

**Beaumont Basin Watermaster
MEETING AGENDA
DATE: Tuesday, January 8, 2008
TIME: 10:00 AM
PLACE: BCVWD
815 E. 12th Street, Beaumont, CA, 92223**

1. Call to Order
2. Roll Call
 - A. City of Banning: George Thacker
 - B. City of Beaumont: Dee Moorjani
 - C. Beaumont Cherry Valley Water District: C.J. Butcher
 - D. South Mesa Water Company: George Jorritsma
 - E. Yucaipa Valley Water District: Joe Zoba
3. Pledge of Allegiance
4. Oral and Written Communication

Anyone wishing to address the Watermaster on any matter not on the Agenda of this meeting may do so now. The oral communications portion of this Agenda is to hear comments. If any question or concern arises related to any issues not on the Agenda, it will be referred to Staff for appropriate response. Anyone wishing to speak on an item on the Agenda may do so at the time the Watermaster considers that item. All persons wishing to speak must fill out a Request to Speak Form and give it to the Clerk at the beginning of the meeting. Forms are available from Clerk upon request.

5. Consent Calendar
 - A. Approve Minutes of May 15, 2007, Managers Meeting
 - B. Approve Minutes of September 11, 2007
 - C. Approve Minutes of October 23, 2007, Managers Meeting
 - D. Treasurer Report
 - E. List of Task Orders Issued
 - F. Correspondence Received and Responded
6. Status Reports
 - A. Establishment of Rules and Regulations for Allocation of Unused Overlyers Pumping Rights
 - B. Update of Activities
7. Action Items
 - A. Resolution 2008-001, Establishing a Public Records Act Policy
Recommendation – Approve
 - B. Resolution 2008-002, To Adopt the Upper Santa Ana River Watershed Integrated Regional Water Management Plan
Recommendation – Approve

- C. Biennial Engineers Report
Recommendation – Approve
- D. Water Supply and Water Supply Conditions in the San Geronio Pass Region
Recommendation – Approve and Authorize Staff to Forward to LAFCO and Others
- E. Fourth Annual Report of the Beaumont Basin Watermaster
Recommendation – Approve and Authorize Circulation

8. Watermaster Reports

- Watermaster Members
- Chief of Watermaster Service
- Watermaster Engineer – STWMA PC 1, Application AB-303 Grant
- Watermaster Legal Counsel

9. Adjournment

Minutes of May 15, 2007

**RECORD OF THE MINUTES OF THE
Joint Manager Committee Meeting of the Beaumont Basin, Watermaster,
STWMA and STWMA Project Committee No1
May 15, 2007**

1. Roll Call

Board Members Present

Dee Morjani, City of Beaumont

Paul Toor, City of Banning

C.J. Butcher General Manager of BVCWD and District's representative for WATERMASTER

Joe ZOBA, Yucaipa Valley Water District

Others Present

Andy Schlange, General Manager of STWMA and Project Committee 1, Chief of WATERMASTER Services

Mark Wildermuth, Consultant for STWMA and the WATERMASTER

Walt Beckam

Joe Aklufi, Legal Counsel

Patsy Reeley, Cherry Valley

Frances Flanders, Cherry Valley

Stella Parks, Cherry Valley, BVCWD

Barbara Voigt, San Geronimo Pass Water Agency

Sarah Oneda, Yucaipa Valley Water District, Human Resources

Blanca Marin, BVCWD, Recording Secretary

2. Call to Order

BVCWD General Manager, Joe Zoba called the meeting to order at 9:35am

3. Presentation – General Overview Concepts

STWMA General Manager Schlange and Mark Wildermuth Engineer presented an overview of the purpose and activities of the Beaumont Basin, Watermaster, STWMA and STWMA Project Committee No1. They also set forth the work plan associated with the Proposed F/Y 2007-2008 Budget including:

- Water Supply and its impacts on the area growth.
- Water Quality and the need to participate with outside agencies like SAWPA to develop programs for financing eligibility. Staff further indicated that STWMA is the only agency that has completed an Intergraded Regional Water Master in the watershed.

General Manager Schlange talked about the need to update the Water Supply and Demand reports.

Consultant, Mark Wildermuth presented a slide show about Table A water supply. He explained that the city of Banning and BGVWD currently have initiated a charge for new source water and they are in discussion with Pass Agency to buy additional water supplies. Mr. Wildermuth also mentioned that staff is also working to enhance and develop additional local water supplies. Consultant, Wildermuth also mentioned that recent purchases of additional State Water supplies (enhancement water) in Coachella currently cost about \$3300 per acre foot on average. He also stated that State Project is not delivering 100 percent of allocation and on average are only delivering about 70 percent of entitlement.

BGVWD General Manager, Chuck Butcher explained that the dollars that used to purchase new additional water does not include the cost to deliver the water to the end user.

Yucaipa Valley Water District Joe Zoba gave an update in regards to the work that the Agency is doing working with the City of Beaumont.

Wildermuth informed that the STWMA completed a report that evaluated a series of recharge facilities for storm runoff and supplemental water recharge and that the whole concept of these facilities is to capture surface runoff water in the Beaumont Basin. He explained that the facilities that are high priority are the Noble Creek, Marshall Creek and Smith Creek as potential recharge facilities.

Wildermuth spoke about the Beaumont Basin storage capacity to be used by the agencies as well as by other outside agencies which could create revenue from conjunctive use partners. There was a lengthy discussion regarding the cost and impediments to completing the development and implementation of such programs.

4. Budget 2007-2008

Schlange provided a brief explanation of the 2007-2008 Budget for the San Timoteo Watershed Management Authority, the San Timoteo Watershed Management Authority Project Committee NO 1 and the Beaumont Basin Watermaster.

Further discussion regarding the different roles of STWMA and The Watermaster were addressed.

5. Adjournment

YVWD General Manager, Joe Zoba adjourned the meeting at 11:35am

Minutes of September 11, 2007

**Draft Record of the Minutes
Beaumont Basin Watermaster
September 11, 2007**

Watermaster Members Present

City of Banning: Paul Toor
Beaumont Cherry Valley Water District: C.J. Butcher
South Mesa Water Company: George Jorritsma
Yucaipa Valley Water District: Joe Zoba

Watermaster Members Absent

City of Beaumont: Dee Moorjani

Consultants Present

Joe Aklufi:	Aklufi & Wysoki
Andrew Schlange:	San Timoteo Watershed Management Authority (STWMA)/ Beaumont Basin Watermaster (BBWM)
Mark Wildermuth:	Wildermuth Environmental, Inc.
Samantha Stevens:	Wildermuth Environmental, Inc.
Joe Reichenberger:	Beaumont Cherry Valley Water District

Others Present

Jeff Davis:	San Geronio Pass Water Agency
Barbara Voigt:	San Geronio Pass Water Agency
Ray Morris	San Geronio Pass Water Agency
John Jeter	San Geronio Pass Water Agency
Mary Lou Cotton	Kennedy/Jenks Consultants Inc.
Russ Behrens	McCormick, Kidman & Behrens
Patsy Reeley:	CVAN
Frances Flanders:	CVAN
Stella Parks	BCVWD
Marquel Dopp	BCVWD
Blanca Marin	BCVWD

2. Chairman Jorritsma called the meeting to order at 10:00am
3. Chairman Jorritsma led everyone in the *Pledge of Allegiance*
4. **Oral and Written Communication**

No oral or written communications presented.

5. Consent Calendar
 - A. Approve Minutes of June 19, 2007 Meeting
 - B. Treasurer Report
 - C. List of Tasks Orders Issued
 - D. Correspondence Received and Responded

Motion made by Member Zoba, second by Member Butcher, and by unanimous vote
Moved to approve the consent calendar as presented.

6. Status Reports – Chief of Watermaster Services Schlange advised the Watermaster that the four reports presented verbally would be reviewed in detail at a Joint Managers Workshop on October 23rd, 2007 at Yucaipa Valley Water District at 9:00am.

A. Draft Biennial Engineers Report

Mr. Wildermuth of Wildermuth Environmental Inc. briefly reviewed his findings outlined in the Biennial Report.

B. Draft Salt Mitigation fee Study

Mr. Wildermuth of Wildermuth Environmental Inc. presented a Draft Salt Mitigation Report for Watermaster to review and comment. He explained that the report indicates how salt is introduced into the Basin, and a methodology for assessing a fee for water users in the Basin. Staff recommended that members prepare any comments on this item to be discussed at the workshop.

C. Draft Water Supply report

Mr. Wildermuth presented to the members the Draft Water-Supply Water Demand Reports 2007, indicating that some members still needed to be reconciled.

D. Subsidence Report and Progress

Mr. Wildermuth informed members that, subsidence report has been completed tabulated and mapped and will be ready for final submittal to the State in two weeks. Wildermuth further recommended that future budget provided for further surveys every two years.

7. Action Items

A. A City of Beaumont Application for a Beaumont Storage Agreement

Chief of Watermaster Services presented an application for a Beaumont Basin Storage Agreement

Motion made by Member Zoba, Second by Member Toor, and by unanimous vote to approve the City of Beaumont Application for a Beaumont Storage Agreement.

B. San Gorgonio Pass Water Agency Kennedy Jenks Report (Evaluation of Potential Water Transfer Opportunities)

General Manager, Jeff Davis, of the San Gorgonio Pass Water Agency and Ms. Mary Lou Cotton, author of the Kennedy Jenks Report explained the different water supplies which are currently available for sell. Mrs. Cotton reviewed the report funding with the Watermaster members. Lengthy discussion followed.

Schlange stated that there will be a lot of questions that will be answered at the October 23rd meeting regarding this item.

After further discussion and upon motion by member Toor, second by member Butcher and by unanimous vote, moved that the Beaumont Basin Watermaster authorizes and supports Watermaster staff to undertake further discussion with San Geronio Pass Water Agency to develop a menu of points for consideration to be included in a cooperative agreement.

8. Watermaster Reports

- Watermaster Members
- Chief of Watermaster Service
- Watermaster Engineer – Up date of other activities
- Watermaster Legal Counsel

9. Adjournment of meeting 12:08PM

C.J. Butcher, Secretary of the Watermaster

Minutes of October 23, 2007

**RECORD OF THE MINUTES OF THE
Joint Managers Meeting of the
San Timoteo Watershed Management Authority,
San Timoteo Watershed Management Authority Project,
Committee NO1, the Beaumont Basin WaterMaster and the Managers of San
Gorgonio Pass Water Agency and Cabazon Water District
October 23, 2007**

1. Roll Call

Managers Present

Paul Toor, City of Banning
George Jorristma, South Mesa Mutual Water Co.
Jeff Davis, San Gorgonio Pass Water Agency
C.J. Butcher, Beaumont Cherry Valley Water District
Douglas Headrick, San Bernardino Water Company
Joe Zoba, Yucaipa Valley Water District
Martie Killough, City of Beaumont

Consultants Present

Mark Wildermuth, Wildermuth Environmental Inc.
Samantha Stevens, Wildermuth Environmental Inc.
Mike Plinski, Wildermuth Environmental Inc.
Joe Aklufi, Aklufi and Wysoki
Andrew Schlange, STWMA and Beaumont Basin Watermaster

Others Present

Barbara Voigt, San Gorgonio Pass Water Agency
Marquel Dopp, Beaumont Cherry Valley Water District
Blanca Marin, Beaumont Cherry Valley Water District
Frances Flanders, Cherry Valley
Luwana Ryan, Cherry Valley
Sam Gershon, Cherry Valley
Steve Rhoades, Cherry Valley
Henry Wochholz, Yucaipa Valley Water District

2. Call to Order

Joe Aklufi from Aklufi & Wysoki announced that due to the nature of the meeting public comment was not to be reviewed. Andrew Schlange invited the public to place recorders if they have them on the table to make their own recordings of the meeting.

Andrew Schlange stated that one of the biggest issues facing the Pass Area is the need to acquire additional water from the State of California. The Kennedy Jenks report prepared for the Pass Agency is an excellent report which outlines a lot of opportunities for water purchase on this area. A draft letter will be discussed and will

be reviewed for comments. According to the Wildermuth report this area will experience a 40, 000 acre feet shortage at build out. Staff reviewed the alternatives

**a) Discussion and Response to the Pass Agency Kennedy Jenks Report
Dated, February 28, 2007**

According to the Kennedy Jenks report the recommendations are that the Pass Agency acquires additional water. Discussion regarding the priority of such purchase was reviewed by staff which suggested water south of the Delta be considered first, such as Nichols, the excess water in the State Aqueduct, such as San Bernardino Water Municipal. The next priority all water that is less costly than desalted water. Last priority is the water north of the Delta. Some problems associated with the acquisitions of water were also discussed such as 1) availability of water, and 2) capacity to store the water.

Mark Wildermuth of Wildermuth Environmental, Inc. made a clarification on the Kennedy Jenks report about the two different types of water, the "one Shot water" and the State Table A water.

Mr. Schlange indicated that there is indeed a difference in the sources of water. In going north and buying water supplies is that is aqueduct yield is that it is necessary to acquire more than one acre foot of water to receive one acre foot of water locally. Since the Delta Smelt issue the price of water is high.

Mr. Aklufi questioned members about who will be making the decision to make this purchase from any of the companies named in the Kennedy Jenks report and if there were any options.

Mr. Schlange stated that the decision needs to be made between the Pass Agency and the Watermaster to obtain additional water.

Mr. Davis explained the process of when the agency orders water. The agency approves water service for the retailers and gets a schedule every year to see how much water the agency will need. They reported that 2008 year is expected to be a dry year and the agency needs to have a number of types of water in its portfolio. The major concern is the high prices of water which is most likely to go higher.

b) Alternative Water Supplies

Mr. Schlange discussed recycled water and other sources of water which might be available.

3. Discussion and Comments Regarding Fourth Annual Watermaster Report

Mr. Wildermuth indicated that some revisions were made to the draft report as evaluated for comments and he explained Table A-3 of the report.

Mr. Schlange recommended that each agency review the reports and their comments and suggested changes be forwarded to Mr. Wildermuth as staff plans to request approval of the report in January 2008.

4. Discussion and Comments Regarding Development of Salt Mitigation Fee for Beaumont Management Zone

Mr. Wildermuth reviewed the draft report in detail indicating why such a fee is necessary. Mr. Wildermuth stated that he will update and include comments reviewed and present it at the next Watermaster meeting for further discussion.

5. Discussion and Comment on the 2007 Report on Water Supply Conditions in San Geronio Pass Region

Staff reviewed the draft report and requested that comments be forwarded to Mr. Wildermuth.

6. Discussion and Comment on the Subsidence Monitoring for the Beaumont Basin Program

Mr. Wildermuth briefly explained the Benchmark Elevations. Information was collected and it was indicated that minor subsidence of the land surface occurred across the entire Beaumont Basin. He briefly described the Table ES-1 of the Subsidence Monitoring Program Report. Recommendation was made that annual surveys should be made and budget it next years for STWMA and or the Beaumont Basin Watermaster. The summary is that the temporary surplus is not causing an impact in the Beaumont Basin.

7. Status Report Regarding Septic Tank Impacts on Beaumont Basin Verbal Report – Charles J. Butcher (BCVWD)

Mr. Butcher indicated that since "Measure B" failed BCVWD has developed a new program to stop the pollution from entering the Beaumont Basin from north of the Banning Fault. The plan is to capture the pollution water from the north of the Beaumont Fault, pump it to Bogart Park, put it in artificial wet lands and then the water can be used for irrigation in the recycle water system. He indicated that Mr. Wildermuth has done some modeling as to what will happen if nothing is done to resolve this pollution issue. Joe Reichenberger, District Engineer did an estimated the cost of the project at \$16 million dollars. The District is also reviewing the Wellhead treatment as an option indicating it will be very expensive.

Mr. Schlange stated BCVWD met with the Bureau of Reclamation and that the Bureau of Reclamation was very interested in this project. Mr. Schlange recommended putting this item back on the agenda for the Watermaster to Discuss. Since Measure B failed, this matter has to be brought back and addressed because it is a water quality issue. Other agencies might get involved as the water pollution issue will probably affect them as well.

Discussion took place regarding the possibility of other agencies sharing the cost of this project. Examples were provided regarding other agencies facing the same water pollution problem that the BCVWD is currently facing.

Mr. Zoba stated that City of San Bernardino and other agencies need to be incorporated for storage of water and other matters relative to water supply for the Pass Area.

Mr. Schlange explained some options on how to generate the money to pay for the purchase of additional water. One of the issues mentioned was the amount of money that will be needed to put up front so a bond can be issued as it has to be demonstrated that the areas have the ability to meet repayment requirements.

8. Discussion Regarding Yucaipa Valley Water District Brine Line Verbal Report – Joseph Zoba (YVWD)

Mr. Zoba indicated that they have entered into a contract with JUDEX for the completion of the Environmental Preliminary Design of the Brine Line. They have a draft EIR based on their recycled water project. A new chart was handed out which showed that the alignments have changed. Other agencies are interested and this might cause the Brine Line to be modified. Preliminary Design Report will be finished by the end of 2007. The 4 million dollars that were received from SAWPA will be going to this project as a base amount for any agencies that wish to contribute beyond that. The next step will be sizing and it needs to be determined who needs what capacity. The design is expected to be completed by 2008 and online in 2010.

Mr. Schlange indicated that the STWMA PC No1 agreed to joint venture with Yucaipa on the environmental work. With the conditions on the State aqueduct, the droughts and other elements, he will be prepared to tell the STWMA PC 1 committee that it is time to move the desalter forward now. Recommended that committees enter into a cooperative agreement to joint ventures with Yucaipa by January 2008 and that would take care of the Beaumont plan as well.

9. Adjournment

The Combined Manager's Meeting was adjourned at 11:45am

Resolution 2008-001

To: Beaumont Basin Watermaster
From: J. Andrew Schlange
Date: January 8, 2008
Subject: Establishing a Public Records Act Policy

Background

Recently, on numerous occasions, members of the public have requested copies of tape recordings of meetings and copies of public documents such as reports etc. The number and cost of preparing such documents, make it necessary for the Watermaster to implement a policy for handling such requests.

Therefore, attached please find the proposed Watermaster Resolution 2008-001 which outlines such a policy for your consideration.

Staff Recommendation

That the Watermaster Commission approves Watermaster Resolution 2008-001 entitled "Resolution of the Beaumont Basin Establishing a Public Records Act Policy."

Respectfully,

J. Andrew Schlange

RESOLUTION 2008-001

RESOLUTION OF THE BEAUMONT BASIN WATERMASTER ESTABLISHING A PUBLIC RECORDS ACT POLICY

Section 1: Public Access

Public records are open to inspection at all times during regular office hours. The office hours of the Watermaster are from 9:00 a.m. to 4:00 p.m., Monday through Friday, except state and federal holidays.

Section 2: Request in Writing

Request to inspect public records should be directed to:

J. Andrew Schlange
Chief of Watermaster Services
Beaumont Basin Watermaster
C/o Beaumont Cherry Valley Water District
560 Magnolia Avenue
Beaumont, CA 92223

Section 3: Response to Request

Within 10 calendar days from the receipt of a written request for public records, the Watermaster's contact person or his designee will respond to the requester by letter, stating whether the Watermaster will comply with the request. In unusual circumstances, the time limit prescribed may be extended by up to 10 additional business days by written notice from the Watermaster setting forth the reasons for the extension and the date upon which a determination is expected to be mailed.

"Unusual Circumstances" means (a) the need to search for and collect the records from other offices; or (b) the request seeks voluminous records or (c) the need to consult with another agency having a substantial interest in the subject matter of the request.

If the Watermaster decides that certain information will not be disclosed, written notification will be provided to the requester stating the reasons for the decision, accompanied by the name and title of the person making the decision. The Watermaster shall justify withholding any record by showing that the record in question is exempt under an express provision of the California Public Records Act, or that, under the facts of a particular case, the public interest served by not making the record public clearly outweighs the public interest served by disclosure of the record.

Section 4: Copy Charge

Copies of any specifically-described and identified public record not exempt from disclosure will be made for a charge of 25 cents per page, 11" x 14" or smaller, black and

white. Larger documents (e.g. maps) and color documents will be reproduced at actual cost.

Recordings of public meetings, whether by tape or compact disk recording, are made only for the convenience of the Secretary in preparing the Official Minutes of the meetings. Such recordings are not maintained as public records and are disposed of as soon as the minutes have been transcribed. The Watermaster does not have an in-house capability of reproducing such recordings. As a courtesy, the Watermaster will arrange for the preparation of a duplicate recording, at the actual cost thereof. A written request for a duplicate recording shall be accompanied by a fee of \$25.00 to cover the costs incurred in producing the duplicate recording. All such requests and payment must be received within three business days of the meeting to ensure that the recording will still be available for reproduction. It is highly recommended and the public is encouraged to bring their own sound recording equipment to public meetings of the Watermaster. In order to ensure a quality sound recording, the Watermaster will assist any member of the public in situating the recorder to ensure a quality recording.

Section 5: Limits on Disclosure

Under the California Public Records Act, there are various categories of records that the Watermaster is not required to disclose, including:

- a) Raw draft documents;
- b) Records relating to pending litigation;
- c) Records comprised of personnel, medical or similar files;
- d) Records containing an individual's Social Security number, driver's license number or home telephone number;
- e) Records protected by the attorney-client privilege.

Section 6: Destruction of Public Records

Certain records of the Watermaster are maintained indefinitely, and others are maintained for a limited period of time and then are destroyed.

- a. Records Which Shall Be Retained Indefinitely:
 - 1) Records affecting title to real property;
 - 2) Court records;
 - 3) The minutes, ordinances and resolutions of the Watermaster.
- b. **Records Which May Be Destroyed:** Subject to the provisions of Subsection c below, the following records may be destroyed, as follows:
 - 1) **After a minimum of 2 years:** basic time and earnings cards, wage rate tables and work time schedules, agendas, meetings folders and packets, general correspondence, press releases and outdated policies and procedures.
 - 2) **After a minimum of 3 years:** personnel records and files, job descriptions.

- 3) **After a minimum of 4 years:** payroll records, income tax withholding records, federal unemployment tax records, and FICA contributions records.
 - 4) **After a minimum of 5 years:** budget preparation files, expired service and construction contracts, claims against the Watermaster, expired leases.
 - 5) **After a minimum of 6 years:** audit reports
 - 6) **After a minimum of 8 years:** Statements of Economic Interest.
- c. **Destruction Procedures:** After the minimum period of time has passed, records may be destroyed in accordance with one of the following two methods:
- 1) Method No 1 – destruction without making copy: the Chief of Watermaster Services may, with the written consent of the Watermaster's Legal Counsel, destroy any authorized Watermaster record, document; instrument, book or paper without making a copy thereof, after the same is no longer required.
 - 2) Method No 2 – destruction after making a copy: the Chief of Watermaster Services may, without the written consent of the Watermaster's Legal Counsel, cause to be destroyed any and all of the records, documents, instruments, books and papers authorized hereunder if a copy thereof is made and stored electronically and capable of being reproduced accurately and legibly, is accessible for public reference as the original record was, and a true copy of the record is maintained on a compact disk or other medium and kept in a safe and separate place for security purposes. For purposes of this policy, every reproduction of a document therefore shall be deemed an original record.

MOVE, PASSED AND ADOPTED this 8th day of January, 2008 upon the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

BEAUMONT BASIN WATERMASTER

By _____

BEAUMONT CHERRY VALLEY WATER DISTRICT

DIRECTORS

Stella Parks
President
Dr. Blair Ball
Vice President
Albert Chatigny
Marquel Dopp
William Lasb

560 Magnolia Avenue
Beaumont, California 92223-2258
Telephone 951-845-9581
Fax 951-845-0159

COPY

OFFICERS

C.J. Butcher
Secretary/Treasurer
J.C. Reichenberger
Engineer
Gerold Shoaf
Redwine and Sherrill
General Counsel

September 20, 2007

Frances Flanders
41045 Mohawk Drive
Cherry Valley, CA 92223

Re: Recording

Dear Mrs. Frances,

This letter is in response to your requests for a tape recording of the Watermaster Board Meeting and the Beaumont Basin Watermaster minutes for September 11, 2007.

We do not have the facilities or equipment to reproduce tape recordings for the Watermaster Board. A copy will have to be made by commercial means. It is estimated that it will cost \$25.00 to reproduce the tape recording. Please deposit the amount with me in advance and I will arrange to have the tape reproduced. It should be ready in about two weeks.

As to the minutes of the Watermaster meeting, the Chief of Watermaster Services asked me to advise you that, they will be available upon approval by the Board at its regular meeting, scheduled for January 2008.

However, if you wish to simply record the meeting on your own tape recorder, we can accommodate that, at no cost to you. Please call me for an appointment at (951)845-9581 Ext. 23.

COPY

Sincerely,

Blanca Marin

Blanca Marin
Administrative Assistant

cc: Watermaster

Resolution 2008-002

Beaumont Basin Watermaster

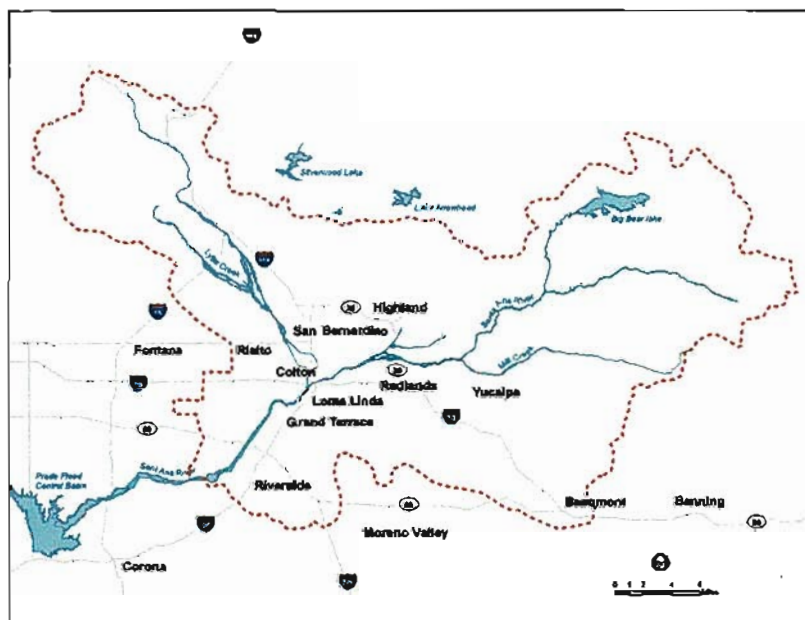
DATE: January 8, 2008

TO: Board of Directors

FROM: J. Andrew Schlange, Chief of Watermaster Services

SUBJECT: Proposed adoption of the Upper Santa Ana River Watershed Integrated Regional Water Management Plan

Since April 2006, the San Bernardino Valley Municipal Water District (Valley District) has been acting as the lead agency for the preparation of the *Upper Santa Ana River Watershed Integrated Regional Water Management Plan* (Plan). The Plan covers all, or portions of the cities and communities of San Bernardino, Riverside, Fontana, Rialto, Colton, Grand Terrace, Loma Linda, Highland, Redlands, Mentone, Yucaipa, Big Bear Lake, the San Timoteo Watershed, and a large portion of the San Bernardino National Forest. It was developed through an open, public process which involved fourteen different public agencies. Each of these agencies helped develop the Plan by their participation in the Technical Advisory Group (TAG). The TAG met twice a month during the planning process and presented updates to their elected officials as well as quarterly updates to the San Bernardino Valley Municipal Water District Advisory Commission on Water Policy.



Integrated Regional Water Management Plan Study Area

The Plan generally concludes that the region will be able to meet its future water needs by 1) implementing water conservation and water recycling programs that reduce overall demands, 2) efficiently managing its local water resources and 3) optimizing the use of imported water from the State Water Project by storing it when it is available for later use during drought periods.

The water Agencies that have participated in the development and the financing of the plan are:

City of Big Bear Department of Water and Power
East Valley Water District
Fontana Union Water Company
City of Redlands Municipal Utilities Department

City of Riverside Public Utilities
San Bernardino County Flood Control District
San Bernardino Municipal Water Department
San Bernardino Valley Municipal Water District
San Bernardino Valley Water Conservation District
San Geronimo Pass Water Agency
San Timoteo Watershed Management Authority
Water Resources Institute, California State University,
San Bernardino (non-funding partner)
West Valley Water District
Yucaipa Valley Water District

The Plan was distributed in the middle of October as a Public Draft for review and comment. All of the comments received during the public draft review period have been responded to or have been incorporated into the final version of the plan.

In addition to its value as a planning tool, an Integrated Regional Plan also enables any agency who adopts it to meet the Department of Water Resources eligibility requirements for grant programs such as Proposition 84.

Staff Recommendation: Adopt the Upper Santa Ana River Watershed Integrated Regional Water Management Plan by adopting Resolution 2008-002.

RESOLUTION NO. 2008-002

**RESOLUTION OF THE BEAUMONT BASIN WATERMASTER TO ADOPT THE
UPPER SANTA ANA RIVER WATERSHED INTEGRATED REGIONAL WATER
MANAGEMENT PLAN**

WHEREAS, most of the Appropriator Parties to the Beaumont 2004 Stipulated Agreement are members of a Technical Advisory Group established for the purpose of preparing an Integrated Regional Water Management Plan (Plan) for the upper Santa Ana River watershed;

WHEREAS, the Technical Advisory Group guided the preparation of the Plan and prepared a public draft of the Plan;

WHEREAS, the San Bernardino Valley Municipal Water District is a member of Technical Advisory Group and supported and participated in preparation of the Plan;

WHEREAS, the San Bernardino Valley Municipal Water District Advisory Commission on Water Policy held a public meeting to receive public comments on the Plan;

WHEREAS; the Technical Advisory Group has addressed public comments and prepared a final Plan; and

WHEREAS; the Technical Advisory Group recommends the adoption of the plan.

NOW, THEREFORE, BE IT RESOLVED BY THE BEAUMONT BASIN WATERMASTER that the Beaumont Basin Watermaster does hereby support and adopt the Upper Santa Ana River Watershed Integrated Regional Water Management Plan.

ADOPTED this 8th day of January, 2008

BEAUMONT BASIN WATERMASTER

By: _____
George Jorritsma
Chairman

ATTEST:

Charles Butcher
Secretary

Biennial Engineers Report

To: Beaumont Basin Watermaster
From: J. Andrew Schlange
Date: January 8, 2008
Subject: Biennial Engineers Report

Background

Transmitted herewith, please find the Watermaster First Biennial Engineers Report for your consideration and approval. The draft report was reviewed at the October 23, 2007 Managers Meeting at the Yucaipa Valley Water District. All comments which have been reviewed are included in the Final Report.

Staff Recommendation

Staff recommends that the Watermaster approve the Watermaster First Biennial Engineers Report

Respectfully,

J. Andrew Schlange

BEAUMONT BASIN WATERMASTER

For

SAN TIMOTEO WATERSHED MANAGEMENT AUTHORITY

V.

CITY OF BANNING, ET AL
(CASE NO. RIC 389197)

**FIRST BIENNIAL ENGINEERS REPORT
JULY 2003 THROUGH JUNE 2006**



June 2007

TABLE OF CONTENTS

1. INTRODUCTION	1-1
2. MONITORING PROGRAMS	2-1
2.1 Beaumont Basin Watermaster	2-1
2.1.1 Powers of the Beaumont Basin Watermaster	2-1
2.1.2 Subsidence Monitoring Program	2-1
2.1.3 Groundwater Level Monitoring Program	2-1
2.2 Maximum Benefit Monitoring Program	2-2
2.2.1 Well Canvas	2-2
2.2.2 Groundwater Level Monitoring Program	2-3
2.2.3 Groundwater Quality Monitoring Program	2-3
2.3 Cooperative Monitoring Programs	2-3
3. GROUNDWATER PUMPING, ELEVATION, AND STORAGE	3-1
3.1 Groundwater Pumping	3-1
3.2 Groundwater Elevation	3-2
3.3 Groundwater Storage	3-2
4. WATER QUALITY CONDITIONS	4-1
4.1 Background	4-1
4.2 Beaumont Basin Water Quality	4-1
4.2.1 Total Dissolved Solids	4-1
4.2.2 Nitrate-Nitrogen	4-2
4.2.3 Water Character Index	4-2
4.2.4 Constituents of Potential Concern	4-3
4.2.4.1 Aluminum	4-3
4.2.4.2 Arsenic	4-3
4.2.4.3 Chromium	4-3
4.2.4.4 Iron	4-3
4.2.4.5 Manganese	4-4
4.2.4.6 pH	4-4
4.2.4.7 Turbidity	4-4
5. REFERENCES	5-1
APPENDIX - GROUNDWATER LEVEL TIME HISTORIES	

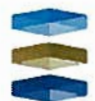


TABLE OF CONTENTS

LIST OF TABLES	
3-1	Groundwater Production in the Beaumont Basin
3-2	Projected Groundwater Pumping in the Beaumont Basin
4-1	Constituents Analyzed
4-2	Water Quality Exceedance Report

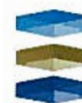
TABLE OF CONTENTS

LIST OF FIGURES	
2-1	Management Zones
3-1	Wells in the Beaumont Basin and Major Groundwater Producers
3-2	Wells with Water Level Data from 2003 to 2006
3-3	Groundwater Elevation for Fall 2003 – Beaumont Basin
3-4	Groundwater Elevation for Fall 2006 – Beaumont Basin
3-5	Change in Groundwater Elevation – Fall 2003 - Fall 2006
3-6	Specific Yield of the Beaumont Basin
3-7	Change in Storage in the Beaumont Basin – Fall 2003 - Fall 2006
4-1	Wells with Water Quality Data – 2002 – 2006
4-2	Average Total Dissolved Solids Concentration – 2002 – 2006
4-3	Maximum Total Dissolved Solids Concentration – 2002 – 2006
4-4	Total Dissolved Solids Time History in the Beaumont Basin
4-5	Wells with Water Quality Time Histories
4-6	Average Nitrate-Nitrogen Concentration – 2002 – 2006
4-7	Maximum Nitrate-Nitrogen Concentration – 2002 – 2006
4-8	Nitrate-Nitrogen Time History in the Beaumont Basin
4-9	Average Water Character Index – 2002 – 2006
4-10	Wells with Water Quality Maximum Contaminant Level Exceedances



TABLE OF CONTENTS

ACRONYM AND ABBREVIATIONS LIST	
acre-ft/yr	acre feet per year
BCVWD	Beaumont Cherry Valley Water District
CDFM	cumulated departure from the mean
MCL	maximum contaminant level
mg/L	milligrams per liter
RWQCB	Regional Water Quality Control Board, Santa Ana Region
SMWC	South Mesa Water Company
STWMA	San Timoteo Watershed Management Authority
SWRCB	State Water Resources Control Board
TDS	total dissolved solids
USGS	US Geological Survey
WEI	Wildermuth Environmental, Inc.
YVWD	Yucaipa Valley Water District



1. INTRODUCTION

Because of their common interest in the San Timoteo Watershed, the Beaumont Cherry Valley Water District (BCVWD), the City of Beaumont (Beaumont), the South Mesa Water Company (SMWC), and the Yucaipa Valley Water District (YVWD) formed the San Timoteo Watershed Management Authority (STWMA) in January 2001. Once formed, the STWMA began a watershed-wide, multi-phase effort to develop and implement a comprehensive San Timoteo Watershed Management Program (STWMP). Phase 1 included describing the area's water resources, establishing goals concerning the needs and issues identified for protecting and enhancing these resources, and affirming a management plan to accomplish these goals. This is documented in the San Timoteo Watershed Management Program, Phase 1 Report (Wildermuth Environmental, 2002) and its successor, the updated and re-titled Integrated Regional Water Management Program (IRWMP) for the San Timoteo Watershed (Wildermuth Environmental, 2005). The five goals include:

- Enhance basin water supplies.
- Protect and enhance water quality.
- Optimize management of the STWMA area groundwater basins.
- Protect riparian habitat in San Timoteo Creek and protect/enhance habitat in the STWMA area.
- Equitably distribute the benefits and costs of developing a San Timoteo Watershed Management Program (STWMP).

The process also identified the initiatives or program elements necessary to achieve these goals. Program Element 5 called for the STWMA members to establish a groundwater management entity for the Beaumont Basin. Two groups, representing appropriator and overlying interests, began negotiations in May 2002 to implement this program element.

A Stipulated Judgment was developed and submitted to the Court as a result of said negotiations. On February 4, 2004, the Honorable Judge Gary Tranbarger of the Superior Court of the State of California for the County of Riverside signed the Stipulated Judgment (Judgment) titled "*San Timoteo Watershed Management Authority, vs. City of Banning, et al.*," Case No. RIC 389197. Pursuant to the Judgment, the Court appointed a five-member Watermaster committee, consisting of representatives from the Cities of Banning and Beaumont, the BCVWD, the YVWD, and the SMWC. The effective date of the Judgment, for accounting purposes, is July 1, 2003. The Beaumont Basin encompasses approximately 26 square miles, has a safe yield of approximately 8,650 acre-feet/year, a total storage capacity of over a million acre-feet, and up to 200,000 acre-feet of storage capacity available for conjunctive use.

By approving the Judgment, the Court extended the responsibility of managing the Beaumont Basin to the Watermaster. Should there be any need in the future to resolve difficult questions, the Court retained continuing jurisdiction. The primary responsibilities of the Watermaster are listed below:

- Administer the Beaumont Basin Judgment.
- Approve producer activities.
- Develop contracts for beneficial programs and services.
- Maintain and improve the water supply.
- Maintain and improve water quality.
- Monitor and understand the basin.
- Provide cooperative leadership.



Part VI, Paragraph 5(A) of the Judgment calls for the establishment of Rules and Regulations for the conduct of Watermaster affairs. On June 8, 2004, Watermaster adopted the Rules and Regulations of the Beaumont Basin Watermaster. Section 2.13 of the Rules and Regulations calls for a basin condition report to be prepared at least once every two years. This report fulfills that requirement and is the first such report. The study period for this report is the fiscal years 2003-04 through 2005-06.

2. MONITORING PROGRAMS

2.1 Beaumont Basin Watermaster

2.1.1 Powers of the Beaumont Basin Watermaster

Part VI, Paragraph 5(G) of the Judgment gives the Beaumont Basin Watermaster (Watermaster) the power to conduct the monitoring of groundwater levels, ground levels, storage, and water quality. On a monthly basis, the appropriators report groundwater levels and production for the wells in their sphere of influence to the Watermaster. The appropriators in the Beaumont Basin include the City of Banning (Banning), the BCVWD, the SMWC, and the YVWD. As with groundwater level and groundwater production data, groundwater quality data are being managed by Watermaster in order to perform the requisite scientific and engineering analyses to ensure that the requirements of the Judgment are being met. Watermaster has a relational database that contains well location, construction, lithology, specific capacity, groundwater level, and water quality information.

In addition to the monitoring mentioned above, the Watermaster has initiated two studies to further understand the state of the Beaumont Basin and the impacts from the operation of the Basin: the subsidence monitoring and groundwater level monitoring programs.

2.1.2 Subsidence Monitoring Program

A subsidence monitoring program was initiated by the STWMA on behalf of the Watermaster during the 2005-06 fiscal year. The Watermaster adopted Resolution 2004-07 entitled "*A Resolution of the Beaumont Basin Watermaster in Support of AB303 Grant Applications That Further the Management of the Beaumont Basin*" on November 4, 2004. Program Element 1 of the IRWMP calls for the development and implementation of a comprehensive monitoring program for the STWMA area, including the Beaumont Basin. The Watermaster is concerned about the potential for future subsidence that could occur as a result of past and future groundwater pumping in the Basin. On behalf of the Watermaster, the STWMA developed a monitoring program specifically to assess the occurrence of subsidence from past groundwater pumping and future pumping. To implement this program, the STWMA applied for an AB303 Grant from the Department of Water Resources. The Watermaster agreed to match the funds if the application was successful. The application was successful, and as previously stated, the subsidence monitoring program was initiated during the 2005-06 fiscal year.

The preliminary results of the program indicated very little, if any, subsidence has occurred as a result of historic pumping and overdraft. Historical subsidence data (survey data and remote sensing data [InSAR]) for the period of 1928 to 2000 was compiled, analyzed, and used to finalize the locations of new survey lines that will be monitored for land subsidence, if any, that may accompany the future drawdown of water levels. The Beaumont Basin monuments were installed, and ground level surveys were completed in November 2006 and April 2007. Annual ground level surveys will be conducted to monitor for any possible land subsidence.

2.1.3 Groundwater Level Monitoring Program

In fiscal year 2006-07, the Watermaster initiated a groundwater level monitoring program to determine the location of subsurface groundwater barriers and to collect consistent long-term groundwater level information for its own use and for the use of pumpers in the Beaumont Basin. The implementation of this program consisted of the establishment of a groundwater level monitoring network and the



installation of integrated pressure transducers and data loggers in ten wells. These instruments measure and record groundwater levels every fifteen minutes.

In addition to the data that the Watermaster collects from the ten pressure transducers mentioned above, the BCVWD and the SMWC report transducer data from their wells to the Watermaster. This information is also stored in a relational database.

2.2 Maximum Benefit Monitoring Program

In January 2004, the Santa Ana Regional Water Quality Control Board (RWQCB) amended the Water Quality Control Plan (Basin Plan) for the Santa Ana River Basin, incorporating an updated total dissolved solids (TDS) and nitrogen management plan (RWQCB, 2004). This amendment includes revised groundwater subbasin boundaries, revised TDS and nitrate-nitrogen quality objectives for groundwater, revised TDS and nitrogen wasteload allocations, revised reach designations, as well as TDS and nitrogen objectives and beneficial uses for specific surface waters.

The Basin Plan Amendment includes both “antidegradation” and “maximum benefit” objectives for TDS and nitrate-nitrogen for the Beaumont, San Timoteo, and Yucaipa Management Zones. The application of the “maximum benefit” objectives relies on the implementation of a specific program of projects and requirements—on behalf of the STWMA, the YVWD, and the City of Beaumont—that are an integral part of the IRWMP for the San Timoteo Watershed.

Table 5-9a and 5-10a in the Basin Plan Amendment identify the projects and requirements that must be implemented to demonstrate that water quality, consistent with maximum benefit to the people of the state, will be maintained. Two of the commitments in these tables are for surface water and groundwater monitoring programs. On April 15, 2005, the RWQCB adopted resolution R8-2005-0066—approving the Surface Water and Groundwater Monitoring Programs in support of the STWMA’s and the City of Beaumont’s maximum benefit commitments in the Beaumont and San Timoteo Management Zones—and resolution R8-2005-0065—approving the Surface Water and Groundwater Monitoring Programs in support of the YVWD’s maximum benefit commitments in the San Timoteo and Yucaipa Management Zones. The Groundwater Monitoring Programs for the Beaumont, San Timoteo, and Yucaipa Management Zones include the following key components: a well canvas, a groundwater level monitoring program, and a groundwater quality monitoring program.

2.2.1 Well Canvas

The first step of the groundwater monitoring program was to identify the universe of wells in the management zone of interest. A total of about 520 wells were identified in the Beaumont, San Timoteo, and Yucaipa Management Zones. Figure 2-1 shows the locations of the management zones and the wells identified. To obtain the necessary station information and to determine whether a water level measurement and water quality sample could be obtained, every well was canvassed via a site visitation. Station information is the static information of a well, including well name(s), well owner, location coordinates, well status, casing diameter, well depth, lithology, and screened intervals. This data was entered into a relational database. During the well canvas effort, many private wells could not be located and were presumed to be destroyed. New wells were found and added to the groundwater level and quality monitoring programs where appropriate.

2.2.2 Groundwater Level Monitoring Program

At the initiation of the Groundwater Level Monitoring Program, historical groundwater level data was acquired from the entities that have collected groundwater level data in the management zones of interest. Data is collected annually from agencies that have existing groundwater level monitoring programs. Additionally, monthly static groundwater level measurements are taken at all of the wells where water level measurements are obtainable, as identified during the well canvassing. All groundwater level data is entered into a relational database.

A key well program will be developed in fiscal 07/08. An assessment of the groundwater level data will be made to evaluate the minimum set of wells that need to be monitored to meet the management needs of the area. This minimum set of wells may include the construction of new monitoring wells.

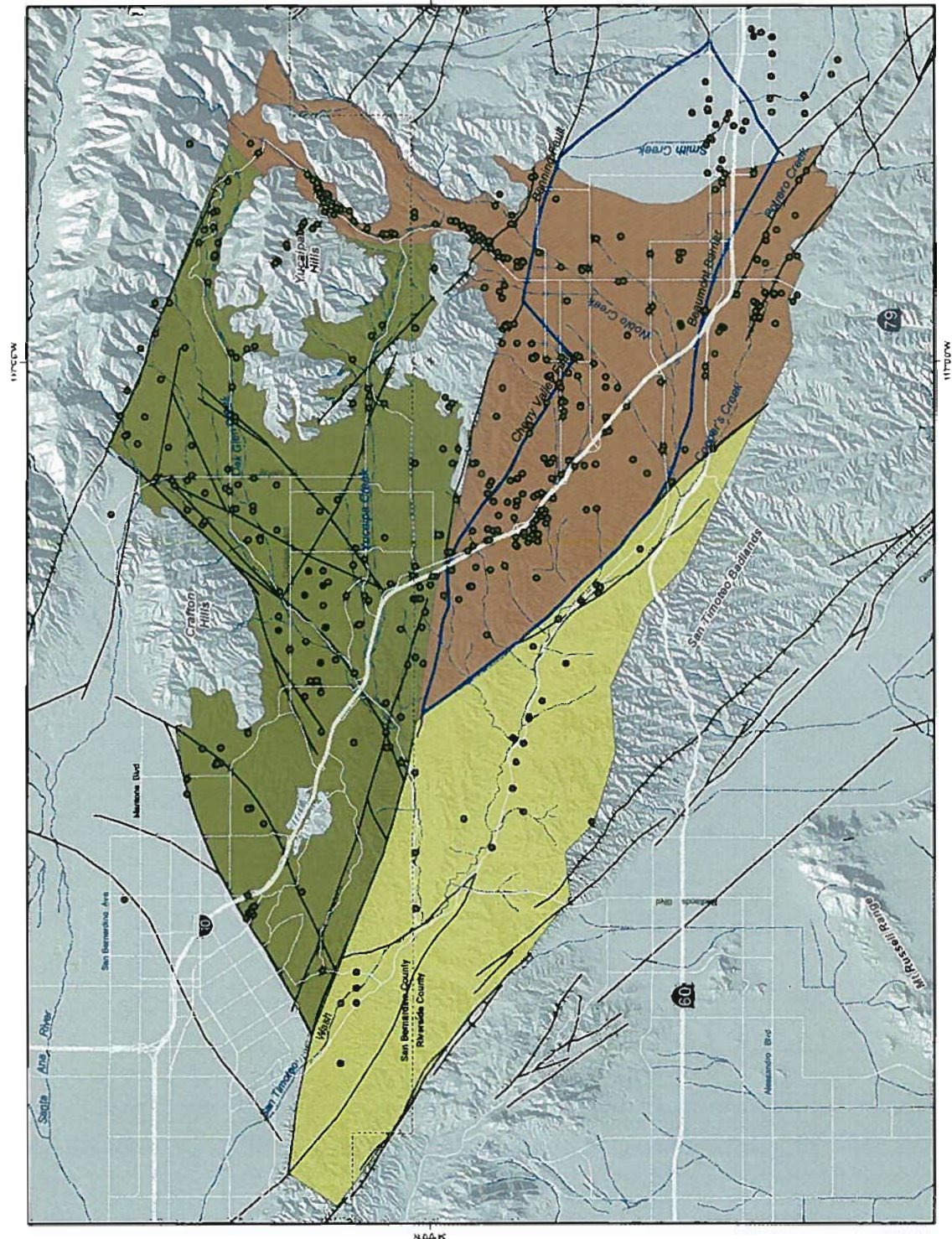
2.2.3 Groundwater Quality Monitoring Program

The Groundwater Quality Monitoring Program consists of collecting existing water quality data and sampling wells without existing data. All available groundwater quality data was acquired from entities that have existing and mandated water quality programs. Water quality samples from wells operated by appropriator producers and some overlying producers are collected as part of formalized monitoring programs. Constituents include those that are regulated for drinking water purposes in the California Code of Regulations, Title 22 or that are of special interest to the pumper. As with the Groundwater Level Monitoring Program, data is gathered annually from the agencies that collect groundwater quality data. A sampling program has been implemented for private and publicly owned wells that were identified for sampling in the well canvassing and are not part of an existing or mandated water quality monitoring program. These wells have been sampled once during the first two years of the monitoring program. All groundwater quality data is entered into a relational database.

A key well program will be developed in fiscal 07/08. The data collected will be rigorously reviewed, and based on this review, a long-term monitoring program will be developed and implemented. The long-term monitoring program will contain a minimum set of key wells that can be periodically monitored to assess water quality conditions in the area over time. As with groundwater level monitoring, this may require the construction of new monitoring wells.

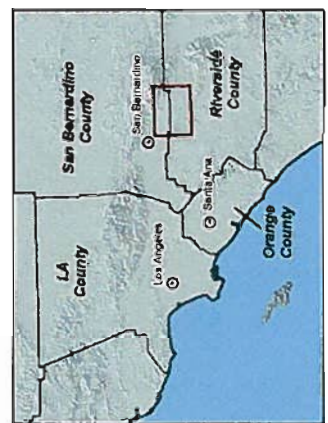
2.3 Cooperative Monitoring Programs

The U.S. Geological Survey (USGS) monitors numerous wells throughout the Beaumont Basin. This monitoring consists of water level measurements in the spring and fall and periodic water quality sampling.

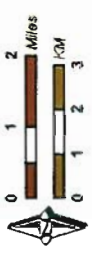


Main Map Features

- Management Zone
- Beaumont
- San Timoteo
- Yucaipa
- Wells Identified for Well Canvass
- Beaumont Basin
- Stream
- Fault



Produced by:
WILDERMUTH
 ENVIRONMENTAL, INC.
 23832 Alhambra Drive
 Lake Forest, California 92550
 951-455-3030
 www.wilderemuth.com/enr/2017/07/01/



Beaumont Basin Watermaster
 Biennial Engineers Report 2018

Management Zones

Figure 2-1

3. GROUNDWATER PUMPING, ELEVATION, AND STORAGE

3.1 Groundwater Pumping

Table 3-1 shows appropriative and overlying groundwater pumping in the Beaumont Basin for the study period of this report, which is fiscal years 2003-04 through 2005-06. All parties to the Judgment are required to report monthly pumping to the Beaumont Basin Watermaster. In some cases, only annual pumping was reported or engineering estimates of pumping were made. Figure 3-1 shows the wells in the Beaumont Basin and shows which wells pump more than 10 acre-feet/year. In 2005, Sunny-Cal Egg and Poultry Company ceased pumping.

The largest pumpers in the Beaumont Basin, those that pump over 1,000 acre-feet/year, are Banning, the BCVWD, the YVWD, and the So Cal Professional Golfer's Association. The first three pumpers supply drinking water to the Cities of Banning, Beaumont, and Yucaipa, and unincorporated areas of Riverside County and the So Cal PGA pumps groundwater to irrigate golf courses. Of the four largest pumpers, the BCVWD pumps the greatest amount of groundwater from the Beaumont Basin. The BCVWD's service area and sphere of influence, which is shown in Figure 3-1, cover the over half of the Beaumont Basin.

Over the study period, the BCVWD's and the SMWC's groundwater pumping has increased; whereas, the City of Banning's groundwater pumping has decreased. The YVWD's groundwater pumping fluctuated over the study period. Even though Banning's pumping decreased during the study period, their overall water demand has grown. To meet its water demand, the city has utilized its groundwater supplies from other basins.

The population of San Timoteo Watershed region is growing and water demand is increasing. In the next couple of years, recycled water will be used for irrigation in lieu groundwater. Moreover, the two largest overlying pumpers in the Beaumont Basin, the California Oak Valley Golf and Resort and So Cal Professional Golfer's Association, will be using recycled water for irrigation in the near future. And, the groundwater pumping of other overlying pumpers is expected to decrease in the next few years as more development occurs and land uses shift from agricultural to residential and commercial.

Table 3-2 shows the projected groundwater pumping in the Beaumont Basin through the year 2020. The projections for the appropriators shown in this table are based on the most current planning numbers from the individual agencies. The projections for overlying pumpers reflect the transition of overlying water rights to appropriative water rights for the overlayers that will transfer their water rights because of changing land uses and the use of recycled water in lieu of groundwater. The Groundwater pumping by the SMWC and overlying pumpers is projected to decrease through 2020, while pumping by Banning, the BCVWD, and the YVWD is projected to increase through 2020. Although the SMWC plans to decrease its pumping in the Beaumont Basin, its demand will increase, and this increase in demand will be met by imported water, recycled water, and other groundwater sources. Any groundwater that the City of Banning, the BCVWD, the YVWD pump from the Beaumont Basin beyond the safe yield will be offset by the use of the temporary surplus and the recharge of imported water, recycled water, stormwater, and urban runoff.

3.2 Groundwater Elevation

Section 2 describes the groundwater level monitoring programs in the Beaumont Basin. Groundwater level data is being collected by several agencies and includes data on private, monitoring, and production wells. Figure 3-2 shows all wells in the Beaumont Basin with groundwater level data for the period of 2003 through 2006. This data was used to generate groundwater elevation contour maps for fall 2003 and fall 2006.

Groundwater elevation time histories are provided in the Appendix for the wells in Figure 3-2 that have numerical IDs. In these time histories, groundwater elevation time histories are plotted against a cumulative departure from the mean (CDFM) curve. The CDFM curve is a representation of precipitation over time and, when plotted with a groundwater elevation time history, aids in understanding groundwater elevation fluctuations. The time histories can be used to distinguish between static and pumping groundwater levels. Pumping groundwater level measurements were discarded for the development of the groundwater elevation contour maps.

Figure 3-3 is a groundwater elevation contour map for fall 2003. It displays the general groundwater flow patterns (groundwater flows perpendicular to the contours). Groundwater flow typically follows the surface drainage patterns from higher elevations in the north to lower elevations in the southeast and west. Along these flow paths, groundwater encounters numerous faults, which act as barriers to flow with varying effectiveness. The major fault barriers in the Beaumont area are the Banning and Cherry Valley Fault Zones and the Beaumont Barrier. From the Banning Fault, at the mouth of Edgar Canyon, groundwater within the Beaumont Basin flows southward under a relatively minor gradient toward the City of Beaumont where the groundwater flow divides. Groundwater east of this divide flows southeastward, and some discharges as underflow into the Banning Basin. West of this divide, groundwater flows westward and discharges as underflow into the San Timoteo Basin or as rising groundwater at springs and seeps in the tributaries of San Timoteo Creek.

Figure 3-4 shows groundwater elevations for fall 2006. Because the Groundwater Level Monitoring Program began in 2005, more groundwater elevation data was available in 2006 than in 2003. Overall, the groundwater flow follows the same general pattern as in fall 2003.

Across the Beaumont Basin groundwater elevations have predominately declined over the period ranging from 2003 to 2006. The difference in groundwater elevations is shown in Figure 3-5. Groundwater elevations have declined by about 20 feet throughout the majority of the basin and increased by about 10 to 20 feet in the southeast near the border of the Beaumont and Banning Basins. This increase in groundwater elevations is most likely due to decreased pumping at the wells owned by Banning in this region.

Groundwater elevations were expected to decline over the study period as groundwater production has exceeded the safe yield of the Beaumont Basin. Specifically, during the study period, groundwater pumping exceeded the safe yield by about 21,300 acre-feet. The Judgment established a temporary surplus that allows up to 160,000 acre-ft of overdraft within the Beaumont Basin during the first ten years of operation. The purpose of the temporary surplus is to create room for the safe storage of supplemental water and to reduce losses from the basin to surrounding basins.

3.3 Groundwater Storage

Groundwater storage changes in response to how a groundwater basin is operated. This change can be calculated from the change in groundwater elevations over a known time period and the specific yield of

the aquifer. The specific yield is the quantity of water that a unit volume of an aquifer, after being saturated, will yield by gravity. The specific yield of the Beaumont Basin was estimated using lithological data and pump test data from well completion reports. These estimates were further refined during the calibration of the BCVWD Beaumont Area Groundwater Flow Model (WEI, 2007). During the calibration process, the specific yield values were adjusted such that the model simulated water level changes over the 1927 to 2004 period closely corresponded to the actual measured water level data for that period. The resulting areal distribution of specific yield is shown in Figure 3-6.

On the far east side of the northwest edge of the basin, there is a small cluster of wells. With the exception of these few wells, there are no other known wells in this region and consequently no lithological or water level data was available. The specific yield and change in storage was not calculated for this region. However, based on the geology, the surface water flow patterns, and water level data from the cluster of wells previously mentioned, it appears that this region is hydrologically separated from the remainder of the Beaumont Basin.

For the study period, the change in storage of the Beaumont Basin was calculated using the change in groundwater elevation presented in Figure 3-5 and the specific yield shown in Figure 3-6. The Beaumont Basin was divided into 100 x 100 meter grid cells, and the change in storage was calculated for each cell. The resulting change in storage per cell was summed for all cells. The change in storage was approximately -14,450 acre-feet (AF). The areal distribution of the change in storage is shown in Figure 3-7. This decline in groundwater storage was expected because, as previously noted, annual groundwater production during the study period has exceeded the safe yield of the basin as defined by the Judgment, which is 8,650 acre-feet/year (AFY).

The developed yield of the basin is the yield developed over a period of time, which is based on how the basin is operated. The developed yield was calculated using the following equation:

$$\Delta Y = \frac{\sum P + \Delta S - \sum AR}{\Delta t}$$

where:

Y = yield

P = pumping

S = storage

AR = artificial recharge

t = time

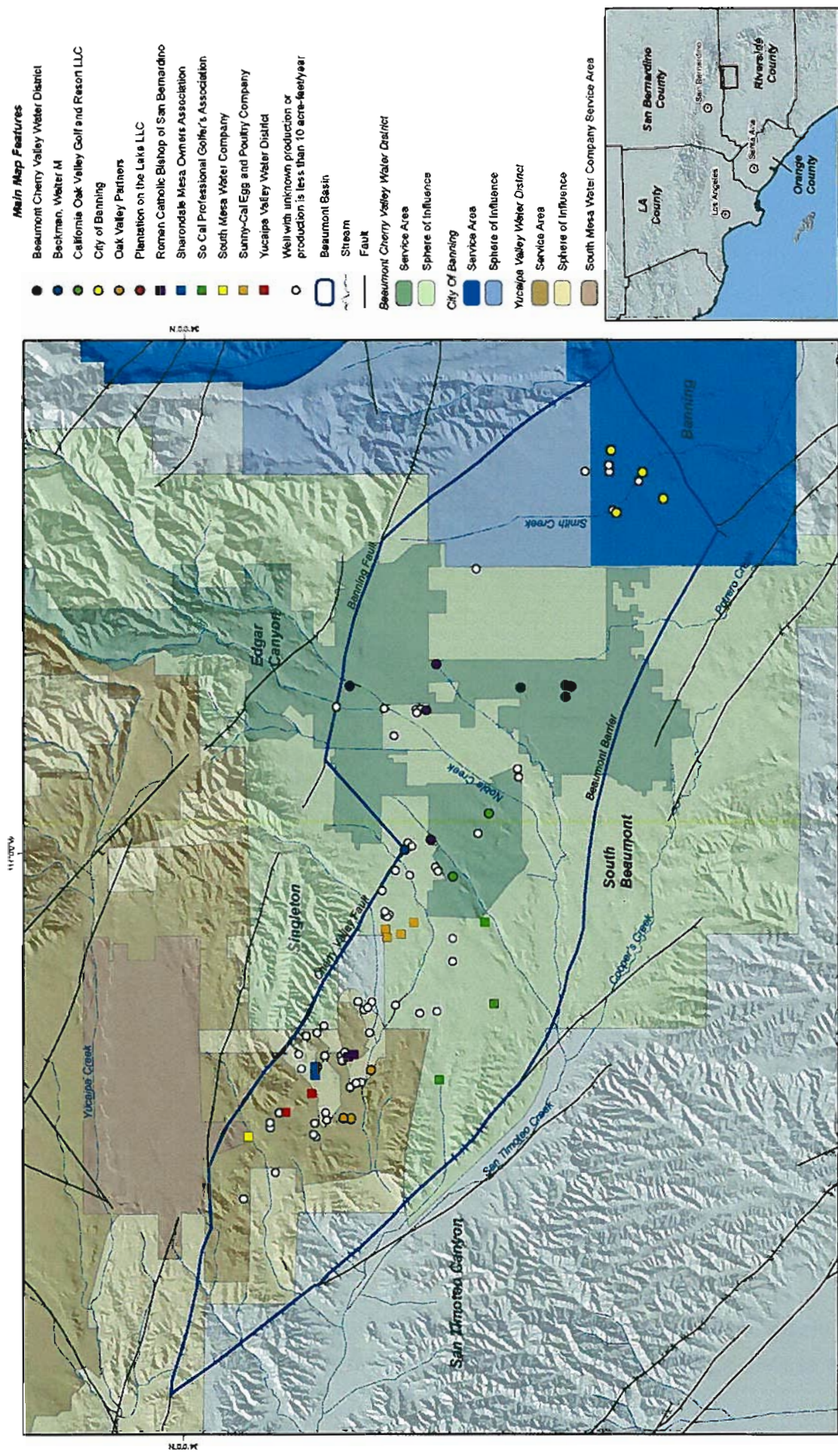
Over the study period, the developed yield of the basin was about 9,800 AFY. This exceeds the safe yield of the basin as set forth in the Judgment by about 1,150 AFY. This difference may indicate that the yield of the basin is greater than the safe yield defined by the Judgment. The yield of the basin is dependent on the outflow of groundwater from the basin to surrounding basins and surface water systems. These outflows are head dependent, and the decrease in groundwater elevations may have resulted in reduced losses from the Beaumont Basin and, thus, a greater developed yield.

**Table 3-1
Groundwater Production in the Beaumont Basin (acre-feet)**

Owner	Well Name	Station ID	Fiscal Year 2003-04	Fiscal Year 2004-05	Fiscal Year 2005-06
City of Banning					
	Well C2	1004340	1,018	312	0
	Well C3	1004377	1,000	791	325
	Well C4	1206706	827	918	318
	Well M3	1206700	896	75	698
	Well M9	1206834	63	0	0
	Production from BCVWD		347	324	427
	Total		3,951	2,420	1,768
Beaumont Cherry Valley Water District					
	Well 1	1004351	513	870	1,220
	Well 2	1004349	1,941	765	0
	Well 3	1004350	1,018	947	765
	Well 16	1002938	1,139	740	706
	Well 21	1201487	838	2,099	2,157
	Well 22	1002968	1,103	725	535
	Well 23	1207328	0	564	1,751
	Well 24	1206224	0	0	919
	Production for Banning		-347	-324	-427
	Total		6,204	8,386	7,825
South Mesa Water Company					
	3rd No. 4 Well	1003035	420	558	832
Yucalpa Valley Water District					
	Well 35	1003058	70	272	114
	Well 48	1003063	1,835	1,012	1,415
	Total		2,005	1,284	1,530
Beckman, Walter M.					
		1206852	27	27	83
California Oak Valley Golf and Resort LLC					
	Oak Valley #1	1007025			742
	OVGC Comfort Stn	1206848			97
	Total		1,227	835	839
Merlin Properties					
			6	6	6
Oak Valley Partners					
	Haskell Ranch-Main ⁶	1003078	49		
	Singleton Ranch #5	1003075	300	300	300
	Singleton Ranch #7	1003072	143	90	188
	Irrigation Stokes	1201567	10	10	10
	Total		503	400	478
Plantation on the Lake LLC					
		1206846	321	313	327
Rancho Calimesa Mobile Home Park					
			59	59	59
Roman Catholic Bishop of San Bernardino					
			78	72	72
Sharondale Mesa Owners Association					
	Well No.1	1206844	144	110	95
	Well No.2	1206845	25	53	91
	Total		169	163	186
So Cal Professional Golfer's Association					
	Well A	1206995	275	196	160
	Well C	1206997	32	82	0
	Well D	1206998	1,094	1,110	1,225
	Total		1,401	1,389	1,385
Stearns, Leonard M.					
			1	1	1
Sunny-Cal Egg and Poultry Company					
	Well No. 1	1206854			
	Well No. 2	1002950			
	Well No. 3	1201475			
	Well No. 4	1201480			
	Well No. 5	1206993			
	Well No. 6	1206994			
	Total		452	452	0
Total			16,824	14,146	14,887

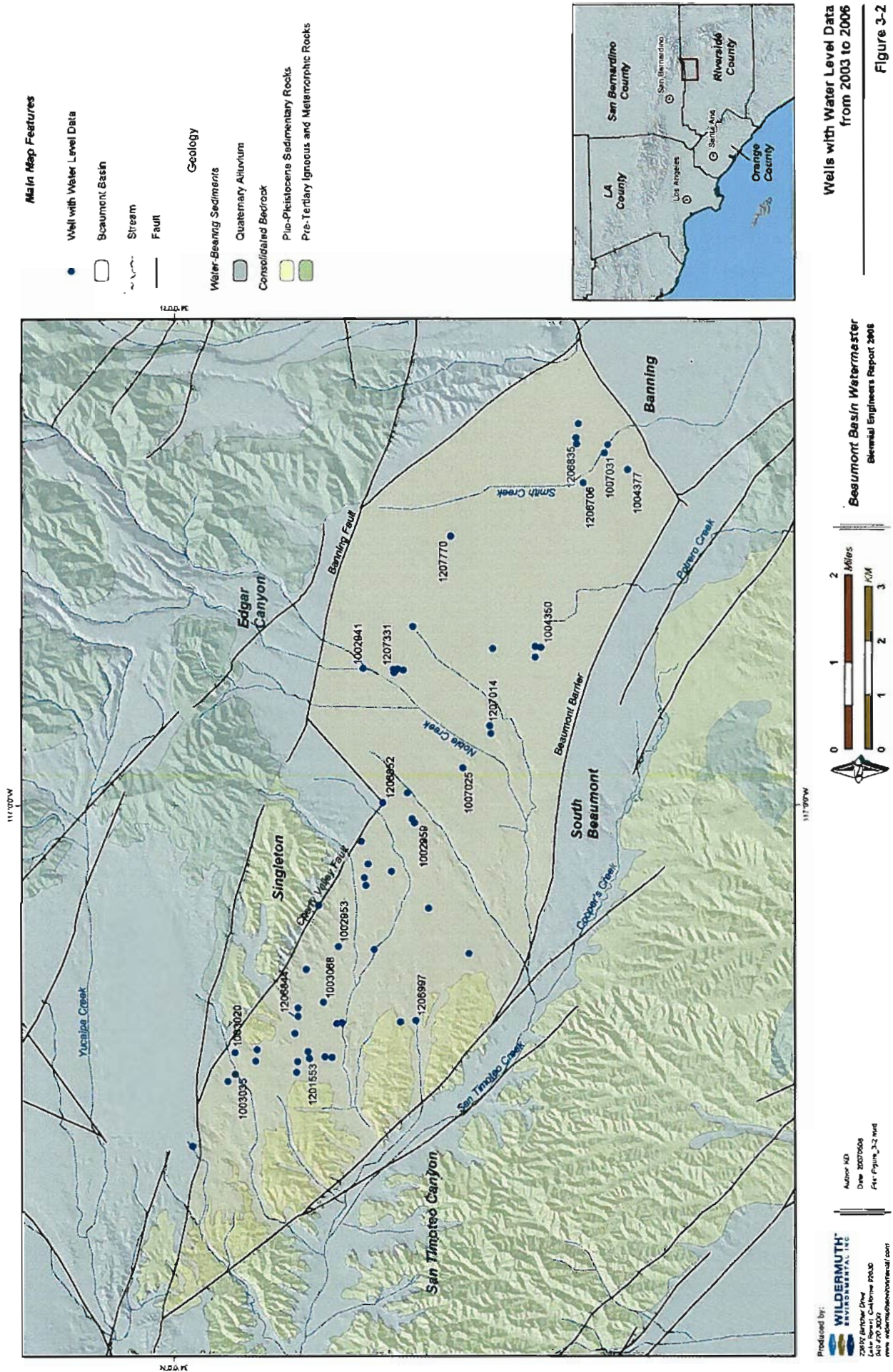
Table 3-2
Projected Groundwater Pumping in the Beaumont Basin

Year	Beaumont Cherry Valley Water District	City of Banning	South Mesa Water Company	Yucaipa Valley Water District	Overlying Pumpers	Total
2005	7,054	1,780	636	1,274	4,251	14,995
2006	9,252	1,858	645	2,027	4,313	18,095
2007	9,950	2,929	600	2,300	4,074	19,853
2008	10,380	4,051	800	2,350	3,918	21,299
2009	12,240	1,924	600	2,400	3,918	21,082
2010	14,100	2,291	600	2,463	678	20,132
2011	15,140	2,835	600	2,463	678	21,716
2012	16,180	3,378	600	2,463	678	23,299
2013	17,220	3,921	600	2,463	678	24,882
2014	18,260	4,465	315	2,463	678	26,181
2015	19,300	5,008	315	2,463	678	27,764
2016	19,540	5,531	315	2,463	678	28,527
2017	19,780	6,055	315	2,463	678	29,291
2018	20,020	6,578	315	2,463	678	30,054
2019	20,260	7,102	315	2,463	678	30,818
2020	20,500	7,625	315	2,463	678	31,581



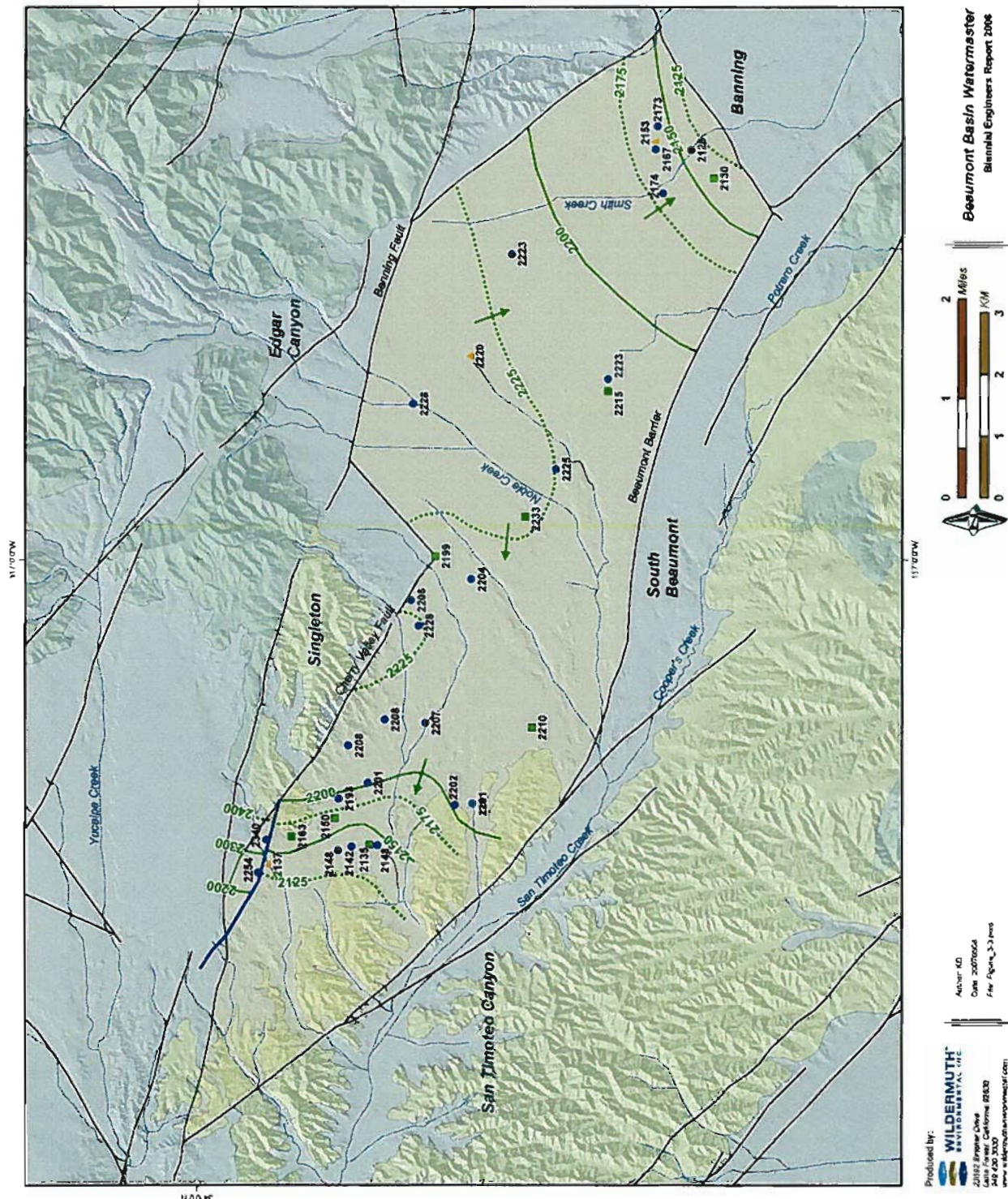
Wells in the Beaumont Basin and Major Groundwater Producers

Figure 3-1



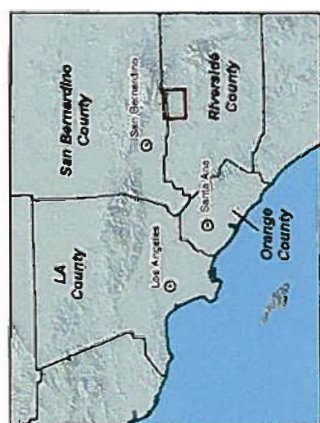
Wells with Water Level Data
from 2003 to 2006

Figure 3-2



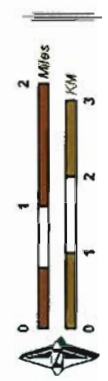
Main Map Features

- Contours of Equal Groundwater Elevation (feet above mean sea level)
 - 2100
 - 2125
- General Direction of Groundwater Flow
- Well Activity of Groundwater Elevation Measurement
 - Recovering
 - Estimated Static
 - Static
- Inferred Barrier to Groundwater Flow (based on significant differences in groundwater elevation at neighboring wells)
- Beaumont Basin
- Stream
- Fault
- Geology
 - Water-Bearing Sediments
 - Quaternary Alluvium
 - Consolidated Bedrock
 - Plio-Pleistocene Sedimentary Rocks
 - Pre-Tertiary Igneous and Metamorphic Rocks



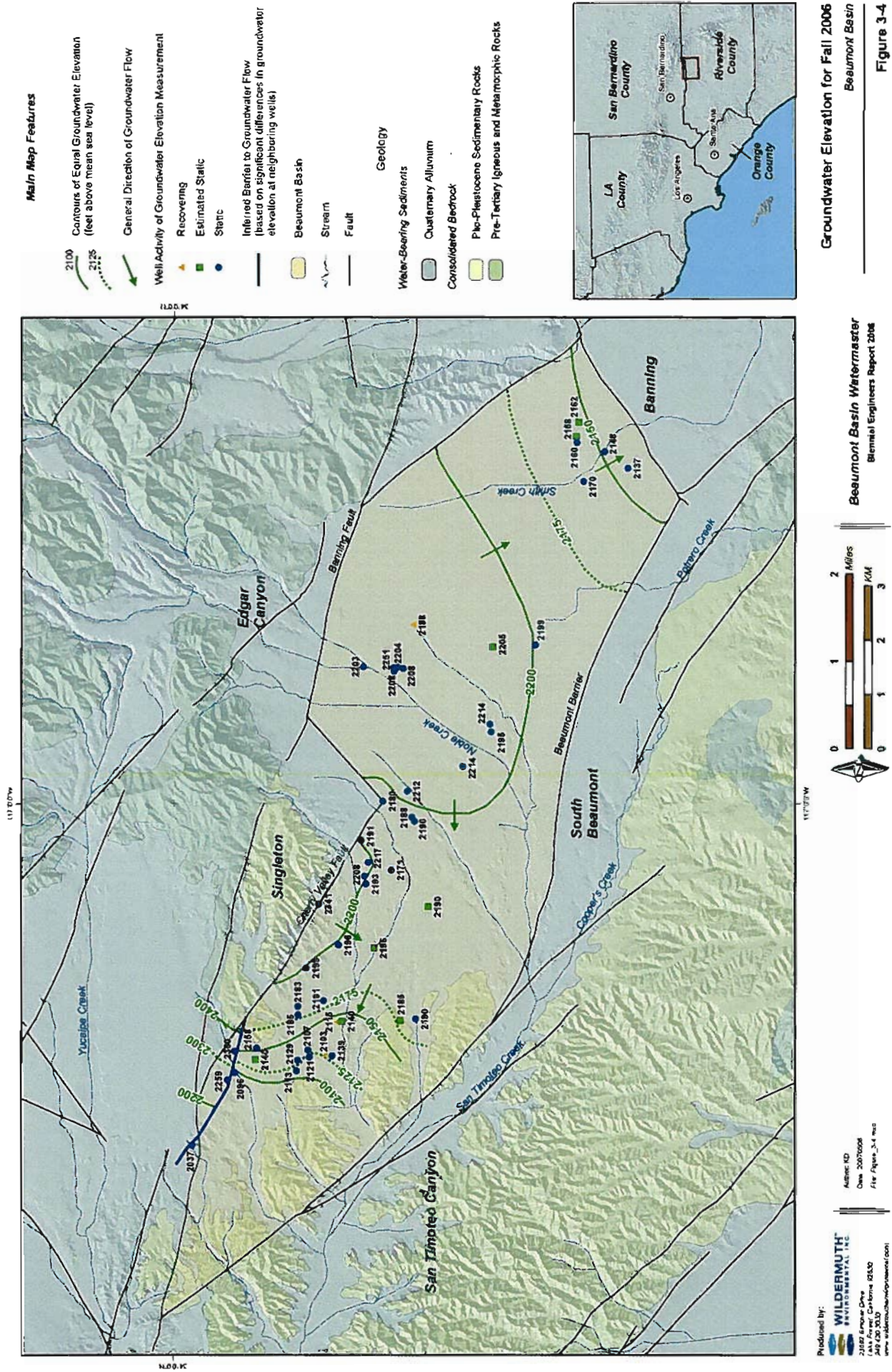
Groundwater Elevation for Fall 2003
Beaumont Basin
Figure 3-3

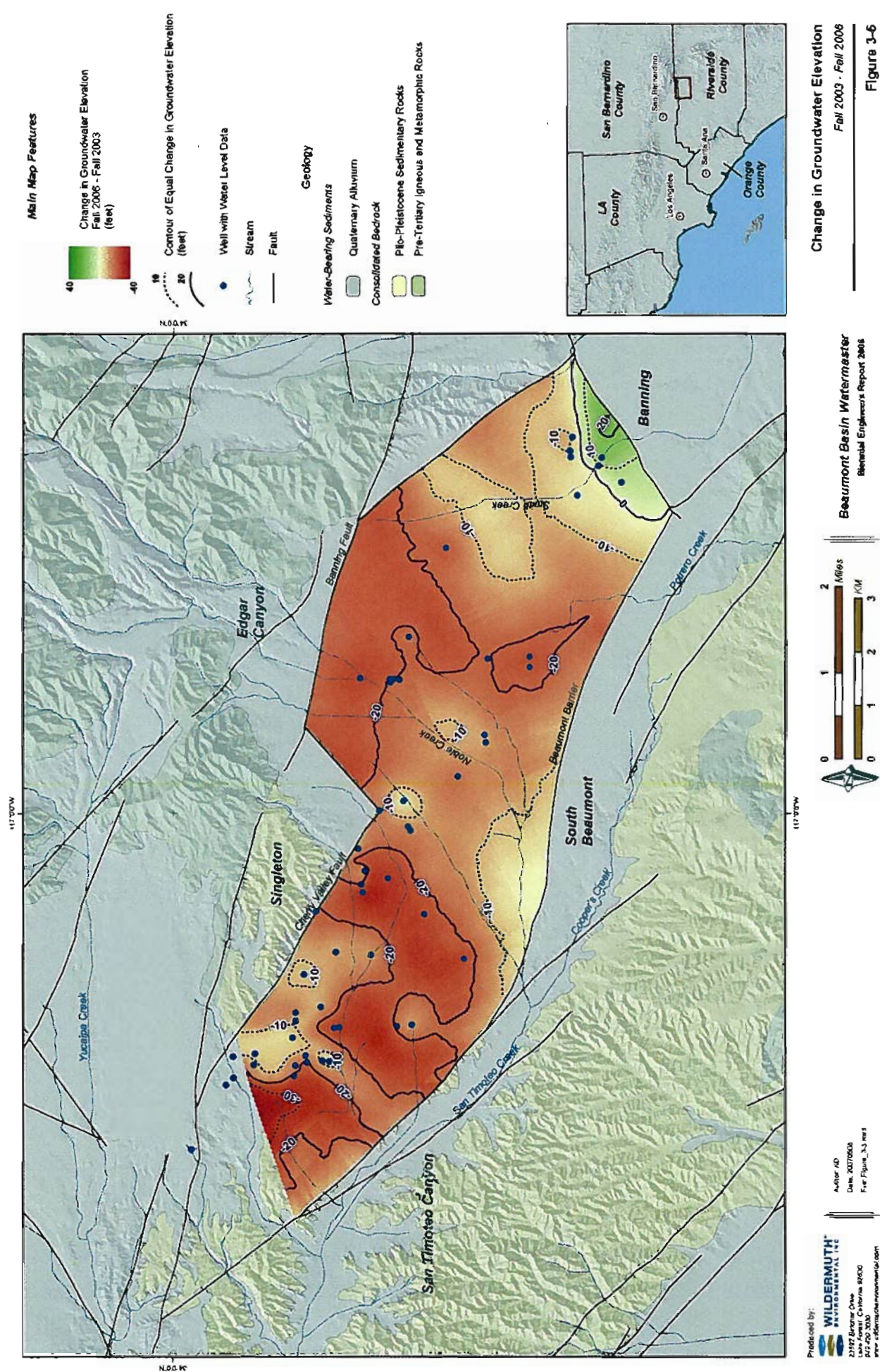
Beaumont Basin Watermaster
Biennial Engineers Report 2006

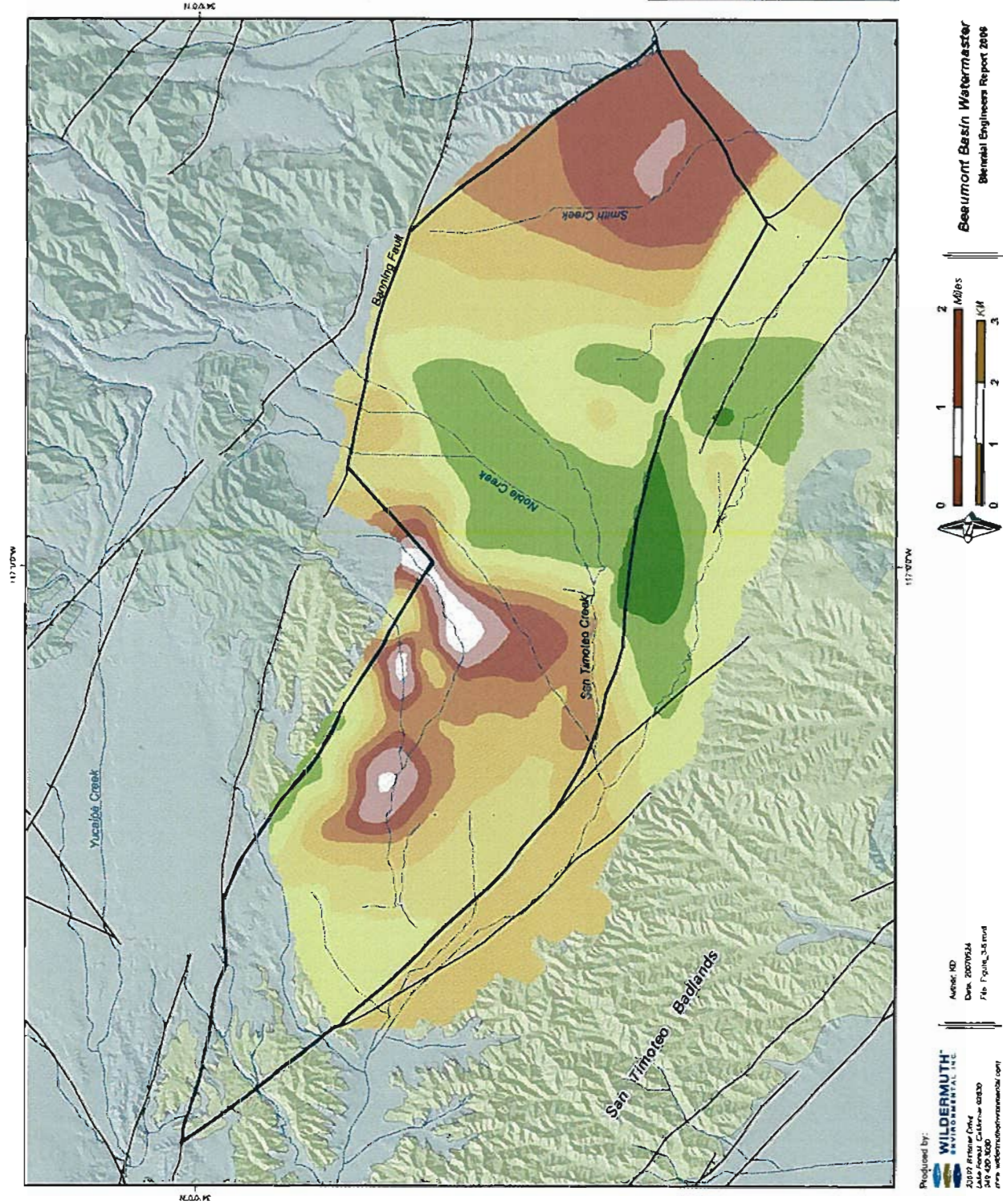


Produced by:
WILDERMUTH
ENVIRONMENTAL, INC.
20182 Bridge Drive
San Diego, California 92128
619 450 2820
www.wilderdmuth.com

Author: KD
Date: 2/27/2006
File: Figure_3-3.mxd



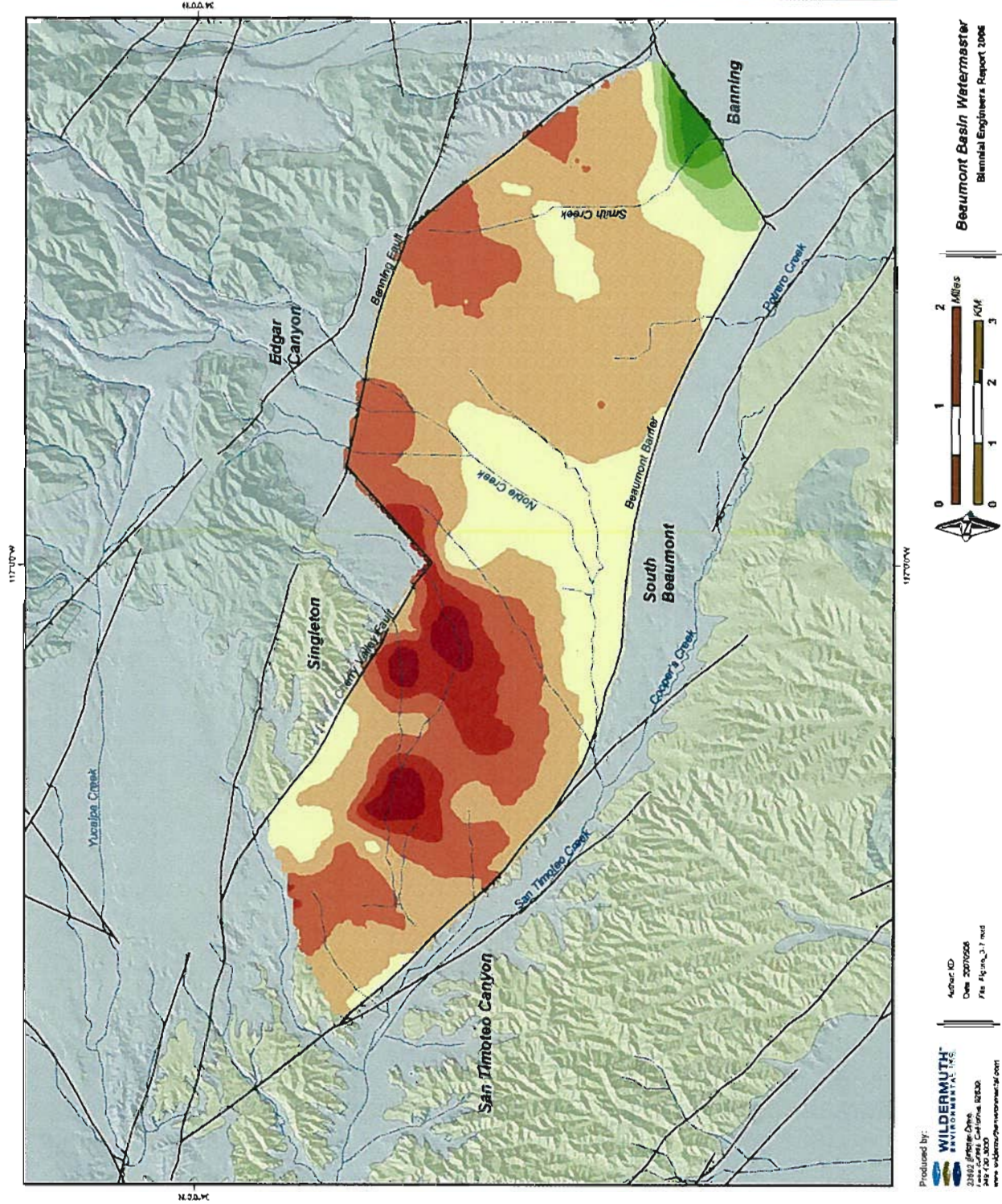




Beaumont Basin Watermaster
Blended Engineers Report 2008

Specific Yield of the Beaumont Basin

Figure 3-6



4. WATER QUALITY CONDITIONS

4.1 Background

In the past, various entities have collected groundwater quality samples from wells in the Beaumont Basin. Moreover, municipal supply entities have collected groundwater quality samples to comply with the Department of Health Services' requirements in the California Code of Regulations, Title 22 or for programs that involve irregular study-oriented measurements or long-term periodic measurements. As described in Section 2, the Watermaster collects water quality data from appropriator and overlying pumpers in the Beaumont Basin. The Watermaster has combined previously digitized groundwater quality data from all known sources into a comprehensive database.

4.2 Beaumont Basin Groundwater Quality

Figure 4-1 shows all of the wells that have groundwater quality monitoring results for the period ranging from 2002 to 2006. Although the study period for this report is the fiscal years 2003-04 through 2005-06, additional water quality data has been included because of the limited data available for the study period. Two important groundwater quality constituents in the Beaumont Basin are total dissolved solids (TDS) and nitrate-nitrogen. Groundwater basin objectives have been established by the RWQCB for TDS and nitrate-nitrogen in the Beaumont Management Zone, which encompasses the majority of the Beaumont Basin (see Figure 2-1).

There are numerous federal and state drinking water quality standards. Primary maximum contaminant levels (MCL) are enforceable criteria that have been set for health reasons. Secondary standards are related to the aesthetic qualities of water, such as taste and odor. In addition, for some chemicals, there are "notification level" criteria that are set by the state. These notification levels have been set because of health concerns, but are not enforceable. A secondary MCL has been established for TDS, and a primary MCL has been established for nitrate-nitrogen. Another water quality parameter discussed in this report is the water character index, which can provide a semi-quantitative estimate of the mixing of different source waters in a groundwater basin and constituents that exceeded a federal or state drinking water standard.

4.2.1 Total Dissolved Solids

Figures 4-2 and 4-3 show average and maximum TDS concentrations, respectively, across the Beaumont Basin for the period of 2002-2006. During this period, TDS concentrations ranged from 160 to 360 milligrams per liter (mg/L), which is below the secondary maximum contaminant level (MCL) of 500 mg/L. Figures 4-2 and 4-3 show TDS concentrations displayed in intervals that correspond to regulatory objectives for groundwater quality in the Beaumont Management Zone. The historical ambient TDS concentration, representative of the 1954-1973 period, is 230 mg/L. This is also the anti-degradation objective. The current ambient TDS concentration is 260 mg/L, representative of the 1984-2003 period, and 330 mg/L is the maximum benefit objective for the Beaumont Management Zone.

About one-half of the wells with TDS measurements taken during the period of 2002-2006 had an average concentration that was below the historical ambient TDS concentration, and twelve wells had a maximum TDS concentration that was below the historical ambient concentration. Three wells had average and maximum TDS concentrations that were above the maximum benefit TDS objective.

A representative time history of TDS concentrations at several wells, shown in Figure 4-4, was prepared to show the temporal changes in water quality in the Beaumont Basin since the early 1960s. The locations of these wells are shown in Figure 4-5. While some of the wells included have also been included in the water level charts, there was not sufficient data to construct water quality time histories for all of the same wells.

As shown in Figure 4-4, TDS concentrations in the Beaumont Basin have remained stable with concentrations typically below 350 mg/L. YVWD Well 35 is the one exception; that is, the TDS concentration of this well has increased by about 150 -200 mg/L over the past forty years.

4.2.2 Nitrate-Nitrogen

Figures 4-6 and 4-7 show the average and maximum nitrate-nitrogen concentrations, respectively, across the Beaumont Basin for the period of 2002-2006. By convention, all nitrate values are reported in this document as nitrate-nitrogen ($\text{NO}_3\text{-N}$): therefore, they should be compared with an MCL of 10 mg/L. The average nitrate-nitrogen concentrations range from 0.26 to 7.9 mg/L, and the maximum concentrations range from 0.26 to 9.03 mg/L. In the 2002-2006 period, about seventy percent of the wells that were sampled for nitrate-nitrogen had an average concentration of less than 2.5 mg/L, and about sixty-one percent had maximum nitrate-nitrogen concentrations below 2.5 mg/L. Two wells had an average and four wells had a maximum nitrate-nitrogen concentration above 7.5 mg/L. None of the wells had a nitrate-nitrogen concentration that exceeded the drinking water MCL of 10 mg/L.

Figure 4-8 shows the nitrate-nitrogen time histories of selected wells in the Beaumont Basin. Nitrate-nitrogen concentrations have remained stable in some wells and increased in others. As seen with TDS concentrations, nitrate-nitrogen concentrations have increased at YVWD Well 35, rising from about 1.5 to 8 mg/L over the past thirty years. Increasing concentrations have also been observed at BCVWD Wells 16 and 21. These wells are known to be impacted by septic effluent from on-site waste disposal systems. Over the past few years, nitrate-nitrogen levels at YVWD Well 35 and BCVWD Well 16 have approached the MCL of 10 mg/L. Other wells shown in Figure 4-8 have nitrate-nitrogen concentrations that range from about 1 to 3 mg/L.

4.2.3 Water Character Index

The water character index (WCI) is a unitless parameter that provides a numerical estimation of water character. The WCI can be used to assess the ionic distribution of constituents in a water sample. This is analogous to a trilinear or Piper diagram, which is a graphical means of displaying the ratios of the principal ionic constituents in water (Piper, 1944; Watson and Burnett, 1995). Water character is defined by the following equation:

$$WCI = 100 \cdot \left(\left\{ \frac{Ca + Mg}{Na + K} \right\} + \left\{ \frac{CO_3 + HCO_3}{Cl + SO_4} \right\} \right)$$

Where Ca, Mg, *et cetera*, are expressed in terms of milliequivalents per liter (meq/L) rather than milligrams per liter (mg/L). The first term on the right hand side of the equation is the ratio of divalent to monovalent cations and the second term on the right hand side of the equation is the ratio of carbonate character to chloride/sulfate character. The utility of the WCI method, compared to a Stiff or Piper/trilinear diagram, is that many data points can be plotted as time histories for a given well or surface water station. The points can also be plotted to show areal and spatial distributions of water character.



What is more, the WCI method can be used to provide a semi-quantitative estimate of the mixing of source waters with differing WCIs, as long as the WCIs of the source waters are consistent.

Figure 4-9 shows the average WCI for each well. The lower the WCI value, the more the water character reflects a sodium-chloride-sulfate character (blue and green well symbols). The higher WCI values represent water character that has more of a calcium-magnesium-bicarbonate character (red and orange well symbols). Groundwater that is directly influenced by drainage from the San Bernardino Mountains is typically calcium-magnesium-bicarbonate in character (high WCIs). Higher WCI values are seen in wells that are influenced by Smith Creek, Noble Creek, and Little San Geronio Creek. Wells that are not directly influenced by these large drainages exhibit a lower WCI, representing water that has more of a sodium-chloride-sulfate character. This may be due to the influence of on-site waste disposal systems, agricultural practices, and/or return flows from irrigation. Mendez *et al.* (2001) postulated that the sodium-chloride-sulfate character in this area may represent mineralization from nearby fault zones. The majority of wells in the Beaumont Basin show relatively high WCIs, suggesting that they may be influenced by surface water.

4.2.4 Other Constituents of Potential Concern

Table 4-2 lists the wells in the Beaumont Basin wherein a measured constituent exceeded at least one water quality criteria during the period of 2002 through 2006. In total, three wells exceeded a primary MCL and seventeen wells exceeded a secondary MCL. The locations of these wells are shown in Figure 4-10. A description of potential constituents of concern follows.

4.2.4.1 Aluminum

The aluminum concentration exceeded the secondary MCL at two wells; however, no health based standards were exceeded. Above the secondary MCL, aluminum can add color to water.

4.2.4.2 Arsenic

In January 2001, the EPA revised the drinking water standard for arsenic from 50 µg/L to 10 µg/L by 2006. After adopting 10 µg/L as the new standard for arsenic in drinking water, the EPA decided to review the decision to ensure that the final standard was based on sound science and accurate estimates of costs and benefits. In October 2001, the EPA decided to move forward with implementing the 10 µg/L standard (EPA, 2001). One well exceeded the new federal standard for arsenic, but not the state primary MCL. The erosion of natural deposits can contribute arsenic to groundwater.

4.2.4.3 Chromium

Two wells exceeded the state primary MCL for chromium, but not the federal MCL. The erosion of natural deposits can contribute chromium to groundwater.

4.2.4.4 Iron

Six wells exceeded the federal and state secondary MCLs for iron. At a concentration above the secondary MCL, iron can effect the color, odor, and taste of water. Iron can turn water a rusty color and produces a metallic taste. It can also cause reddish and orange staining of household fixtures, scaling, and sedimentation.



SECTION 4 – WATER QUALITY CONDITIONS

4.2.4.5 Manganese

Three monitoring wells exceeded the federal and state secondary MCLs for manganese. At a concentration above the secondary MCL, manganese can effect the color, odor, and taste of water. Manganese can turn water a black to brown color and produce a bitter metallic taste. It can also cause a blackish staining of household fixtures.

4.2.4.6 pH

Three wells exceeded the federal secondary MCL for pH. Water with a pH above 8.5 can result in a soda taste, a slippery feel, and the formation of deposits.

4.2.4.7 Turbidity

One well exceed the state secondary MCL for turbidity. The drinking water standard for turbidity is based on aesthetics.



Table 4-1
Constituents Analyzed

1,1,1,2-Tetrachloroethane	Amoxicillin	Dacthal Acid Metabolites
1,1,1-Trichloroethane	Anion	Dalapon
1,1,2,2-Tetrachloroethane	Anthracene	DCAA
1,1,2-Trichloro-1,2,2-Trifluoroethane	Antimony	Decachlorobiphenyl
1,1,2-Trichloroethane	Arsenic	di(2-Ethylhexyl)Adipate
1,1-Dichloroethane	Asbestos	di(2-Ethylhexyl)Phthalate
1,1-Dichloroethene	Atrazine	Diazinon
1,1-Dichloroethylene	Barium	Dibromoacetic Acid
1,1-Dichloropropene	Bentazon	Dibromochloromethane (THM)
1,2,3-Trichlorobenzene	Benzene	Dibromochloropropane (DBCP)
1,2,3-Trichloropropane	Benzo (a) Pyrene	Dibromomethane
1,2,4-Dimethylbenzene	Beryllium	Dicamba
1,2,4-Trichlorobenzene	Bicarbonate Alkalinity (as CaCO ₃)	Dichloroacetic Acid
1,2-Dibromo-3-Chloropropane	Bicarbonate Alkalinity AS HCO ₃	Dichlorobromomethane
1,2-Dichlorobenzene	bis(2-Chloroethyl) Ether	Dichlorodifluoromethane
1,2-Dichloroethane	Boron	Dichloromethane
1,2-Dichloropropane	Bromacil	Dieldrin
1,3,5-Trimethylbenzene	Bromide	Di-isopropyl Ether
1,3-Dichlorobenzene	Bromobenzene	Dimethoate
1,3-Dichloropropane	Bromochloromethane	Dinoseb
1,3-Dimethyl 2-Nitrobenzene	Bromodichloromethane (THM)	Diquat
1,4-Dichlorobenzene	Bromofluorobenzene	Diuron
1,4-Dioxane	Bromoform (THM)	DO(field)
1-Phenylpropane	Bromomethane	DOC
2- Butanone	Butachlor	E. Coli Bacteria
2- Chloroethylvinyl Ether	Cadmium	Endothall
2,2-Dichloropropane	Caffeine	Endrin
2,3,7,8-TCDD	Calcium	EPTC
2,4,5-TP (silvex)	Carbaryl	Estradiol
2,4-D	Carbofuran	Ethylbenzene
2,4-Dinitrotoluene	Carbon Tetrachloride	Ethylene Dibromide
2,6-Dinitrotoluene	Carbonate Alkalinity as CaCO ₃	Fluoranthene
2-Chlorotoluene	Cations	Fluoride
3-Hydroxycarbofuran	Chlordane	Fluoxetine
4,4-DDD	Chloride	Foaming Agents
4,4-DDE	Chloroethane	Gemfibrozil
4-Chlorotoluene	Chloroform (THM)	Glyphosate
4-Methyl-2-pentanone	Chloromethane	Gross Alpha
4-Nitrophenol	Chlorothalonil	Gross Alpha Counting Error
Acetaminophen	Chlorpyrifos	Heptachlor
Acetochlor	Chromium	Heptachlor Epoxide
Agressiveness Index	Chromium IV	Heterotrophic, Plate Count
Alachlor	Chromium VI (Hexavalent)	Hexachlorobenzene
Aldicarb	cis-1,2-Dichloroethene	Hexachlorobutadiene
Aldicarb Sulfone	cis-1,2-Dichloroethylene	Hexachlorocyclopentadiene
Aldicarb Sulfoxide	cis-1,3-Dichloropropene	Hydroxide Alkalinity
Aldrin	Coliform Bacteria (Total)	Ibuprofen
Alkalinity (as CaCO ₃)	Color	Iopromide
Aluminum	Copper	Iron
Ammonia-Nitrogen	Cyanide	Isophorone
Isopropylbenzene	Polychlorinated Biphenyls	Turbidity
Kjeldal Nitrogen	Potassium	Uranium
Langlier Index @ 60 C	Progesterone	Uranium Counting Error
Langlier Index @ Source Temp.	Prometryn	Vanadium

Table 4-1
Constituents Analyzed

Lead	Propachlor	Vinyl Chloride
Lindane	Propoxur	Xylene (m,p)
Magnesium	Radium 222	Xylene (o)
Manganese	Radium 222 Counting Error	Xylene (p+m)
Mercury	Radium 226	Xylenes
Methiocarb	Radium 226 Counting Error	Zinc
Methomyl	Radium 228	
Methoxychlor	Radium 228 Counting Error	
Methyl Ethyl Ketone	sec-Butylbenzene	
Methyl Isobutyl Ketone	Selenium	
Methyl-tert-butyl-ether	Silica	
Metolachlor	Silver	
Metribuzin	Simazine	
Molinate	Sodium	
Monobromoacetic Acid	Source Temperature	
Monochloroacetic Acid	Specific Conductance (Field)	
Monochlorobenzene	Specific Conductance (Laboratory)	
Naphthalene	Strontium	
n-Butylbenzene	Styrene	
NH3+NH4-N	Sulfamethoxazole	
Nickel	Sulfate	
Nitrate	Terbacil	
Nitrate + Nitrite - Nitrogen	tert-Amyl Methyl Ether	
Nitrate-Nitrogen	Tert-butyl Alcohol	
Nitrite	Tert-butyl Benzene	
Nitrite-Nitrogen	Tert-butyl Ethyl Ether	
Nitrobenzene	Testosterone	
Odor Threshold @ 60 C	Tetrachloroethylene	
Oil-grse	Thallium	
Orthopo4	Thiobencarb	
Oxamyl	Toluene	
Paraquat	Total 1,3-Dichloropropene	
PCB-1016	Total Coliform	
PCB-1221	Total Dissolved Solids	
PCB-1232	Total Hardness (as CaCO3)	
PCB-1242	Total Nitrite + Nitrogen As N	
PCB-1248	Total Organic Carbon	
PCB-1254	Total Trihalomethanes	
PCB-1260	Toxaphene	
PCB-209	trans-1,2-Dichloroethene	
Pentachlorophenol	trans-1,2-Dichloroethylene	
Perchlorate	trans-1,3-Dichloropropene	
pH (Field)	Trichloroacetic Acid	
pH (Laboratory)	Trichloroethylene	
Phosphate	Trichlorofluoromethane	
Phosphorus	Triclosan	
Picloram	Trimethoprim	
p-Isopropyltoluene	Tritium	

Table 4-2
Water Quality Exceedance Report

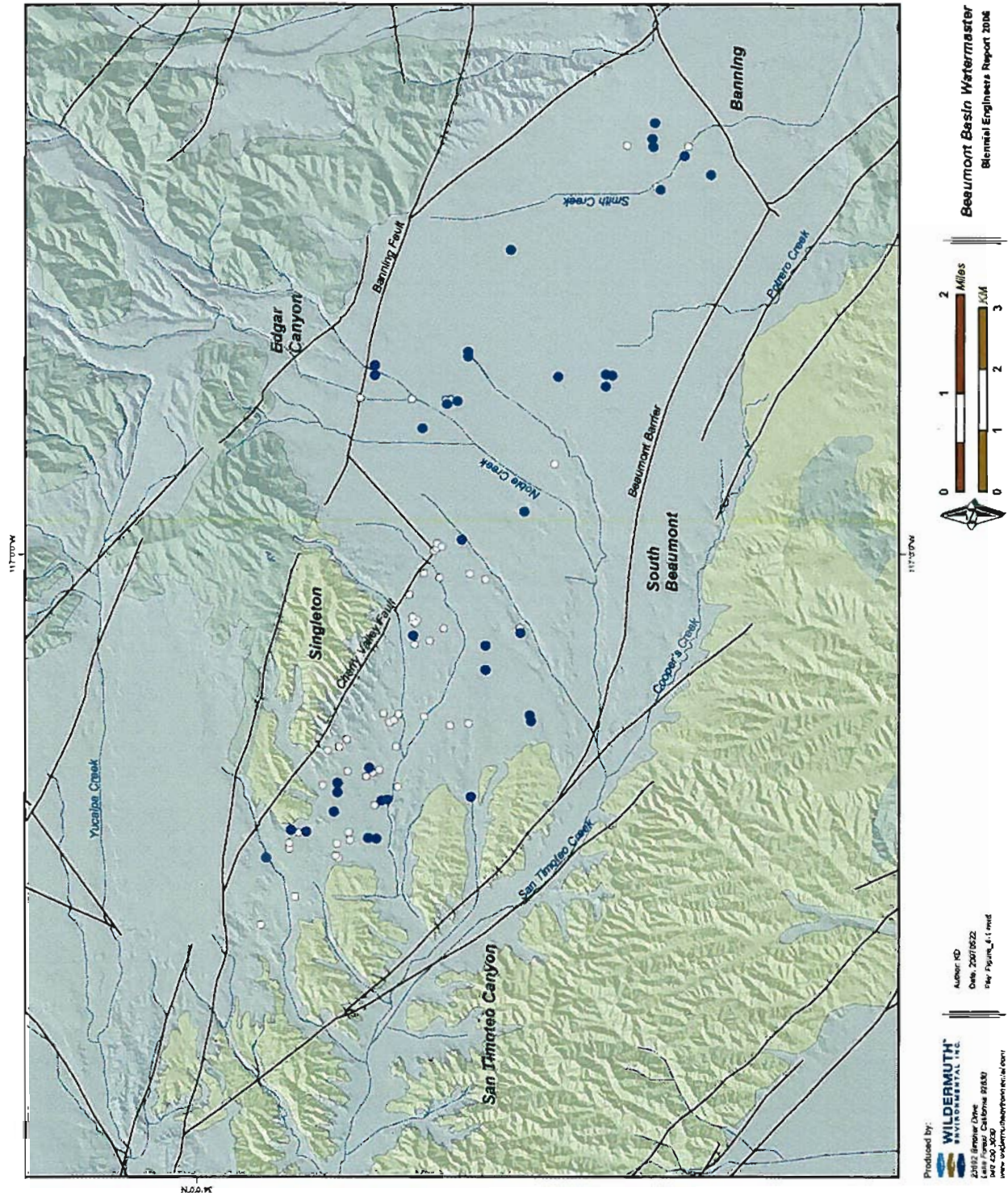
Chemical	Well Owner	Well Name	Date	Chemical Concentration	Primary EPA MCL	Secondary EPA MCL	Primary CA MCL	Secondary CA MCL
Aluminum (µg/L)								
City of Banning		Well M-3	5/31/2005	270		200	1000	200
So. Calif. Professional Golf Association		Well A	1/5/2006	320		200	1000	200
Arsenic (µg/L)								
Oak Valley Partners		Singleton Ranch 5	9/21/2006	24	10		50	
Chromium (µg/L)								
So. Calif. Professional Golf Association		Well A	1/16/2003	86	100		50	
South Mesa Water Company		Well 4	3/31/2004	86	100		50	
Iron (µg/L)								
City of Banning		Well M-3	5/31/2005	330		300		300
Beaumont-cherry Valley Water District		Well 24	9/23/2005	990		300		300
So. Calif. Professional Golf Association		Well A	1/5/2006	930		300		300
City of Banning		Well C-2A	1/10/2006	490		300		300
Oak Valley Partners		Singleton Ranch 7	9/21/2006	1300		300		300
Sunny-Cal Egg & Poultry Company		Well 1	9/22/2006	1100		300		300
Manganese (µg/L)								
United States Geological Survey		335714116565002	8/28/2002	61		50		50
United States Geological Survey		335714116565001	8/29/2002	55		50		50
United States Geological Survey		335714116565003	8/29/2002	96		50		50
United States Geological Survey		335714116565003	6/11/2003	58		50		50
pH								
So. Calif. Professional Golf Association		Well A	1/16/2003	8.8		8.5		
South Mesa Water Company		Well 4	9/10/2003	9.0		8.5		
South Mesa Water Company		Well 4	3/31/2004	8.6		8.5		
Oak Valley Partners		Singleton Ranch 5	9/21/2006	9.6		8.5		
Turbidity (NTU)								
So. Calif. Professional Golf Association		Well A	1/5/2006	8.5				5

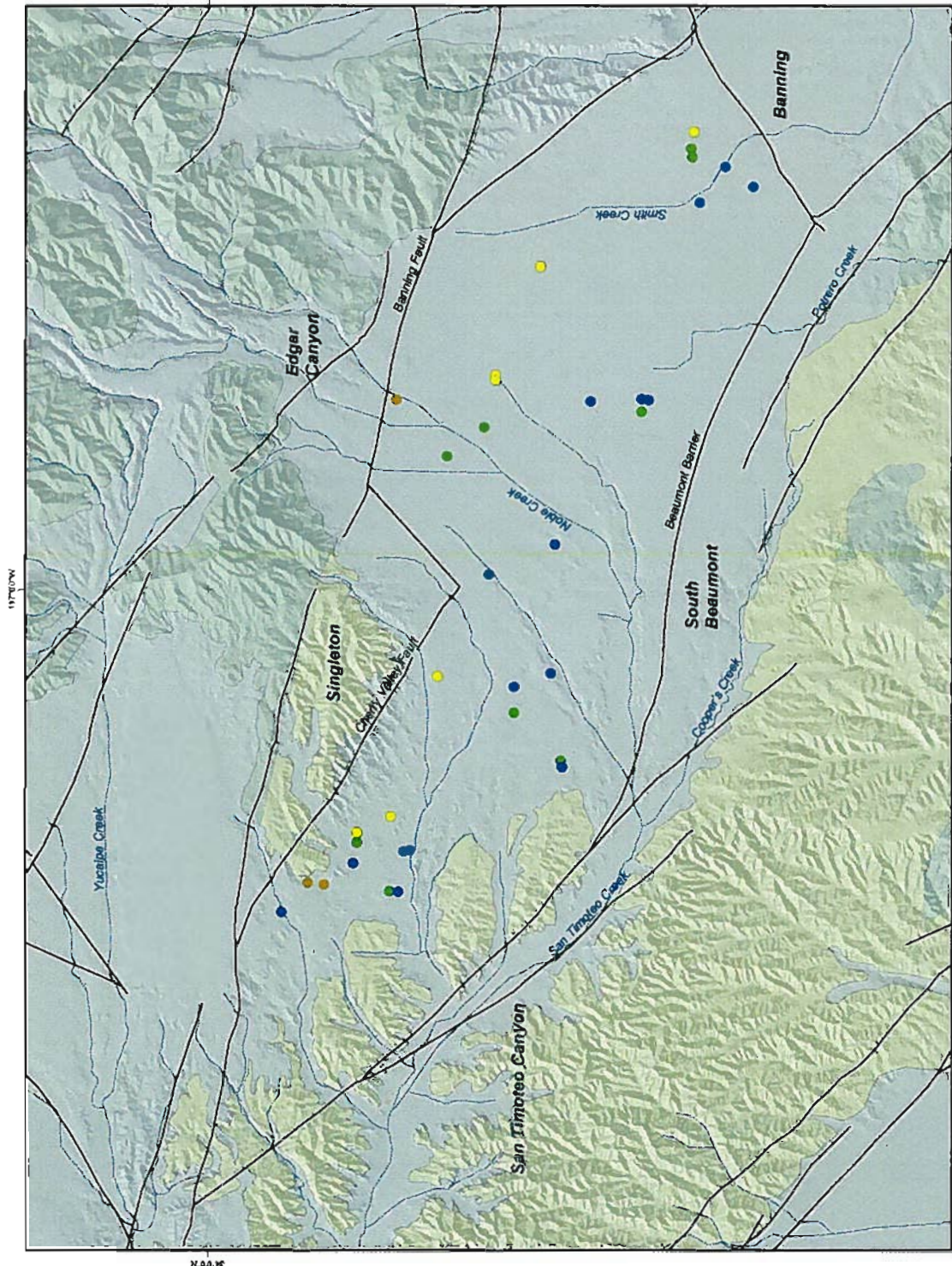
Primary EPA MCL Primary EPA MCLs are federally enforceable limits for chemicals in drinking water and are set as close as feasible to the corresponding EPA MCLG.

Secondary EPA MCL Secondary EPA MCLs apply to chemicals in drinking water that adversely affect its odor, taste, or appearance. Secondary EPA MCLs are not based on direct health effects associated with the chemical. Secondary MCLs are considered desirable goals and are not federally enforceable.

Primary CA MCL Primary CA MCLs are analogous to Primary EPA MCLs and are enforceable at this state level. If the California DHS has adopted a more stringent primary MCL than the EPA MCL, the primary CA MCL would be enforceable.

Secondary CA MCL Secondary CA MCLs are analogous to Secondary EPA MCLs and are enforceable at the state level. If the California DHS has adopted a more stringent secondary MCL than the EPA MCL, the secondary CA MCL would be applied.





Main Map Features

Average TDS Concentration (mg/L)

- <230
- 230 - 260
- 260 - 300
- >300

Geology

Water-Bearing Sediments

- Quaternary Alluvium
- Consolidated Bedrock
- Plio-Pleistocene Sedimentary Rocks
- Pre-Tertiary Igneous and Metamorphic Rocks

Stream

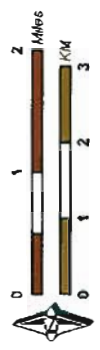
Fault

Produced by:

WILDERMUTH
ENVIRONMENTAL, INC.

2352 Buckeye Drive
Lake Forest, California 92530
www.wilderdmuth.com/waterdata/count

Author: KD
Date: 20070522
File: Figure_4-2.mxd

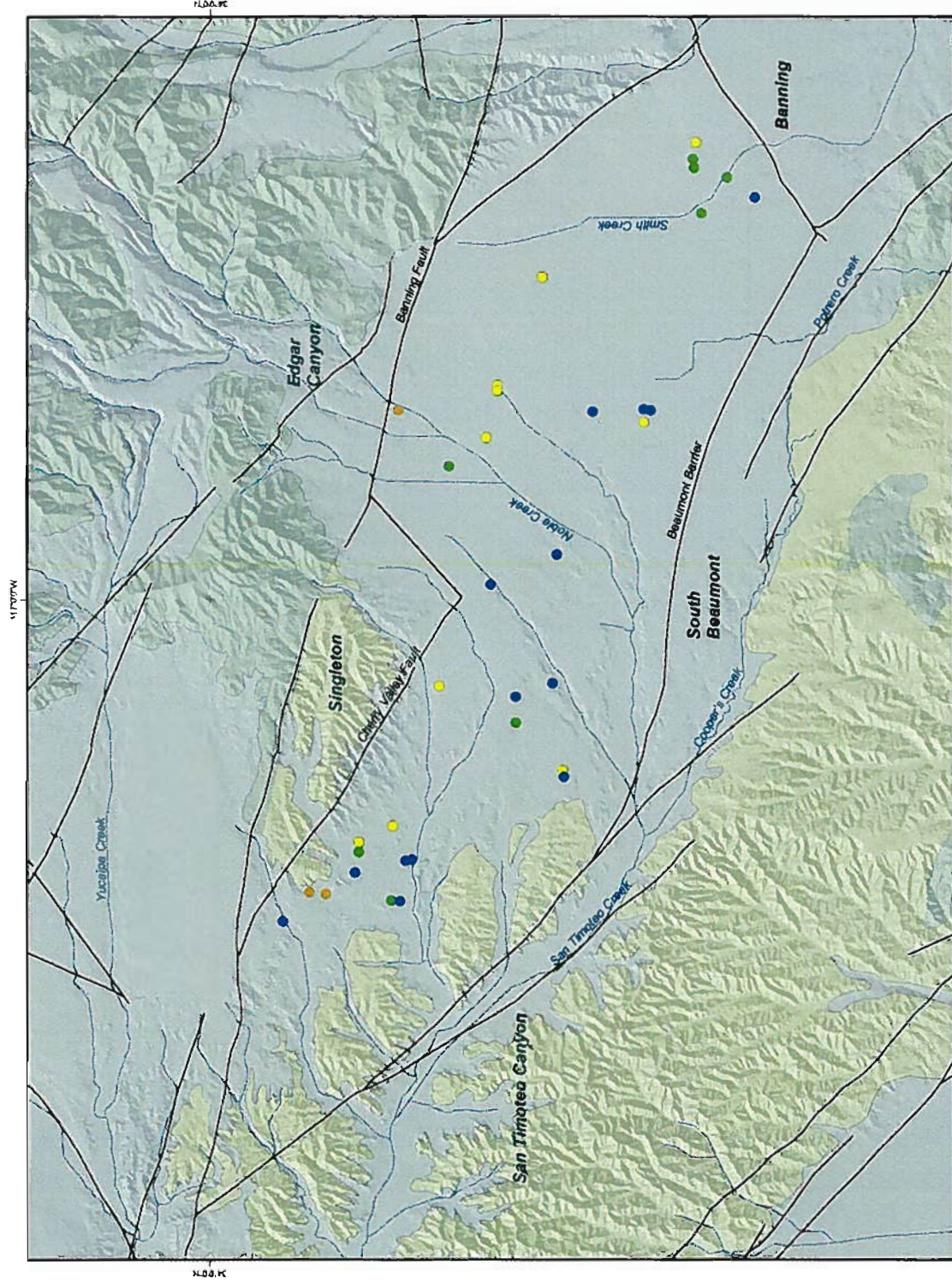


Beaumont Basin Watermaster
Biennial Engineers Report 2006



Average Total Dissolved Solids Concentration
2002 - 2006

Figure 4-2



Main Map Features

Maximum TDS Concentration (mg/L)

- <230
- 230 - 260
- 260 - 330
- >330

Geology

Water-Bearing Sediments

Quaternary Alluvium

Consolidated Bedrock

Plio-Pleistocene Sedimentary Rocks

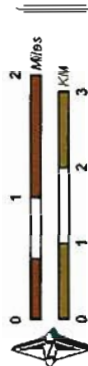
Pre-Tertiary Igneous and Metamorphic Rocks

Stream

Fault

Produced by:
WILDERMUTH
 ENVIRONMENTAL, INC.
 22517 E. Highway 200
 Lake Arrowhead, California 92530
 951.430.3030
 www.wilder-muth.com

Author: KD
 Date: 2/27/2022
 File: Figure_4-3.mxd



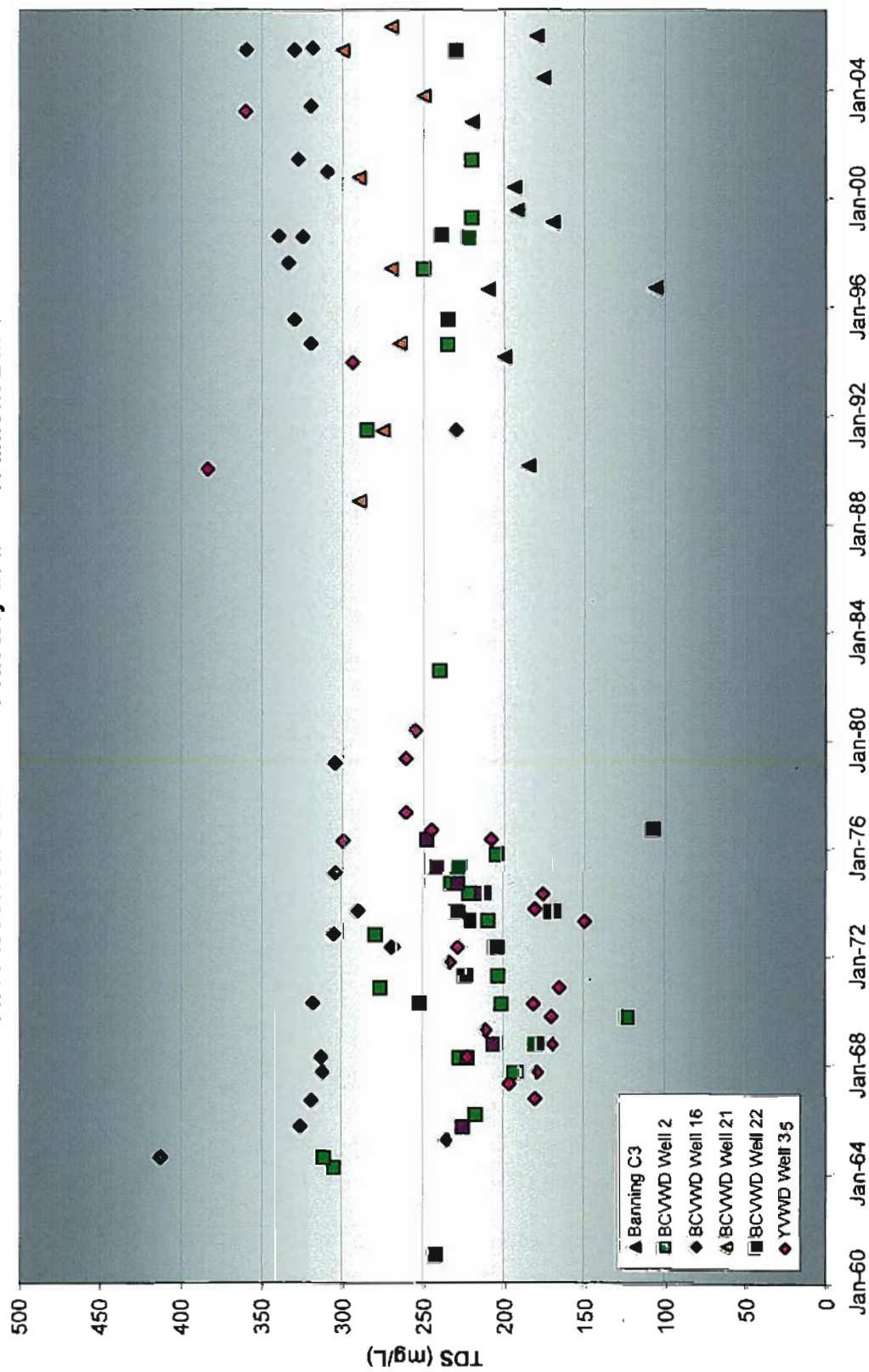
Beaumont Basin Watermaster
 Biennial Engineers Report 2016

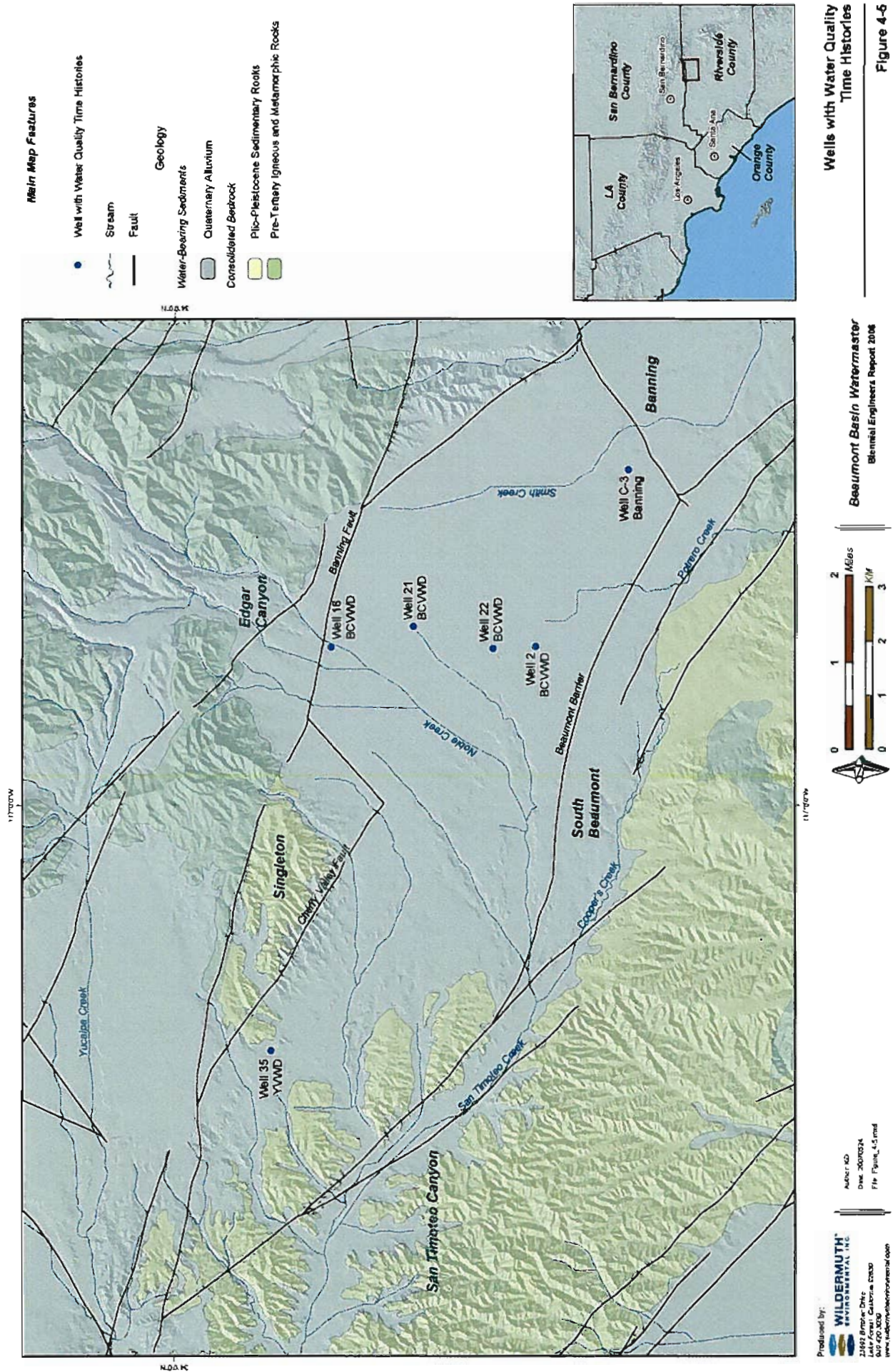


Maximum Total Dissolved Solids Concentration
 2002 - 2006

Figure 4-3

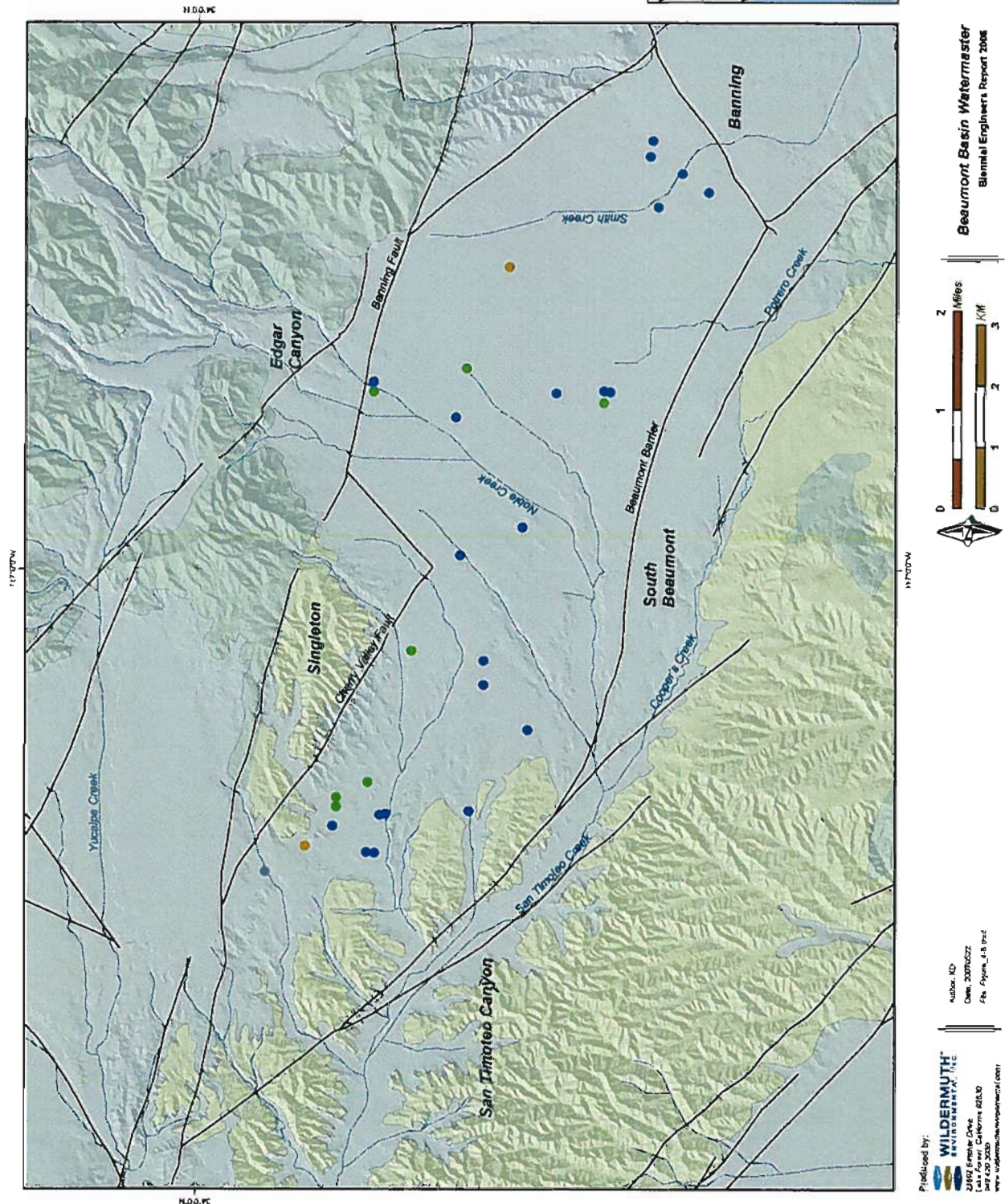
Figure 4-4
Total Dissolved Solids Time History in the Beaumont Basin



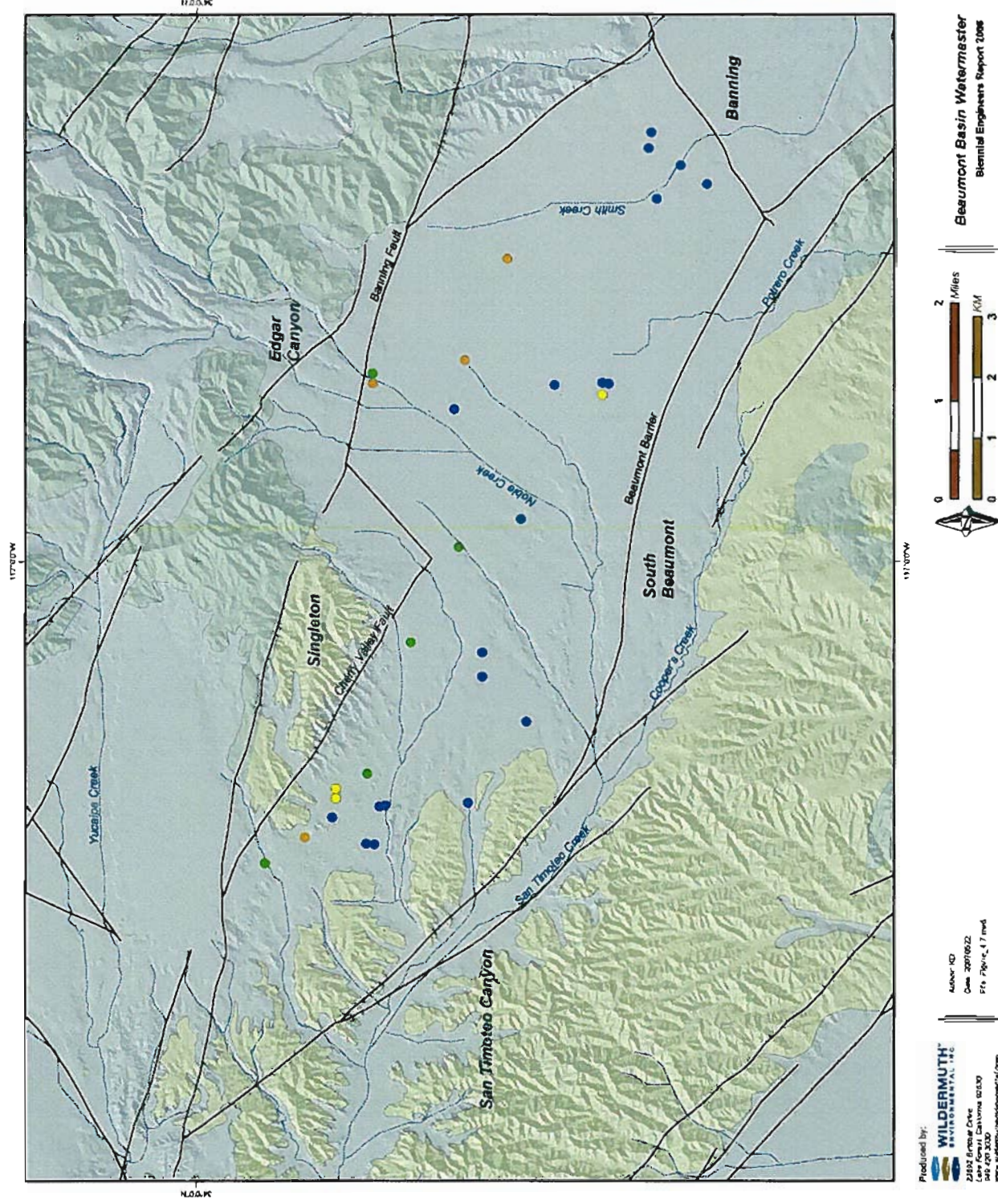


Wells with Water Quality Time Histories

Figure 4-5



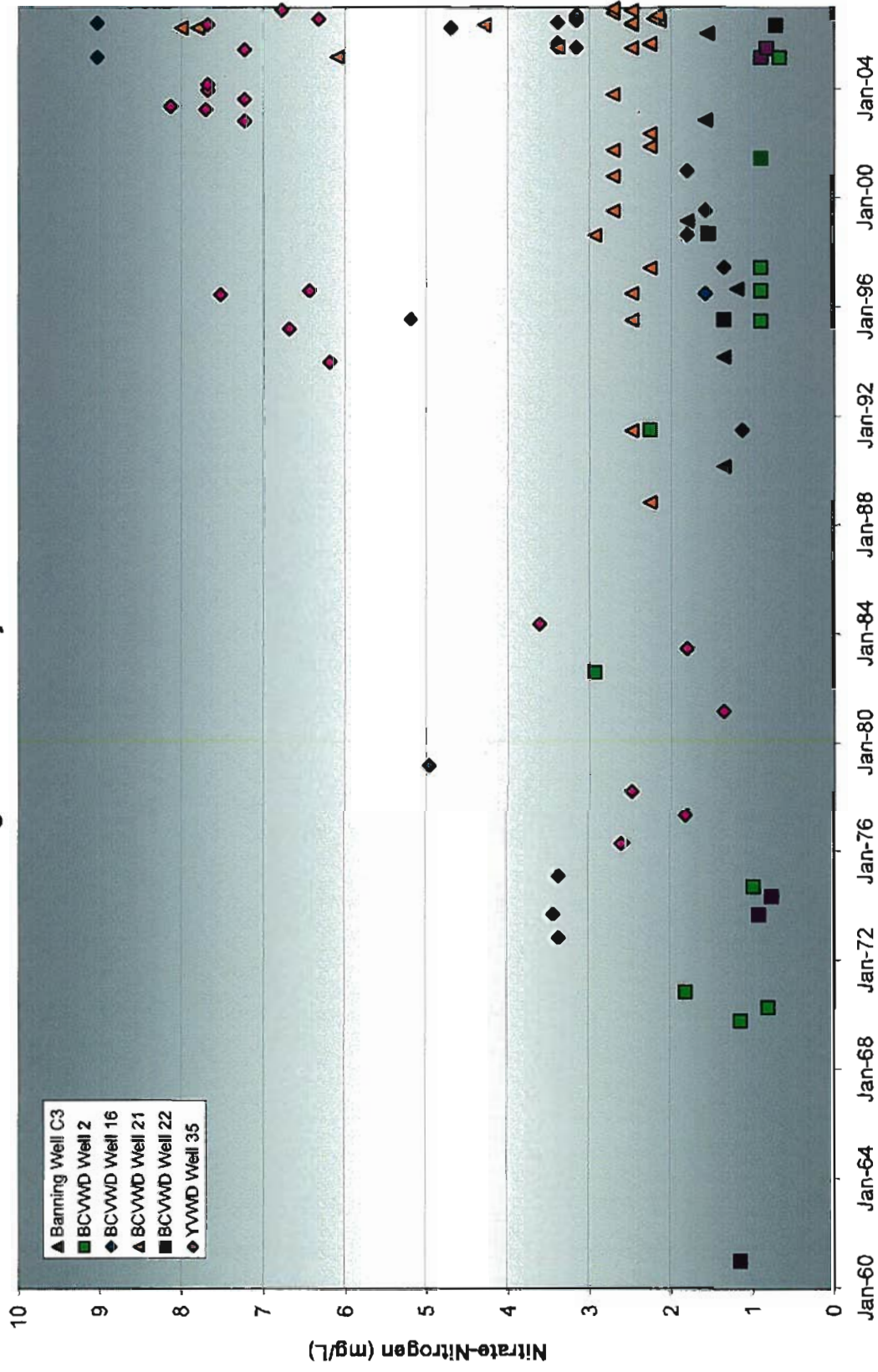
Average Nitrate-Nitrogen Concentration
2002 - 2006
Figure 4-5

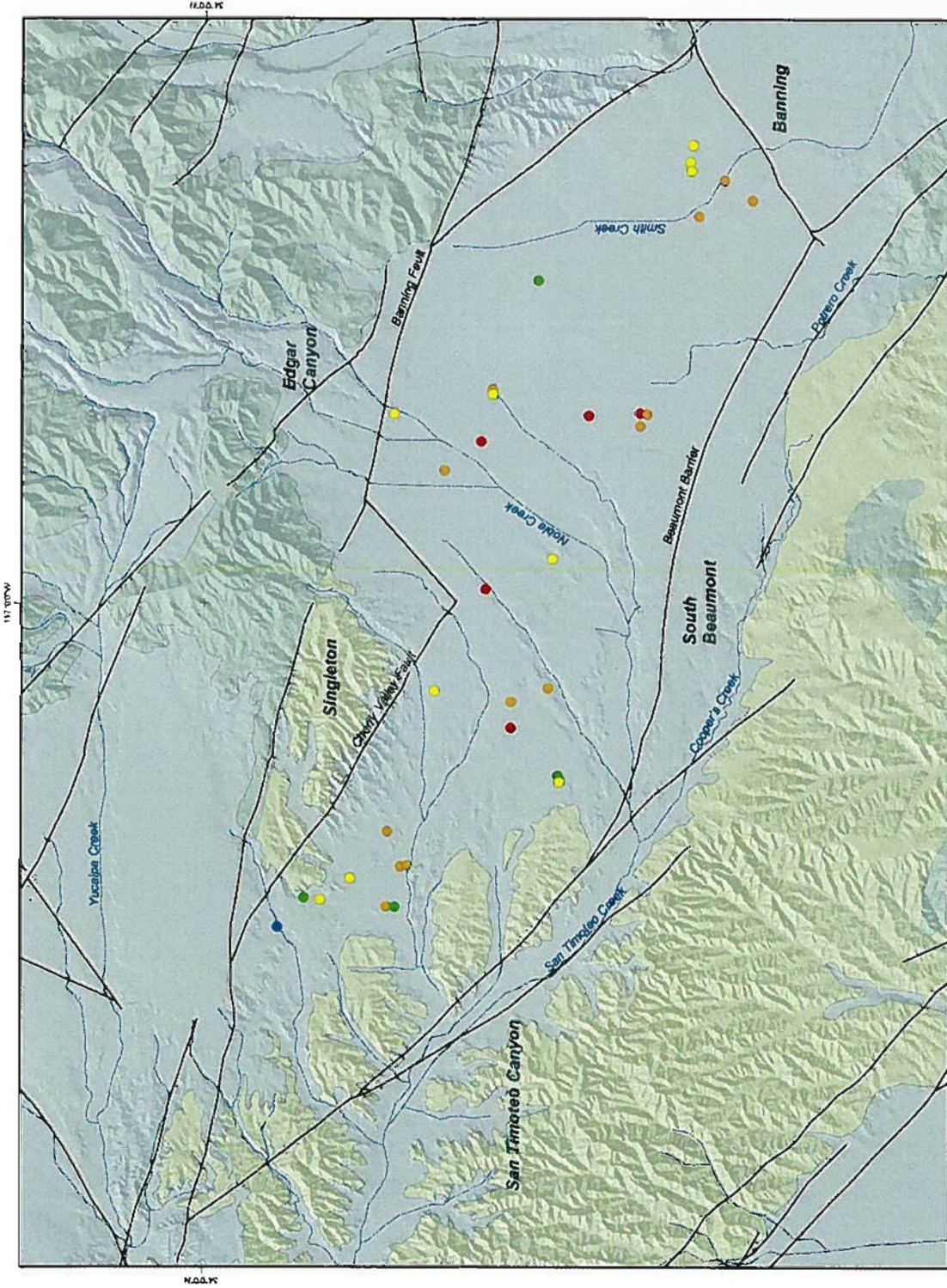


Maximum Nitrate-Nitrogen Concentration
2002 - 2006

Figure 4-7

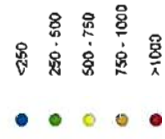
Figure 4-8
Nitrate-Nitrogen Time History in the Beaumont Basin





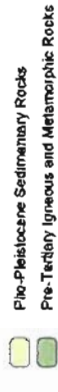
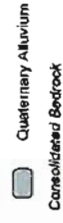
Main Map Features

Average Water Character Index

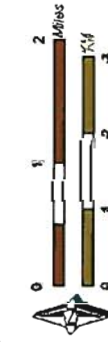


Geology

Water-Bearing Sediments



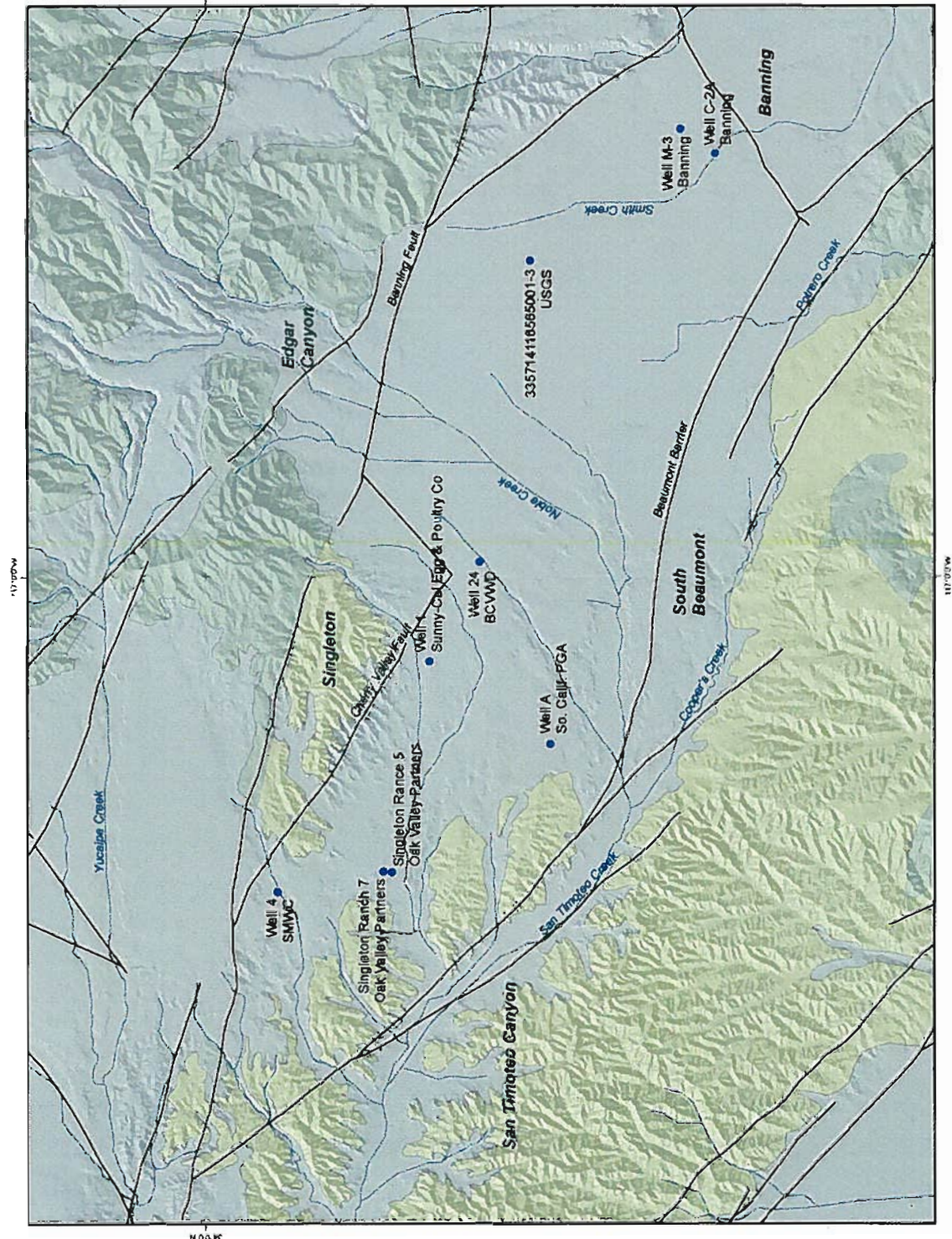
Beaumont Basin Watermaster
Biennial Engineers Report 1006



Author: AD
Date: 20070527
File: Figure_4.5.mxd

Produced by:
WILDERMUTH
ENVIRONMENTAL INC.
23880 Jingle Dike
San Gabriel, California 91760
www.wilder-muth.com/070706-01-0001

Average Water Character Index
2002 - 2006
Figure 4-9



- Main Map Features**
- Well with Drinking Water MCL Exceedance
 - Stream
 - Fault
- Geology**
- Water-Bearing Sediments
 - Quaternary Alluvium
 - Consolidated Bedrock
 - Pliocene Sedimentary Rocks
 - Pre-Tertiary Igneous and Metamorphic Rocks



5. REFERENCES

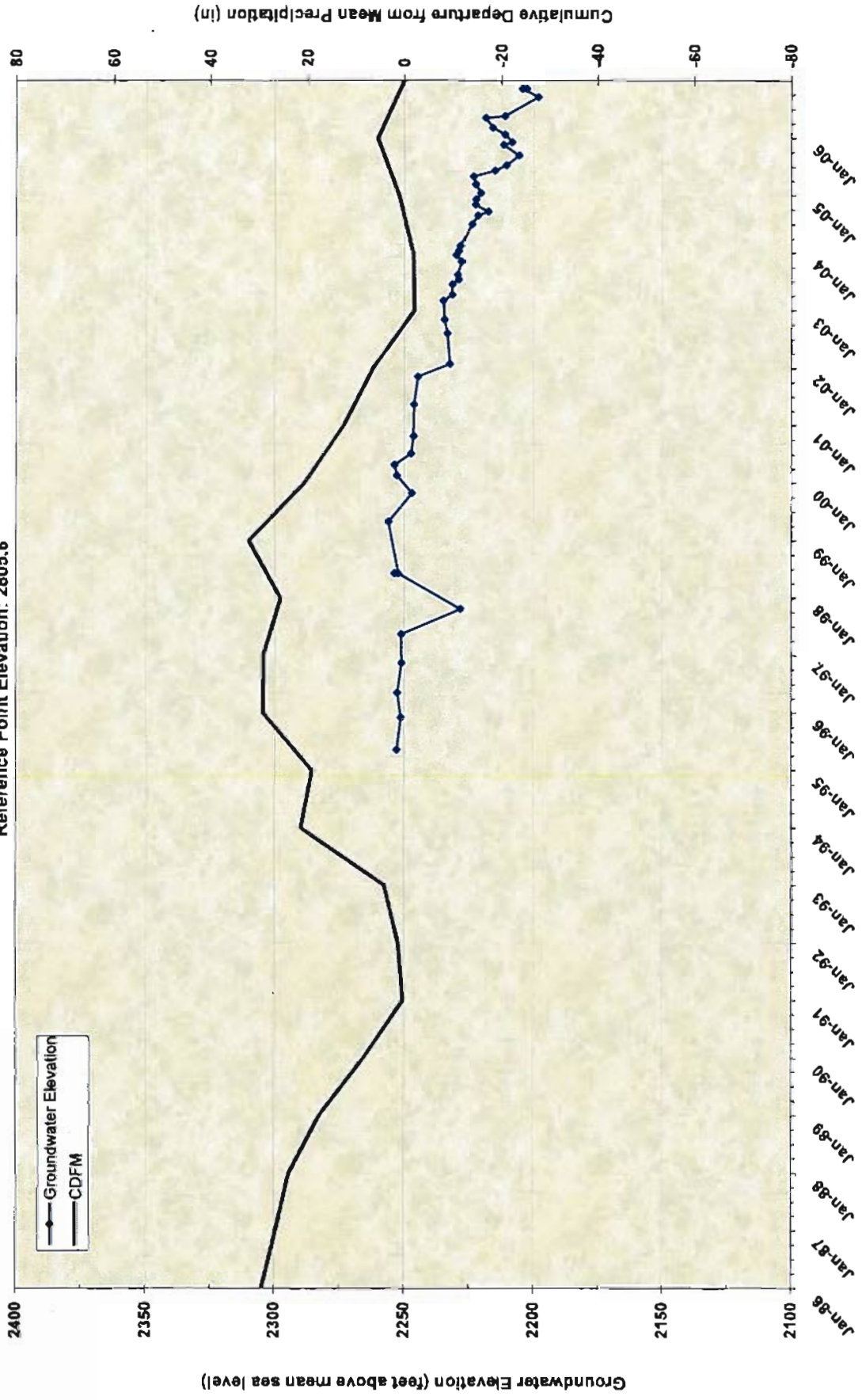
- RWQCB. 2004. R8-2004-001. Resolution Amending the Water Quality Control Plan for the Santa Ana River Basin to Incorporate an Updated Total Dissolved Solids (TDS) and Nitrogen Management Plan for the Santa Ana Region Including Revised Groundwater Subbasin Boundaries, Revised TDS and Nitrate-Nitrogen Quality Objectives for Groundwater, Revised TDS and Nitrogen Wasteload Allocations, and Revised Reach Designations, TDS and Nitrogen Objectives and Beneficial Uses for Specific Surface Waters



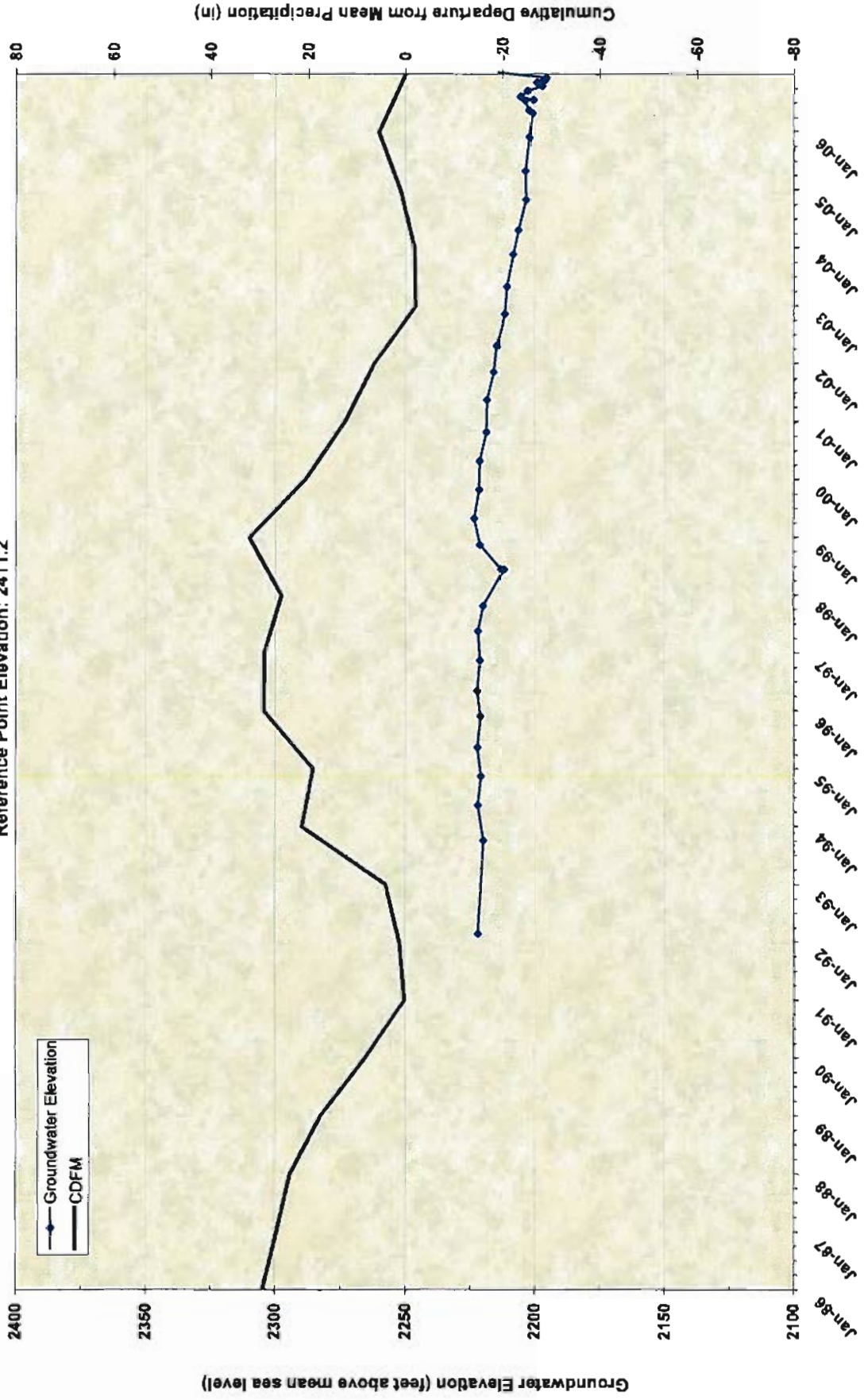
APPENDIX

GROUNDWATER LEVEL TIME HISTORIES

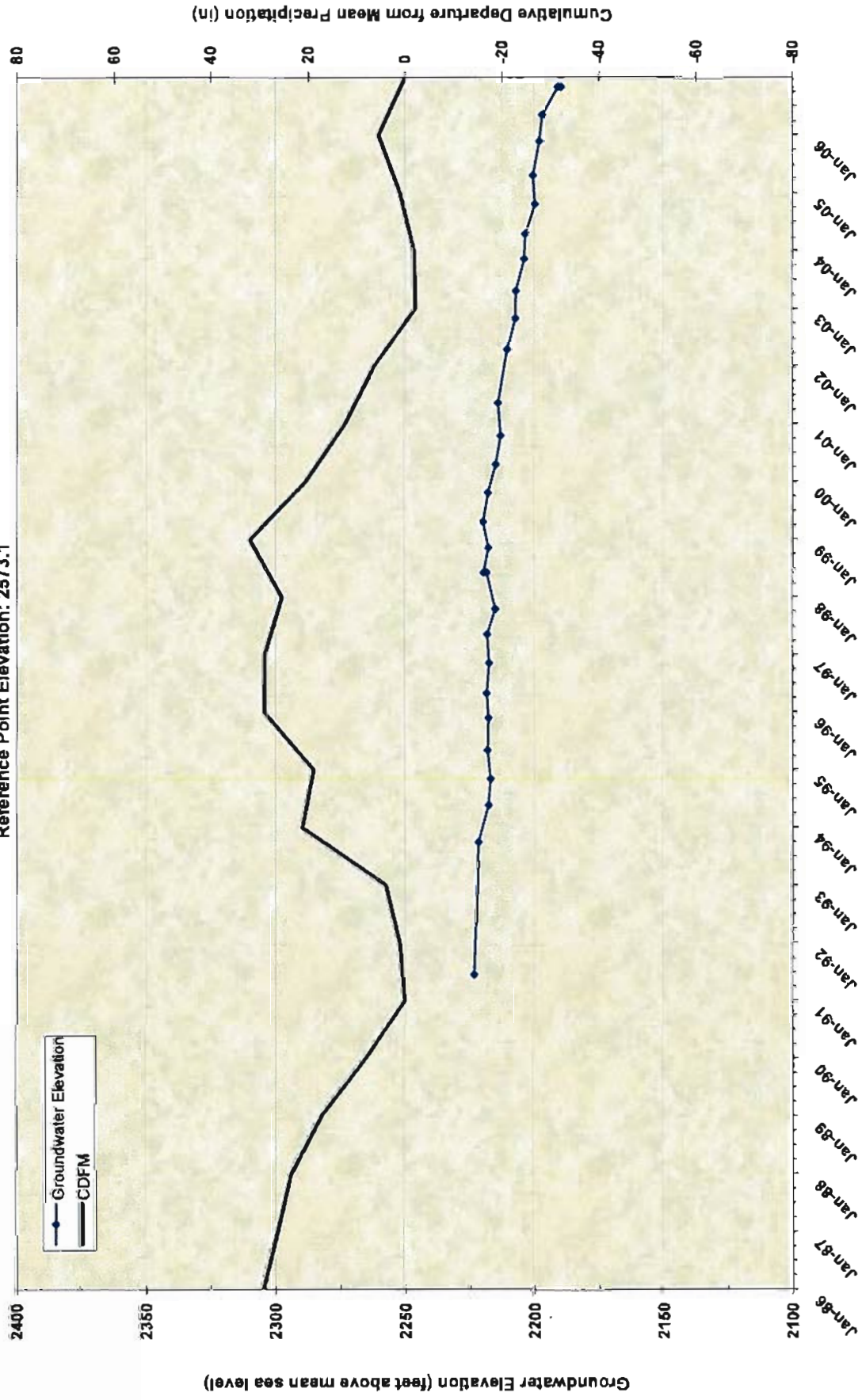
Station ID: 1002941 Local Name: TW-1
Owner: San Geronio Pass Water Agency
Reference Point Elevation: 2805.6



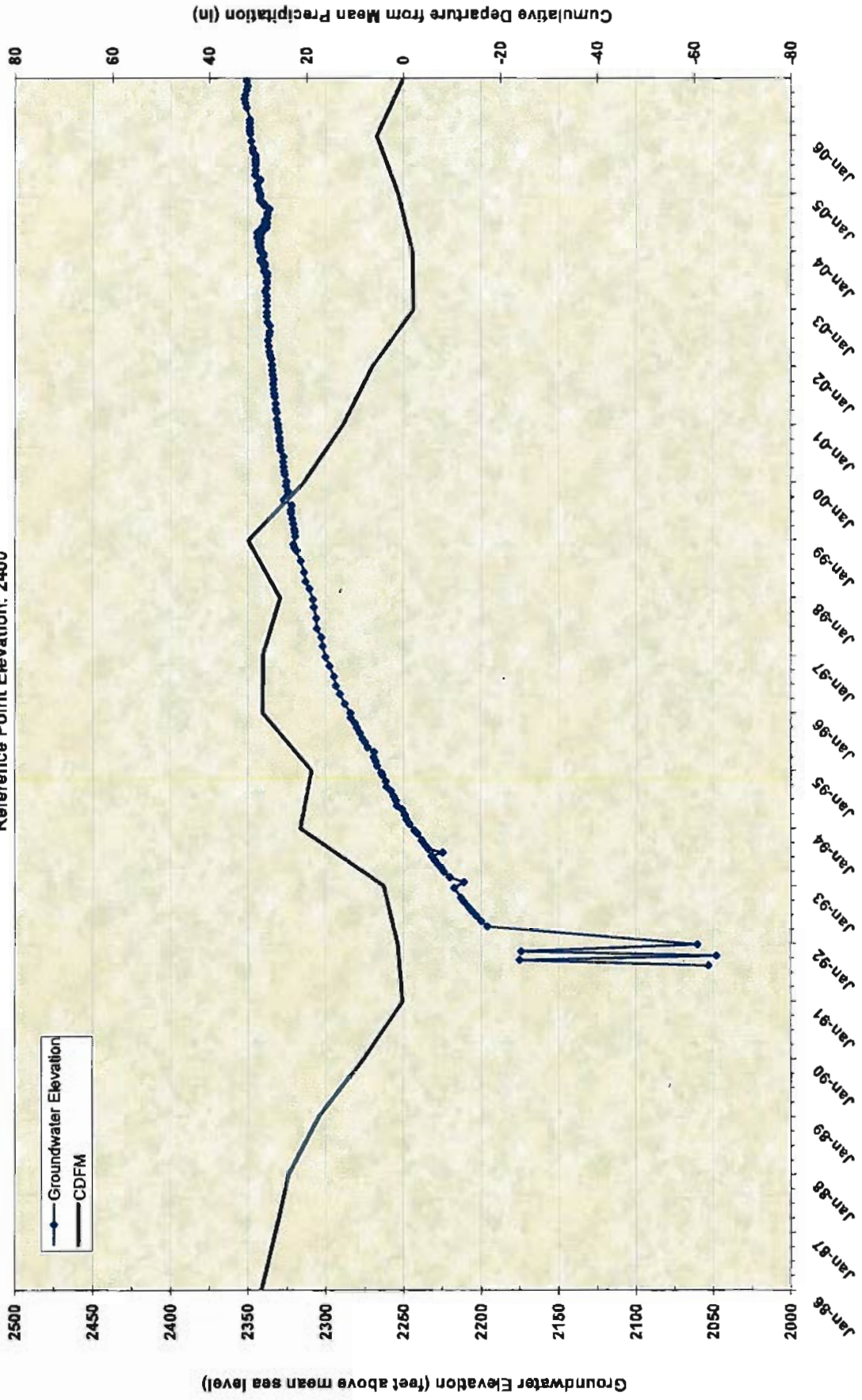
Station ID: 1002953 Local Name:
Owner: Owner Unknown
Reference Point Elevation: 2411.2



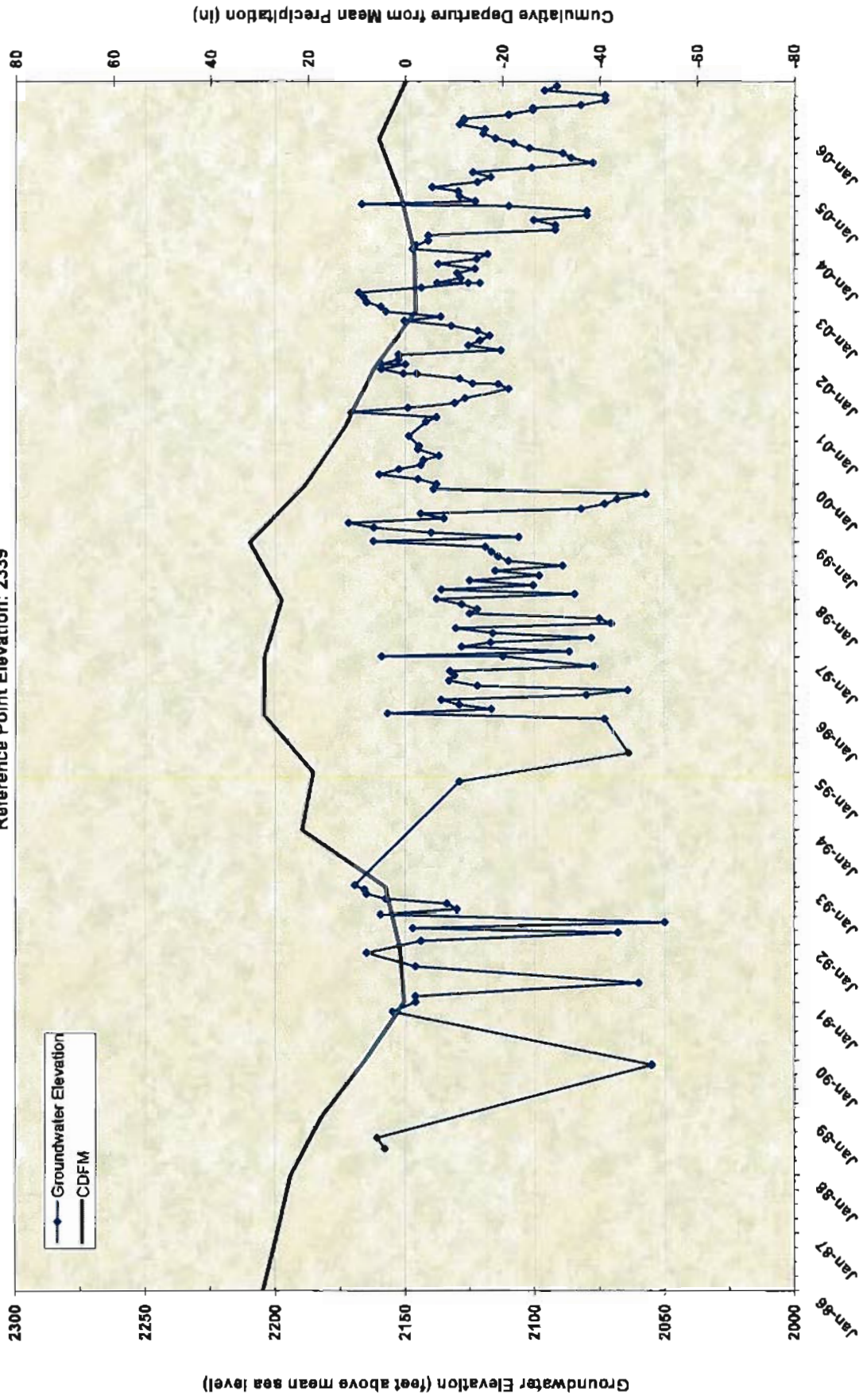
Station ID: 1002959
 Owner: Dearen, Greg
 Reference Point Elevation: 2573.1



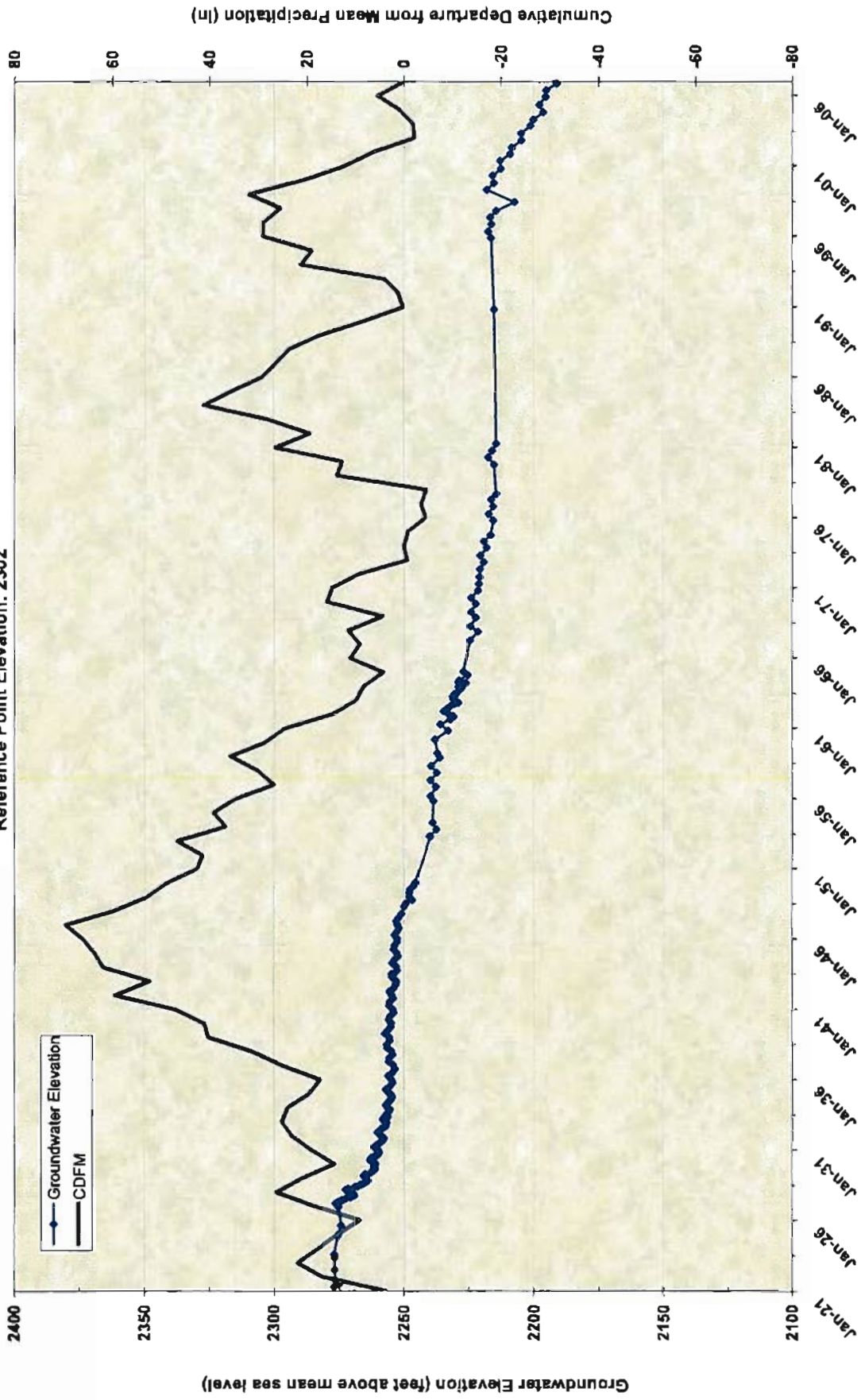
Station ID: 1003020 Local Name: YVWD 47
 Owner: Yucaipa Valley Water District
 Reference Point Elevation: 2400



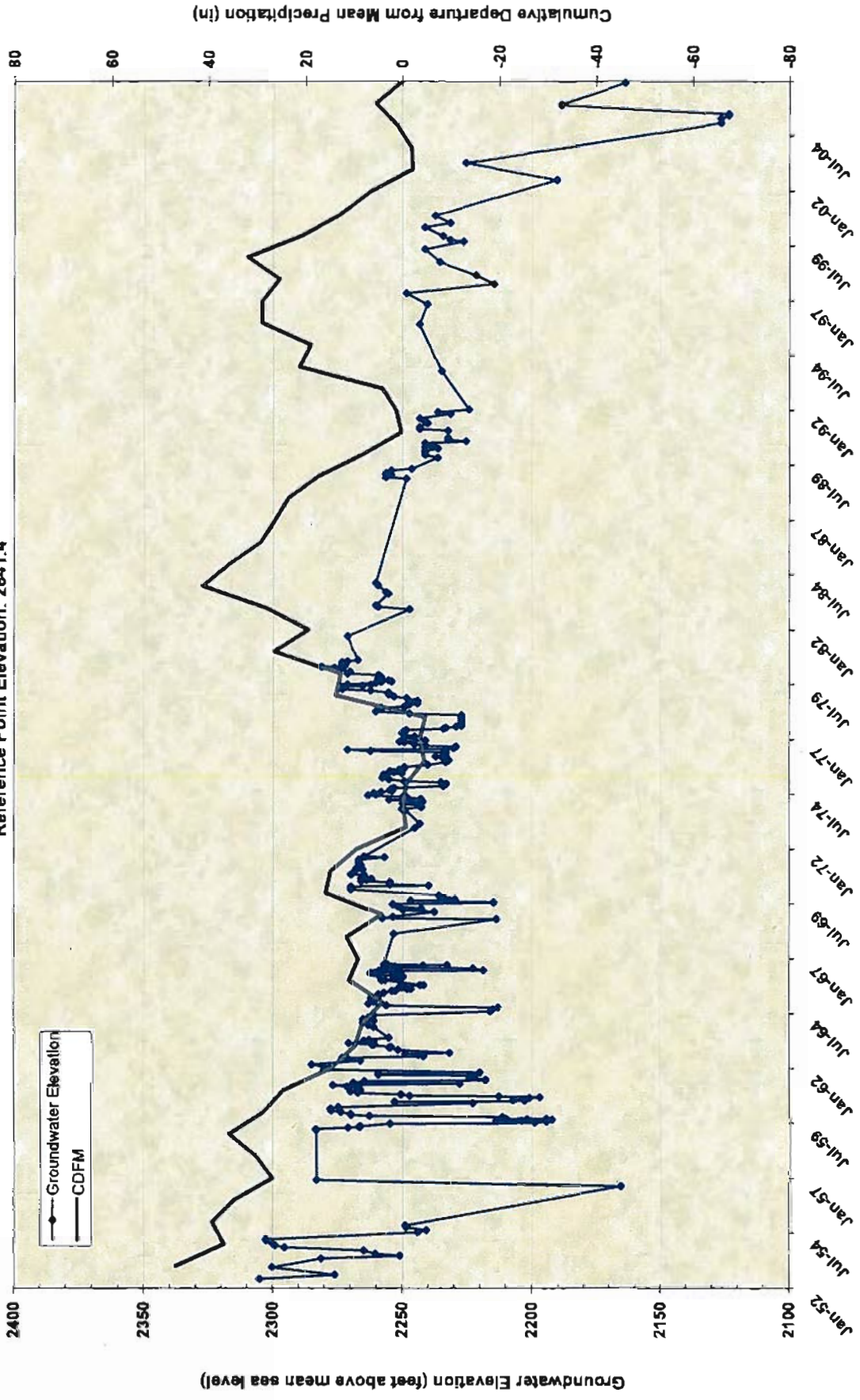
Station ID: 1003035 Local Name: 4
 Owner: South Mesa Water Company
 Reference Point Elevation: 2339



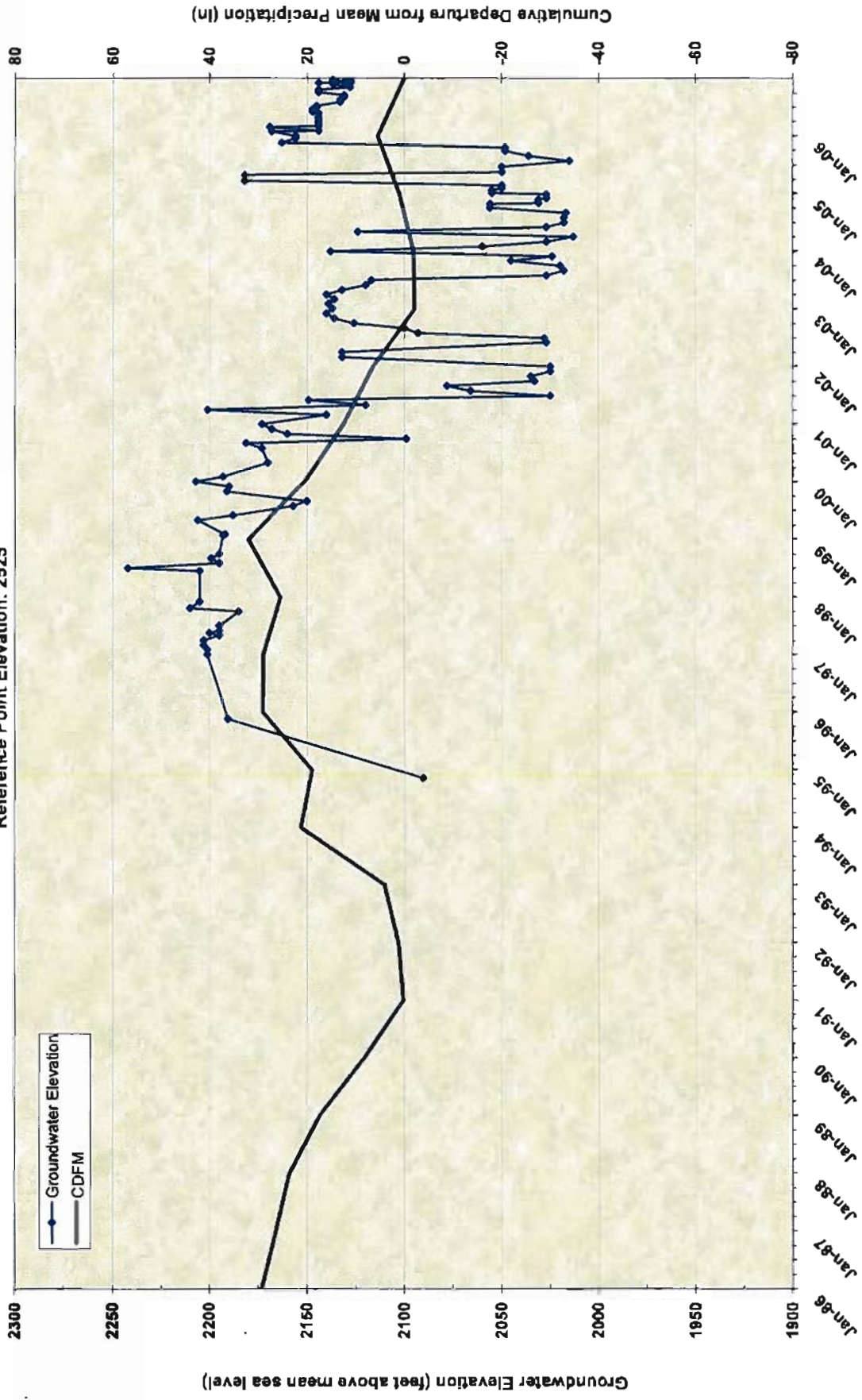
Station ID: 1003068 Local Name: MORENO 6
Owner: Beaumont-Yucaipa Water Conservation Agency
Reference Point Elevation: 2302



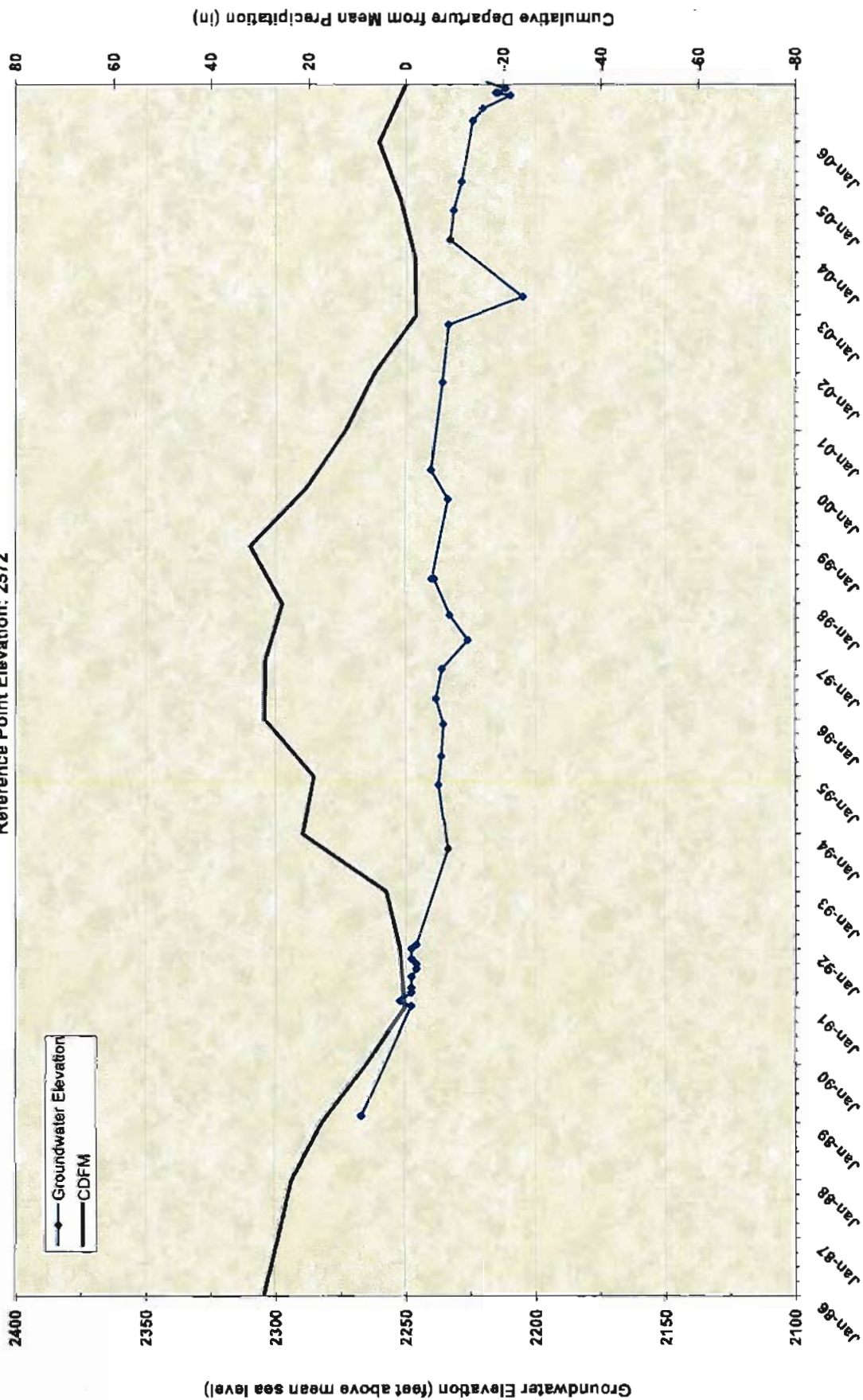
Station ID: 1004350 Local Name: 3
 Owner: Beaumont Cherry Valley Water District
 Reference Point Elevation: 2641.4



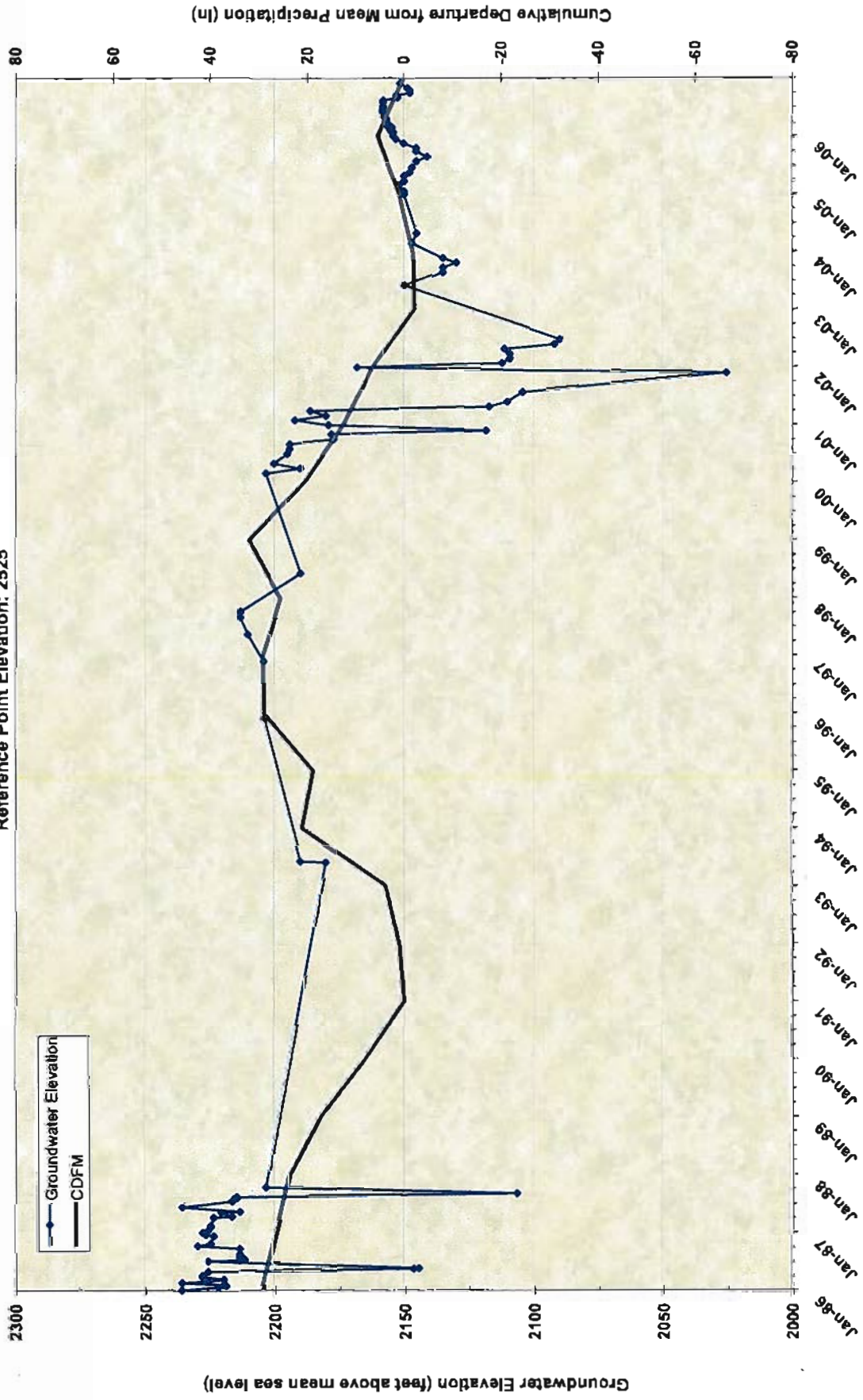
Station ID: 1004377 Local Name: C-3
 Owner: City Of Banning
 Reference Point Elevation: 2525



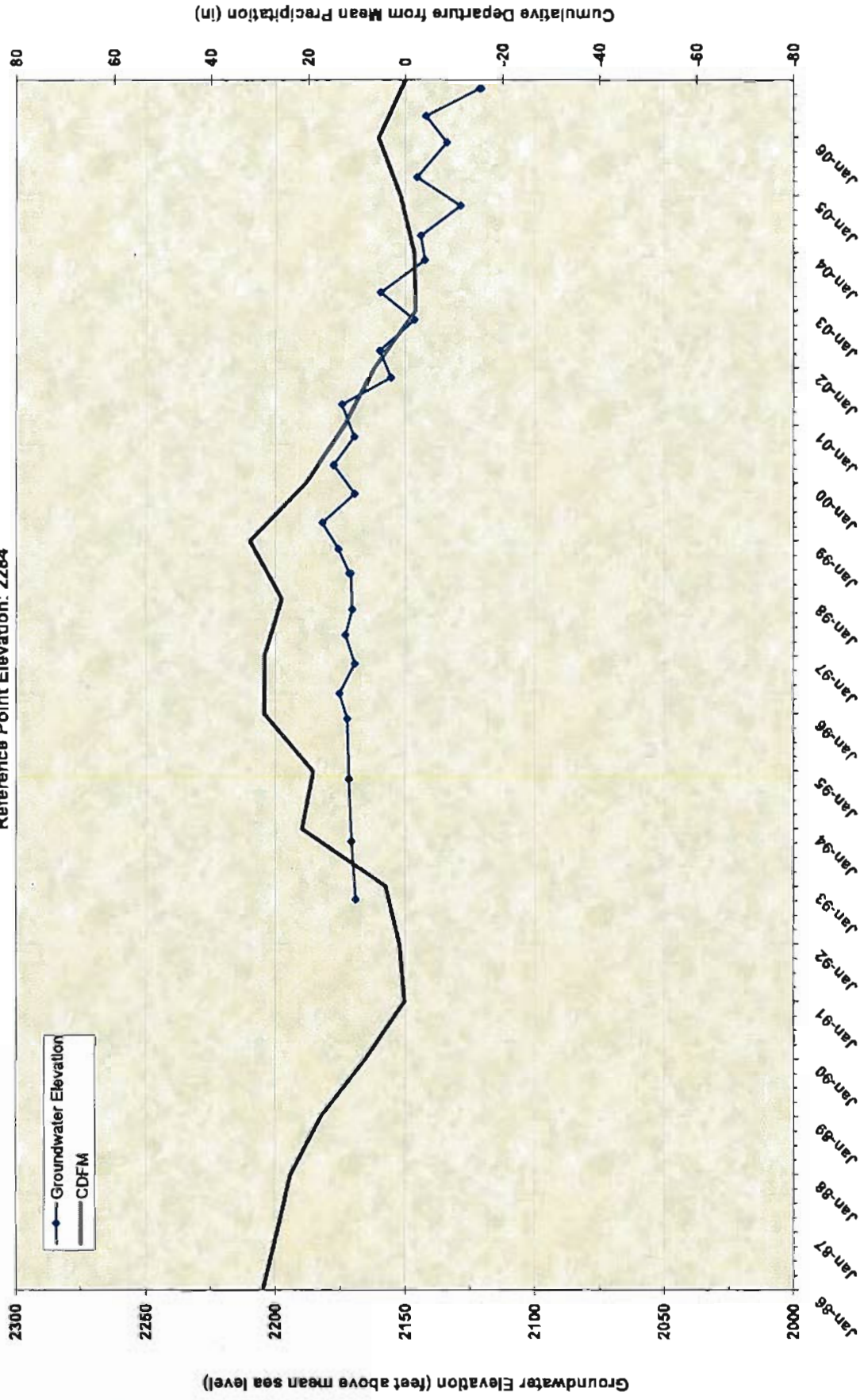
Station ID: 1007025 Local Name: OAK VALLEY #1
 Owner: California Oak Valley Golf And Resort Llc
 Reference Point Elevation: 2572



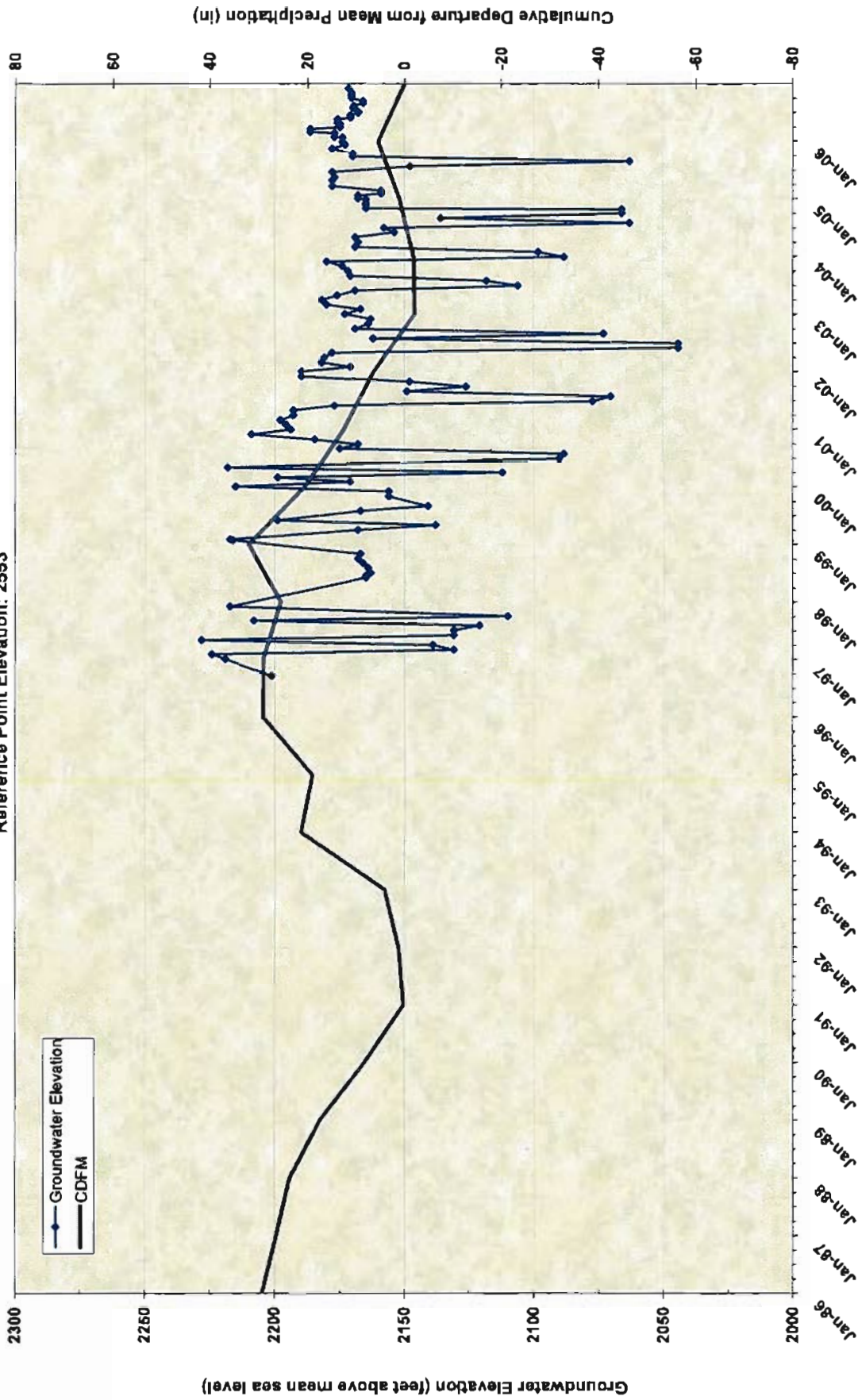
Station ID: 1007031 Local Name: C-2A
 Owner: City Of Banning
 Reference Point Elevation: 2525



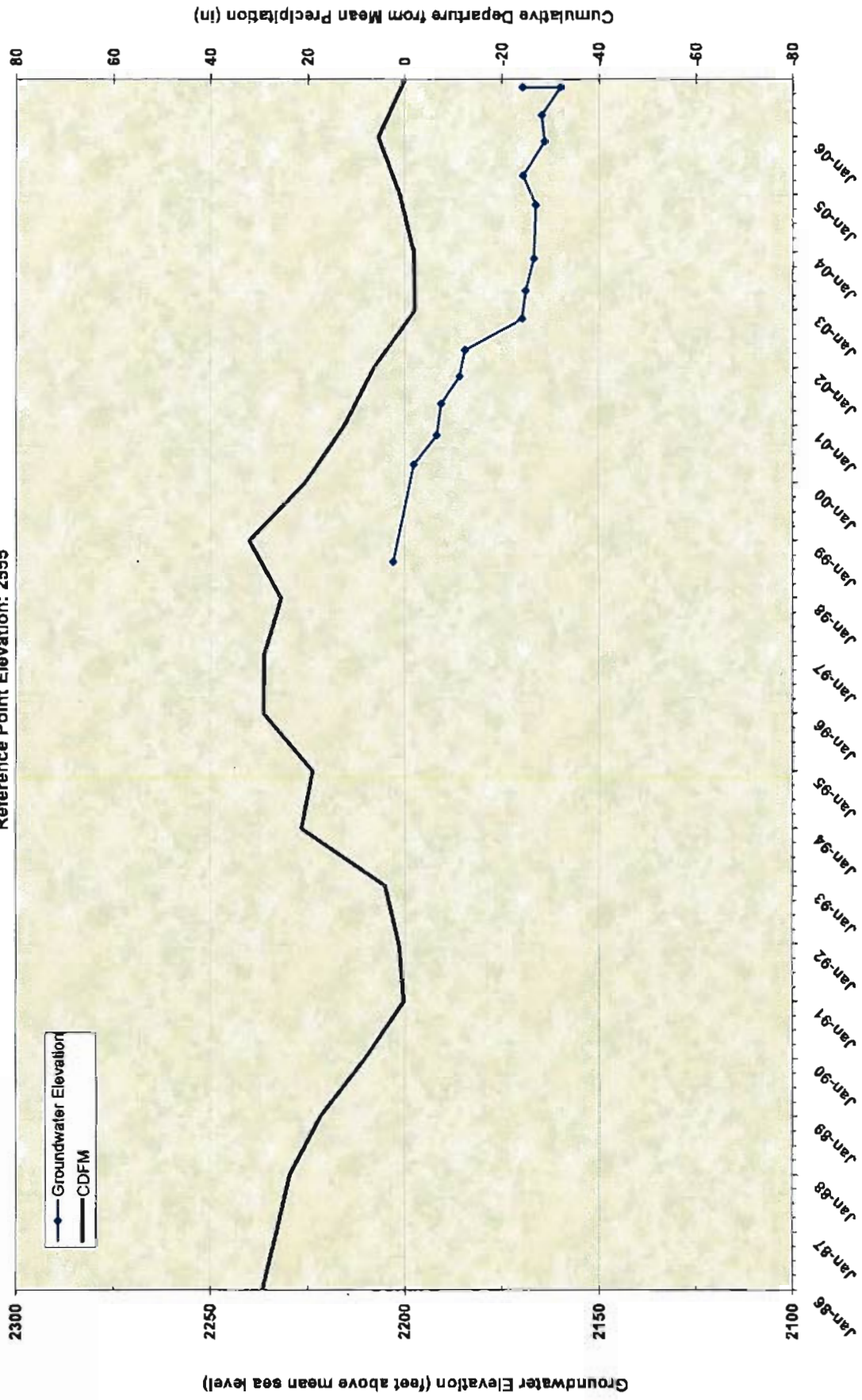
Station ID: 1201553 Local Name: 2
 Owner: Hewitt, Patricia
 Reference Point Elevation: 2284



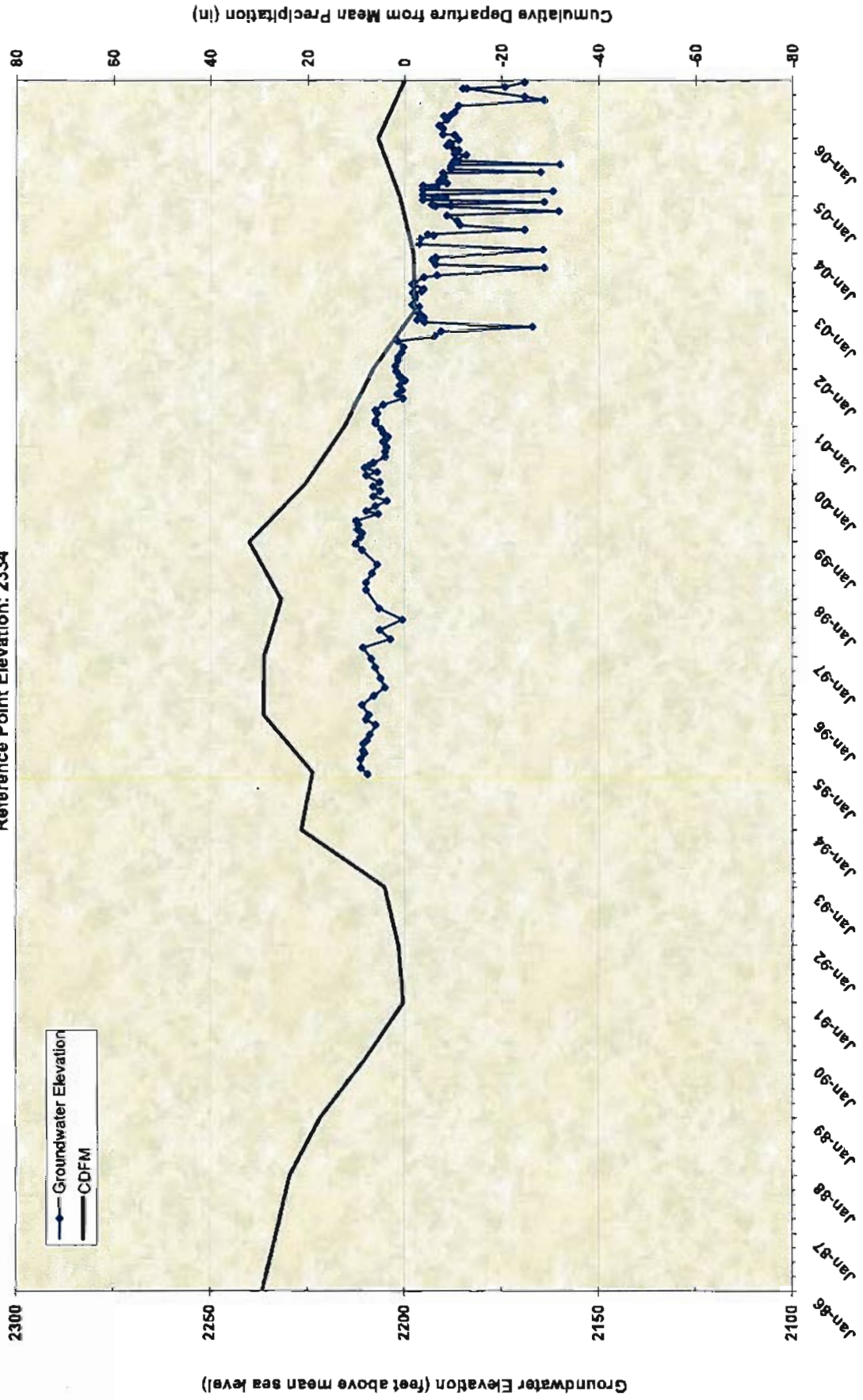
Station ID: 1206706 Local Name: C-4
 Owner: City Of Banning
 Reference Point Elevation: 2553



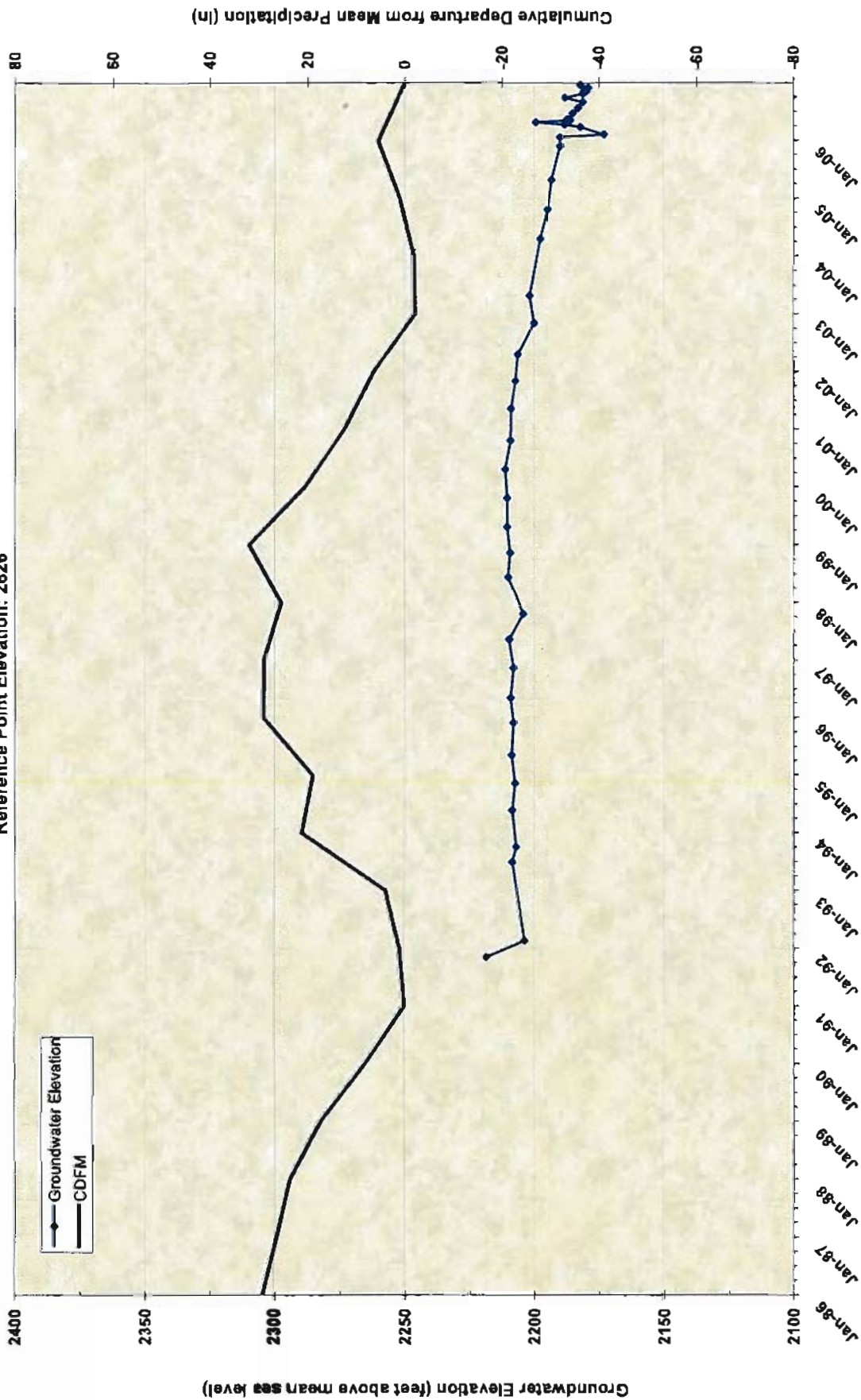
Station ID: 1206835 Local Name: M2
Owner: City Of Banning
Reference Point Elevation: 2555



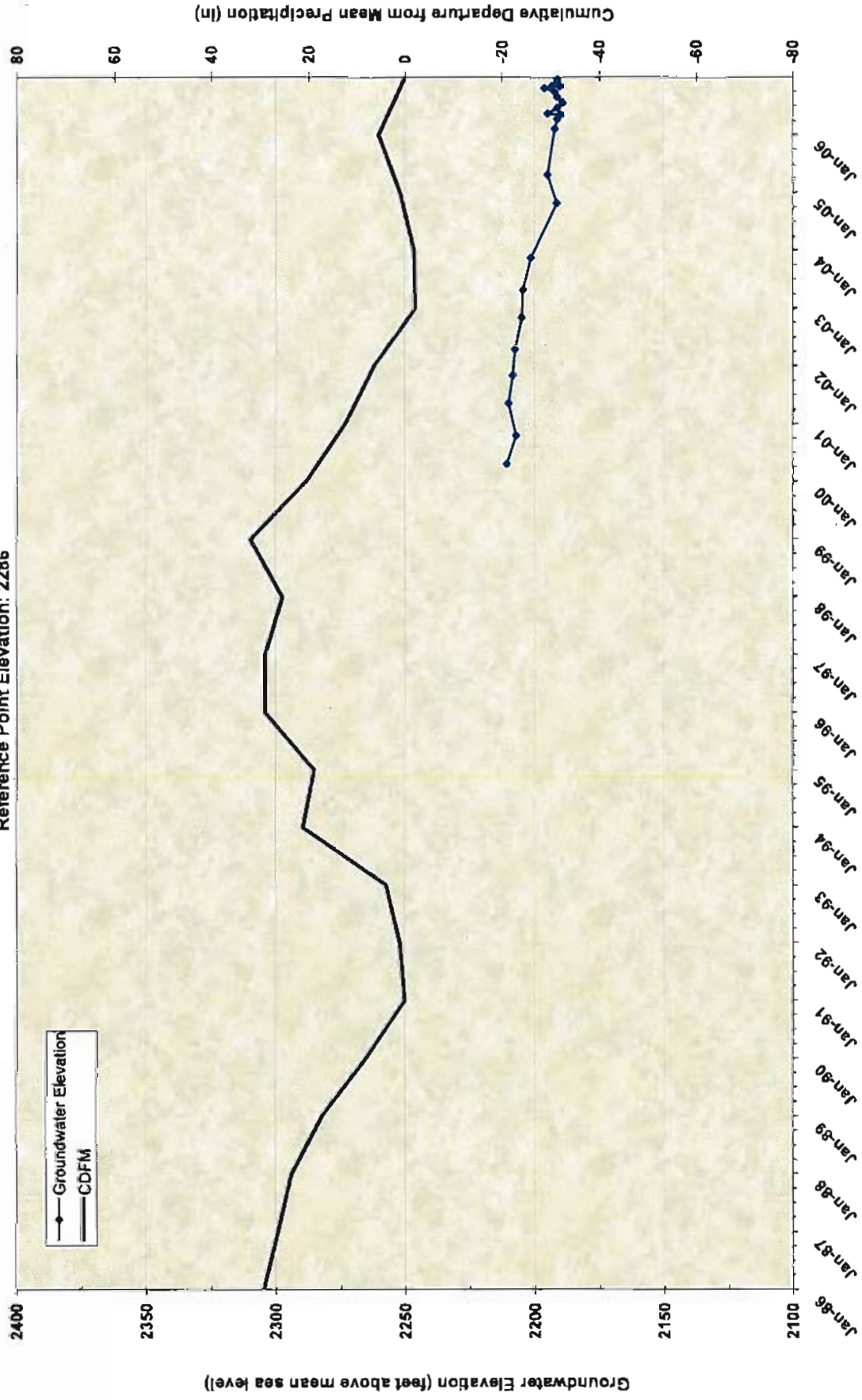
Station ID: 1206844 Local Name: 1
 Owner: Sharondale Mesa Owners Association
 Reference Point Elevation: 2334



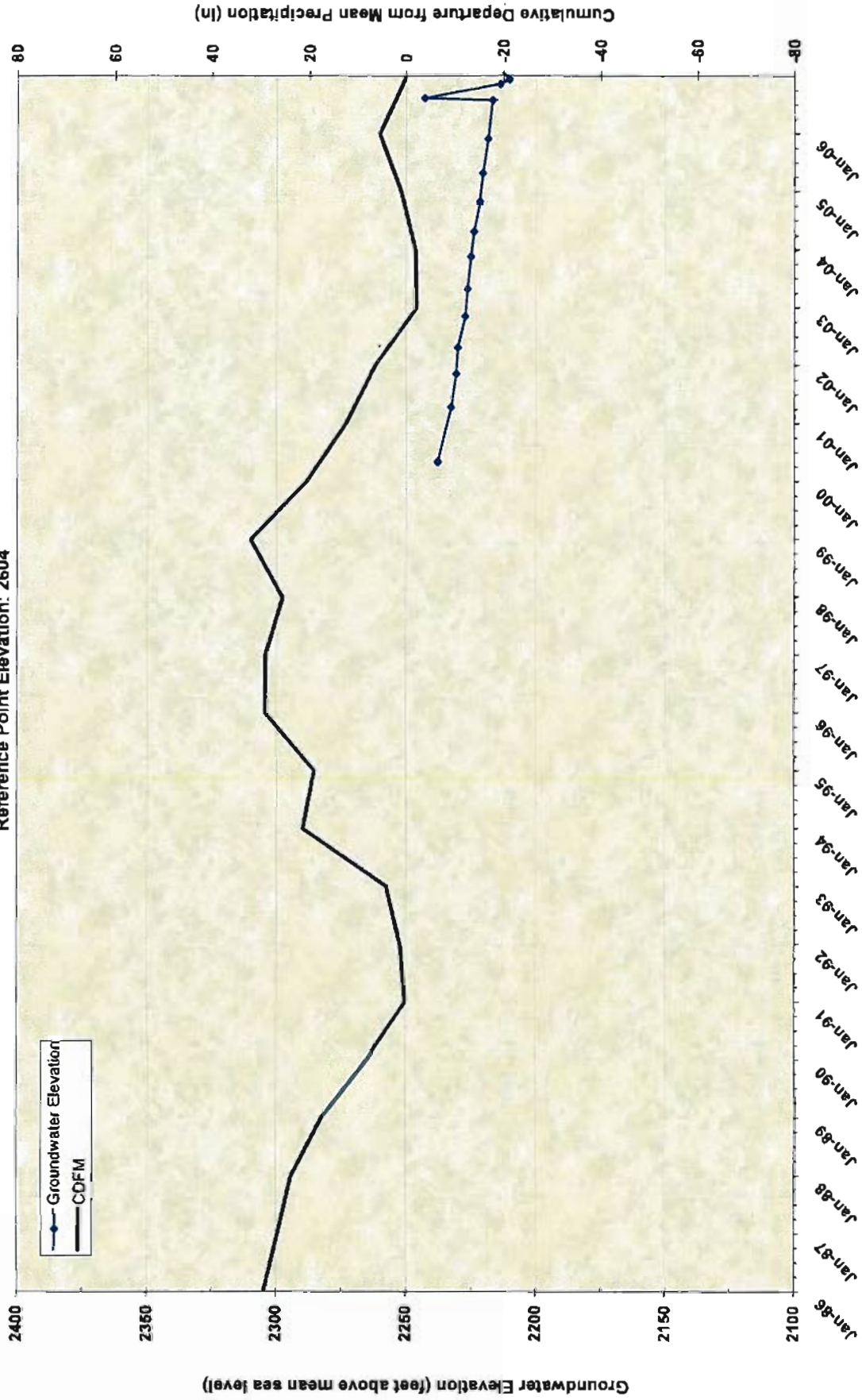
Station ID: 1206852 Local Name:
Owner: Beckman, Walt
Reference Point Elevation: 2626



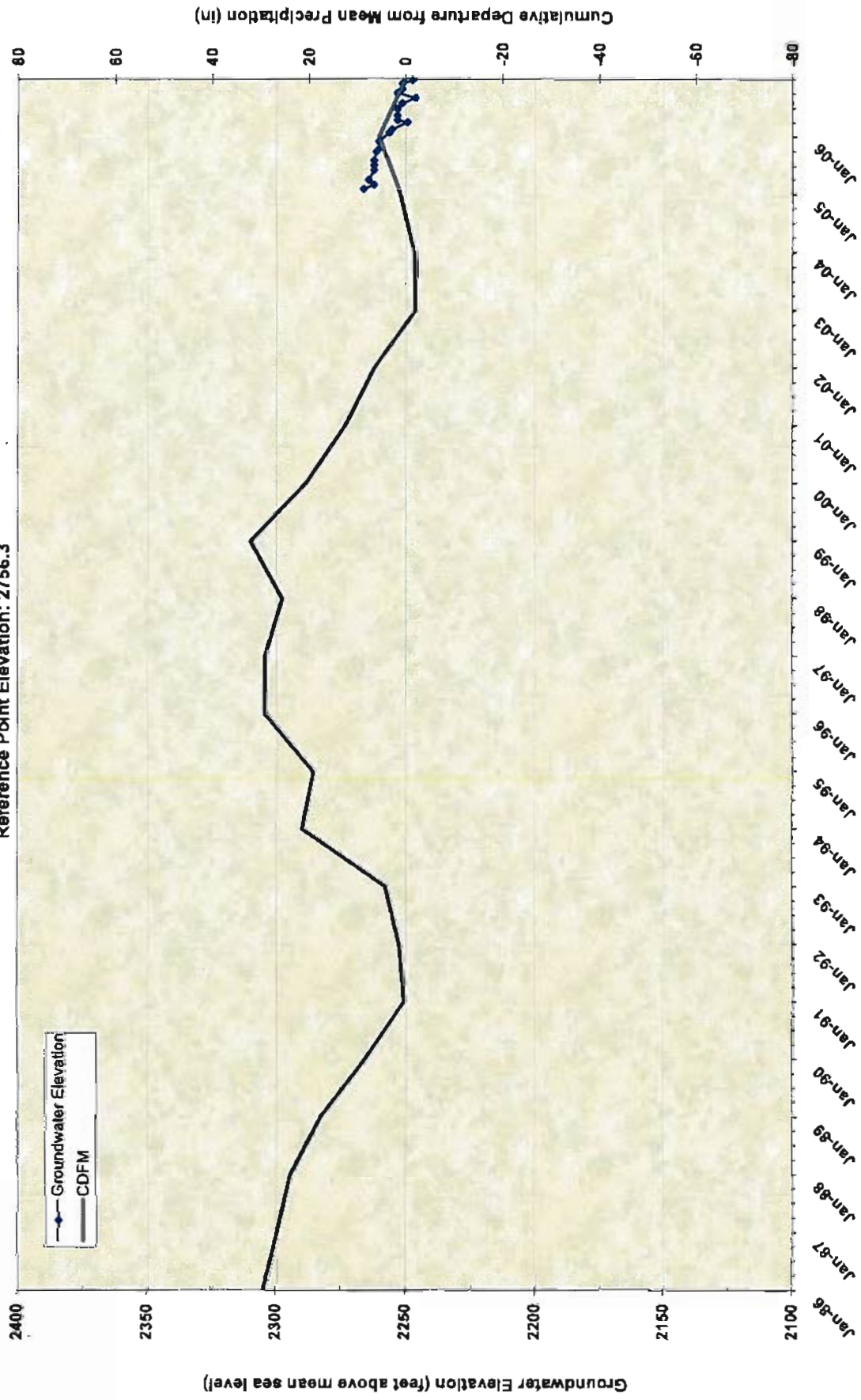
Station ID: 1206997 Local Name: C
 Owner: So. Calif. Professional Golf Association
 Reference Point Elevation: 2286



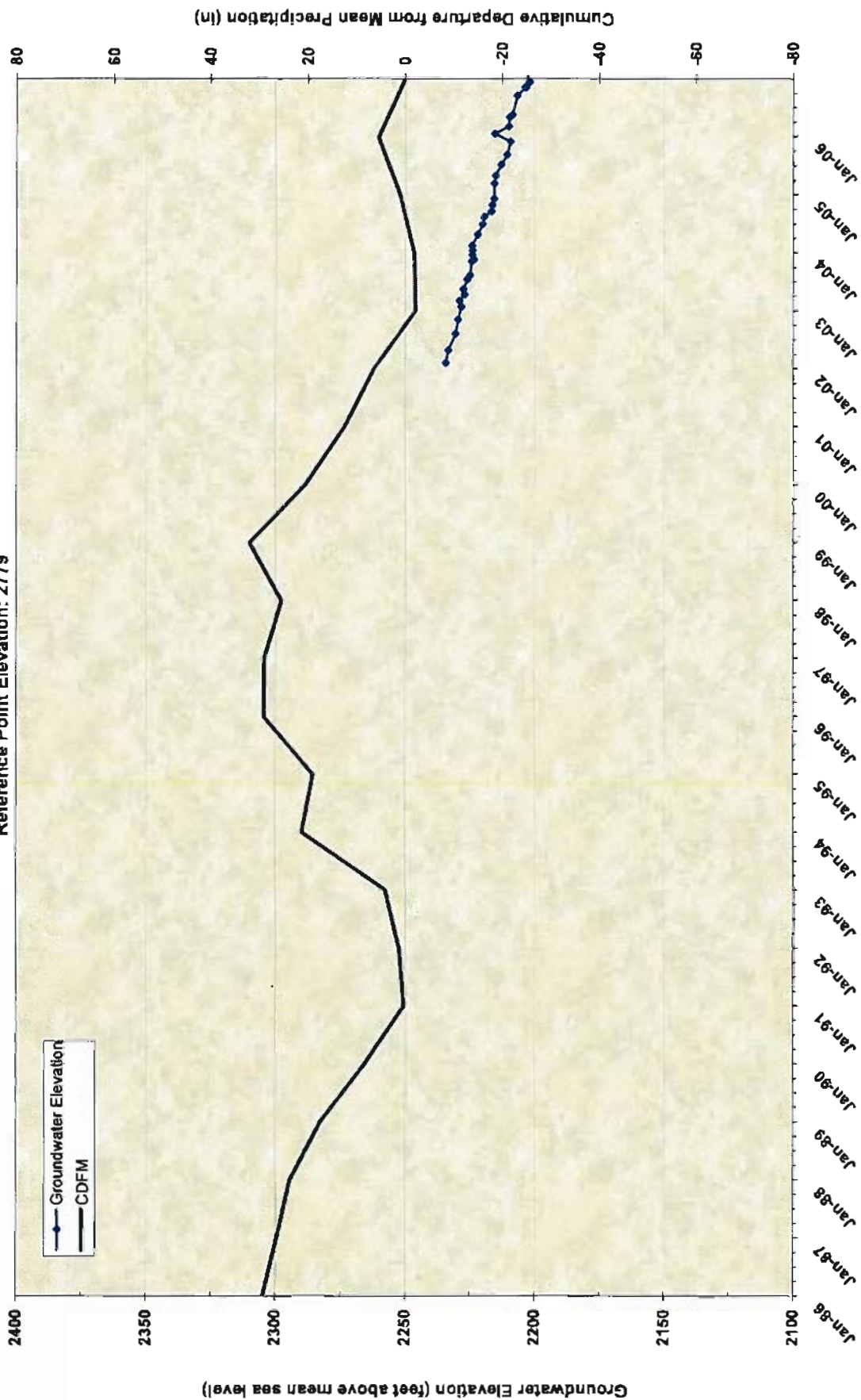
Station ID: 1207014
 Owner: Beaumont-Cherry Valley Recreation and Parks District
 Reference Point Elevation: 2604



Station ID: 1207331 Local Name: BH-1
Owner: Beaumont Cherry Valley Water District
Reference Point Elevation: 2756.3



Station ID: 1207770 Local Name: 33571411655001
 Owner: United States, Geological Survey
 Reference Point Elevation: 2779



**2007 Report on Water Supply
Conditions in the San Geronio Pass
Region**

To: Beaumont Basin Watermaster
From: J. Andrew Schlange
Date: January 8, 2008
Subject: 2007 Report on Water Supply Conditions in the San Gorgonio Pass Region

Transmitted herewith, please find the 2007 Report on Water Supply Conditions in the San Gorgonio Pass region for your review and approval.

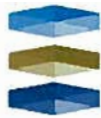
The report was reviewed at the October 23, 2007 Managers Meeting at the Yucaipa Valley Water District. All comments which have been reviewed are now incorporated in the Final Report.

Staff Recommendation

Staff recommends that the Beaumont Basin Watermaster approve the 2007 Report on Water Supply Conditions in the San Gorgonio Pass Region and authorize its submittal to LAFCO.

Respectfully,

J. Andrew Schlange



WILDERMUTH™
ENVIRONMENTAL INC.

May 14, 2007
Revised September 28, 2007

Beaumont Basin Watermaster
Attention: J. Andrew Schlange, Chief of Watermaster Services
560 Magnolia Avenue
Beaumont, California 92223

SUBJECT: 2007 REPORT ON WATER SUPPLY CONDITIONS IN THE SAN GORGONIO PASS REGION

Mr. Schlange:

Per your authorization, Wildermuth Environmental, Inc (WEI) updated the water demand and supply plans for the Beaumont Cherry Valley Water District (BCVWD), the City of Banning (Banning), the Cabazon Water District (CWD), the South Mesa Water Company (SMWC), and the part of the Yucaipa Valley Water District (YVWD) located in Riverside County. The *investigation area* for these retail water agencies is shown by their combined spheres of influence in Figure 1. The water demand in the investigation area represents most of the water demand in the San Gorgonio Pass Water Agency (SGPWA) service area. This update is part of the San Timoteo Watershed Management Authority (STWMA) and Beaumont Basin Watermaster (Watermaster) annual assessment of water demands and water supply plans. WEI prepared a similar analysis in January 2006 pursuant to a request from LAFCO, which was adopted by the STWMA and the Watermaster in March 2006.

WATER DEMANDS IN THE SGPWA SERVICE AREA

WEI obtained water demand projections and water supply plans from the BCVWD, Banning, the CWD, the SMWC, and the YVWD for their service areas. The sources of this information are:

- *Beaumont Cherry Valley Water District, Final 2005 Urban Water Management Plan August (December 2005).*
- *Determination of Maximum Perennial Yield for the City of Banning, Geoscience Support Services, 2003.*
- *2005 Urban Water Management Plan for the City of Banning, Wildermuth Environmental, Inc., 2005.*
- *2005 Urban Water Management Plan for the South Mesa Water Company, South Mesa Water Company, 2005.*
- An Excel workbook from Joe Zoba of the YVWD that shows the water demands and the supply of imported and recycled waters projected to be used in the part of the YVWD within the SGPWA service area (January 2007).
- *Groundwater Resources Monitoring Plan, Yucaipa. Fox, R. C., May, 1990.*
- A verbal projection of the water demands and supply plan for the CWD, Krieger and Stewart (engineers for the CWD, November, 2005).

Some of these water demands were slightly revised based on actual water use after the planning documents were prepared and on changes in the water supply plans provided by the agencies. These demands are based on the planning investigations conducted by each agency and represent each agency's best estimate. The demand projections presented herein have been reviewed by all agencies except the CWD. The projected water demands in acre-ft/yr through 2030 are:

Year	BCVWD	Banning	CWD	SMWC	YVWD	Total
2005	8,854	9,282	1,000	2,500	1,500	23,136
2010	22,300	12,501	4,000	2,740	3,000	44,541
2015	27,900	15,518	8,000	3,200	5,000	59,618
2020	29,300	18,535	12,000	3,560	6,935	70,330
2025	30,000	21,552	16,000	3,900	8,610	80,062
2030	30,500	24,569	16,000	4,300	10,285	85,654
Compound Rate of Growth	4.7%	4.0%	11.7%	2.2%	8.0%	5.2%

Figure 2 illustrates the water demand growth over time. The composite growth rate is about five percent per year and will increase from about 23,100 acre-ft/yr in 2005 to about 86,000 acre-ft/yr in 2030. Note that most of this growth is front loaded and will occur before 2020. These demand projections do not reflect the present housing slump caused by challenges in the mortgage industry. It is reasonable to assume that the growth in demand will slow down over the next one to two years. For planning purposes the Watermaster and the STWMA should not assume that the overall growth will be less than shown herein – the Watermaster and the STWMA should assume that there will be a surge in demand when the mortgage situation plays out and should continue to work with the SGPWA to aggressively develop new supplies for the region and stay ahead of the future demands.

WATER SUPPLY PLANS

Each agency has a number of available water sources, which are based, in part, on their location within the investigation area. Current sources of water include surface water, groundwater, and imported State Water Project (SWP) water. The largest single local source is the Beaumont Groundwater Basin. Future sources include increased usage of surface water, groundwater, imported water, recycled water, and conservation. Substantial investments will be required to develop local, recycled, and additional imported supplies to meet future demands. The retail water agencies have incorporated the cost of developing new supplies into their connection and commodity fees.

Beaumont Basin Adjudication

In February 2003, the STWMA filed suit in the Superior Court to adjudicate pumping and storage rights in the Beaumont Basin. The STWMA and the major pumpers developed a stipulated agreement (*Stipulated Agreement*) to resolve the lawsuit. In February 2004, the *Stipulated Agreement* was approved by the Court. The *Stipulated Agreement* is available for review at www.beaumontwatermaster.org.

This *Stipulated Agreement* established pumping rights among the two major classes of pumpers: overlying and appropriative. Overlying pumpers were assigned fixed rights with some flexibility to vary their maximum use during any five-year period. The safe yield established in the *Stipulated Agreement* is 8,650 acre-ft/yr. The total of the overlying producers' rights is equal to the safe yield. Collectively, the overlying pumpers produce substantially less than their aggregate rights. Appropriators' rights are stated as a percentage or fraction of water in the safe yield that is not used by the overlying pumpers. The *Stipulated Agreement* provides for the orderly transition of land use and associated water uses through

detailed provisions that require the assignment of rights from an overlying pumper to an appropriator when the appropriator provides service to the lands of the overlying pumper.

The *Stipulated Agreement* declares that there is a temporary surplus of water in the basin of 160,000 acre-ft. The temporary surplus can be used by the appropriators during the first ten years of the *Stipulated Agreement*. The appropriators will store the unused portion of the temporary surplus for use in subsequent years. The intent of removing the temporary surplus is to create additional evacuated storage space in the basin for use in storing supplemental water. The *Stipulated Agreement* gives control of the evacuated storage space in the basin and the overall management of storage to the Watermaster.

Exhibit A herein shows the projected allocation of the safe yield, the operating yield, the transition of overlying uses to appropriative uses for the overlayers that will convert, and the assignment of non-potable water for overlying rights. Table 1 shows the projected water rights from the Beaumont Basin for the appropriators through 2020; afterwards, the pumping rights should remain constant at 2020 values.

State Water Project Water

The SGPWA has a Table "A" allocation of 17,300 acre-ft/yr of water from the State Water Project (SWP). The SGPWA, by agreement with the DWR and the San Bernardino Valley Municipal Water District (SBVMWD), is currently limited to importing 8,650 acre-ft/yr until the SGPWA and SBVMWD formally initiate the environmental documentation process for the next phase of the East Branch Extension (EBX2). The EBX will include pipelines and pump station improvements upstream of the SGPWA service area. Based on discussions with SGPWA staff, we have assumed that full deliveries of the SGPWA's Table "A" allocation will be available starting in 2011.

The DWR completed an assessment of the reliability of the SWP in 2002 and found that the SWP would be able to deliver an average of 72 percent of the contracted Table "A" allocation or about 12,500 acre-ft/yr and that the deliveries would range between about 19% and 82% or about 3,300 to 14,200 acre-ft/yr for the SGPWA. Recent updated estimates developed by the DWR suggest that the average reliability could be as low as 69 percent. For this analysis, we have assumed the average reliability to be 69 percent, which yields about 12,000 acre-ft/yr to the SGPWA. The SGPWA, in their planning, has determined that there will be surplus water in the Delta from time to time and that part of this surplus water (Article 21 water) could be purchased by the SGPWA and used to supplement their Table "A" allocation. The SGPWA has estimated that they could supplement their Table "A" allocation by 2,000 acre-ft/yr on average with this surplus water, yielding the SGPWA about 14,000 acre-ft/yr.

In addition to the SGPWA Table "A" allocation, the BCVWD and Banning are collecting fees from new development to purchase new Table "A" water. The BCVWD and Banning will provide these funds to the SGPWA who will then purchase the new water and make it available to the BCVWD and Banning. The BCVWD will require 9,500 acre-ft/yr of reliable supply and therefore plans to have the SGPWA purchase 13,800 acre-ft/yr of water (69 percent average reliability). Likewise, Banning will require 5,000 acre-ft/yr of reliable supply and therefore plans to have the SGPWA purchase 7,300 acre-ft/yr of water. In total, the BCVWD and Banning will provide funds to the SGPWA to purchase 21,100 acre-ft/yr of new Table "A" water, which will yield about 14,500 acre-ft/yr of supply on average. All of the BCVWD's and Banning's SWP water demands are assumed to come from this Table "A" enhancement.

the CWD's, the SMWC's, and the YVWD's demands for SWP water through the SGPWA are assumed to be met through the SGPWA's existing Table "A" and Article 21 water. In the out years, near 2030, there will not be enough of this water for these entities and they will need to secure additional supplemental water supplies. Shortfalls can also be satisfied by transfers from Beaumont Basin storage accounts.

Recycled Water

Recycled water is produced by Banning, the City of Beaumont, and the YVWD. Banning, the BCVWD, the SMWC, and the YVWD have plans to reuse recycled water for irrigation uses and to supplement groundwater supplies through recharge. Most of the recycled water produced will be reused. The amounts of recycled water projected to be produced and used through 2030 are:

Year	Recycled Water Production (acre-feet)	Recycled Water Reuse (acre-feet)	Fraction of Recycled Water Reused
2005	4,800	0	0%
2010	10,300	6,300	61%
2015	15,000	9,500	63%
2020	17,700	10,300	58%
2025	20,000	11,400	57%
2030	22,300	13,400	60%

Some of the unused recycled water is discharged to San Timoteo Creek and the remainder is recharged in the Banning Basin. This unused recycled water is a valuable resource that may be put to use in the future to meet water demands in the SGPWA service area.

BCVWD Water Supply Plan

Table 2 lists the water demands and sources of supply for the BCVWD sphere. This table also shows the amount of recycled water produced in the BCVWD service area and a projection of the water accounting that will occur under the *Stipulated Agreement*. Potable water demands are projected to grow from about 8,850 in 2005 to about 23,500 acre-ft/yr in 2030. Total water demand is projected to grow from about 8,850 acre-ft/yr in 2005 to about 30,500 acre-ft/yr in 2030—a compounded growth rate of 4.7 percent per year.

The BCVWD is investing in its future water supply plan to ensure that it will be able to meet demands in its service area for the next 25 years and beyond. The BCVWD currently uses two supply sources: groundwater from Beaumont Basin and Edgar Canyon. Beaumont Basin supplies are enhanced by the recharge of imported water and transfer of appropriator water. The BCVWD is developing new water sources, including Noble Creek recharge, urban stormwater recharge, the direct use of non-potable water, and the recharge of recycled water. The details of the BCVWD water supply plan can be found in *Beaumont Cherry Valley Water District, Final 2005 Urban Water Management Plan* (December 2005). The BCVWD has purchased imported water from the SGPWA through the SGPWA's existing Table "A" allocation and, as mentioned above, will provide funds to the SGPWA to purchase additional Table "A" water for its exclusive use.

The BCVWD water supply plan can meet future water demands through 2030 and beyond. In most years, the BCVWD will have a substantial surplus of water, which will allow them to store water in the Beaumont Basin.

Banning Water Supply Plan

Table 3 lists the water demands and the sources of supply for the Banning service area. This table also shows the amount of recycled water produced in the Banning service area and a projection of the water accounting that will occur under the *Stipulated Agreement*. Total water demand is projected to grow from about 9,280 acre-ft/yr in 2005 to about 24,600 acre-ft/yr in 2030—a compounded growth rate of about 4.0 percent per year.

Banning is investing in its future water supply plan to ensure that it will be able to meet demands in its service area for the next 25 years and beyond. Banning currently uses three supply sources: groundwater from the Beaumont Basin, Banning Canyon Basin, and Banning East-West Basins. In addition, Banning is developing new water sources, including new urban stormwater recharge in the Beaumont Basin, the direct use of recycled water, and the recharge of imported water. Banning is working with the Banning Heights Mutual Water Company and the SGPWA to optimize the development of water resources in the Banning area. The details of Banning's water supply plan can be found in its *2005 Urban Water Management Plan*. Banning is planning to purchase imported water from the SGPWA indirectly at spreading grounds in the Beaumont Basin and directly through the delivery of treated imported water from a treatment plant that will be jointly funded and owned by the BCVWD and Banning. Banning is planning to purchase imported water from the SGPWA through the SGPWA's existing Table "A" allocation in the early years and, as mentioned above, will provide funds to the SGPWA to purchase additional Table "A" water for its exclusive use.

The Banning water supply plan can meet future water demands through 2030 and beyond. In most years, Banning will have a substantial surplus of water, which will allow them to store water in the Beaumont Basin.

Cabazon Water District

Table 4 lists the water demands and the sources of supply for the CWD service area. The CWD is not a party to the *Stipulated Agreement*. Total water demand is projected to grow from about 1,000 acre-ft/yr in 2005 to about 16,000 acre-ft/yr in 2025 and remain steady thereafter—a compounded growth rate of about 11.7 percent per year.

The CWD plans to rely entirely on local groundwater from the Cabazon Groundwater Basin area and a small spring for its local supplies. The CWD has no immediate plans to take imported water from the SGPWA.

The City of Banning, the Morongo Indians, and a bottled-water company also pump from the Cabazon Groundwater Basin area. Groundwater pumping in the Cabazon Groundwater Basin area could reach 20,000 acre-ft/yr when the CWD area reaches build out in 2025. For planning purposes, we have assumed that the CWD will limit its pumping to 6,000 acre-ft/yr and will import water for the remaining demand, up to 10,000 acre-ft/yr, from the SGPWA. We have also assumed, based on discussions with the CWD's engineer, that the CWD will not reuse its recycled water.

South Mesa Water Company

Table 5 lists the water demands and the sources of supply for the SMWC service area. This table also shows a projection of the water accounting that will occur under the *Stipulated Agreement*. Total water demand is projected to grow from about 2,500 acre-ft/yr in 2005 to about 4,300 acre-ft/yr in 2030—a compounded growth rate of about 2.2 percent per year.

The SMWC is investing in its future water supply plan to ensure that it will be able to meet demands in its service area for the next 25 years and beyond. The SMWC currently uses two supply sources: groundwater from the Beaumont Basin and Calimesa Basin (a sub-basin of the Yucaipa-area Basins). The SMWC is planning to construct a treatment plant and take delivery of SWP water from the SGPWA. In the near future and beyond, the SMWC plans to rely on the Calimesa Basin, SWP water, and limited

reuse of recycled water. The details of the SMWC's water supply plan can be found in its *2005 Urban Water Management Plan*.

The SMWC water supply plan can meet future water demands through 2030 and beyond. In most years, the SMWC will have a substantial surplus of water, which will allow them to store water in the Beaumont Basin.

YVWD Water Supply Plan

Table 6 lists the water demands and the sources of supply for the area within the Riverside County portion of the YVWD service area. This table also shows the amount of recycled water produced in the YVWD service area and a projection of the water accounting that will occur under the *Stipulated Agreement*. Potable water demands are projected to grow from about 1,500 in 2005 to about 6,500 acre-ft/yr in 2030. Total water demand is projected to grow from about 1,500 acre-ft/yr in 2005 to about 10,300 acre-ft/yr in 2030—a compounded growth rate of about 8 percent.

The YVWD is investing in its future water supply plans to ensure that they will be able to meet demands in their service areas for the next 25 years. The YVWD currently pumps groundwater from the Beaumont Basin and the Calimesa Basin. The YVWD is developing new water sources for this area, including recycled and imported waters. The YVWD is constructing a filtration plant and planning to purchase State Project Water from the SGPWA through the SGPWA's existing Table "A" allocation and from San Bernardino Valley Municipal Water District.

The YVWD water supply plan can meet future water demands through 2030 and beyond. In most years, the YVWD will have a surplus of water, which will allow them to store water in the Beaumont Basin.

AGGREGATE DEMANDS AND WATER SUPPLY

Table 7 lists the aggregate water demands and water sources for the BCVWD, Banning, the CWD, the SMWC, and the Riverside County portion of the YVWD. Total demand is seen to increase from about 23,200 in 2005 to about 85,700 acre-ft/yr in 2030—an aggregate growth rate of about 5.2 percent.

Exclusive of water stored in the Beaumont Basin pursuant to the *Stipulated Agreement*, the total water supply available to the *investigation area* ranges from about 36,700 acre-ft/yr in 2005 to about 82,400 acre-ft/yr in 2030. The column labeled "Local Supplies" corresponds to groundwater supplies that were developed by the retail agencies. "Local Enhancements" is the new yield developed by the BCVWD Noble Creek Recharge Project and the recharge of new urban stormwater. The "Recycled Water Reuse" column corresponds to the direct reuse plans developed by the BCVWD, Banning, the SMWC, and the YVWD, and to the recycled water recharge program of the BCVWD. It was assumed that the SGPWA would maximize its allocation of Table "A" water and that the BCVWD, Banning, and the SGPWA would obtain additional imported water referred to herein as Table "A" Enhancement.

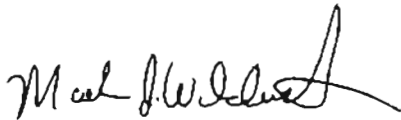
The temporary surplus is a separate part of the local supply until 2014 pursuant to the *Stipulated Agreement*. The unused portion of the temporary surplus that is stored in local storage accounts prior to 2014 will be used to meet local demands as part of the local groundwater supply after 2014. The aggregate supply exceeds aggregate demand from 2005 through 2025. The parties to the *Stipulated Agreement* will use water stored in the Beaumont Basin to meet their demands and no supply shortages are projected to occur through 2030. A key assumption is that the parties to the *Stipulated Agreement* will use water at the maximum rate at which it is available from the SGPWA every year, including the Table "A" enhancement water when it is available. In 2024, the demand for imported water will exceed the combined SGPWA original Table "A" allocation and the BCVWD and Banning Table "A" Enhancement with the deficit reaching about 2,000 acre-ft/yr by 2030. The SGPWA will need to purchase about 2,900 acre-ft/yr of new supplemental supplies and have this supply online in the early 2020s.

With the exception of the SMWC and the CWD, water demands will continue to increase beyond 2030, and therefore additional supplemental water supplies beyond the Table "A" supplies suggested above will be required. These new supplemental supplies could include recycled and imported water. The Watermaster and the STWMA should carefully consider the findings of the forthcoming Resource Optimization Study (draft available in late October 2007) and implement its recommendations to maximize the use of local water resources and to maximize the reliability of SWP water.

It has been our sincere pleasure to serve the Watermaster and the STWMA in this investigation. Please call me if you have any questions.

Sincerely,

Wildermuth Environmental, Inc.

A handwritten signature in black ink, appearing to read "Mark Wildermuth". The signature is fluid and cursive, with a large, stylized "M" and "W".

Mark Wildermuth, MS, PE
President/CEO

Encl.

cc STWMA Commissioners
Joe Aklufi

Table 1
Projected Allocation of Pumping Rights per the 2004 Beaumont Basin
Stipulated Agreement
(acre-ft)

Year ¹	Overlying Pumps		Appropriator Pumps				Total Rights Allocated
	Overlying Rights	Used by Overliers	BCVWD	YVWD	SMWC	Banning	Total
2004	8,650	4,251	6,802	2,173	1,996	5,029	16,000
2005	8,650	4,313	6,802	2,173	1,996	5,029	16,000
2006	8,650	4,074	6,802	2,173	1,996	5,029	16,000
2007	8,650	3,918	7,002	2,373	1,996	5,029	16,400
2008	8,650	3,918	7,044	2,565	1,996	5,029	16,634
2009	8,650	678	12,718	3,393	2,580	6,499	25,191
2010	8,650	678	12,785	3,593	2,587	6,517	25,483
2011	8,650	678	12,980	3,834	2,632	6,630	26,076
2012	8,650	678	12,867	3,977	2,587	6,516	25,947
2013	8,650	678	12,809	4,138	2,557	6,442	25,947
2014	8,650	678	5,566	1,824	432	1,088	8,909
2015	8,650	678	5,466	1,793	403	1,014	8,675
2016	8,650	678	5,366	1,761	373	940	8,441
2017	8,650	678	5,267	1,729	344	867	8,206
2018	8,650	678	5,167	1,697	315	793	7,972
2019	8,650	678	5,167	1,697	315	793	7,972
2020	8,650	678	5,167	1,697	315	793	7,972

¹ – Commencing in 2014, the temporary surplus is exhausted and the Appropriator Pumps are allocated unproduced overlying rights annually based on Exhibit C of the Stipulated Agreement. The projected allocation of pumping rights will not change significantly after 2018.

Table 2
Water Demand and Water Supply Plan for the Beaumont Cherry Valley Water District Service Area
(acre-ft/yr)

Year ¹	Demands ^{2,3}			Supplies ⁴												Edgar Canyon	Direct Use of Non-Potable			Total Supply
	Potable	Non Potable	Total Demand	Recycled Water Production Available for Use	Rights Per 2004 Adjudication ⁵	Additions to Pumping Right per the 2004 Adjudication				Recycled SWP Water ⁶ Purchased for Recharge ⁶	Aggregator Water Transfer	Total Additions to Pumping Right	Annual Production Right per 2004 Adjudication	Annual Production	Over (Under) Production		Potential Volume in BCVWD Storage Account ⁷	Water		
						Noble Creek Recharge Project	Storm Water Recharge ⁶	New Urban Storm Water Recharge ⁶	Recycled Water Recharge ⁶									Recycled SWP	Imported SWP	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
2006	11,801	0	11,801	2,115	6,802	0	200	0	3,500	0	3,700	10,502	9,252	(1,250)	1,331	2,549	0	0	0	11,801
2007	11,750	0	11,750	2,093	7,002	0	200	0	6,000	1,500	7,700	14,702	8,950	(4,752)	6,084	1,800	0	0	0	11,750
2008	12,180	5,440	17,620	2,308	7,044	0	200	0	11,440	0	11,640	18,884	15,820	(2,864)	8,948	1,800	0	0	0	17,620
2009	14,040	5,560	19,600	3,238	12,718	2,000	1,760	0	11,560	0	15,320	28,038	17,800	(10,238)	16,168	1,800	0	0	0	19,600
2010	15,900	8,400	22,300	4,168	12,785	2,000	1,760	968	6,000	0	10,728	23,513	14,100	(9,413)	28,599	1,800	3,200	6,400	22,300	
2011	16,940	8,480	23,420	4,888	12,860	2,000	1,760	1,448	6,000	0	11,208	24,187	15,140	(9,047)	37,847	1,800	3,240	6,480	23,420	
2012	17,980	8,560	24,540	5,208	12,867	2,000	1,760	1,628	6,000	0	11,688	24,555	16,180	(8,375)	46,021	1,800	3,280	6,560	24,540	
2013	19,020	8,640	25,660	5,728	12,809	2,000	1,760	2,408	6,000	0	12,168	24,977	17,220	(7,757)	53,779	1,800	3,320	6,640	25,660	
2014	20,060	8,720	26,780	6,248	12,809	2,000	1,760	2,888	6,000	0	12,848	25,355	18,260	(7,095)	61,527	1,800	3,360	6,720	26,780	
2015	21,100	8,800	27,900	6,768	12,809	2,000	1,760	3,368	6,000	0	13,128	25,733	19,300	(6,433)	70,520	1,800	3,400	6,800	27,900	
2016	21,340	8,840	28,180	6,888	12,809	2,000	1,760	3,468	6,000	0	13,228	25,913	19,540	(6,373)	71,800	1,800	3,420	6,840	28,180	
2017	21,580	8,880	28,460	7,008	12,809	2,000	1,760	3,568	6,000	0	13,328	26,093	19,780	(6,313)	72,895	1,800	3,440	6,880	28,460	
2018	21,820	8,920	28,740	7,128	12,809	2,000	1,760	3,668	6,000	0	13,428	26,273	20,020	(6,253)	73,980	1,800	3,460	6,920	28,740	
2019	22,060	8,960	29,020	7,248	12,809	2,000	1,760	3,768	6,000	0	13,528	26,453	20,260	(6,193)	75,065	1,800	3,480	6,960	29,020	
2020	22,300	9,000	29,300	7,368	12,809	2,000	1,760	3,868	6,000	0	13,628	26,633	20,500	(6,133)	76,150	1,800	3,500	7,000	29,300	
2021	22,440	9,040	29,440	7,438	12,809	2,000	1,760	3,904	6,000	0	13,684	26,813	20,640	(6,073)	77,235	1,800	3,500	7,000	29,440	
2022	22,580	9,080	29,580	7,508	12,809	2,000	1,760	3,904	6,000	0	13,684	26,813	20,780	(6,013)	77,320	1,800	3,500	7,000	29,580	
2023	22,720	9,120	29,720	7,578	12,809	2,000	1,760	3,904	6,000	0	13,684	26,813	20,920	(5,953)	77,405	1,800	3,500	7,000	29,720	
2024	22,860	9,160	29,860	7,648	12,809	2,000	1,760	3,904	6,000	0	13,684	26,813	21,060	(5,893)	77,490	1,800	3,500	7,000	29,860	
2025	23,000	9,200	30,000	7,718	12,809	2,000	1,760	3,904	6,000	0	13,684	26,813	21,200	(5,833)	77,575	1,800	3,500	7,000	30,000	
2026	23,100	9,200	30,100	7,768	12,809	2,000	1,760	3,904	6,000	0	13,684	26,813	21,300	(5,793)	77,660	1,800	3,500	7,000	30,100	
2027	23,200	9,200	30,200	7,818	12,809	2,000	1,760	3,904	6,000	0	13,684	26,813	21,400	(5,753)	77,745	1,800	3,500	7,000	30,200	
2028	23,300	9,200	30,300	7,868	12,809	2,000	1,760	3,904	6,000	0	13,684	26,813	21,500	(5,713)	77,830	1,800	3,500	7,000	30,300	
2029	23,400	9,200	30,400	7,918	12,809	2,000	1,760	3,904	6,000	0	13,684	26,813	21,600	(5,673)	77,915	1,800	3,500	7,000	30,400	
2030	23,500	9,200	30,500	7,968	12,809	2,000	1,760	3,904	6,000	0	13,684	26,813	21,700	(5,633)	78,000	1,800	3,500	7,000	30,500	

1 - Calendar year.
2 - Demands and Supplies as per December 2006 Urban Water Management Plan with minor changes to reflect compliance with 2004 Basin Plan and Beaumont Basin Segmented Agreement.
3 - Includes all production from BCVWD and excludes overfill purchases.
4 - Specific interpretation of the Beaumont Basin Adjudication approved by the Court in 2004 and assumes that overfills will either be contracted to non-potable supplies provided by BCVWD or that their demands will have been replaced by appropriate values. See Table 4.
5 - Represents engineering estimates and credit to appropriate account is pending an application submitted to the Watermaster and subsequent investigation by the Watermaster. 200 acre-ft/yr of recharge in from 8th Street Basin, which is owned by the City of Beaumont. This City will apply for credit to be applied to BCVWD's account.
6 - Watermaster.
7 - Not recycled water will be available in 2008 and (net) 1 mgd of discharge to Capitan Creek will be initiated.
8 - Assumed to be recycled water and not to be used for any other purpose. Credit is for long-term demand to other parties.
9 - Assumed to be recycled water from SGP/W. Table "X" allocation will be used to supplement recycled water to meet non-potable demands.

Table 3
Water Demand and Water Supply Plan for the City of Banning Service Area
(acre-ft/yr)

Year ¹	Demands ²	Supplies ²													Total Supply		
		Recycled Water Production Available for Use	Rights Per 2004 Stipulated Agreement	New Urban Storm Water Recharge ⁴	SWP Water Purchased for Recharge ⁵	Beaumont Basin Rights and Production ⁷	Annual Production Right per 2004 Adjudication	Annual Production	Over (Under) Production	Potential Volume in Banning Storage Account ⁸	Banning Storage Unit	Cabazon Storage Unit ⁷	Banning Canyon ⁷	Recycled Water			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
																	= (9)+(14) - (16) - (17) - (18)
2006	10,238	3,394	5,029	0	0	0	5,029	1,856	(3,171)	7,847	1,402	812	2,014	0	6,366	0	10,238
2007	10,570	3,560	5,029	0	0	1,500	6,529	2,829	(3,600)	11,447	944	787	1,731	0	5,911	0	10,570
2008	11,214	3,862	5,029	0	2,000		7,029	4,051	(2,977)	14,424	748	961	1,707	0	5,455	0	11,214
2009	11,857	4,204	6,499	0	3,000		9,498	3,124	(6,375)	20,800	548	1,138	1,684	2,050	5,000	0	11,857
2010	12,501	4,528	6,517	300	4,000		10,817	2,281	(8,526)	29,326	350	1,310	1,660	2,050	5,000	1,500	12,501
2011	13,105	4,828	6,830	300	5,000		11,830	2,835	(9,098)	38,421	350	1,310	1,660	2,050	5,000	1,580	13,105
2012	13,708	5,129	6,516	300	5,000		11,816	3,378	(9,438)	46,859	350	1,310	1,660	2,050	5,000	1,620	13,708
2013	14,311	5,431	6,442	300	5,000		11,742	3,821	(7,821)	54,680	350	1,310	1,660	2,050	5,000	1,880	14,311
2014	14,915	5,733	6,098	300	5,000		6,388	4,465	(1,823)	56,803	350	1,310	1,660	2,050	5,000	1,740	14,915
2015	15,518	6,034	6,014	300	5,000		8,314	5,008	(1,306)	57,909	350	1,310	1,660	2,050	5,000	1,800	15,518
2016	16,121	6,336	6,400	300	5,000		6,240	5,531	(709)	58,818	350	1,310	1,660	2,050	5,000	1,880	16,121
2017	16,725	6,638	6,657	300	5,000		6,187	6,055	(112)	58,728	350	1,310	1,660	2,050	5,000	1,960	16,725
2018	17,328	6,939	6,939	300	5,000		8,093	6,578	485	58,244	350	1,310	1,680	2,050	6,000	2,040	17,328
2019	17,932	7,241	7,932	300	5,000		8,093	7,102	1,009	57,236	350	1,310	1,680	2,050	5,000	2,120	17,932
2020	18,535	7,543	7,932	300	5,000		8,093	7,625	1,532	55,704	350	1,310	1,680	2,050	5,000	2,200	18,535
2021	19,138	7,844	7,932	300	5,000		6,093	8,168	53,628	350	1,310	1,310	1,660	2,050	6,000	2,260	19,138
2022	19,742	8,146	7,932	300	5,000		6,093	8,712	2,619	51,010	350	1,310	1,660	2,050	5,000	2,320	19,742
2023	20,345	8,448	7,932	300	5,000		6,093	9,255	3,162	47,847	350	1,310	1,660	2,050	5,000	2,380	20,345
2024	20,948	8,749	7,932	300	5,000		6,093	9,798	3,705	44,142	350	1,310	1,660	2,050	5,000	2,440	20,948
2025	21,552	9,051	7,932	300	5,000		6,093	10,342	4,249	39,893	350	1,310	1,660	2,050	5,000	2,500	21,552
2026	22,155	9,353	7,932	300	5,000		6,093	10,885	4,792	35,101	350	1,310	1,660	2,050	5,000	2,560	22,155
2027	22,759	9,654	7,932	300	5,000		6,093	11,429	5,336	28,765	350	1,310	1,660	2,050	5,000	2,620	22,759
2028	23,362	9,956	7,932	300	5,000		6,093	11,879	5,879	23,867	350	1,310	1,660	2,050	5,000	2,680	23,362
2029	23,965	10,258	7,932	300	5,000		6,093	12,515	6,422	17,464	350	1,310	1,680	2,050	5,000	2,740	23,965
2030	24,569	10,560	7,932	300	5,000		6,093	13,059	6,965	12,265	350	1,310	1,680	2,050	5,000	2,800	24,569

1 - Calendar year.
2 - Water Demands and Supplies adapted from City of Banning Urban Water Management Plan (2005).
3 - Since implementation of the Beaumont Basin Adjudication approved by the Court in 2004.
4 - Smith Creek Recharge Project. Represents engineering estimate and credit to appropriator account is pending an application submitted to the Watermaster and subsequent investigation by the Watermaster.
5 - Water will be either recharged in Beaumont Basin, served from a treatment plant, or some combination of both.
6 - Assumes that water stored in Banning storage account is allowed to accrue and be available during shortages on SWP or for lease/assignment to other parties.
7 - From Geoscience Report.



Table 4

Water Demand and Water Supply Plan for the Cabazon Water District
(acre-ft/yr)

Year ¹	Demands ²			Supplies ²		
	Potable	Non Potable	Total	Imported SWP Water from SGPWA	Cabazon Groundwater Basin Area	Total Supply
(1)	(2)	(3)	(4) = (2)+(3)	(5)	(6)	(7) = (5)+(6)
2006	1,600	0	1,600	0	1,600	1,600
2007	2,200	0	2,200	0	2,200	2,200
2008	2,800	0	2,800	0	2,800	2,800
2009	3,400	0	3,400	0	3,400	3,400
2010	4,000	0	4,000	0	4,000	4,000
2011	4,800	0	4,800	0	4,800	4,800
2012	5,600	0	5,600	0	5,600	5,600
2013	6,400	0	6,400	400	6,000	6,400
2014	7,200	0	7,200	1,200	6,000	7,200
2015	8,000	0	8,000	2,000	6,000	8,000
2016	8,800	0	8,800	2,800	6,000	8,800
2017	9,600	0	9,600	3,600	6,000	9,600
2018	10,400	0	10,400	4,400	6,000	10,400
2019	11,200	0	11,200	5,200	6,000	11,200
2020	12,000	0	12,000	6,000	6,000	12,000
2021	12,800	0	12,800	6,800	6,000	12,800
2022	13,600	0	13,600	7,600	6,000	13,600
2023	14,400	0	14,400	8,400	6,000	14,400
2024	15,200	0	15,200	9,200	6,000	15,200
2025	16,000	0	16,000	10,000	6,000	16,000
2026	16,000	0	16,000	10,000	6,000	16,000
2027	16,000	0	16,000	10,000	6,000	16,000
2028	16,000	0	16,000	10,000	6,000	16,000
2029	16,000	0	16,000	10,000	6,000	16,000
2030	16,000	0	16,000	10,000	6,000	16,000

1 -- Calendar year.

2 -- Water Demands and Supplies from Krieger and Stewart (Engineers for CWD), November 2005.

Table 5
Water Demand and Water Supply Plan for the South Mesa Water Company
(acre-ft/yr)

Year ¹	Demands ²		Supplies ²										Yucaipa Area Groundwater Basins	Total Supply
	Potable	Non Potable	Total	Recycled Water Production Available for Use	Beaumont Basin Rights and Production ³				Imported SPW from SGPWA for Direct Potable Use	Non Potable Water Supply				
					Rights per 2004 Adjudication	SMWC Beaumont Pumping for use in SGPWA Area ⁴	Over (Under) Production	Appropriator Water Transfer		Potential Volume in SMWC Storage Account ⁵	Imported SWP from SGPWA	Recycled Water		
(1)	(2)	(3)	(4) = (2)+(3)	(5)	(6)	(7) = (6)-(5)	(8)	(9)	(10)	(11)	(12)	(13)	(14) = (9)+(10)+(11)+(12) +(13)	
2006	2,548	0	2,548	0	645	(1,351)	0	4,225	0	0	0	1,903	2,548	
2007	2,596	0	2,596	0	600	(1,396)	(3,000)	2,621	0	0	0	1,996	2,596	
2008	2,644	0	2,644	0	600	(1,396)		4,017	0	0	0	2,044	2,644	
2009	2,692	0	2,692	0	600	(1,980)		5,987	0	0	0	2,092	2,692	
2010	2,740	0	2,740	0	600	(1,987)		7,984	0	0	0	2,140	2,740	
2011	2,810	22	2,832	0	600	(2,032)		10,016	0	0	22	2,210	2,832	
2012	2,880	44	2,924	0	600	(1,987)		12,003	0	0	44	2,280	2,924	
2013	2,950	66	3,016	0	600	(1,957)		13,960	0	0	66	2,350	3,016	
2014	3,020	88	3,108	0	432	(1,177)		14,077	0	0	88	2,705	3,108	
2015	3,090	110	3,200	0	403	(88)		14,165	1,120	0	110	1,655	3,200	
2016	3,155	117	3,272	0	373	(58)		14,223	1,120	0	117	1,720	3,272	
2017	3,220	124	3,344	0	344	(29)		14,252	1,120	0	124	1,785	3,344	
2018	3,285	131	3,416	0	315	0		14,252	1,120	0	131	1,850	3,416	
2019	3,350	138	3,488	0	315	0		14,251	1,120	0	138	1,815	3,488	
2020	3,415	145	3,560	0	315	0		14,251	1,120	0	145	1,980	3,560	
2021	3,474	154	3,628	0	315	0		14,251	1,232	0	154	1,827	3,628	
2022	3,533	163	3,696	0	315	0		14,251	1,344	0	163	1,874	3,696	
2023	3,592	172	3,764	0	315	0		14,251	1,456	0	172	1,821	3,764	
2024	3,651	181	3,832	0	315	0		14,250	1,568	0	181	1,768	3,832	
2025	3,710	190	3,900	0	315	0		14,250	1,680	0	190	1,715	3,900	
2026	3,779	201	3,980	0	315	0		14,250	1,792	0	201	1,672	3,980	
2027	3,848	212	4,060	0	315	0		14,250	1,904	0	212	1,629	4,060	
2028	3,918	222	4,140	0	315	0		14,250	2,016	0	222	1,587	4,140	
2029	3,987	233	4,220	0	315	0		14,249	2,128	0	233	1,544	4,220	
2030	4,056	244	4,300	0	315	0		14,249	2,240	0	244	1,501	4,300	

- 1 - Calendar year.
2 - Water Demands and Supplies from SMWC 2005 Urban Water Management Plan prepared by Water Systems Consulting, August 2005.
3 - Stated interpretation of the Beaumont Basin Adjudication approved by the Court in 2004.
4 - Per direction from George Jortisma.
5 - Assumes that water stored in SMWC storage account is allowed to accrue and be available during shortages on SWP or for lease/assignment to other parties.

Table 6
Water Demand and Water Supply Plan for the Yucaipa Valley Water District Area in the SGPWA Service Area
(acre-ft/yr)

Year ¹	Demands ²			Supplies ²													Total Supply
	Potable	Non Potable	Total	Beaumont Basin Rights and Production ³								Imported SWP		Non Potable Water		Yucaipa Area Groundwater Basins	
				Recycled Water Production Available for Use	(5)	(6)	(7)	(8)	(9)	YVWD Beaumont Pumping for use in SGPWA Area ⁴	YVWD Beaumont Pumping Exported from SGPWA Area ⁴	Total	Over (Under) Production	Volume in YVWD Storage Account ⁴	Water from SGPWA for Direct Potable Use		
(1)	(2)	(3)	(4) = (2)+(3)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12) = (11)-(8)	(13)	(14)	(15)	(16)	(17)	(18) = (14)+(15)+(16)+(17)
2006	1,800	0	1,800	800	2,173	0	2,173	200	1,827	2,027	(148)	1,412	0	0	0	1,400	1,800
2007	1,400	300	1,700	700	2,373	0	2,373	300	2,000	2,300	(73)	1,485	400	100	200	700	1,700
2008	1,700	450	2,150	850	2,565	0	2,565	350	2,000	2,350	(215)	1,700	600	335	115	750	2,150
2009	2,000	800	2,800	1,000	3,393	0	3,393	400	2,000	2,400	(993)	2,693	800	450	150	800	2,800
2010	2,250	750	3,000	1,125	3,593	0	3,593	463	2,000	2,463	(1,130)	2,823	1,000	565	185	787	3,000
2011	2,500	900	3,400	1,250	3,834	0	3,834	463	2,000	2,463	(1,371)	3,195	1,100	675	225	937	3,400
2012	2,750	1,050	3,800	1,375	3,977	0	3,977	463	2,000	2,463	(1,514)	3,709	1,200	780	270	1,087	3,800
2013	3,000	1,200	4,200	1,500	4,138	0	4,138	463	2,000	2,463	(1,675)	4,084	1,300	900	300	1,237	4,200
2014	3,250	1,350	4,600	1,625	4,124	0	4,124	463	2,000	2,463	(1,839)	4,084	1,400	1,015	335	1,237	4,600
2015	3,500	1,500	5,000	1,750	4,193	0	4,193	463	2,000	2,463	(2,000)	4,084	1,500	1,125	375	1,237	5,000
2016	3,750	1,650	5,400	1,875	4,176	0	4,176	463	2,000	2,463	(2,163)	4,084	1,600	1,235	415	1,237	5,400
2017	4,000	1,800	5,800	2,000	4,179	0	4,179	463	2,000	2,463	(2,324)	4,084	1,700	1,350	450	1,237	5,800
2018	4,250	1,950	6,200	2,125	4,197	0	4,197	463	2,000	2,463	(2,485)	4,084	1,800	1,465	485	1,237	6,200
2019	4,500	2,100	6,600	2,250	4,187	0	4,187	463	2,000	2,463	(2,646)	4,084	1,900	1,575	525	1,237	6,600
2020	4,685	2,250	6,935	2,343	4,197	0	4,197	463	2,000	2,463	(2,807)	4,084	2,000	1,685	565	1,237	6,935
2021	4,870	2,400	7,270	2,435	4,187	0	4,187	463	2,000	2,463	(2,968)	4,084	2,100	1,800	600	1,237	7,270
2022	5,055	2,550	7,605	2,528	4,187	0	4,187	463	2,000	2,463	(3,129)	4,084	2,200	1,915	635	1,237	7,605
2023	5,240	2,700	7,940	2,620	4,187	0	4,187	463	2,000	2,463	(3,290)	4,084	2,300	2,025	675	1,237	7,940
2024	5,425	2,850	8,275	2,713	4,187	0	4,187	463	2,000	2,463	(3,451)	4,084	2,400	2,140	720	1,237	8,275
2025	5,610	3,000	8,610	2,805	4,187	488	4,675	463	2,000	2,463	(3,612)	4,084	2,500	2,255	755	1,237	8,610
2026	5,795	3,150	8,945	2,898	4,187	766	4,964	463	2,000	2,463	(3,773)	4,084	2,600	2,370	800	1,237	8,945
2027	5,980	3,300	9,280	2,990	4,187	766	4,964	463	2,000	2,463	(3,934)	4,084	2,700	2,485	850	1,237	9,280
2028	6,165	3,450	9,615	3,083	4,187	766	4,964	463	2,000	2,463	(4,095)	4,084	2,800	2,595	900	1,237	9,615
2029	6,350	3,600	9,950	3,175	4,187	766	4,964	463	2,000	2,463	(4,256)	4,084	2,900	2,705	925	1,237	9,950
2030	6,535	3,750	10,285	3,268	4,187	766	4,964	463	2,000	2,463	(4,417)	4,084	3,000	2,815	1,000	1,322	10,285

1 - Calendar year.
2 - Winter Demands and Supplies from YVWD projections supplied by Joe Zoba on January 19, 2007.
3 - Strict interpretation of the Beaumont Basin Adjudication approved by the Court in 2004 and assumes that overfills will either be converted to non-potable supplies provided by YVWD or that their demands will have been replaced by appropriate uses.
4 - Assumes that YVWD will pump about 500 acre-ft/yr from the Beaumont Basin for use in SGPWA service area and will pump 2000 acre-ft/yr from the Beaumont Basin for export from the SGPWA to SEVWMD service area.
5 - Assumes that water stored in YVWD storage account is allowed to accrue and be available during shortages on SWP or for lease/assignment to other parties.

Table 7
BCVWD, Banning, CWD, SMCW and YVWD* Demand and Water Supply Summary
(2006-2030)

Year	Total Demand	Supplies Available to the Major Water Suppliers in the SGPMA*										Surplus (Shortage)	Stored Water in the Bannock Basin
		Bannock Basin ¹	Edgar Canyon	Banning Storage Unit	Local Supplies	Cabazon Storage Unit	Yuma/Ala Area Groundwater Basins	Total	Direct Use	Recycled Water Reuse	SGPMA* Original Table "A" ⁴	Imported SVP Water	Total Supply Available
2006	27,722	20,313	2,549	2,014	6,366	1,000	3,303	36,145	0	0	4,700	0	41,845
2007	28,900	20,474	2,600	2,014	5,911	2,200	2,898	34,811	200	0	5,000	0	41,811
2008	30,400	20,932	2,600	2,014	5,495	2,000	2,794	33,835	115	0	5,300	0	40,250
2009	32,000	21,100	2,600	2,014	5,090	2,000	2,692	32,508	115	0	5,600	0	38,233
2010	33,600	21,261	2,600	2,014	4,686	2,000	2,590	31,151	115	0	5,900	0	36,166
2011	35,200	21,422	2,600	2,014	4,282	2,000	2,488	29,792	115	0	6,200	0	34,097
2012	36,800	21,583	2,600	2,014	3,878	2,000	2,386	28,434	115	0	6,500	0	32,028
2013	38,400	21,744	2,600	2,014	3,474	2,000	2,284	27,075	115	0	6,800	0	29,959
2014	40,000	21,905	2,600	2,014	3,070	2,000	2,182	25,716	115	0	7,100	0	27,890
2015	41,600	22,066	2,600	2,014	2,666	2,000	2,080	24,357	115	0	7,400	0	25,821
2016	43,200	22,227	2,600	2,014	2,262	2,000	1,978	22,998	115	0	7,700	0	23,752
2017	44,800	22,388	2,600	2,014	1,858	2,000	1,876	21,639	115	0	8,000	0	21,683
2018	46,400	22,549	2,600	2,014	1,454	2,000	1,774	20,280	115	0	8,300	0	19,614
2019	48,000	22,710	2,600	2,014	1,050	2,000	1,672	18,921	115	0	8,600	0	17,545
2020	49,600	22,871	2,600	2,014	646	2,000	1,570	17,562	115	0	8,900	0	15,476
2021	51,200	23,032	2,600	2,014	242	2,000	1,468	16,203	115	0	9,200	0	13,407
2022	52,800	23,193	2,600	2,014	166	2,000	1,366	14,844	115	0	9,500	0	11,338
2023	54,400	23,354	2,600	2,014	166	2,000	1,264	13,485	115	0	9,800	0	9,269
2024	56,000	23,515	2,600	2,014	166	2,000	1,162	12,126	115	0	10,100	0	7,200
2025	57,600	23,676	2,600	2,014	166	2,000	1,060	10,767	115	0	10,400	0	5,131
2026	59,200	23,837	2,600	2,014	166	2,000	958	9,408	115	0	10,700	0	3,062
2027	60,800	23,998	2,600	2,014	166	2,000	856	8,049	115	0	11,000	0	1,003
2028	62,400	24,159	2,600	2,014	166	2,000	754	6,690	115	0	11,300	0	-1,066
2029	64,000	24,320	2,600	2,014	166	2,000	652	5,331	115	0	11,600	0	-3,135
2030	65,600	24,481	2,600	2,014	166	2,000	550	3,972	115	0	11,900	0	-5,204

* Part of YVWD in San Geronimo Pass Water Agency service area.

1 - Calendar year.

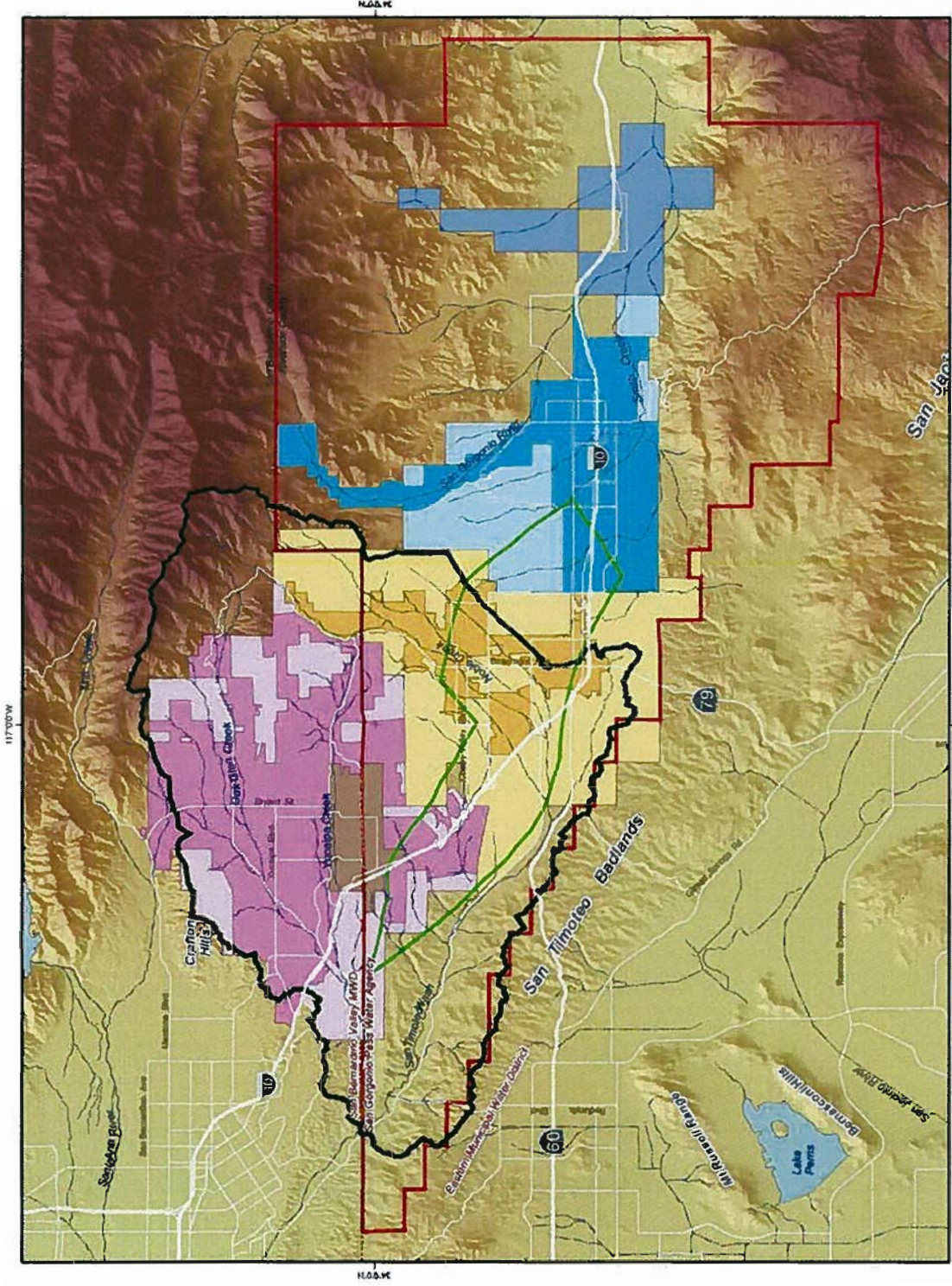
2 - Includes 8,650 acre-ft of safe yield plus temporary surplus of 16,000 acre-ft that is available through 2013.

3 - Equal to 12.5 percent of water served after 2015 and consists of Irrigation Return from users.

4 - Available supply per Jeff Davis of SGPMA assumed to be 89 percent of the contracted Table "A" (89 - 17,500 - 12,000) plus an average 2,000 acre-ft of SVP purchased under other available programs.

5 - SGPMA will purchase 10,300 acre-ft of new Table A for BCVWD yielding 7,100 acre-ft at 68 percent reliability; and 13,500 acre-ft of new Table A for Banning yielding 8,300 acre-ft at 69 percent reliability.

11,907



Main Map Features

- Yucaipa Valley Water District
 - Service Area
 - Sphere of Influence
- Beaumont-Cherry Valley Water District
 - Service Area
 - Sphere of Influence
- City of Banning
 - Service Area
 - Sphere of Influence
- Cabazon County Water District
- South Mesa Water Company
- San Geronimo Pass Water Agency
- San Timoteo Watershed
 - Department of Public Works (with Yucaipa Creek)
- Beaumont Groundwater Basin

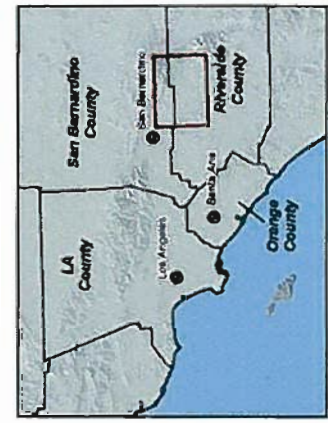
Note: Map does not reflect water district annexations after Jan. 1, 2000

Produced by:
WILDERMUTH
 23002 Brenner Drive
 San Diego, CA 92120
 619-450-3030
www.wildermuth.com

Author: KTO
 Date: 05/06/2010
 File: Overview_Figure_00000270.mxd



San Timoteo Watershed Management Authority
 Updates of the
 San Timoteo Watershed Management Program



Investigation Area
Figure 1

**Figure 2 – Projected Water Demands for Banning, BCVWD, YVWD, SMWC and CCWD
Based on Planning Information Provided by the Retail Agencies**

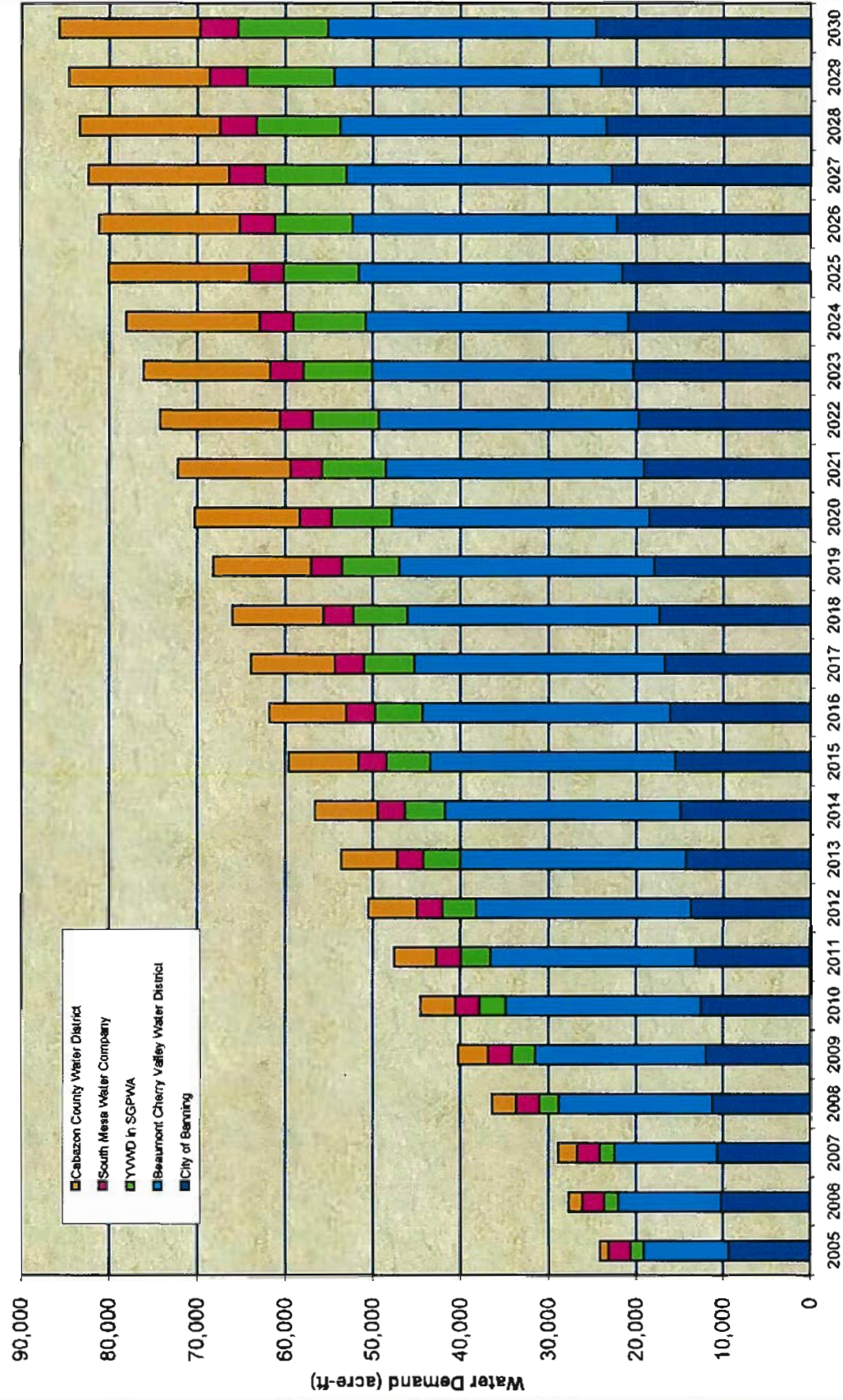


Figure 3 – Projected Water Supply Plan and Demand for Banning, the BCVWD, the SMWC, and Riverside County Part of the YVWD Based on Planning Information Provided by these Retail Agencies

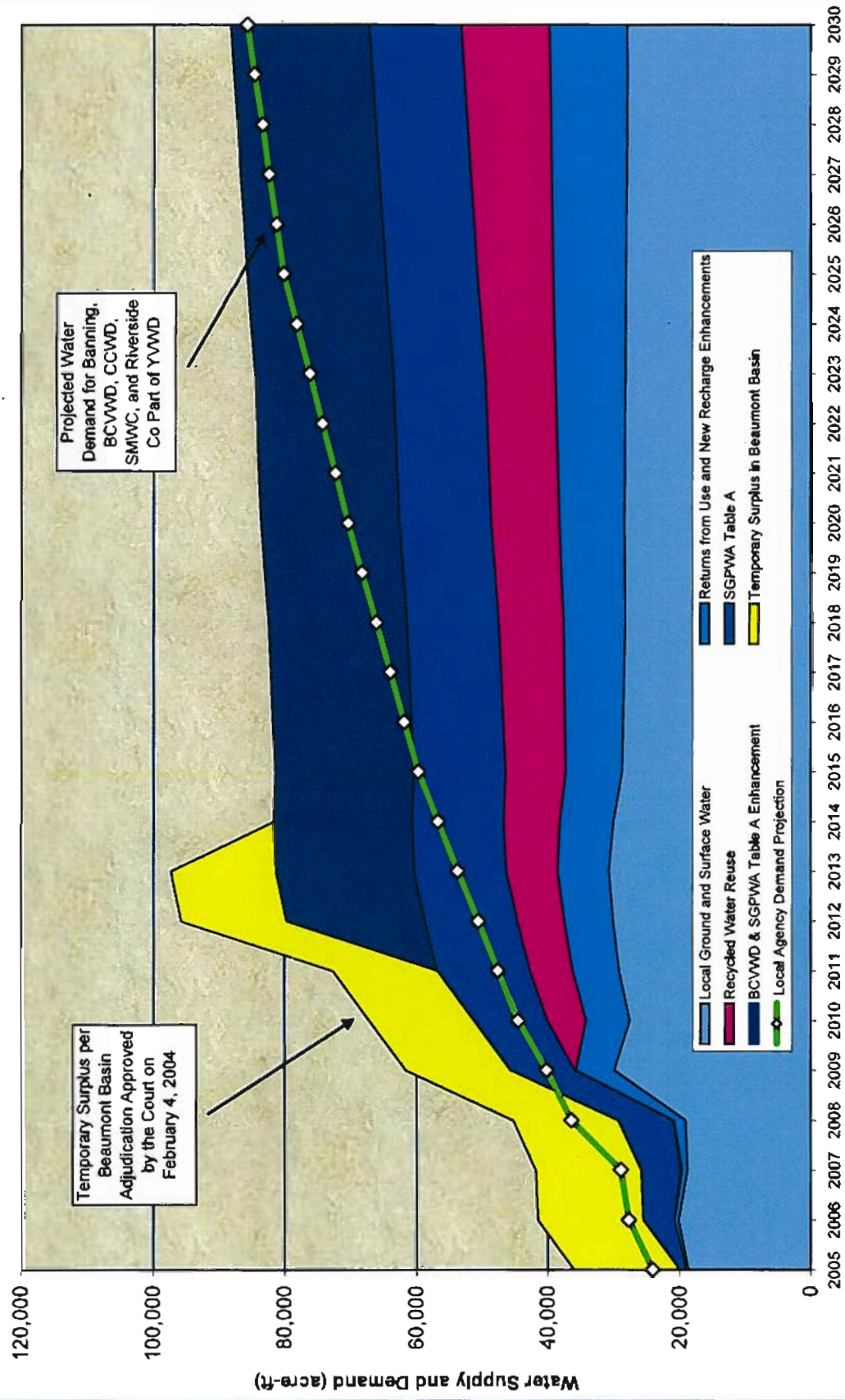


EXHIBIT A

Year	Sunny-Cal Egg and Poultry Company ^{1,2}									
	Overlying Right	Used	Unused	Direct Use by BCVWD	Distribution of Users				Total to BCVWD	Total Transferred
					BCVWD 42.51%	YVWD 13.58%	SMWC 12.48%	Banning 31.43%		
2004	1,784	452	1,332	0	566	181	166	419	566	0
2005	1,784	452	1,332	0	566	181	166	419	566	0
2006	1,784	0	1,784	0	758	242	223	561	758	0
2007	1,784	0	1,784	0	758	242	223	561	758	0
2008	1,784	0	1,784	0	758	242	223	561	758	0
2009	1,784	0	1,784	493	549	175	161	406	1,042	1,825
2010	1,784	0	1,784	493	549	175	161	406	1,042	1,825
2011	1,784	0	1,784	493	549	175	161	406	1,042	2,277
2012	1,784	0	1,784	493	549	175	161	406	1,042	2,277
2013	1,784	0	1,784	493	549	175	161	406	1,042	2,277
2014	1,784	0	1,784	493	549	175	161	406	1,042	1,784
2015	1,784	0	1,784	493	549	175	161	406	1,042	1,784
2016	1,784	0	1,784	493	549	175	161	406	1,042	1,784
2017	1,784	0	1,784	493	549	175	161	406	1,042	1,784
2018	1,784	0	1,784	493	549	175	161	406	1,042	1,784

1 – Unused rights are not transferred until after preceding five year period; direct use is transferred the same year.

2 – Assumes area served by BCVWD in 2009.

Year	California Oak Valley Golf and Resort LLC¹										
	Overlying Right	Used	Unused	Direct Use by BCVWD	Distribution of Users				Banning 31.43%	Total to BCVWD	Total Transferred
					BCVWD 42.51%	YVWD 13.58%	SMWC 12.48%				
2004	950	1,230	-280	0	0	0	0	0	0	0	0
2005	950	1,350	-400	0	0	0	0	0	0	0	0
2006	950	1,470	-520	0	0	0	0	0	0	0	0
2007	950	1,350	-400	0	0	0	0	0	0	0	0
2008	950	1,350	-400	0	0	0	0	0	0	0	0
2009	950	0	950	950	0	0	0	0	0	950	950
2010	950	0	950	950	0	0	0	0	0	950	950
2011	950	0	950	950	0	0	0	0	0	950	950
2012	950	0	950	950	0	0	0	0	0	950	950
2013	950	0	950	950	0	0	0	0	0	950	950
2014	950	0	950	950	0	0	0	0	0	950	950
2015	950	0	950	950	0	0	0	0	0	950	950
2016	950	0	950	950	0	0	0	0	0	950	950
2017	950	0	950	950	0	0	0	0	0	950	950
2018	950	0	950	950	0	0	0	0	0	950	950

¹ -- Unused rights are not transferred until after preceding five year period; direct use is transferred the same year.

Year	Oak Valley Partners ¹											
	Overlying Right	Used	Unused	Direct Use by YVWD 75.00%	Direct Use by BCVWD 25.00%	Distribution of Users				Total to YVWD	Total to BCVWD	Total Transferred
						BCVWD 42.51%	YVWD 13.58%	SMWC 12.48%	Banning 31.43%			
2004	1,806	500	1,306	0		555	177	163	410	177	555	0
2005	1,806	400	1,406	0		598	191	175	442	191	598	0
2006	1,806	480	1,326	0		564	180	165	417	180	564	0
2007	1,806	500	1,306	200	200	385	123	113	285	323	585	400
2008	1,806	500	1,306	392	242	286	91	84	211	484	527	634
2009	1,806	0	1,806	585	284	399	127	117	295	712	682	2,175
2010	1,806	0	1,806	777	326	299	95	88	221	873	625	2,509
2011	1,806	0	1,806	970	368	199	64	58	147	1,033	567	2,663
2012	1,806	0	1,806	1,162	410	100	32	29	74	1,194	509	2,478
2013	1,806	0	1,806	1,355	452	0	0	0	0	1,355	452	2,478
2014	1,806	0	1,806	1,355	452	0	0	0	0	1,355	452	2,743
2015	1,806	0	1,806	1,355	452	0	0	0	0	1,355	452	2,509
2016	1,806	0	1,806	1,355	452	0	0	0	0	1,355	452	2,275
2017	1,806	0	1,806	1,355	452	0	0	0	0	1,355	452	2,040
2018	1,806	0	1,806	1,355	452	0	0	0	0	1,355	452	1,806

¹ – Unused rights are not transferred until after preceding five year period; direct use is transferred the same year.

Year	So. California Professional Golf Association [†]									
	Overlying Right	Used	Unused	Direct Use by BCVWD	Distribution of Users			Total to BCVWD		Total Transferred
					BCVWD 42.51%	YVWD 13.58%	SMWC 12.48%	Banning 31.43%		
2004	2,200	1,410	790	0	336	107	99	248	336	0
2005	2,200	1,470	730	0	310	99	91	229	310	0
2006	2,200	1,390	810	0	344	110	101	255	344	0
2007	2,200	1,390	810	0	344	110	101	255	344	0
2008	2,200	1,390	810	0	344	110	101	255	344	0
2009	2,200	0	2,200	2,200	0	0	0	0	2,200	2,990
2010	2,200	0	2,200	2,200	0	0	0	0	2,200	2,930
2011	2,200	0	2,200	2,200	0	0	0	0	2,200	3,010
2012	2,200	0	2,200	2,200	0	0	0	0	2,200	3,010
2013	2,200	0	2,200	2,200	0	0	0	0	2,200	3,010
2014	2,200	0	2,200	2,200	0	0	0	0	2,200	2,200
2015	2,200	0	2,200	2,200	0	0	0	0	2,200	2,200
2016	2,200	0	2,200	2,200	0	0	0	0	2,200	2,200
2017	2,200	0	2,200	2,200	0	0	0	0	2,200	2,200
2018	2,200	0	2,200	2,200	0	0	0	0	2,200	2,200

[†] 1 – Unused rights are not transferred until after preceding five year period; direct use is transferred the same year.

Year	Overlying Right	Used	Unused	Minor Overliers ¹				Total Transferred
				BCVWD 42.51%	YVWD 13.58%	SMWC 12.48%	Banning 31.43%	
2004	1,910	659	1,251	532	170	156	393	0
2005	1,910	641	1,269	540	172	158	399	0
2006	1,910	734	1,176	500	160	147	370	0
2007	1,910	678	1,232	524	167	154	387	0
2008	1,910	678	1,232	524	167	154	387	0
2009	1,910	678	1,232	524	167	154	387	1,251
2010	1,910	678	1,232	524	167	154	387	1,269
2011	1,910	678	1,232	524	167	154	387	1,176
2012	1,910	678	1,232	524	167	154	387	1,232
2013	1,910	678	1,232	524	167	154	387	1,232
2014	1,910	678	1,232	524	167	154	387	1,232
2015	1,910	678	1,232	524	167	154	387	1,232
2016	1,910	678	1,232	524	167	154	387	1,232
2017	1,910	678	1,232	524	167	154	387	1,232
2018	1,910	678	1,232	524	167	154	387	1,232

¹ – Unused rights are not transferred until after preceding five year period; direct use is transferred the same year.

**Fourth Annual Report of the
Beaumont Basin Watermaster**

To: Beaumont Basin Watermaster
From: J. Andrew Schlange, COWS
Date: January 8, 2008
Subject: Fourth Annual Report of the Beaumont Basin Watermaster

Transmitted herewith, for your review and consideration, please find the Fourth Annual Report of the Beaumont Basin Watermaster for your approval.

This report was previously reviewed at the October 23, 2007 Managers Meeting at the Yucaipa Valley Water District. All comments received have been addressed and as required, included in the Final Report.

Staff Recommendation

Staff recommends that the Beaumont Basin Watermaster approve Fourth Annual Report of the Beaumont Basin Watermaster and authorize staff to circulate as required

Respectfully,

J. Andrew Schlange, COWS

BEAUMONT BASIN WATERMASTER

For

SAN TIMOTEO WATERSHED MANAGEMENT AUTHORITY

V.

CITY OF BANNING, ET AL
(CASE NO. RIC 389197)

FOURTH ANNUAL REPORT OF THE BEAUMONT BASIN WATERMASTER FY 2006-07



December 2007

BEAUMONT BASIN WATERMASTER

For

SAN TIMOTEO WATERSHED MANAGEMENT AUTHORITY

V.

CITY OF BANNING, ET AL
(CASE NO. RIC 389197)

FOURTH ANNUAL REPORT OF THE BEAUMONT BASIN WATERMASTER

FY 2006-07

December 2007

TABLE OF CONTENTS

	Page
OVERVIEW OF JUDGMENT AND WATERMASTER	
Background and History	4
Responsibilities of the Watermaster	4
Mission Statement	5
Watermaster Committee Representatives	6
ACTIVITIES OF WATERMASTER	
Meetings	6
Watermaster Address	7
ADMINISTRATION OF THE JUDGMENT	
Precipitation in the Beaumont Basin	7
Accounting for Production, Recharge, Transfers and Storage	7
Active Party List	9
Annual Administrative Budget	9
Annual Audit	9
Annual Assessments	10
Employment of Experts and Agents	10
Meter Installation	10
Resolutions	10
Rules and Regulations	10
Storage Management and Use	10
Subsidence Monitoring	12
Watermaster Website	12
Well Standards	12



TABLE OF CONTENTS

LIST OF TABLES

Table 1. Summary of Annual Production from the Beaumont Basin

Table 2. Summary of Appropriator Storage Account Balances as of July 1, 2007

LIST OF FIGURES

Figure 1. Annual Precipitation with Cumulative Departure From Mean

Figure 2. Location Map of Wells in the Beaumont Basin

APPENDICES

Appendix A – Summary of Production, Recharge, Transfers, and Storage in the Beaumont Basin

1. Appropriator Producer Summary of Production for Fiscal Year 2006/07
2. Overlying Producer Summary of Production for Fiscal Year 2006/07
3. Reconciliation of Production and Storage Accounts
4. Amended FY 2003/04 Appendix E-2
5. Amended FY 2003/04 Appendix E-3
6. Amended FY 2004/05 Appendix E-2
7. Amended FY 2004/05 Appendix E-3
8. Amended FY 2005/06 Appendix A-3

Appendix B – Active Party List

Appendix C – Adopted Budget

Appendix D – Letter - Annual Audit



OVERVIEW OF JUDGMENT AND WATERMASTER

Background and History

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

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

The Phase 1 report also identified the initiatives or program elements necessary to achieve these goals. Program Element 5 called for the STWMA members to establish a groundwater management entity for the Beaumont Basin. Two groups representing appropriator and overlying interests began negotiations in May 2002 to implement this program element.

A Stipulated Judgment was developed and submitted to the Court as a result of the negotiations. The Honorable Judge Gary Tranbarger of the Superior Court of the State of California for the County of Riverside, signed the Stipulated Judgment titled "*San Timoteo Watershed Management Authority, vs. City of Banning, et al.*," Case No. RIC 389197, on February 4, 2004. Pursuant to the Judgment, the Court appointed a five-member Watermaster committee, consisting of representatives from the Cities of Banning and Beaumont, the BCVWD, the YVWD, and the SMWC. The effective date of the Judgment for accounting purposes is July 1, 2003. The Beaumont Basin encompasses approximately 26 square miles and has a safe yield of approximately 8,650 acre-ft, a total storage capacity of over a million acre-ft, and up to 200,000 acre-ft of storage capacity available for conjunctive use.

The Court extended much of the responsibility regarding the management of the Beaumont Basin to the Watermaster by approving the Stipulated Judgment. The Court retained continuing jurisdiction should there be any need in the future to resolve difficult questions. The primary responsibilities of the Watermaster are outlined below. A copy of the Judgment and other information regarding the Watermaster is available at www.beaumontwatermaster.org.

Responsibilities of Watermaster

The Beaumont Basin Watermaster is responsible for administering adjudicated water rights and managing groundwater resources in the Beaumont Groundwater Basin. With numerous Appropriators and Overlying producers that rely on the Basin, there is a need for its coordinated management, which the Watermaster provides, as summarized below.

Administer the Beaumont Basin Judgment. Watermaster operates under the Judgment and a formal set of Rules and Regulations (and any revisions thereto), which were adopted on June 8, 2004. Together, the Judgment and the Rules and Regulations establish the procedures by which Watermaster acts to account for the water resources in the Beaumont Basin. In order to fund its operations, Watermaster collects both administrative and replenishment assessments from the parties to the Judgment.

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

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

Maintain and Improve Water Supply. Watermaster determines the amount of groundwater that each producer is entitled to extract annually without incurring a replenishment obligation for the succeeding fiscal year. Watermaster manages and controls the replenishment of water supplies in the Basin. It acquires and spreads replenishment water as needed. And, it approves and facilitates the storage of supplemental water in the Basin.

Maintain and Improve Water Quality. Watermaster coordinates or participates in local efforts to preserve and restore the quality of groundwater in the Basin. It assists and encourages regulatory agencies to enforce water quality regulations that affect the Basin.

Monitor and Understand the Basin. Watermaster collects relevant data from producers including production, water level, water quality, and other data. Watermaster uses these data to expand its knowledge of how the Basin works to manage it more effectively. It prepares an annual report of Watermaster operations, including financial and engineering information, as well as summary reports for the Court and all other interested parties.

Provide Cooperative Leadership. Watermaster helps develop and implement plans regarding the management of the Basin.

In summary, Watermaster, in carrying out its duties, is responsible for providing a legal and practical means for making the maximum reasonable beneficial use of the waters of the Basin; facilitating the conjunctive utilization of surface, ground and supplemental waters; and satisfying the requirements of water users that have rights in the Basin or that are dependent upon the Basin.

Mission Statement

Watermaster adopted Resolution 2004-06 entitled "*Resolution of the Beaumont Basin Watermaster Adopting a Watermaster Mission Statement and Supporting Principles*" at its October 19, 2004 meeting. The Watermaster's mission statement is as follows:



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

Watermaster Committee Representatives

The Parties to the Judgment did not designate new representatives during the fiscal year. Pursuant to Part VI, Paragraph 4 of the Judgment, (pg. 16 – 17), Watermaster Committee representatives were nominated by the Cities of Banning and Beaumont, the BCVWD, the YVWD, and the SMWC. The Court received and approved the nominations on March 8, 2004.

The Committee Representatives, who are all employees or consultants of their nominating agencies, are as follows:

Banning, City of	Paul Toor, Director of Public Works
Beaumont, City of	Deepak Moorjani, Director of Public Works
Beaumont Cherry Valley Water District	Charles Butcher, General Manager
South Mesa Water Company	George Jorritsma, General Manager
Yucaipa Valley Water District	Joseph B. Zoba, General Manager

ACTIVITIES OF WATERMASTER

Meetings

The Beaumont Watermaster met quarterly to transact Watermaster business during its fourth year of operation under the Judgment. Two special meetings were called in addition to the regularly scheduled quarterly meetings. Meetings were held at the City of Banning City Hall, located at 99 East Ramsey, Banning, California 92220, unless otherwise noticed. Meetings of the Watermaster Committee were held on:

September 12, 2006
January 09, 2007
February 13, 2007
March 13, 2007
May 15, 2007 (at YVWD offices)
June 19, 2007

The Committee Officers continued to serve as they had in the previous year as follows:

Chairman	George Jorritsma
Vice Chairman	Deepak Moorjani
Secretary	Charles Butcher
Treasurer	Joseph B. Zoba

Mr. J. Andrew Schlange continued to serve as the Chief of Watermaster Services, Mr. Joseph S. Aklufi continued as the Watermaster's Legal Counsel, and Mr. Mark Wildermuth of Wildermuth Environmental, Inc (WEI) continued as the Watermaster Engineer.



The Watermaster continued with administering and implementing the Judgment during its fourth year of operation, as discussed in more detail below by subject matter. Copies of the agendas and approved minutes of each of the above meetings can be viewed or downloaded on the Watermaster website (www.beaumontwatermaster.org).

In addition to the formal Watermaster Committee meetings listed above, informal meetings were held regarding the potential for cooperative efforts among the parties and others for use of the Basin. Informal meetings were held or attended by the Chief of Watermaster Services, members of the Watermaster Committee, the Watermaster Engineer, the Watermaster Legal Counsel, and others such as representatives from the Department of Water Resources (DWR), San Geronio Pass Water Agency (SGPWA), and other potential users of the Basin's storage capacity.

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

ADMINISTRATION OF THE JUDGMENT

Precipitation in the Beaumont Basin

The annual precipitation in the City of Beaumont from 1920 to 2007, as measured by the County of Riverside's Beaumont Station 013, is shown in Figure 1. Figure 1 also displays the cumulative departure from the mean (CDFM) precipitation. The CDFM plot is a useful way to characterize the occurrence and magnitude of wet and dry climatic periods, where a positive slope indicates a wet period, and a negative slope indicates a dry period. The variability of annual rainfall in the Beaumont region led to several prolonged periods of wet and dry weather. The most notable of these periods is the dry period from 1946 to 1977, which is punctuated with only a few years of high rainfall. Since the creation of the Watermaster, the Beaumont region has experienced a short wet period (2003-2005) followed by two dry years. The average precipitation in the City of Beaumont is about 17.6 inches. The precipitation during fiscal 2006/07 was 5.6 inches, which is second the lowest recorded precipitation in the City of Beaumont area over the last 88 years, second only to fiscal 2001/02 which experienced a total rainfall of 5.2 inches.

Accounting for Production, Recharge, Transfers and Storage

One of Watermaster's primary responsibilities is to account for production from the Beaumont Basin. Producers who pump less than 10 acre-ft per year, otherwise known as minimal producers, are exempt from the provisions of the Judgment unless otherwise ordered by the Court (Part III, Paragraph 4, pg. 12). Therefore, Watermaster does not collect production



information from minimal producers other than those participating in the Judgment. A location map of the wells in the Beaumont Basin is shown in Figure 2.

There are five Appropriative Producers participating in the Judgment: the cities of Banning and Beaumont, the BCVWD, the SMWC, and the YVWD. An Appropriator's annual production right consists of:

- "the Appropriator's share of operating safe yield, plus
- (1) any water acquired by an Appropriator from an Overlying Producer or other Appropriator pursuant to the Judgment,
- (2) any water withdrawn from the Appropriator's storage account, and
- (3) New Yield created by the Appropriator" (Part I, Paragraph 3B, pg. 2).

An Appropriator's annual production right represents the maximum quantity of water said Appropriator can produce from the Beaumont Basin each year without incurring a replenishment obligation. It includes the Appropriator's share of the temporary surplus (Part I, Paragraph 3M, pg. 4). Temporary surplus is defined in the Judgment as "the amount of groundwater that can be pumped annually in excess of safe yield from a groundwater basin necessary to create enough additional storage capacity to prevent the waste of water" (Part I, Paragraph 3BB, pg. 6). The temporary surplus in the Beaumont Basin may not exceed 160,000 acre-ft over a 10 year period, or 16,000 acre-ft per year (Exhibit C of the Judgment).

Appendix A-1 shows the monthly production of each Appropriator for fiscal 2006/07. It also shows each Appropriator's total annual production, their projected share of the operating safe yield from Exhibit C of the Judgment, and the amount of unused water that is projected to be eligible for storage. Pursuant to the Judgment (Part I, Paragraph 3B, pg. 2), and a separate agreement that is on file with the Watermaster, the BCVWD continued to pump water for Banning during the fiscal 2006/07. The amount of water pumped to Banning is also shown in Appendix A-1.

Producers who use water on the overlying land from which they extract water are called Overlying Producers. Overlying Producers are assigned a share of the Basin's safe yield and may not use more than five times their share of safe yield in any five year period (Part II, Paragraph 1A, pg. 6). Production estimates for Overlying Producers for the fiscal 2006/07 are provided in Appendix A-2. At the September 2005 Watermaster meeting, the Watermaster engineer reported that several of the Overlying Producer wells were not metered, or that their meters may not have been working properly. The Watermaster engineer recommended using a water duty method that is routinely used to estimate production in the absence of metered production. The water duty method estimates production based on the type of use and the total acreage to which water was applied. The Watermaster committee members concurred and requested that revised production estimates be developed for prior years as appropriate and brought back for discussion.

Revised production estimates were discussed at the January 10, 2006, Watermaster meeting. The Watermaster accepted these production estimates and concurred with their use in Appendix A-2, subject to the receipt of more accurate information from the affected Overlying Producers. A letter was sent to the affected Overlying Producers, informing them of these revised production estimates and requesting more accurate information, if available, within 60



days. Watermaster did not receive any responses to the letter. A summary of annual production from the Beaumont Basin by producer is shown in Table 1.

Appendix A-3, which is new to this year's report, is a reconciliation of the Appropriator groundwater pumping, supplemental water recharge, local water recharge, transfers, and storage accounts. During the current fiscal year, there were no demonstrations of the recharge of local waters provided to the Watermaster. The BCVWD recharged 6,462 acre-ft of State Water Project water with its new recharge facilities. The SMWC transferred 1,500 acre-ft each to the City of Banning and the BCVWD. This required a debit of 3,000 acre-ft to the SMWC storage account. At the beginning of fiscal 2006/07, the total water in storage accounts was about 13,216 acre-ft. At the end of fiscal 2006/07, the volume of water in storage accounts was about 20,176 acre-ft. No Appropriator party incurred a replenishment obligation.

Appendices A-4 and A-6 contain revisions to prior years' reported production (03/04 and 04/05, respectively) for the Appropriator parties. Appendices A-5, A-7 and A-8 contain revisions to prior years' reported production (03/04, 04/05, and 05/06 respectively) for Overlying producers. These revisions are based on more accurate information obtained from the producers during this fiscal year. All updated values have been accounted for in Appendix A-3.

Beginning in fiscal year 2008/09, and each year thereafter, any water allocated as part of the safe yield to the Overlying Producers during the prior five years that remains unused will be reallocated to the Appropriators. The unused water will be reallocated based on each Appropriator's percent share of operating safe yield as shown in Exhibit C of the Judgment. The precise accounting rules that describe how this will be achieved will to be developed in fiscal 2007/08.

Also in fiscal 2007/08, the Appropriator parties will develop rules and regulations regarding the demonstrations of new local water recharge and the crediting of new returns from use. Both of these recharge components are included in the Appropriators' Urban Water Management Plans and in the Watermaster's annual report of water demands and supplies.

Active Party List

Under Part VII, Paragraph 1 of the Judgment, "the Watermaster shall maintain, at all times, a current list of Parties to whom notices are to be sent and their addresses for the purposes of service. The Watermaster shall also maintain a full current list of names and addresses of all Parties or their successors, as filed herein. Copies of such lists shall be available to any Person." These lists are commonly referred to as the Watermaster's "Active Party List." A copy of the list is posted on the Watermaster website and has been included as Appendix B in this annual report. The list in Appendix B also includes "interested parties" in addition to "active parties." "Interested parties" are those persons or entities that are not parties to the Judgment, but that have requested that Watermaster to include them on the Watermaster mailing list to remain current on Watermaster activities.

Under the Judgment, any Party desiring to be relieved of receiving notices of Watermaster activities can complete the Waiver of Notice and Designation of Address for Notice and Service portion of the form adopted by the Watermaster. Watermaster did not receive any Waiver of Notice requests during its third year of operation.



Annual Administrative Budget

YVWD staff serves as the Watermaster Treasurer. Watermaster adopted an administrative budget for fiscal year 2006/07 at its June 13, 2006 meeting. A copy of the "Final Year End Report for the Beaumont Basin Watermaster FY 2006-2007 Budget Member Contributions and Expenses" has been included as Appendix C in this annual report.

Annual Audit

Under the Judgment, Part VI, Paragraph 6(b), Watermaster's annual report of operations shall include an audit of all assessments and Watermaster expenditures. The Watermaster assessments and expenditures are shown in Appendix C as part of the annual budget. An audit of Watermaster assessments and expenditures is conducted each year. The letter received regarding the audit has been included as Appendix D in this annual report.

Annual Assessments

The annual assessments are shown in Appendix C. One of the Watermaster members, SMWC, did not pay its assessments during the first two years of Watermaster operations. SMWC paid all prior assessments by the close of the fiscal year.

Employment of Experts and Agents

Watermaster continued the services of the Chief of Watermaster Services, Legal Counsel, and the Watermaster Engineer during the fiscal year. Watermaster did not retain the services of any other experts or agents during the fiscal year.

Meter Installation

In an effort to better monitor production from the Beaumont Basin, Watermaster entered into contracts with the BCVWD and the YVWD during fiscal 2004/05 to install meters on unmetered overlying producer wells in their respective spheres of influence. One meter was installed by BCVWD during the third year of Watermaster operations.

Resolutions

No resolutions were adopted by the Watermaster during fiscal 2006/07.

Rules and Regulations

Rules and regulations and forms (rules) were adopted at the June 8, 2004 Watermaster meeting. They were also included in Appendix F of the First Annual Report of the Beaumont Basin Watermaster. The rules were adopted with an understanding that proposed modifications would be considered, as necessary in fiscal 2005/06. Resolution 2006-01 entitled "*A Resolution of the Beaumont Basin Watermaster Establishing Rules and Regulations Regulating the Transfer of Water Between Appropriators*" amended Section 7 of the Watermaster Rules and Regulations to clarify the reporting requirement for the transfer of water between Appropriators. Forms 7 and 8 entitled, "*Transfer of Water Between Appropriators*" and "*Transfer of Rights to Recapture Water in Storage Between Appropriators*" respectively, were also developed for this purpose. The amended rules and forms were adopted at the February 7, 2006 special meeting of the Watermaster.

Watermaster also approved several changes to Form 2, entitled "*Groundwater Storage Agreement*" at its January 10, 2006 meeting. Copies of the amended Section 7 and of forms 2,



7 and 8 are available on the Watermaster website. The Watermaster Handbook has been updated appropriately to reflect these changes.

Storage Management and Use

Watermaster made significant advances in the area of storage management and use during fiscal 2005/06 as follows:

- The first applications and agreements to store unpumped appropriator production rights were approved;
- Future water demand and supply conditions in the San Geronio Pass region were agreed upon and submitted to LAFCO by all relevant local entities for the first time in Pass area history; and
- Watermaster requested that the SGPWA to proceed with the implementation and construction of EBX Phase II (EBX2) to improve the local ability to import supplemental water.

Watermaster approved applications and agreements to store unused appropriator production rights from the first two years of operations for the City of Banning, the BCVWD, the SMWC and the YVWD at its March 27, 2006 meeting. These are the first such applications and agreements approved by the Watermaster since the Judgment was entered. Copies of the storage applications and agreements can be found on the Watermaster's website.

The City of Beaumont applied for a 22,000 acre-ft storage account with the Watermaster in fiscal 2006/07. The Watermaster approved this application at its June 2007 meeting. The total amount of unused storage allocated to groundwater storage accounts, as authorized by the Watermaster pursuant to the Judgment, is 157,000 acre-ft. Table 2 lists the quantities approved and the account balances for all Appropriators as of July 1, 2007.

Discussions and meetings regarding the management and use of Basin storage capacity continued during the fiscal year. In 2004, the Watermaster adopted Resolution 2004-05 entitled "*A Resolution of the Beaumont Basin Watermaster Adopting an Inventory of Water Demands and Water Supplies in the San Geronio Pass Region*". A report entitled "*2006 Report on Water Supply Conditions in the San Geronio Pass Region*" was presented to Watermaster at its March 27, 2006 meeting. This 2006 report updated the prior report through the year 2030 with information from the local area 2005 Urban Water Management Plans. The Watermaster concurred with the findings in the updated report and authorized the Watermaster Chairman to sign a letter transmitting it to LAFCO. The transmittal letter was signed by representatives of 10 local entities. This is the first time in the history of the San Geronio Pass region that all relevant entities have agreed on the projected supplies and demands for the area. A copy of the 2006 report is available on the Watermaster's website.

Watermaster requested that the SGPWA to proceed with the implementation and construction of EBX2 with Resolution No. 2006-03, which was adopted on March 27, 2006. The EBX2 will increase the local ability to import supplemental water to the Beaumont Basin. Watermaster found it is necessary to adopt this resolution because:

- There is a pressing need to purchase imported water to offset the overdraft;
- The retail market for additional water is developing rapidly;



- The cost of construction materials, especially concrete and steel is increasing rapidly; and
- The SGPWA is not able to consummate the acquisition of imported water rights to enhance its "Table A" allocation unless it begins this process.

Watermaster recognized the need for mutual cooperation to facilitate this request and offered its support as well as the support of its member agencies when Resolution 2006-03 was submitted. The SGPWA took action on this request at its May 1, 2006 meeting.

The Watermaster, the STWMA and the Appropriator parties are continuing to work with the SGPWA and the San Bernardino Valley Municipal Water District to complete EBX2 as soon as possible and to maximize the amount of SWP water available to the SGPWA service area.

Subsidence Monitoring

Subsidence monitoring was conducted by the STWMA on behalf of Watermaster during the fiscal year. Watermaster adopted Resolution 2004-07 entitled "*A Resolution of the Beaumont Basin Watermaster in Support of AB303 Grant Applications That Further the Management of the Beaumont Basin*" on November 4, 2004. Program Element 1 of the IRWMP calls for the development and implementation of a comprehensive monitoring program for the STWMA area, including the Beaumont Basin. Watermaster is concerned about the future potential for land subsidence that may occur as a result of past and future groundwater pumping from the Basin. On behalf of Watermaster, the STWMA developed a monitoring program to assess the occurrence of subsidence from past groundwater pumping and future pumping at the request of Watermaster. To implement this program, the STWMA applied for an AB303 Grant from the DWR. Watermaster agreed to provide the local matching funds if the application was successful. The application was successful and the subsidence monitoring program was initiated during fiscal 2005/06. Watermaster provided approximately one-half of the local matching funds in fiscal 2005/06 and fiscal 2006/07.

The preliminary results of the program indicate that very little, if any, subsidence has occurred as a result of historic pumping and overdraft. The historical subsidence data (survey data and remote sensing data [InSAR]) for the period of 1928 to 2000 were compiled, analyzed, and used to finalize the locations of new survey lines for monitoring future land subsidence, if any, that may accompany the future drawdown of water levels. The benchmark monuments along the survey lines were installed during the spring and summer of 2006, and the initial ground level survey was completed in November 2006. A subsequent survey was completed in March of 2007. The results of the surveys are being analyzed by Watermaster's engineer, and will be published in a separate report to the Watermaster in September 2007. This report will include recommendations for methods of future land subsidence monitoring.

Watermaster Website

Watermaster established a website in February 2004, in an effort to communicate the activities of Watermaster to the parties and the public. The website is a place where anyone can obtain or review copies of the Judgment, the Rules and Regulations, meeting agendas, and meeting minutes. A new host for the website was procured, and the website was revised and updated during the fiscal year. The website will continue to evolve and include additional relevant information as Watermaster continues to manage the Beaumont Basin and administer the Judgment.



Well Standards

No changes were made to the Beaumont Basin Well Policy during the fiscal year. The Well Policy in effect was adopted as Resolution 2004-04 entitled "*A Resolution of the Beaumont Basin Watermaster Adopting Minimum Standards for the Construction, Reconstruction, Abandonment and Destruction of Groundwater Extraction Wells*" at the July 20, 2004, Watermaster meeting. With Resolution 2004-04, the Watermaster Committee adopted the existing Riverside County Ordinance No. 682.3 and expanded it by requiring the installation of a "sounding tube" to facilitate the measurement of water levels on all wells constructed after July 20, 2004 in the Beaumont Basin.



Table 1
Summary of Annual Production from the Beaumont Basin

Producer	Fiscal Year Production (acre-ft)			
	2003/04	2004/05	2005/06	2006/07
Appropriator				
Banning	3,951	2,420	1,768	2,046
Beaumont	0	0	0	0
Beaumont-Cherry Valley WD	6,204	6,386	7,625	10,455
South Mesa Water Co.	420	558	632	691
Yucaipa Valley Water District	2,005	1,284	1,530	2,309
Subtotal	12,580	10,649	11,555	15,502
Overlying Producer				
Beckman, Walter M.	27	27	83	93
California Oak Valley Golf & Resort LLC ¹	1,227	635	839	768
Merlin Properties	6	6	6	6
Oak Valley Partners, LP	503	400	476	434
Plantation on the Lake	321	313	327	372
Rancho Calimesa MHP	59	59	59	59
Roman Catholic Bishop	78	72	72	72
Sharondale Mesa Owners Association	169	163	186	195
So. Calif. Prof. Golfer's Assoc.	1,401	1,369	1,385	1,764
Sterns, Leonard M. and Dorthy D.	1	1	1	1
Sunny-Cal Egg and Poultry Co.	452	452	0	0
Nikodinov, Nick			0	0
McAmis, Ronald L.			0	0
Aldama, Nicolas and Amalia			0	0
Gutierrez, Hector, Luis Gutierrez and Sebastian Monroy			0	0
Darmont, Boris and Miriam			0	0
Subtotal	4,244	3,497	3,432	3,763
Total	16,824	14,146	14,987	19,264

1 – 2004/05 and 2005/06 values corrected and 2003/04 value is being reviewed

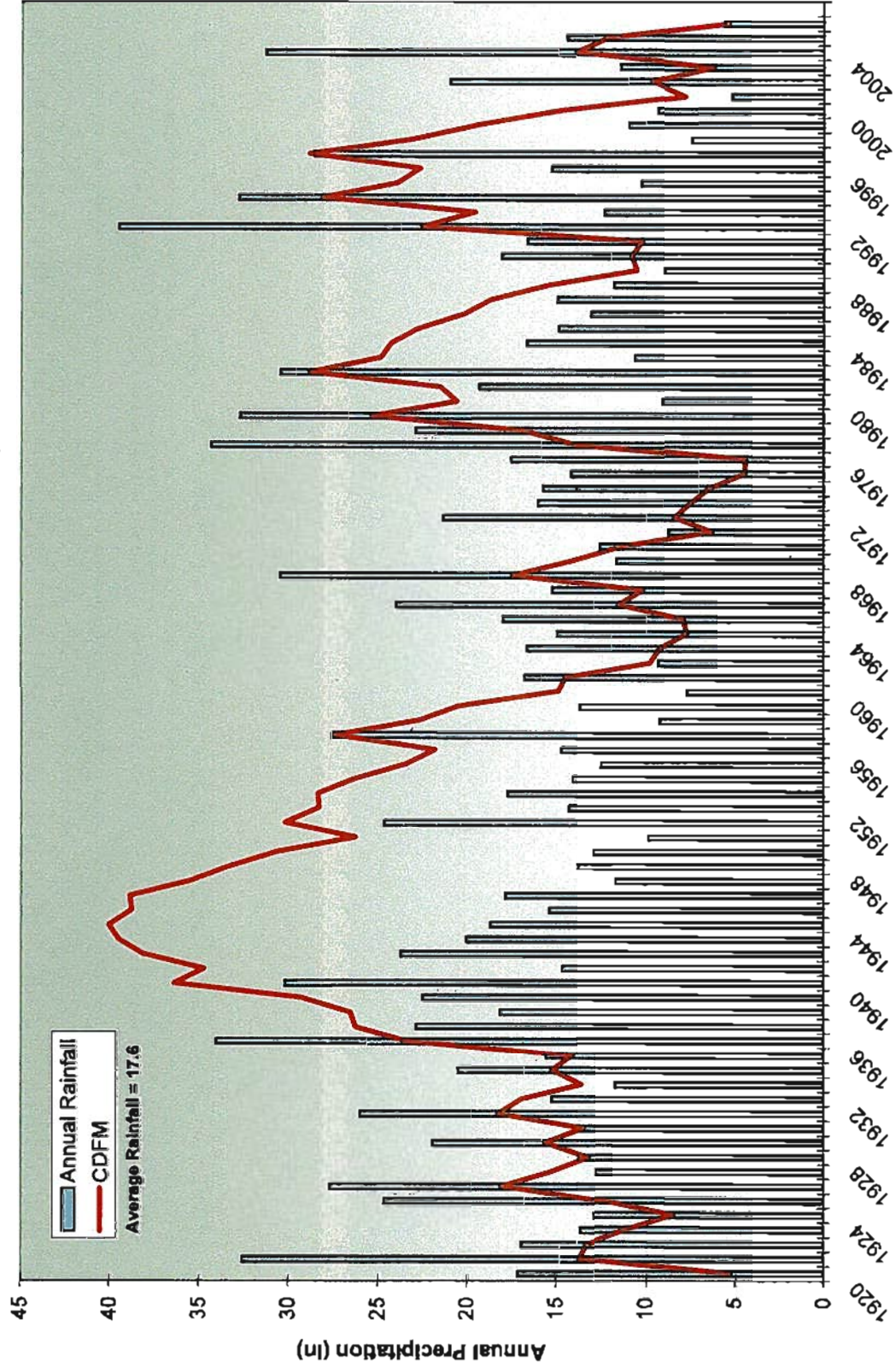
Table 2
Summary of Appropriator Storage Account Balances as of July 1, 2007

Appropriator	Storage Account Balance as of July 1, 2006	Ending Account Balance as of July 1, 2007	Authorized Storage Account as of July 1, 2007
Banning	6,948	11,431	40,000
Beaumont	0	0	0
Beaumont-Cherry Valley WD	191	4,499	70,000
South Mesa Water Co.	4,378	2,682	20,000
Yucaipa Valley Water District	1,700	1,564	5,000
Totals	13,216	20,176	135,000

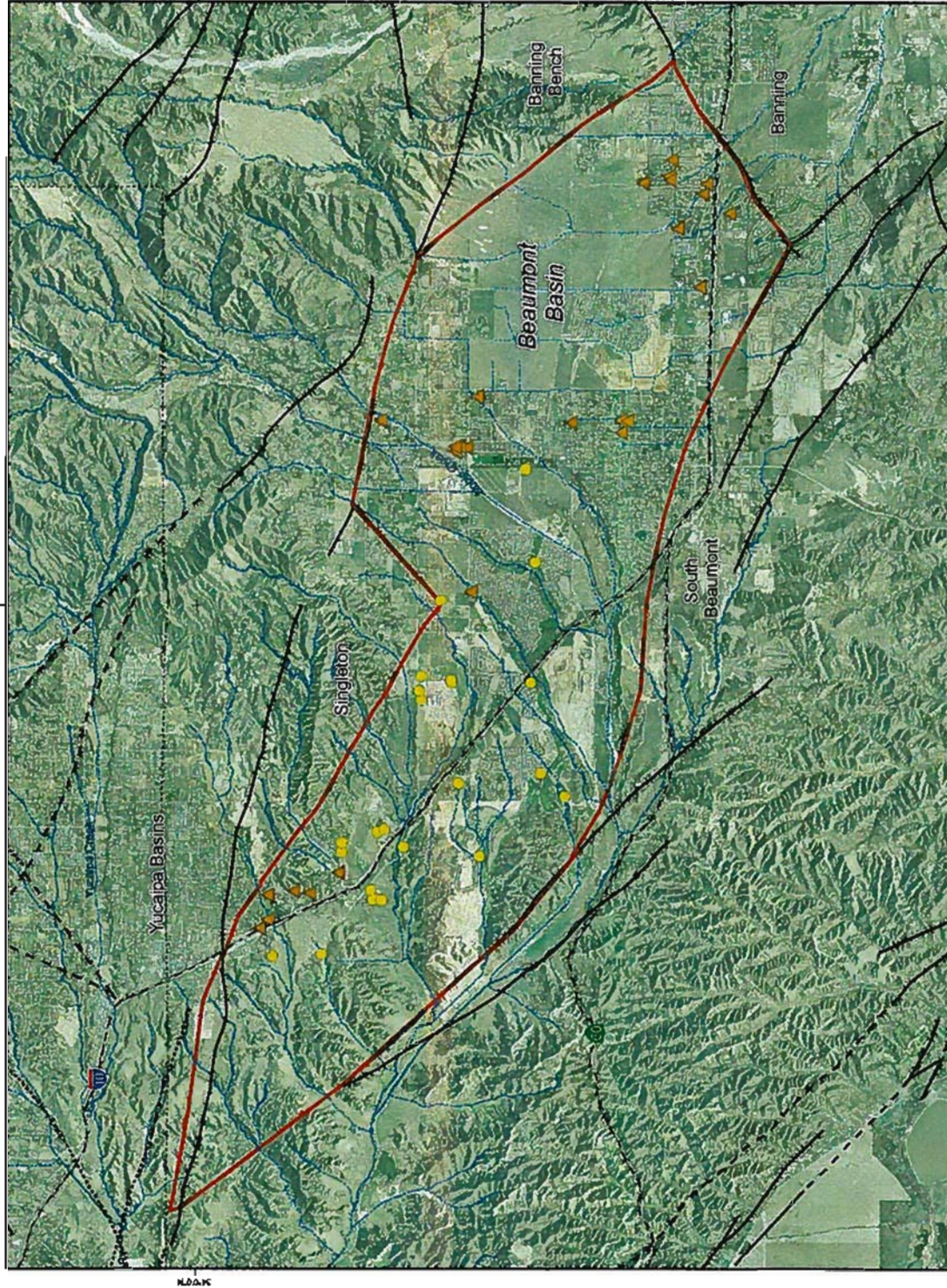
1 – negative values of under production mean that the appropriator pumped more than its share of the operating yield.

2 – SMWC sold 1,500 acre-ft each to the City of Banning and BCVWD thereby increasing their storage accounts by 1,500 acre-ft each and decreasing SMWC's storage account by 3,000 acre-ft.

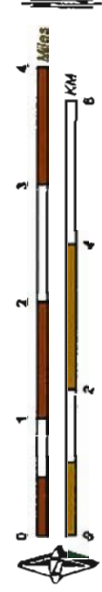
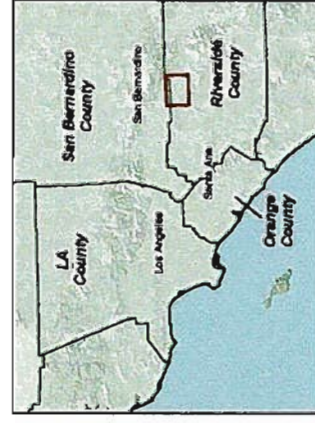
Figure 1. Annual Precipitation with Cumulative Departure From Mean
(Beaumont Station 013: 1920-2007)



Fourth Annual Report of the Beaumont Basin Watermaster



- Main Features**
- Appropriations (Yellow Triangle)
 - Overlying Producers (Yellow Circle)
 - Beaumont Basin Boundary (Red Outline)
- Other Features**
- Streams (Blue Line)
 - Faults & Groundwater Divides (Black Line)
 - Location Certain (Solid Black Line)
 - Location Approximate (Dashed Black Line)
 - Location Concealed (Dotted Black Line)



Location Map of Wells
in the Beaumont Basin

Figure 2

APPENDIX A
SUMMARY OF PRODUCTION, RECHARGE, TRANSFERS,
AND STORAGE IN THE BEAUMONT BASIN

Appendix A-1
Appropriator Producer Summary of Production for Fiscal Year 2006/07

Well Name	Station ID	Water Production by Appropriator (acre-ft) ¹												Total Production	Op Sale Yield	Eligible for Storage
		Jul 2006	Aug 2006	Sep 2006	Oct 2006	Nov 2006	Dec 2006	Jan 2007	Feb 2007	Mar 2007	Apr 2007	May 2007	Jun 2007			
Banning, City of																
Well C2-A	1007031	0	0	0	0	0	0	2	1	0	1	1	0	30	39	
Well C3	1004377	36	45	27	6	0	0	10	4	9	0	18	48	59	323	
Well C4	1206706	81	32	50	11	20	0	10	13	6	2	11	61	156	434	
Well M3	1206700	85	82	88	75	70	0	33	40	13	24	24	24	43	800	
Well M9	1208834	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Production from BCYWD ²		104	105	108	82	45	0	0	0	43	55	55	71	58	851	
Subtotal		287	284	310	174	140	55	55	58	18	79	108	204	348	2,046	2,983
Beaumont-Cherry Valley Water District																
Well 1	1004351	186	170	141	83	138	47	75	0	116	13	0	83	131	1,246	
Well 2	1004349	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Well 3	1004350	191	51	8	5	163	56	81	81	43	82	82	86	148	968	
Well 16	1002938	120	114	101	12	0	0	0	0	17	0	0	0	12	378	
Well 21	1201487	320	308	263	120	186	82	190	99	92	115	184	215	215	2,183	
Well 22	1002966	178	160	140	77	101	81	43	21	80	47	87	87	128	1,111	
Well 23	1207328	868	0	304	191	295	110	187	54	168	190	274	273	273	2,747	
Well 24	1208224	277	248	296	173	211	108	79	280	188	173	209	237	237	2,477	
Production for Banning ²		-104	-105	-106	-62	-45	0	0	0	-43	-55	-71	-58	-651	-651	
Subtotal		1,865	943	1,149	609	1,060	462	655	583	638	566	861	1,084	10,455	6,802	0
South Mesa Water Company																
3rd No. 4 Well	1003035	81	77	65	56	54	42	43	43	49	49	53	69	71	891	
Subtotal		81	77	65	56	54	42	43	43	49	49	53	69	71	891	1,305
Yucalpa Valley Water District																
Well 35	1003058	47	40	34	20	15	2	1	0	4	1	1	28	47	241	
Well 48	1003063	244	240	228	229	228	121	53	18	131	122	222	231	231	2,088	
Subtotal		292	280	262	249	243	124	56	18	135	124	124	250	279	2,309	0
Total		2,526	1,564	1,788	1,089	1,486	682	808	832	902	851	1,385	1,780	15,502	18,000	4,287

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

2 – Pursuant to Part 1, Paragraph 3 B of the Judgment, and a separate Agreement (a copy of which is on file with the Watermaster).

Appendix A-2
Overlying Producer Summary of Production for Fiscal Year 2006/07

CD #	CD Name	CD Type	2007 Production by Month (in Thousands of Pounds)												Total Production to Date			
			Jul 2007	Aug 2007	Sep 2007	Oct 2007	Nov 2007	Dec 2007	Jan 2008	Feb 2008	Mar 2008	Apr 2008	May 2008	Jun 2008				
1206852	Beckman, Walter M.	Yes	19	20	15	7	11	2	3	2	2	3	4	5	93	75	375	230
1206853	California Oak Valley Golf and Resort LLC	Yes	33	54	16	0	1	0	0	0	0	20	17	0	140			
	Oak Valley #1		1007025															
	OVGC Cement Stn		1206848	Yes	81	47	84	43	67	28	38	21	47	22	67	86	828	4,750
1206854	Subtotal		124	101	100	43	67	28	36	21	47	42	73	86	768	850		24
1206855	Merlin Properties	No													6	550	2,750	
1206856	Oak Valley Partners, LP	No													300			
1206857	Sagehen Ranch #5	Yes	10	12	20	15	7	7	18	10	10	12	3	0	124			
1206858	Sagehen Ranch #7	Yes													10			
1206859	Impington Stokes	No													434	1,808	9,000	1,813
1206860	Subtotal																	
1206861	Plantation on the Lake LLC	Yes	40	42	41	35	32	30	22	21	17	32	24	38	372	581	2,808	1,333
1206862	Rancho Calimesa Mobile Home Park	No													59	160	750	236
1206863	Roman Catholic Bishop of San Bernardino	No																
1206864	In-Gas	No																
1206865	Pressure	No																
1206866	Subtotal																	
1206867	Sharonville Meat Owners Association	Yes	8	12	13	10	9	7	5	7	12	14	3	14	111			294
1206868	Well No.1	Yes	22	13	11	7	3	1	2	0	0	0	18	8	83			
1206869	Well No.2	Yes	28	25	23	17	13	8	7	7	12	14	21	20	185	195	200	1,000
1206870	Subtotal																	
1206871	So Calif Section of the Professional Oolier's Association of America	Yes	3	3	7	7	20	92	17	80	90	75	53	51	487			
1206872	Well A	Yes	3	3	7	7	20	92	17	80	90	75	53	51	487			
1206873	Well C	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0			
1206874	Well D	Yes	198	185	213	92	28	82	60	37	96	107	112	90	127			
1206875	Subtotal		198	188	220	99	49	174	97	117	156	182	165	141	1764	2,200	11,000	5,919
1206876	Stearns, Leonard M. and Dorothy D.	Yes													1	200	1,000	4
1206877	Sunny-Cal Egg and Poultry Company	Yes													0	1,489.5	7,187.5	909
1206878	Sunny-Cal North - Blandford, Maribeth & Bertram	Yes													0	300	1,500	0
1206879	Nickodinos, Nick	Yes													0	20	100	0
1206880	McAnis, Ronald L.	Yes													0	5	25	0
1206881	Aldama, Nicolas and Amalia	Yes													0	7	35	0
1206882	Gutierrez, Hector, Luis Gutierrez and Sebastian Monroy	Yes													0	10	50	0
1206883	Dunnett, Boris and Miriam	Yes													0	2.5	12.5	0

1 - All values rounded and subject to revision based on receipt of more accurate information
2 - Blank indicates no information was reported and production was estimated

Appendix A-3
Reconciliation of Appropriator Production and Storage Accounts

Fiscal Year	Storage Account Balance at Beginning of Fiscal Year	Operating Yield	Groundwater Production for Fiscal Year	Under Production ¹	Transfers Among Appropriators	Additions to Storage Account			Total Additions to Storage Account	Ending Account Balance	Authorized Storage Account as of June 30, 2007
						SWP Water Recharge	Supplemental Water	Recycled Water Recharge			
Beaumont Cherry Valley Water District											
2003/04	0	6,802	6,204	588	0	0	0	0	688	588	
2004/05	588	8,802	8,386	416	0	0	0	0	416	1,014	
2005/06	1,014	8,802	7,625	-823	0	0	0	0	-823	181	
2006/07 ²	191	6,802	10,456	-3,653	1,500	6,462	0	0	4,309	4,498	70,000
City of Banning											
2003/04	0	5,029	3,951	1,078	0	0	0	0	1,078	1,078	
2004/05	1,078	5,029	2,420	2,609	0	0	0	0	2,609	3,686	
2004/06	3,686	5,029	1,768	3,281	0	0	0	0	3,281	8,948	
2006/07 ²	6,948	5,028	2,046	2,983	1,500	0	0	0	4,483	11,431	40,000
City of Beaumont											
2003/04	0	0	0	0	0	0	0	0	0	0	
2004/05	0	0	0	0	0	0	0	0	0	0	
2004/06	0	0	0	0	0	0	0	0	0	0	
2006/07	0	0	0	0	0	0	0	0	0	0	0
South Mesa Water Company											
2003/04	0	1,996	420	1,576	0	0	0	0	1,576	1,576	
2004/05	1,576	1,996	558	1,438	0	0	0	0	1,438	3,014	
2004/06	3,014	1,996	832	1,364	0	0	0	0	1,364	4,378	
2006/07 ²	4,378	1,996	891	1,305	-3,000	0	0	0	-1,695	2,682	20,000
Yucalpa Valley Water District											
2003/04	0	2,173	2,005	168	0	0	0	0	168	168	
2004/05	168	2,173	1,294	889	0	0	0	0	889	1,056	
2004/06	1,056	2,173	1,530	643	0	0	0	0	643	1,700	
2006/07	1,700	2,173	2,308	-136	0	0	0	0	-136	1,564	5,000
Totals											
2003/04	0	16,000	12,580	3,420	0	0	0	0	3,420	3,420	
2004/05	3,420	16,000	10,649	5,351	0	0	0	0	5,351	8,771	
2004/06	8,771	16,000	11,555	4,445	0	0	0	0	4,445	13,216	
2006/07	13,216	16,000	15,502	498	0	6,462	0	0	6,960	20,176	135,000
Cumulative Totals	13,216	64,000	50,286	13,714	0	6,462	0	0	20,176	20,176	

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

² - SJVWC add 1,500 acre-ft each to the City of Banning and BCYWD thereby increasing their storage accounts by 1,500 acre-ft each and decreasing SJVWC's storage account by 3,000 acre-ft.

**Appendix A-4
Appropriator Producer Summary of Production for Fiscal Year 2003/04 (Amended)**

Well Name	Station ID	Water Production by Appropriator (acre-ft) ¹												Total Production	Op Sale Yield	Eligible for Storage
		Jul 2003	Aug 2003	Sept 2003	Oct 2003	Nov 2003	Dec 2003	Jan 2004	Feb 2004	Mar 2004	Apr 2004	May 2004	Jun 2004			
Banning, City of																
Well C2-A	1007001	107.5	98.1	118.7	108.5	82.9	102.5	95.4	88.8	51.3	72.8	40.8	50.3	1018		
Well C3	1004377	112.9	100.9	103.1	88.1	36.8	78.1	101.0	88.5	101.4	48.7	67.8	75.2	1000		
Well C4	1206706	102.1	111.0	74.0	77.6	64.9	18.7	38.5	18.5	85.8	74.4	91.2	88.4	827		
Well M3	1208700	76.4	182.1	129.8	146.7	10.7	0.0	0.0	0.0	0.0	0.0	0.0	118.9	686		
Well M6	1208834	62.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	83		
Production from BCWWD ²														347		
Subtotal		481.2	474.2	425.6	420.9	195.1	197.3	234.9	196.8	306.3	298.5	377.9	382.8	3951	5028	1078
Beaumont-Cherry Valley Water District																
Well 1	1004351	0.0	0.0	0.0	0.0	0.8	5.3	0.0	0.0	33.5	118.1	180.0	175.7	613		
Well 2	1004349	187.9	181.2	193.8	151.1	115.0	151.2	143.0	135.1	203.1	192.1	183.4	124.5	1941		
Well 3	1004350	152.7	163.6	173.0	118.0	43.6	24.2	0.0	0.0	0.0	0.0	153.6	186.4	1018		
Well 16	1002938	108.3	110.9	114.5	94.0	59.0	67.9	64.2	49.7	88.2	112.3	137.0	132.9	1138		
Well 21	1201487	201.0	209.3	218.0	172.8	31.8	0.0	0.0	0.0	0.1	0.0	0.4	2.9	838		
Well 22	1002986	152.7	110.9	50.3	135.9	33.5	0.0	64.3	54.0	101.8	111.5	140.8	147.4	1103		
Production for Banning ²														-347		
Subtotal		782.8	778.0	749.8	671.8	283.4	248.8	271.5	238.9	356.2	431.4	867.8	723.8	8204	8802	598
South Mesa Water Company																
3rd No. 4 Well	1003035	85.2	47.0	51.3	25.5	18.0	18.2	15.7	13.1	30.5	45.3	53.1	38.0	420		
Subtotal		85.2	47.0	51.3	25.5	18.0	18.2	15.7	13.1	30.5	45.3	53.1	38.0	420	1886	1576
Yucalpa Valley Water District																
Well 35	1003058	25.3	18.8	10.4	1.9	0.7	1.8	1.1	0.8	4.4	0.6	0.8	3.4	70		
Well 48	1003063	234.5	239.1	220.9	164.3	123.8	120.8	121.4	107.2	133.3	136.4	170.9	182.3	1835		
Subtotal		259.7	257.9	231.4	166.2	124.5	122.7	122.5	108.0	137.7	137.1	171.7	185.7	2005	2179	188
Total		1568.7	1555.0	1457.8	1284.3	620.8	584.8	644.5	556.6	833.7	812.2	1270.5	1291.3	12580	16000	3420

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

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

Appendix A-5
Overlying Producer Summary of Production for Fiscal Year 2003/04 (Amended)

Total Acres	Station ID	75' Survey	Data Available Beginning On (Fiscal Year)												Total Approved Production	Estimated Production FY 2003/04	Certified County Reg.	Fiscal Production Reg.
			Jul 2003	Aug 2003	Sep 2003	Oct 2003	Nov 2003	Dec 2003	Jan 2004	Feb 2004	Mar 2004	Apr 2004	May 2004	Jun 2004				
Beckman, Walter M. ¹	1206852	No													NR	27	75	375
California Oak Valley Gold and Resort LLC ²																		
Oak Valley #1	1007025	No																
OVOC Comfort Bn	1206848	No																
Subtotal ³																1,227	960	4,760
Martin Properties ⁴																		
Oak Valley Partners, LP																		
Hemlock Ranch-Main	1000076	N/A													49			
Singleton Ranch #5	1000075	No													300			
Singleton Ranch #7	1000072	Yes													143			
Irigation Stocks	1201957	No													10			
Subtotal ⁵															503		1,006	9,030
Participation on the Lake LLC		Yes	26.8	39.0	36.1	31.6	25.5	18.7	18.3	21.7	13.2	24.1	30.3	35.1	321	321	561	2,905
Rancho Calimesa Mobile Home Park ⁶		No													NR	59	150	750
Roman Catholic Bishop of San Bernardino ⁷																		
In-One	1201556	No																
Pressure	1201557	No																
Subtotal ⁸																59	150	750
Charonville Home Owners Association																		
Well No. 1	1206844	Yes	24.2	20.9	27.3	15.6	5.1	5.6	5.0	8.4	5.9	7.4	10.0	14.4	144			
Well No. 2	1206845	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	25			
Subtotal ⁹			24.2	20.9	27.3	15.6	5.1	5.6	5.0	8.4	5.9	7.4	10.0	14.4	169			
So. Calif Section of the Professional Golfers Association of America ¹⁰																		
Well A	1206995	Yes	35.6	39.0	25.8	8.0	7.7	4.8	6.4	0.7	36.9	25.8	43.1	45.3	275			
Well B	1206996	No																
Well C	1206997	Yes	174.7	168.6	132.7	115.3	43.8	34.3	36.5	14.1	56.4	84.9	113.7	140.0	32			
Well D	1206996	Yes	210.5	197.4	150.5	121.3	61.4	38.9	42.9	14.8	82.3	90.5	136.6	160.3	1,401			
Subtotal ¹¹			380.8	365.0	288.0	244.6	143.9	117.6	115.8	29.2	173.6	201.2	293.4	345.6	1,708			
Sharma, Leonard M. and Dorothy D.		No													NR	1	200	1,000
Sunny-Cal Egg and Poultry Company ¹²																		
Well No. 1	1206854	N/A																
Well No. 2	1002850	N/A																
Well No. 3	1201480	N/A																
Well No. 4		N/A																
Well No. 5		N/A																
Well No. 6		N/A																
Subtotal ¹³																452	1,704	8,020
Total																4,254	6,409	34,336

¹ All values rounded & subject to revision based on receipt of more accurate information

² Blank or NR, no information reported or production estimated

³ All production estimates where irrigation occurs use 70% irrigation efficiency for sprinkler irrigation

⁴ Production estimated, well has no meter, but supplies water for 2 residences & sprinkler/irrigates approximately 4.5 acres of land

⁵ Production estimated, well supplies 3 residences with approximately 0.8 acres of landscape irrigation

⁶ Production estimated, Rancho Calimesa has approximately 185 mobile homes from aerial photo - 0.3 acre per dwelling unit, total use estimated. These above residences on other parcels - all owned by Sharma.

⁷ Production estimated, Wells have no meter, but supply water for 2 residences & sprinkler/irrigates approximately 12 acres of land

⁸ Provided copies of meter log with annual calendar year estimates only - SCPOA Well B (1206845) destroyed and capped.

⁹ Well Nos. 5 & 6 are a production for Mainstem, Mainstem & Sharma who share in aggregate right with Sunny-Cal

Appendix A-8
Appropriator Producer Summary of Production for Fiscal Year 2004/05 (Amended)

Well Name	Station ID	Water Production by Appropriator (acre-ft) ¹												Total Production	Op Sale Yield	Eligible for Storage
		Jul 2004	Aug 2004	Sep 2004	Oct 2004	Nov 2004	Dec 2004	Jan 2005	Feb 2005	Mar 2005	Apr 2005	May 2005	Jun 2005			
Banning, City of																
Well C2-A	1007031	88.2	68.8	73.1	36.3	22.6	23.8	0.4	0.0	0.0	0.0	0.0	0.0	312		
Well C3	1004377	120.4	117.4	108.0	89.3	53.0	57.9	45.0	57.1	10.3	48.2	46.7	40.0	791		
Well C4	1208708	158.8	157.7	154.8	135.2	81.2	81.2	88.8	7.5	6.1	28.8	8.5	20.8	918		
Well M3	1208700	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	76		
Well M8	1208834	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0		
Production from SCVWD ²														324		
Subtotal		343.4	344.8	334.0	280.7	186.7	163.1	136.0	64.6	18.4	76.9	80.0	100.7	2420	5028	2608
Seasmont-Cherry Valley Water District																
Well 1	1004351	156.8	134.4	130.7	8.3	0.0	40.0	15.2	10.1	19.3	87.8	122.2	184.2	870		
Well 2	1004349	144.6	138.1	141.8	101.1	57.4	84.1	44.6	36.1	38.9	0.0	0.0	0.0	765		
Well 3	1004350	145.8	164.1	117.0	84.1	47.8	34.4	37.3	30.7	40.7	78.7	30.7	135.0	847		
Well 16	1002838	133.8	113.5	88.2	64.3	54.6	77.0	9.8	0.0	0.0	40.2	80.2	110.8	740		
Well 21	1201487	211.7	259.8	268.0	195.8	163.8	150.0	78.0	104.1	106.8	181.5	154.7	224.7	2089		
Well 22	1002688	151.3	151.1	128.9	69.0	4.2	2.8	0.0	5.8	13.7	57.9	73.0	88.0	725		
Well 23	1207328	0.0	41.9	85.1	55.7	17.8	3.7	56.5	25.0	29.5	63.8	58.6	126.6	564		
Production for Banning ²														-324		
Subtotal		943.9	1003.0	955.7	568.1	345.4	372.0	241.5	211.8	247.0	491.2	498.2	830.4	8386	8802	416
South Mesa Water Company																
3rd No. 4 Well	1003035	51.8	82.4	74.2	54.7	12.1	10.9	28.7	18.7	38.2	51.3	65.4	70.0	558		
Subtotal		51.8	82.4	74.2	54.7	12.1	10.9	29.7	18.7	38.2	51.3	65.4	70.0	558	1886	1438
Yucalpa Valley Water District																
Well 35	1003058	63.8	78.8	70.8	1.4	1.4	0.8	0.2	0.7	0.7	24.7	30.1	0.6	272		
Well 48	1003083	177.8	218.9	186.5	123.8	18.9	20.8	13.8	11.4	21.2	14.8	51.9	152.8	1012		
Subtotal		241.9	295.8	257.5	125.2	20.3	21.4	13.8	12.1	21.8	39.5	82.0	153.1	1284	2173	889
Total		1580.7	1725.7	1821.4	1008.8	544.6	587.4	420.0	305.1	324.5	858.0	798.6	1154.2	10848	18000	5351

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

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

Appendix A-7
Overlying Producer Summary of Production for Fiscal Year 2004/05 (Amended)

Well Name	Station ID	Acres	Water Production Reported in Quarterly Report (acres)												Total Reported Production	Overlying Owner	Overlying Production - 2004
			Jul 2004	Aug 2004	Sep 2004	Oct 2004	Nov 2004	Dec 2004	Jan 2005	Feb 2005	Mar 2005	Apr 2005	May 2005	Jun 2005			
Beckman, Walter M. ¹	1206852	No													NR	27.1	75
California Oak Valley Oil and Research LLC ²																	
Oak Valley #1	1007025	No												150.2	225		
OVOC Comfort Stn	1206848	No											8.1	101			
Subtotal													18.7	82.2	422	835.0	960
Meritt Properties ³		No													NR	5.8	550
Oak Valley Partners, LP ⁴																	
Angeleno Ranch #6	1003075	No													300		
Angeleno Ranch #7	1003072	Yes													90		
Injection Station	1201067	No													10		
Subtotal															400	400.0	1,800
Plantation on the Lake LLC		Yes	35.9	41.4	40.7	37.8	21.8	20.5	23.9	11.9	8.3	18.9	20.2	34.3	313	313.0	581
Rancho Callesana Mobile Homes Park ⁵		No													NR	68.5	150
Roman Catholic Bishop of San Bernardino ⁶		No															
Ir-Oak	1201068	No															
Pressure	1201057	No															
Subtotal																	
Shareholders Mesa Owners Association																	
Well No. 1	1206844	Yes	19.4	12.0	9.2	8.0	8.0	7.9	5.2	5.9	2.5	8.8	9.2	13.3	110		
Well No. 2	1206845	Yes	7.7	9.0	8.5	4.2	0.0	0.0	0.0	0.0	4.3	5.2	7.2	8.1	53		
Subtotal			27.1	21.9	15.9	12.3	8.3	7.9	5.2	5.9	6.8	13.9	16.4	21.4	163	163.0	200
So Cal Section of the Professional Gutter's Association of America ⁷																	
Well A	1206895	Yes													196		
Well B	1206896	No													82		
Well C	1206897	Yes													1,110		
Well D	1206898	Yes													1,269		
Subtotal															NR	1,369.0	2,200
Stearns, Leonard M. and Dorothy D.		No														0.8	200
Stumpy-Cal Egg and Poultry Company ¹¹																	
Well No. 1	1206854	N/A															
Well No. 2	1002950	N/A															
Well No. 3		N/A															
Well No. 4		N/A															
Well No. 5	1201490	N/A															
Well No. 6		N/A															
Subtotal																451.7	1,784
Total															NR	3,496	8,686

¹ All values provided & subject to revision based on receipt of more accurate information.

² Blank or NR, no information reported or production estimated.

³ All production estimates where irrigation occurs use 75% irrigation efficiency for sprinkler irrigation.

⁴ Production estimated: well has no meter, but supplies water for 2 residences & sprinkler irrigates approximately 4.5 acres of land.

⁵ Production estimated from partially reported values.

⁶ Production estimated: well supplies 3 residences with approximately 0.8 acres of landscape irrigation.

⁷ Oak Valley #1: 154.8 at for Sep 2004 - Jan 2005; 6.1 at for Feb & Mar 2005; OVOC Comfort Station: reported 14.0 at for Feb & Mar 2005; 81.5 at for Apr - Jun 2005.

⁸ Production estimated: Rancho Callesana has approximately 195 mobile homes from aerial photo - 0.3 aby per dwelling unit indoor use estimated. These other residences on other periods - all owned by Stearns.

⁹ Production estimated: Wells have no meters, but supply water for 2 residences & sprinkler irrigates approximately 12 acres of land.

¹⁰ Provided copies of state IRIP with annual calendar year estimates only - SCPOA Well B (1206898 destroyed and mapped).

¹¹ Well Nos. 5 & 6 are production for Hestheim, Maribeth & Bernman who share to appropriate right with Stumpy-Cal.

**Appendix A-9
Overlying Producer Summary of Production for Fiscal Year 2006/06 (Amended)**

Well Name	County ID	Watered	Quarter Production by Quarter (Oil and Gas Part, Water, etc.)												Total Requested Production	Approved Production FY 2006-07	Oil and Gas Lease Acres	Estimated Production Part
			Jul 2005	Aug 2005	Sep 2005	Oct 2005	Nov 2005	Dec 2005	Jan 2006	Feb 2006	Mar 2006	Apr 2006	May 2006	Jun 2006				
Beckman, Walter M.	1206952	Yes							7.3	3.3	6.2	0.6	4.1	20.1	41.6	83	75	375
California Oak Valley Golf and Resort LLC																		
Oak Valley #1	1907025	Yes	92.9		26.1	122.9	61.1		73.3	32.0	34.0	0.0	44.6	196.1	741.9			
DVOC Comfort Stn	1206848	Yes	39.3		13.1	27.4	0.0	0.0	0.0	0.0	0.1	0.0	6.1	11.4	87.4			
Subtotal			132.2	0.0	42.2	150.0	61.1	0.0	73.3	32.0	34.1	0.0	60.7	177.5	829.0	836	860	4,760
Mirfin Properties		No														5.6	550	2,760
Oak Valley Partners, LP																		
Shannon Ranch #6	1003075	No													300.0			
Shannon Ranch #7	1003072	Yes	0.0		0.5	7.3	13.3	11.8	7.6	6.7	14.0	24.4	28.0	49.8	185.7			
Irrigation Stokes	1201967	No													10.0			
Subtotal															475.7	475.7	1,806	9,030
Plantation on the Lake LLC	1206946	Yes	35.3		34.9	32.6	25.4	23.7	27.5	21.6	20.7	12.9	20.4	28.8	326.8	326.8	581	2,806
Rancho Callesas Mobile Home Park		No														58.5	150	750
Roman Catholic Bishop of San Bernardino																		
In-Gas	1201556	No																
Pressure	1201557	No																
Subtotal																71.8	154	770
Sharonville News Owners Association																		
Well No.1	1206844	Yes	7.0		13.8	9.8	4.4	6.8	5.1	6.8	2.1	4.3	6.7	14.2	94.5			
Well No.2	1206945	Yes	16.0		7.2	6.8	9.8	6.7	4.8	3.4	4.0	4.7	7.7	8.0	91.3			
Subtotal			23.0		21.1	16.3	14.8	11.5	9.9	10.1	6.1	9.0	18.3	23.2	185.8	185.8	200	1,000
See Calif Section of the Professional Coder's Association of America																		
Well A	1206995	Yes	28.9		34.3	12.9	8.2	8.1	8.4	5.7	3.1	14.3	0.8	2.9	180.0			
Well C	1206907	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			
Well D	1206906	Yes	124.1		114.5	67.9	79.4	76.7	75.8	15.0	10.0	147.1	189.8	218.2	1225.0			
Subtotal			154.1		148.7	80.4	87.5	83.5	83.9	20.7	13.1	181.5	170.5	221.1	1385.0	1385.0	2,200	11,000
Stearns, Leonard M. and Dorothy O.																0.9	200	1,000
Sunny-Cal Egg and Poultry Company																0	1,038.5	7,197.5
Sunny-Cal North - Mannheim, Mannheim & Berman																0	300	1,500
Milodinev, Nick																0	20	100
McKellie, Ronald L.																0	6	25
Adams, Nicolas and Amalia																0	7	35
Guilmer, Hector, Luis Guilmer and Sebastian Morrey																0	10	50
Berment, Boris and Miriam																0	2.6	12.5
Total																3432	8,850	

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

2 - Blank indicates no information was reported and production was estimated

APPENDIX B
ACTIVE PARTY LIST

Active & Interested Party List

Mr. Paul Toor
Public Works Director/Assistant City Manager
City of Banning
Post Office Box 998
Banning, CA 92220

Mr. Chuck Butcher
General Manager
Beaumont Cherry Valley Water District
560 Magnolia Avenue
Beaumont, CA 92223

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

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

Mr. J. Andrew Schlange
General Manager
San Timoteo Watershed Management Authority
4 Crown Court
Rancho Mirage, CA 92270

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

Mr. Gerry Shoaf, Esq.
Redwine and Sherrill
1950 Market Street
Riverside, Ca 9250

Mr. James Krueger
Plantation on the Lake
PO Box 1960,
Newport Beach, CA 92658-8932
jimk@mrc1.com

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

Sharondale Mesa Owners Association
9525 Sharon Way
Calimesa, CA 92320

Mr. Ron Sullivan
California Oak Valley Golf & Resort LLC
27710 Jefferson Ave #301
Temecula, CA 92590

Mark Knorrington
Oak Valley Partners LP
Post Office Box 645
Calimesa, CA 92320

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

Mr. Roger Billings
So Cal Professional Golfers Association of America
36211 Champions Drive
Calimesa, CA 92320

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

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

Mr. Walter M. Beckman
38201 Cherry Valley Boulevard
Cherry Valley, CA 92223

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

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

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

Mr. Robert Reiter
San Bernardino Valley Municipal Water District
1350 South E Street
San Bernardino, CA 92412-5906

Mr. Jeff Davis
General Manager
San Geronio Pass Water Agency
1210 Beaumont, Avenue
Beaumont, CA 92223

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

Ms. Kristal Davis Fadtko
Wildermuth Environmental, Inc.
23692 Birtcher Drive
Lake Forest, CA 92630-1790

Ms. Maria Mendoza
Wildermuth Environmental, Inc.
23692 Birtcher Drive
Lake Forest, CA 92630-1790

Ms. Julie Salinas
Beaumont Cherry Valley Water District
560 Magnolia Avenue
Beaumont, CA 92223

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

Mr. John Jeter
Board President
San Geronio Pass Water Agency
1210 Beaumont Ave
Beaumont, CA 92223

Ms. Barbara Voigt
Director
San Geronio Pass Water Agency
1210 Beaumont Ave
Beaumont, CA 92223

Mr. Dick Larsen
Director
San Geronio Pass Water Agency
1210 Beaumont Ave
Beaumont, CA 92223

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

Mr. Ray Lewis (Deceased)
Director
San Geronio Pass Water Agency
1210 Beaumont Ave
Beaumont, CA 92223

Ms. Patsy Reeley
10096 Live Oak Avenue
Cherry Valley, CA 92223

Ms. Luwana Ryan
9574 Mountain View Ave.
Cherry Valley, CA 92223

APPENDIX C
ADOPTED BUDGET

**Beaumont Basin Watermaster
FY 2006-2007 Budget**

Acct#	IO #	MEMBER CONTRIBUTIONS	Adopted Original Budget	W-1006 to FY 2006 Y/E Actual	W-1007 Tentative 3/13/07	Revised Budget	Rev Received Exp Paid	Remaining to Receive or PAY
-	-	FY 2006 Fund Balance Carryover - ACTUAL						
3105	-	City of Beaumont	(40,000.00)	(19,724.95)		(59,724.95)	59,724.95	0.00
3110	-	Beaumont Cherry Valley WD	(84,500.00)			(84,500.00)	84,500.00	0.00
3115	-	Yucaipa Valley Water District	(84,500.00)			(84,500.00)	84,500.00	0.00
3120	-	City of Banning	(84,500.00)			(84,500.00)	84,500.00	0.00
3125	-	South Mesa Water Company	(49,500.00)			(49,500.00)	49,500.00	(35,000.00)
		TOTAL BUDGET CONTRIBUTION (REVENUE)	(427,500.00)	(19,724.95)	0.00	(447,224.95)	412,224.95	(35,000.00)
EXPENSES:								
5000	-	Interest Earned	0.00			0.00	Expense Paid 15.58	15.58
5001	1	JAS Chief of Watermaster Services (\$4250 per month)	51,000.00			51,000.00	(51,000.00)	0.00
5010	2	Misc & Meetings (TO#2=\$5,000)	5,000.00	724.95		5,724.95	(4,448.40)	1,278.55
5020	3	WEI Acquisition/Computation & Annual Report	20,000.00			20,000.00	(18,502.84)	1,497.16
5040	-	Annual Audit	1,500.00			1,500.00	0.00	1,500.00
5060	4	WEI General Engineering	25,000.00			25,000.00	(18,700.91)	6,299.09
5062	-	WEI Subsidence Monitoring Program - STWMA	95,000.00			95,000.00	(95,000.00)	0.00
5063	5	WEI Groundwater Level Monitoring Program	25,000.00		5,000.00	31,000.00	(30,980.60)	19.40
5064	-	Meter Installation	10,000.00			10,000.00	0.00	10,000.00
5065	7	WEI Update of Water Demand and Supply Projections	10,000.00			10,000.00	(3,207.50)	6,792.50
5066	8	WEI Biennial Engineer's Report	30,000.00			30,000.00	(29,980.00)	20.00
5070	-	A&W General Legal (A&W \$150 per hour)	10,000.00			10,000.00	(9,339.50)	660.50
5071	9	WEI Conjunctive-Use Marketing	10,000.00			10,000.00	(5,137.98)	4,862.02
5072	10	WEI Salt Mitigation Fee Implementation	30,000.00			30,000.00	(30,000.00)	0.00
5073	11	WEI Regional Resource Optimization Scoping Work	100,000.00			100,000.00	(77,896.42)	22,103.58
5080	-	Reserve	5,000.00	19,000.00	(6,000.00)	18,000.00	0.00	18,000.00
		TOTAL BUDGET EXPENSES	427,500.00	19,724.95	0.00	447,224.95	(374,178.57)	73,046.38
Difference of Revenue Received & Expenses Paid								
							38,046.38	
							Cash fund Balance	

APPENDIX D
LETTER – ANNUAL AUDIT

Travis Hickey, CPA

34590 County Line Road
Suite 3
Yucaipa, CA 92399

Ph: (909) 795-9681
Fax: (909) 583-0055
E-mail: Travis@hickey-cpa.com

Beaumont Basin Watermaster
Office of the Watermaster Secretary
c/o Yucaipa Valley Water District
P.O. Box 730
Yucaipa, CA 92399

We have examined Beaumont Basin Watermaster's compliance of all assessments and expenditures with the Rules and Regulations of the Beaumont Basin Watermaster during the period of July 1, 2006 through June 30, 2007. Management is responsible for Beaumont Watermaster's compliance with those requirements. Our responsibility is to express an opinion on Beaumont Basin Watermaster's compliance with the Rules and Regulations of the Beaumont Basin Watermaster based on our examination.

Our examination was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants and, accordingly, included examining on a test basis, evidence about Beaumont Basin Watermaster's compliance with these requirements and performing such other procedures as we considered necessary in the circumstances. We believe that our examination provides a reasonable basis for our opinion. Our examination does not provide legal determination on Beaumont Basin Watermaster's compliance with specified requirements.

In our opinion, Beaumont Basin Watermaster complied, in all material respects, with the aforementioned requirements during the period July 1, 2006 through June 30, 2007.

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

Travis Hickey, CPA

Yucaipa, California
December 18, 2007