wells in the Beaumont Basin.

Well Name	Sample Date	Analyte	Concentration	Unit
Banning-M3	3/24/2016	CHROMIUM, HEXAVALENT	9.4	UG/L
Banning-M3	6/22/2016	CHROMIUM, HEXAVALENT	9.1	UG/L
Banning-M3	9/21/2016	CHROMIUM, HEXAVALENT	9.3	UG/L
Banning-M3	12/21/2016	CHROMIUM, HEXAVALENT	9.4	UG/L
Banning-M3	5/25/2017	CHROMIUM, HEXAVALENT	9.9	UG/L
Banning-M3	8/14/2017	CHROMIUM, HEXAVALENT	9.2	UG/L
Banning-M3	11/15/2017	CHROMIUM, HEXAVALENT	9.1	UG/L
Banning-M3	2/14/2018	COPPER	< 50	UG/L
Banning-M3	2/14/2018	DIBROMOCHLOROPROPANE (DBCP)	< 0.01	UG/L
Banning-M3	2/14/2018	FLUORIDE (F) (NATURAL-SOURCE)	0.32	MG/L
Banning-M3	2/14/2018	HARDNESS (TOTAL) AS CACO3	160	MG/L
Banning-M3	2/14/2018	HYDROXIDE ALKALINITY	< 5	MG/L
Banning-M3	2/14/2018	IRON	120	UG/L
Banning-M3	2/14/2018	LEAD	< 5	UG/L
Banning-M3	2/14/2018	MAGNESIUM	14	MG/L
Banning-M3	2/14/2018	MANGANESE	< 20	UG/L
Banning-M3	2/14/2018	MERCURY	< 1	UG/L
Banning-M3	4/27/2016	NITRATE (AS N)	2.1	MG/L
Banning-M3	4/26/2017	NITRATE (AS N)	2.2	MG/L
Banning-M3	2/14/2018	NITRATE (AS N)	2.2	, MG/L
Banning-M3	6/13/2018	NITRATE (AS N)	1.9	MG/L
Banning-M3	1/23/2019	NITRATE (AS N)	2.2	MG/L
Banning-M3	4/27/2016	NITRITE (AS N)	< 0.1	MG/L
Banning-M3	4/26/2017	NITRITE (AS N)	< 0.1	MG/L
Banning-M3	2/14/2018	NITRITE (AS N)	< 0.1	MG/L
Banning-M3	6/13/2018	NITRITE (AS N)	< 0.1	MG/L
Banning-M3	1/23/2019	NITRITE (AS N)	< 0.4	MG/L
Banning-M3	2/14/2018	POTASSIUM	2.1	MG/L
Banning-M3	2/14/2018	SODIUM	39	MG/L
Banning-M3	2/14/2018	SPECIFIC CONDUCTANCE	460	USiemens/cm
Banning-M3	2/14/2018	SULFATE	36	MG/L
Banning-M3	2/14/2018	TETRACHLOROETHYLENE	< 0.5	UG/L
Banning-M3	2/14/2018	TOTAL DISSOLVED SOLIDS	280	MG/L
Banning-M3	2/14/2018	TRICHLOROETHYLENE	< 0.5	UG/L
Banning-M3	2/14/2018	TURBIDITY, LABORATORY	1.2	NTU
Banning-M3	2/14/2018	ZINC	< 50	UG/L
SMWC-4	4/11/2016	ALKALINITY (TOTAL) AS CACO3	110	MG/L
SMWC-4	4/15/2019	ALKALINITY (TOTAL) AS CACO3	110	MG/L
SMWC-4	4/11/2016	ALUMINUM	< 0	UG/L
SMWC-4	4/15/2019	ALUMINUM	< 0	UG/L
SMWC-4	4/11/2016	ARSENIC	4.4	UG/L
SMWC-4	4/15/2019	ARSENIC	3.8	UG/L
SMWC-4	4/11/2016	BICARBONATE ALKALINITY	110	MG/L
SMWC-4	4/15/2019	BICARBONATE ALKALINITY	110	MG/L

Well Name	Sample Date	Analyte	Concentration	Unit
		· · · · · · · · · · · · · · · · · · ·		
SMWC-4	4/11/2016	CALCIUM	8.8	MG/L
SMWC-4	4/15/2019		7.1	MG/L
SMWC-4	4/11/2016		12	MG/L
SMWC-4	4/15/2019		11	MG/L
SMWC-4	4/11/2016	CHLORIDE	17	MG/L
SMWC-4	4/15/2019	CHLORIDE	18	MG/L
SMWC-4	4/11/2016		< 0	UG/L
SMWC-4	4/15/2019	CHROMIUM (TOTAL)	< 0	UG/L
SMWC-4	12/4/2017	CHROMIUM, HEXAVALENT	2.3	UG/L
SMWC-4	4/15/2019	CHROMIUM, HEXAVALENT	2.2	UG/L
SMWC-4	4/11/2016	COPPER	< 0	UG/L
SMWC-4	4/15/2019	COPPER	< 0	UG/L
SMWC-4	4/11/2016	FLUORIDE (F) (NATURAL-SOURCE)	0.41	MG/L
SMWC-4	4/15/2019	FLUORIDE (F) (NATURAL-SOURCE)	0.4	MG/L
SMWC-4	4/11/2016	HARDNESS (TOTAL) AS CACO3	29	MG/L
SMWC-4	4/15/2019	HARDNESS (TOTAL) AS CACO3	22	MG/L
SMWC-4	4/11/2016	HYDROXIDE ALKALINITY	< 0	MG/L
SMWC-4	4/15/2019	HYDROXIDE ALKALINITY	< 0	MG/L
SMWC-4	4/11/2016	IRON	< 0	UG/L
SMWC-4	4/15/2019	IRON	< 0	UG/L
SMWC-4	4/11/2016	LEAD	< 0	UG/L
SMWC-4	4/15/2019	LEAD	< 0	UG/L
SMWC-4	4/11/2016	MAGNESIUM	1.7	MG/L
SMWC-4	4/15/2019	MAGNESIUM	1.1	MG/L
SMWC-4	4/11/2016	MANGANESE	< 0	UG/L
SMWC-4	4/15/2019	MANGANESE	< 0	UG/L
SMWC-4	4/11/2016	MERCURY	< 1	UG/L
SMWC-4	4/15/2019	MERCURY	< 1	UG/L
SMWC-4	4/11/2016	NITRATE (AS N)	3.2	MG/L
SMWC-4	6/1/2016	NITRATE (AS N)	3	MG/L
SMWC-4	9/1/2016	NITRATE (AS N)	3	MG/L
SMWC-4	12/1/2016	NITRATE (AS N)	4	MG/L
SMWC-4	3/3/2017	NITRATE (AS N)	3.8	MG/L
SMWC-4	6/5/2017	NITRATE (AS N)	3.1	MG/L
SMWC-4	9/12/2017	NITRATE (AS N)	4.9	MG/L
SMWC-4	12/4/2017	NITRATE (AS N)	3.2	MG/L
SMWC-4	12/4/2018	NITRATE (AS N)	4.3	MG/L
SMWC-4	4/15/2019	NITRATE (AS N)	3.8	MG/L
SMWC-4	6/4/2019	NITRATE (AS N)	4.4	MG/L
SMWC-4	6/3/2020	NITRATE (AS N)	3.1	MG/L
SMWC-4	4/11/2016	NITRITE (AS N)	< 0	MG/L
SMWC-4	4/15/2019	NITRITE (AS N)	< 0	MG/L
SMWC-4	4/11/2016	POTASSIUM	1	MG/L
SMWC-4	4/15/2019	POTASSIUM	< 0	MG/L

CDPH W	ater Quality for	the 2016-20 per	iod for Domesti	c Wells i	n the Beaumon	t Basin.

Well Name	Sample Date	Analyte	Concentration	Unit
SMWC-4	4/11/2016	SODIUM	61	MG/L
SMWC-4	4/11/2016 4/15/2019	SODIUM	61	MG/L MG/L
SMWC-4	4/13/2019	SPECIFIC CONDUCTANCE		USiemens/cm
SMWC-4	4/11/2018	SPECIFIC CONDUCTANCE	320	
SMWC-4	4/13/2019	SULFATE	16	MG/L
SMWC-4	4/11/2018	SULFATE	10	MG/L MG/L
SMWC-4	8/2/2019	TETRACHLOROETHYLENE	< 0	UG/L
SMWC-4	8/2/2018	TETRACHLOROETHYLENE		UG/L UG/L
SMWC-4		TOTAL DISSOLVED SOLIDS	190	
SMWC-4	4/11/2016	TOTAL DISSOLVED SOLIDS	190	MG/L MG/L
SMWC-4	4/15/2019			
	8/2/2016		< 0	UG/L
SMWC-4	8/12/2019			UG/L
SMWC-4	4/11/2016		0.3	NTU
SMWC-4	4/15/2019	TURBIDITY, LABORATORY	< 0	NTU
SMWC-4	4/11/2016	VANADIUM	100	UG/L
SMWC-4	4/15/2019	VANADIUM	72	UG/L
SMWC-4	4/11/2016	ZINC	< 0	UG/L
SMWC-4	4/15/2019	ZINC	< 0	UG/L
YVWD-48	7/13/2017	ALKALINITY (TOTAL) AS CACO3	96	MG/L
YVWD-48	7/14/2020	ALKALINITY (TOTAL) AS CACO3	140	MG/L
YVWD-48	7/13/2017	ALUMINUM	< 0	UG/L
YVWD-48	7/14/2020	ALUMINUM	0	UG/L
YVWD-48	7/13/2017	ARSENIC	2.5	UG/L
YVWD-48	7/14/2020	ARSENIC	0	UG/L
YVWD-48	7/13/2017	BICARBONATE ALKALINITY	75	MG/L
YVWD-48	7/14/2020	BICARBONATE ALKALINITY	170	MG/L
YVWD-48	7/13/2017	CALCIUM	11	MG/L
YVWD-48	7/14/2020	CALCIUM	32	MG/L
YVWD-48	7/13/2017	CARBONATE ALKALINITY	21	MG/L
YVWD-48	7/14/2020	CARBONATE ALKALINITY	0	MG/L
YVWD-48	7/13/2017	CHLORIDE	8.8	MG/L
YVWD-48	7/14/2020	CHLORIDE	11	MG/L
YVWD-48	7/13/2017	CHROMIUM (TOTAL)	< 0	UG/L
YVWD-48	7/14/2020	CHROMIUM (TOTAL)	0	UG/L
YVWD-48	7/13/2017	CHROMIUM, HEXAVALENT	5.8	UG/L
YVWD-48	7/14/2020	CHROMIUM, HEXAVALENT	7.5	UG/L
YVWD-48	7/13/2017	COPPER	< 0	UG/L
YVWD-48	7/14/2020	COPPER	0	UG/L
YVWD-48	7/17/2019	DIBROMOCHLOROPROPANE (DBCP)	0	UG/L
YVWD-48	7/13/2017	FLUORIDE (F) (NATURAL-SOURCE)	0.63	MG/L
YVWD-48	7/14/2020	FLUORIDE (F) (NATURAL-SOURCE)	0.39	MG/L
YVWD-48	7/13/2017	HARDNESS (TOTAL) AS CACO3	38	MG/L
YVWD-48	7/14/2020	HARDNESS (TOTAL) AS CACO3	100	MG/L
YVWD-48	7/13/2017	HYDROXIDE ALKALINITY	< 0	MG/L

CDPH Water Quality for the 2016-20 period for Domestic Wells in the Beaumont Basin.	<b>CDPH Water Qualit</b>	y for the 2016-20	period for Domestic	c Wells in the Beaumont Basin.
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Well Name	Sample Date	Analyte	Concentration	Unit
YVWD-48	7/14/2020	HYDROXIDE ALKALINITY	0	MG/L
YVWD-48	7/13/2017	IRON	< 0	UG/L
YVWD-48	7/14/2020	IRON	0	UG/L
YVWD-48	7/13/2017	LEAD	< 0	UG/L
YVWD-48	7/14/2020	LEAD	0	UG/L
YVWD-48	7/13/2017	MAGNESIUM	2.8	MG/L
YVWD-48	7/14/2020	MAGNESIUM	4.8	MG/L
YVWD-48	7/13/2017	MANGANESE	< 0	UG/L
YVWD-48	7/14/2020	MANGANESE	0	UG/L
YVWD-48	7/13/2017	MERCURY	< 1	UG/L
YVWD-48	7/14/2020	MERCURY	< 1	UG/L
YVWD-48	9/22/2016	NITRATE (AS N)	1.8	MG/L
YVWD-48	7/13/2017	NITRATE (AS N)	1.6	MG/L
YVWD-48	7/16/2018	NITRATE (AS N)	2.1	MG/L
YVWD-48	7/17/2019	NITRATE (AS N)	1.8	MG/L
YVWD-48	7/14/2020	NITRATE (AS N)	2.4	MG/L
YVWD-48	7/13/2017	NITRITE (AS N)	< 0	MG/L
YVWD-48	7/14/2020	NITRITE (AS N)	0	MG/L
YVWD-48	7/13/2017	POTASSIUM	1.5	MG/L
YVWD-48	7/14/2020	POTASSIUM	2	MG/L
YVWD-48	7/13/2017	SODIUM	43	MG/L
YVWD-48	7/14/2020	SODIUM	36	MG/L
YVWD-48	7/13/2017	SPECIFIC CONDUCTANCE	260	USiemens/cm
YVWD-48	7/14/2020	SPECIFIC CONDUCTANCE	340	USiemens/cm
YVWD-48	7/13/2017	SULFATE	14	MG/L
YVWD-48	7/14/2020	SULFATE	13	MG/L
YVWD-48	6/23/2016	TETRACHLOROETHYLENE	< 0	UG/L
YVWD-48	7/17/2019	TETRACHLOROETHYLENE	0	UG/L
YVWD-48	9/22/2016	TOTAL DISSOLVED SOLIDS	130	MG/L
YVWD-48	7/13/2017	TOTAL DISSOLVED SOLIDS	130	MG/L
YVWD-48	7/14/2020	TOTAL DISSOLVED SOLIDS	200	MG/L
YVWD-48	6/23/2016	TRICHLOROETHYLENE	< 0	UG/L
YVWD-48	7/17/2019	TRICHLOROETHYLENE	0	UG/L
YVWD-48	7/13/2017	TURBIDITY, LABORATORY	0.4	NTU
YVWD-48	7/14/2020	TURBIDITY, LABORATORY	0	NTU
YVWD-48	7/13/2017	VANADIUM	90	UG/L
YVWD-48	7/14/2020	VANADIUM	22	UG/L
YVWD-48	7/13/2017	ZINC	< 0	UG/L
YVWD-48	7/14/2020	ZINC	0	UG/L