



CHINO BASIN WATERMASTER



NOTICE OF MEETINGS

Thursday, May 14, 2009

10:00 a.m. – Appropriative & Non-Ag Pool Meeting

AT THE CHINO BASIN WATERMASTER OFFICES

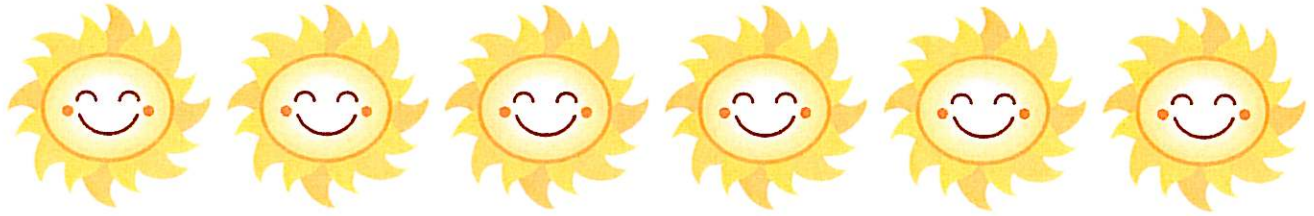
9641 San Bernardino Road
Rancho Cucamonga, CA 91730
(909) 484-3888

Tuesday, May 19, 2009

9:00 a.m. – Agricultural Pool Meeting

AT THE INLAND EMPIRE UTILITIES AGENCY OFFICES

6075 Kimball Ave. Bldg. A Board Room
Chino, CA 91710
(909) 993-1600



CHINO BASIN WATERMASTER

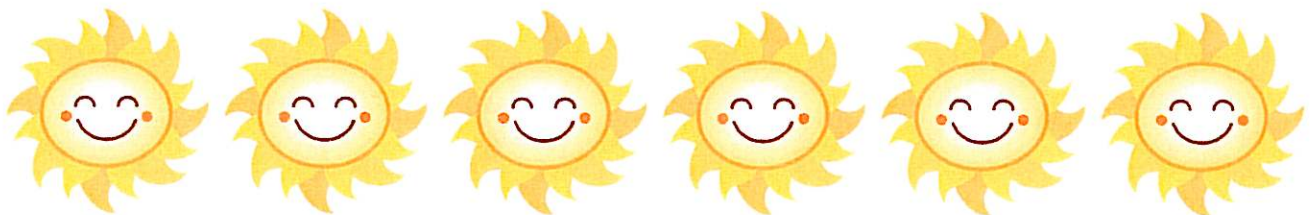
Thursday, May 14, 2009

10:00 a.m. – Appropriative & Non-Ag Pool Meeting

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AGENDA PACKAGE



**CHINO BASIN WATERMASTER
JOINT APPROPRIATIVE & NON-AGRICULTURAL POOL MEETING
WITH**

*Mr. Ken Jeske, Chair, Appropriative Pool
Mr. Mark Kinsey, Vice-Chair, Appropriative Pool
Mr. Bob Bowcock, Chair, Non-Agricultural Pool
Mr. Kevin Sage, Vice-Chair Non-Agricultural Pool*

**10:00 a.m. – May 14, 2009
At The Offices Of
Chino Basin Watermaster
9641 San Bernardino Road
Rancho Cucamonga, CA 91730**

AGENDA

CALL TO ORDER

AGENDA - ADDITIONS/REORDER

I. CONSENT CALENDAR

Note: All matters listed under the Consent Calendar are considered to be routine and non-controversial and will be acted upon by one motion in the form listed below. There will be no separate discussion on these items prior to voting unless any members, staff, or the public requests specific items be discussed and/or removed from the Consent Calendar for separate action.

A. MINUTES

1. Minutes of the Joint Appropriative and Non-Agricultural Pool Meeting held March 12, 2009
(Page 1)

B. FINANCIAL REPORTS

1. Cash Disbursements for the month of April 2009 (Page 13)
2. Watermaster Visa Check Detail (Page 17)
3. Combining Schedule for the Period July 1, 2008 through March 31, 2009 (Page 19)
4. Treasurer's Report of Financial Affairs for the Period March 1, 2009 through February 31, 2009 (Page 21)
5. Budget vs. Actual July 2008 through March 2009 (Page 23)

II. BUSINESS ITEM

**A. AUCTION PRICE FLOOR AGREEMENT AND STORAGE & RECOVERY AGREEMENT –
NON-ACTION ITEM FOR DISCUSSION ONLY**

Provide Feedback to Staff Regarding Broad Mutual Benefit of Auction Proceeds (Page 25)

B. CHINO BASIN WATERMASTER 2009-2010 BUDGET

Consider Approval of the Chino Basin Watermaster 2009-2010 Budget (Page 49)

C. APPLICATION FOR STORAGE ACCOUNT

Consider Approval for the Storage Account by Inland Empire Utilities Agency, Three Valleys Municipal Water District, and Western Municipal Water District on behalf of Metropolitan Water District of Southern California for an additional 74,000.000 acre-feet in addition to the 100,000.000 acre-feet existing Storage Account (Page 81)

III. REPORTS/UPDATES

A. WATERMASTER GENERAL LEGAL COUNSEL REPORT

1. April 27, 2009 Hearing

B. ENGINEERING REPORT

1. Brooks Basin Recharge Recycled Water
2. Storage Losses (*additional material will be provided at the meeting*)
3. Recharge Master Plan Update

C. FINANCIAL REPORT

1. Hanson Settlement
2. Replenishment Obligation Update

D. CEO/STAFF REPORT

1. Legislative Update
2. Recharge Update
3. Foothill Water Coalition
4. Zone 1 Repair to San Sevaine Channel Agreement

IV. INFORMATION

1. Newspaper Articles (*Page 187*)

V. POOL MEMBER COMMENTS

VI. OTHER BUSINESS

VII. CONFIDENTIAL SESSION - POSSIBLE ACTION

Pursuant to the Appropriative and Non-Agricultural Pool Rules & Regulations, a Confidential Session may be held during the Watermaster Pool meeting for the purpose of discussion and possible action.

VIII. FUTURE MEETINGS

May 14 2009	10:00 a.m.	Appropriative & Non-Agricultural Pool Meeting
May 19, 2009	9:00 a.m.	Agricultural Pool Meeting @ IEUA
May 28, 2009	8:00 a.m.	IEUA Dry Year Yield Meeting @ CBWM
May 28, 2009	9:00 a.m.	Advisory Committee Meeting
May 28, 2009	11:00 a.m.	Watermaster Board Meeting
May 28, 2009	1:00 p.m.	WE Workshop #3 Tasks 8.2 through 8.5

Meeting Adjourn

**CHINO BASIN WATERMASTER
AGRICULTURAL POOL MEETING**

WITH

Mr. Bob Feenstra, Chair

Mr. Jeff Pierson, Vice-Chair

9:00 a.m. – May 19, 2009

At The Offices Of

Inland Empire Utilities Agency

6075 Kimball Ave., Bldg. A, Board Room

Chino, CA 91710

AGENDA

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AGENDA - ADDITIONS/REORDER

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1. Minutes of the Agricultural Pool Meeting held April 21, 2009 *(Page 7)*

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1. Cash Disbursements for the month of April 2009 *(Page 13)*
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D. CEO/STAFF REPORT

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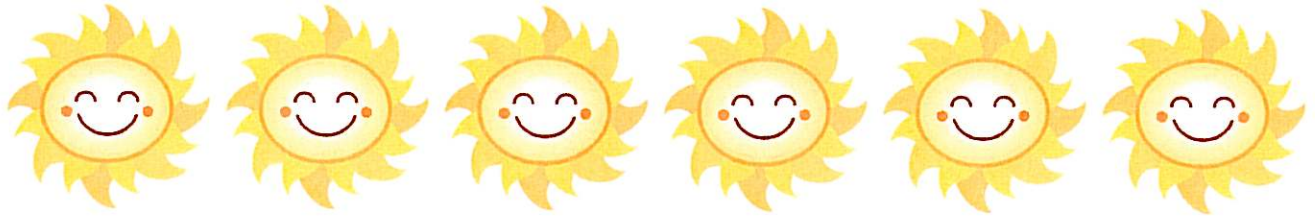
V. POOL MEMBER COMMENTS

VI. OTHER BUSINESS

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May 28, 2009	9:00 a.m.	Advisory Committee Meeting
May 28, 2009	11:00 a.m.	Watermaster Board Meeting
May 28, 2009	1:00 p.m.	WE Workshop #3 Tasks 8.2 through 8.5

Meeting Adjourn

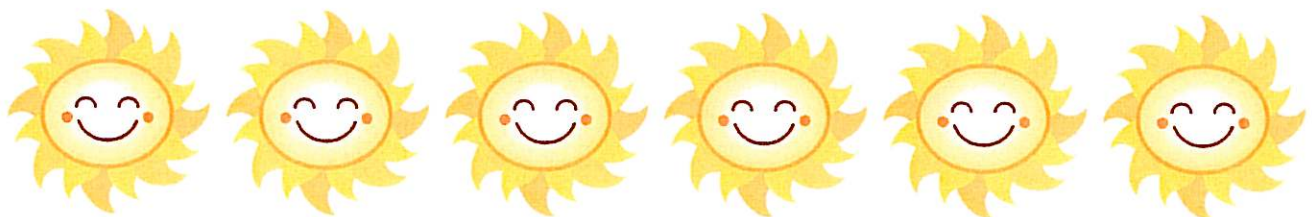


CHINO BASIN WATERMASTER

I. CONSENT CALENDAR

A. MINUTES

1. Joint Appropriative and Non-Agricultural Pool Meeting – April 14, 2009



Draft Minutes
CHINO BASIN WATERMASTER
JOINT APPROPRIATIVE & NON-AGRICULTURAL POOL MEETING
April 14, 2009

The Joint Appropriative and Non-Agricultural Pool Meeting were held at the offices of Chino Basin Watermaster, 9641 San Bernardino Road, Rancho Cucamonga, CA, on April 14, 2009 at 10:00 a.m.

APPROPRIATIVE POOL MEMBERS PRESENT

Ken Jeske, Chair	City of Ontario
John Bosler	Cucamonga Valley Water District
Mark Kinsey	Monte Vista Water District
Robert Tock	Jurupa Community Services District
Charles Moorrees	San Antonio Water Company
Raul Garibay	City of Pomona
Dave Crosley	City of Chino

NON-AGRICULTURAL POOL MEMBERS PRESENT

Kevin Sage	Vulcan Materials Company (Calmat Division)
Mohamad El Amamy	City of Ontario

Watermaster Board Members Present

Michael Camacho	Inland Empire Utilities Agency
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Watermaster Staff Present

Kenneth R. Manning	Chief Executive Officer
Sheri Rojo	CFO/Asst. General Manager
Ben Pak	Senior Project Engineer
Danielle Maurizio	Senior Engineer
Sherri Lynne Molino	Recording Secretary

Watermaster Consultants Present

Michael Fife	Brownstein, Hyatt, Farber & Schreck
Mark Wildermuth	Wildermuth Environmental Inc.
Andy Malone	Wildermuth Environmental Inc.

Others Present

Jennifer Novak	State of California Dept. of Justice
Marv Shaw	Inland Empire Utilities Agency
Sandra Rose	Monte Vista Water District
Eunice Ulloa	Chino Basin Water Conservation District

Chair Jeske called the Joint Appropriative and Non-Agricultural Pool Meeting to order at 10:03 a.m.

AGENDA - ADDITIONS/REORDER

Chair Jeske asked that the closed session take place first prior to any items on the agenda.

Chair Jeske closed the regular open meeting at 10:04 a.m. to hold the confidential session.

VII. CONFIDENTIAL SESSION - POSSIBLE ACTION

Pursuant to the Appropriative and Non-Agricultural Pool Rules & Regulations, a Confidential Session may be held during the Watermaster Pool meeting for the purpose of discussion and possible action.

1. Meeting with Agricultural Pool Regarding Special Projects
2. Personnel Committee Matters

No action was reported on.

Chair Jeske dismissed the confidential session at 10:36 a.m. to continue with the open meeting.

I. CONSENT CALENDAR**A. MINUTES**

1. Minutes of the Joint Appropriative and Non-Agricultural Pool Meeting held March 12, 2009

B. FINANCIAL REPORTS

1. Cash Disbursements for the month of March 2009
2. Watermaster Visa Check Detail
3. Combining Schedule for the Period July 1, 2008 through February 28, 2009
4. Treasurer's Report of Financial Affairs for the Period February 1, 2009 through February 28 2009
5. Budget vs. Actual July 2008 through February 2009

C. WATER TRANSACTION

1. **Consider Approval for Notice of Sale or Transfer** – Cucamonga Valley Water District is purchasing 500 acre-feet of water from West valley Water District. This purchase is made from WVWD's water in storage and is to be placed in CVWD's Excess Carryover Account. Date of Application: March 10, 2009
2. **Consider Approval for Notice of Sale or Transfer** – Chino Basin Watermaster will purchase 1,000,000 acre-feet of water from the Jurupa Community Services District Toward Replenishment Obligation. Date of Application: March 17, 2009
3. **Consider Approval for Notice of Sale or Transfer** – On March 9, 2009, Watermaster received Form 5 "Application to Transfer Annual Production Right or Safe Yield, with KCO, LLC (Koll) as Transferor and the City of Ontario (as Overlying Non-Agricultural party) as Transferee in the amount of 22,000 acre-feet – a permanent transfer of its share of safe yield. Date of Application: March 9, 2009

*Motion by Tock, second by Garibay, and by unanimous vote – Non-Ag concurred
Moved to approve Consent Calendar A through C, as presented*

II. BUSINESS ITEM**A. BUDGET TRANSFER T-09-04-02**

Chair Jeske offered comment on the Budget Transfer and noted the transfer is in the amount of \$30,000.00 for Agricultural Pool legal and technical services related to recent legal activity.

*Motion by Crosley, second by Garibay, and by unanimous vote – Non-Ag concurred
Moved to approve Budget Transfer Request T-09-04-2 for Agricultural Pool Legal & Technical services in the amount of \$30,000.00, as presented*

B. STATUS REPORT 2008-2

Mr. Manning stated this is a report that has been created and supplied to the court for several years; these were quarterly reports filed with the court. The reporting was changed by the court to every six months by Judge Gunn and those have been filed accordingly. When the changes were made from Judge Gunn to the new judge it was noted no more Status Reports were to be filed until further notice. At the February Watermaster hearing, Judge Wade asked that the reports continue and staff has put together the report which is in the meeting packet; however,

some minor editing changes have been made since the packet was sent out and a revised Status Report is available on the back table. Mr. Manning noted this report will be made available on the Watermaster website. Staff is seeking approval to file this with the court. A brief discussion regarding cost ensued.

*Motion by Tock, second by Crosley, and by unanimous vote – Non-Ag concurred
Moved to approve Status Report 2008-2 for filing with the court, as presented*

III. REPORTS/UPDATES

A. WATERMASTER GENERAL LEGAL COUNSEL REPORT

1. April 27, 2009 Hearing

Counsel Fife stated the next hearing is scheduled for Monday, April 27, 2009 at 9:30 a.m. on OBMP Program Elements 1 through 3. The last hearing was pretty formal and staff and counsel feel this hearing will be much more relaxed and will require less preparation. Andy Malone will present Program Element #1, Mark Wildermuth will present Program Element #2, Ken Jeske will present Program Element #3, and Ken Manning will speak on reporting. Counsel has done some initial preparation with those parties and once materials are available they will be distributed. Counsel Fife stated the court has required a declaration be filed from legal counsel in advance of the hearing regarding reporting and that declaration will be distributed once it has been finalized. A discussion regarding the hearing and legal fees ensued.

2. Hanson Aggregates Update

Counsel Fife stated the case has been settled and the Watermaster Board approved the proposed settlement agreement last month and there is a copy of the signed settlement agreement on the back table. Under the settlement agreement, Hanson Aggregates is going to pay a total of \$450,000.00 in four payments. The first payment has already been received in the amount of \$117,000.00 which covers all the hard costs to clean up the basin. In addition Hanson is going to pay \$333,000 in lost opportunity costs and \$111,000 will be due on July 1, 2009. The balance of the payments will be received July 1, 2010 and July 1, 2011. A discussion regarding this matter ensued. Chair Jeske asked staff to put together a sheet on how/where the settlement will be parceled back out.

3. Notice Application for Storage Account by Inland Empire Utilities Agency, Three Valleys Municipal Water District, and Western Municipal Water District on behalf of Metropolitan Water District of Southern California for an additional 74,000 acre-feet in addition to the 100,000.000 acre-feet existing DYY Storage Account

Counsel Fife stated this is the Dry Year Yield Expansion Application. Staff has put it under report items this month to give a heads up that this will be on the May agenda for approval. This document has now been distributed and staff wants to make sure you all have an opportunity to review and comment prior to it coming back on the May agenda. A lengthy discussion regarding this item ensued. Counsel Fife stated this is a good start for dialog on this item and further discussions/comments will be taken at the May meeting. Chair Jeske stated this is a months' notice to get our thoughts together to determine if the parties want to look at this from a regional view point or a parochial view point.

4. Development and Use of the City of Upland's Storm Drains Agreement

Counsel Fife stated this item was placed under reports for this month for information and it will be on the agenda for approval in May. There is a draft agreement on the back table for your review which has been provided in red-line version for discussion. This is an agreement being proposed between the City of Upland, Inland Empire Utilities Agency (IEUA), and Watermaster to modify some of Uplands' facilities in order to assist in the use of those facilities to get water to the recharge basin. There are various terms stated in the agreement stating that Watermaster will be contributing \$50,000.00 to the project and IEUA would also be contributing \$50,000.00 to the project and doing the actual construction. This

will come back next month for approval. A lengthy discussion regarding this item, the construction that is going to be performed, and who owns the water ensued.

B. ENGINEERING REPORT

1. Recharge Master Plan Update and Schedule

Mr. Wildermuth stated as the Recharge Master Plan is progressing there are a lot of parallel activities going on behind the scenes. The production optimization work continues and as a practical matter the Peace II CEQA is occurring concurrently and both items will wrap up around the same time at the end of the month. The storm water recharge component is being done by Wagner and Bonsignore and the Conservation District; however, there are some data collection issues with some of the cities and the county. A workshop regarding groundwater production projections and what our estimate of supplemental water recharge capacity is was held recently. Please submit any comments on the projections and capacity as soon as you can. A discussion regarding Mr. Wildermuth's comments ensued.

Added Comment:

Mr. Wildermuth stated the Inland Empire Utilities Agency is proposing to amend the recharge permit that they are co-permittees with Watermaster to go to a 10 year dilution period from a 5 year period. IEUA is working with the Regional Board on this and the Regional Board responded to them stating they need to do a nitrogen TDS projection and that is underway. The City of Pomona has expressed concern and would like some more explanation and time to consider it before the amended permit goes through. Mr. Garibay noted this needs to be agendized for next month for what the analysis yields along with the possible impacts. A discussion regarding this matter ensued.

2. Summary of Findings from Max Benefit/Hydraulic Control Monitoring Report

Mr. Malone stated this year Watermaster is getting ready to publish a number of reports on the monitoring programs that it is conducting. Mr. Malone noted he is going to discuss Hydraulic Control and some of the subsidence monitoring that has been taking place basin wide. Mr. Malone stated Hydraulic Control is Watermaster and IEUA's attempt to hydraulically isolate the Chino Basin from impacts to downstream beneficial uses, specifically Orange County Water District. Mr. Malone reviewed several maps in detail. The Regional Board is requiring IEUA and Watermaster to demonstrate through pumping at the desalter well fields that we are modifying our groundwater flow directions and lowering groundwater levels to minimize the impact of rising groundwater on the water quality of the Santa Ana River. Groundwater levels are monitored specifically at all the noted wells and then an annual groundwater contour map is made from all the collected data. Mr. Malone reviewed the data received which is shown on the maps being presented. Mr. Malone stated it does not appear there is hydraulic control on the west side where the desalter wells that exist are perforated in the deep part of the aquifer system and there is not much shallow groundwater production in that region. Mr. Wildermuth stated Orange County Water District staff came to him two years ago and asked what was going on in the Santa Ana River because there was a clear reduction in discharge/base flow and when you review the desalters shown on the map including the Corona desalters it can be explained. When all the wastewater is factored out, the Santa Ana River is recharging more; the physical evidence is starting to show not just in the groundwater contours but the river flow is actually going down. A discussion regarding Mr. Wildermuth's comments ensued.

3. Results of InSAR Work

Mr. Malone reviewed a map of subsidence which is pre-OBMP conditions and discussed the map in detail. When the Peace Agreement was constructed there were two major elements that were associated with subsidence to develop, eliminate, or minimize subsidence or ground fissuring could occur in the future. InSAR gives us a cost effective way to give us a snapshot of what subsidence is doing across the entire basin. Mr. Malone showed some more recent maps and discussed them in detail. Mr. Malone noted in

Agricultural areas there is little to no data from the radar satellites. Mr. Malone reviewed the Management Zones and their subsidence occurrences which are displayed in more recent InSAR capture. A discussion regarding Mr. Malone's presentation ensued. Mr. Manning noted the InSAR costs are going to be absorbed by Watermaster and be just a part of the MZ1 budget because staff feels this technology is going to tell us a lot across the basin, not just in the MZ1 area and this will be discussed at the upcoming budget workshop.

C. FINANCIAL REPORT

1. Budget Workshop and Related Items

Ms. Rojo stated the budget workshop is scheduled for Tuesday, April 21, 2009 at 2:00 p.m.

D. CEO/STAFF REPORT

1. Legislative Update

No comment was made regarding this item.

2. Recharge Update

No comment was made regarding this item.

3. Zone 1 Repair to San Sevaine Channel Agreement

Mr. Manning stated this item is for information this month; however, it will be on the agenda next month for approval. This will memorialize an agreement with the County of San Bernardino to do the repairs which were actually caused by the Christmas Day storm that took place five years ago. The damage from that storm tore up the channel and there have been much back and forth discussions with the county on who should pay for the damages. It has been agreed that Watermaster will pick up 25% of the cost, IEUA will pick up 25% of the cost, and the county will pick up the other 50% of the cost for those damages that were occurred in that storm. The county is proposing additional repairs beyond what was from the damage and Watermaster has told them that we will not pick up those costs. The final agreement will come back next month for approval.

IV. INFORMATION

1. Newspaper Articles

No comment was made regarding this item.

V. POOL MEMBER COMMENTS

No comment was made regarding this item.

VI. OTHER BUSINESS

No comment was made regarding this item.

VII. CONFIDENTIAL SESSION - POSSIBLE ACTION

Pursuant to the Appropriative and Non-Agricultural Pool Rules & Regulations, a Confidential Session may be held during the Watermaster Pool meeting for the purpose of discussion and possible action.

1. Meeting with Agricultural Pool Regarding Special Projects
2. Personnel Committee Matters

This item was taken out of order prior to the Consent Calendar and there was no reported action recorded.

VIII. FUTURE MEETINGS

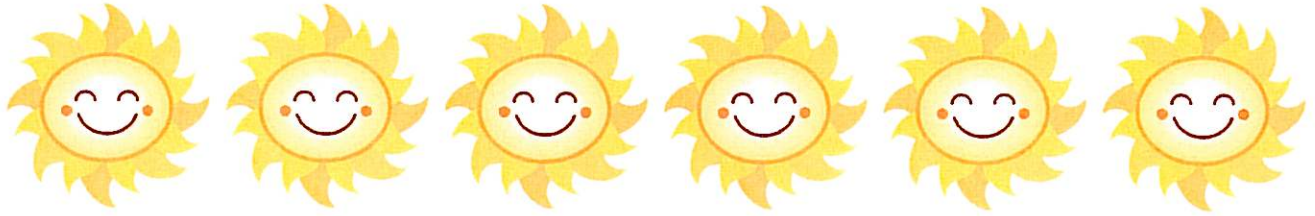
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April 23, 2009	8:00 a.m.	IEUA Dry Year Yield Meeting @ CBWM
April 23, 2009	9:00 a.m.	Advisory Committee Meeting

April 23, 2009	11:00 a.m.	Watermaster Board Meeting
April 23, 2009	1:00 p.m.	WE Workshop #2 Task 6.1
April 27, 2009	9:30 a.m.	Chino Basin Watermaster Hearing, San Bernardino Court
April 28, 2009	9:00 a.m.	GRCC Meeting

The Appropriative Pool meeting was dismissed by Chair Jeske at 11:45 a.m.

Secretary: _____

Minutes Approved: _____

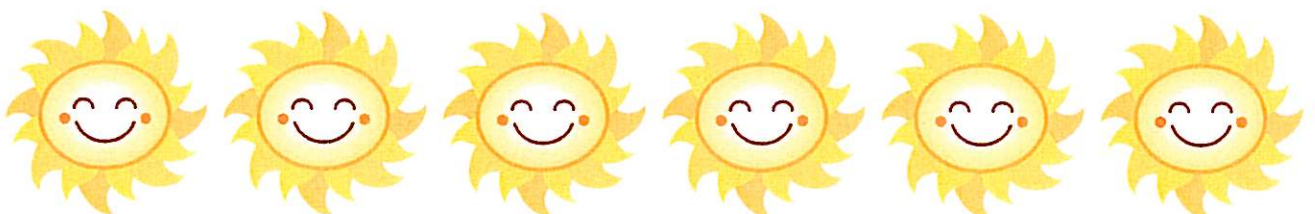


CHINO BASIN WATERMASTER

I. CONSENT CALENDAR

A. MINUTES

1. Agricultural Pool Meeting – April 21, 2009



Draft Minutes
CHINO BASIN WATERMASTER
AGRICULTURAL POOL MEETING
April 21, 2009

The Agricultural Pool Meeting was held at the offices of the office of Inland Empire Utilities Agency, 6075 Kimball Avenue, Chino, CA, on April 21, 2009 at 9:00 a.m.

Agricultural Pool Members Present

Jeff Pierson, Vice-Chair	Crops
Glen Durrington	Crops
Gene Koopman	Milk Producers Counsel
John Huitsing	Dairy
Jennifer Novak	State of California Department of Justice for CIM

Watermaster Board Members Present

Michael Camacho	Inland Empire Utilities Agency
Paul Hofer	Crops

Watermaster Staff Present

Kenneth R. Manning	Chief Executive Officer
Sheri Rojo	CFO/Assistant General Manager
Ben Pak	Senior Project Engineer
Danielle Maurizio	Senior Engineer
Sheri Lynne Molino	Recording Secretary

Watermaster Consultants Present

Michael Fife	Brownstein, Hyatt, Farber & Schreck
Mark Wildermuth	Wildermuth Environmental Inc.

Others Present

Steven Lee	Reid & Hellyer
Eunice Ulloa	Chino Basin Water Conservation District
Marv Shaw	Inland Empire Utilities Agency

Vice-Chair Pierson called the Agricultural Pool meeting to order at 9:09 a.m.

AGENDA - ADDITIONS/REORDER

Mr. Pierson noted a quorum is not present and asked that the Consent Calendar and Business Items be taken last to see if more members show up to have a full quorum for voting purposes.

III. REPORTS/UPDATES

A. WATERMASTER GENERAL LEGAL COUNSEL REPORT

1. April 27, 2009 Hearing

Counsel Fife stated the next hearing is scheduled for Monday, April 27, 2009 at 9:30 a.m. on OBMP Program Elements 1 through 3. The last hearing was pretty formal and staff and counsel feel this hearing will be much more relaxed and need less preparation. Andy Malone will present Program Element #1, Mark Wildermuth will present Program Element #2, Ken Jeske will present Program Element #3, and Ken Manning will speak on reporting.

2. Hanson Aggregates Update

Counsel Fife stated the case has been settled and the Watermaster Board approved the proposed settlement agreement last month and there is a copy of the signed settlement agreement on the back table. Under the settlement agreement, Hanson Aggregates is going to pay a total of \$450,000.00 in four payments. The first payment has already been received in the amount of \$117,000.00 which covers all the hard costs to clean up the basin. In addition Hanson is going to pay \$333,000 in lost opportunity costs and \$111,000.00 will be due on July 1, 2009. The compromise for the other two payments was to give Hanson extended amount of time to pay; July 1, 2010 and July 1, 2011. A discussion regarding costs ensued.

3. Notice Application for Storage Account by Inland Empire Utilities Agency, Three Valleys Municipal Water District, and Western Municipal Water District on behalf of Metropolitan Water District of Southern California for an additional 74,000.000 acre-feet in addition to the 100,000.000 acre-feet existing DYY Storage Account

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4. Development and Use of the City of Upland's Storm Drains Agreement

Counsel Fife stated this item was placed under reports for this month for information and it will be on the agenda for approval in May. There is a draft agreement on the back table for your review which has been provided in red-line version for discussion. This is an agreement being proposed between the City of Upland, Inland Empire Utilities Agency (IEUA), and Watermaster to modify Uplands' facilities in order to assist in the use of those facilities to get water to some of the recharge basin. There are various terms stated in the agreement stating that Watermaster will be contributing \$50,000.00 to the project and IEUA would also be contributing \$50,000.00 to the project and doing the actual construction. This will come back next month for approval.

B. ENGINEERING REPORT

Added Comment:

Mr. Wildermuth stated the Inland Empire Utilities Agency is proposing to amend the recharge permit that they are co-permittees with Watermaster to go to a 10 year dilution for recycled water recharge period from a 5 year period. IEUA is working with the Regional Board on this and the Regional Board responded to them stating they need to do a nitrogen TDS projection and that is underway. The City of Pomona has expressed concern and would like some more explanation and time to consider it before the amended permit goes through. A discussion regarding Pomona wells ensued.

1. Recharge Master Plan Update and Schedule

Mr. Wildermuth stated as the Recharge Master Plan is progressing there are a lot of parallel activities going on behind the scenes. The production optimization work continues and as a practical matter the Peace II CEQA is occurring concurrently and both items will wrap up around the same time at the end of the month. A workshop regarding groundwater production projections and what our estimate of supplemental water recharge capacity was held recently. Please submit any comments on the projections and capacity as soon as you can.

2. Summary of Findings from Max Benefit/Hydraulic Control Monitoring Report

Mr. Wildermuth stated Mr. Malone who was to give today's presentation was unable to attend and this report will be given by him in its entirety at the Advisory Committee meeting this Thursday and can be brought back to this pool next month.

3. Results of InSAR Work

Mr. Wildermuth stated Malone will give this report in its entirety at the Advisory Committee meeting this Thursday.

C. FINANCIAL REPORT

1. Budget Workshop and Related Items

Ms. Rojo stated the budget workshop is scheduled for today at 2:00 p.m. Ms. Rojo stated she spoke to Mr. Feenstra and in his absence today he asked that an update be given on the Agricultural Pool's actual budget category. Ms. Rojo stated the amounts budgeted Watermaster staff time as it relates to the Agricultural Pool, Agricultural pool member compensation, and extra compensation; the same numbers will be used this year as were used last year. The same number will also be used for legal and technical work. Ms. Rojo stated the only number that has substantially changed for the Agricultural Pool and is now where a separate category called Ag Pool Special Projects. \$50,000.00 will be budgeted. That amount will cover special projects as they come up and is going to be defined in the agreement that will be brought forward between the Agricultural Pool and the other Pools. This money if needed; gives Pool more money that is budgeted for their use. Ms. Rojo reviewed the budget amendment and budget transfer policies to cover shortfalls in a specific category that are in place. A lengthy discussion regarding this item, TMDL Study costs and category title name ensued. Ms. Rojo stated she will contact SAWPA on future TMDL Study costs and will try and have that number to present for the workshop today. Mr. Lee stated he will be for the workshop today and will report back to the Pool members after the workshop as to what transpired for costs.

D. CEO/STAFF REPORT

1. Legislative Update

Mr. Manning noted there are two handouts that were obtained in Sacramento at meetings he attended. These handouts contain the most current status on water bonds in the works. Mr. Manning reviewed these legislative charts in detail. Mr. Manning noted a more detailed legislative report will be given at the Advisory Committee meeting this Thursday.

2. Recharge Update

Mr. Manning stated a current recharge update spreadsheet is available on the back table for review.

3. Zone 1 Repair to San Sevaine Channel Agreement

Mr. Manning stated this item is for information this month; however, it will be on the agenda next month for approval. This will memorialize an agreement with the County of San Bernardino to do the repairs which were actually caused by the Christmas Day storm that took place five years ago. The damage from that storm tore up the channel and there have been much back and forth discussions with the county on who should pay for the damages. It has been agreed that Watermaster will pick up 25% of the cost, IEUA will pick up 25% of the cost, and the county will pick up the other 50% of the cost for those damages that were occurred in that storm. The county is proposing additional repairs beyond what was from the damage and Watermaster has told them that we will not pick up those costs. The final agreement will come back next month for approval.

Mr. Pierson noted a quorum still is not present, so an Advisory vote will be taken on the Consent Calendar items and Business Items to be given to the Advisory Committee and the Watermaster Board for their consideration on moving the items forward. The Consent Calendar and Business Items will be placed on the May agenda for an official Agricultural Pool vote.

I. CONSENT CALENDAR**A. MINUTES**

1. Minutes of the Agricultural Pool Meeting held March 17, 2009

B. FINANCIAL REPORTS

1. Cash Disbursements for the month of March 2009
2. Watermaster Visa Check Detail
3. Combining Schedule for the Period July 1, 2008 through February 28, 2009
4. Treasurer's Report of Financial Affairs for the Period February 1, 2009 through February 28 2009
5. Budget vs. Actual July 2008 through February 2009

C. WATER TRANSACTION

1. **Consider Approval for Notice of Sale or Transfer** – Cucamonga Valley Water District is purchasing 500 acre-feet of water from West valley Water District. This purchase is made from WVWD's water in storage and is to be placed in CVWD's Excess Carryover Account. Date of Application: March 10, 2009
2. **Consider Approval for Notice of Sale or Transfer** – Chino Basin Watermaster will purchase 1,000.000 acre-feet of water from the Jurupa Community Services District Toward Replenishment Obligation. Date of Application: March 17, 2009
3. **Consider Approval for Notice of Sale or Transfer** – On March 9, 2009, Watermaster received Form 5 "Application to Transfer Annual Production Right or Safe Yield, with KCO, LLC (Koll) as Transferor and the City of Ontario (as Overlying Non-Agricultural party) as Transferee in the amount of 22.000 acre-feet – a permanent transfer of its share of safe yield. Date of Application: March 9, 2009

*Motion by Novak, second by Koopman
Advisory vote only.*

II. BUSINESS ITEM**A. BUDGET TRANSFER T-09-04-02**

Mr. Manning gave a brief description of this item.

*Motion by Koopman, second by Novak
Advisory vote only.*

B. STATUS REPORT 2008-2

Mr. Manning gave a brief description of this item.

*Motion by Durrington, second by Koopman
Advisory vote only.*

IV. INFORMATION**1. Newspaper Articles**

No comment was made regarding this item.

V. POOL MEMBER COMMENTS

Mr. Durrington commented on the prison's need for service lines for reclaimed water for Agricultural use. Mr. Durrington noted there are two wells located at the prison that can be taken out or substituted for recycled water; however the prison can't afford a main line to access this water. A lengthy discussion regarding this topic ensued. It was noted this item will be placed on an upcoming agenda.

VI. OTHER BUSINESS

No comment was made regarding this item.

VII. CONFIDENTIAL SESSION - POSSIBLE ACTION

Pursuant to the Agricultural Pool Rules & Regulations, a Confidential Session may be held during the Watermaster Pool meeting for the purpose of discussion and possible action.

No confidential session was held.

VIII. FUTURE MEETINGS

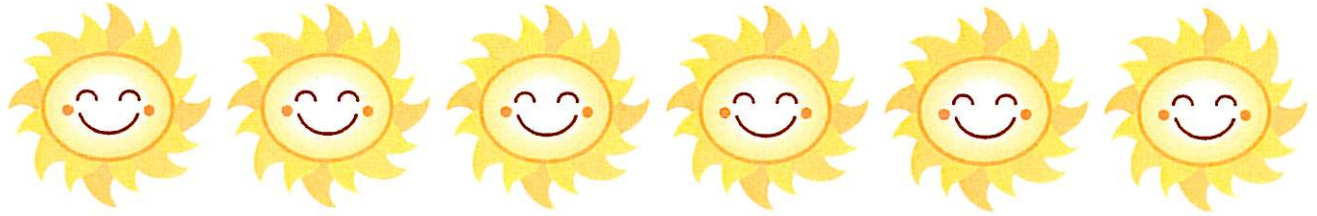
April 14, 2009	10:00 a.m.	Appropriative & Non-Agricultural Pool Meeting
April 21, 2009	9:00 a.m.	Agricultural Pool Meeting @ IEUA
April 21, 2009	2:00 p.m.	Budget Workshop
April 23, 2009	8:00 a.m.	IEUA Dry Year Yield Meeting @ CBWM
April 23, 2009	9:00 a.m.	Advisory Committee Meeting
April 23, 2009	11:00 a.m.	Watermaster Board Meeting
April 23, 2009	1:00 p.m.	WE Workshop #2 Task 6.1
April 27, 2009	9:30 a.m.	Chino Basin Watermaster Hearing, San Bernardino Court
April 28, 2009	9:00 a.m.	GRCC Meeting

The Agricultural Pool meeting was dismissed by Vice-Chair Pierson at 10:08 a.m.

Secretary: _____

Minutes Approved: _____

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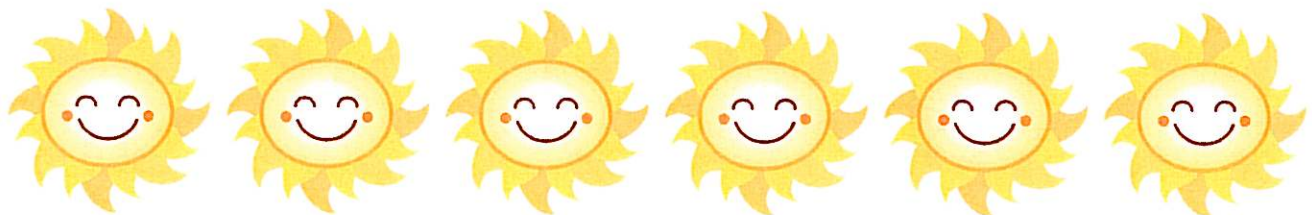


CHINO BASIN WATERMASTER

I. CONSENT CALENDAR

B. FINANCIAL REPORTS

1. Cash Disbursements for the month of April 2009
2. Watermaster Visa Check Detail
3. Combining Schedule of Revenue, Expenses and Changes in Working Capital for the Period July 1, 2008 through March 31, 2009
4. Treasurer's Report of Financial Affairs for the Period March 1, 2009 through March 31, 2009
5. Profit & Loss Budget vs. Actual July 2008 through March 2009





CHINO BASIN WATERMASTER

9641 San Bernardino Road, Rancho Cucamonga, Ca 91730
Tel: 909.484.3888 Fax: 909.484.3890 www.cbwm.org

KENNETH R. MANNING
Chief Executive Officer

STAFF REPORT

DATE: May 14, 2009
May 19, 2009
May 28, 2009

TO: Committee Members
Watermaster Board Members

SUBJECT: Cash Disbursement Report

SUMMARY

Issue – Record of cash disbursements for the month of April 2009.

Recommendation – Staff recommends the Cash Disbursements for April 2009 be received and filed as presented.

Fiscal Impact – Funds disbursed were included in the FY 2008-09 Watermaster Budget.

BACKGROUND

A monthly cash disbursement report is provided to keep all members apprised of Watermaster expenditures.

DISCUSSION

Total cash disbursements during the month of April 2009 were \$747,780.01. The most significant expenditures during the month were Wildermuth Environmental Inc. in the amount of \$333,074.87, Inland Empire Utilities Agency in the amount of \$149,915.07, and Brownstein Hyatt Farber Schreck in the amount of \$59,756.20.

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CHINO BASIN WATERMASTER
Cash Disbursement Detail Report
April 2009

Type	Date	Num	Name	Amount
Apr 09				
Bill Pmt -Check	4/1/2009	13157	ARROWHEAD MOUNTAIN SPRING WATER	-34.50
Bill Pmt -Check	4/1/2009	13158	BLACK & VEATCH CORPORATION	-9,697.50
Bill Pmt -Check	4/1/2009	13159	BOWCOCK, ROBERT	-250.00
Bill Pmt -Check	4/1/2009	13160	CAL CPA	-395.00
Bill Pmt -Check	4/1/2009	13161	CALIFORNIA GROUNDWATER COALITION	-9,500.00
Bill Pmt -Check	4/1/2009	13162	CAMACHO, MICHAEL	-250.00
Bill Pmt -Check	4/1/2009	13163	COMPUTER NETWORK	-4,901.85
Bill Pmt -Check	4/1/2009	13164	DAN VASILE	-90.00
Bill Pmt -Check	4/1/2009	13165	DE BOOM, NATHAN	-375.00
Bill Pmt -Check	4/1/2009	13166	DIRECTV	-76.98
Bill Pmt -Check	4/1/2009	13167	DURRINGTON, GLEN	-375.00
Bill Pmt -Check	4/1/2009	13168	FEENSTRA, BOB	-1,000.00
Bill Pmt -Check	4/1/2009	13169	HUITSING, JOHN	-375.00
Bill Pmt -Check	4/1/2009	13170	INLAND EMPIRE UTILITIES AGENCY	-250.50
Bill Pmt -Check	4/1/2009	13171	KONICA MINOLTA BUSINESS SOLUTIONS	-469.26
Bill Pmt -Check	4/1/2009	13172	KOOPMAN, GENE	-500.00
Bill Pmt -Check	4/1/2009	13173	KUHN, BOB	-250.00
Bill Pmt -Check	4/1/2009	13174	LOS ANGELES TIMES	-46.40
Bill Pmt -Check	4/1/2009	13175	OFFICE DEPOT	-732.26
Bill Pmt -Check	4/1/2009	13176	PAYCHEX	-202.70
Bill Pmt -Check	4/1/2009	13177	PIERSON, JEFFREY	-1,125.00
Bill Pmt -Check	4/1/2009	13178	PURCHASE POWER	-226.24
Bill Pmt -Check	4/1/2009	13179	QUILL	-87.12
Bill Pmt -Check	4/1/2009	13180	SAGE, KEVIN	-125.00
Bill Pmt -Check	4/1/2009	13181	STANDARD INSURANCE CO.	-580.01
Bill Pmt -Check	4/1/2009	13182	STATE COMPENSATION INSURANCE FUND	-756.57
Bill Pmt -Check	4/1/2009	13183	TLC STAFFING	-912.00
Bill Pmt -Check	4/1/2009	13184	VANDEN HEUVEL, GEOFFREY	-125.00
Bill Pmt -Check	4/1/2009	13185	VANDEN HEUVEL, ROB	-500.00
Bill Pmt -Check	4/1/2009	13186	VERIZON	-430.13
Bill Pmt -Check	4/1/2009	13187	VISION SERVICE PLAN	-62.19
Bill Pmt -Check	4/1/2009	13188	W.C. DISCOUNT MOBILE AUTO DETAILING	-150.00
Bill Pmt -Check	4/1/2009	13189	WHITEHEAD, MICHAEL	-125.00
Bill Pmt -Check	4/1/2009	13190	WILLIS, KENNETH	-375.00
Bill Pmt -Check	4/1/2009	13156	PARK PLACE COMPUTER SOLUTIONS, INC.	-4,200.00
Bill Pmt -Check	4/1/2009	13155	PUMP CHECK	-1,382.50
Bill Pmt -Check	4/2/2009	13191	CINDY NAVAROLI	-2,902.50
General Journal	4/4/2009	09/04/02	PAYROLL	-7,543.81
General Journal	4/4/2009	09/04/02	PAYROLL	-27,638.76
Bill Pmt -Check	4/8/2009	13192	PUBLIC EMPLOYEES' RETIREMENT SYSTEM	-5,791.08
Bill Pmt -Check	4/8/2009	13193	PUBLIC EMPLOYEES' RETIREMENT SYSTEM	-5,791.08
Bill Pmt -Check	4/8/2009	13194	PUBLIC EMPLOYEES' RETIREMENT SYSTEM	-5,833.57
Bill Pmt -Check	4/8/2009	13195	PUBLIC EMPLOYEES' RETIREMENT SYSTEM	-5,844.16
Bill Pmt -Check	4/8/2009	13196	CITISTREET	-2,595.66
Bill Pmt -Check	4/8/2009	13197	CITISTREET	-2,595.66
Bill Pmt -Check	4/8/2009	13198	ACWA SERVICES CORPORATION	-209.95
Bill Pmt -Check	4/8/2009	13199	ASSOCIATION OF GOVERNMENT ACCOUNTA...	-74.00
Bill Pmt -Check	4/8/2009	13200	CALPERS	-270.00
Bill Pmt -Check	4/8/2009	13201	CINDY NAVAROLI	-1,087.50
Bill Pmt -Check	4/8/2009	13202	HSBC BUSINESS SOLUTIONS	-307.93
Bill Pmt -Check	4/8/2009	13203	JAMES JOHNSTON	-885.00
Bill Pmt -Check	4/8/2009	13204	OFFICE DEPOT	-43.08
Bill Pmt -Check	4/8/2009	13205	PREMIERE GLOBAL SERVICES	-267.05
Bill Pmt -Check	4/8/2009	13206	PUBLIC EMPLOYEES' RETIREMENT SYSTEM	-5,394.44
Bill Pmt -Check	4/8/2009	13207	SAFEGUARD DENTAL & VISION	-58.06
Bill Pmt -Check	4/8/2009	13208	SAFETY CLEAN JANITORIAL SERVICES	-687.88
Bill Pmt -Check	4/8/2009	13209	SOFTCHOICE	-1,844.57
Bill Pmt -Check	4/8/2009	13210	TLC STAFFING	-288.00
Bill Pmt -Check	4/8/2009	13211	UNION 76	-114.51
Bill Pmt -Check	4/8/2009	13212	USA-FACT INC	-71.20
Bill Pmt -Check	4/8/2009	13213	YUKON DISPOSAL SERVICE	-142.88
Bill Pmt -Check	4/9/2009	13214	ADLIN, BEN	-200.00
Bill Pmt -Check	4/9/2009	13215	POWERS ELECTRIC PRODUCTS CO.	-693.24
Bill Pmt -Check	4/9/2009	13216	UNITED PARCEL SERVICE	-72.00
Bill Pmt -Check	4/17/2009	13217	BANC OF AMERICA LEASING	-3,186.17
Bill Pmt -Check	4/17/2009	13218	BANK OF AMERICA	-4,254.47
Bill Pmt -Check	4/17/2009	13219	COMPUTER NETWORK	-4,078.13
Bill Pmt -Check	4/17/2009	13220	CUCAMONGA VALLEY WATER DISTRICT	-5,495.00

CHINO BASIN WATERMASTER
Cash Disbursement Detail Report
April 2009

Type	Date	Num	Name	Amount
Bill Pmt -Check	4/17/2009	13221	CUCAMONGA VALLEY IAAP	-77.00
Bill Pmt -Check	4/17/2009	13222	FIRST AMERICAN REAL ESTATE SOLUTIONS	-125.00
Bill Pmt -Check	4/17/2009	13223	IAAP	-98.00
Bill Pmt -Check	4/17/2009	13224	INLAND EMPIRE UTILITIES AGENCY	-149,915.07
Bill Pmt -Check	4/17/2009	13225	MCI	-1,226.37
Bill Pmt -Check	4/17/2009	13226	MIJAC ALARM	-141.00
Bill Pmt -Check	4/17/2009	13227	OFFICE DEPOT	-211.14
Bill Pmt -Check	4/17/2009	13228	PETTY CASH	-519.60
Bill Pmt -Check	4/17/2009	13229	PITNEY BOWES CREDIT CORPORATION	-473.07
Bill Pmt -Check	4/17/2009	13230	PRE-PAID LEGAL SERVICES, INC.	-103.60
Bill Pmt -Check	4/17/2009	13231	PUMP CHECK	-3,235.56
Bill Pmt -Check	4/17/2009	13232	REID & HELLYER	-12,588.20
Bill Pmt -Check	4/17/2009	13233	STAULA, MARY L	-136.61
Bill Pmt -Check	4/17/2009	13234	THE STANDARD INSURANCE COMPANY	-156.56
Bill Pmt -Check	4/17/2009	13235	VERIZON WIRELESS	-480.27
Bill Pmt -Check	4/17/2009	13236	W.C. DISCOUNT MOBILE AUTO DETAILING	-50.00
Bill Pmt -Check	4/17/2009	13237	WESTERN DENTAL SERVICES, INC.	-28.06
Bill Pmt -Check	4/17/2009	13238	BROWNSTEIN HYATT FARBER SCHRECK	-59,756.20
Bill Pmt -Check	4/17/2009	13239	MAYER HOFFMAN MC CANN P.C.	-95.00
General Journal	4/18/2009	09/04/04	PAYROLL	-7,644.68
General Journal	4/18/2009	09/04/04	PAYROLL	-28,167.50
Bill Pmt -Check	4/22/2009	13240	WILDERMUTH ENVIRONMENTAL INC	-333,074.87
Bill Pmt -Check	4/23/2009	13241	EL TORITO	-318.97
Bill Pmt -Check	4/29/2009	13242	AMERICAN WATER WORKS ASSOCIATION	-2,263.00
Bill Pmt -Check	4/29/2009	13243	ARROWHEAD MOUNTAIN SPRING WATER	-47.31
Bill Pmt -Check	4/29/2009	13244	CALPERS	-4,008.12
Bill Pmt -Check	4/29/2009	13245	COMPUTER NETWORK	-163.13
Bill Pmt -Check	4/29/2009	13246	DIRECTV	-79.99
Bill Pmt -Check	4/29/2009	13247	IDEAL GRAPHICS	-19.40
Bill Pmt -Check	4/29/2009	13248	INLAND EMPIRE UTILITIES AGENCY	-250.50
Bill Pmt -Check	4/29/2009	13249	KONICA MINOLTA BUSINESS SOLUTIONS	-315.36
Bill Pmt -Check	4/29/2009	13250	OFFICE DEPOT	-21.74
Bill Pmt -Check	4/29/2009	13251	PUMP CHECK	-1,480.00
Bill Pmt -Check	4/29/2009	13252	RICOH BUSINESS SYSTEMS-Lease	-897.19
Bill Pmt -Check	4/29/2009	13253	SPECIAL DISTRICT & LOCAL GOVERNMENT I...	-1,540.00
Bill Pmt -Check	4/29/2009	13254	STANDARD INSURANCE CO.	-596.82
Bill Pmt -Check	4/29/2009	13255	VISION SERVICE PLAN	-62.19
Bill Pmt -Check	4/29/2009	13256	W.C. DISCOUNT MOBILE AUTO DETAILING	-75.00
Bill Pmt -Check	4/29/2009	13257	YUKON DISPOSAL SERVICE	-142.88
				-747,780.01

Apr 09

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CHINO BASIN WATERMASTER
Check Detail
April 2009

Type	Num	Date	Name	Account	Paid Amount
Bill Pmt -Ch...	13218	4/17/2009	BANK OF AMER...	1012 · Bank of America Gen'l Ckg	
Bill	4024...	3/31/2009		6191 · Conferences	-3,096.21
				6212 · Meeting Expense	-136.26
				6312 · Meeting Expenses	-136.27
				6141.3 · Admin Meetings	-80.79
				7204 · Comp Recharge-Supplies	-58.99
				6112 · Subscriptions/Publications	-80.73
				6031.7 · Other Office Supplies	-507.15
				6909.1 · OBMP Meetings	-158.07
TOTAL					-4,254.47

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CHINO BASIN WATERMASTER
 COMBINING SCHEDULE OF REVENUE, EXPENSES AND CHANGES IN WORKING CAPITAL
 FOR THE
 PERIOD JULY 1, 2008 THROUGH MARCH 31, 2009

	WATERMASTER ADMINISTRATION	OPTIMUM BASIN MANAGEMENT	POOL APPROPRIATIVE	POOL AGRICULTURAL	POOL NON-AGRIC.	POOL REPLENISHMENT	GROUNDWATER SB222	EDUCATION FUNDS	GRAND TOTALS	BUDGET 2008-2009
Administrative Revenues										
Administrative Assessments		7,993,307			172,817				8,166,124	\$7,841,054
Interest Revenue		85,175	8,433		2,014			24	95,646	174,368
Mutual Agency Project Revenue		466,371			11,973				478,344	148,410
Grant Income										0
Miscellaneous Income										0
Total Revenues		8,544,853	8,433		186,804			24	8,740,114	8,163,832
Administrative & Project Expenditures										
Watermaster Administration	458,703								458,703	619,960
Watermaster Board-Advisory Committee	44,419								44,419	61,201
Pool Administration		16,407	132,561	3,564					152,532	166,523
Optimum Basin Mgmt Administration		1,139,147							1,139,147	1,913,484
OBMP Project Costs		4,143,905							4,143,905	5,392,289
Education Funds Use								375	375	375
Mutual Agency Project Costs		10,000							10,000	10,000
Total Administrative/OBMP Expenses	503,122	5,293,052	132,561	3,564				375	5,949,081	8,163,832
Net Administrative/OBMP Income	(503,122)	(5,293,052)								
Allocate Net Admin Income To Pools		377,368	113,160	12,593						
Allocate Net OBMP Income To Pools		3,970,072	1,190,494	132,486						
Agricultural Expense Transfer		1,414,742	(1,414,742)							
Total Expenses	5,778,589	21,474	148,643	38,161				375	5,949,081	8,163,832
Net Administrative Income	2,766,264	(13,041)						(351)	2,791,033	-
Other Income/(Expense)										
Replenishment Water Assessments			6,437,643						6,437,643	0
Interest Revenue			34,126						34,126	0
Water Purchases										0
Balance Adjustment										0
Groundwater Replenishment										0
Net Other Income			6,471,769						6,471,769	0
Net Transfers To/(From) Reserves										
		2,766,264	(13,041)	38,161				(351)	9,262,802	-
Working Capital, July 1, 2008		5,413,216	481,995	143,157	294,397	158,251	1,343		6,492,359	
Working Capital, End Of Period		8,179,480	468,954	181,318	6,766,166	158,251	992		15,755,161	
07/08 Assessable Production		103,077,958	30,909,693	3,439,822					137,427,473	
07/08 Production Percentages		75.005%	22.492%	2.503%					100.000%	

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CHINO BASIN WATERMASTER
TREASURER'S REPORT OF FINANCIAL AFFAIRS FOR THE PERIOD
FEBRUARY 1 THROUGH MARCH 31, 2009

DEPOSITORIES:		
Cash on Hand - Petty Cash	\$	500
Bank of America		
Governmental Checking-Demand Deposits	\$	365,456
Zero Balance Account - Payroll		
Local Agency Investment Fund - Sacramento		<u>14,940,455</u>
TOTAL CASH IN BANKS AND ON HAND		\$ 15,306,411
TOTAL CASH IN BANKS AND ON HAND		15,756,359
		\$ (449,948)

3/31/2009
2/28/2009

CHANGE IN CASH POSITION DUE TO:

Decrease/(Increase) in Assets:	\$	86,543
Accounts Receivable		-
Assessments Receivable		-
Prepaid Expenses, Deposits & Other Current Assets		(96,081)
Accounts Payable		13,238
(Decrease)/Increase in Liabilities		<u>(453,648)</u>
Accrued Payroll, Payroll Taxes & Other Current Liabilities		-
Transfer to/(from) Reserves		-
PERIOD INCREASE (DECREASE)	\$	(449,948)

	Petty Cash	Govt'l Checking Demand	Zero Balance Account Payroll	Local Agency Investment Funds	Totals
\$	500	215,404	-	15,540,455	\$ 15,756,359
Deposits	-	384,498	-	-	384,498
Transfers	-	530,117	69,883	(600,000)	-
Withdrawals/Checks	-	(764,563)	(69,883)	-	(834,446)
Balances as of 3/31/2009	500	365,456	-	14,940,455	\$ 15,306,411
PERIOD INCREASE OR (DECREASE)	\$	150,052	\$	(600,000)	\$ (449,948)

SUMMARY OF FINANCIAL TRANSACTIONS:

Balances as of 2/28/2009	\$	15,306,411
Deposits		384,498
Transfers		(834,446)
Withdrawals/Checks		-
Balances as of 3/31/2009	\$	15,306,411
PERIOD INCREASE OR (DECREASE)	\$	(449,948)

**CHINO BASIN WATERMASTER
TREASURER'S REPORT OF FINANCIAL AFFAIRS FOR THE PERIOD
FEBRUARY 1 THROUGH MARCH 31, 2009**

INVESTMENT TRANSACTIONS

Effective Date	Transaction	Depository	Activity	Redeemed	Days to Maturity	Interest Rate(*)	Maturity Yield
3/16/2009	Withdrawal	L.A.I.F.	\$ 600,000				
TOTAL INVESTMENT TRANSACTIONS			\$ 600,000	-			

* The earnings rate for L.A.I.F. is a daily variable rate; 1.91% was the effective yield rate at the Quarter ended March 31, 2009.


**INVESTMENT STATUS
March 31, 2009**

Financial Institution	Principal Amount	Number of Days	Interest Rate	Maturity Date
Local Agency Investment Fund	\$ 14,940,455			
TOTAL INVESTMENTS	\$ 14,940,455			

Funds on hand are sufficient to meet all foreseen and planned Administrative and project expenditures during the next six months.

All investment transactions have been executed in accordance with the criteria stated in Chino Basin Watermaster's Investment Policy.

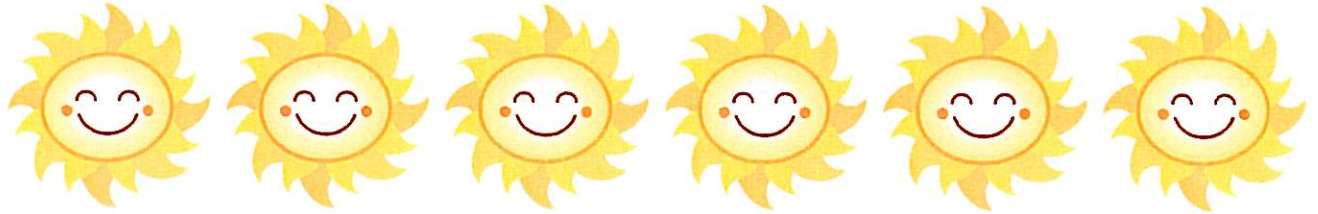
Respectfully submitted,



Sheri M. Rojo, CPA
Chief Financial Officer & Assistant General Manager
Chino Basin Watermaster

	<u>Jul '08 - Mar 09</u>	<u>Budget</u>	<u>\$ Over Budget</u>	<u>% of Budget</u>
Ordinary Income/Expense				
Income				
4010 · Local Agency Subsidies	478,344	148,410	329,934	322.31%
4110 · Admin Asmnts-Approp Pool	7,993,307	7,860,411	132,896	101.69%
4120 · Admin Asmnts-Non-Agri Pool	172,817	132,237	40,580	130.69%
4700 · Non Operating Revenues	95,646	174,368	-78,722	54.85%
Total Income	<u>8,740,114</u>	<u>8,315,426</u>	<u>424,688</u>	<u>105.11%</u>
Gross Profit	8,740,114	8,315,426	424,688	105.11%
Expense				
6010 · Salary Costs	403,846	484,302	-80,456	83.39%
6020 · Office Building Expense	66,925	102,000	-35,075	65.61%
6030 · Office Supplies & Equip.	19,530	46,500	-26,970	42.0%
6040 · Postage & Printing Costs	53,282	87,380	-34,098	60.98%
6050 · Information Services	97,780	144,000	-46,220	67.9%
6060 · Contract Services	72,673	98,000	-25,327	74.16%
6080 · Insurance	15,706	17,730	-2,024	88.58%
6110 · Dues and Subscriptions	11,971	16,750	-4,779	71.47%
6140 · WM Admin Expenses	1,191	4,000	-2,809	29.76%
6150 · Field Supplies	864	2,500	-1,636	34.54%
6170 · Travel & Transportation	20,758	39,200	-18,442	52.95%
6190 · Conferences & Seminars	23,646	26,500	-2,854	89.23%
6200 · Advisory Comm - WM Board	12,342	19,181	-6,839	64.34%
6300 · Watermaster Board Expenses	32,078	42,020	-9,942	76.34%
8300 · Appr PI-WM & Pool Admin	16,407	24,008	-7,601	68.34%
8400 · Agri Pool-WM & Pool Admin	16,908	24,820	-7,912	68.12%
8467 · Ag Legal & Technical Services	88,928	128,000	-39,072	69.48%
8470 · Ag Meeting Attend -Special	8,000	12,000	-4,000	66.67%
8471 · Ag Pool Expense	18,725	0	18,725	100.0%
8500 · Non-Ag PI-WM & Pool Admin	3,564	7,695	-4,131	46.32%
6500 · Education Funds Use Expens	375	375	0	100.0%
9500 · Allocated G&A Expenditures	<u>-329,466</u>	<u>-448,902</u>	<u>119,436</u>	<u>73.39%</u>
Subtotal G&A Expenditures	656,029	878,059	-222,030	74.71%
6900 · Optimum Basin Mgmt Plan	1,033,547	1,755,421	-721,874	58.88%
6950 · Mutual Agency Projects	10,000	10,000	0	100.0%
9501 · G&A Expenses Allocated-OBMP	<u>105,600</u>	<u>137,959</u>	<u>-32,359</u>	<u>76.54%</u>
Subtotal OBMP Expenditures	1,149,147	1,903,380	-754,233	60.37%
7101 · Production Monitoring	89,654	107,515	-17,861	83.39%
7102 · In-line Meter Installation	36,911	87,931	-51,020	41.98%
7103 · Grdwtr Quality Monitoring	129,078	210,458	-81,380	61.33%
7104 · Gdwtr Level Monitoring	315,950	372,538	-56,588	84.81%

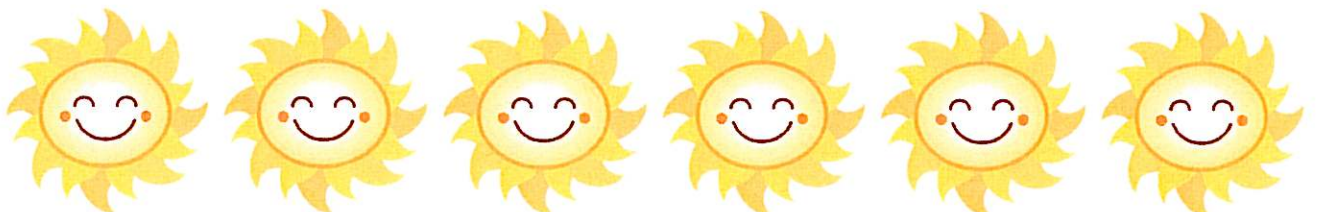
	<u>Jul '08 - Mar 09</u>	<u>Budget</u>	<u>\$ Over Budget</u>	<u>% of Budget</u>
7105 · Sur Wtr Qual Monitoring	4,160	46,717	-42,557	8.91%
7107 · Ground Level Monitoring	294,963	651,468	-356,505	45.28%
7108 · Hydraulic Control Monitoring	430,479	713,949	-283,470	60.3%
7200 · PE2- Comp Recharge Pgm	999,695	1,245,266	-245,571	80.28%
7300 · PE3&5-Water Supply/Desalte	60,396	108,477	-48,081	55.68%
7400 · PE4- Mgmt Plan	228,835	272,515	-43,680	83.97%
7500 · PE6&7-CoopEfforts/SaltMgmt	41,162	76,411	-35,249	53.87%
7600 · PE8&9-StorageMgmt/Conj Use	25,284	61,909	-36,625	40.84%
7690 · Recharge Improvement Debt Pymt	1,261,894	1,261,594	300	100.02%
7700 · Inactive Well Protection Prgm	0	6,296	-6,296	0.0%
9502 · G&A Expenses Allocated-Projects	225,445	310,943	-85,498	72.5%
Subtotal Project Costs	<u>4,143,905</u>	<u>5,533,987</u>	<u>-1,390,082</u>	<u>74.88%</u>
Total Expense	<u>5,949,081</u>	<u>8,315,426</u>	<u>-2,366,345</u>	<u>71.54%</u>
Net Ordinary Income	2,791,033		2,791,033	100.0%
Other Income/Expense				
Other Income				
4225 · Interest Income	34,126			
4210 · Approp Pool-Replenishment	6,427,596			
4220 · Non-Ag Pool-Replenishment	10,047			
Total Other Income	<u>6,471,769</u>			
Other Expense				
9999 · To/(From) Reserves	9,262,802			
Total Other Expense	<u>9,262,802</u>			
Net Other Income	<u>-2,791,033</u>			
Net Income	<u><u> </u></u>	<u><u> </u></u>	<u><u> </u></u>	<u><u> </u></u>



CHINO BASIN WATERMASTER

II. BUSINESS ITEM

A. AUCTION PRICE FLOOR AGREEMENT AND STORAGE & RECOVERY AGREEMENT





CHINO BASIN WATERMASTER

9641 San Bernardino Road, Rancho Cucamonga, Ca 91730
Tel: 909.484.3888 Fax: 909.484.3890 www.cbwm.org

KENNETH R. MANNING
Chief Executive Officer

STAFF REPORT

DATE: May 14, 2009
TO: Committee Members
SUBJECT: Non-Agricultural Pool Stored Water Auction

SUMMARY

Non-action item; for Discussion only. The Appropriate Pool will be asked to provide feedback to staff regarding formalization of the broad mutual benefit to be obtained from the Storage and Recovery Agreement and auction proceeds.

Update on Auction Development

1. Auction administrator

Watermaster staff and counsel are actively engaged in research and interviews with potential auctioneers. Staff will be prepared to make a recommendation in June for the selection of a cost-effective auction administrator.

2. Draft Storage and Recovery Agreement

Watermaster staff and counsel are completing a first draft Storage and Recovery Agreement that will need to be approved prior to the auction. A draft copy of this agreement will be available for review under separate cover prior to or at the Pool meetings. Staff will request approval of this agreement on the June agendas and will propose scheduling a July hearing date to receive Court approval of the agreement.

3. Material Physical Injury Analysis

As a precondition to Board and Court approval of the Storage and Recovery Agreement, there must be finding that no unmitigated Material Physical Injury exists. Watermaster staff is engaged in preparation of an analysis of the potential for Material Physical Injury to result from the activities contemplated with the auction. This analysis will accompany the approval of the Storage and Recovery Agreement.

4. Recommendation Regarding Broad Mutual Benefit

As a precondition to Board and Court approval of the Storage and Recovery Agreement, there must be findings that the program will provide broad mutual benefit to the members of the Appropriative Pool and the Overlying (Non-Agricultural) Pool. Watermaster staff and counsel believe that the Pools themselves are the best situated to provide a recommendation as to how the proceeds from the auction will be used to provide broad mutual benefit.

Watermaster staff and counsel request that the Appropriative Pool and Overlying (Non-Agricultural) Pool provide direction to staff regarding broad mutual benefit so that this recommendation can be a part of the approval process described above to occur in June.

CHINO BASIN GROUNDWATER RESOURCES AUCTION PRICE FLOOR AGREEMENT

This Chino Basin Groundwater Resources Auction Price Floor Agreement (“Agreement”) is made by and between the Chino Basin Watermaster, a Court-appointed groundwater basin management entity (“Watermaster”) and Western Municipal Water District of Riverside County, a retail and wholesale California municipal water district (“Western”), and is effective as of the date last signed by a Party (“Effective Date”). The term “Buyer” as used herein shall refer to the buyer at Auction (as defined in Recital ___ herein) which may or may not be Western and may or may not occur under this Agreement. To the extent Western purchases the Groundwater Resources (as defined in Section 2, herein) under this Agreement and not as the Selected Bidder at Auction (as defined in the Bid Documents attached hereto as Exhibit “___”), Western shall be considered the “Buyer” and the terms of this Agreement shall govern all transactions between Western and Watermaster. Watermaster and Western are sometimes referred to herein collectively as “Parties” and individually as “Party.”

RECITALS

A. In 1978, the San Bernardino Superior Court entered judgment on Case No. 164327 (now designated No. RCV 51010), Chino Basin Municipal Water District v. City of Chino (the “Judgment”). The Judgment is a plenary adjudication of all rights to groundwater and storage capacity within the Chino Basin and established a physical solution to provide ongoing management of the Chino Basin water resources and an equitable and feasible method of allocating the cost of importing supplemental water to achieve a hydrologic balance within Chino Basin. The Judgment adjudicated the rights of several hundred overlying landowners as well as several substantial industrial and commercial producers of water for use on their overlying lands, and within the cities, public water districts, utilities, and mutual water companies that provide water service within and adjacent to the Chino Basin.

B. The Judgment authorized the appointment of a Watermaster with the express powers and duties as provided for in the Judgment or as the Court may subsequently order pursuant to its continuing jurisdiction. Watermaster holds no rights to produce groundwater, but is the entity responsible for monitoring and regulating the production of groundwater within the basin under the Judgment.

C. Each of the defendants named in the Judgment is a water producer or other water claimant or public water district within the Chino Basin. Each such defendant has been identified as a member of one of the following three groups: (1) Overlying (Agricultural) Producers, possessing lands overlying the Chino Basin and producing water from the basin for agricultural uses on overlying lands; (2) Overlying (Non-Agricultural) Producers (the “Non-Ag Pool”), possessing lands overlying Chino Basin, producing water from the basin for use on overlying lands for other than agricultural purposes; and (3) Appropriators, producing water from Chino Basin pursuant to appropriative or prescriptive rights.

D. On June 29, 2000, the Non-Ag Pool entered into the Chino Basin Peace Agreement (“Peace Agreement”) with various other Chino Basin right holders. The Peace Agreement enabled Watermaster to adopt and implement the Optimum Basin Management

Program (“OBMP”), a comprehensive program to monitor, develop, and manage groundwater and storage capacity in the Chino Basin. The Peace Agreement grants Watermaster significant authority to regulate storage and recovery programs in the Chino Basin. Specifically, Section 5.2(a)(i) provides that “all storage capacity shall be subject to regulation and control by Watermaster.” Under Section 5.2(c)(ix), Watermaster “reserves complete discretion” over any proposed storage and recovery program involving non-parties to the Judgment. Additionally, Section 5.3(e) provides that “parties to the Judgment with rights within the [Non-Ag Pool] shall have the additional rights to Transfer their rights to Watermaster for the purposes of Replenishment for a Desalter or for a Storage and Recovery Program.”

E. On September 21, 2007, Watermaster entered into a Purchase and Sale Agreement with the Non-Ag Pool. Under the terms of this agreement, Watermaster purchased an amount of water from the Non-Ag Pool equivalent to the total quantity of water held in storage by the Non-Ag Pool on June 30, 2007, less a ten percent dedication for Desalter Replenishment, less an additional quantity of water transferred to the San Antonio Water Company (SAWCO) and Vulcan Materials.

F. On October 25, 2007, the Non-Ag Pool entered into the Chino Basin Peace II Agreement (“Peace II”) with various other Chino Basin right holders to confirm support for Watermaster’s OBMP. As part of Peace II, Exhibit G to the Judgment was amended to grant members of the Non-Ag Pool “the discretionary right to transfer or lease their quantified production rights and carry-over water held in storage accounts ... to Watermaster in conformance with the procedures described in the Peace Agreement between the parties therein.” On the same date, Paragraph 8 of the Judgment was similarly amended to grant members of the Non-Ag Pool the “right to transfer or lease their quantified production rights to Watermaster in conformance with the procedures described in the Peace Agreement between the parties therein.” In conjunction with Watermaster’s “complete discretion” under the Peace Agreement to enter into Storage and Recovery Programs with non-parties to the Judgment, these Peace II amendments authorize Watermaster to purchase or lease water rights from the Non-Ag Pool to remarket those rights to other entities such as Western.

G. Watermaster intends to sell by auction the sole and exclusive contractual right and interest to certain Chino Basin related Groundwater Resources, as expressly defined in Section 2, herein.

H. Subject to Subsection ____ herein, it is Watermaster’s intention to hold one auction on [DATE] (as described in Section 9) by which it will offer for sale the Groundwater Resources (“Auction”).

I. Western desires to purchase the Groundwater Resources and seeks, by this Agreement, to establish (i) the purchase terms for the Groundwater Resources at Auction; and (ii) the price Western will pay for the Groundwater Resources if Watermaster does not obtain a Higher Conforming Bid (as defined in Section 3 herein) at Auction.

J. Watermaster and Western intend that the Groundwater Resources purchased by Western pursuant to this Agreement, if any, may be used or sold by Western, subject to the terms and conditions set forth herein.

NOW, THEREFORE, in consideration of the mutual promises, covenants, and agreements hereinafter set forth, and for other good and valuable consideration (the receipt and sufficiency of which are hereby acknowledged), the Parties agree as follows:

1. Incorporation by Reference. The above Recitals and Exhibits hereto are incorporated herein by this reference.

2. Price; Purchase Terms.

2.1 This Agreement establishes the minimum price (“Minimum Price”) and purchase terms for the Groundwater Resources at Auction if Western becomes the Buyer. With the exception of the Minimum Price, and other terms specific to this Agreement, the material terms of this Agreement will be offered to any other Buyer under the applicable Groundwater Resources Auction Agreement (as defined in Subsection 9.4 herein) entered into between Watermaster and such other Buyer.

2.2 The Groundwater Resources are further defined as follows:

2.2.1 Forty thousand (40,000) acre-feet of Non-Ag Pool groundwater (“Groundwater”), less ten percent (10%) which shall be permanently dedicated to Desalter Replenishment, for a net amount of 36,000 acre-feet of groundwater available for immediate extraction from the Chino Basin. The Groundwater shall be divided and auctioned in separate but equal increments of 18,000 acre-feet each, referred to as “Groundwater Pool A” and “Groundwater Pool B.”

2.2.2 Exclusive use of forty thousand (40,000) acre-feet of storage capacity (“Storage Capacity”) in the Chino Basin for storage and subsequent extraction of stored water, for a term of 30 years. The Storage Capacity shall be divided and auctioned in separate but equal increments of 20,000 acre-feet each, referred to as “Storage Capacity Pool A” and “Storage Capacity Pool B.”

2.2.3 The Groundwater Pool A and Storage Capacity Pool A shall be auctioned together as a single unit referred to as Groundwater Resources Pool A and Groundwater Pool B and Storage Capacity Pool B shall be auctioned together as a single unit referred to as Groundwater Resources Pool B. Groundwater Resources Pool A and Groundwater Resources Pool B are collectively referred to as “Groundwater Resources”.

2.2.4 The 36,000 acre-feet of the available 40,000 acre-feet of Storage Capacity shall be considered initially occupied as of the Closing Date; 18,000 of the 20,000 acre-feet allocated each to Storage Capacity Pool A and B shall be considered initially occupied as of the Closing Date. The volume of Storage Capacity in either Storage Capacity Pool A or B occupied and useable at any time shall be based upon the use of the Groundwater within each pool, the subsequent replenishment and use of other water stored

over time, and shall be accounted for separately pursuant to Watermaster's ongoing accounting; and

2.2.5 The Groundwater Resources are taken subject to the Court's ongoing jurisdiction under the terms of the Judgment and Watermaster's ongoing authority subject to the Judgment and the Court's jurisdiction.

2.2.6 The Groundwater Resources do not include access to facilities either to extract Groundwater from or replenish water in the Storage Capacity of the Chino Basin.

3. Challenge to Rights of Third-Party. Except as provided in Subsection 9.8 herein, Western commits and agrees not to appeal, contest, enjoin, protest or otherwise challenge the Auction or sale of the Groundwater Resources to a third party that (i) is a Qualified Bidder, (ii) submits a Conforming Bid at Auction, and (iii) closes on such Conforming Bid within the time frame specified in Subsection 9.9 herein. The terms "Qualified Bidder," "Higher Conforming Bid" and "Conforming Bid" are further defined in the Instructions to Bidders. Instructions to Bidders along with the Qualified Bidder Form, Bid Form, Bid Confirmation Form, Groundwater Resources Auction Agreement and Groundwater Resources Auction Escrow Agreement (collectively, "Bid Documents") are attached hereto as Exhibit "C."

4. Interference with Auction. Except for Western's right to challenge a bid as set forth in Subsection 9.8 herein, Western commits and agrees that it shall not take any action to disrupt, delay, enjoin or otherwise interfere with the timing and conduct of the Auction or disseminate any information regarding the Auction without the knowledge and consent of Watermaster. Western further commits and agrees to refer all inquiries it receives regarding the Auction to Watermaster and to cooperate with Watermaster in formulating mutually-acceptable materials for public disclosure in connection with the Auction. Western covenants that it will not collaborate, collude or conspire with any other bidders or third parties to fix or otherwise affect the bid price at Auction. Notwithstanding the foregoing, nothing herein shall preclude Western from conferring with third parties about the Auction or the Groundwater Resources as part of its due diligence efforts or investigation of the potential uses for or assignment of the Groundwater Resources or any interest therein. Watermaster acknowledges that Western may have discussions with developers and other third parties regarding acquisition of all or some portion of Western's potential interest in the Groundwater Resources and that such discussions do not constitute a violation of this Section 4 or any other provision of this Agreement.

5. Minimum Price. Subject to Western's termination rights herein, if Watermaster does not Close with a Higher Conforming Bid at Auction from Western or another bidder, Western agrees to purchase from Watermaster and Watermaster agrees to sell to Western, subject to the payment terms described herein and otherwise pursuant to the terms of this Agreement, the Groundwater Resources for the following ("Minimum Price"):

5.1 \$600.00 per acre-foot for Groundwater, for a total of \$21,600,000 (\$600 per acre-foot times 36,000 acre-feet) ("Groundwater Purchase Price"); and

- 5.2 \$25 per acre-foot per year, adjusted annually according to the index described below, for Storage Capacity (“Storage Payment”). The Storage Payment shall be due and payable annually subject to the following:
- 5.2.1 Upon the Closing Date, and each annual anniversary thereafter up to but not including the fifth anniversary of the Closing Date, for each acre-foot of Storage Capacity that is available for recharge after extraction of each acre-foot of the Groundwater (“Available Storage Capacity”). Upon the Closing Date, 4,000 acre-feet of Available Storage Capacity is immediately available for recharge as a result of the 10% Desalter Replenishment. Thus, at Closing, the first Storage Payment shall be \$100,000 (4,000 acre-feet multiplied by \$25 per acre-foot). As an additional example, if during the first year following the Closing Date, 10,000 acre-feet of the Groundwater has been extracted (in addition to the initial 4,000 acre-feet of Desalter Replenishment), the Storage Payment shall be the product of 14,000 acre-feet multiplied by the applicable Indexed Storage Fee, as defined in Section 5.2.4 herein; and
- 5.2.2 On the fifth anniversary of the Closing Date and annually thereafter through the term of this Agreement, the Storage Payment shall be equal to the product of 40,000 acre-feet multiplied by the applicable Indexed Storage Fee; and
- 5.2.3 The Storage Payment shall be due and payable annually on the anniversary of the Closing Date, whether or not the Storage Capacity is actually used for replenishment; and
- 5.2.4 The per acre-foot Storage Payment shall be adjusted annually prior to calculating the then due and payable Storage Payment, according to the {SET INDEX} (“Indexed Storage Fee”).

6. Form and Timing of Payments. All payments for the Groundwater Resources shall be made in cash or cash equivalent on the schedule set forth in this Agreement and in accordance with the terms of the “Minimum Price Escrow Agreement” among Watermaster, Western and XXXX (“Escrow Agent”). The Minimum Price Escrow Agreement is attached hereto as Exhibit “ ”. Watermaster and Western shall execute and deliver the Minimum Price Escrow Agreement to the Escrow Agent no later than the Closing Date. Where payments are required, actual payment is to be made in accordance with the Minimum Price Escrow Agreement, or the Auction Escrow Agreement, as applicable. Watermaster shall be solely responsible for all escrow fees and escrow expenses incurred by Escrow Agent in discharging its duties under the Minimum Price Escrow Agreement.

7. Term. The term of this Agreement shall commence on the Effective Date and shall terminate as provided in Section 17 herein.

8. Breakup Fee. In the event this Agreement terminates because Watermaster closes on a Higher Conforming Bid with a Buyer other than Western for either or both the Groundwater

Resources Pool A and Groundwater Resources Pool B within the time provided in Subsection 9.9 herein, Western shall receive in the manner set forth in the Groundwater Resources Auction Escrow Agreement a "Breakup Fee" from Watermaster as follows: 10% of every payment Watermaster receives from Buyer for the Groundwater Pool A and Groundwater Pool B under the Groundwater Resources Auction Agreement; provided, however, that Western shall receive a minimum of \$ [REDACTED] within three years of the Closing Date ("Minimum Breakup Fee"). If Western's total share of the payments received by Watermaster for the Groundwater during this three year period is less than Minimum Breakup Fee, Watermaster shall pay any deficit to Western on or before the third anniversary of the Closing Date. Any such "deficit payment" by Watermaster shall be deducted from Western's 10% share of the next payment(s) received by Watermaster for the Groundwater until the deficit payment is recouped in full by Watermaster. The Breakup Fee shall not apply if Western is the Buyer or if Western exercises its right under Subsection 20.1(i) herein to terminate this Agreement.

9. Auction.

- 9.1 **Date.** Watermaster shall conduct an Auction of the Groundwater Resources on [DATE].
- 9.2 **Notice.** Watermaster shall provide written notice of the date of the Auction (via postings, press releases, email, website, newspaper or other means calculated to reach potential bidders, including Western) at least 30 days prior to the Auction date.
- 9.3 **Disclosure of Agreement.** This Agreement shall be disclosed to potential bidders along with the notice provided in Section 9.2, above.
- 9.4 **Terms.** The Groundwater Resources Pool A and Groundwater Resources Pool B shall be offered and auctioned separately. However, Any Qualified Bidder may bid and be the Selected Bidder on either or both Groundwater Resources Pool. The form of purchase agreement to be used at Auction in the event Watermaster closes on a Higher Conforming Bid at Auction with either Western or another bidder is included in the Bid Documents attached hereto as Exhibit "[REDACTED]" ("Groundwater Resources Auction Agreement").
- 9.5 **Opening Bids.** Subject to Subsection 9.7 herein, all bids for the Groundwater Resources at Auction shall be not less than \$700 per acre-foot for Groundwater and \$33 per acre-foot per year for Storage Capacity ("Minimum Auction Bid"). Any bid (a) to purchase less than the full increment of either of the Groundwater Resources Pool A or Pool B, (b) to purchase on terms different than the Groundwater Resources Auction Agreement, (c) that is not in conformance with the Bid Documents, or (d) that is made by a person other than a Qualified Bidder, shall be rejected as a nonconforming bid.
- 9.6 **Participants.** Any Qualified Bidder, including Western, may participate in the Auction. The bidder qualification requirements are set forth in the Bid Documents.

- 9.7 **Procedure.** Pursuant to the Bid Documents, Watermaster has (i) determined the Auction structure, (ii) developed the Instructions to Bidders, and (iii) set forth the standard for Qualified Bidders. Pursuant to the Bid Documents, Watermaster shall (i) identify Qualified Bidders at Auction, (ii) identify Conforming Bids at Auction, (iii) conduct the Auction, and (iv) determine the Selected Bidder. For purposes of the Auction, Western shall be deemed a Qualified Bidder, this Agreement shall be deemed its sealed, Conforming Bid for the terms described in this Agreement in round one (sealed bids) of the Auction, and Western shall be eligible to participate in round two (oral bids) of the Auction. In the event that Western is the Selected Bidder at Auction, Western shall timely comply with the requirements to close its bid set forth in the Bid Documents, and shall also deliver to the Escrow Agent an original, fully-completed and executed Groundwater Resources Auction Escrow Agreement (with exhibits) on or before the deadline specified in the Instructions to Bidders. If Western is the Selected Bidder and fails to timely close its bid in the manner and time-frame specified in the Bid Documents and in accordance with the Groundwater Resources Auction Agreement, Western shall pay Watermaster the Minimum Breakup Fee within 10 business days of the deadline specified in the Instructions to Bidders as negotiated and agreed upon liquidated damages for its failure to consummate the transaction contemplated by its bid at Auction, the parties hereby agreeing that said amount is a reasonable forecast of just compensation for the harm that may be caused Watermaster as a result of Western's failure to close on its bid and that Watermaster's harm in the event of Western's failure to close on its bid would be incapable of accurate estimation or very difficult to estimate accurately. Unless this Agreement terminates as provided in Section 20, payment of said liquidated damages shall not relieve Western of its obligation to close on this Agreement in accordance with the terms of Subsection 9.9 herein in the event that Watermaster is either unable to close on a Higher Conforming Bid at Auction or timely elects to close this Agreement.
- 9.8 **Disclosure of Buyer/Bid.** At the conclusion of the Auction, Watermaster shall (i) post the name of the Selected Bidder(s) outside the Watermaster office and on Watermaster's Auction website, and (ii) provide Western with a copy of the bid(s) selected by Watermaster, the Bid Form(s), Bid Confirmation Form(s) (if applicable), Qualified Bidder Form(s), the Groundwater Resources Auction Agreements, and the Groundwater Resources Auction Escrow Agreements to be entered into between the Selected Bidder(s) and Watermaster. Western must notify Watermaster in writing within 10 business days of receipt by Western of the selected bid if it intends to challenge the bid, and Watermaster shall not close with the Selected Bidder until the expiration of such 10-business-day period and not thereafter pending the final resolution of any challenge brought by Western under this Section 9. Otherwise, Western shall be deemed to have waived its right to challenge the selected bid(s). The only basis upon which Western may challenge the selected bid(s) is Watermaster's alleged failure to comply with this Section 9. Any challenge to the selected bid(s) will be subject to the dispute resolution provisions in Section [redacted] herein and the remedial provisions in Section [redacted] herein.

- 9.9 **Closing Date.** Subject to the provisions of Subsection 9.8 herein, the Buyer shall have 20 business days from the Auction date to close its bid with Watermaster. In the event the Buyer does not timely close, Watermaster shall immediately notify in writing the next highest bidder, with a bid that is equal to or greater than the Minimum Auction Bid. If the next highest bidder, with a bid that is equal to or greater than the Minimum Auction Bid fails to close its bid within 20 business days of receipt of Watermaster's written notice, subject to the provisions of Subsection 9.8 herein, Watermaster shall immediately notify the next such highest bidder, with a bid that is equal to or greater than the Minimum Auction Bid, in writing, until a close is timely effected. If ultimately no close is timely effected, Watermaster shall so notify Western in writing within 5 days of the final date on which Watermaster was entitled to close with another Buyer, and Western shall close within 10 business days of receipt of Watermaster's written notice; provided, however, Western shall have the sole and absolute discretion whether to close if the Watermaster's written notice is not delivered on or before the 60th day after the Auction date. Notwithstanding the foregoing, Watermaster reserves the right to waive any and all bids and to close the Agreement by notice to Western, and, in such event, Western shall have 10 business days from receipt of Watermaster's written notice to close on this Agreement; provided, however, Western shall have the sole and absolute discretion whether to close if the Watermaster's written notice is not delivered on or before the 60th day after the Auction date. The date of closing with the Buyer as the case may be is referred to herein as the "Closing Date".
- 9.10 **Closing Location.** Closing will take place in the office of the Watermaster, 9641 San Bernardino Road, Rancho Cucamonga, CA 91730 commencing at 10:00 a.m. Pacific Standard Time.

10. Groundwater Resources; Payment Timing. In the event Watermaster does not receive a Higher Conforming Bid at Auction or no close is timely effected with a bidder other than Western, subject to the terms of Subsection 9.9 herein, Western shall purchase from Watermaster the Groundwater Resources for the Minimum Price under the terms of this Agreement.

10.1 **Payment Options.**

- 10.1.1 Concurrent with the Closing Date, Western shall pay Watermaster either:
a) a lump sum equal to the Groundwater Purchase Price and the first Storage Payment; or b) the first payment pursuant to the "Payment Stream Option," defined below.
- 10.1.2 As an alternative to the lump sum payment, concurrent with the Closing, Western may elect to pay Watermaster XXX% of the sum of the Groundwater Purchase Price and first year Storage Payment, and finance the remaining balance over a period of ten years from the Closing Date (the "Payment Stream Option"). If Western elects the Payment Stream Option, Watermaster shall finance the balance of the money owed at a rate of interest equal to the then-prevailing Federal 5-Year Treasury Rate plus

2%, compounded quarterly. Payments will be due and payable quarterly, with the first payment due exactly three months after the Closing Date, and the final payment due on the fifth anniversary of the Closing Date, according to amortization schedule attached as Exhibit “___”; and

10.1.3 Annually, on the anniversary of each Closing Date during the term, Western shall pay to Watermaster the then applicable Storage Payment.

10.2 **Taxes and Liabilities.**

10.2.1 **Transfer Tax.** In the unlikely event that there is are taxes associated with Watermaster’s sale of the Groundwater Resources, Watermaster shall be responsible for payment of such taxes in accordance with the terms of the Minimum Price Escrow Agreement or within 30 days of identification of such transfer tax(es) by Western.

10.2.2 **Existing Liabilities.** To the extent that there are any existing liabilities applicable to the Groundwater Resources prior to the Closing Date, Watermaster shall be responsible for payment of such existing liabilities in accordance with the terms of the Minimum Price Escrow Agreement or within 30 days of the identification of such existing liabilities by Western.

11. Extraction of Groundwater Resources. If Western becomes the Buyer of the Groundwater Resources under this Agreement, concurrent with the Closing, Watermaster shall provide Western with a true and correct copy of Watermaster’s annual report that quantifies and certifies that: (i) the total acre-feet of Groundwater subject to this Agreement is available to be recovered by Western, (ii) the total Storage Space necessary to retain the Groundwater and any subsequent replenishment up to the Storage Capacity shall remain available in the Chino Basin; and (iii) a copy of the Court approved storage agreement for 40,000 acre-feet. Each year thereafter, Western shall have the right to extract the Groundwater in whole or in part as set forth in this Section 11.

11.1 **Limitations on Extraction of Groundwater.** Western shall make whatever arrangements as may be required to access and extract the Groundwater and utilize the Storage Capacity, subject to the terms of the Judgment and Watermaster’s oversight.

11.2 **Requirements for Court Approval.** Western must obtain Court approval, as may be appropriate, to implement a storage and recovery plan to make use of the Groundwater Resources. Watermaster shall make every reasonable effort to facilitate such approval, provided Western’s implementation plans are consistent with the Judgment.

12. Security Interests. If Western becomes the Buyer of the Groundwater Resources under this Agreement, Watermaster shall have all of the rights and remedies provided to a secured party in law or equity under the laws of the State of California with respect to the security interests, liens or other security granted it in this Section 12 or in any of the Documents to secure Western’s payment obligations under the Documents. Western hereby irrevocably authorizes

Watermaster at any time (and from time to time) to file and/or record in any jurisdiction any UCC-1 financing statements or other documents and amendments thereto in order to reflect, preserve and perfect the liens and security interests granted to it in this Section 12 and in the Documents. Western shall execute and deliver to Watermaster, upon request from time to time, such additional documents and grants as Watermaster may require relative to the liens and/or security interests granted it in this Section 12 and the Documents. In order to secure Western's obligations with respect to the unpaid purchase price for any Groundwater Resources purchased hereunder, Western hereby grants to Watermaster a first priority security interest in and to such Groundwater Resources. Western shall not grant any other security interest, lien or other encumbrance in and to any Groundwater Resources without the prior written consent of Watermaster.

13. Watermaster Responsibilities.

- 13.1 **Authority to Sell.** It is expressly understood by the Parties that Watermaster assumes no responsibility under this Agreement to arrange for Western's ability to make use of the Groundwater Resources, other than making reasonable efforts to facilitate any Court approval consistent with the terms of the Judgment. Nothing contained herein shall relieve Western of the obligation to conduct its own due diligence prior to entering into this Agreement.
- 13.2 **No Guarantee of Water Resources Reliability.** If Western becomes the Buyer of the Groundwater Resources under this Agreement, it is expressly acknowledged that this Agreement memorializes a transaction involving the sale of Groundwater Resources to Western for use by Western as a reliable water supply. This Agreement does not, by its express terms or by implication, constitute (in whole or part) any grant, issuance, decision, order, permit, finding, conclusion, holding, recommendation, approval, determination or other form of governmental action as to any other matter whatsoever. Western expressly acknowledges and agrees that Watermaster hereby gives no express or implied assurances or guarantees of any kind as to the outcome of any reliance upon the Groundwater Resources for planning purposes, including the preparation or validity of water supply assessments, water supply verifications, or environmental impact reports or analyses which may include such water supply reliability analyses.
- 13.3 **Due Diligence.** Each Party expressly acknowledges that it has been provided the opportunity to inspect and make such investigations regarding this Agreement (including, but not limited to, the Groundwater Resources), and has performed such due diligence inspections and investigations thereof and of its suitability for such Party's purposes (including review of documents and information provided by or on behalf of the other Party and interviews with the other Party's employees and consultants), as such Party deems appropriate, necessary and prudent for such Party to enter into this Agreement and consummate the transaction contemplated hereunder.

- 13.4 **Physical Delivery of Water.** Western expressly acknowledges that this Agreement provides Western with a contractual right to the Groundwater Resources; provided however, this Agreement provides Western with no independent physical access to make use of the Groundwater Resources. It is Western's sole and exclusive responsibility to arrange for such physical access as Western determines is necessary and appropriate to make use of the Groundwater Resources. Western expressly acknowledges and agrees that such access must be consistent with the Judgment and may require court approval.
- 13.5 **Storage and Recovery Facilities.** Western expressly acknowledges that this Agreement provides Western with no independent right to construct, operate, maintain or repair any facilities, including but not limited to, groundwater wells, recharge facilities, or conveyance facilities. It is Western's sole and exclusive responsibility to arrange for such access to such facilities as Western determines is necessary and appropriate to make use of the Groundwater Resources. Western expressly acknowledges and agrees that such access and use of such facilities must be consistent with the Judgment and may require court approval.

14. Watermaster's Representations, Warranties and Covenants. Watermaster represents, warrants and covenants to Western as follows:

- 14.1 Watermaster is an entity authorized under the Judgment with a nine-member Board appointed by the Superior Court of San Bernardino County to account for and implement the management of the Chino Basin.
- 14.2 Watermaster has the authority to dispose of the Groundwater Resources subject to, and in accordance with, the requirements of the Judgment and applicable law.
- 14.3 Watermaster is duly authorized to conduct the Auction, select and administer all Auction procedures, bidder and bid requirements, and determine the Buyer at Auction based on the bidder and bid requirements.
- 14.4 Watermaster is authorized to execute this Agreement, and subject to the Court approval(s) that may be required to implement this Agreement, no further actions or approvals (including actions by members of the Non-Ag Pool) are necessary before execution of this Agreement.
- 14.5 Neither the execution and delivery of this Agreement, nor Watermaster's performance of its obligations hereunder, shall breach any known obligation, right or interest of a third party, regulatory agency, Watermaster Party or other governing body with authority over Watermaster.
- 14.6 The Offered Groundwater Resources have not been, and shall not during the term of this Agreement be, pledged or committed to any other use by Watermaster (except as otherwise provided herein).

- 14.7 This is the only agreement entered into by Watermaster that will set a price floor for the Auction. Watermaster has not, and shall not, enter into any other similar agreement prior to Auction.
- 14.8 Watermaster has provided, or otherwise made available, to Western true and accurate copies of all material information in its possession relevant to the Groundwater Resources.
- 14.9 This Agreement does not involve the offer for sale or sale of any "security" pursuant to any state or federal securities law, rule or regulation, and that neither this Agreement or the Groundwater Resources sold herein, nor the offer or sale of either, will require registration under the federal Securities Act of 1933, as amended, or any state securities or "blue sky" law, rule or regulation.
- 14.10 No warrant, either express or implied, is made as to the water quality of the Groundwater or the water that may be introduced into the Storage Capacity for subsequent recapture. The Parties expressly acknowledge that areas of the Chino Basin have compromised quality, and extraction of groundwater, including the Groundwater, may require subsequent treatment before being fit for human consumption.

15. Western's Representations, Warranties and Covenants. Western represents, warrants and covenants to Watermaster as follows:

- 15.1 Western is a retail and wholesale California water agency duly organized, validly existing and in good standing under the laws of the State of California.
- 15.2 Western has the authority to participate in the Auction, execute and deliver this Agreement, and perform its obligations hereunder, and all such actions have been duly authorized and approved by all necessary partnership action.
- 15.3 Western has received all consents required in order for it to execute, deliver and perform its obligations under this Agreement.
- 15.4 To the best of Western's knowledge, neither the execution and delivery of this Agreement nor Western's performance of its obligations hereunder shall breach any (i) provision of Western's governing documents, (ii) resolution adopted by Western's governing body, (iii) law, regulation or order to which Western may be subject; or (iv) contract to which Western is a party or to which it may be bound.
- 15.5 To the best of Western's knowledge, there is no pending litigation against Western or any of its partners that may affect its ability to close on this Agreement or to perform its obligations hereunder.
- 15.6 Western has not colluded or conspired with any person or entity to fix the price or terms for the Groundwater Resources.

16. Dispute Resolution. Upon the occurrence of any dispute or disagreement between the Parties hereto arising out of, or in connection with, any term or provision of this Agreement, the subject matter hereof, or the interpretation or enforcement hereof ("Dispute"), the Parties shall engage in informal, good faith discussions and attempt to resolve the Dispute. In connection therewith, upon written notice of either Party each of the Parties will appoint a designated officer whose task it shall be to meet for the purpose of attempting to resolve such Dispute. The designated officers shall meet as often as the Parties shall deem to be reasonably necessary. Such officers will discuss the Dispute. If the Parties are unable to resolve the Dispute in accordance with this Section 16 within 30 days (or such other period mutually agreed to by Western and Watermaster, not to exceed 90 days), and in the event that either of the Parties concludes in good faith that amicable resolution through continued negotiation with respect to the Dispute is not reasonably likely, then the Parties agree to submit to mediation. The mediation shall be held under the commercial mediation rules of the American Arbitration Association. The matter in dispute shall be submitted to a mediator mutually selected by the Parties. In the event the Parties cannot agree upon the selection of a mediator within 7 days, then within 3 days thereafter the Parties shall jointly request the Judge administering the Judgment to appoint an independent mediator. The mediator selected shall have at least 5 years' experience in mediating or arbitrating disputes. The cost of any such mediation shall be divided equally among the Parties. The results of the mediation shall be nonbinding on the Parties, and any Party shall thereafter be free to initiate litigation pursuant to paragraph 15 of the Judgment.

17. Termination of Agreement.

17.1 **Expiration of Agreement.** This Agreement shall expire on [DATE] unless earlier terminated as provided in this Agreement. [30 YEAR TERM]

17.2 **Automatic Termination.** This Agreement shall automatically terminate, and neither Party shall thereafter have any further obligations or responsibilities to the other Party except as expressly set forth herein, upon the first of the following dates to occur: (i) the date Western elects to terminate this Agreement because Buyer has failed to timely close and Watermaster has deferred closing on the Agreement for at least 60 days after the Auction date to complete the process specified in Subsection 9.9 herein, (ii) the date Watermaster closes on an Groundwater Resources Auction Agreement based on a Higher Conforming Bid for the Offered Groundwater Resources submitted by Western or another bidder at Auction (provided the closing is timely under Subsection 9.9 herein); (iii) the date each of the Parties has completed in full its obligations under this Agreement or (iv) 5:00 p.m. Pacific Standard Time on [DATE].

17.3 **Termination by Party.** This Agreement may be terminated (i) by mutual consent of the Parties; (ii) by either Party if the other Party is in breach of a material provision of this Agreement, including without limitation, the failure to hold the Auction as set forth in Subsection 9.1 herein, and the breach has not been (a) cured within 45 days of receipt of written notice reasonably detailing the breach; provided, however, such cure period shall not apply to the obligation to close on or before the Closing Date or to hold the Auction in Accordance with Section 9.1 herein; (b) resolved pursuant to the Dispute Resolution process in

Section 19 herein; (c) waived in writing by the non-breaching Party; or (iii) by either Party in the event any of Sections _____ herein are held to be invalid or unenforceable. Notwithstanding the foregoing, the non-breaching Party may not terminate this Agreement if the material breach is curable but cannot be cured within the 45-day period set forth above for reasons beyond the control of the breaching Party, and the breaching Party is diligently pursuing reasonable efforts to cure such breach.

17.4 **Effect of Termination.** The right to terminate as set forth in Subsection _____ herein shall be in addition to any other rights that may be available to Western or Watermaster in law or equity and shall not be construed as an election of remedies.

17.5 **Procedures Upon Termination.** The termination of this Agreement shall not relieve either Party of any liability that accrued prior to such termination. Subject to the terms of Subsection 17.3 and Section 18 herein, upon the termination of this Agreement all of the provisions of this Agreement shall terminate and, if Western purchased the Groundwater Resources under this Agreement:

17.5.1 Western shall, within 30 days from the date of termination relinquish to Watermaster in a written notice ("Notice") all rights and interest in the Groundwater Resources.

17.5.2 Watermaster shall, within 30 days of receipt of the Notice, (i) refund to Western the money received by Watermaster for the Groundwater Resources (without interest except as provided in Subsection ____ herein).

18. **Survival.** Each of the following shall survive the termination of this Agreement: (a) Section ____ herein (Breakup Fee), Section ____ herein (Security Interests), Section ____ herein (Watermaster Responsibilities), Section ____ herein (Watermaster's Representations, Warranties and Covenants), Section ____ herein (Western's Representations, Warranties and Covenants), Section ____ herein (Dispute Resolution), Section ____ herein (Remedies), and Section ____ herein (Indemnification); (b) Subsection ____ herein (Procedure), Subsection ____ herein (Taxes and Liabilities), Subsection ____ herein (Taxes and Liabilities), Subsection ____ herein (Procedures upon Termination); Subsection ____ herein (Assignments; Successors; No Third-Party Rights), Subsection ____ herein (Governing Law), Subsection ____ herein (Notices), Subsection ____ herein (No Liability), Subsection ____ herein (Cooperation and Further Documentation), Subsection ____ herein (Cooperation in the Event of Third-Party Litigation); and (c) those provisions, and the rights and obligations therein, set forth in this Agreement which either by their terms state or evidence the intent of the Parties that the provisions survive the expiration or termination of this Agreement (or must survive to give effect to the provisions of this Agreement); PROVIDED, HOWEVER, THAT THIS SECTION SHALL NOT APPLY IF WESTERN IS THE SELECTED BIDDER AT AUCTION AND TIMELY CLOSES ON THE GROUNDWATER SUPPLY AUCTION AGREEMENT.

19. Remedies.

- 19.1 **Remedies upon Breach or Default.** In the event of a breach or default by a Party hereto, which is not cured within the period specified in Subsection ____ herein, and in addition to its other remedies specified in this Agreement or available under applicable law, the non-breaching Party shall have the right to: (i) seek specific performance of the breaching Party's duties and obligations under this Agreement to the extent the non-breaching Party has not elected to terminate this Agreement pursuant to Subsection ____ herein, (ii) recover from the breaching Party all damages and losses incurred or suffered by the non-breaching Party as a result of such breach or default, and (iii) perform the breaching Party's unperformed duties and obligations (in which event the breaching Party shall, within 5 days of request by the non-breaching Party, reimburse the non-breaching Party for all sums, amounts, costs and expenses expended by said Party in connection therewith).
- 19.2 **Successful Challenge.** To the extent any legal action or proceeding is initiated challenging the validity of the Auction or the effectiveness of Watermaster's material obligations under this Agreement (a "Challenge Proceeding"), Watermaster will be solely responsible for the defense of such Challenge Proceeding, subject to the cooperation provisions in Subsections ____ herein, including any and all costs and expenses associated therewith. To the extent that the results of any Challenge Proceeding is to deem the Auction or Watermaster's material obligations under this Agreement unlawful or unenforceable, Western may relinquish, in writing, all rights and interest in the Groundwater Resources to Watermaster in exchange for Watermaster refunding to Western the money received by Watermaster for the applicable Groundwater Resources without interest. Such refund shall be paid by Watermaster within 30 days of receipt of the aforementioned notice and refund demand from Western, or within such other period as mutually agreed to by the Parties.

20. Indemnification.

- 20.1 **Indemnification by Watermaster.** Watermaster shall indemnify and hold harmless Western and its partners, directors, officers, managers, employees, agents, consultants, advisors, accountants, financial advisors, legal counsel or other representatives (collectively, "Western Indemnified Persons"), and will reimburse the Western Indemnified Persons for any loss, liability, claim, damage, expense (including costs of investigation and defense and reasonable attorneys' fees and expenses), whether or not involving a claim by a third party (collectively, "Damages"), arising from or in connection with:
- 20.1.1 any breach of any representation or warranty made by Watermaster in this Agreement or any other agreement, certificate, document or other writing delivered in connection herewith;

- 20.1.2 any breach of any covenant, agreement or obligation of Watermaster in this Agreement or any other agreement, certificate, document or other writing delivered in connection herewith;
 - 20.1.3 any liability arising out of the ownership of any Groundwater Resources prior to the time that such Groundwater Resources are transferred in full to Western pursuant to this Agreement;
 - 20.1.4 any brokerage or finder's fees or commissions or similar payments based upon any agreement or understanding made, or alleged to have been made, by any person with Watermaster (or any person acting on its behalf) in connection with this Agreement or the Groundwater Resources;
 - 20.1.5 any noncompliance by Watermaster with any laws applicable to the Groundwater Resources or this Agreement;
 - 20.1.6 any Challenge Proceeding, including without limitation any and all Damages incurred by Western as a result of a Challenge Proceeding resulting in either the Auction or Watermaster's material obligations under this Agreement being deemed unlawful or unenforceable; and
 - 20.1.7 any misrepresentation by Watermaster or its agents relating to the Auction or the interests being sold thereunder.
- 20.2 **Indemnification by Western.** Western shall indemnify and hold harmless Watermaster and its directors, officers, managers, employees, agents, consultants, advisors, accountants, financial advisors, legal counsel or other representatives (collectively, "Watermaster Indemnified Persons"), and will reimburse the Watermaster Indemnified Persons for any Damages arising from or in connection with:
- 20.2.1 any breach of any representation or warranty made by Western in this Agreement or any other agreement, certificate, document or other writing delivered to Watermaster in connection herewith;
 - 20.2.2 any breach of any covenant, agreement or obligation of Western in this Agreement or any other agreement, certificate, document or other writing delivered to Watermaster in connection herewith;
 - 20.2.3 any brokerage or finder's fees or commissions or similar payments based upon any agreement or understanding made, or alleged to have been made, by any person with Western (or any person acting on its behalf) in connection with this Agreement; and
 - 20.2.4 any noncompliance by Western with any laws applicable to the Groundwater Resources or this Agreement.

20.3 **Indemnification Procedures.** In the event of any claim, action or demand (“Claim”) where any Party hereto seeks indemnification from the other, the Party seeking indemnification (“Indemnified Party”) shall give the Party from whom indemnification is sought (“Indemnifying Party”) written notice of such Claim promptly after the Indemnified Party first becomes aware thereof. Provided, however, that failure to give such notice shall not preclude indemnification with respect to such Claim except to the extent of any additional or increased Losses or other actual prejudice directly caused by such failure. The Indemnifying Party shall have the right to choose counsel to defend such Claim (subject to the approval of such counsel by the Indemnified Party, which approval shall not be unreasonably withheld, conditioned or delayed), and to control, compromise and settle such Claim, and the Indemnified Party shall have the right to participate in the defense at its sole expense. Provided further, however, the Indemnified Party shall have the right to take over the control of the defense or settlement of such Claim at any time if the Indemnified Party irrevocably waives all rights to indemnification from and by the Indemnifying Party. The Indemnifying Party and the Indemnified Party shall cooperate in the defense or settlement of any Claim and no Party shall have the right to enter into any settlement agreement that materially affects the other Party’s material rights or material interests without such Party’s prior written consent (which consent will not be unreasonably withheld or delayed).

21. **Assignments Successors No Third-Party Rights.** Except as expressly provided herein, no Party may assign, in whole or in part, any of its rights or delegate any of its obligations under this Agreement without the prior written consent of the other Party (which consent shall not be unreasonably withheld or delayed). Furthermore, no Party may convey all or any portion of its rights hereunder unless either (a) the corresponding obligations of that Party are completely assumed by the assignee, the assignee accepts such obligations and demonstrates its ability to perform them to the reasonable satisfaction of the other Party, the obligations are specifically listed in the assignment and the assignee expressly agrees to be bound by the provisions of Sections ____, or (b) the Party remains obligated to perform said corresponding obligations after such assignment; provided, however, Western (after written notice to Watermaster), may assign any of its rights and delegate any of its obligations under this Agreement to any solvent, duly authorized, and lawfully existing affiliate of Western that can fulfill the representations and warranties and other covenants herein, and may collaterally assign its rights hereunder to any financial institution providing financing in connection with the transactions contemplated herein provided that the financial institution shall take such rights subject to Watermaster’s security interests set forth herein. Subject to the foregoing, this Agreement will apply to, be binding in all respects upon, and inure to the benefit of, the successors and permitted assigns of the Parties. Except as set forth in Section ____ herein, nothing expressed or referred to in this Agreement will be construed to give any Person other than the Parties to this Agreement any legal or equitable right, remedy or claim under this Agreement, except such rights as shall inure to a successor or permitted assignee pursuant to this Subsection ____.

22. **Miscellaneous.**

- 22.1 **Expenses.** Except as otherwise provided in this Agreement, each Party to this Agreement shall bear its respective fees and expenses incurred in connection with this Agreement.
- 22.2 **Counterparts.** This Agreement may be executed in counterparts, each of which shall be considered part of the whole. Further, the Parties agree that valid execution of this Agreement may be accomplished by signatures exchanged between the Parties by facsimile transmission and that such signatures shall be valid and binding as though they were original signatures.
- 22.3 **Attorneys' Fees.** Should a Party be required to consult or engage attorneys to represent it with regard to enforcement of any material part of this Agreement, the prevailing Party shall be entitled to (and the non-prevailing Party shall be responsible for), the payment of all costs and expenses incurred by the prevailing Party, including reasonable attorneys' fees.
- 22.4 **Waivers.** No waiver of any of the provisions of this Agreement shall constitute a waiver of any other provision, whether or not similar, nor shall any waiver be a continuing waiver. Except as expressly provided for in this Agreement, no waiver shall be binding unless executed in writing, by the Party making the waiver. Any Party may waive any provision of this Agreement intended for its benefit, Provided, however, such waiver shall in no way excuse the other Party from the performance of any of its other obligations under this Agreement.
- 22.5 **Governing Law.** This Agreement shall be deemed an California contract and construed according to California law. This Agreement shall only be enforceable in a court of competent jurisdiction in the State of California, and not in any other state.
- 22.6 **Construction.** The Parties acknowledge that they were each represented by counsel in connection with this Agreement, that each of them (and their respective counsel) reviewed this Agreement, that any rule of construction to the effect that ambiguities are to be resolved against the drafting Party shall not be employed in the interpretation of this Agreement, and that the language in all parts of this Agreement shall in all cases be construed as a whole and in accordance with its fair meaning. Any provision of this Agreement which requires a Party to perform an action shall be construed so as to require the Party to perform the action or to cause the action to be performed. Any provision of this Agreement which prohibits a Party from performing an action shall be construed so as to prohibit the Party from performing the action or from permitting others to perform the action. Except to the extent, if any, to which this Agreement specifies otherwise, each Party shall be deemed to be required to perform its obligations under this Agreement at its own expense, and each Party shall be permitted to exercise its rights and privileges only at its own expense.

- 22.7 **Severability.** Except as otherwise provided herein (including, without limitation, Subsection [REDACTED] herein), if any provision of this Agreement is held invalid or unenforceable by any court of competent jurisdiction, the other provisions of this Agreement shall remain in full force and effect and the Parties shall negotiate an equitable adjustment in the provisions of this Agreement with a view toward effecting the purpose of this Agreement. The validity and enforceability of the remaining provisions or portions, or applications thereof, shall not be affected thereby.
- 22.8 **Notices.** Notices shall be in writing and shall be given by personal or air courier service delivery to a responsible person, by telephone facsimile, or by deposit in the United States mail, certified mail, and return-receipt requested, postage prepaid. Notices shall be delivered or addressed to Watermaster and Western at the addresses set forth below, or at such other address as a Party may designate in writing. The date notice is deemed to have been given, received and become effective shall be the date on which the notice is delivered (if notice is given by personal or air courier service delivery or by telephone facsimile), or 2 days following the date of deposit in the mail (if the notice is sent through the United States mail).

If to Watermaster: [ADDRESS]

ADDRESS
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ADDRESS

If to Western: ADDRESS

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Copy to:

ADDRESS
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All notices served by a Party, that may trigger a right, obligation or duty to be fulfilled by the other Party under this Agreement, shall be served by Certified Mail, return receipt requested.

- 22.9 **No Liability.** Watermaster and Western expressly acknowledge and agree that neither the Watermaster Council members, other officers, employees, attorneys or agents of Watermaster nor Western's members, managers, employees, officers or agents shall have any personal obligation or liability under this Agreement.
- 22.10 **Cooperation and Further Documentation.** Each Party agrees in good faith to (i) cooperate with one another, the Court having jurisdiction over the Judgment and/or other third parties, and (ii) execute such further or additional documents as

may be necessary or appropriate to fully carry out the intent and purpose of this Agreement.

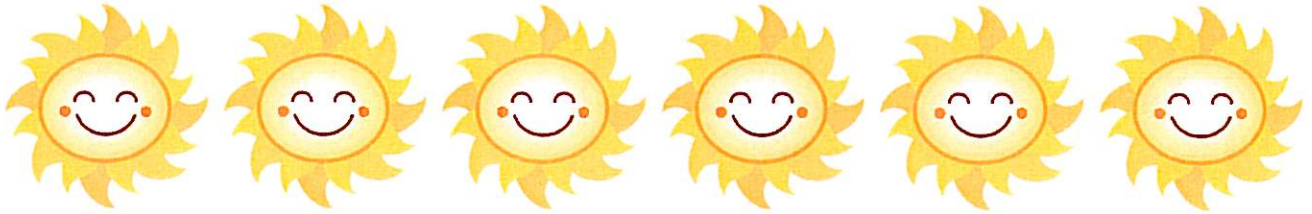
- 22.11 **Cooperation in the Event of Third-Party Litigation.** Subject to Subsection [redacted] herein and the indemnification provisions of Section [redacted] herein, in the event that any legal action is instituted by a third party or other governmental entity or official against the Parties challenging the validity or enforceability of any provision of this Agreement, or any other action by a Party performing hereunder, the Parties hereby agree to affirmatively cooperate in defending such action and to pay their own expenses associated with such defense. In the event of any litigation challenging the effectiveness of this Agreement (or any portion hereof), this Agreement shall remain in full force and effect while such litigation (including any appellate review) is pending.
- 22.12 **No Agency Created.** Nothing contained in this Agreement shall create any partnership, joint venture, or agency relationship between the Parties.
- 22.13 **Time Periods.** If the time for performance of any obligation or taking any action under this Agreement falls or expires on a Saturday, Sunday or legal holiday, the time for performance or taking such action shall be extended to the next succeeding day which is not a Saturday, Sunday or legal holiday.
- 22.14 **Headings.** The headings of this Agreement are for purposes of reference only and shall not limit or define the meaning of any provision of this Agreement.
- 22.15 **Entire Agreement.** This Agreement and the exhibits hereto and the Minimum Price Escrow Agreement constitute the entire agreement between the Parties pertaining to the subject matter contained herein and therein. All prior and contemporaneous agreements, representations and understandings of the Parties, oral or written, are superseded by, and merged into, this Agreement and the exhibits hereto and the Minimum Price Escrow Agreement. This Agreement shall not be modified, changed or amended by any subsequent written or oral agreement unless agreed to in writing by Western and Watermaster.
- 22.16 **Authorizations.** The signatories to this Agreement represent that they have been appropriately authorized to enter into this Agreement on behalf of the Party for which they sign, and that no further action or approvals (including actions by Watermaster. Council) are necessary before execution of this Agreement.
- 22.17 **Conflict of Interest.** Notice is hereby given of the provisions of [Cal. Code re: Conflicts], as amended by this reference, the provisions of this statute are incorporated in this Agreement to the extent of their applicability to contracts of the nature of this Agreement under the laws of the State of California
- 22.18 **Knowledge.** For purposes of this Agreement, (a) an individual will be deemed to have "knowledge" of a particular fact or other matter if that individual is actually aware of that fact or matter or if a prudent individual could be expected to discover or otherwise become aware of that fact or matter in the course of

conducting a reasonably comprehensive investigation regarding the accuracy of any representation or warranty contained in this Agreement, and (b) a person other than an individual will be deemed to have 'knowledge' of a particular fact or other matter if any individual who is serving, or who has at any time served as a director, officer, partner, official, executor or trustee of that person (or in any similar capacity) has or at any time had, knowledge of that fact or other matter, and any such individual (and any individual party to this Agreement) will be deemed to have conducted a reasonably comprehensive investigation regarding the accuracy of the representations and warranties made herein by that person or individual.

22.19 **Days.** Any and all references to a number of days herein, unless otherwise specified, shall refer to calendar days.

IN WITNESS WHEREOF, the Parties hereto have executed this instrument by and through their authorized representatives effective on the day and year first-above written.

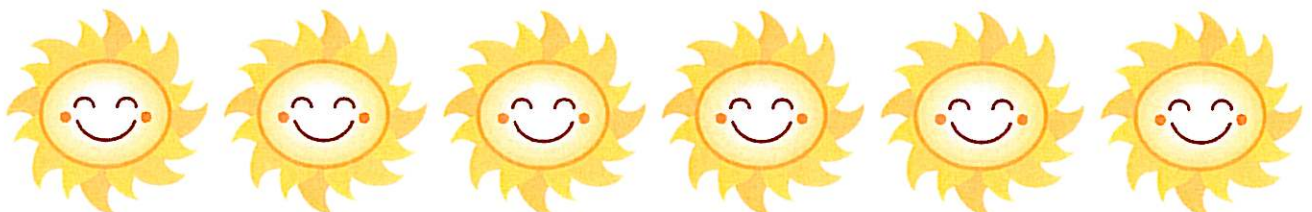
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CHINO BASIN WATERMASTER

II. BUSINESS ITEM

B. CHINO BASIN WATERMASTER BUDGET





CHINO BASIN WATERMASTER

9641 San Bernardino Road, Rancho Cucamonga, Ca 91730
Tel: 909.484.3888 Fax: 909.484.3890 www.cbwm.org

KENNETH R. MANNING
Chief Executive Officer

STAFF REPORT

DATE: May 14, 2009
May 19, 2009
May 28, 2009

TO: Committee Members
Watermaster Board Members

SUBJECT: Proposed Fiscal Year 2009/2010 Budget

SUMMARY

Issue – Annual Budget for Watermaster Administration and OBMP tasks during FY 2009/10.

Recommendations – Staff recommends the Committees and the Board consider approval/adoption of the Proposed FY 2009/10 Budget.

Fiscal Impact – The FY 2009/10 Proposed Budget expenses are \$7,680,789. The FY 2009/10 Budget, as proposed, anticipates a slight increase in Administrative costs, a decrease in OBMP expenditures and a decrease in OBMP project costs over the prior year “amended” budget.

DISCUSSION

Each year, Watermaster staff conducts meetings internally and with consultants to discuss upcoming projects and anticipated work flow. As the budget is developed, the related budgeted costs are continually refined. The current version of the budget reflects the discussions with consultants and stakeholders.

On April 21, 2009 Watermaster conducted the annual Budget Workshop and discussed the draft budget in detail and in summary. The categories and accounts that were discussed in detail at the workshop included:

For the Administrative costs:

- The draft budget includes no salary adjustment based on COLA for March, 2009.
- The draft budget includes 11 approved staff positions.
- The draft budget includes an increase in the amount budgeted for potential Agricultural Pool expenditures.

For OBMP General costs: (See attached "Budget and Description of Engineering Tasks" for additional detail.)

- Decreases in both legal and engineering budgets for OBMP costs

Staff has compiled a draft budget for OBMP Implementation Project costs: (See attached "Budget and Description of Engineering Tasks" for additional detail.)

- Continued implementation of the recharge improvement project including recharge and well monitoring program.
- Development of a recharge master plan update pursuant to Condition Subsequent #5 – which will be budgeted over 2 years.
- Management of subsidence and related monitoring and analysis based upon recommendations from the MZ-1 technical committee.
- Continued implementation of the Hydraulic Control Monitoring Program and collection of water quality data from the Santa Ana River as mandated in the Basin Plan. However, staff will be working with the Regional Water Quality Control Board in an attempt to reduce the future scope of work in this category, thereby reducing future budgeted costs.

In summary, the FY 2009/10 Budget, as proposed, anticipates a decrease in total budgeted costs. Final assessments will be refined when the assessment package is prepared this fall; actual assessment amounts are dependent on prior year pumping which will affect the final assessment amounts.



CHINO BASIN WATERMASTER

DRAFT BUDGET

May 14, 2009

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**CHINO BASIN WATERMASTER
SUMMARY BUDGET 2009-2010**

	FY 07-08 June Actual	FY 08-09 December Actual	FY 08-09 Amended Budget	FY 09-10 Proposed Budget	Current vs. Proposed
Ordinary Income					
4000 Mutual Agency Revenue	\$237,370	\$0	\$148,410	\$148,410	\$0
4110 Appropriative Pool Assessments	7,480,676	7,993,307	7,860,411	7,185,411	-675,000
4120 Non-Agricultural Pool Assessments	122,298	172,817	132,237	155,427	23,190
4730 Prorated Interest Income	186,184	60,829	174,368	191,540	17,172
Total Income	8,061,582	8,227,982	8,315,426	7,680,789	-634,637
Administrative Expenses					
6010 Salary Costs	486,402	297,801	484,302	487,838	3,536
6020 Office Building Expense	91,236	41,986	102,000	102,500	500
6030 Office Supplies & Equip.	39,086	10,381	50,500	46,500	-4,000
6040 Postage & Printing Costs	89,126	34,653	87,380	84,300	-3,080
6050 Information Services	139,480	66,989	144,000	148,500	4,500
6060 WM Special Contract Services	95,138	38,797	98,000	98,000	0
6080 Insurance Expense	15,414	15,706	17,730	16,730	-1,000
6110 Dues and Subscriptions	17,453	10,286	16,750	17,000	250
6150 Field Supplies & Equipment	554	864	2,500	2,800	300
6170 Vehicle Maintenance Costs	18,443	14,541	39,200	37,800	-1,400
6190 Conferences & Seminars	24,172	13,523	26,500	26,500	0
6200 Advisory Committee Expenses	17,065	7,667	19,181	18,078	-1,103
6300 Watermaster Board Expenses	37,819	21,913	42,020	43,823	1,803
6500 Education Fund Expenses	375	0	375	375	0
8300 Appropriative Pool Administration	20,280	11,496	24,008	23,069	-939
8400 Agricultural Pool Administration	137,820	64,372	134,820	200,114	65,294
8500 Non-Agricultural Pool Administration	6,561	2,412	7,695	6,677	-1,018
9400 Depreciation Expense	25,131	0	0	0	0
9500 Allocated G&A Expenses	-506,732	-204,742	-448,902	-488,230	-39,328
Total Administrative Expenses	754,824	448,648	848,059	872,374	24,315
General OBMP Expenditures					
6900 Optimum Basin Mgmt Program	2,282,059	603,285	1,785,421	1,399,372	-386,049
6950 Cooperative Efforts	10,000	0	10,000	10,000	0
9501 Allocated G&A Expenditures	177,356	60,562	137,959	148,448	10,489
Total General OBMP Expenditures	2,469,415	663,847	1,933,380	1,557,820	-375,560

**CHINO BASIN WATERMASTER
SUMMARY BUDGET 2009-2010**

	FY 07-08		FY 08-09		FY 08-09		FY 09-10		Current vs. Proposed
	June Actual	December Actual	Amended Budget	Proposed Budget	Proposed Budget	Proposed Budget			
7000 OBMP Implementation Projects									
7101 Production Monitoring	104,920	63,293	107,515	107,047	107,047	107,047	107,047	-468	
7102 In-Line Meter Installation/Maintenance	24,844	24,714	87,931	56,179	56,179	56,179	56,179	-31,752	
7103 Groundwater Quality Monitoring	98,466	95,584	210,458	214,362	214,362	214,362	214,362	3,904	
7104 Groundwater Level Monitoring	189,377	218,154	372,538	366,956	366,956	366,956	366,956	-5,582	
7105 Recharge Basin Water Quality Monitoring	13,527	2,433	46,717	43,912	43,912	43,912	43,912	-2,805	
7107 Ground Level Monitoring	275,165	123,949	651,468	550,059	550,059	550,059	550,059	-101,409	
7108 Hydraulic Control Monitoring Program	193,337	244,213	713,949	567,022	567,022	567,022	567,022	-146,927	
7109 Recharge & Well Monitoring Program	33,157	0	0	9,152	9,152	9,152	9,152	9,152	
7200 OBMP Pgm Element 2 - Comp Recharge	918,727	509,652	1,245,266	1,478,560	1,478,560	1,478,560	1,478,560	233,294	
7300 OBMP Pgm Element 3 & 5 - Water Supply Plan - Desalter	131,340	56,084	108,477	96,003	96,003	96,003	96,003	-12,474	
7400 OBMP Pgm Element 4 - Mgmt Zone Strategies	147,404	137,989	272,515	91,985	91,985	91,985	91,985	-180,530	
7500 OBMP Pgm Element 6 & 7 - Coop Efforts/Salt Mgmt	111,259	21,588	76,411	163,727	163,727	163,727	163,727	87,316	
7600 OBMP Pgm Element 8 & 9 Storage Mgmt/Conj Use	93,140	387,503	61,909	29,550	29,550	29,550	29,550	-32,359	
7700 Inactive Well Protection Program	295	0	6,296	5,066	5,066	5,066	5,066	-1,230	
7690 Recharge Improvement Debt Payment	1,368,373	511,894	1,261,594	1,131,233	1,131,233	1,131,233	1,131,233	-130,361	
9502 Allocated G&A Expenditures	322,589	144,179	310,943	339,782	339,782	339,782	339,782	28,839	
Total OBMP Implementation Projects	4,025,921	2,541,229	5,533,987	5,250,595	5,250,595	5,250,595	5,250,595	-283,392	
Total Expenses	7,250,160	3,653,724	8,315,426	7,680,789	7,680,789	7,680,789	7,680,789	-634,637	
Net Ordinary Income	811,422	4,574,257	0	0	0	0	0	0	
Other Income									
4210 Approp Pool-Replenishment	3,393,110	6,427,596	0	0	0	0	0	0	
4220 Non-Ag Pool-Replenishment	9,256	10,047	0	0	0	0	0	0	
4230 Groundwater Recharge Activity	0	0	0	0	0	0	0	0	
Total Other Income	3,402,366	6,437,643	0	0	0	0	0	0	
Other Expense									
5010 Groundwater Recharge	3,325,123	0	0	0	0	0	0	0	
Total Other Expense	3,325,123	0	0	0	0	0	0	0	
Net Other Income	77,244	6,437,643	0	0	0	0	0	0	
9800 From / (To) Reserves	-913,796	-11,011,900	0	0	0	0	0	0	
Net Income	-\$25,130	\$0	\$0	\$0	\$0	\$0	\$0	\$0	

CHINO BASIN WATERMASTER

FY 2009/2010

DETAIL BUDGET

	FY 07-08	FY 08-09	FY 08-09	FY 09-10	Current
	June	December	Amended	Proposed	vs.
	Actual	Actual	Budget	Budget	Proposed
Ordinary Income					
Income					
4000 Cooperative Effort Contributions					
4010 Local Agency Subsidies - Other	\$237,370	\$0	\$148,410	\$148,410	\$0
Total 4000 Mutual Agency Revenue	237,370	0	148,410	148,410	0
4110 Appropriative Pool Assessments					
4111 Administrative Assessment	588,748	635,991	646,964	654,327	7,363
4111.2 OBMP Assessment	4,160,273	4,542,646	4,487,998	4,003,209	-484,789
4112 Ag Pool Reallocation - Administrative	167,967	190,956	184,434	196,211	11,777
4113 Ag Pool Reallocation - OBMP	1,186,136	1,362,120	1,279,421	1,200,431	-78,990
4115 Recharge Improvement Revenue	1,377,552	1,261,594	1,261,594	1,131,233	-130,361
4117 P/Y Adjustments & Pool Interest	0	0	0	0	0
Total 4110 Appropriative Pool Assessments	7,480,676	7,993,307	7,860,411	7,185,411	-675,000
4120 Non-Agricultural Pool Assessments					
4123 Administrative Assessment	15,161	21,224	16,661	21,836	5,175
4124 OBMP Assessment	107,137	151,593	115,576	133,591	18,015
4127 P/Y Adjustments	0	0	0	0	0
Total 4120 Non-Agricultural Pool Assessments	122,298	172,817	132,237	155,427	23,190
4730 Prorated Interest Income					
4731 Interest - Agricultural Pool	20,699	6,258	17,500	17,500	0
4732 Interest - Appropriative Pool	161,051	53,225	152,000	170,000	18,000
4733 Interest - Non-Agricultural Pool	4,370	1,328	4,800	4,000	-800
4739 Interest - Education Fund	64	18	68	40	-28
Total 4730 Prorated Interest Income	186,184	60,829	174,368	191,540	17,172
4900 Miscellaneous Income					
	35,054	1,028	0	0	0
Total Income	8,061,582	8,227,982	8,315,426	7,680,789	-634,637

CHINO BASIN WATERMASTER

FY 2009/2010

DETAIL BUDGET

	FY 07-08 June Actual	FY 08-09 December Actual	FY 08-09 Amended Budget	FY 09-10 Proposed Budget	Current vs. Proposed
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Administrative Expenses

6010 Salary Costs					
6011 WM Staff Salaries & Payroll Burden	514,582	281,482	484,304	468,339	-15,965
6012 Payroll Services	2,539	1,492	0	2,000	2,000
6013 Human Resources Services	14,558	11,051	0	12,000	12,000
6016 New Employee Search Costs	1,410	362	0	500	500
6017 Temporary Services	16,445	11,725	0	5,000	5,000
Subtotal Wages	549,534	306,112	484,304	487,839	3,535
6018 Fringe Benefits	-63,131	-8,311	480,203	474,334	-5,869
60199 Payroll Burden Allocated	0	0	-480,205	-474,335	5,870
Total 6010 Salary Costs	486,402	297,801	484,302	487,838	3,536

6020 Office Building Expense

6021 Office Lease	63,135	27,475	66,000	68,000	2,000
6022 Telephone	12,289	8,384	12,000	15,000	3,000
6024 Building Repairs & Janitorial	15,812	6,127	24,000	19,500	-4,500
Total 6020 Office Building Expense	91,236	41,986	102,000	102,500	500

6030 Office Supplies & Equip.

6031 Office Supplies	21,872	8,687	46,500	43,500	-3,000
6038 Other Office Equipment	541	866	0	0	0
6039 Office Expenses	14,104	0	0	0	0
6141 Meeting Expenses	2,569	828	4,000	3,000	-1,000
Total 6030 Office Supplies & Equip.	39,086	10,381	50,500	46,500	-4,000

6040 Postage & Printing Costs

6042 Postage	15,464	3,560	15,000	12,000	-3,000
6043 Copy Machine Lease & Maintenance	64,958	30,116	63,000	63,000	0
6044 Postage Meter Lease	1,947	977	2,880	2,800	-80
6045 Outside Printing	6,757	0	6,500	6,500	0
Total 6040 Postage & Printing Costs	89,126	34,653	87,380	84,300	-3,080

CHINO BASIN WATERMASTER

FY 2009/2010

DETAIL BUDGET

	FY 07-08 June Actual	FY 08-09 December Actual	FY 08-09 Amended Budget	FY 09-10 Proposed Budget	Current vs. Proposed
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6050 Information Services

6052 Consultants	75,549	22,808	89,000	87,000	-2,000
6053 Internet Services	19,172	12,300	13,000	16,500	3,500
6054 Computer Software & Hardware	44,759	31,881	42,000	45,000	3,000
Total 6050 Information Services	139,480	66,989	144,000	148,500	4,500

6060 WM Special Contract Services

6061 Contract Services	67,715	38,247	40,000	40,000	0
6062 Audit Services	12,307	551	8,000	8,000	0
6063 Public Relations Consultant	15,115	0	40,000	40,000	0
6067 General Counsel	0	0	10,000	10,000	0
Total 6060 WM Special Contract Services	95,138	38,797	98,000	98,000	0

6080 Insurance Expense

6085 Business Insurance Package	15,254	15,498	17,500	16,500	-1,000
6086 Position Bond Insurance	160	208	230	230	0
Total 6080 Insurance Expense	15,414	15,706	17,730	16,730	-1,000

6110 Dues and Subscriptions

6111 Membership Dues	15,177	8,640	16,000	15,000	-1,000
6112 Subscriptions	2,276	1,646	750	2,000	1,250
Total 6110 Dues and Subscriptions	17,453	10,286	16,750	17,000	250

6150 Field Supplies & Equipment

6151 Small Tools & Equipment	438	40	1,500	1,800	300
6154 Uniforms	116	824	1,000	1,000	0
Total 6150 Field Supplies & Equipment	554	864	2,500	2,800	300

6170 Vehicle Maintenance Costs

6170 Travel & Transportation	0	0	4,000	4,000	0
6171 Vehicle Allowance	7,838	12,555	23,400	23,400	0
6173 Mileage Reimbursements	1,663	39	1,600	400	-1,200
6175 Vehicle Fuel	1,928	813	3,200	3,000	-200
6177 Vehicle Repairs & Maintenance	7,015	1,134	7,000	7,000	0
Total 6170 Travel & Transportation	18,443	14,541	39,200	37,800	-1,400

CHINO BASIN WATERMASTER

FY 2009/2010

DETAIL BUDGET

	FY 07-08 June Actual	FY 08-09 December Actual	FY 08-09 Amended Budget	FY 09-10 Proposed Budget	Current vs. Proposed
6190 Conferences & Seminars					
6191 Conferences & Seminars	21,589	10,445	20,000	20,000	0
6192 Training & Continuing Education	2,583	3,077	6,500	6,500	0
Total 6190 Conferences & Seminars	24,172	13,523	26,500	26,500	0
6200 Advisory Committee Expenses					
6201 WM Staff Salaries	15,227	6,731	16,681	16,078	-603
6212 Meeting Expense	1,838	937	2,500	2,000	-500
Total 6200 Advisory Committee Expenses	17,065	7,667	19,181	18,078	-1,103
6300 Watermaster Board Expenses					
6301 WM Staff Salaries	18,479	11,101	20,220	22,023	1,803
6311 Board Member Compensation	16,522	9,750	18,500	18,500	0
6312 Meeting Expense	2,354	1,030	3,000	3,000	0
6313 Board Members' Expenses	464	32	300	300	0
Total 6300 WM Board Expenses	37,819	21,913	42,020	43,823	1,803
6500 Education Fund Expenditures	375	0	375	375	0
8300 Appropriative Pool Administration					
8301 WM Staff Salaries	20,093	11,355	23,508	22,569	-939
8312 Meeting Expenses	187	141	500	500	0
Total 8300 Appropriative Pool Administration	20,280	11,496	24,008	23,069	-939
8400 Agricultural Pool Administration					
8401 WM Staff	22,080	7,551	21,020	19,814	-1,206
8411 Compensation	2,200	800	2,000	2,000	0
8412 Meeting Expenses	0	17	300	300	0
8456 IEUA RTS Meter Charge	1,528	1,503	1,500	3,000	1,500
8467 Ag-Pool Legal & Technical Service	87,704	47,042	80,000	80,000	0
8467.1 Frank B & Associates	9,999	2,760	18,000	18,000	0
8470 Ag Pool Meeting Special Compensation	14,309	4,700	12,000	12,000	0
8471 Ag Pool Special Projects	0	0	0	65,000	65,000
Total 8400 Agricultural Pool Admin	137,820	64,372	134,820	200,114	65,294

CHINO BASIN WATERMASTER

FY 2009/2010

DETAIL BUDGET

	FY 07-08 June Actual	FY 08-09 December Actual	FY 08-09 Amended Budget	FY 09-10 Proposed Budget	Current vs. Proposed
8500 Non-Agricultural Pool Administration					
8501 WM Staff	6,373	2,350	7,495	6,477	-1,018
8512 Meeting Expense	187	63	200	200	0
Total 8500 Non-Agricultural Pool Admin	6,561	2,412	7,695	6,677	-1,018
9400 Depreciation Expense	25,131	0	0	0	0
9500 Allocated G&A Expenditures	-506,732	-204,742	-448,902	-488,230	-39,328
Total Administrative Expenses	754,824	448,648	848,059	872,374	24,315
General OBMP Expenses					
6900 Optimum Basin Mgmt Program					
6901 OBMP - Staff	214,119	92,132	217,402	214,369	-3,033
6903 OBMP - SARW Group	37,512	0	0	0	0
6906 OBMP - Engineering	638,127	119,263	275,535	495,003	219,468
6906.4 OBMP - CEQA	0	0	200,000	75,000	-125,000
6906.7 OBMP - DataX	4,207	4,207	0	0	0
6906.8 OBMP - Reports	177,600	560	109,984	0	-109,984
6907 OBMP - Legal					
6907.1 Ellison & Schneider	237,614	18,358	150,000	0	-150,000
6907.2 Ludorff & Scalmanini	100,049	4,025	37,500	0	-37,500
6907.3 WM Legal Counsel	742,220	358,801	775,000	595,000	-180,000
6907.34 SAR Accord	121,303	0	0	0	0
6909 OBMP - Other Expense	9,308	5,941	20,000	20,000	0
Total 6900 OBMP	2,282,059	603,285	1,785,421	1,399,372	-386,049
Total 6950 Cooperative Efforts	10,000	0	10,000	10,000	0
9501 Allocated G&A Expenditures	177,356	60,562	137,959	148,448	10,489
Total General OBMP Expenses	2,469,415	663,847	1,933,380	1,557,820	-375,560

CHINO BASIN WATERMASTER

FY 2009/2010

DETAIL BUDGET

	FY 07-08	FY 08-09	FY 08-09	FY 08-09	FY 09-10	Current
	June	December	Amended	Proposed	Budget	vs.
	Actual	Actual	Budget	Budget	Budget	Proposed

7000 OBMP Implementation Projects

7100 OBMP Pgm Element 1 - Camp Monitoring Program

7101 Production Monitoring

7101.1 Production Monitoring - WM Staff	74,267	48,686	74,737	103,497	28,760	
7101.3 Production Monitoring - Engineering Services	29,903	14,295	32,028	2,800	-29,228	
7101.4 Production Monitoring - Computer Services	750	313	750	750	0	
Total 7101 Production Monitoring	104,920	63,293	107,515	107,047	-468	

7102 In-Line Meter Installation/Maintenance

7102.1 In-Line Meter - WM Staff	1,846	5,421	27,231	13,179	-14,052	
7102.5 In-Line Meter - Maintenance & Repair	2,582	75	9,000	5,000	-4,000	
7102.7 In-Line Meter - In-Line Meters	2,691	3,978	8,000	8,000	0	
7102.8 In-Line Meter - Calibration & Testing	17,725	15,240	43,700	30,000	-13,700	
Total 7102 In-Line Meter Installation/Maintenance	24,844	24,714	87,931	56,179	-31,752	

7103 Groundwater Quality Monitoring

7103.1 Grdwtr Quality - WM Staff	45,488	14,682	70,084	74,871	4,787	
7103.3 Grdwtr Quality - Engineering Services	52,126	52,080	109,684	110,736	1,052	
7103.5 Grdwtr Quality - Laboratory Services	0	28,509	28,440	28,005	-435	
7103.6 Grdwtr Quality - Supplies	102	0	1,500	0	-1,500	
7103.7 Grdwtr Quality - Computer Services	750	313	750	750	0	
Total 7103 Groundwater Quality Monitoring	98,466	95,584	210,458	214,362	3,904	

7104 Groundwater Level Monitoring

7104.1 Grdwtr Level - WM Staff	81,084	49,108	98,326	96,010	-2,316	
7104.3 Grdwtr Level - Engineering Services	99,147	166,782	232,212	235,646	3,434	
7104.4 Grdwtr Level - Contract Services	595	260	11,500	11,500	0	
7104.6 Grdwtr Level - Supplies	1,677	264	2,500	2,500	0	
7104.7 Grdwtr Level - Capital Equipment	6,874	1,741	28,000	21,300	-6,700	
Total 7104 Groundwater Level Monitoring	189,377	218,154	372,538	366,956	-5,582	

CHINO BASIN WATERMASTER

FY 2009/2010

DETAIL BUDGET

	FY 07-08 June Actual	FY 08-09 December Actual	FY 08-09 Amended Budget	FY 09-10 Proposed Budget	Current vs. Proposed
7105 Recharge Basin Water Quality Monitoring					
7105.1 Recharge Basin Water Quality - WM Staff	7,959	2,238	42,717	39,912	-2,805
7105.4 Recharge Basin Water Quality - Laboratory Services	273	195	3,500	3,500	0
7105.6 Recharge Basin Water Quality - Supplies	5,295	0	500	500	0
Total 7105 Recharge Basin Water Quality Monitoring	13,527	2,433	46,717	43,912	-2,805
7107 Ground Level Monitoring					
7107.1 Ground Level - WM Staff	1,575	153	2,758	1,406	-1,352
7107.2 Ground Level - Engineering Services	157,071	102,742	298,600	244,127	-54,473
7107.3 Ground Level - Synthetic Aperture Radar	25,000	12,400	95,000	95,000	0
7107.5 Ground Level - Laboratory Services	0	0	10,000	0	-10,000
7107.6 Ground Level - Contract Services	89,990	8,654	245,110	209,526	-35,584
7107.9 Ground Level - Supplies	1,529	0	0	0	0
Total 7107 Ground Level Monitoring	275,165	123,949	651,468	550,059	-101,409
7108 Hydraulic Control Monitoring					
7108.1 Hydraulic Control Monitoring - WM Staff	9,798	4,822	12,836	13,543	707
7108.2 Hydraulic Control Monitoring - Temporary Services	7,968	21,654	0	0	0
7108.3 Hydraulic Control Monitoring - Engineering Services	175,571	101,132	397,899	366,846	-31,053
7108.4 Hydraulic Control Monitoring - Laboratory Services	0	116,605	263,214	181,933	-81,281
7108.9 Hydraulic Control Monitoring - Contract Services	0	0	40,000	4,700	-35,300
Total 7108 Hydraulic Control Monitoring	193,337	244,213	713,949	567,022	-146,927
7109 Recharge & Well Monitoring					
7109.3 Recharge & Well Monitoring - Engineering Services	33,157	0	0	9,152	9,152
7109.4 Recharge & Well Monitoring - Laboratory Services	0	0	0	0	0
Total 7109 Recharge & Well Monitoring	33,157	0	0	9,152	9,152

CHINO BASIN WATERMASTER

FY 2009/2010

DETAIL BUDGET

	FY 07-08	FY 08-09	FY 08-09	FY 08-09	FY 09-10	Current
	June	December	Amended	Proposed	Proposed	vs.
	Actual	Actual	Budget	Budget	Budget	Proposed

7200 OBMP Pgm Element 2 - Comp Recharge

7201 Comp Recharge - WM Staff	69,646	47,772	111,819	99,910	99,910	-11,909
7202 Comp Recharge - Engineering Services	36,337	118,984	8,100	158,225	158,225	150,125
7202.1 Comp Recharge - Recharge Master Plan	0	0	394,847	522,425	522,425	127,578
7203 Comp Recharge - Contract Services	5,304	0	22,500	22,000	22,000	-500
7204 Comp Recharge - Supplies	389	65	18,000	16,000	16,000	-2,000
7205 Comp Recharge - Other Expenses	51	52	0	0	0	0
7206 Comp Recharge - Basin Program O&M	760,000	299,830	690,000	660,000	660,000	-30,000
7207 Comp Recharge - Other	0	0	0	0	0	0
7208 Hansen Aggregate Damages	47,000	42,948	0	0	0	0
Total 7200 Comprehensive Recharge	918,727	509,652	1,245,266	1,478,560	1,478,560	233,294

7300 OBMP Pgm Element 3 & 5 - Water Supply Plan - Desalter

7301 OBMP - WM Staff	22,606	20,308	22,965	23,694	23,694	729
7303 OBMP - Engineering Services	103,601	35,768	85,512	72,309	72,309	-13,203
7304 OBMP - Contract Services	5,128	0	0	0	0	0
7305 OBMP - Supplies	5	8	0	0	0	0
Total 7300 OBMP Elements 3 & 5 Water Supply Plan	131,340	56,084	108,477	96,003	96,003	-12,474

7400 OBMP Pgm Element 4 - Mgmt Zone Strategies

7401 OBMP - WM Staff	16,204	2,487	11,379	10,705	10,705	-674
7402 OBMP - Engineering Services	130,591	131,904	214,036	71,280	71,280	-142,756
7403 OBMP - Contract Services	0	3,339	47,000	10,000	10,000	-37,000
7404 OBMP - Supplies	103	0	100	0	0	-100
7405 OBMP - Other Expenses	505	259	0	0	0	0
Total 7400 OBMP Element 4 - Mgmt Zone Strategies	147,404	137,989	272,515	91,985	91,985	-180,530

7500 OBMP Pgm Element 6 & 7 - Coop Efforts/Salt Mgmt

7501 OBMP - WM Staff	12,606	1,147	1,411	1,414	1,414	3
7502 OBMP - Engineering Services	98,654	20,441	55,000	116,913	116,913	61,913
7503 OBMP - Contract Services	0	0	20,000	20,000	20,000	0
7505 OBMP - Other Expenses	0	0	0	25,400	25,400	25,400
Total 7500 OBMP Element 6 & 7 - Coop Efforts/Salt Mgmt	111,259	21,588	76,411	163,727	163,727	87,316

CHINO BASIN WATERMASTER

FY 2009/2010

DETAIL BUDGET

	FY 07-08	FY 08-09	FY 08-09	FY 09-10	Current
	June	December	Amended	Proposed	vs.
	Actual	Actual	Budget	Budget	Proposed
7600 OBMP Pgm Element 8 & 9 Storage Mgmt/Conj Use					
7601 OBMP - WM Staff	35,446	19,606	9,441	9,463	22
7602 OBMP - Engineering Services	57,693	366,365	52,468	20,087	-32,381
7605 OBMP - Other Expenses	0	1,532	0	0	0
Total 7600 OBMP Element 8 & 9 Storage Mgmt/Conj Use	93,140	387,503	61,909	29,550	-32,359
7700 Inactive Well Protection Program					
7701 Inactive Well Protection Program - WM Staff	0	0	4,296	3,066	-1,230
7703 Inactive Well Protection Program - Contract Services	295	0	2,000	2,000	0
Total 7700 Inactive Well Protection Program	295	0	6,296	5,066	-1,230
7690 Recharge Improvement Debt Payment					
9502 Allocated G&A Expenditures	1,368,373	511,894	1,261,594	1,131,233	-130,361
	322,589	144,179	310,943	339,782	28,839
Total OBMP Implementation Projects	4,025,921	2,541,229	5,533,987	5,250,595	-283,392
Total General OBMP & Implementation Projects	6,495,336	3,205,077	7,467,367	6,808,415	-658,952
Total Expenses	7,250,160	3,653,724	8,315,426	7,680,789	-634,637
Net Ordinary Income	811,422	4,574,257	0	0	0

CHINO BASIN WATERMASTER

FY 2009/2010

DETAIL BUDGET

	FY 07-08	FY 08-09	FY 08-09	FY 08-09	FY 09-10	Current
	June	December	Amended	Proposed	Proposed	vs.
	Actual	Actual	Budget	Budget	Budget	Proposed
Other Income						
Water Replenishment Assessments						
4210 Approp Pool-Replenishment						
4211 15% Gross Assessments	451,217	893,722	0	0	0	0
4212 85% Net Assessments	2,556,870	5,064,427	0	0	0	0
4213 100% Net Assessments	385,023	469,447	0	0	0	0
4214 Prior Year Adjustment	0	0	0	0	0	0
Total 4210 Approp Pool-Replenishment	3,393,110	6,427,596	0	0	0	0
4220 Non-Ag Pool-Replenishment						
4223 Net Replenishment	9,256	10,047	0	0	0	0
Total 4220 Non-Ag Pool-Replenishment	9,256	10,047	0	0	0	0
Total Other Income	3,402,366	6,437,643	0	0	0	0
Other Expense						
5010 Groundwater Recharge						
5011 Replenishment Water	3,227,218	0	0	0	0	0
5015 OC-59 Use Fees	0	0	0	0	0	0
5015.1 OC-59 Use Fees - Other	0	0	0	0	0	0
5017 IEUA Surcharges	97,905	0	0	0	0	0
Total 5010 Groundwater Recharge	3,325,123	0	0	0	0	0
Total Other Expense	3,325,123	0	0	0	0	0
Net Other Income	77,244	6,437,643	0	0	0	0
(To) / From Reserves	-913,796	-11,011,900	0	0	0	0
Net Income	-\$25,130	\$0	\$0	\$0	\$0	\$0

CHINO BASIN WATERMASTER
2009-2010 BUDGET
LINE ITEM JUSTIFICATION

Budget Line Number	Comments
ORDINARY INCOME/EXPENSE	
4000	COOPERATIVE EFFORT CONTRIBUTIONS
4010	Local Agency Subsidies - Other
4110 APPROPRIATIVE POOL ASSESSMENTS	
4111	Administrative Assessment
4111.2	OBMP Assessment
4112	Agricultural Pool Reallocation-Administrative Assessment
4113	Agricultural Pool Reallocation- OBMP Assessment
4115	Recharge Improvement Revenue
4117	P/Y Adjustments
4120 NON-AGRICULTURAL POOL ASSESSMENTS	
4123	Administrative Assessment
4124	OBMP Assessment
4127	P/Y Adjustments
4730 PRORATED INTEREST INCOME	
4900 MISCELLANEOUS INCOME	
4900	Miscellaneous Income
6010 SALARY COSTS	
6011	WM Staff Salaries & Payroll Burden
6012	Payroll Services
6013	Human Resource Services
6016	Employee Search Costs
6017	Temporary Services
6018	Fringe Benefits
60199	Payroll Burden Allocated
6020 OFFICE BUILDING EXPENSE	
6021	Office Lease
6022	Telephone
6024	Building Repair & Maintenance
6030 OFFICE SUPPLIES & EQUIPMENT	
6031	Office Supplies
6038	Office Equipment
6039	Office Expense
6141	Meeting Expenses

This account represents funds which are to be received from Metropolitan Water District to offset our costs related to administering the Dry Year Yield Program.

Appropriative Pool Assessments equal the Pool's share of all General Administrative Expenses levied to the Appropriators on a per acre-foot basis levied based on the prior year's production.

Appropriative Pool Assessments equal the Pool's share of all Optimum Management costs levied to the Appropriators on a per acre-foot basis based on the prior year's production.

The Appropriative Pool and the Overlaying Agricultural Pool agreed that the unproduced portion of Ag Pool's annual share of safe yield (82,800 acre-feet) would be immediately reallocated to the Appropriative Pool members provided the Appropriative Pool would pay the Agricultural Pool's share of Administrative and Special Project expenses.

With separate assessments levied for General Administration and Optimum Basin Management Plan and Implementation Costs, the Agricultural Pool costs charged through the reallocation levy have been separated to differentiate between the revenues from the two levies.

This line item covers funds required to pay the budgeted debt service payment and the operating & maintenance expenses.

Consists of adjustments related to prior years, if any.

Non-Agricultural Pool Assessments equal the Pool's share of all General Administrative Expenses levied to the Non-Agricultural Pool based on the prior year's

Non-Agricultural Pool Assessments equal the Pool's share of all Optimum Basin Management costs levied to the Pool members based on the prior year's production.

Consists of adjustments related to prior years, if any.

Interest is prorated between the Pools and the Education Fund using formula approved by the Advisory Committee and Pools several years ago.

Miscellaneous income, such as fees collected for late assessments, data requests, rebates, etc.

Expenses related to administrative staff hours and costs not related to a particular project.

Expenses related to processing of bi-weekly payroll and preparation of quarterly and annual tax returns, including year end W-2 processing.

Employee medical reimbursement plan, paid for by Watermaster staff.

Costs cover "help wanted" advertisements, pre-employment physicals & non-staff or consultant interviewer's time (if applicable).

Temporary help on special administrative projects and staffing for vacant positions.

Benefits paid to employees such as medical, dental, vacation, sick leave & holidays.

Fringe benefits allocated to salary costs.

Lease for Watermaster office.

Telephone expense includes office telephone system, cellular phones for management & field staff along with conference call service.

This line item covers monthly housekeeping & maintenance requests to the office.

Office supplies include: copy paper, stationary, envelopes, checks and other miscellaneous office supplies.

This Budget line covers the cost of office equipment not included in office supplies referenced in account 6031.

This line covers the costs of items not covered under any of the above #6030 lines including file management consulting fees.

Expenses charged to this line include administrative meeting expenses.

CHINO BASIN WATERMASTER
2009-2010 BUDGET
LINE ITEM JUSTIFICATION

Budget Line Number	Comments
5040 POSTAGE & PRINTING COSTS	
6042	Postage Postage reflected here covers the cost of mailing or shipping all meeting notices and agendas; correspondence; Annual Reports; outgoing bills and payments, etc. Charges include FedEx and United Parcel Service costs as well as postage. This line covers the cost of leasing copy machines as well as the costs for copies exceeding the minimum number per month/year as stipulated in the lease agreements.
6043	Copy Machine Lease
6044	Postage Meter Lease
6045	Printing Postage meter costs includes the annual lease fees, quarterly reset fees and postage meter ink cartridge replacements. Printing costs covered here are those done by outside printers and include the Annual Report, blueprints, special area street maps, color prints, emergency printing when copiers are down for repairs, etc. Color brochures and annual financial statements will be printed.
6050 WATERMASTER INFORMATION SERVICES	
6052	Computer Consultant Support Services
6053	Internet Services
6054	Computer Software & Hardware Watermaster uses consultants to maintain its computer network & workstations as well as to develop & maintain databases. Website maintenance costs & T-1 internet connection. Costs include new software, software upgrades, upgraded computer hardware, servers printers, back up power supplies, etc.
6060 WATERMASTER SPECIAL CONTRACT SERVICES	
6061	Other Contract Services
6062	Audit Services
6063	Public Relations Consultant Watermaster retains consultants to develop and implement strategic plans and develop brochures and the Annual Report. This line item budgets funds to pay for the required annual financial statement audit.
6067	Legal Services - General Counsel Watermaster retains outside consultants on a per contract basis as our Public Relations Consultant, to keep us up to date regarding relevant legislative issues. Watermaster's general counsel expenses related to personnel and non-project specific matters.
6080 INSURANCES	
6085	Business Insurance Package
6086	Position Bond Insurance All insurance policies are now included under Business Insurance Package, including auto & general liability. Insures key positions for risk of misappropriation and/or fraud.
6110 DUES & SUBSCRIPTIONS	
6111	Membership Dues Watermaster memberships include: American Water Works Assoc Research Foundation, Association of California Water Agencies, Association of Ground Water Agencies. Watermaster subscribes to the periodicals and trade journals.
6112	Subscriptions
6150 FIELD SUPPLIES & EQUIPMENT	
6151	Small Tools & Equipment Small tools include: any tool which might be required while work in the field.
6154	Uniforms & Safety Shoes T-shirts, hats & jackets are provided to staff with Watermaster's logo to wear while in the field and while representing Watermaster. This line item also includes work boots for field staff.
6170 TRAVEL & TRANSPORTATION	
6170	Travel & Transportation
6171	Vehicle Allowances Travel & Transportation costs related to Watermaster business, not related to conferences & seminars. Employment agreement allows the Chief Executive Officer a vehicle allowance of \$650 per month.
6173	Mileage Reimbursements Reimbursements paid to Watermaster employees for use of personal vehicles for Watermaster business at the federally approved rate per mile.
6175	Vehicle Fuel Fuel expenses for Watermaster owned vehicles.
6177	Vehicle Repairs Covers repairs & maintenance to Watermaster's vehicles.

CHINO BASIN WATERMASTER
2009-2010 BUDGET
LINE ITEM JUSTIFICATION

Budget Line Number	Comments
6190 CONFERENCES & SEMINARS	
6191	Staff attends conferences for information, training, or making presentations regarding the Chino Basin Watermaster activities.
6192	Attendance at training & continuing education for staff.
6200 ADVISORY COMMITTEE	
6201	Salary and burden costs of WM staff in attending and preparing for Advisory Committee meetings.
6212	Advisory Committee meetings are normally scheduled to cover the lunch hour so that members are absent from their normal jobs the least amount of time possible. To accommodate the members, a luncheon or refreshments are served and those costs are reflected here.
6300 WATERMASTER BOARD EXPENSES	
6301	Salary and burden costs of WM staff in preparing for and attending Watermaster Board Meetings.
6311	Board Members are entitled to, but may waive, compensation for each day of service. Those who have not waived, receive \$125 per day served at various meetings including Board meetings, Committee meetings and other water agency meetings, including conference calls.
6312	Board and Committee meetings may be scheduled to cover the lunch hour so that attendees are absent from their normal jobs the least amount of time possible. If this occurs, a luncheon or refreshments are served and those costs are reflected here.
6313	Board Members are entitled to receive reimbursement for expenses incurred on behalf of Watermaster. Upon request, mileage is reimbursed to any Board Member using a personal vehicle on Watermaster business.
6500 EDUCATION FUND EXPENDITURES	This account disburses funds from the educational account as directed.
8300 APPROPRIATIVE POOL ADMINISTRATION AND SPECIAL PROJECTS	
8301	Salary and burden costs of WM staff in attending and preparing for Pool Meetings, and any other Appropriate Pool administrative activity.
8312	This item covers meeting expenses, including the cost of refreshments.
8400 AGRICULTURAL POOL ADMINISTRATION AND SPECIAL STUDIES	
8401	Salary and burden costs of WM staff in attending and preparing for Pool Meetings, and any other Agricultural Pool administrative activity.
8411	AG Pool Members are reimbursed \$25 for each Pool, Committee or Board Meeting attended. Ag Pool voted to increase reimbursement to \$125 per meeting with the extra \$100 to be paid out of Ag Pool accumulated interest. This additional \$100 is shown under account #8470.
8412	This item covers meeting expenses, including the cost of refreshments.
8456	Inland Empire Utilities Agency implemented a 'readiness to serve' charge against Watermaster for future provision of service to the land in the Agricultural preserve.
8467	The Agricultural Pool retains its own legal council to represent them in all Watermaster matters.
8467.1	The Agricultural Pool has contracted with a water management consultant to assist them in following Watermaster activities important to the Agricultural Pool.
8470	See account #8411 for details of this line item.
8471	Funds set aside for projects related to the Agricultural Pool projects.
8500 NON-AGRICULTURAL POOL ADMINISTRATION AND SPECIAL PROJECTS	
8501	Salary and burden costs of WM staff in attending and preparing for Pool Meetings and any other Non-Agricultural Pool administrative activity.
8512	This item covers meeting expenses, including the cost of refreshments.
9400	Non Cash depreciation expense related to fixed asset purchases from the current and previous fiscal years.
9500	Administrative Overhead is allocated to OBMP & Project jobs as a percentage of total Watermaster salaries.
9900 OPTIMUM BASIN MANAGEMENT PROGRAM	
6900	This work includes general engineering services requested by Watermaster to support implementation of the OBMP. The current budget request includes general, non-project specific as well as ad hoc requests for services and data requests promoting the ongoing efforts to implement the OBMP. Items include all aspects of preparing reports as required by the OBMP including the State of the Basin Report and the conditions subsequent pursuant to Judge Gunn's December 21, 2007 court order approving Peace II.

CHINO BASIN WATERMASTER
2009-2010 BUDGET
LINE ITEM JUSTIFICATION

Budget Line Number	Comments
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6950 COOPERATIVE EFFORTS On an ad hoc basis, Watermaster and other agencies agree to share the costs of various projects that will benefit both parties.

9501 ALLOCATED G&A EXPENDITURES Administrative Overhead is allocated to OBMP & Project jobs as a percentage of total Watermaster salaries.

7000 OPTIMUM BASIN MANAGEMENT PROGRAM IMPLEMENTATION PROJECTS

7101 PRODUCTION MONITORING Watermaster staff collects and processes production information for the approximately 600 wells within the Basin, including approximately 200 Appropriator wells and approximately 400 private wells. Watermaster staff reads the meters for the private wells, while the Appropriators and Overlaying Non-Agricultural Pools report their meter readings to Watermaster. The data are inputted into a production database that is updated quarterly, and that is used at the end of the fiscal year to provide essential data for the Assessment Package. Computer services are for the subscription for parcel lot information (split 50/50 with 7103-Groundwater Quality Monitoring).

7102 IN-LINE METER INSTALLATION Approximately 315 in-line flow meters are now installed on the previously unmeasured private wells. Approximately 150 meters must be calibrated each year and other maintenance and repairs are required. Each calibration is expected to cost \$200. Ten meters are expected to be replaced this fiscal year due to failures, at an average cost of \$800 each.

7103 GROUNDWATER QUALITY MONITORING Pursuant to the OBMP & Peace Agreement, Program Element 1 includes the development and implementation of a comprehensive groundwater quality monitoring program. Previously, Watermaster annually collected water quality data from approximately 200 private wells and obtained other water quality data from other cooperators so that approximately one-third of the active wells were sampled every third year. Other cooperators include members of the Appropriative and Overlaying Non-Agricultural Pools, the Regional Water Quality Control Board, the Department of Toxic Substances Control, the United States Geological Survey, the Orange County Water District and others. The key well monitoring program has now been implemented. Approximately 120 wells are included within the water quality key well program, with approximately 60 wells being sampled and analyzed each year. This monitoring activity is a requirement for the Chino Basin to receive TDS and Nitrogen objectives based on maximum beneficial use. The ad hoc Water Quality Committee oversees the surface water and groundwater quality programs to ensure that necessary data are collected to effectively manage the Basin. No supplies are budgeted for this line item this year.

Computer services are for the subscription for parcel lot information (split 50/50 with 7101-Production Monitoring).

7104 GROUNDWATER LEVEL MONITORING PROJECT Pursuant to the OBMP & Peace Agreement, Program Element 1 includes the development and implementation of a comprehensive groundwater-level monitoring program. Groundwater-level measurements are collected and compiled from about 600 wells. Of the 600 wells, about 65 wells are measured monthly, about 250 wells are measured semi-annually, about 60 wells are measured by transducers, about 200 wells are measured by municipal well owners (which are collected by Watermaster staff), and about 100 wells are measured by cooperators (which are collected by Watermaster staff). Cooperators include members of the Appropriative and Overlaying Non-Agricultural Pools, RWQCB, DTSC, USGS, OCWD, and others. All data are checked for reasonableness with regard to historical data at the well, converted from depth-to-water to groundwater-level elevation, and compiled into a centralized database. The majority of this effort is concentrated in the southern half of the Basin to support Desalter/HCMP monitoring programs. These data are analyzed in time series charts and maps annually to support the annual HCMP report and the semi-annual State of the Basin Report. Contract services for this item include the construction of aluminum covers for transducers not otherwise enclosed in structures and ground-level surveys of well reference points. Required supplies for this line item include sounder replacement lines, rubber gloves, distilled water, and fittings for installing transducers. Capital equipment for this line item include 25 new/replacement transducers and 17 transducer download cables.

7105 BASIN WATER QUALITY MONITORING Pursuant to the OBMP & Peace Agreement, Program Element 1 also includes the surface water quality monitoring program. Work in this line item includes sampling and analysis of water quality at recharge and flood retention basins within the Chino Basin. This is typically done during the rainy season only, approximately 3-4 samplings per basin per year. This monitoring activity is a requirement for the Chino Basin to receive TDS and Nitrogen objectives based on maximum beneficial use. Required supplies for this line item include rubber gloves, sample bags, tools, and field lab equipment.

**CHINO BASIN WATERMASTER
2009-2010 BUDGET
LINE ITEM JUSTIFICATION**

Budget Line Number	Comments
<u>7107 GROUND LEVEL MONITORING</u>	<p>Pursuant to the OBMP & Peace Agreement, Program Element 1 also includes the development and implementation of a ground-level monitoring and testing program. Watermaster is interested in determining how much, if any, subsidence has occurred in the Basin and in monitoring the effectiveness of the OBMP in minimizing it. Data will be collected from a network of ground elevation stations (surveys), from a multi-piezometer and from a dual borehole extensometer in the subsidence-prone area (mainly Management Zone 1). Satellite imagery (InSAR) also will be collected and analyzed for subsidence. Watermaster is implementing these efforts as part of the MZ-1 Subsidence Management Plan.</p> <p>A pilot ASR test at a well owned by the City of Chino Hills will be initiated, and monies are budgeted to assist Chino Hills with that effort.</p> <p>As part of the Basin Plan, a monitoring plan to evaluate the state of hydraulic control in the southern end of the basin has been developed. Hydraulic control will be used to maximize the safe yield of the basin. Watermaster, OCWD and the Regional Board have developed a monitoring plan to assess the state of hydraulic control to provide information to Watermaster to manage future production and recharge. Samples are collected from seven stations along the SAR every-other-week for water quality analyses. Stream flow measurements are also collected from five stations along the SAR. Water discharge and quality data area collected from all POTWS and other non-in tributary dischargers between the Riverside Narrows and below Prado dam. This monitoring activity is a requirement for the Chino Basin to receive TDS and Nitrogen objectives based on maximum beneficial use.</p> <p>A 2009 aerial photograph of the Chino Basin area will also be purchased to assist in this effort.</p> <p>Due to the recent agreement with IEUA, this expense is no longer cost-shared with IEUA. However, some money is budgeted in this category for Watermaster consultants to coordinate with IEUA when necessary.</p> <p>This line item includes the recharge master plan update required by Judge Gunn's December 21, 2008 order approving Peace II, GRCC participation, and recharge basin O&M.</p> <p>The work in this line item includes engineering services for the technical review of non-Watermaster consultant work products for consistency with OBMP, Basin Plan and other Watermaster interests. Work in this line item also includes the design support for the proposed Chino Creek Desalter well field.</p> <p>Pursuant to the OBMP & Peace Agreement, Watermaster has developed a long-term management plan for MZ1. Watermaster and the Court approved the MZ1 Subsidence Management Plan in 2007. Watermaster will be implementing the MZ1 Subsidence Management Plan in FY 2008-09 and in years thereafter, and adapting the plan as new data and understanding dictates. Data collected and analyzed will be presented and discussed at the MZ1 Technical Group meetings. New monitoring wells were installed in MZ-3 and monitored during FY 2005/06 and 2006/07. A technical memorandum will be completed this fiscal year and a revised monitoring program will be developed.</p> <p>In Management Zone 3, Watermaster will conduct a thorough ground water quality survey to locate contaminant plumes which might impact appropriator wells. Plans include quarterly sampling and analyses of two new "sentry" wells to provide on-going monitoring of plume management.</p> <p>Pursuant to the OBMP & Peace Agreement, Watermaster will complete specific activities to improve water quality monitoring and analyze the effectiveness of the OBMP to accomplish its goals. The work in this line item includes coordinating the Water Quality committee activities, coordinating with RWQCB and DTSC on several groundwater plumes - including VOC plumes potentially emanating from the Ontario International Airport and the Chino Airport, and the Stingfellow perchlorate plume, which has now reached the Santa Ana River, the Basin Monitoring Task Force pursuant to Watermaster's Maximum Benefit obligation, and participating in the TMDL process for Santa Ana River, Chino and Mill Creeks.</p> <p>This line item includes Watermaster's effort to expand the existing DYY Program and to develop new groundwater storage programs.</p>
<u>7108 HYDRAULIC CONTROL MONITORING PROGRAM</u>	
<u>7109 RECHARGE AND WELL MONITORING PROGRAM</u>	
<u>7200 OBMP PROGRAM ELEMENT 2 - COMPREHENSIVE RECHARGE PROGRAM</u>	
<u>7300 OBMP PROGRAM ELEMENTS 3 & 5 - WATER SUPPLY PLAN - DESALTER</u>	
<u>7400 OBMP PROGRAM ELEMENT 4 - MANAGEMENT ZONE MANAGEMENT STRATEGIES</u>	
<u>7500 OBMP PROGRAM ELEMENTS 6 & 7 - COOPERATIVE EFFORTS AND SALT MANAGEMENT</u>	
<u>7600 OBMP PROGRAM ELEMENTS 8 & 9 - STORAGE MANAGEMENT AND CONJUNCTIVE USE PROGRAMS</u>	
<u>7700 INACTIVE WELL PROTECTION PROGRAM</u>	
7690	RECHARGE IMPROVEMENT DEBT PAYMENT
9502	ALLOCATED G&A EXPENDITURES

CHINO BASIN WATERMASTER
2009-2010 BUDGET
LINE ITEM JUSTIFICATION

Budget Line Number	Comments
SUPPLEMENTAL & REPLENISHMENT WATER INCOME AND EXPENSES	
	Water rights were assigned in the Judgment entered in 1978. It established the terms and conditions regarding replenishment water and how the assessments would be levied to cover the water for each pool. No amounts are budgeted in this category as Watermaster is unable to determine what the overproduction will be at year, if any. Replenishment water is a "pass-thru" expense meaning all amounts overproduced by an agency are billed to them at the rate Watermaster pays for the cost of the water.
4210	App Pool Replenishment Assessments Certain Appropriators under the Judgment have 15% of the cost of replenishment water required by their group and 85% of the cost is paid by the appropriator overproducing water in the prior year. Other Appropriators have the obligation to pay 100% of the costs of replacing any overproduced water.
4211	15% Gross Assessments Costs levied against the 15%/85% group for replacing water.
4212	85% Gross Assessments Costs levied against the 15%/85% group for replacing water.
4213	100% Net Assessments Costs levied against those subject to 100% assessments for replacing water.
4220	Non-Ag Pool Replenishment Non-Ag members (primarily industrial producers) are required to replace any water produced which exceeds their assigned water rights.
5010	GROUNDWATER RECHARGE Costs of Replenishment or Supplemental Water.
5011	Replenishment Water This line covers the costs of purchasing replenishment water from MWD at \$233/AF.
5015	OC-59 Use Fees Connection Fees.
5017	IEUA Surcharges Inland Empire Utilities Agencies charges a fee for water delivered.

**CHINO BASIN WATERMASTER
ASSESSMENT CALCULATION
FISCAL YEAR 2009-2010
ESTIMATED, BASED ON PREVIOUS YEARS ASSESSMENT PACKAGE

	MEMO ONLY FISCAL YEAR 2009-2010 BUDGET TOTALS		ASSESSMENT		APPROPRIATIVE POOL		AGRICULTURAL POOL		NON-AG POOL	
PRODUCTION BASIS										
2006-07 Production & Exchanges in Acre-Feet			130,826,204	76.288%	37,295,410	21.748%	3,369,080	1.965%		
2007-08 Production & Exchanges in Acre-Feet			103,077,958	75.005%	30,909,693	22.492%	3,439,822	2.503%		
BUDGET										
Administration, Advisory Committee & Watermaster Board (1)	\$872,374		\$654,327		\$196,211		\$21,836			
OBMP & Implementation Projects(1)	5,677,182		\$4,258,190			\$1,276,891		\$142,100		
General Admin & OBMP Assessments	6,549,556		654,327		196,211	1,276,891		21,836		142,100
TOTAL BUDGET			6,549,556		654,327	4,258,190		21,836		142,100
Less Budgeted Interest Income	(191,540)									
Contributions from Outside Agencies	(148,410)				(143,665)			(43,080)		(4,794)
CASH DEMAND			6,209,607		654,327	4,003,210		21,836		133,591
OPERATING RESERVE										
Administrative	0	\$0	\$0		\$0			\$0		\$0
OBMP	0	0								
Less: Funds On Hand Utilized for Assessments			0		0			0		0
FUNDS REQUIRED TO BE ASSESSED			\$6,209,607		\$654,327	\$4,003,210		\$1,200,431		\$133,591
Proposed Assessments										
General Administration Assessments		\$6.35	\$6.35		\$6.35		\$6.35	\$38.84		\$38.84
Minimum Assessments		\$5.00	\$5.00		\$5.00		\$5.00	\$5.00		\$5.00
Prior Year Assessments (For Information Only)			\$6.17		\$44.07		\$6.17	\$44.07		\$6.17

(1) Total costs are allocated to Pools by actual production percentages. Does not include Recharge Debt Payment or Replenishment water purchases.

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**Chino Basin Watermaster
Budget and Description of Engineering Tasks
Fiscal Year 2009/2010**

6906 – Optimum Basin Management Program: General Engineering			
Tasks			
<ul style="list-style-type: none"> • Pool, Advisory, Watermaster Meetings • Other General Meetings as Requested • Evaluation of Transfers, Assessment of Supplemental Water Recharge • Miscellaneous Data Requests • Miscellaneous CEO Requests • Project Management • Annual Engineering Updates • Correct New Yield Estimate for Storm Water Recharge. This includes the following subtasks: <ul style="list-style-type: none"> • Update Recharge Information • Storm Water Recharge Quantification • Prepare Reports • Meetings 			
Milestones/Accomplishments			
•			
Budget	Billed	ECAC	Projected (Over)/Under
\$455,003	\$0	\$455,003	\$0

7101 – PEI: Groundwater Production Monitoring Program			
Tasks			
<p><i>Purpose: [Basin Operation] Obtain groundwater production data for private wells. This task is performed jointly by Watermaster and WEI staff.</i></p> <ul style="list-style-type: none"> • Provide Support for Quarterly Meter Reads. This task comprises obtaining quarterly meter reads from about 325 private wells. 			
Milestones/Accomplishments			
•			
Budget	Billed	ECAC	Projected (Over)/Under
\$2,800	\$0	\$2,800	\$0

7103 – PEI: Groundwater Quality Monitoring Program			
Tasks			
<p><i>Purpose: [Basin Plan and Max Benefit] Obtain groundwater quality information in and adjacent to Chino Basin. These data are required for the triennial ambient water quality update mandated by the Basin Plan and for the Hydraulic Control Monitoring Program – a maximum benefit requirement in the Basin Plan. The data are also</i></p>			

used for the Biannual State of the Basin report and estimating influent water quality to desalter wells.

- Obtain Groundwater Quality Data Routinely from about 200 Wells from All Appropriators and Cooperators in and Adjacent to Chino Basin. This represents about 20,000 records in Watermaster's database. Subtasks include:
 - phone calls and meetings with water quality staff
 - uploading hardcopy, spreadsheet, and laboratory electronic data deliverables to Watermaster's database.
- Collect and Analyze Groundwater Quality Samples from About 45 Private Wells. Subtasks include:
 - annual re-evaluation of the key well program due to abandoned and destroyed wells
 - scheduling the field work and coordinating with the analytical laboratory
 - performing the field work
 - uploading field and laboratory data to Watermaster's database.
 - The field work follows the standard operating procedures (SOPs) and the Quality Assurance Project Plan (QAPP) defined in the 2004 HCMP Work Plan.
- Characterize Groundwater Quality Conditions and Trends. Subtasks include:
 - create time-history plots of key water quality constituents, e.g., TDS and nitrate-nitrogen.
 - Create maps showing the spatial distribution of water quality constituents.
 - Attend meetings on regional water quality issues as required (e.g., SAWPA's Emerging Contaminants Workgroup meetings)

Milestones/Accomplishments

Budget	Billed	ECAC	Projected (Over)/Under
\$138,741	\$0	\$138,741	\$0

7104 – PEI: Groundwater Level Monitoring Program

Tasks

Purpose: [Basin Plan and Max Benefit] Obtain groundwater level information in and adjacent to Chino Basin. These data are required for the triennial ambient water quality update mandated by the Basin Plan and for the Hydraulic Control Monitoring Program – a maximum benefit requirement in the Basin Plan. The data are also used for the Biannual State of the Basin report and for the Chino Basin Groundwater Model.

- Collect and Analyze Groundwater Level Measurements from About 122 Wells. Subtasks include:
 - annual re-evaluation of the key well program due to abandoned and destroyed wells
 - scheduling the field work
 - performing the field work: manual measurements are collected monthly at 80 wells and transducer data is downloaded quarterly at 42 wells.
 - process, QC, and upload of manual water level measurements to Watermaster's database

<ul style="list-style-type: none"> • process, QC, and upload of transducer data to Watermaster's database • field work follows the SOPs and the QAPP defined in the 2004 HCMP Work Plan. • Routinely collect, process, QC, and upload water level measurements to Watermaster's database that were compiled by CBWM staff from all Appropriators and Cooperators in and Adjacent to Chino Basin. • Routinely collect, process, QC, and upload transducer data from about 40 wells that was downloaded in the field by CBWM staff. • Characterize Groundwater Level Conditions and Trends. Subtasks include: <ul style="list-style-type: none"> • create time-history plots of groundwater elevations • create maps showing groundwater elevation contours 			
Milestones/Accomplishments			
•			
Budget	Billed	ECAC	Projected (Over)/Under
\$266,946	\$0	\$266,946	\$0

7107 – PEI: Ground Level Monitoring Program			
Tasks			
<p><i>Purposes: 1) To verify the protective nature of the current MZ-I Plan with regard to permanent land subsidence and ground fissuring in the Managed Area.</i></p> <p><i>2) To develop a pumping and recharge plan to minimize the risk of future land subsidence and ground fissuring across all of MZ-I.</i></p> <ul style="list-style-type: none"> • Setup and Maintenance of Monitoring Network. Subtasks include: <ul style="list-style-type: none"> • Equipment maintenance at the Ayala Park Extensometer and across entire monitoring network • Aquifer System Monitoring and Testing. Subtasks include: <ul style="list-style-type: none"> • Collection and organization of groundwater-level and groundwater-production data from wells in MZI monitoring network • Conduct ASR pilot test at Well CH-16 • Aquifer System Monitoring and Testing – Outside Pro (ASR pilot test at Well CH-16) • Ground Level Surveys. Subtasks include: <ul style="list-style-type: none"> • Conduct Fall 2009 ground-level survey and EDMs (horizontal monitoring) in Managed Area • Conduct Spring 2010 survey (EDMs only) • Replace destroyed benchmarks • Ground Level Surveys - Outside Pro • InSAR – multiple interferograms across entire Chino Basin for 2009-10 • InSAR - Outside Pro • Water-supply Planning within the Managed Area 			
Milestones/Accomplishments			

Budget	Billed	ECAC	Projected (Over)/Under
\$548,653	\$0	\$548,653	\$0

7108 – PEI: Hydraulic Control Monitoring Program

Tasks

Purpose: [Basin Plan and Max Benefit] Obtain surface water discharge and water quality data from the Santa Ana River and its tributaries and groundwater quality information in and adjacent to Chino Basin. These data are required by the Basin Plan (the surface water stations and frequencies are specified in Table 5-8a) and for the Hydraulic Control Monitoring Program – a maximum benefit requirement in the Basin Plan. The data are also used for the Biannual State of the Basin report and for the Chino Basin Groundwater Model.

- Measure Discharge at Specified Surface Water Stations in the Santa Ana River and Tributaries. Direct Discharge measurements are made at 6 stations every other week. Subtasks include:
 - scheduling the field work
 - performing the field work
 - QA/QC'ing the discharge calculations
 - uploading the discharge data to Watermaster's database.
 - The field work follows the SOPs and the QAPP defined in the 2004 HCMP Work Plan.
- Collect Grab Surface Water Quality Samples at Specified Surface Water Stations in the Santa Ana River and Tributaries. Samples are collected at 14 stations every other week. Samples are also collected from three POTWs. Data from IEUA's POTW discharges are obtained from IEUA. Subtasks include:
 - scheduling the field work and coordinating with the analytical laboratory
 - performing the field work
 - uploading field and laboratory data to Watermaster's database.
- Collect annual groundwater quality samples from the 21 HCMP monitoring wells. Subtasks include:
 - scheduling the field work and coordinating with the analytical laboratory
 - performing the field work
 - uploading field and laboratory data to Watermaster's database.
- Collect near-river groundwater samples at the NAWQA and SARWC Wells. The 2 NAWQA and 2 SARWC wells are sampled monthly. Subtasks include:
 - scheduling the field work and coordinating with the analytical laboratory
 - performing the field work
 - uploading field and laboratory data to Watermaster's database.
- Routinely collect discharge data from the Santa Ana River and its tributaries measured by the USGS and collect treatment plant effluent discharge and water quality data collected by The City of Riverside, the City of Corona, and the WRRCRWA. All data are processed, checked for QA/QC and loaded to Watermaster's database.
- Interpretation of HCMP Data and Data Analyses/Comparison with Metrics. All data generated in

the HCMP, as well as the GWQMP and the GWLMP will be analyzed and used to demonstrate the degree of hydraulic control obtained by basin re-operation and desalter production.			
<ul style="list-style-type: none"> • 2009 Aerial Photograph. Watermaster will purchase a compressed, digital 2009 Aerial Photograph of the Chino Basin Area in support of the HCMP. • HCMP Monitoring Well Master Plan and Grant Applications. Watermaster and IEUA will develop a master plan of new monitoring wells that will be required to demonstrate hydraulic control in Chino Basin as part of the Maximum Benefit requirement. Approximately two nests of wells are proposed per year beginning in FY 2010/11. The agencies will endeavor to seek grant funding whenever possible. • Reports—Compose four quarterly data reports and one annual HCMP report (draft and final). • Meetings 			
Milestones/Accomplishments			
.			
Budget	Billed	ECAC	Projected (Over)/Under
\$553,479	\$0	\$553,479	\$0

7109 – PE1: Recharge and Well Monitoring Program: Pursuant to the Groundwater Recharge Permit and Maximum Benefit			
Tasks			
<ul style="list-style-type: none"> • Review Quarterly and Annual Reports for Chino Basin Recycled Water Groundwater Recharge Program • Review results of the Brooks Basin Tracer Test. • Review Start-Up Protocol Reports as needed. 			
Milestones/Accomplishments			
.			
Budget	Billed	ECAC	Projected (Over)/Under
\$9,152	\$0	\$9,152	\$0

7202 – PE2: Recharge Master Plan (Conducted over a Two-Year Period) (FY 08/09 and FY 09/10)			
Tasks			
<p><i>Purpose: December 21, 2007 Court Order, Condition Subsequent No. 5: “By July 1, 2008, Watermaster shall submit to the Court a detail outline of the scope and content of its first Recharge Master Plan Update, and shall report its progress by January 1, 2009 and July 1, 2009. December 21, 2007 Court Order, Condition Subsequent No. 8: “By July 1, 2010, Watermaster shall submit to the Court for approval an updated Recharge Master Plan. The updated Recharge Master Plan shall include all the elements listed in the <u>Special Referee’s</u></i></p>			

Final Report and Recommendations.

- Task 1 Project Management
- Task 2: Collect, Compile, and Review Data and Reports
- Task 3: Develop Planning Criteria
- Task 4: Characterize How Land Use Decisions and Storm Water Management Affect Safe Yield
- Task 5: Conduct Initial Integrated Review of Water Demands and Water Supply Plans
- Task 6: Describe Storm Water Recharge and Recharge Enhancement Opportunities
- Task 7: Describe Supplemental Water Recharge and Supplemental Water Recharge Enhancement Opportunities
- Task 8: Integrate Storm and Supplemental Water Recharge Projects
- Task 9: Conduct Final Integrated Review of Water Demands and Water Supply Plans
- Task 10: Prepare Recharge Master Plan
- Task 11: Prepare Final Report

Milestones/Accomplishments

•			
Budget	Billed	ECAC	Projected (Over)/Under
\$560,425	\$0	\$560,425	\$0

7202.Y – PE3: Subsurface Investigation of the Wineville Basin

Tasks

- Develop and Implement the Field Program
- Review the Field Program Data
- Prepare Reports

Milestones/Accomplishments

•			
Budget	Billed	ECAC	Projected (Over)/Under
\$77,625	\$0	\$77,625	\$0

7303 – PE3/5: Water Supply Plan for Desalter

Tasks

Purpose: [Basin Plan and Max Benefit] Plan, site, drill, and construct wells for the Chino Creek Desalter Well Field. This well field is required for hydraulic control in the southwest portion of Chino Basin – hydraulic control is a necessary condition for maximum benefit in the Basin Plan.

- Chino Creek Desalter Well Field. Subtasks include:

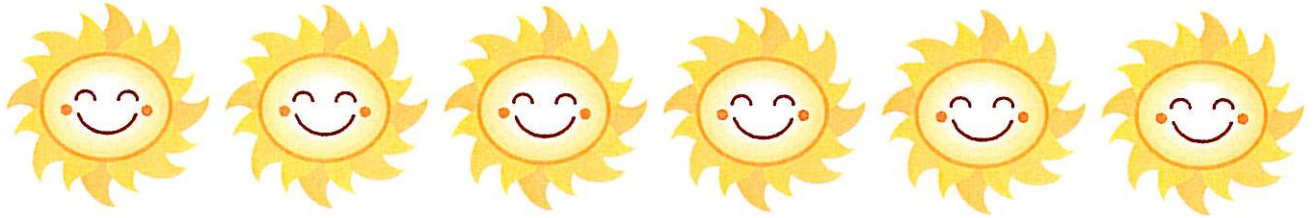
<ul style="list-style-type: none"> • Coordination with CDA, other agencies, and consultant for desalter well field development. • Review conceptual siting. • Review test well siting. • Review of lithologic geophysical logs and review well design. • Provide groundwater flow modeling to assess the effects of planned desalter well field operations, including the addition of new wells. 			
Milestones/Accomplishments			
•			
Budget	Billed	ECAC	Projected (Over)/Under
\$72,309	\$0	\$72,309	\$0

7402 – PE4: Management Zone Strategies			
Tasks			
<p><i>Purposes: 1) To verify the protective nature of the current MZ-1 Plan with regard to permanent land subsidence and ground fissuring in the Managed Area.</i></p> <p><i>2) To develop a pumping and recharge plan to minimize the risk of future land subsidence and ground fissuring across all of MZ-1.</i></p> <p><i>3) To assess groundwater quality conditions in Management Zone 3. MZ-3 monitoring program has been on-going for three years. The monitoring program will be completed this fiscal year with the completion of the final report.</i></p> <ul style="list-style-type: none"> • PE4/MZ-1: Data Analyses and Reports. Subtasks include: <ul style="list-style-type: none"> • Analysis of production, piezometric, extensometer, ground-level survey, horizontal strain, InSAR, and seismic data • Preparation of MZ1 Annual Report • Update of MZ1 Plan • PE4/MZ-1: Meetings and Admin 			
Milestones/Accomplishments			
•			
Budget	Billed	ECAC	Projected (Over)/Under
\$81,280	\$0	\$81,280	\$0

7502 – PE6/7: Cooperative Efforts/Salt Management			
Tasks			
<p><i>Purpose: These tasks address special water quality issues that impact Chino Basin.</i></p> <ul style="list-style-type: none"> • Water Quality Committee Meetings. This task assumes four, quarterly meetings with the WQC. 			

<ul style="list-style-type: none"> As Needed Investigations (e.g., perchlorate isotopes). This task is for special water quality studies, for example, a perchlorate isotope source study of Hole Lake, and/or a study of low detection limit perchlorate in the Santa Ana River and potential impacts to Chino Basin due to increased desalter and JCSD pumping. Ontario International Airport VOC Plume. Subtasks include: <ul style="list-style-type: none"> coordination and negotiation with OIA PRPs oversight of monitoring well drilling, construction, and testing Chino Airport VOC Plume. Subtasks include: <ul style="list-style-type: none"> coordination and negotiation with Chino Airport PRP. Bloomington Divide Water Level Investigation 			
Milestones/Accomplishments			
.			
Budget	Billed	ECAC	Projected (Over)/Under
\$162,313	\$0	\$162,313	\$0

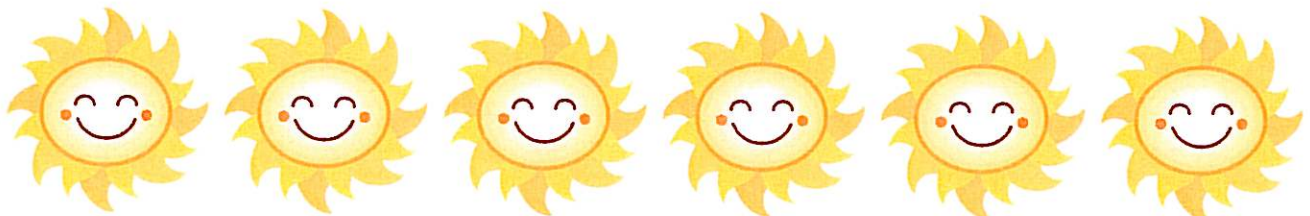
7602 – PE8/9: Storage Management & Conjunctive Use			
Tasks			
<ul style="list-style-type: none"> General Consulting SDCWA and CLWA Program Metropolitan 			
Milestones/Accomplishments			
.			
Budget	Billed	ECAC	Projected (Over)/Under
\$20,087	\$0	\$20,087	\$0



CHINO BASIN WATERMASTER

II. BUSINESS ITEM

C. APPLICATION FOR STORAGE ACCOUNT





CHINO BASIN WATERMASTER

9641 San Bernardino Road, Rancho Cucamonga, Ca 91730
Tel: 909.484.3888 Fax: 909.484.3890 www.cbwm.org

KENNETH R. MANNING
Chief Executive Officer

STAFF REPORT

DATE: May 14, 2009
May 19, 2009

TO: Committee Members

SUBJECT: Consider Approval Application for a Storage Account by IEUA, TVMWD, and WMWD on behalf of Metropolitan Water District of Southern California for an additional 74,000.000 acre-feet in addition to the 100,000.000 acre-feet existing Storage Account

SUMMARY

Recommendation - Staff recommends that any approval of the Application be conditioned upon compliance with the WEI Material Physical Injury Report discussed in the staff report. However, concerns exist about compliance of the Application with the Peace Agreement. Staff requests a recommendation from the Appropriative Pool as to how the Pool believes the Application should proceed through the Watermaster process.

I. INTRODUCTION

The Inland Empire Utilities Agency (IEUA), Three Valleys Municipal Water District (TVMWD), and Western Municipal Water District (WMWD), on behalf of the Metropolitan Water District of Southern California (Metropolitan), have submitted an Application under Article X of the Watermaster Rules and Regulations for a storage account in the amount of an additional 74,000.000 acre-feet in addition to the 100,000.000 acre-feet existing Storage Account.

This Application has been submitted in order to implement future amendments to the terms of the existing Groundwater Storage Program Funding Agreement by and among Metropolitan, IEUA, TVMWD, WMWD, and the Chino Basin Watermaster (Agreement No. 49960) that was approved by the Watermaster Board on October 23, 2003. These amendments are described in "Joint Participation Agreement No. 93343" between the Chino Desalter Authority ("CDA"), IEUA, WMWD and Metropolitan. This agreement was included in the submittal of the Application and provides for subsidies for the Chino II Desalter. Section

7.4 of Agreement No. 93343 specifies that if the expansion of the Dry Year Yield account is not approved by September 1, 2009, then the agreement to provide the subsidy for the Chino II Desalter will terminate.¹

II. ARTICLE X APPLICATION RULES AND PROCEDURES

Under Watermaster's Rules and Regulations § 10.7, any person may request Watermaster's approval of an Agreement to participate in a Storage and Recovery Program by submitting an Application to Watermaster that, at a minimum, includes the following information:

- (a) The identity of the person(s) that will Recharge, Store and Recover the water as well as its ultimate place of use;
- (b) The quantity of water to be Stored and Recovered;
- (c) The proposed schedule for the Recharge of water for storage, if any;
- (d) The proposed schedule and method for Recovery;
- (e) The location of the Recharge facilities through which the Stored Water will be recharged;
- (f) The location of the Production facilities through which the Stored Water will be recovered;
- (g) The water levels and water quality of the Groundwater in the areas likely to be affected by the Storage and Recovery, if known; and
- (h) Any other information that Watermaster requires to be included.

Watermaster shall have no obligation to process incomplete Applications. (Rules § 10.3(a).) Watermaster staff has reviewed the Application and the previously approved Funding Agreement and finds that the information required by the Rules and Regulations has been provided as reasonably required to allow Watermaster to analyze the Application for its potential to cause Material Physical Injury.

Under Rules and Regulations § 8.1(h), each Groundwater Storage Agreement shall include but not be limited to the following components [Judgment Exhibit "I" ¶ 3.]:

- (i) The quantities and the term of the storage right, which shall specifically exclude credit for any return flows;
- (ii) A statement of the priorities of the storage right as against overlying, Safe Yield uses, and other storage rights;
- (iii) The delivery rates, together with schedules and procedures for spreading, injection or in-lieu deliveries of Supplemental Water for direct use;
- (iv) The calculation of storage water losses and annual accounting for water in storage; and
- (v) The establishment and administration of withdrawal schedules, locations and methods.

Under the Rules and Regulations § 8.1(f)(ii), Watermaster may not approve an Application to store and Recover water if it is inconsistent with the terms of the Peace Agreement or will cause any Material Physical Injury to any party to the Judgment or the Basin. Any potential or threatened Material Physical Injury to any party to the Judgment or the Basin caused by the storage and Recovery of water shall be reasonably and fully mitigated as a condition of approval. In the event the Material Physical Injury cannot be mitigated, the request for storage and Recovery must be denied. (Peace Agreement § 5.2 (a) (iii).) Applications for the storage of Supplemental Water shall be processed in accordance with the provisions of Article X.

Under the Rules and Regulations section 10.13, following consideration of an Application by each Pool Committee, a Contest to the Application may be filed by any party to the Judgment. Contests shall be submitted a minimum of fourteen (14) days prior to the date scheduled for Advisory Committee consideration and possible action. Under section 10.11, an Application shall not be considered by the Advisory Committee until at least twenty-one (21) days after the last of the three Pool Committee meetings to consider the matter. Under section 10.17(a), Watermaster shall not deny an uncontested Application until it has referred the matter to a hearing officer.

¹ Section 7.4 of Agreement No. 93343 also specifies that approval of an elimination of losses to the DYY account must be approved by September 1, 2009 in order to avoid termination of the subsidy. The issue of loss elimination does not appear to be addressed in the Application.

III. PEACE AGREEMENT

Peace Agreement section 5.2(c)(iv)(b) requires that Watermaster shall prioritize its efforts to regulate and condition the storage and recovery of water developed in a Storage and Recovery Program for the mutual benefit of the parties to the Judgment and give first priority to Storage and Recovery Programs that provide broad mutual benefits.

Peace Agreement section 7.4(b) describes the order of priority of various sources of funding to satisfy all unmet capital, operation and maintenance costs relative to the Chino II Desalter. The fourth source of funding is, "MWD subsidies or other funding without committing the storage space of the Chino Basin under any storage and recovery or conjunctive use agreement, such as that secured pursuant to Agreement Number 7658, between MWD, SAWPA, IEUA, WMWD and OCWD dated December 7, 1995, and entitled "Chino Basin Desalinization Program, Phase I, Joint Participation Agreement for Recovery and Utilization of Contaminated Groundwater."

IV. SUMMARY OF THE APPLICATION

The Application identifies the maximum quantity of the storage account to be an additional 74,000.000 acre-feet in addition to the 100,000.000 acre-feet existing storage account. This is within the targeted 500,000.000 acre-feet identified in the Peace Agreement as the Storage and Recovery Program.

The Application identifies the method of placement of water in storage as in-lieu delivery by Metropolitan and direct injection with aquifer storage and recovery wells. The specific amount of water to be delivered into storage will be determined according to availability by the Operating Committee under Agreement No. 49960 and future amendments to it. However, the maximum that can be placed into storage in any one year is 50,000.000 acre-feet (16,667.000 acre-feet in addition to the current 33,333.000 acre-feet).

Recapture from storage will be accomplished by pumping from wells. Likely, new wells will be constructed, as well as new treatment facilities for existing impaired wells. A list of new wells to be constructed under the Program will be included in future amendments to Agreement No. 49960. While these new facilities are constructed in order to provide the ability to recapture the water out of storage, it is recognized that the production of water out of the storage account will be determined by the Operating Committee by looking at the gross production from the participating entities and comparing this with past pumping. Under the Application, the maximum amount that can be recaptured from storage in any one year is 50,000.000 acre-feet (16,667.000 acre-feet addition to the current 33,333.000 acre-feet).

Specific commitments by the appropriators to take the in lieu deliveries of water and to shift to increased groundwater pumping to accomplish the recapture of water are detailed in the Local Agency Agreements which are being developed for approval by each of the local agencies.

In addition to Form 6, the Application also includes Form 2 (Recharge) and Form 4 (Recapture).

V. SUMMARY OF ANALYSIS OF POTENTIAL TO CAUSE MATERIAL PHYSICAL INJURY

In addition to providing a summary of the Application, Watermaster's notice of the Application is required to provide a reasonable preliminary analysis of the potential for the activities described in the Application to result in Material Physical Injury (Rules § 10.10)

In the latter half of 2008, an investigation was completed to evaluate the feasibility of the Expansion. This analysis was published as the *Chino Basin Dry-Year Yield Program Expansion Project Development Report* (Black & Veatch, 2008). Three expansion alternatives were developed and evaluated. Wildermuth Environmental Inc. (WEI), at the direction of the Watermaster, conducted a Material Physical Injury analysis on these expansion alternatives. The detailed Material Physical analysis is attached. The IEUA adopted a mitigated negative declaration for the Expansion in December 2008.

Based on WEI's analysis, Material Physical Injury—related to storage losses, groundwater level changes, and plume migration—will occur; however, this Material Physical Injury can be mitigated if the mitigation measures from the Mitigated Negative Declaration are substantially expanded and included in the DYY Program Expansion agreements.

VI. ANALYSIS AND STAFF RECOMMENDATION

At the April Pool meetings, Watermaster staff was made aware that one or more member of the Appropriative Pool may contest approval of the Application as a violation of the Peace Agreement section 7.4(b)(iv). Watermaster is not aware of any steps that have been taken by any of the Appropriative Pool members that are parties to Agreement No. 93343 or by any of the members of the Pool that may contest approval of the Application to find a resolution of the situation. Watermaster staff raised this issue as part of the March Pool agenda so that the relevant parties could confer about resolution.

It appears that the exchange described by the Joint Participation Agreement No. 93343 currently violates section 7.4(b)(iv) of the Peace Agreement. Given the current situation, staff would not likely be able to recommend approval of the Application to the Watermaster Board. Watermaster staff thus asks for a recommendation from the Appropriative Pool as to how it would like the Application to proceed through the Watermaster process.

In addition, Staff recommends that the Appropriative Pool recommend that if the Board ultimately approves the Application, that approval should be conditioned on implementation of WEI's recommendations regarding mitigation of potential Material Physical Injury.

CHINO BASIN WATERMASTER

NOTICE

OF

APPLICATION(S)

RECEIVED FOR

WATER TRANSACTION – STORAGE ACCOUNT

Date of Notice:

March 27, 2009

This notice is to advise interested persons that the attached application will come before the Watermaster Board on or after 90 days from the date of this notice.

NOTICE OF APPLICATION(S) RECEIVED

Date of Applications: **March 20, 2009**

Date of this notice: **March 26, 2009**

Please take notice that the following Application has been received by Watermaster:

- A. Notice of Application for a Storage Account by IEUA, TVMWD, and WMWD on behalf of Metropolitan Water District of Southern California for an additional 74,000.000 acre-feet in addition to the 100,000.000 acre-feet existing Storage Account

This *Application* will first be considered by each of the respective pool committees on the following dates:

Agricultural Pool: May 19, 2009

Appropriative Pool: May 14, 2009

Non-Agricultural Pool: May 14, 2009

This *Application* will be scheduled for consideration by the Advisory Committee *no earlier than ninety-days from the date of this notice and a minimum of twenty-one calendar days* after the last pool committee reviews it.

After consideration by the Advisory Committee, the *Application* will be considered by the Board.

Unless the *Application* is amended, parties to the Judgment may file *Contests* to the *Application* with Watermaster *within seven calendar days* of when the last pool committee considers it. Any *Contest* must be in writing and state the basis of the *Contest*.

Watermaster address:

Chino Basin Watermaster
9641 San Bernardino Road
Rancho Cucamonga, CA 91730

Tel: (909) 484-3888
Fax: (909) 484-3890



CHINO BASIN WATERMASTER

9641 San Bernardino Road, Rancho Cucamonga, Ca 91730
Tel: 909.484.3888 Fax: 909.484.3890 www.cbwm.org

KENNETH R. MANNING
Chief Executive Officer

DATE: March 27, 2009

TO: Active Parties of Chino Basin Watermaster

SUBJECT: Summary and Analysis
Notice of Application for a Storage Account by IEUA, TVMWD, and WMWD on behalf of Metropolitan Water District of Southern California for an additional 74,000.000 acre-feet in addition to the 100,000.000 acre-feet existing Storage Account

I. INTRODUCTION

The Inland Empire Utilities Agency (IEUA), Three Valleys Municipal Water District (TVMWD), and Western Municipal Water District (WMWD), on behalf of the Metropolitan Water District of Southern California (Metropolitan), have submitted an Application under Article X of the Watermaster Rules and Regulations for a storage account in the amount of an additional 74,000.000 acre-feet in addition to the 100,000.000 acre-feet existing Storage Account. This Application has been submitted in order to implement future amendments to the terms of the existing Groundwater Storage Program Funding Agreement by and among Metropolitan, IEUA, TVMWD, WMWD, and the Chino Basin Watermaster (Agreement No. 49960) that was approved by the Watermaster Board on October 23, 2003.

II. ARTICLE X APPLICATION RULES AND PROCEDURES

Under Watermaster's Rules and Regulations § 10.7, any person may request Watermaster's approval of an Agreement to participate in a Storage and Recovery Program by submitting an Application to Watermaster that, at a minimum, includes the following information:

- (a) The identity of the person(s) that will Recharge, Store and Recover the water as well as its ultimate place of use;
- (b) The quantity of water to be Stored and Recovered;
- (c) The proposed schedule for the Recharge of water for storage, if any;
- (d) The proposed schedule and method for Recovery;
- (e) The location of the Recharge facilities through which the Stored Water will be recharged;
- (f) The location of the Production facilities through which the Stored Water will be recovered;
- (g) The water levels and water quality of the Groundwater in the areas likely to be affected by the Storage and Recovery, if known; and
- (h) Any other information that Watermaster requires to be included.

Watermaster shall have no obligation to process incomplete Applications. (Rules § 10.3(a).) Watermaster staff has reviewed the Application and the previously approved Funding Agreement and finds that the information required by the Rules and Regulations has been provided as reasonably required to allow Watermaster to analyze the Application for its potential to cause Material Physical Injury.

Under Rules and Regulations § 8.1(h), each Groundwater Storage Agreement shall include but not be limited to the following components [Judgment Exhibit "I" ¶ 3.]:

- (i) The quantities and the term of the storage right, which shall specifically exclude credit for any return flows;
- (ii) A statement of the priorities of the storage right as against overlying, Safe Yield uses, and other storage rights;
- (iii) The delivery rates, together with schedules and procedures for spreading, injection or in-lieu deliveries of Supplemental Water for direct use;
- (iv) The calculation of storage water losses and annual accounting for water in storage; and
- (v) The establishment and administration of withdrawal schedules, locations and methods.

Under the Rules and Regulations § 8.1(f)(ii), Watermaster may not approve an Application to store and Recover water if it is inconsistent with the terms of the Peace Agreement or will cause any Material Physical Injury to any party to the Judgment or the Basin. Any potential or threatened Material Physical Injury to any party to the Judgment or the Basin caused by the storage and Recovery of water shall be reasonably and fully mitigated as a condition of approval. In the event the Material Physical Injury cannot be mitigated, the request for storage and Recovery must be denied. (Peace Agreement § 5.2 (a) (iii).) Applications for the storage of Supplemental Water shall be processed in accordance with the provisions of Article X.

III. SUMMARY OF THE APPLICATION

The Application identifies the maximum quantity of the storage account to be an additional 74,000.000 acre-feet in addition to the 100,000.000 acre-feet existing storage account. This is within the targeted 500,000.000 acre-feet identified in the Peace Agreement as the Storage and Recovery Program.

The Application identifies the method of placement of water in storage as in-lieu delivery by Metropolitan and direct injection with aquifer storage and recovery wells. The specific amount of water to be delivered into storage will be determined according to availability by the Operating Committee under Agreement No. 49960 and future amendments to it. However, the maximum that can be placed into storage in any one year is 50,000.000 acre-feet (16,667.000 acre-feet in addition to the current 33,333.000 acre-feet).

Recapture from storage will be accomplished by pumping from wells. Likely, new wells will be constructed, as well as new treatment facilities for existing impaired wells. A list of new wells to be constructed under the Program will be included in future amendments to Agreement No. 49960. While these new facilities are constructed in order to provide the ability to recapture the water out of storage, it is recognized that the production of water out of the storage account will be determined by the Operating Committee by looking at the gross production from the participating entities and comparing this with past pumping. Under the Application, the maximum amount that can be recaptured from storage in any one year is 50,000.000 acre-feet (16,667.000 acre-feet addition to the current 33,333.000 acre-feet).

Specific commitments by the appropriators to take the in lieu deliveries of water and to shift to increased groundwater pumping to accomplish the recapture of water are detailed in the Local Agency Agreements which are being developed for approval by each of the local agencies.

In addition to Form 6, the Application also includes Form 2 (Recharge) and Form 4 (Recapture).

IV. SUMMARY OF ANALYSIS OF POTENTIAL TO CAUSE MATERIAL PHYSICAL INJURY

In addition to providing a summary of the Application, Watermaster's notice of the Application is required to provide a reasonable preliminary analysis of the potential for the activities described in the Application to result in Material Physical Injury (Rules § 10.10)

In the latter half of 2008, an investigation was completed to evaluate the feasibility of the Expansion. This analysis was published as the *Chino Basin Dry-Year Yield Program Expansion Project Development Report* (Black & Veatch, 2008). Three expansion alternatives were developed and evaluated. Wildermuth Environmental Inc. (WEI), at the direction of the Watermaster, conducted a Material Physical Injury analysis on these expansion alternatives. The detailed Material Physical analysis is attached. The IEUA adopted a mitigated negative declaration for the Expansion in December 2008.

Based on WEI's analysis, Material Physical Injury—related to storage losses, groundwater level changes, and plume migration—will occur; however, this Material Physical Injury can be mitigated if the mitigation measures from the Mitigated Negative Declaration are substantially expanded and included in the DYY Program Expansion agreements.

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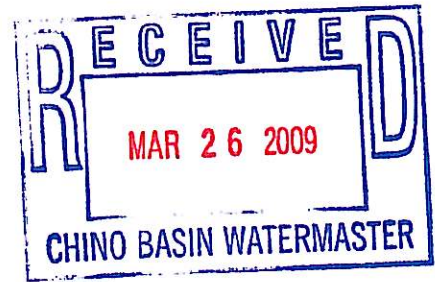


Inland Empire Utilities Agency

A MUNICIPAL WATER DISTRICT

6075 Kimball Ave, • Chino, CA 91708
P.O. Box 9020 • Chino, Hills, CA 91709
TEL (909) 993-1600 • FAX (909) 597-8875
www.ieua.org

March 20, 2009



Mr. Kenneth Manning, Chief Executive Officer
Chino Basin Watermaster
8632 Archibald Ave, Suite 109
Rancho Cucamonga, CA 91730

Subject: Application for an additional 74,000 AF Storage and Recovery Program, to the existing approved 100,000 AF The Metropolitan Water District of Southern California (MWD) storage account, with MWD and the local Dry Year Yield Conjunctive Use Program (Expansion) participating agencies.

Dear Mr. Manning:

On behalf of The Metropolitan Water District of Southern California (MWD) and the Dry Year Yield Conjunctive Use Program (Expansion), Inland Empire Utilities Agency (IEUA), Three Valleys Municipal Water District (TVMWD) and Western Municipal Water District (WMWD) jointly submit this letter along with; Chino Basin Watermaster Forms 2, 4 and 6, "Agreement No. 49960, Dry Year Yield Conjunctive Use Program" and "Agreement No. 93343, Chino Basin Desalination Program (Phase II)."

These application documents are submitted consistent with the requirements for Regional Storage and Recovery Program Section 5.2 provisions of the Peace Agreement and the Rules and Regulations of Section 8.3. The requirements of Section 10.7 of the Rules and Regulations and are summarized below:

- (A) MWD, through its member agencies, IEUA, TVMWD and WMWD, will provide imported water for storage and recovery via direct replenishment, injection (ASR wells), and in-lieu.
- (B) Consistent with Agreement No. 49960, as amended in the future between MWD, TVMWD, IEUA and Chino Basin Watermaster, the amount of water placed into storage and recovered from storage will be administered through an Operating Committee.
- (C) The ability to put water into the MWD account will be based on availability of imported water and also be consistent with Agreement No. 49960, as amended in the future.

Fifty-Five Years of Excellence in Water Resources & Quality Management

Terry Callin
President

Angel Santlago
Vice President

Michael E. Camacho
Secretary/Treasurer

Gene Koopman
Director

John L. Anderson
Director

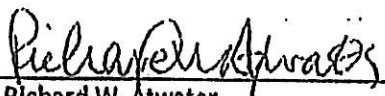
Richard W. Atwater
Chief Executive Officer
General Manager

- (D) The schedule for recovery of MWD water will be based on the timing of a call from MWD, and the development of annual Operating Plans with participating agencies and will also be consistent with Agreement No. 49960, as amended in the future.
- (E) The location of the Dry Year Yield Conjunctive Use Program (Expansion) groundwater recharge facilities have been CEQA certified by IEUA and are fully described in the report titled "Optimum Basin Management Program, Chino Basin Dry Year Yield Program Expansion Project Development Report," dated December 2008.
- (F) The locations of the Dry Year Yield Conjunctive Use Program (Expansion) groundwater production facilities have been CEQA certified by IEUA and are fully described in the report titled "Optimum Basin Management Program, Chino Basin Dry Year Yield Program Expansion Project Development Report," dated December 2008.
- (G) Water level and water quality information is documented in the "Optimum Basin Management Program, Chino Basin Dry Year Yield Program Expansion Project Development Report," dated December 2008.

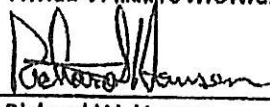
The Inland Empire Utilities Agency certified the CEQA documentation on December 17, 2008. As part of the CEQA analysis, a four volume "Optimum Basin Management Program, Chino Basin Dry Year Yield Project Development Report" was published and should be incorporated with this letter application to Chino Basin Watermaster.

Sincerely,

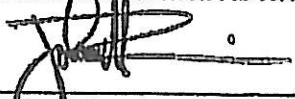
INLAND EMPIRE UTILITIES AGENCY

By 
Richard W. Atwater
General Manager

THREE VALLEYS MUNICIPAL WATER DISTRICT

By 
Richard W. Hansen
General Manager

WESTERN MUNICIPAL WATER DISTRICT

By 
John V. Rossi
General Manager

Cc: Brian Thomas (MWD)
Kathy Kunysz (MWD)

Attachments:

1. Chino Basin Watermaster Form 2 – Application for Recharge
2. Chino Basin Watermaster Form 4 – Application to Recapture Water in Storage
3. Chino Basin Watermaster Form 6 – Application to Participate In a Storage & Recovery Program
4. Agreement No. 49960, Dry Year Yield Conjunctive Use Program; and
5. Agreement No. 93343, Chino Basin Desalination Program (Phase II)
6. Optimum Basin Management Program, Chino Basin Dry Year Yield Program Expansion Project Development Report (December 2008) – 4 Volume CD

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**APPLICATION OR AMENDMENT TO APPLICATION
FOR
RECHARGE**

APPLICANT

Inland Empire Utilities Agency,
Three Valleys Municipal Water District, and
Western Municipal Water District on behalf of
Metropolitan Water District of Southern California
Name

March 9, 2009
Date Requested

Date Approved

6075 Kimball Avenue
Street Address

74,000.00* Acre-feet
Amount Requested

Acre-feet
Amount Approved

Chino

CA

91708

16,667.00 AFY**

12 Months

City

State

Zip Code

Projected Rate of
Recapture

Projected
Duration of
Recapture

Telephone: (909) 993-1600

Facsimile: (909) 993-1983

* This would be an additional 74,000.00 AF added to an existing storage account of 100,000.00 AF, approved in 2003.

** This would be an additional 16,667.00 AF added to an existing recapture rate of 33,000.00 AFY, approved in 2003.

SOURCE OF SUPPLY

Water from:

- State Water Project
- Colorado River
- Local Supplemental
- Recycled Water
- Other, explain

Source: Metropolitan Water District of Southern California

METHOD OF RECHARGE

PERCOLATION (Locations and methods of recharge are described in the CEQA documentation.)

INJECTION

EXCHANGE

WATER QUALITY AND WATER LEVELS

What is the Existing water quality and what are the existing water levels in the areas that are likely to be affected?

See Watermaster Summary and Analysis of Application and reports by Wildermuth Environmental.

MATERIAL PHYSICAL INJURY

Is the Applicant aware of any potential Material Physical Injury to a party to the Judgment or the Basin That may be caused by the action covered by the application? Yes [X] No []
See CEQA documentation for mitigation measures.

If yes, what are the proposed mitigation measures, if any, that might reasonably be imposed to ensure that the action does not result in Material Physical Injury to a party to the Judgment or the Basin?

ADDITIONAL INFORMATION ATTACHED Yes [X] No []

Inland Empire Utilities Agency

Three Valleys Municipal Water District

Western Municipal Water District
Applicants

TO BE COMPLETED BY WATERMASTER:

DATE OF APPROVAL FROM NON-AGRICULTURAL POOL: _____

DATE OF APPROVAL FROM AGRICULTURAL POOL: _____

DATE OF APPROVAL FROM APPROPRIATIVE POOL: _____

HEARING DATE, IF ANY: _____

DATE OF ADVISORY COMMITTEE APPROVAL: _____


DATE OF BOARD APPROVAL: _____

MATERIAL PHYSICAL INJURY

Is the Applicant aware of any potential Material Physical Injury to a party to the Judgment or the Basin That may be caused by the action covered by the application? Yes [X] No []
See CEQA documentation for mitigation measures.

If yes, what are the proposed mitigation measures, if any, that might reasonably be imposed to ensure that the action does not result in Material Physical Injury to a party to the Judgment or the Basin?

ADDITIONAL INFORMATION ATTACHED Yes [X] No []

Inland Empire Utilities Agency 

Three Valleys Municipal Water District 

Western Municipal Water District
Applicants

TO BE COMPLETED BY WATERMASTER:

DATE OF APPROVAL FROM NON-AGRICULTURAL POOL: _____

DATE OF APPROVAL FROM AGRICULTURAL POOL: _____

DATE OF APPROVAL FROM APPROPRIATIVE POOL: _____

HEARING DATE, IF ANY: _____

DATE OF ADVISORY COMMITTEE APPROVAL: _____

DATE OF BOARD APPROVAL: _____

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**APPLICATION OR AMENDMENT TO APPLICATION
TO
RECAPTURE WATER IN STORAGE**

APPLICANT

Inland Empire Utilities Agency,
Three Valleys Municipal Water District, and
Western Municipal Water District on behalf of
Metropolitan Water District of Southern California
Name

March 9, 2009

Date Requested

_____ Date Approved

6075 Kimball Avenue
Street Address

74,000.00* Acre-feet
Amount Requested

_____ Acre-feet
Amount Approved

Chino

CA

91708

16,667.00 AFY**

12 Months

City

State

Zip Code

Projected Rate of
Recapture

Projected
Duration of
Recapture

Telephone: (909) 993-1600

Facsimile: (909) 993-1983

* This would be an additional 74,000.00 AF added to an existing storage account of 100,000.00 AF, approved in 2003.

** This would be an additional 16,667.00 AF added to an existing recapture rate of 33,000.00 AFY, approved in 2003.

**IS THIS AN AMENDMENT TO A PREVIOUSLY APPROVED APPLICATION? [X] YES [] NO
IF YES, ATTACH APPLICATION TO BE AMENDED**

IDENTITY OF PERSON THAT STORED THE WATER: Metropolitan Water District of Southern California

PURPOSE OF RECAPTURE

- Pump when other sources of supply are curtailed
- Pump to meet current or future demand over and above production right
- Pump as necessary to stabilize future assessment amounts
- Other, explain: Pump pursuant to call by Metropolitan of stored water

METHOD OF RECAPTURE (if by other than pumping) (e.g. exchange)

PLACE OF USE OF WATER TO BE RECAPTURED

Within service area of agencies participating in Metropolitan Funding Agreement (see attached shift obligation schedule).

LOCATION OF RECAPTURE FACILITIES (IF DIFFERENT FROM REGULAR PRODUCTION FACILITIES)

Facilities constructed pursuant to Metropolitan Funding Agreement.

WATER QUALITY AND WATER LEVELS

What is the existing water quality and what are the existing water levels in the areas that are likely to be affected?

See Watermaster Summary and Analysis of Application and reports by Wildermuth Environmental.

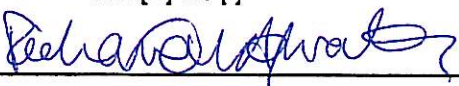
MATERIAL PHYSICAL INJURY

Is the Applicant aware of any potential Material Physical Injury to a party to the Judgment or the Basin that may be caused by the action covered by the application? Yes [X] No []

See CEQA documentation for mitigation measures.

If yes, what are the proposed mitigation measures, if any, that might reasonably be imposed to ensure that the action does not result in Material Physical Injury to a party to the Judgment or the Basin?

ADDITIONAL INFORMATION ATTACHED Yes [X] No []

Inland Empire Utilities Agency 

Three Valleys Municipal Water District 

Western Municipal Water District Applicants

TO BE COMPLETED BY WATERMASTER:

DATE OF APPROVAL FROM NON-AGRICULTURAL POOL: _____

DATE OF APPROVAL FROM AGRICULTURAL POOL: _____

DATE OF APPROVAL FROM APPROPRIATIVE POOL: _____

HEARING DATE, IF ANY: _____

DATE OF ADVISORY COMMITTEE APPROVAL: _____

DATE OF BOARD APPROVAL: _____ Agreement # _____

WATER QUALITY AND WATER LEVELS

What is the existing water quality and what are the existing water levels in the areas that are likely to be affected?

See Watermaster Summary and Analysis of Application and reports by Wildermuth Environmental.

MATERIAL PHYSICAL INJURY

Is the Applicant aware of any potential Material Physical Injury to a party to the Judgment or the Basin that may be caused by the action covered by the application? Yes [X] No []

See CEQA documentation for mitigation measures.

If yes, what are the proposed mitigation measures, if any, that might reasonably be imposed to ensure that the action does not result in Material Physical Injury to a party to the Judgment or the Basin?

ADDITIONAL INFORMATION ATTACHED Yes [X] No []

Inland Empire Utilities Agency _____

Three Valleys Municipal Water District Richard J. Hansen _____

Western Municipal Water District _____
Applicants

TO BE COMPLETED BY WATERMASTER:

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DATE OF APPROVAL FROM APPROPRIATIVE POOL: _____

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DATE OF BOARD APPROVAL: _____ Agreement # _____

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**APPLICATION BY A PARTY TO THE JUDGMENT
TO
PARTICIPATE IN A STORAGE & RECOVERY PROGRAM**

APPLICANT

Inland Empire Utilities Agency,
Three Valleys Municipal Water District, and
Western Municipal Water District on behalf of
Metropolitan Water District of Southern California

Name

March 9, 2009

Date Requested

_____ Date Approved

6075 Kimball Avenue

Street Address

74,000.00* Acre-feet

Amount Requested

_____ Acre-feet

Amount Approved

Chino

City

CA

State

91708

Zip Code

Telephone: (909) 993-1600

Facsimile: (909) 993-1983

* This would be an additional 74,000.00 AF added to an existing storage account of 100,000.00 AF, approved in 2003.

TYPE OF WATER TO BE PLACED IN STORAGE

Recycled

Imported

Both

METHOD AND LOCATION OF PLACEMENT IN STORAGE - Check and attach all that may apply

Recharge (Form 2)

Transfer of Right to Water in Storage (Form 3)

Transfer from another Party to the Judgment (Form 5)

METHOD AND LOCATION OF RECAPTURE FROM STORAGE - Check and attach all that may apply

Pump from wells (Form 4)

Transfer to another party to the Judgment (Form 3)

FEASIBILITY PLAN TO ACCOMPLISH STORAGE & RECOVERY PROGRAM ATTACHED?

Yes

No Analyzed through approval process of Funding Agreement

WATER QUALITY AND WATER LEVELS

What is the existing water quality and what are the existing water levels in the areas that are likely to be affected?

MATERIAL PHYSICAL INJURY

Is the Applicant aware of any potential Material Physical Injury to a party to the Judgment or the Basin that may be caused by the action covered by the application? Yes No

See CEQA documentation for mitigation measures.

If yes, what are the proposed mitigation measures, if any, that might reasonably be imposed to ensure that the action does not result in Material Physical Injury to a party to the Judgment or the Basin?

CEQA Compliance completed and certified by applicants.

ADDITIONAL INFORMATION ATTACHED

Yes[X]

No []

Inland Empire Utilities Agency

Richard A. Swales

Three Valleys Municipal Water District

Western Municipal Water District
Applicants

[Signature]

TO BE COMPLETED BY WATERMASTER:

DATE OF APPROVAL FROM NON-AGRICULTURAL POOL: _____

DATE OF APPROVAL FROM AGRICULTURAL POOL: _____

DATE OF APPROVAL FROM APPROPRIATIVE POOL: _____

HEARING DATE, IF ANY: _____

DATE OF ADVISORY COMMITTEE APPROVAL: _____

DATE OF BOARD APPROVAL: _____

If yes, what are the proposed mitigation measures, if any, that might reasonably be imposed to ensure that the action does not result in Material Physical Injury to a party to the Judgment or the Basin?

CEQA Compliance completed and certified by applicants.

ADDITIONAL INFORMATION ATTACHED Yes[X] No []

Inland Empire Utilities Agency _____

Three Valleys Municipal Water District *Richard Hansen* _____

Western Municipal Water District _____
Applicants

TO BE COMPLETED BY WATERMASTER:

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DATE OF APPROVAL FROM AGRICULTURAL POOL: _____

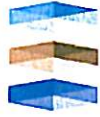
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HEARING DATE, IF ANY: _____

DATE OF ADVISORY COMMITTEE APPROVAL: _____

DATE OF BOARD APPROVAL: _____

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March 24, 2009

Chino Basin Watermaster
Attention: Kenneth R. Manning
Chief Executive Officer
9641 San Bernardino Road
Rancho Cucamonga, CA 91730

Subject: Analysis of Material Physical Injury from the Proposed Expansion of the Dry-Year Yield Program

Dear Mr. Manning:

The Dry-Year Yield Program (DYYP) is a groundwater storage and recovery program where supplemental water is stored in the Chino Basin during surplus years and extracted during years when the availability of supplemental water is limited. The Chino Basin DYYP was developed jointly by the Inland Empire Utilities Agency (IEUA) and the Metropolitan Water District of Southern California (MWDSC) with input from the Chino Basin Watermaster (Watermaster). The existing DYYP has a maximum storage capacity of 100,000 acre-ft with maximum puts of 25,000 acre-ft/yr and maximum takes of 33,000 acre-ft/yr. The proposed DYYP Expansion, or Expansion, evaluated herein is a 150,000 acre-ft storage program with 50,000 acre-ft/yr puts and 50,000 acre-ft/yr takes. The Expansion was developed jointly by the IEUA, the Three Valleys Municipal Water District (TVMWD), the Western Municipal Water District (WMWD), and the MWDSC.

In the latter half of 2008, an investigation was completed to evaluate the feasibility of the Expansion. This analysis was published as the *Chino Basin Dry-Year Yield Program Expansion Project Development Report* (Black & Veatch, 2008). Three expansion alternatives were developed and evaluated. Wildermuth Environmental, at the direction of the Watermaster, conducted a material physical injury analysis on these expansion alternatives. This material physical analysis is attached herein. The IEUA adopted a mitigated negative declaration for the Expansion in December 2008.

Per the Peace Agreement, material physical injury is defined as: “material injury that is attributable to Recharge, Transfer, storage and recovery, management, movement or Production of water or implementation of the Optimum Basin Management Plan including, but not limited to, degradation of water quality, liquefaction, land subsidence, increases in pump lift and adverse impacts associated with rising groundwater” (p. 8).

The criteria used to evaluate material physical injury for the Expansion include groundwater level changes, the increased potential for subsidence, losses from storage, changes in the direction and speed of known water quality anomalies, and the ability to maintain hydraulic control. These criteria were evaluated with an enhanced version of the 2007 Watermaster Model and MT3D. Based on our analysis, material physical injury—related to storage losses, groundwater level changes, and plume migration—will occur; however, this material physical injury can be mitigated. The results of the material physical injury analysis are summarized below.

DYYP Expansion Alternatives

The Baseline Alternative, which represents the DYYP as it is currently being implemented, and three DYYP Expansion Alternatives are described below. The Expansion Alternatives attempt to bookend all potential DYYP Expansion concepts.

Baseline Alternative – Expansion of the Desalters, Reoperation, and the 100,000 acre-ft DYYP. The Baseline Alternative includes the planned expansion of the desalters and reoperation—as described in *2007 CBWM Groundwater Model Documentation and Evaluation of the Peace II Project Description* (WEI, 2007)—and the existing 100,000 acre-ft DYYP. Under the existing DYYP, the MWDSC, in consultation with Watermaster and the IEUA, makes surplus water available to the basin, which is then recharged via wet water recharge and in-lieu means (the put). Previously, the MWDSC could recharge up to 25,000 acre-ft/yr in the basin. However, due to the availability of surplus water (3 out of 10 years), the put requirement was increased to 33,000 acre-ft/yr under the direction of the IEUA. When the MWDSC makes a call, appropriators that participate in the program will reduce their demands on the MWDSC’s imported supplies and could make up the difference in a number of ways. For modeling purposes, this difference was assumed to be made up solely by producing more groundwater from the MWDSC’s storage account (the take). For the existing 100,000 acre-ft DYYP, the puts are assumed to occur via in-lieu means. The planning period begins with a three-year take period, as it is currently underway. A ten-year cycle is then assumed to repeat itself through 2035.

Alternative 1 – 150,000 acre-ft DYYP. This alternative is identical to the existing DYYP except the puts and takes increase to 50,000 acre-ft/yr and the maximum storage in the MWDSC DYYP storage account increases to 150,000 acre-ft.

Alternative 2 – 150,000 acre-ft DYYP with 100,000 acre-ft Negative Storage. This alternative is identical to Alternative 1 except the first two cycles are modified to allow for five consecutive take years with the volume in MWDSC storage account changing from +150,000 acre-ft to -100,000 acre-ft. The objective of this alternative is to estimate the impacts of allowing the MWDSC account to go negative for a period time and subsequently refilling it.

Alternative 3 – 150,000 acre-ft DYYP with 300,000 acre-ft Maximum Storage. This alternative is identical to Alternative 1 except the first two cycles are substantially modified to allow the MWDSC storage account to have significant quantities of water in storage and to increase the maximum volume in storage up to approximately 300,000 acre-ft. This alternative also includes small summer partial takes on the order of 6,250 acre-ft in certain years to reduce summer peaking on the Rialto Pipeline. The objective of this alternative is to estimate the impacts of allowing the MWDSC account to hold large quantities of water throughout the anticipated term of the DYYP Expansion contract.

Groundwater Level Changes

The Baseline Alternative is Alternative 1C of the Peace II Agreement (WEI, 2008). The Parties to the Judgment and the Peace II Agreement have indicated that they are willing to accept decreased

groundwater levels and associated increases in pumping energy expenses with the expectation of financial gains and certainties made possible by implementing the Peace II project description. The Baseline Alternative includes the existing DYYP and other Peace II related features. No material physical injury will occur from implementing the Baseline Alternative.

Groundwater production is projected to be maintained with the Expansion Alternatives; although, some changes in production and replenishment plans may be required. From a production perspective, as previously noted, no material physical injury is projected to occur from the decline in groundwater levels caused by the implementing the Baseline Alternative. The same is true for each of the Expansion Alternatives with two exceptions: the proposed take by Jurupa Community Services District (JCSD)/Western Municipal water District (WMWD) was reduced and the proposed take by the City of Chino Hills was eliminated. The total reduction in the proposed take was about 8,000 acre-ft/yr. These modifications were required to maintain projected production and to avoid incurring a material physical injury. It is our professional opinion that Chino Hills could participate in the take side of the Expansion if it modified its production plans to take more water from the shallow aquifer system. The JCSD could also participate by modifying its production plans and by improving groundwater replenishment in the JCSD area. Modifying the Chino Hills and JCSD production plans was beyond the scope of this material physical injury investigation. A comprehensive review of the sustainability of groundwater production and replenishment has been incorporated into the 2010 Recharge Master Plan Update.

Groundwater level declines are, by themselves, considered material physical injury in the Peace Agreement and need to be mitigated such that they are no longer "material." The *Chino Groundwater Basin Dry-Year Yield Program Expansion Initial Study* states that "[...] the mitigation identified for storage losses is deemed adequate to offset the groundwater level declines, based on the assumption that groundwater offsets (reduced takes or increased puts) will be directed to areas actually experiencing groundwater elevation declines as a result of implementing the DYY Expansion Project." The maximum groundwater level declines projected in the material physical injury analysis are shown in Figures 12a, 12b, and 12c in the attached report.

- For Expansion Alternative 1, during the lowest storage year, groundwater levels will be lower than those of the Baseline Alternative in slightly more than half the basin. The most impacted producers include the City of Pomona, the JCSD, and the MVWD.
- For Expansion Alternative 2, during the lowest storage year, groundwater levels will be lower than those of the Baseline Alternative in most of the basin. The most impacted producers include the Cities of Chino, Ontario, Pomona, and Upland, the MVWD, and the Fontana Water Company.
- For Expansion Alternative 3, during the lowest storage year, groundwater levels will be lower than those of the Baseline Alternative in a small area of the basin within the JCSD service area. Only the JCSD will be impacted groundwater level changes under this alternative.

It should also be noted that the Expansion Alternatives produce groundwater level increases in an area located in the north-central service area of the City of Ontario and the south-central service area of the CVWD during the lowest storage period.

It is our professional opinion that the projected declines are sustainable. That said, groundwater level declines are considered a material physical injury and will need to be mitigated. The Mitigated Negative Declaration presents the following mitigation measure:

“Mitigation Measure VII-2. The stakeholders shall implement an adaptive management program in conjunction with the DYY Expansion Project. This adaptive management program shall be implemented concurrent with the DYY Expansion Project and the performance standard is to offset the actual loss of storage (measured or modeled by the Watermaster) by reduced takes or increased puts (or an alternative method deemed equivalent to reduced takes or increased puts) over each ten-year period of the DYY Expansion Project. To the extent feasible, the reduction in takes and puts, or an alternative, shall be offset in any portion of the Chino Basin that experiences a lowering of groundwater table that is attributable to the DYY Expansion Project.”

The operable language in this mitigation measure, relative to groundwater level changes, is “To the extent feasible, the reduction in takes and puts, or an alternative, shall be offset in any portion of the Chino Basin that experiences a lowering of groundwater table that is attributable to the DYY Expansion Project.” This mitigation measure assumes that Watermaster, a Chino Basin party, or another entity will be conducting monitoring, periodically reviewing monitoring data, and analyzing the basin with models to parse out the groundwater level changes of the DYY Expansion from groundwater level changes that result from other basin management activities. This is a complex analysis that would need to be done more frequently than every ten years to assure sustainable production in the JCSD service area. The mitigation is unclear, and there is speculation that it may not be mitigated at all. To ensure that these investigations will be implemented and effective, the responsible entity should be stated clearly, and the costs, attributed to identifying groundwater level changes apart from groundwater level changes that result from other basin management activities, should be budgeted. The responsible parties and the scope of the proposed mitigation measure should be included in the agreements that implement the DYY Expansion.

Changes in Subsidence Potential

WEI has been conducting subsidence investigations in Management Zone 1 (MZ1) for Watermaster since September 2000. The PA-7 piezometer is used in Watermaster’s MZ1 Long Term Management Plan as the key monitoring location for drawdown-related subsidence. This plan states that basin management activities that maintain piezometric elevations greater than 400-feet at the PA-7 piezometer (corresponding to a depth-to-water of 245 feet) will not cause inelastic subsidence. For all Expansion alternatives, the projected lowest piezometric elevations are 23 to 48 feet higher than the subsidence threshold elevation of 400 ft for the managed area of MZ1; thus, no inelastic subsidence is projected to occur in this area. No material physical injury related to subsidence is projected to result from any of the Expansion alternatives.

Storage Losses

Storage losses will occur under Expansion Alternatives 1 and 3. These losses occur due to a decline in Santa Ana River recharge that results from increased groundwater levels in the basin. Through 2035, losses total about 1,500 acre-ft for Alternative 1 and about 40,000 acre-ft for Alternative 3. The material physical injury associated with storage losses was recognized in the Expansion Mitigated Negative Declaration. Moreover, the Mitigated Negative Declaration states that storage losses can be mitigated with either reduced takes or supplemental puts. The specific mitigation measure is provided below.

"Mitigation Measure VIII-2. The stakeholders shall implement an adaptive management program in conjunction with the DYY Expansion Project. This adaptive management program shall be implemented concurrent with the DYY Expansion Project and the performance standard is to offset the actual loss of storage (measured or modeled by the Watermaster) by reduced takes or increased puts (or an alternative method deemed equivalent to reduced takes or increased puts) over each ten-year period of the DYY Expansion Project. To the extent feasible, the reduction in takes and puts, or an alternative, shall be offset in any portion of the Chino Basin that experiences a lowering of groundwater table that is attributable to the DYY Expansion Project."

It is our opinion that this mitigation measure, if implemented, can mitigate the projected material physical injury. As with groundwater level change mitigation, it assumes that Watermaster, a Chino Basin party, or another entity will be conducting monitoring, periodically reviewing monitoring data, and analyzing the basin with models to parse out the groundwater storage losses of the DYY Expansion from storage losses that will occur as a result of other storage activities. This is a complex analysis that would need to be done more frequently than every ten years. To ensure that these investigations will be implemented and affective, the responsible entity should be stated clearly, and the costs, attributed to identifying these storage losses apart from storage losses that result from other storage activities, should be budgeted. The responsible parties and scope of the proposed mitigation measure should be included in the agreements that implement the DYY Expansion.

Change in Direction and Speed of Water Quality Anomalies – Kaiser Plume

In the Baseline Alternative, and Expansion Alternatives 1 and 3, the leading edge of the Kaiser plume was projected to travel slightly more than 4 miles in a southwesterly direction over the projection period (2007 through 2035). In Expansion Alternatives 1 and 3, the downstream half of the plume decreased in size, compared to the Baseline Alternative, suggesting that projected Expansion production at City of Ontario Well 50 drew in more of the Kaiser plume than was projected to occur under the Baseline Alternative. Furthermore, this suggests that the Expansion may contribute to water quality degradation at City of Ontario Well 50, which is adjacent to the plume. This is a potential material physical injury and may require mitigation pursuant to the Peace Agreement.

Subsequent No. 3 from the Order Confirming Motion for Approval of the Peace II Documents (WEI, 2008). Hydraulic control was assessed from detailed groundwater elevation contour maps. Groundwater elevation contours in the southern end of Layer 1 of the Chino Basin were evaluated for the Baseline Alternative (2023), Alternative 1 (2030), Alternative 2 (2035), and Alternative 3 (2025) (all years correspond to high water level periods, resulting from the put and take timing of each respective alternative). (Hydraulic control is weakest when water levels are highest in the southern portion of the basin.) Hydraulic control is maintained for all Expansion alternatives.

Conclusion

Based on our analysis, material physical injury—related to storage losses, groundwater level changes, and plume migration—will occur; however, this material physical injury can be mitigated if the mitigation measures, cited above, from the Mitigated Negative Declaration are substantially expanded and included in the DYYP Expansion agreements. In our professional opinion, Watermaster should condition its approval of the IEUA's application to expand the DYYP on the development of specific mitigation requirements that will be included in the final agreements that implement the DYYP Expansion.

Please call either of us if you have any questions or need further assistance.

Very truly yours,

Wildermuth Environmental, Inc.



Thomas D. McCarthy, PE, PG
Associate Engineer



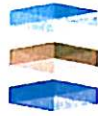
Mark J. Wildermuth, PE
Chairman

Cc.
Richard Atwater, Inland Empire Utilities Agency
Tom Dodson, Tom Dodson and Associates
Michael Fife, Brownstein Hyatt Farber Schreck

Encl.

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December 15, 2008

Chino Basin Watermaster
Attention: Kenneth R. Manning
Chief Executive Officer
9641 San Bernardino Road
Rancho Cucamonga, CA 91730

Subject: Analysis of Material Physical Injury from the Proposed Expansion of the Dry-Year Yield Program

Dear Mr. Manning:

The objective of this investigation is to determine if there will be a material physical injury to the Chino Basin or a Party to the Judgment from the proposed expansion of the Dry-Year Yield Program (DYYP), hereafter referred to as the DYYP Expansion or Expansion. The criteria used to evaluate material physical injury include groundwater-level changes, the increased potential for subsidence, losses from storage, changes in the direction and speed of known water quality anomalies, and the ability to maintain hydraulic control.

The DYYP is a groundwater storage and recovery program where supplemental water is stored in the Chino Basin during surplus years and extracted during years when the availability of supplemental water is limited. The Chino Basin DYYP was developed jointly by the Chino Basin Watermaster (CBWM), the Inland Empire Utilities Agency (IEUA), and the Metropolitan Water District of Southern California (MWDSC). The DYYP has a maximum storage capacity of 100,000 acre-ft with maximum puts of 25,000 acre-ft/yr and maximum takes of 33,000 acre-ft/yr. The proposed DYYP Expansion evaluated herein is a 150,000 acre-ft storage program with 50,000 acre-ft/yr puts and 50,000 acre-ft/yr takes. The Expansion was developed jointly by the CBWM, the IEUA, the Three Valleys Municipal Water District (TVMWD), the Western Municipal Water District (WMWD), and the MWDSC.

The Black and Veatch Corporation (B&V) was the lead consultant in the development of the facility and related operating plans for DYYP Expansion alternatives. Starting in February 2008, B&V developed a series of preliminary dry-year yield plans with the participating water agencies. The investigation reported herein is an assessment of material physical injury from the specific facilities and operating plans articulated by B&V. The facility and operating plans for the DYYP Expansion have been documented by B&V in Volume I of the DYYP Project Development Report.

To evaluate the criteria listed above, WEI staff utilized the 2007 Watermaster Model (Model). Figure 1 illustrates the extent of the groundwater model (model domain) and the Regional Water Quality Control Board (RWQCB) management zones. The model domain extends into the Temescal Basin as the two basins are hydraulically connected. The Model was used to evaluate a baseline alternative and three proposed Expansion alternatives.

The Baseline Alternative (Baseline) is based on the Peace II Project Description with the existing 100,000 acre-ft DYYP. Moreover, the Baseline is equivalent to Alternative 1C, which was documented in *Response to Condition Subsequent No. 3 from the Order Confirming Motion for Approval of the Peace II Documents* (WEI, 2008). The Baseline was found to cause no material physical injury. The assessment of material injury herein is based on an evaluation of the criteria listed above as well as a comparison to the Baseline Alternative.

The development of the DYYP Expansion project included a determination of how participants would increase or decrease imported water purchases at predetermined amounts to meet program put and take objectives. During put years, the participating retailers would reduce their projected pumping by an amount equal to the put, and the MWDC would supply a like amount of water to participating retailers as a direct surface water delivery. In a take year, the participating retailers would increase their pumping over their projected amount equal to the take, and the MWDC would reduce their delivery of surface water by a like amount. Table 1 lists the initial proposed takes, which were determined in a series of meetings with participating agencies. Several preliminary Model simulations were completed to determine the feasibility of these proposed takes. The conclusion of the preliminary simulations is also provided in Table 1. Due to hydraulic limitations, the proposed take for the City of Chino Hills and the WMWD could not be maintained. The City of Chino Hills proposed take was reduced from 2,000 acre-ft/yr to 0 acre-ft/yr. The WMWD proposed take was reduced from 10,000 acre-ft per year to 5,000 acre-ft/yr. These feasible takes are included in the analysis presented herein. With regard to the Chino Hills take, the take was reduced as precautionary piezometric elevations to prevent inelastic subsidence (at piezometer PA-7) could not be maintained. However, the model assumptions for City of Chino Hills were reflective of a conservative scenario relative to "deep well" pumping. In fact, the City of Chino Hills has subsequently shifted 1,448 acre-ft/yr DYY production out of the MZ-1 managed zone. Additionally, the City of Chino Hills contemplates a broader use of shallow well production than initially modeled. This will also be accomplished in conjunction with further monitoring and groundwater basin testing. It is our professional opinion that Chino Hills can participate in the take side of the Expansion Program if its pumping plans take more water from the shallow aquifer system than modeled. Optimizing the Chino Hills pumping plan is beyond the scope of this investigation. This optimization should be included in a subsequent basin-wide analysis of pumping and recharge plans performed by the appropriators and the CBWM. The WMWD take was reduced until groundwater pumping in the JCSD well field could be maintained.

Dry Year Yield Evaluation Criteria

Per the Peace Agreement, material physical injury is defined as: "material injury that is attributable to Recharge, Transfer, storage and recovery, management, movement or Production of water or implementation of the Optimum Basin Management Plan (OBMP) (WEI 1999), including, but not limited to, degradation of water quality, liquefaction, land subsidence, increases in pump lift and adverse impacts associated with rising groundwater" (p. 8).

As indicated above, each proposed Expansion alternative was evaluated with the Model to determine groundwater-level changes at selected representative locations in the basin and the basin

as a whole, the increased potential for subsidence through the lowering of piezometric levels in vicinity of the City of Chino, losses of water in storage due to operating the basin at greater storage levels, the change in direction and speed of known water quality anomalies due to the superposition of the put and take periods on otherwise expected basin operations, and the ability to maintain hydraulic control when operating the basin at greater storage levels. The planning period used in this analysis consists of the 27-year period from October 2008 through September 2035. This period corresponds to the 25-year period of the proposed Expansion agreement, which ranges from 2010 through 2035. Groundwater modeling was completed for 2006 through 2060 with the impacts reported for through 2035. The impacts of each alternative were assessed by comparing the model simulation results to the Baseline Alternative. Specifically, information was extracted from the model results to produce:

- Water budget tables to determine outflow from the Chino North Management Zone to the Prado Basin Management Zone and the Santa Ana River, new recharge from the Santa Ana River, and the change in water in storage.
- Maps showing the areal distribution of groundwater elevations and the change in groundwater elevations caused by each proposed Expansion alternative.
- Hydrographs showing projected water level time histories at selected representative wells in the Chino Basin. This includes the PA-7 piezometer located at the CBWM subsidence monitoring station in Ayala Park. The PA-7 piezometer is used to assess the potential for subsidence in the area of subsidence concern within the City of Chino.
- Maps that show plume migration tracks for the dry-year yield Baseline and Expansion over the planning period.
- Detailed groundwater level and flow system maps of the southern part of the basin to assess the state of hydraulic control.

Dry-Year Yield Program Expansion Description

Eight Chino Basin appropriators are anticipated to participate in the Expansion, including the Cities of Chino, Chino Hills, Pomona, Ontario, and Upland; the Cucamonga Valley Water District (CVWD); the Jurupa Community Services District (JCSJ); and the Monte Vista Water District (MVWD). The Three Valleys Municipal Water District (TVMWD) and the Western Municipal Water District (WMWD) are also expected to participate through coordination with Chino Basin appropriators. Program participants would increase or decrease imported water purchases at a predetermined amount to meet program put and take objectives. During put years, participating retailers would reduce their projected pumping by an amount equal to the put, and MWDSC would supply a like amount of water to participating retailers as a direct surface water delivery. In take years, the participating retailers would increase their pumping over their projected amount equal to the take, and the MWDSC would reduce their delivery of surface water by a like amount; demands that would have otherwise been met by MWDSC surface water deliveries are met by groundwater extracted from the program storage account.

Tables 2 and 3 list the program participants' existing and anticipated expansion put and/or take contributions. The combined put capacity of these agencies is 50,000 acre-ft/yr. As shown in Table 2, the total committed in-lieu put capacity is approximately 42,500 acre-ft/yr. The 7,500 difference between the committed put and the modeled put is assumed to consist of either additional in-lieu

deliveries or wet water recharge. For modeling purposes, this was assumed to consist solely of additional in-lieu deliveries, which were assigned to all participants on a pro-rata basis. Approximately 17,000 acre-ft/yr of the put capacity occurs via aquifer storage and recovery (ASR) injection wells and the remaining approximately 33,000 acre-ft/yr occurs via in-lieu deliveries. The locations of the new ASR wells are shown in Figure 2. During put years, these wells operate as injection wells, and during take and hold years, they operate as extraction wells. The total in-lieu put capacity is approximately the same as the in-lieu capacity of the existing program (33,000 acre-ft/yr). The TVMWD is not a Chino Basin appropriator; therefore, its puts were assigned to the City of Pomona and the City of Upland. As shown in Table 3, the combined take capacity modeled for these agencies is 50,000 acre-ft/yr (inclusive of the existing program). The WMWD is not a Chino Basin appropriator; therefore, its takes were assigned to the JCSD.

Projected Groundwater Production for the Planning Period

The IEUA developed a preliminary groundwater pumping plan (IEUA, 2008a) for the Chino Basin during the summer of 2008. This plan, which is based on the current and future water supply plans provided by the groundwater producers for the period of 2008 through 2035, is the basis of the groundwater pumping plan used in this investigation. The producers' water supply plans include existing and new master-planned wells, planned groundwater treatment facilities, an expanded OBMP desalter program, and the assumption that CBWM will secure access to enough replenishment facilities and water to enable the producers to pump what they need. The groundwater pumping plan was vetted early through the CBWM process and was accepted by the appropriators in September 2008.

Table 4 lists projected groundwater production by party for the period of 2006/07 through 2034/35. The total production of the appropriators during the projection period averages about 180,000 acre-ft/yr and ranges from a low of about 140,000 acre-ft/yr to a high of about 210,000 acre-ft/yr. The total production for the Chino Basin during this period averages about 195,500 acre-ft/yr and ranges from a low of about 170,000 acre-ft/yr to a high of about 220,000 acre-ft/yr. Adjustments were made in some of the individual appropriator pumping plans to reduce well interference and regional drawdown in the center of the basin. The appropriators and the CBWM should conduct a basin-wide analysis of pumping and recharge plans to optimize pumping and groundwater levels. The optimization would consist of determining pumping and recharge operations that minimize drawdown using wells that pump from specific aquifers, wells in specific locations within the basin, and or constructing new wells.

Projected Groundwater Recharge and Replenishment

Replenishment water is recharged to the Chino Basin by the CBWM pursuant to the 1978 Chino Basin Judgment (Case No. RCV 51010, Chino Basin Municipal Water District vs. City of Chino et al.) and the Peace Agreement. Table 5 lists the future replenishment obligation and replenishment water estimates for the Baseline and Expansion Alternatives. The allocation of recharge to individual facilities is based on the requirement to balance recharge and discharge as described in the OBMP Peace Agreement. The CBWM purchases replenishment water when one or more parties overproduces. Typically, the CBWM purchases water from the MWDSC at a replenishment rate, which is made available to the CBWM when the MWDSC has surplus imported water. The

availability of replenishment water from the MWDSC has been substantially reduced due to environmental and judicial constraints and drought. There is no official forecast available from MWDSC to characterize the availability of replenishment water. However, MWDSC staff has presented relevant information to its member agencies, as part of an ongoing Regional Groundwater Workshop process (Brandon Goshi, August 29 and October 30 2008), showing the impacts of different water supply and demand scenarios on the availability of surplus water for groundwater replenishment and regional storage purposes. The same information was presented by MWDSC staff at the Chino Basin Watermaster Strategic Planning Meeting (Grace Chan, September 29 2008). These presentations showed that, under the Interim Remedy Order to protect Delta Smelt (U.S. District Court Judge Oliver Wanger, NRDC vs. Kempthorne 2007), surplus water may only be available in approximately three out of ten years. The primary State Water Project supply assumptions underlying this finding is documented in the 2007 State Water Project Delivery Reliability Report from the California Department of Water Resources (DWR, 2007). Although MWDSC staff also presented the impacts of potential improvements to the State Water Project supplies that may occur in the future, it has been assumed for modeling purposes that replenishment water will be available to CBWM in three of ten years and that this water will be provided to the CBWM in the quantities necessary to meet cumulative unmet replenishment obligation limited by the recharge capacity in existing recharge basins. Deliveries of this water were assumed to occur when the MWDSC is doing a put into its DYYP storage account. A 5,000 acre-ft/yr in-lieu program was also assumed to extend the recharge capacity to the amount required to satisfy replenishment obligations.

The estimated volume of new storm water recharged during the planning period is 11,646 acre-ft/yr, which is based on the actual operations of the stormwater recharge facilities in the Chino Basin. This value was used in the Peace II material physical injury analysis.

The volume of recycled water recharged during the planning period is based on IEUA recycled water plans (IEUA, 2007) and discussions with IEUA staff (IEUA, 2008b). Recycled water recharge increases from approximately 1,300 acre-ft in 2006 to 24,000 acre-ft in 2035. Table 5 shows recycled water recharge for the planning period. The availability of recycled water for recharge was based on the following assumptions:

- The IEUA will gain approval to transition from its existing 5-year volumetric average recycled water content of approximately 33% permit condition to a 10-year volumetric average recycled water content of 50% permit condition.
- Imported water will be available 3 out of 10 years for dilution.

When imported water is available, the volume used for replenishment was calculated based on the available recharge capacity and the cumulative unmet replenishment obligation. The available capacity was determined after accounting for storm water and recycled water. The volume of recycled water was determined iteratively with the estimated volume of imported water to satisfy recycled water contribution constraints. No imported water is assumed to be purchased unless there is an unmet replenishment obligation.

Alternative Descriptions

The Baseline Alternative, which represents the DYYP as it is currently being implemented, and three DYYP Expansion Alternatives are described below. The three Expansion Alternatives attempt to bookend all currently envisioned DYYP Expansion concepts.

Baseline Alternative – Expansion of the Desalters, Reoperation, and the 100,000 acre-ft DYYP. The Baseline Alternative includes the planned expansion of the desalters and reoperation—as described in *2007 CBWM Groundwater Model Documentation and Evaluation of the Peace II Project Description* (WEI, 2007a)—and the existing 100,000 acre-ft DYYP. In the existing DYYP, the MWDSC, in consultation with the CBWM and the IEUA, makes surplus water available to the basin, which is then recharged via wet water recharge and in-lieu means (the put). Previously, the MWDSC could recharge up to 25,000 acre-ft/yr in the basin. However, due to the availability of surplus water (3 out of 10 years), the put requirement was increased to 33,000 acre-ft/yr under the direction of the IEUA. When the MWDSC makes a call, appropriators that participate in the program will reduce their demands on the MWDSC's imported supplies and could make up the difference in a number of ways. For modeling purposes, this difference was assumed to be solely by producing more groundwater from Metropolitan's storage account (the take). The puts and takes are listed in Tables 2 and 3, respectively. For the existing 100,000 acre-ft DYYP, the puts are assumed to occur via in-lieu means. This is the preferred method of the appropriators, and it frees up wet water recharge capacity for future replenishment. The take commitments are contractual commitments between the appropriators listed in Table 3 and the IEUA. Figure 3a illustrates the time history of groundwater pumping and storage in the Baseline Alternative through the end of the Peace Agreement. A ten-year cycle was assumed with the first three years being put years, the next four years being hold years and the last three years being take years. The planning period starts off with a three-year take period, as it is currently underway. The ten-year cycle is assumed to repeat itself through 2035.

Alternative 1 – 150,000 acre-ft DYYP. This alternative is identical to the existing DYYP except the puts and takes increase to 50,000 acre-ft/yr and the maximum storage in the MWDSC DYYP storage account is 150,000 acre-ft. The groundwater production modifications required to accomplish the increased puts and takes are shown in Tables 2 and 3. Figure 3b illustrates the time history of groundwater pumping and storage for Alternative 1.

Alternative 2 – 150,000 acre-ft DYYP with 100,000 acre-ft Negative Storage. This alternative is identical to Alternative 1 except the first two cycles are modified to allow five consecutive take years with volume in MWDSC storage account changing from +150,000 acre-ft to -100,000 acre-ft. The objective of this alternative is to estimate the impacts of allowing the MWDSC account to go negative for a period time and subsequently refilling it. Figure 3c illustrates the time history of groundwater pumping and storage for Alternative 2.

Alternative 3 – 150,000 acre-ft DYYP with 300,000 acre-ft Maximum Storage. This alternative is identical to Alternative 1 except the first two cycles are substantially modified to allow the MWDSC storage account to have significant quantities of water in storage and to increase the maximum volume in storage up to approximately 300,000 acre-ft. This alternative also includes small summer (or partial) takes on the order of 6,250 acre-ft in certain years to reduce summer peaking on

the Rialto Pipeline. The objective of this alternative is to estimate the impacts of allowing the MWDSC account to hold large quantities of water throughout the anticipated term of the DYYP Expansion contract. Of particular interest are the impacts on water in storage and hydraulic control. Figure 3d illustrates the time history of groundwater pumping and storage for Alternative 3. The 6,250 acre-ft summer takes are visible apart from the large programmatic takes.

Material Physical Injury Analysis

Hydrologic Balance and Storage

The hydrologic water budgets for Chino North, Chino South, Chino East, and Prado Management Zones for the Baseline Alternative, Alternative 1, Alternative 2, and Alternative 3 are shown in Tables 6 through 9, respectively. Overall, the budgets are very similar. The greatest differences lie in how basin storage changes over time and how the basin interacts with the Santa Ana River. Water budget as used herein refers to the accounting of recharge, discharge and water in storage.

There are several recharge and discharge components listed in Tables 6 through 9. A key difference in the water budgets is the inflow from stream recharge and outflow to rising groundwater. The net difference between rising groundwater and stream recharge can be seen in the Santa Ana River discharge at Prado Dam and in basin storage.

Table 10 shows the estimated time history of Santa Ana River discharge for the Baseline and three Expansion Alternatives. Table 10 also shows the difference in surface water discharge caused by the Expansion. Figure 4a illustrates the change in Santa Ana River recharge to the Chino Basin for each alternative relative to the Baseline.

The hydrologic balance for Alternative 1 is almost identical to the baseline with subtle differences showing up in slightly increased streambed recharge in Chino South Management Zone (MZ) and the time history of storage. The hydrologic balance for Alternative 2 is shows decreased streambed recharge in Chino South MZ. This is caused by drawdown associated with negative DYYP storage program. The hydrologic balance for Alternative 3 is shows significant decreased streambed recharge in Chino South MZ. The specific amount of change for each alternative relative to the Baseline is listed below:

- For Alternative 1, the cumulative discharge for the Santa Ana River is increased by a total of about 1,500 acre-ft by 2035.
- For Alternative 2, the cumulative discharge for the Santa Ana River is reduced by a total of about 32,700 acre-ft by 2035 and is equivalent to an average decrease of about a 2 cubic feet per second (cfs) in the Santa Ana River discharge, or about one half of one percent of the total discharge in the Santa Ana River.
- For Alternative 3, the cumulative discharge for the Santa Ana River is increased by a total of about 35,900 acre-ft by 2035 and is equivalent to an average increase of about a 2 cfs in the

Santa Ana River discharge, or also about one half of one percent of the total discharge in the Santa Ana River.

Figure shows cumulative change in storage for each alternative. 4b also illustrates when water levels for each alternative are at their lowest, when the cumulative change in storage is greatest, and when there is no water in the DYYP Expansion storage account. For the planning period, this is 2030 for all alternatives with the exception of Alternative 2 and Alternative 3. Alternative 3 has water in the DYYP storage account throughout the planning period; and approximately 100,000 acre-ft in 2030. Alternative 2 is at its lowest cumulative storage in 2021.

The total storage in the Chino Basin declined similarly for each Alternative relative to the Baseline; however, the storage levels varied more abruptly due to the put and take periods. The decline in storage was at a lower rate during put periods and dropped more steeply during take periods. Figure 4b illustrates the change in storage over the planning period for each alternative. The planning period cumulative change in storage is approximately -407,000 acre-ft for the Baseline, -359,000 acre-ft for Alternative 1, -311,000 acre-ft for Alternative 2, and -359,000 acre-ft for Alternative 3. In 2030, when all storage accounts for have a zero balance except Alternative 3, the change in storage is -459,600, -462,000, -410,000, and -388,500 for Alternative 1, Alternative 2 and Alternative 3, respectively. A. When corrected for the amount of water in the DYYP storage account in 2030, Alternative 3 has a change in storage of -494,500. Note that the change in storage for the Baseline Alternative and Alternative 1 are very similar, within less than 1 percent of each other. Alternative 2 gains more water from the Santa Ana River than the other alternatives and therefore has less cumulative change in storage, approximately 11 percent less than the Baseline Alternative. Alternative 3 does not gain as much water from the Santa Ana River than the other alternatives. When correcting for DYYP water in the storage account in 2030, Alternative 3 has more cumulative change in storage, approximately 8 percent more than the Baseline Alternative.

Alternative 1 results in a negligible change in storage relative to the Baseline Alternative. Alternative 2 has the greatest difference in Santa Ana River discharge and change in storage when compared to the Baseline. During the negative storage period of Alternative 2, groundwater levels are depressed relative to the Baseline Alternative levels, and this causes greater recharge from the Santa Ana River.

Alternative 3 results in less Santa Ana River recharge compared to the Baseline Alternative because groundwater levels are higher over the planning period compared to groundwater levels in the Baseline Alternative. This has the effect of losses from storage that result from changes in River recharge that were not accounted for in the planning simulations. These losses would have to be mitigated to ensure no material physical injury.

Changes in Groundwater Levels

Figure 5 shows the locations of selected wells for which groundwater level time history were projected for the Expansion Alternatives. The hydrographs for these wells, which are included with this report as Figures 6a through 6j, show how water levels are projected to change over the planning period. The groundwater elevations in 2008 (initial condition) and 2035 were mapped for layers 1, 2, and 3 for each planning alternative. The 2008 groundwater elevations for layers 1, 2, and 3 are illustrated in Figures 7a through 7c. The initial conditions are the same for all alternatives.

Figures 8a through 8c show the Baseline Alternative at the end of the planning period (2035) for layers 1, 2, and 3.

The maximum change in groundwater levels for the Expansion Alternatives is assumed to occur when DYYP storage is exhausted near the end of the planning period (2030) or, in the case of Alternative 2, at the point where DYYP storage reaches its most negative value (2021). Figure 4b illustrates the cumulative change in storage for each alternative. The point of lowest cumulative change in storage is 2030 for the Baseline Alternative and Alternatives 1 and 3. The point of lowest cumulative storage change for Alternative 2 is 2021. The 2030 groundwater elevations for Alternative 1 layers 1, 2, and 3 are shown in Figures 9a through 9c. The 2021 groundwater elevations for Alternative 2 layers 1, 2, and 3 are shown in Figures 10a through 10c. And, the 2030 groundwater elevations for Alternative 3 layers 1, 2, and 3 are shown in Figures 11a through 11c.

Once the lowest groundwater levels were identified for each Expansion Alternative, the differences between the low groundwater levels of the Baseline Alternative and the Expansion Alternatives were calculated. Figures 12a and 12b compare the low groundwater levels for Alternatives 1 and 3 to the Baseline Alternative in 2030. Figures 12c and 12d compare the low groundwater levels for Alternative 2 to the Baseline Alternative in 2021 and 2030.

Table 10 summarizes the water level changes by alternative. The first *Baseline 2030* columns list the groundwater level changes for the Baseline Alternative from 2008 through 2030 by retail water service area. The average change is area-weighted, and the maximum and minimum changes are specific to model cells in the retail service area. The *Alternative 1 2030 + Baseline* columns list similar statistics for the difference between the Baseline Alternative and Alternative 1 in 2030. For example, the average groundwater level change in the CVWD service area for the Baseline is -37 feet, and the difference in 2030 for the average groundwater level between Alternative 1 and the Baseline is an increase of 3 feet over the retail service area. This table contains similar information for Alternatives 2 and 3.

The groundwater elevation changes are not uniform across the basin, and therefore, some retail agencies will experience greater lift and related energy expenses from the proposed Expansion. Note the following localized changes in groundwater elevations for the Baseline Alternative:

- Through fall 2030, groundwater elevations in the MVWD and City of Pomona production area are projected to change by about -15 to -20 feet in layer 1, -40 to -44 feet in layer 2, and -44 to -53 feet in layer 3.
- Through fall 2030, groundwater elevations in the MZ1 subsidence area (the production area for the Cities of Chino and Chino Hills) are projected to change by about -20 feet in layer 1, -38 feet in layer 2, and -40 feet in layer 3. The groundwater levels in layers 2 and 3 are above the subsidence threshold, and therefore, new inelastic subsidence is not expected to occur for the Baseline Alternative.
- Through fall 2030 groundwater elevations in the CVWD service area are projected to change by about -37 feet in all layers. A significant pumping depression develops at the cluster of CVWD production wells approximately 0.5 miles north of the Turner Recharge Basins. Through fall 2030,

- groundwater elevations in the CVWD service area are projected to change by about -19 feet in all layers.
- Through fall 2030, groundwater elevations in the City of Ontario service area are projected to change by about -40 to -45 feet in all layers.
 - Through fall 2030, groundwater elevations in the JCSD production area are projected to change by about -24 to -18 feet in all layers.
 - Through fall 2030, groundwater elevations in the FWC production area are projected to change by about -26 feet in layers 1 and 2 and by about -8 feet in layer 3.

Water levels in Layer 1 for Alternatives 1 and 3 are slightly higher than the Baseline in 2030. For layers 2 and 3 water levels are still higher in Cucamonga and Fontana, but tend to be lower over the majority of the Chino Basin. Figures 12c through 12d show how each alternative varies from the baseline. Areas of concentrated put, including part of the CVWD service area, show an increase in groundwater levels, and areas where the take is concentrated, such as Pomona and MVWD, show consistent water level declines regardless of the Expansion Alternative.

The projected groundwater declines that result from the Expansion Alternatives are generally small and sustainable. That said, groundwater level declines are considered material physical injury in the Peace Agreement and will need to be mitigated. A discussion of mitigation is beyond the scope of this investigation.

Changes in Subsidence Potential

WEI has been conducting subsidence investigations in MZ1 for the CBWM since September 2000. As part of this process, WEI has reviewed recent historical subsidence across the basin using InSAR, ground level surveys, controlled pumping tests, and a rigorous review of basin hydrogeology. Figure 13 shows the location of recent subsidence in MZ1 (1996-2000) and defines the southern and central sub-areas of subsidence within MZ1. Figure 14 shows the projected the piezometric elevations at the PA-7 piezometer for all planning alternatives.

The PA-7 piezometer is used in the CBWM's MZ1 Long Term Management Plan. In this plan, basin management activities that maintain piezometric elevations greater than 400-feet at the PA-7 piezometer (corresponding to a depth to water of 245 feet) will not cause inelastic subsidence. In all cases, the projected lowest piezometric elevations are 23 to 48 feet higher than the subsidence threshold elevation of 400 ft for the managed area of MZ1; thus, no inelastic subsidence is projected to occur in this area. No material physical injury related to subsidence from any of the planning alternatives is projected to occur.

Change in Movement of Water Quality Anomalies

Previous Chino Basin water quality discussions (WEI, 2003; WEI, 2007b) have described specific water quality conditions across the entire basin and detailed existing contaminant plumes. These plumes are briefly discussed below. Following this discussion, the Expansion Alternatives' effects on said plumes are articulated.

Chino Airport. The Chino Airport is located approximately four miles east of the City of Chino and six miles south of Ontario International Airport, and occupying about 895 acres. From the early 1940s until 1948, the airport was owned by the Federal Government and used for flight training and aircraft storage. The County of San Bernardino acquired the airport in 1948 and has since operated and/or leased portions of the facility. Past and present businesses and activities at the airport since 1948 have included the modification of military aircraft; crop-dusting; aircraft-engine repair; aircraft painting, stripping, and washing; dispensing of fire-retardant chemicals to fight forest fires; and general aircraft maintenance. The use of organic solvents for various manufacturing and industrial purposes is widespread throughout the airport's history (RWQCB, 1990). From 1986 to 1988, a number of groundwater quality investigations were performed in the vicinity of Chino Airport. Analytical results from groundwater sampling revealed the presence of VOCs above MCLs in six wells down gradient of Chino Airport. The most common VOC detected above its MCL was TCE with concentrations in contaminated wells ranging from 6 to 75 µg/L. The plume is elongate in shape, up to 3,600 feet wide, and extends approximately 14,200 feet from the airport's northern boundary in a south to southwestern direction.

General Electric Flatiron Facility. The General Electric Flatiron Facility (Flatiron Facility) occupied the site at 234 East Main Street, Ontario, California from the early 1900s to 1982. Its operations primarily consisted of manufacturing clothes irons. Currently, the site is occupied by an industrial park. The RWQCB issued an investigative order to General Electric (GE) in 1987 after an inactive well in the City of Ontario was found to contain TCE and chromium above drinking water standards. Analytical results from groundwater sampling have indicated that VOCs and total dissolved chromium are the major groundwater contaminants in this plume. The most common VOC detected at levels significantly above its MCL is TCE, which reached a measured maximum concentration of 3,700 µg/L. Other VOCs—including PCE, toluene, and total xylenes, are periodically detected—but commonly below MCLs (Geomatrix Consultants, 1997). The plume is up to 3,400 feet wide and extends about 9,000 feet south-southwest (hydraulically down gradient) from the southern border of the site. From 2001 to 2006, the maximum TCE concentration in groundwater detected at an individual well within the Flatiron Facility plume was 3,200 µg/L.

General Electric Test Cell Facility. The GE Engine Maintenance Center Test Cell Facility (Test Cell Facility) is located at 1923 East Avon, Ontario, California. The primary operations at the Test Cell Facility include the testing and maintenance of aircraft engines. A soil and groundwater investigation, followed by a subsequent quarterly groundwater monitoring program, began in 1991 (Dames & Moore, 1996). The results of these investigations showed that VOCs exist in the soil and groundwater beneath the Test Cell Facility and that the released VOCs have migrated offsite. Analytical results from subsequent investigations indicated that the most common and abundant VOC detected in groundwater beneath the Test Cell Facility was TCE. The historical maximum TCE concentration measured at an onsite monitoring well (directly beneath the Test Cell Facility) was 1,240 µg/L. The historical maximum TCE concentration measured at an offsite monitoring well (down gradient) was 190 µg/L (BDM International, 1997). Other VOCs that have been detected include PCE; cis-1,2-DCE; 1,2-dichloropropane; 1,1-DCE; 1,1-DCA; benzene; toluene; xylenes; and others. The plume is elongate in shape, up to 2,400 feet wide, and extends approximately 10,300 feet from the Test Cell Facility in a southwesterly direction. From 2001 to 2006, the maximum TCE and PCE concentrations in groundwater detected at an individual well within the Test Cell Facility plume were 900 µg/L and 17 µg/L, respectively.

Kaiser Steel Fontana Steel Site. Between 1943 and 1983, the Kaiser Steel Corporation (Kaiser) operated an integrated steel manufacturing facility in Fontana. During the first 30 years of the facility's operation (1945-1974), a portion of Kaiser's brine wastewater was discharged to surface impoundments and allowed to percolate into the soil. In the early 1970s, the surface impoundments were lined to eliminate percolation to groundwater (Mark J. Wildermuth, 1991). In July 1983, Kaiser initiated a groundwater investigation that revealed the presence of a plume of degraded groundwater under the facility. In August 1987, the RWQCB issued CAO Number 87-121, which required additional groundwater investigations and remediation activities. The results of these investigations showed that the major constituents of release to groundwater were inorganic dissolved solids and low molecular weight organic compounds. The wells sampled during the groundwater investigations had TDS concentrations ranging from 500 to 1,200 mg/L and TOC concentrations ranging from 1 to 70 mg/L. As of November 1991, the plume had migrated almost entirely off the Kaiser site. Based on a limited number of wells, including City of Ontario Well No. 30, the plume is up to 3,400 feet wide and extends about 17,500 feet from northeast to southwest.

Milliken Landfill. The Milliken Sanitary Landfill (MSL) is a Class III Municipal Solid Waste Management Unit, located near the intersections of Milliken Avenue and Mission Boulevard in the City of Ontario. This facility is owned by the County of San Bernardino and managed by the County's Waste System Division. The facility was opened in 1958 and continues to accept waste within an approximate 140-acre portion of the 196-acre permitted area (GeoLogic Associates, 1998). Groundwater monitoring at the MSL began in 1987 with five monitoring wells as part of a Solid Waste Assessment Test investigation (IT, 1989). The results of this investigation indicated that the MSL had released organic and inorganic compounds to the underlying groundwater. Due to the presence of such compounds, the MSL conducted an Evaluation Monitoring Program (EMP) investigation. Following the completion of the EMP, a total of 29 monitoring wells were drilled to evaluate the nature and extent of the groundwater impacts identified in the vicinity of the MSL (GeoLogic Associates, 1998). Analytical results from groundwater sampling have indicated that VOCs are the major constituents of release. The most common VOCs detected are TCE, PCE, and dichlorodifluoromethane. Other VOCs detected above their MCLs include vinyl chloride; benzene; 1,1-dichloroethane; and 1,2-dichloropropane. The historical maximum total VOC concentration detected at an individual monitoring well is 159.6 µg/L (GeoLogic Associates, 1998). The plume is up to 1,800 feet wide and extends about 2,100 feet south of the MSL's southern border. From 2001 to 2006, the maximum TCE and PCE concentrations detected at an individual well within the MSL plume were 96 µg/L and 44 µg/L, respectively.

Ontario International Airport. A VOC plume, primarily containing TCE, exists south of the Ontario Airport. This plume extends approximately from State Route 60 on the north and Haven Avenue on the east to Cloverdale Road on the south and South Grove Avenue on the west. In July 2005, Draft CAOs were issued by the RWQCB. These CAOs were presented to the companies they named in August 2005. From 2001 to 2006, the maximum TCE concentration detected at an individual well within this plume was 38 µg/L. The plume is up to 17,700 feet wide and 20,450 feet long.

Pomona Area Plume. This is an undocumented VOC plume in the Pomona area. This plume extends approximately from Holt Boulevard on the north and East End Avenue on the east to

Philadelphia Street on the south and Towne Avenue on the west. From 2000 to 2008, the maximum TCE concentration within this plume was 46 µg/L. The plume is up to 5,000 feet wide and 7,900 feet long.

Figure 15 illustrates the locations of groundwater contaminant plumes in Chino Basin at the beginning of the planning period and their estimated locations at the end of the planning period for the Baseline and DYYP Alternatives. The migration of the plumes through the planning period is very similar for each Alternative.

The current locations of the plumes were mapped from recent data. These locations were assumed to be the initial plume locations at the start of the planning period. Initial concentrations were prepared as input files for MT3D (Zheng and Wang, 1999). MT3D is a 3-dimensional solute transport model code for simulation of advection, dispersion, and chemical reactions of dissolved constituents in groundwater systems. This code, in conjunction with the Model, was used to simulate the movement of the plumes.

With the exception of the Kaiser plume, the plume locations are virtually identical for all the Alternatives, indicating that the change in direction and speed of movement of these plumes caused by the DYYP Expansion is not significant will not contribute to material physical injury. The modeling results suggest that there may be material physical injury from the Expansion alternatives for some wells owned by the City of Ontario.

The simulation results for the Baseline and Expansion Alternatives are discussed below for each contaminant plume:

- Chino Airport – At the beginning of the planning period, the Chino Airport plume underlies and extends southwest of the Chino Airport. In the simulations for the Baseline and Expansion Alternatives, the leading edge of the plume traveled approximately 1.25 miles in the southeasterly direction. The migration of the plume in both alternatives is nearly identical. The primary factors affecting plume migration in the simulations are the regional hydraulic gradient and local Chino Creek Well Field groundwater pumping. At the end of the planning period, the plume location is south and east of Pine and Euclid Avenues, underlying the northern reaches of the Prado Flood Control Basin. The County of San Bernardino is under a Cleanup and Abatement order to remediate this plume.
- General Electric Flatiron Facility – At the beginning of the planning period, the GE Flatiron plume extends south of Mission Boulevard along Euclid Avenue. In the simulations for the Baseline and Expansion Alternatives, the leading edge of the plume traveled approximately 0.4 miles in the easterly direction and 0.6 miles in the southerly direction. There is a negligible difference between the Baseline and Expansion Alternatives plume locations in 2035. The primary factors affecting plume migration in the simulations are the regional hydraulic gradient, local groundwater pumping, and recharge at the Ely Basins. The recharge at Ely Basins deflects the plume to the northwest. GE is under a Cleanup and Abatement order to remediate this plume. It is unlikely that the plume will be allowed to migrate as shown herein.
- General Electric Test Cell Facility – At the beginning of the planning period, the GE Test Cell plume is located south of Ontario Airport, extending southwest of Mission Boulevard to Grove Avenue. In

the simulations for the Baseline and Expansion Alternatives, the leading edge of the plume traveled approximately 0.7 miles in the southeasterly direction around the Ely Basins. There is a negligible difference between the Baseline and Expansion Alternatives plume locations in 2035. The primary factors affecting plume migration in the simulations are the regional hydraulic gradient, local groundwater pumping, and recharge at the Ely Basins. At the end of the planning period, the leading edge of the plume directly underlies State Highway 60 just east of Grove Avenue. GE is under a Cleanup and Abatement order to remediate this plume.

- Kaiser Steel Fontana Steel Site – The location of the Kaiser plume, as shown in Figure 15, was estimated using past modeling studies (through the mid-1980s) and updated through 2008. Kaiser stopped monitoring in the early 1990s. Thus, the projection described herein is approximate. At the beginning of the planning period, the elongated Kaiser plume extends in a southwesterly direction from the former Kaiser Steel site to Mission Boulevard. With the Baseline Alternative, the leading edge of the plume traveled approximately 4.2 miles in the southwesterly direction. With the Expansion Alternatives, the leading edge of the plume traveled approximately 4.2 miles, 3.9 miles, and 4.5 miles in the southwesterly direction for Alternative 1, Alternative 2, and Alternative 3, respectively. City of Ontario Well 50 will be impacted by the Baseline Alternative and each of the Expansion Alternatives. The primary factors affecting plume migration in the simulations are the regional hydraulic gradient and groundwater pumping at wells owned by the City of Ontario, JCSD, and the Chino Desalter Authority. At the end of the planning period, for both the Baseline and Alternatives, the plume is aligned along the west side of Interstate 15 between South Archibald Avenue and South Milliken Avenue, north and south of Highway 60.
- Milliken Landfill – At the beginning of the planning period, the Milliken Landfill plume extends southwest from the landfill site, just north of Mission Boulevard. In the simulations for the Baseline and Expansion Alternatives, the leading edge of the plume traveled approximately 1.3 miles in the southerly direction. There is a negligible difference between the Baseline and Alternative plume locations in 2035. The primary factors affecting plume migration in the simulation are the regional hydraulic gradient and local groundwater pumping. At the end of the planning period, for the Baseline and Expansion Alternatives, the plume is located just southeast of the intersection of East Chino Avenue and Haven Avenue.
- Ontario International Airport – At the beginning of the planning period, the plume underlies a broad area south of Riverside Drive, north of Kimball Avenue, west of Grove Avenue, and east of Archibald Avenue. In the Baseline, the leading edge of the plume did not travel south of its initial (current) position. There is a negligible difference between the Baseline and Expansion Alternative plume locations in 2035. The primary factors affecting plume migration in the simulation are the regional hydraulic gradient and local groundwater pumping, specifically pumping at the Chino-1 Desalter Well Field—the plume is consumed in part by production at the Chino-1 Desalter well field and does not migrate past this well field.
- Pomona Area Plume – At the beginning of the planning period, the plume underlies an area south of Holt Boulevard and north of Philadelphia Street. For the Baseline and all Alternatives, the plume moves approximately 0.5 miles south. There is a negligible difference between the Baseline and the Alternative plume locations in 2035. The primary factors affecting plume migration in the simulation are the regional hydraulic gradient and local groundwater pumping, specifically City of Pomona pumping.

Hydraulic Control

Hydraulic control refers to the elimination or reduction of groundwater discharge from the Chino North MZ to the Santa Ana River to negligible levels. It is a requirement of CBWM and the IEUA's recycled water recharge permit and a condition to gaining access to the assimilative capacity for TDS and nitrogen afforded by the maximum benefit based TDS and nitrogen objectives. Hydraulic control was assessed herein from detailed groundwater elevation contour maps. Hydraulic control was demonstrated for the Baseline Alternative without the DYYP in 2023 in *Response to Condition Subsequent No. 3 from the Order Confirming Motion for Approval of the Peace II Documents* (WEI, 2008). Therefore, the Baseline Alternative (herein with DYYP) was evaluated for hydraulic control in 2023 to determine if it is consistent with the Peace II modeling work.

Hydraulic control is weakest when water levels are highest in the southern portion of the basin. Differences in Santa Ana River recharge are driven by the elevation of groundwater in the southern portion of the basin: lower recharge indicates a period of high groundwater levels, and conversely, greater recharge indicates a period of lower groundwater levels. Figure 4a shows projected Santa Ana River recharge for Alternatives 1, 2, and 3.

Figures 16a through 16d show the groundwater elevation contours for the southern end of the Chino Basin for Layer 1 for the Baseline (2023), Alternative 1 (2030), Alternative 2 (2035), and Alternative 3 (2025), respectively. These maps also show the direction of groundwater flow in the form of unit vectors. These vectors are plotted for every fourth model cell. All planning alternatives result in complete hydraulic control: there are no indications that groundwater from the Chino North Management Zone will discharge to the Santa Ana River.

Conclusions

The objective of this investigation is to determine if the proposed DYYP Expansion will result in material physical injury to the Chino Basin or a party to the Judgment. The criteria used to evaluate material physical injury include groundwater level changes, the increased potential for subsidence, losses due to increased storage, changes in direction and speed of known water quality anomalies, and the ability to maintain hydraulic control. These criteria were evaluated with an enhanced version of the 2007 Watermaster Model and MT3D. Based on our analysis, material physical injury related to storage losses, groundwater level changes, and plume migration will occur; however, this material physical injury can be mitigated.

Storage Losses

Losses from storage will occur as a result of increasing the storage in the basin for Alternative 3. The loss of water in storage is projected to range from about 40,000 acre-ft. This loss in storage water can be mitigated with either reduced takes or by supplemental puts to replace water lost from storage. At present, further discussion of the mitigation is beyond the scope of this investigation.

Groundwater Levels

The Baseline Alternative is essentially Alternative 1C of the Peace II Agreement. The Parties to the Judgment and the Peace II agreement have indicated that they are willing to accept an increase in energy expenses with the expectation of other financial gains and certainties made possible by implementing the Peace II project description, which includes the existing DYYP and other Peace II related agreements. Therefore, no material physical injury is projected to occur from the decline in groundwater levels caused by implementing the Baseline Alternative.

Groundwater production is projected to be maintained with the Baseline and Alternatives; although, some changes in production and replenishment plans may be required. From a production perspective, no material physical injury is projected to occur from the decline in groundwater levels caused by the implementing the Baseline Alternative. The same is true for each of the Expansion Alternatives. Recall that the plan for puts and takes that was analyzed herein reduced the anticipated take for the JCSD/WMWD component and eliminated the take for Chino Hills. These modifications were required to maintain projected pumping and not incur a material physical injury. It is our professional opinion that Chino Hills could participate in the take side of the Expansion Program if it modified its pumping plans to take more water from the shallow aquifer system. Optimizing the Chino Hills pumping plan is beyond the scope of this investigation. This optimization should be included in a subsequent basin-wide analysis of pumping and recharge plans performed by the appropriators and the Watermaster. This subsequent investigation may also indicate that the JCSD/WMWD take could be increased.

The projected groundwater declines in parts of the basin from the Expansion Alternatives are generally small and sustainable. That said, groundwater level declines are by themselves considered material physical injury in the Peace Agreement and need to be mitigated such that they are no longer "material." A discussion of the mitigation is beyond the scope of this investigation.

Change in Direction and Speed of Water Quality Anomalies – Kaiser Plume

In the Baseline Alternative, Alternative 1, and Alternative 3 the leading edge of the Kaiser plume traveled slightly more than 4 miles in a southwesterly direction. In Alternative 1 and Alternative 3, the bottom half of the plume decreased in size, compared to the Baseline Alternative, suggesting that the projected Expansion pumping at City of Ontario well drew in more of the Kaiser plume than was projected to occur in the Baseline Alternative. This suggests that the Expansion may contribute to water quality degradation at the City of Ontario well adjacent to the plume. This is a potential material physical injury that will require mitigation pursuant to the Peace Agreement. A discussion of the mitigation is beyond the scope of this investigation.

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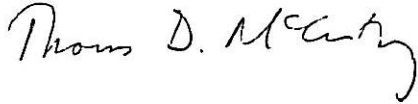
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Encl.

**Table 1
Proposed Pumping Adjustments for Takes**

Agency	Existing Program Takes (1) (acre-ft/yr)	Proposed Expansion Program Takes (2) (acre-ft/yr)	Proposed Total Takes (1) + (2) = (3) (acre-ft/yr)	Feasible Expansion Program Takes (4) (acre-ft/yr)	Feasible Total Takes (1) + (4) = (5) (acre-ft/yr)
City of Chino	1,159	2,000	3,159	2,000	3,159
City of Chino Hills	1,448	2,000	3,448	0	1,448
City of Ontario	8,076	0	8,076	0	8,076
City of Pomona	2,000	2,000	4,000	2,000	4,000
City of Upland	3,001	1,000	4,001	1,000	4,001
Cucamonga Valley Water District	11,353	0	11,353	0	11,353
Fontana Water Company	0	0	0	0	0
Jurupa Community Services District ¹	2,000	2,000	4,000	2,000	4,000
Monte Vista Water District	3,963	5,000	8,963	5,000	8,963
Three Valleys MWD	0	0	0	0	0
Western Municipal Water District ¹	0	10,000	10,000	5,000	5,000
Total	33,000	24,000	57,000	17,000	50,000

1. Western Municipal Water District take performed by Jurupa Community Services District. The feasible take from the Jurupa Community Services District well field is a total of 9,000 acre-ft.

Table 2
Pumping Adjustments for Puts

Agency	Existing Program		Expanded Program			Total Program	
	4 Years (acre-ft/yr)	Converted to 3 Years (acre-ft/yr)	Expansion puts (acre-ft/yr)	Additional Puts ¹ (acre-ft/yr)	Total Puts (acre-ft/yr)	Total ASR puts (acre-ft/yr)	Total In-Lieu Puts (acre-ft/yr)
City of Chino	2,519	3,359	1,000	111	1,111	3,710	809
City of Chino Hills	1,319	1,758	0	0	0	1,823	0
City of Ontario	7,601	10,135	3,000	333	3,333	0	13,615
City of Pomona ²	7,004	9,339	1,000	111	1,111	0	10,717
City of Upland ^{2,3}	1,283	1,711	1,000	111	1,111	0	2,711
Cucamonga Valley Water District	2,260	3,014	5,000	556	5,556	7,000	1,307
Fontana Water Company	0	0	0	0	0	0	0
Jurupa Community Services District	0	0	0	0	0	0	0
Monte Vista Water District	3,013	4,017	4,000	444	4,444	4,000	4,310
Three Valleys MWD ²	0	0	0	0	0	0	0
Sub Totals	25,000	33,333	15,000	1,667	16,667	16,533	33,467
Total						50,000	

1. Additional puts required to meet 50,000 would be recharged wet water or additional in-lieu. For modeling purposes, this additional put was assumed to be in-lieu and distributed to participating agencies on a pro-rata basis.

2. For modeling purposes, Three Valleys MWD "puts" were distributed to the Cities of Pomona and Upland.

3. When Upland pumping was too low to offset with in-lieu, additional in-lieu was distributed to other agencies on a pro-rata basis.

**Table 3
Pumping Adjustments for Takes**

Agency	Existing DYY Program Takes	Expanded Program Takes	
	(acre-ft/yr)	Expansion Takes (acre-ft/yr)	Total Takes (acre-ft/yr)
City of Chino	1,159	2,000	3,159
City of Chino Hills	1,448	0	1,448
City of Ontario	8,076	0	8,076
City of Pomona	2,000	2,000	4,000
City of Upland	3,001	1,000	4,001
Cucamonga Valley Water District	11,353	0	11,353
Fontana Water Company	0	0	0
Jurupa Community Services District ¹	2,000	2,000	9,000
Monte Vista Water District	3,963	5,000	8,963
Three Valleys MWD	0	0	0
Western Municipal Water District ¹	0	5,000	0
Total	33,000	17,000	50,000

1. Western Municipal Water District take performed by Jurupa Community Services District. JCSD's take is 4,000 acre-ft/yr and Western's take is 5,000 acre-ft/yr.

2. Take adjustments were made without optimization of pumping plans. It is possible that Chino Hills and WMWD could participate at higher takes with modifications to pumping plans (wells used and or aquifers pumped from).

Table 4
Groundwater Pumping Projection for the Chino Basin - DYY Expansion Program
(acre-ft/yr)

Producer	Pumping Projection ¹					
	2009/10 (acre-ft/yr)	2014/15 (acre-ft/yr)	2019/20 (acre-ft/yr)	2024/25 (acre-ft/yr)	2029/30 (acre-ft/yr)	2034/35 (acre-ft/yr)
Overlying Agricultural Pool	<u>21,32</u>	<u>13,251</u>	<u>5,010</u>	<u>5,010</u>	<u>5,010</u>	<u>5,010</u>
Overlying Non-Agricultural Pool						
San Bernardino Cty (Chino Airport)	0	0	0	0	0	0
Ameron Inc	0	0	0	0	0	0
California Steel Industries Inc	1,284	1,284	1,284	1,284	1,284	1,284
Swan Lake Mobile Home Park	0	0	0	0	0	0
Vulcan Materials Company	5	5	5	5	5	5
Space Center Mira Loma Inc.	0	0	0	0	0	0
Angelica Textile Service	29	29	29	29	29	29
Sunkist Growers Inc	147	147	147	147	147	147
Praxair Inc	0	0	0	0	0	0
General Electric Company	451	451	451	451	451	451
California Speedway	621	621	621	621	621	621
Reliant Energy Etiwanda	705	705	705	705	705	705
Subtotal Overlying Non-Agricultural Pool Production	<u>3,24</u>	<u>3,24</u>	<u>3,24</u>	<u>3,24</u>	<u>3,24</u>	<u>3,24</u>
Appropriative Pool						
Arrowhead Mountain Spring Water Company	263	318	335	308	308	308
Chino Desalter Authority	26,356	39,400	39,400	39,400	39,400	39,400
City of Chino	9,971	10,844	11,811	12,777	12,963	12,963
City of Chino Hills ²	4,823	4,823	4,823	4,823	4,823	4,823
City of Norco	0	0	0	0	0	0
City of Ontario	28,796	27,211	32,360	37,508	42,658	42,658
City of Pomona	13,000	13,000	13,000	13,000	13,000	13,000
City of Upland	1,284	2,140	2,140	2,140	2,140	2,140
Cucamonga Valley Water District	16,598	21,229	26,729	32,229	37,729	37,729
Fontana Union Water Company	0	0	0	0	0	0
Fontana Water Company	13,500	10,000	11,000	11,500	12,000	12,500
Jurupa Community Services District ²	20,087	18,123	21,616	21,419	21,419	21,419
Inland Empire Utilities Agency	0	0	0	0	0	0
Marygold Mutual Water Company	0	0	0	0	0	0
Metropolitan Water District of Southern California	0	0	0	0	0	0
Monte Vista Irrigation Company	0	0	0	0	0	0
Monte Vista Water District	16,000	17,000	18,500	20,000	21,500	21,500
Mutual Water Company of Glen Avon Heights	0	0	0	0	0	0
Niagara	657	795	838	770	770	770
San Antonio Water Company	894	1,149	1,282	1,244	1,244	1,244
San Bernardino County (Olympic Facility)	13	16	17	15	15	15
Santa Ana River Water Company	263	318	335	308	308	308
Golden State Water Company	329	397	419	385	385	385
West End Consolidated Water Company	0	0	0	0	0	0
West Valley Water District	0	0	0	0	0	0
Subtotal Appropriators	<u>152,83</u>	<u>166,763</u>	<u>18,40</u>	<u>197,827</u>	<u>210,663</u>	<u>211,163</u>
Total Production	<u>177,567</u>	<u>183,255</u>	<u>192,855</u>	<u>206,078</u>	<u>218,914</u>	<u>219,414</u>

1. All production data from IEUA (2008) unless otherwise noted.

2. Black and Veatch, 2008

Table 5
Supplemental Water Deliveries
(acre-ft)

Year	Recycled Water Recharge Used to Reduce Replenishment ¹	Overproduction and Replenishment				
		Net Replenishment Obligation	In-Lieu Deliveries	MWDSC Replenishment Supply	Total Wet Water Recharge	Cumulative Unmet Replenishment Obligation
2006	1,303	-29,339	0	24,759	24,759	-29,339
2007	6,000	-18,977	0	0	0	-73,076
2008	8,000	-17,889	0	0	0	-90,964
2009	8,786	-3,564	0	0	0	-94,528
2010	9,571	-1,261	0	0	0	-95,789
2011	10,357	964	0	0	0	-94,825
2012	11,143	-4,545	0	0	0	-99,371
2013	11,929	-3,148	0	0	0	-102,519
2014	13,500	22,061	0	0	0	-80,457
2015	13,500	27,885	0	0	0	-52,572
2016	13,500	26,332	0	0	0	-26,240
2017	15,000	23,290	5,000	21,809	26,809	-2,950
2018	15,000	22,047	0	0	0	-7,712
2019	15,000	21,038	0	0	0	13,326
2020	15,000	20,151	0	0	0	33,478
2021	15,000	20,478	0	0	0	53,956
2022	15,000	20,843	0	0	0	74,799
2023	16,000	20,469	0	0	0	95,268
2024	16,000	21,296	5,000	82,670	87,670	116,563
2025	22,000	16,195	5,000	76,670	81,670	45,088
2026	22,000	16,886	5,000	20,063	25,063	-19,696
2027	24,000	15,361	5,000	15,361	20,361	-29,398
2028	24,000	15,757	0	0	0	-34,002
2029	24,000	16,184	0	0	0	-17,818
2030	24,000	28,668	0	0	0	10,850
2031	24,000	29,159	0	0	0	40,009
2032	24,000	29,601	0	0	0	69,610
2033	24,000	29,982	0	0	0	99,592
2034	24,000	30,339	5,000	74,670	79,670	129,931
2035	24,000	31,200	5,000	74,670	79,670	81,460
Total	489,589	427,462	35,000	390,672	425,672	na
Average	16,320	14,249	1,167	13,022	14,189	-2,911
Max	24,000	31,200	5,000	82,670	87,670	129,931
Min	1,303	-29,339	0	0	0	-102,519

1. The Replenishment obligation has been reduced do to recycled water recharge.

Table 6
Water Budget for Chino North, Chino East, Chino South, and Prado Basin Management Zones
Baseline Alternative
 (acre-ft)

Year	Inflows							Outflows					Inflow- Outflow
	Boundary Inflow	Temescal to PBIMZ	Deep Percolation	Stream Recharge	Artificial Recharge		Subtotal Inflows	Net Pumping	PBIMZ to Temescal	ET	Rising Groundwater	Subtotal Outflow	
					Storm	Imported and Recycled Water Replenishment							
2006	32,703	6,084	86,301	26,237	11,646	26,110	189,081	153,537	1,883	14,788	15,622	185,830	3,251
2007	32,703	6,262	82,093	29,478	11,646	6,011	168,194	168,334	1,837	14,447	13,981	198,599	-30,406
2008	32,703	5,992	83,012	31,393	11,646	8,014	172,760	205,094	1,792	14,268	13,295	234,450	-61,690
2009	32,703	5,619	83,671	33,084	11,646	8,798	175,521	209,107	1,767	14,063	12,640	237,577	-62,056
2010	32,703	5,212	82,149	34,653	11,646	9,585	175,948	212,373	1,753	13,853	12,049	240,027	-64,078
2011	32,703	4,807	81,849	35,936	11,646	10,372	177,313	146,784	1,740	13,658	11,550	173,732	3,581
2012	32,703	4,409	79,176	36,981	11,646	11,159	176,074	147,431	1,730	13,483	11,125	173,768	2,306
2013	32,703	4,044	78,266	38,119	11,646	11,945	176,723	148,076	1,716	13,275	10,645	173,713	3,011
2014	32,703	3,710	77,834	39,137	11,646	13,519	178,549	182,079	1,704	13,111	10,269	207,163	-28,614
2015	32,703	3,401	77,243	40,249	11,646	13,519	178,760	182,645	1,694	12,980	9,943	207,261	-28,501
2016	32,703	3,113	76,195	41,228	11,646	14,169	179,053	181,875	1,685	12,874	9,695	205,929	-26,876
2017	32,703	2,848	75,760	41,881	11,646	43,255	208,093	176,174	1,677	12,795	9,513	200,159	7,933
2018	32,703	2,604	74,231	42,448	11,646	15,021	178,653	213,258	1,671	12,729	9,363	237,022	-58,369
2019	32,703	2,380	73,530	43,158	11,646	15,021	178,439	212,503	1,666	12,658	9,196	236,022	-57,584
2020	32,703	2,176	71,573	43,982	11,646	15,021	177,101	211,747	1,665	12,587	9,021	235,020	-57,919
2021	32,703	1,993	71,111	44,634	11,646	15,021	177,107	146,037	1,671	12,536	8,898	169,143	7,964
2022	32,703	1,828	70,147	44,953	11,646	15,021	176,298	146,563	1,686	12,513	8,850	169,612	6,686
2023	32,703	1,686	68,771	45,106	11,646	16,023	175,935	147,089	1,712	12,497	8,824	170,121	5,813
2024	32,703	1,564	67,886	45,423	11,646	16,023	175,245	176,014	1,750	12,469	8,761	198,994	-23,749
2025	32,703	1,459	66,933	45,838	11,646	16,023	175,245	176,538	1,794	12,423	8,661	199,417	57,890
2026	32,703	1,369	66,057	46,066	11,646	16,023	175,245	176,761	1,835	12,370	8,576	199,542	57,027
2027	32,703	1,287	65,443	46,095	11,646	16,023	175,245	176,761	1,877	12,328	8,517	199,484	56,417
2028	32,703	1,212	64,549	46,199	11,646	16,023	175,245	176,761	1,925	12,295	8,466	199,484	56,417
2029	32,703	1,146	64,037	46,612	11,646	16,023	175,245	176,761	1,971	12,243	8,362	199,484	56,417
2030	32,703	1,086	63,214	47,213	11,646	16,023	175,245	176,761	2,015	12,176	8,227	199,484	56,417
2031	32,703	1,031	62,919	47,624	11,646	16,023	175,245	176,761	2,058	12,124	8,128	199,484	56,417
2032	32,703	981	62,540	47,702	11,646	16,023	175,245	176,761	2,103	12,109	8,114	199,484	56,417
2033	32,703	937	62,017	47,596	11,646	16,023	175,245	176,761	2,146	12,105	8,117	199,484	56,417
2034	32,703	896	61,798	47,606	11,646	16,023	175,245	176,761	2,188	12,087	8,096	199,484	56,417
2035	32,703	859	61,535	47,854	11,646	16,023	175,245	176,761	2,226	12,043	8,012	199,484	56,417
Total	981,081	81,993	2,161,841	1,254,485	349,388	846,753	5,675,540	5,347,372	54,936	385,888	294,518	6,082,714	-407,174
Average	32,703	2,733	72,061	41,816	11,646	28,225	189,185	178,246	1,831	12,863	9,817	202,757	-13,572
Maximum	32,703	6,262	86,301	47,854	11,646	98,727	257,306	215,769	2,226	14,788	15,622	240,027	57,890
Minimum	32,703	859	61,535	26,237	11,646	6,011	168,194	146,037	1,665	12,043	8,012	169,143	-64,078

Table 7
Water Budget for Chino North, Chino East, Chino South, and Prado Basin Management Zones
Alternative 1 - 150,000 acre-ft DYYP
 (acre-ft)

Year	Inflows						Outflows						Inflow- Outflow
	Boundary Inflow	Temescal to PBMZ	Deep Percolation	Stream Recharge	Artificial Recharge		Subtotal Inflows	Net Pumping	PBMZ to Temescal	ET	Rising Groundwater	Subtotal Outflow	
					Storm	Imported and Recycled Water Replenishment							
2006	32,703	6,084	86,301	26,232	11,646	26,110	189,076	153,518	1,883	14,788	15,622	185,811	3,264
2007	32,703	6,262	82,093	29,463	11,646	6,011	168,178	168,315	1,837	14,445	13,976	198,573	-30,395
2008	32,703	5,992	83,012	31,380	11,646	8,014	172,748	205,551	1,792	14,255	13,251	234,849	-62,101
2009	32,703	5,620	83,671	33,085	11,646	8,798	175,522	209,563	1,767	14,034	12,538	237,901	-62,378
2010	32,703	5,212	82,149	34,678	11,646	9,585	175,973	212,828	1,752	13,812	11,921	240,313	-64,340
2011	32,703	4,808	81,849	35,947	11,646	10,372	177,325	130,084	1,739	13,620	11,443	156,886	20,438
2012	32,703	4,409	79,176	36,954	11,646	11,159	176,047	130,731	1,730	13,461	11,072	156,995	19,052
2013	32,703	4,044	78,266	37,989	11,646	11,945	176,593	131,377	1,716	13,270	10,644	157,007	19,586
2014	32,703	3,709	77,834	38,861	11,646	13,519	178,271	182,059	1,705	13,118	10,301	207,182	-28,911
2015	32,703	3,400	77,243	39,798	11,646	13,519	178,308	182,626	1,694	12,998	10,012	207,329	-29,022
2016	32,703	3,112	76,195	40,644	11,646	14,169	178,469	181,870	1,685	12,904	9,792	206,251	-27,782
2017	32,703	2,846	75,760	41,196	11,646	43,255	207,406	176,154	1,678	12,833	9,634	200,299	7,107
2018	32,703	2,603	74,231	41,855	11,646	15,021	178,059	229,739	1,672	12,764	9,468	253,643	-75,584
2019	32,703	2,381	73,530	43,008	11,646	15,021	178,290	228,982	1,665	12,668	9,200	252,525	-74,235
2020	32,703	2,178	71,573	44,336	11,646	15,021	177,457	228,226	1,665	12,565	8,940	251,396	-73,939
2021	32,703	1,994	70,147	45,304	11,646	15,021	177,779	129,336	1,670	12,493	8,775	152,274	26,505
2022	32,703	1,829	68,771	45,594	11,646	15,021	176,940	129,861	1,685	12,467	8,736	152,749	24,191
2023	32,703	1,687	67,886	45,549	11,646	16,023	176,378	130,387	1,711	12,459	8,739	153,286	23,082
2024	32,703	1,564	66,933	45,615	11,646	16,023	175,437	175,992	1,749	12,445	8,711	198,897	-23,460
2025	32,703	1,459	66,057	45,737	11,646	98,727	257,205	176,516	1,784	12,417	8,654	199,381	57,824
2026	32,703	1,368	65,057	45,759	11,646	98,727	256,261	176,739	1,835	12,378	8,597	199,549	56,712
2027	32,703	1,286	65,443	45,604	11,646	98,727	255,410	176,739	1,878	12,351	8,572	199,540	55,870
2028	32,703	1,212	64,549	45,731	11,646	24,034	179,875	231,078	1,925	12,318	8,515	253,836	-73,961
2029	32,703	1,146	64,037	46,545	11,646	24,034	180,111	231,078	1,971	12,246	8,351	253,646	-73,535
2030	32,703	1,086	63,214	47,664	11,646	24,034	180,347	233,042	2,014	12,149	8,145	255,350	-75,003
2031	32,703	1,032	62,919	48,390	11,646	24,034	180,724	133,626	2,056	12,075	8,013	155,770	24,954
2032	32,703	982	62,540	48,457	11,646	24,034	180,362	133,626	2,101	12,053	8,002	155,782	24,580
2033	32,703	937	62,017	48,160	11,646	24,034	179,496	133,626	2,145	12,058	8,031	155,860	23,637
2034	32,703	896	61,799	47,895	11,646	24,034	178,972	178,707	2,187	12,057	8,041	200,993	-22,021
2035	32,703	859	61,535	47,718	11,646	98,727	253,189	179,207	2,226	12,042	8,017	201,492	51,697
Total	981,081	81,994	2,161,842	1,255,150	349,388	846,753	5,676,208	5,301,182	54,928	385,543	293,721	6,035,375	-359,167
Average	32,703	2,733	72,061	41,838	11,646	28,225	189,207	176,706	1,831	12,851	9,791	201,179	-11,972
Maximum	32,703	6,262	86,301	48,457	11,646	98,727	257,205	233,042	2,226	14,788	15,622	255,350	57,824
Minimum	32,703	859	61,535	26,232	11,646	6,011	168,178	129,336	1,665	12,042	8,002	152,274	-75,584

Table 7 ALT1_Budget.xls



Table 8
Water Budget for Chino North, Chino East, Chino South, and Prado Basin Management Zones
Alternative 2 - 150,000 acre-ft DYP with 100,000 acre-ft Negative Storage
 (acre-ft)

Year	Inflows						Outflows						Inflow- Outflow
	Boundary Inflow	Temescal to PBMZ	Deep Percolation	Stream Recharge	Artificial Recharge		Subtotal Inflows	Net Pumping	PBMZ to Temescal	ET	Rising Groundwater	Subtotal Outflow	
					Storm	Imported and Recycled Water Replenishment							
2006	32,703	6,084	86,301	26,232	11,646	26,110	189,076	153,518	1,883	14,788	15,622	165,811	3,264
2007	32,703	6,262	82,093	29,463	11,646	6,011	168,178	168,315	1,837	14,445	13,976	198,573	-30,395
2008	32,703	5,992	83,012	31,380	11,646	8,014	172,748	205,551	1,792	14,255	13,251	234,849	-62,101
2009	32,703	5,620	83,671	33,085	11,646	8,798	175,522	209,563	1,767	14,034	12,538	237,901	-62,378
2010	32,703	5,212	82,149	34,678	11,646	9,585	175,973	212,828	1,752	13,812	11,921	240,313	-64,340
2011	32,703	4,808	81,849	35,947	11,646	10,372	177,325	130,084	1,739	13,620	11,443	156,886	20,438
2012	32,703	4,409	79,176	36,954	11,646	11,159	176,047	130,731	1,730	13,461	11,072	156,995	19,052
2013	32,703	4,044	78,266	37,989	11,646	11,945	176,593	131,377	1,716	13,270	10,644	157,007	19,586
2014	32,703	3,709	77,834	39,164	11,646	13,519	178,574	231,440	1,704	13,099	10,234	256,478	-77,904
2015	32,703	3,402	77,243	40,993	11,646	13,519	179,505	232,007	1,693	12,922	9,756	256,378	-76,873
2016	32,703	3,116	76,195	42,861	11,646	14,169	180,691	231,251	1,684	12,754	9,334	255,023	-74,333
2017	32,703	2,852	75,760	44,440	11,646	43,255	210,656	230,495	1,676	12,605	8,999	253,774	-43,118
2018	32,703	2,610	74,231	45,801	11,646	15,021	182,012	229,739	1,669	12,474	8,724	252,606	-70,594
2019	32,703	2,387	73,530	46,727	11,646	15,021	180,163	173,890	1,663	12,376	8,538	197,222	-15,207
2020	32,703	2,181	71,573	47,039	11,646	15,021	180,163	173,890	1,662	12,328	8,460	196,340	-16,177
2021	32,703	1,994	71,111	47,146	11,646	15,021	179,621	157,985	1,668	12,311	8,429	180,392	-772
2022	32,703	1,829	70,147	47,256	11,646	15,021	178,602	129,861	1,683	12,303	8,414	152,262	26,340
2023	32,703	1,686	68,771	47,267	11,646	16,023	178,095	130,387	1,709	12,302	8,416	152,813	25,282
2024	32,703	1,563	67,886	47,281	11,646	16,023	177,101	147,343	1,747	12,301	8,413	169,805	7,296
2025	32,703	1,458	66,933	47,261	11,646	98,727	258,728	176,516	1,792	12,290	8,363	199,201	56,415
2026	32,703	1,367	66,057	47,115	11,646	98,727	257,616	176,739	1,834	12,285	8,349	199,248	57,478
2027	32,703	1,285	65,443	46,879	11,646	98,727	256,684	176,739	1,876	12,244	8,346	199,205	-18,459
2028	32,703	1,210	64,549	46,648	11,646	24,034	180,790	176,739	1,924	12,237	8,349	199,248	-18,459
2029	32,703	1,144	64,037	46,780	11,646	24,034	180,343	231,078	1,971	12,209	8,298	253,556	-73,212
2030	32,703	1,084	63,214	47,365	11,646	24,034	180,046	178,706	2,015	12,156	8,179	201,056	-21,010
2031	32,703	1,030	62,919	47,555	11,646	24,034	179,887	162,276	2,059	12,119	8,126	184,580	-4,693
2032	32,703	980	62,540	47,637	11,646	24,034	179,539	162,276	2,104	12,101	8,106	184,587	-5,048
2033	32,703	935	62,017	47,619	11,646	24,034	178,954	133,626	2,147	12,091	8,095	155,959	22,995
2034	32,703	895	61,799	47,511	11,646	24,034	178,587	150,056	2,189	12,086	8,097	172,428	6,159
2035	32,703	858	61,535	47,226	11,646	98,727	252,696	150,557	2,228	12,084	8,107	172,976	79,720
Total	981,081	82,001	2,161,842	1,281,302	349,388	846,753	5,702,367	5,286,318	54,914	383,341	288,640	6,013,213	-310,846
Average	32,703	2,733	72,061	42,710	11,646	28,225	190,079	176,211	1,830	12,778	9,621	200,440	-10,362
Maximum	32,703	6,262	86,301	47,637	11,646	98,727	258,728	232,007	2,228	14,788	15,622	256,478	79,720
Minimum	32,703	858	61,535	26,232	11,646	6,011	168,178	129,861	1,662	12,084	8,095	152,262	-77,904

Table 8 ALT2_Budget.xls



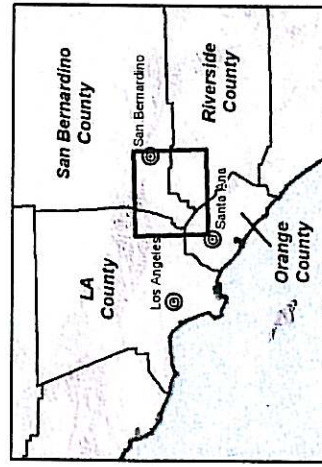
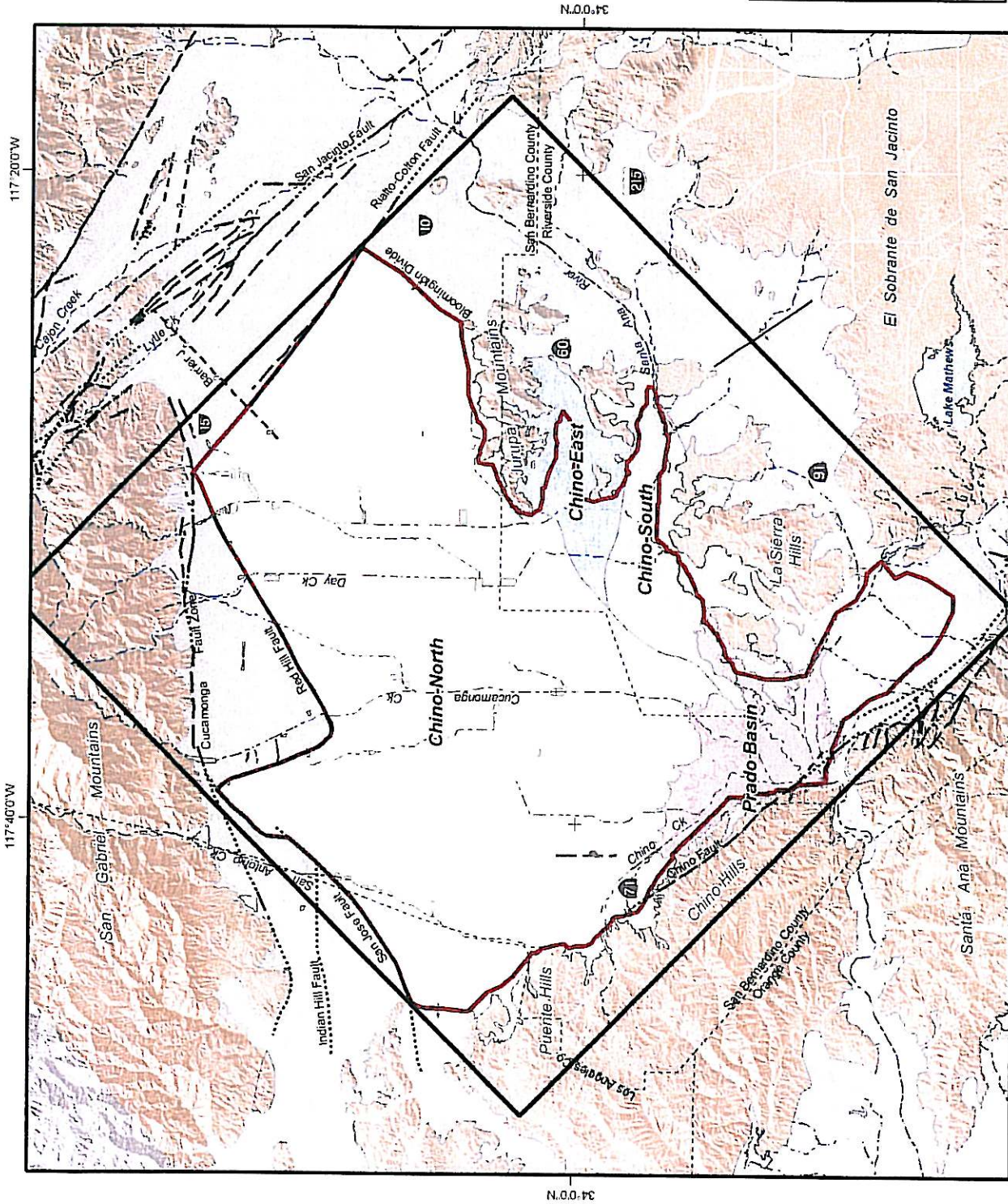
Table 9
Water Budget for Chino North, Chino East, Chino South, and Prado Basin Management Zones
Alternative 3 - 150,000 acre-ft DYYP with 300,000 acre-ft Maximum Storage
 (acre-ft)

Year	Inflows							Outflows					Inflow- Outflow
	Boundary Inflow	Temescal to PBMZ	Deep Percolation	Stream Recharge	Artificial Recharge		Subtotal Inflows	Net Pumping	PEMZ to Temescal	ET	Rising Groundwater	Subtotal Outflow	
					Storm	Imported and Recycled Water Replenishment							
2006	32,703	6,084	86,301	26,232	11,646	26,110	189,076	153,518	1,883	14,788	15,622	185,811	3,264
2007	32,703	6,262	82,093	29,463	11,646	6,011	168,178	168,315	1,837	14,445	13,976	198,573	-30,395
2008	32,703	5,991	83,012	31,352	11,646	8,014	172,719	205,073	1,792	14,265	13,285	234,414	-61,695
2009	32,703	5,619	83,671	33,015	11,646	8,798	175,452	209,084	1,767	14,059	12,625	237,534	-62,083
2010	32,703	5,212	82,149	34,563	11,646	9,585	175,858	212,349	1,753	13,848	12,040	239,990	-64,132
2011	32,703	4,807	81,849	35,855	11,646	10,372	177,232	130,084	1,740	13,655	11,548	157,027	20,205
2012	32,703	4,409	79,176	36,894	11,646	11,159	175,986	130,731	1,730	13,484	11,138	157,084	18,903
2013	32,703	4,044	78,266	37,951	11,646	11,945	176,556	131,377	1,716	13,284	10,681	157,059	19,497
2014	32,703	3,709	77,834	38,816	11,646	13,519	178,227	182,059	1,705	13,129	10,333	207,225	-28,999
2015	32,703	3,400	77,243	39,743	11,646	13,519	178,253	182,626	1,694	13,009	10,040	207,369	-29,116
2016	32,703	3,111	76,195	40,583	11,646	14,169	178,408	181,870	1,685	12,916	9,819	206,290	-27,882
2017	32,703	2,846	75,760	41,160	11,646	14,255	177,370	182,146	1,678	12,843	9,555	206,322	-1,048
2018	32,703	2,603	74,231	41,615	11,646	15,021	177,819	186,349	1,672	12,787	9,333	210,340	-32,521
2019	32,703	2,380	73,530	42,040	11,646	15,021	177,320	185,592	1,667	12,738	9,421	209,418	-32,098
2020	32,703	2,174	71,573	42,436	11,646	15,021	175,554	178,845	1,667	12,699	9,329	202,539	-26,985
2021	32,703	1,989	71,111	42,718	11,646	15,021	175,189	129,336	1,673	12,680	9,286	152,972	22,216
2022	32,703	1,826	70,147	42,844	11,646	15,021	174,187	129,861	1,688	12,677	9,286	153,513	20,674
2023	32,703	1,685	68,771	42,851	11,646	16,023	173,678	130,387	1,715	12,674	9,298	154,074	19,604
2024	32,703	1,562	67,886	43,024	11,646	16,023	172,845	181,983	1,753	12,657	9,255	205,649	-32,804
2025	32,703	1,459	66,933	43,347	11,646	16,023	172,845	182,507	1,798	12,617	9,154	206,076	48,739
2026	32,703	1,369	66,057	43,544	11,646	16,023	172,845	182,731	1,839	12,566	9,063	206,199	47,847
2027	32,703	1,287	65,443	43,604	11,646	16,023	172,845	182,730	1,882	12,523	8,994	206,129	47,282
2028	32,703	1,213	64,549	43,912	11,646	16,023	178,056	231,078	1,929	12,475	8,894	254,376	-76,320
2029	32,703	1,148	64,037	44,852	11,646	16,023	178,419	231,078	1,973	12,391	8,675	254,117	-75,698
2030	32,703	1,088	63,214	46,057	11,646	16,023	178,741	233,042	2,016	12,286	8,430	255,774	-77,033
2031	32,703	1,033	62,919	46,874	11,646	16,023	179,209	133,626	2,058	12,207	8,270	189,735	-10,742
2032	32,703	983	62,540	47,087	11,646	16,023	178,993	167,230	2,103	12,172	8,230	189,707	-11,210
2033	32,703	938	62,017	47,159	11,646	16,023	178,497	167,230	2,146	12,142	8,189	189,707	-11,210
2034	32,703	898	61,799	47,316	11,646	16,023	178,395	178,707	2,187	12,106	8,129	201,129	-22,733
2035	32,703	860	61,535	47,403	11,646	16,023	178,395	179,207	2,226	12,070	8,067	201,570	51,304
Total	981,081	81,988	2,161,842	1,224,309	349,388	846,753	5,645,351	5,260,751	54,970	388,190	300,265	6,004,176	-358,815
Average	32,703	2,733	72,061	40,810	11,646	28,225	188,179	175,358	1,832	12,940	10,009	200,139	-11,960
Maximum	32,703	6,262	86,301	47,403	11,646	98,727	254,815	233,042	2,226	14,788	15,622	255,774	51,304
Minimum	32,703	860	61,535	26,232	11,646	6,011	168,178	129,336	1,667	12,070	8,067	152,972	-77,033

Table 10
Comparison of Projected Annual Discharge at Prado Dam Through 2035
 (acre-ft)

Year	Santa Ana River Discharge at Prado ¹				Difference		
	Baseline	Alternative 1	Alternative 2	Alternative 3	Baseline - Alternative 1	Baseline - Alternative 2	Baseline - Alternative 3
2006	237,156	237,161	237,161	237,161	-5	-5	-5
2007	237,412	237,422	237,422	237,422	-10	-10	-10
2008	241,895	241,862	241,862	241,925	32	32	-30
2009	245,326	245,222	245,222	245,379	104	104	-53
2010	248,942	248,789	248,789	249,023	153	153	-82
2011	251,523	251,405	251,405	251,603	118	118	-79
2012	257,244	257,219	257,219	257,345	25	25	-101
2013	261,405	261,533	261,533	261,608	-129	-129	-203
2014	265,787	266,096	265,726	266,172	-309	61	-385
2015	268,603	269,124	267,673	269,207	-521	931	-603
2016	274,677	275,358	272,683	275,446	-681	1,995	-769
2017	279,619	280,426	276,546	280,483	-807	3,073	-864
2018	284,680	285,378	280,688	285,683	-698	3,992	-1,003
2019	287,948	288,110	283,721	289,291	-162	4,227	-1,343
2020	294,358	293,923	290,741	296,212	435	3,617	-1,854
2021	299,361	298,567	296,380	301,662	794	2,982	-2,301
2022	304,771	304,016	302,032	307,316	756	2,740	-2,545
2023	308,629	308,100	306,060	311,358	529	2,569	-2,729
2024	315,766	315,524	313,561	318,659	242	2,205	-2,893
2025	320,363	320,456	318,669	323,347	-94	1,694	-2,984
2026	320,049	320,377	318,787	323,058	-328	1,262	-3,010
2027	318,168	318,712	317,212	321,135	-545	956	-2,967
2028	319,807	320,323	319,240	322,522	-517	567	-2,715
2029	319,290	319,346	319,057	321,362	-56	233	-2,072
2030	318,554	318,020	318,353	319,913	534	201	-1,359
2031	316,249	315,367	316,315	317,141	881	-66	-892
2032	317,951	317,084	318,009	318,683	867	-57	-732
2033	318,060	317,410	318,015	318,570	650	45	-510
2034	318,029	317,686	318,125	318,352	343	-96	-323
2035	315,903	316,044	316,625	316,410	-141	-723	-507
Total	8,192,956	8,191,479	8,160,246	8,228,863	1,477	32,711	-35,907
Average	292,606	292,553	291,437	293,888	53	1,168	-1,282
Max	320,363	320,456	319,240	323,347	881	4,227	-30
Min	241,895	241,862	241,862	241,925	-807	-723	-3,010

1. Expected value discharge.



Map of Model Domain and Chino Basin Management Zones

Figure 1

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 Date: 20081024
 File: Figure_1.mxd

Scale: 0 1 2 3 4 5 Miles / 0 2 4 6 KM

Logos: Inland Empire, Black & Veatch, Valleys Watersheds, National Fire Plan, Chino Basin Dry-Year Yield Program Expansion Impact Analysis

Main Features

- New Aquifer Storage and Recovery Well
- MODFLOW Groundwater Flow Model Boundary

Geology

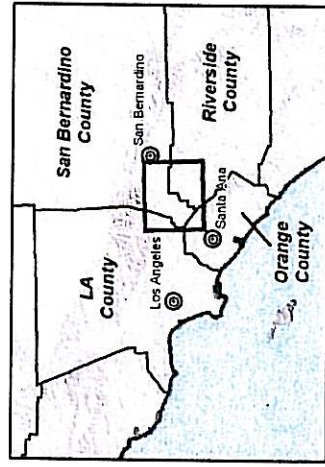
- Water-Bearing Sediments**
- Quaternary Alluvium
- Consolidated Bedrock
- Undifferentiated Pre-Tertiary to Early Pleistocene Igneous, Metamorphic, and Sedimentary Rocks

Faults

- Location Certain
- Location Uncertain
- Location Concealed
- Approximate Location of Groundwater Barrier

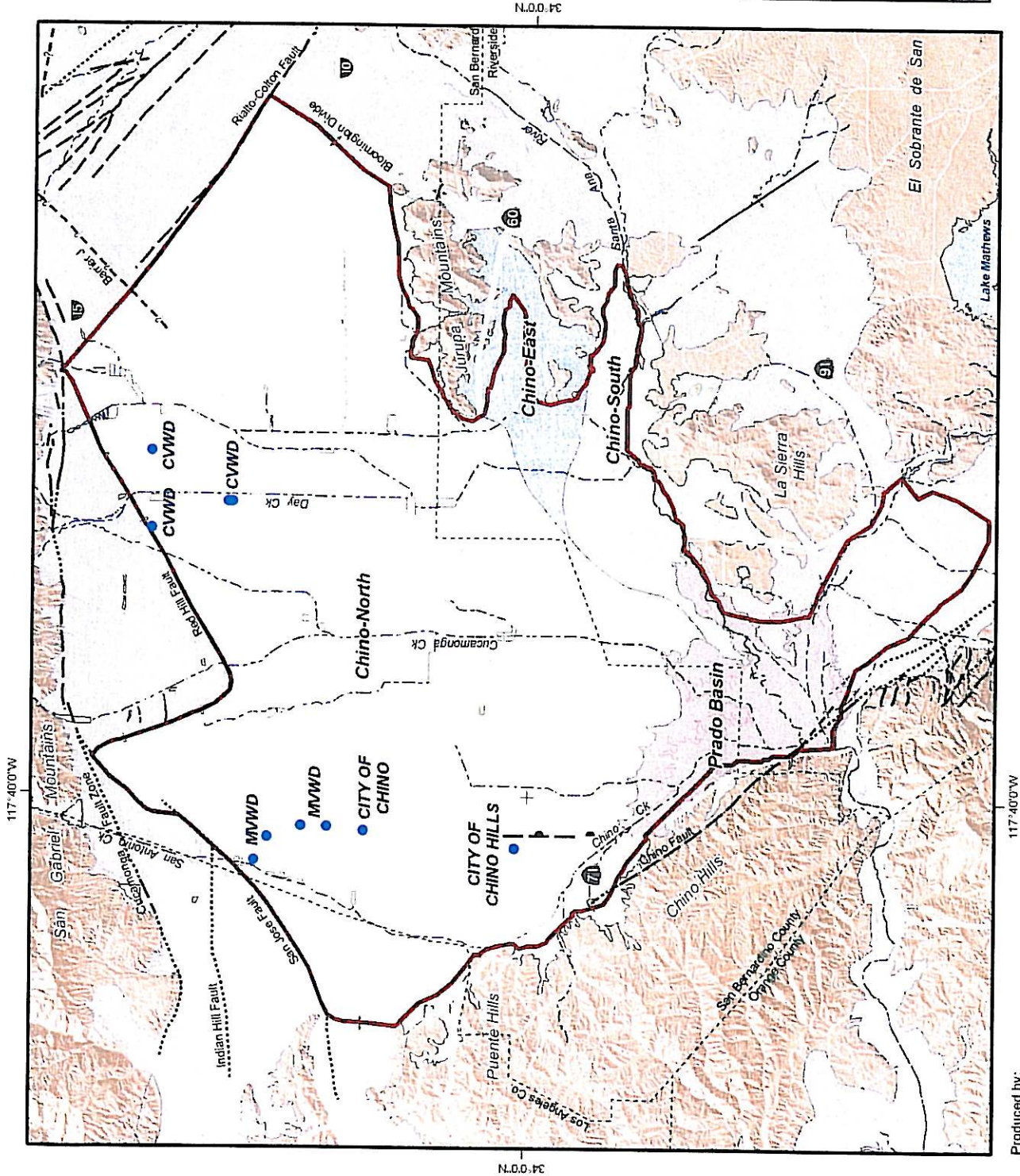
Other Features

- Groundwater Divides
- Flood Control/Conservation Basins
- Streams, Rivers, and Channels



Location Map of New Aquifer Storage and Recovery Wells

Figure 2



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 Date: 20081024
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Scale: 0 to 6 Miles / 0 to 6 KM

Chino Basin Dry-Year Yield Program Expansion Impact Analysis

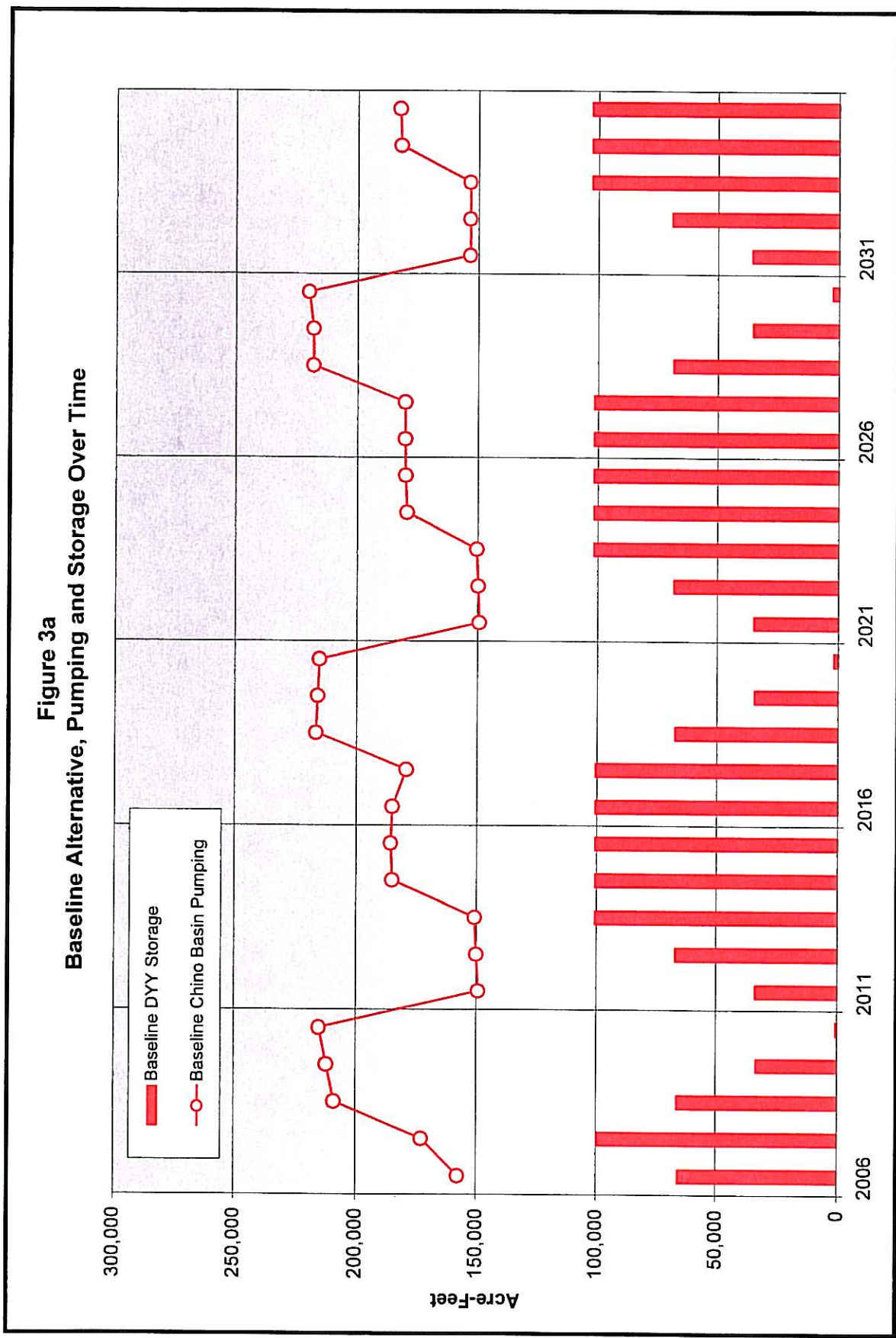


Figure 3a to 3d.xls

Figure 3b
Alternative 1 - 10 Typical Operation, Pumping and Storage Over Time

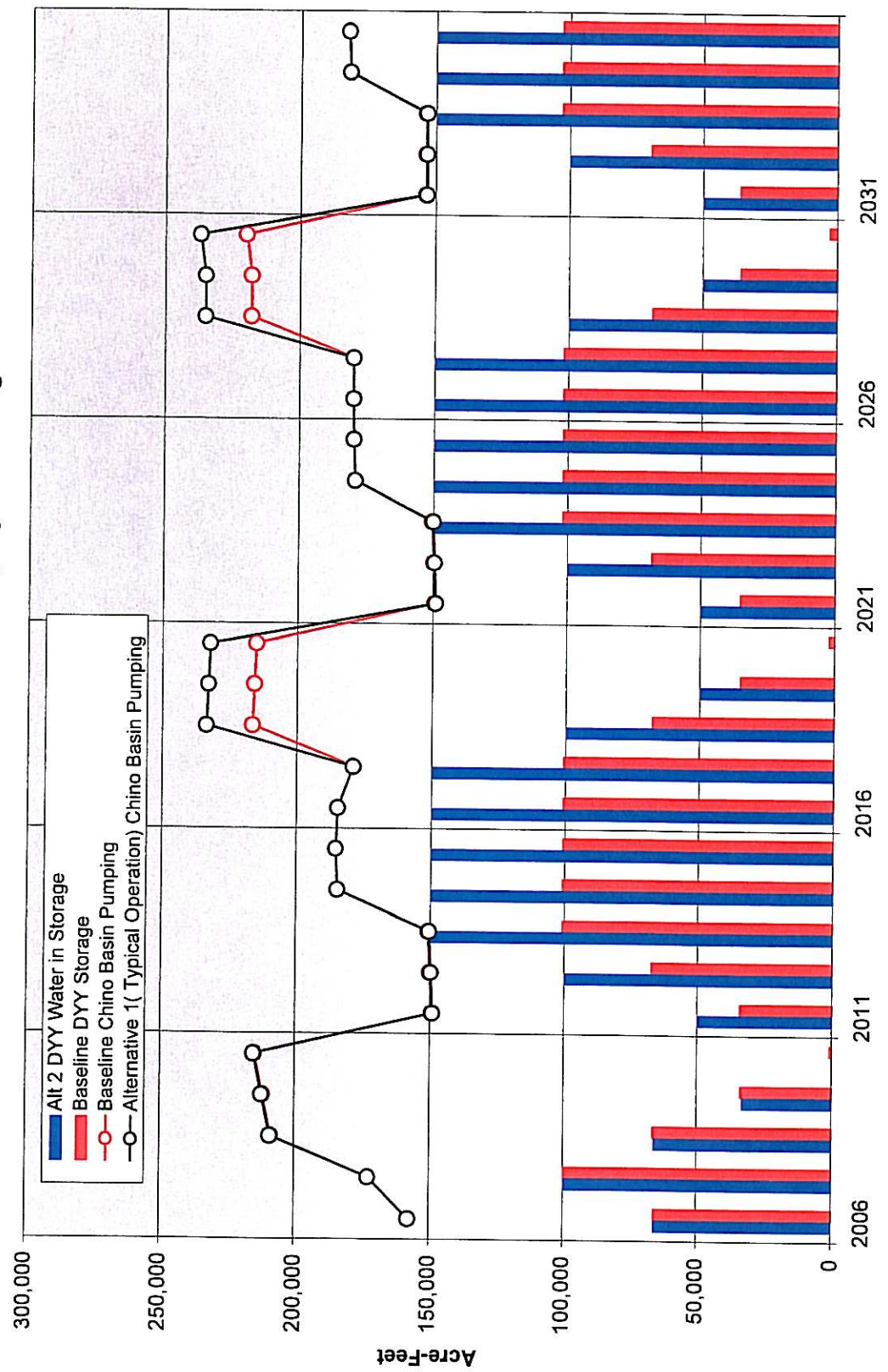


Figure 3a to 3d.xls

Figure 3c
Alternative 2 - Negative Storage, Pumping and Storage Over Time

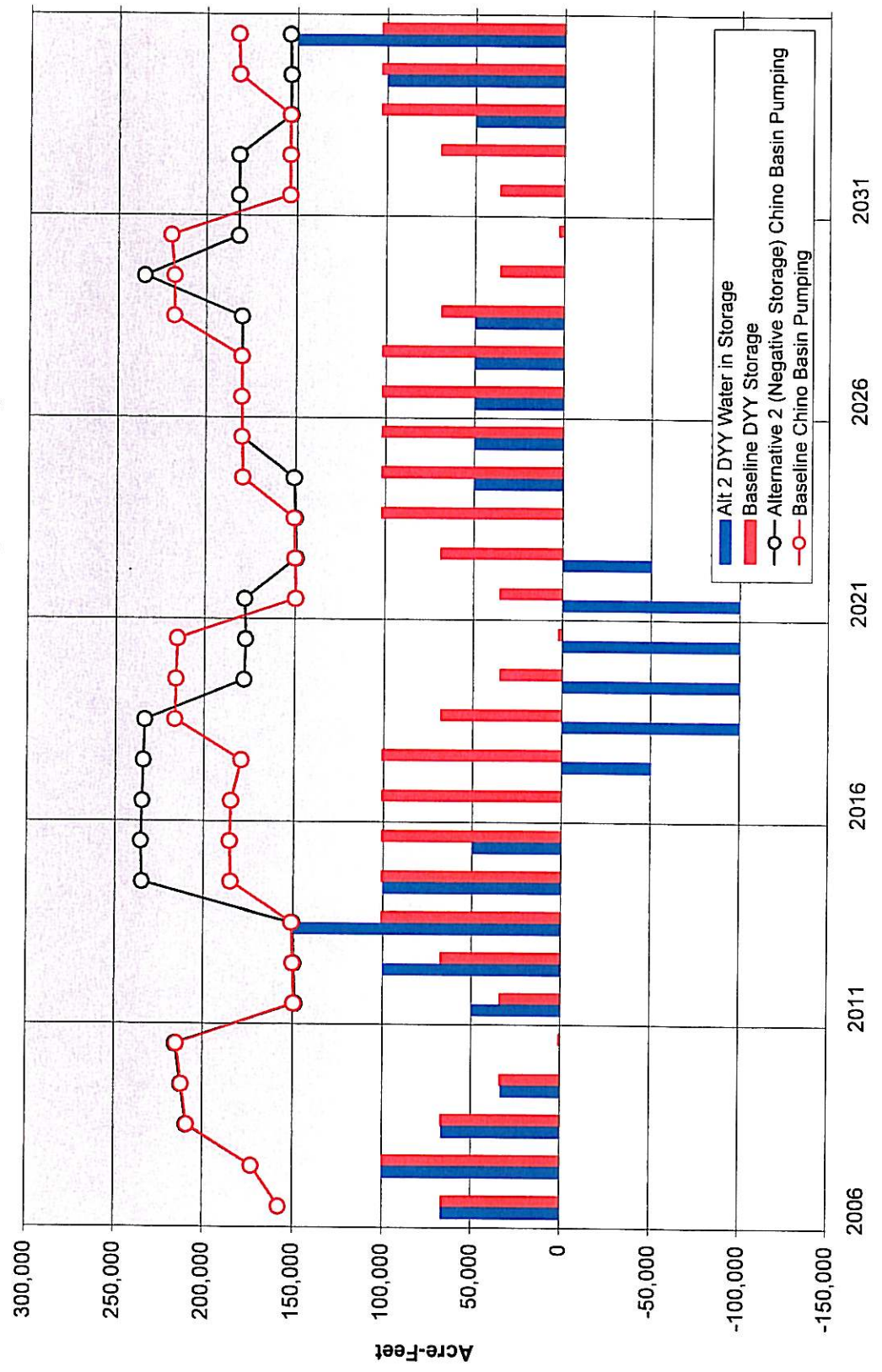


Figure 3d
Alternative 3 - Maximum Storage, Pumping and Storage Over Time

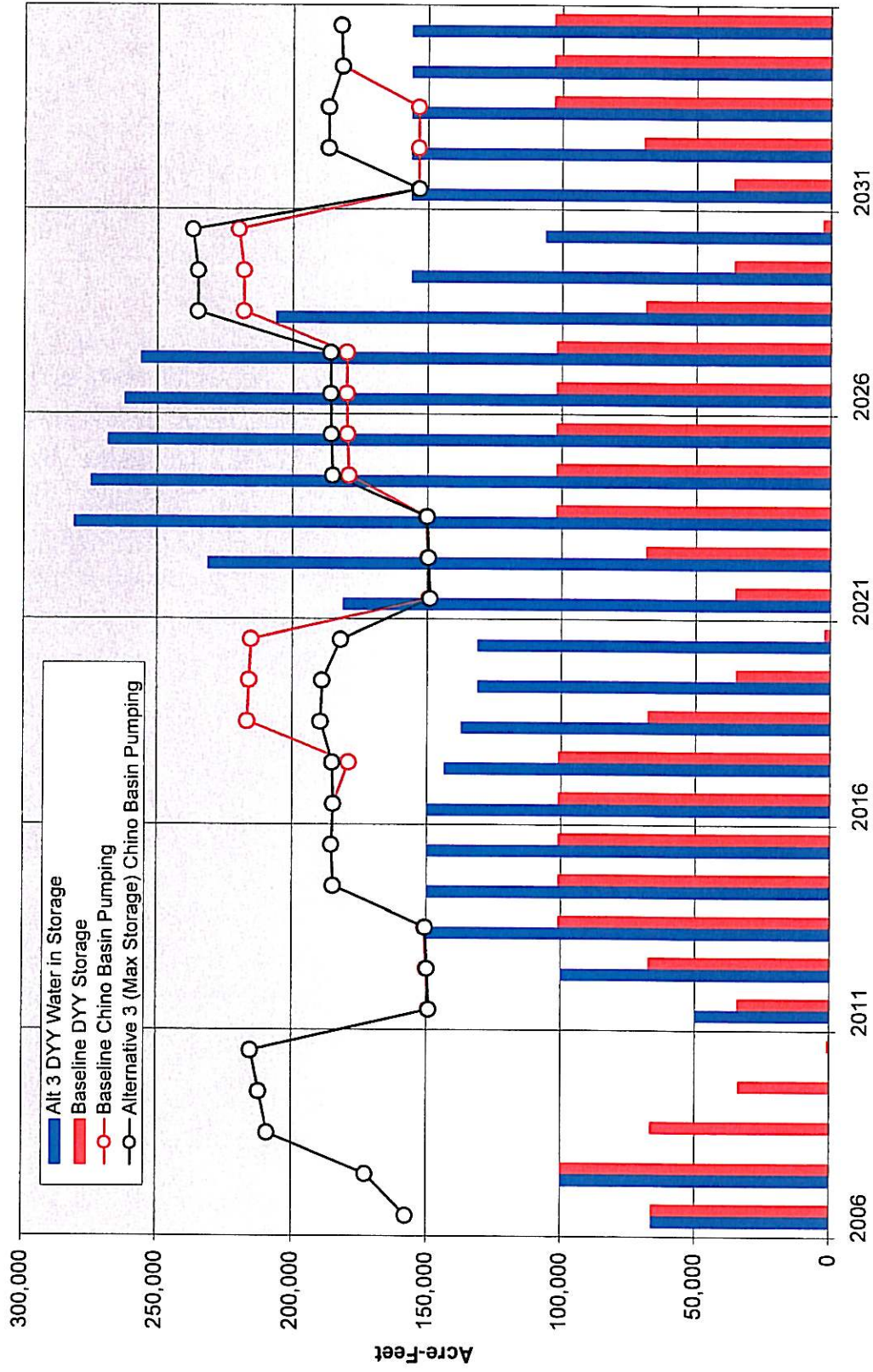


Figure 4a
Comparison of Projected Annual Time Histories of Santa Ana River Recharge the
the Chino Basin for the Dry-Year Yield Expansion Program Alternatives Relative to
the Baseline Alternative

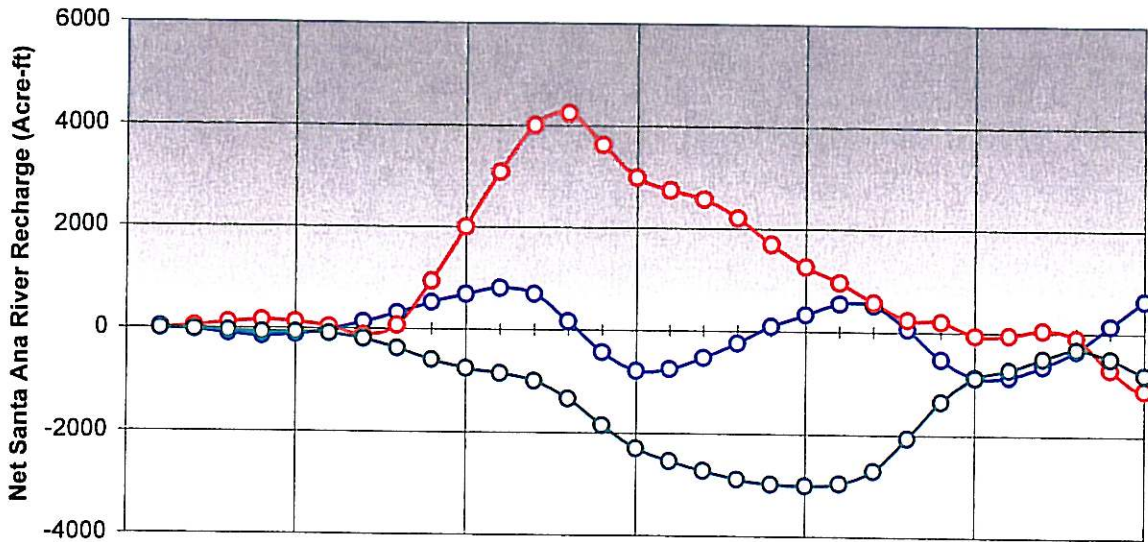
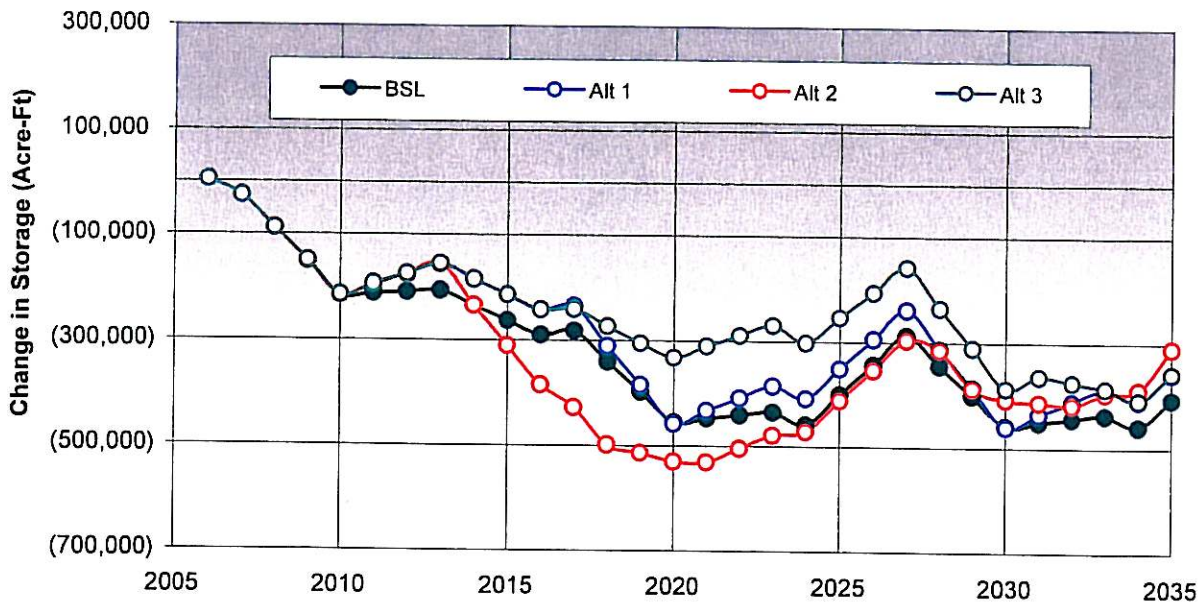
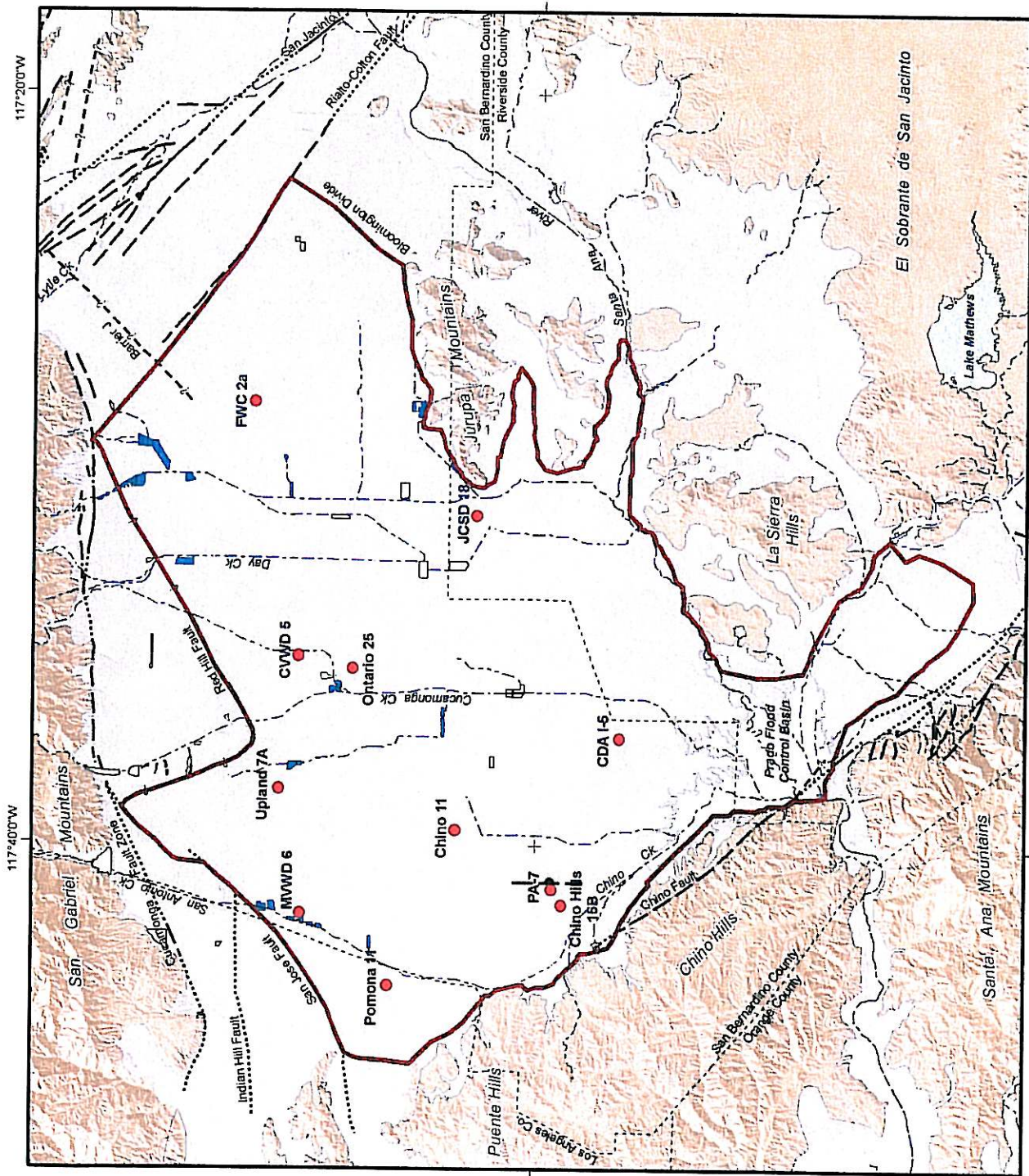


Figure 4b
Cumulative Change in Chino Basin Groundwater Storage For Each Alternative



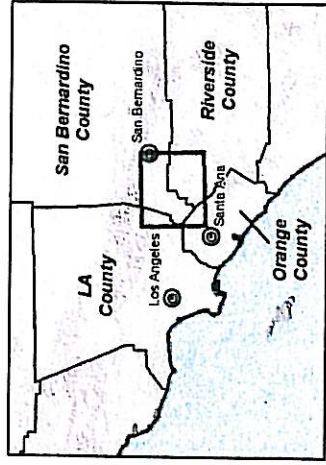


Hydrograph Well
 MODFLOW Groundwater Flow Model Boundary

Geology
 Water-Bearing Sediments
 Quaternary Alluvium
 Consolidated Bedrock
 Undifferentiated Pre-Tertiary to Early Pleistocene igneous, Metamorphic, and Sedimentary Rocks

Faults
 Location Certain
 Location Approximate
 Location Concealed
 Location Uncertain
 Approximate Location of Groundwater Barrier

Other Features
 Groundwater Divides
 Flood Control/Conservation Basins
 Streams, Rivers, and Channels



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Author: MJC
 Date: 2008/10/24
 File: Figure_5.mxd

Scale: 0 1 2 3 4 Miles / 0 2 4 6 KM

Logos: VALUES INTEGRATED, Inland Empire, BLACK & VEATCH, National Flood Insurance Program, Chino Basin Dry-Year Yield Program Expansion Impact Analysis

Planning Alternative Hydrograph Well Location Map

Figure 5

Figure 6a
 Simulated Groundwater Water Levels in Well 7A, City of Upland

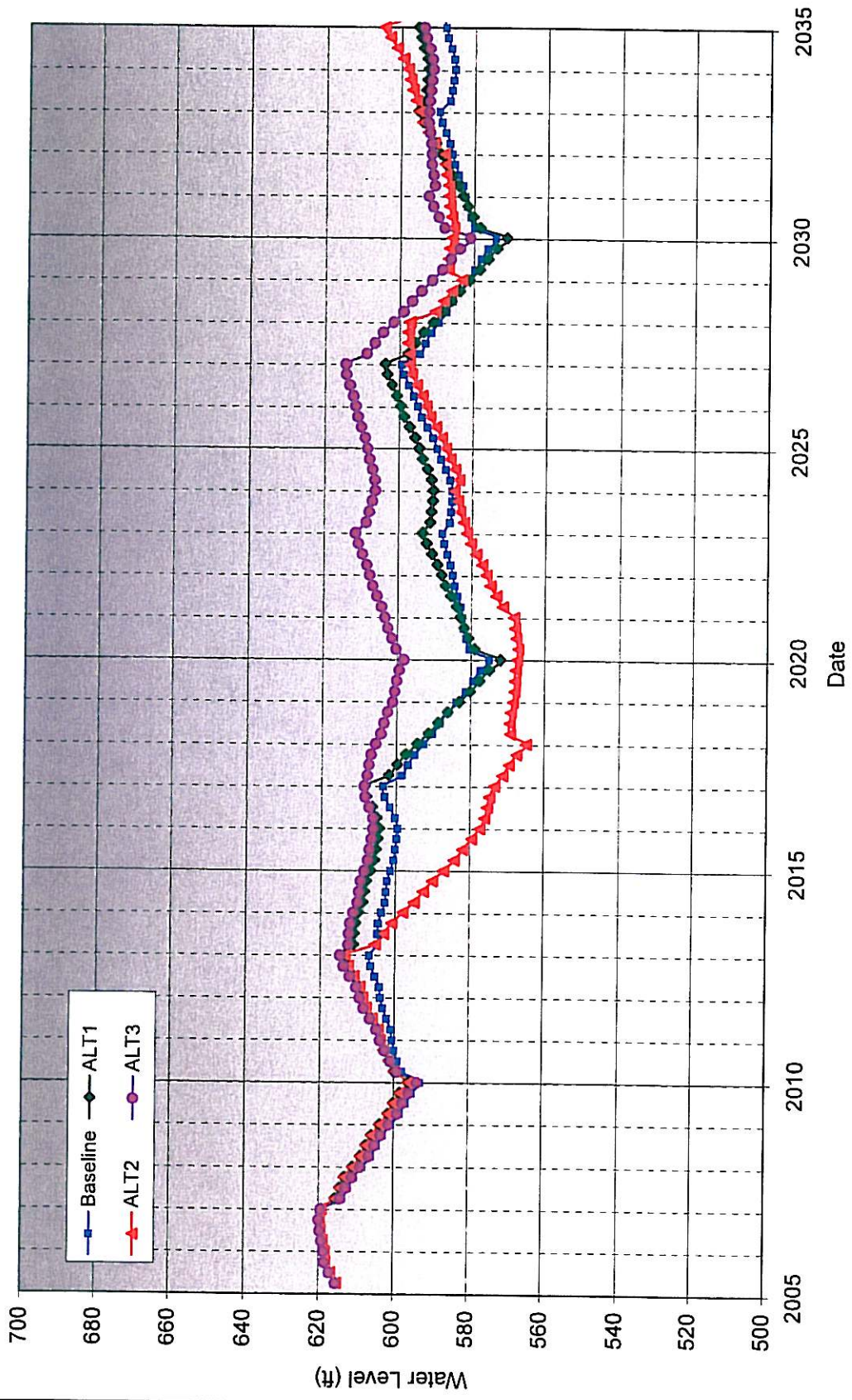


Figure 6 and Figure 14.xls

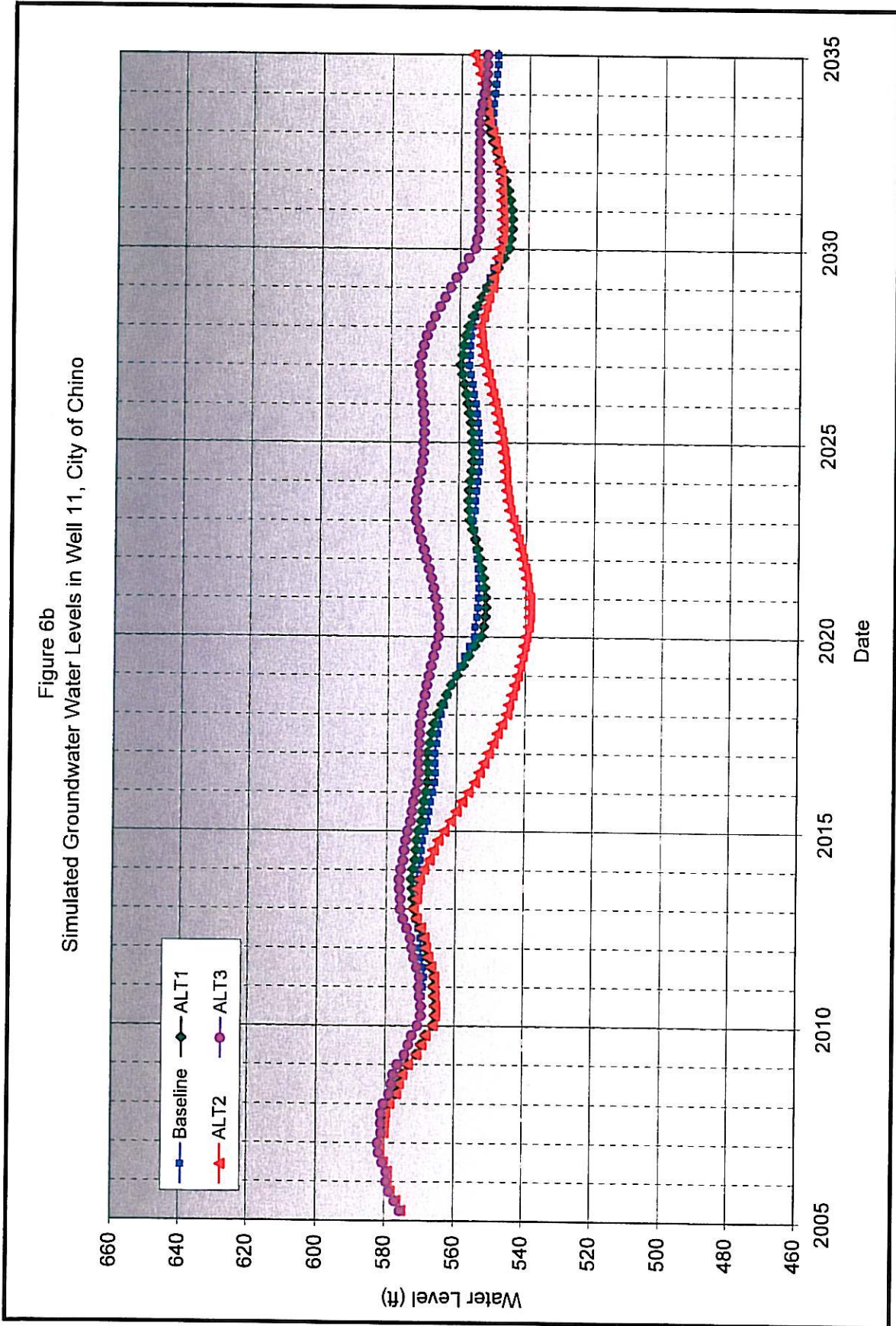


Figure 6 and Figure 14.xls

Figure 6c
 Simulated Groundwater Water Levels in Well18, Jurupa Community Services District

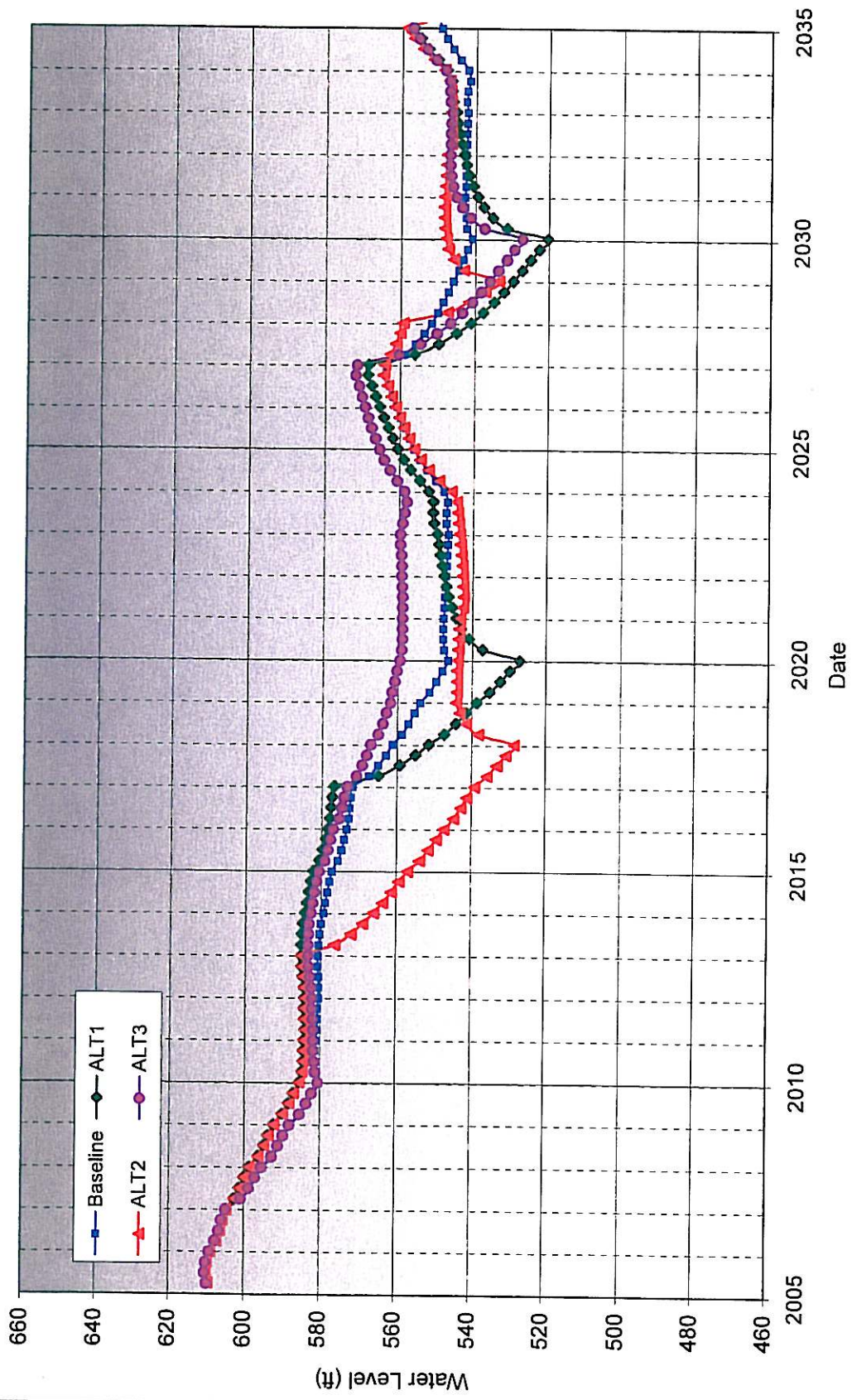


Figure 6 and Figure 14.xls

Figure 6d
 Simulated Groundwater Water Levels in Well P-11, City of Pomona

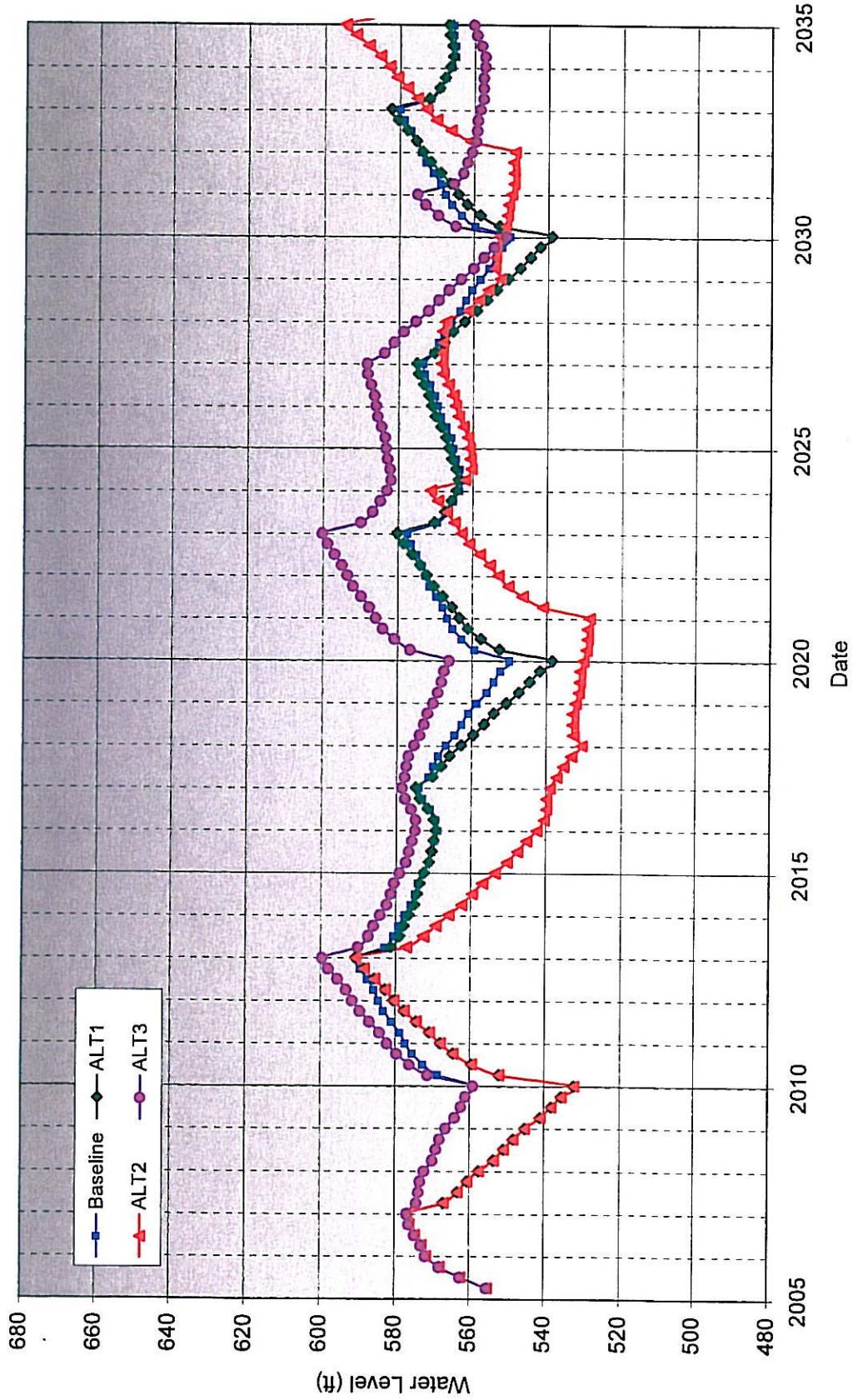


Figure 6 and Figure 14.xls



Figure 6e
 Simulated Groundwater Water Levels in Well 6, Monte Vista Water District

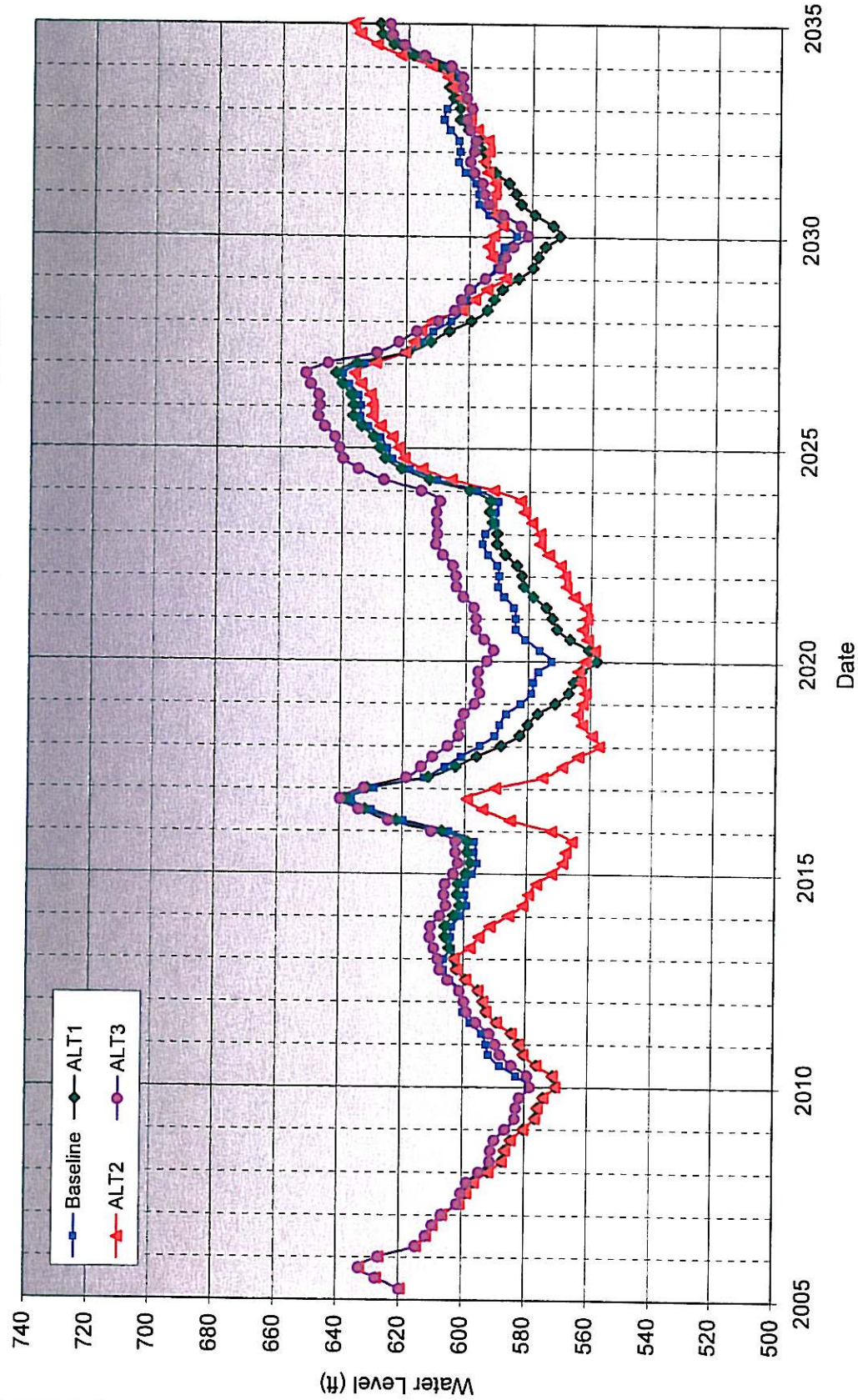


Figure 6 and Figure 14.xls

Figure 6f
 Simulated Groundwater Water Levels in Well 25, City of Ontario

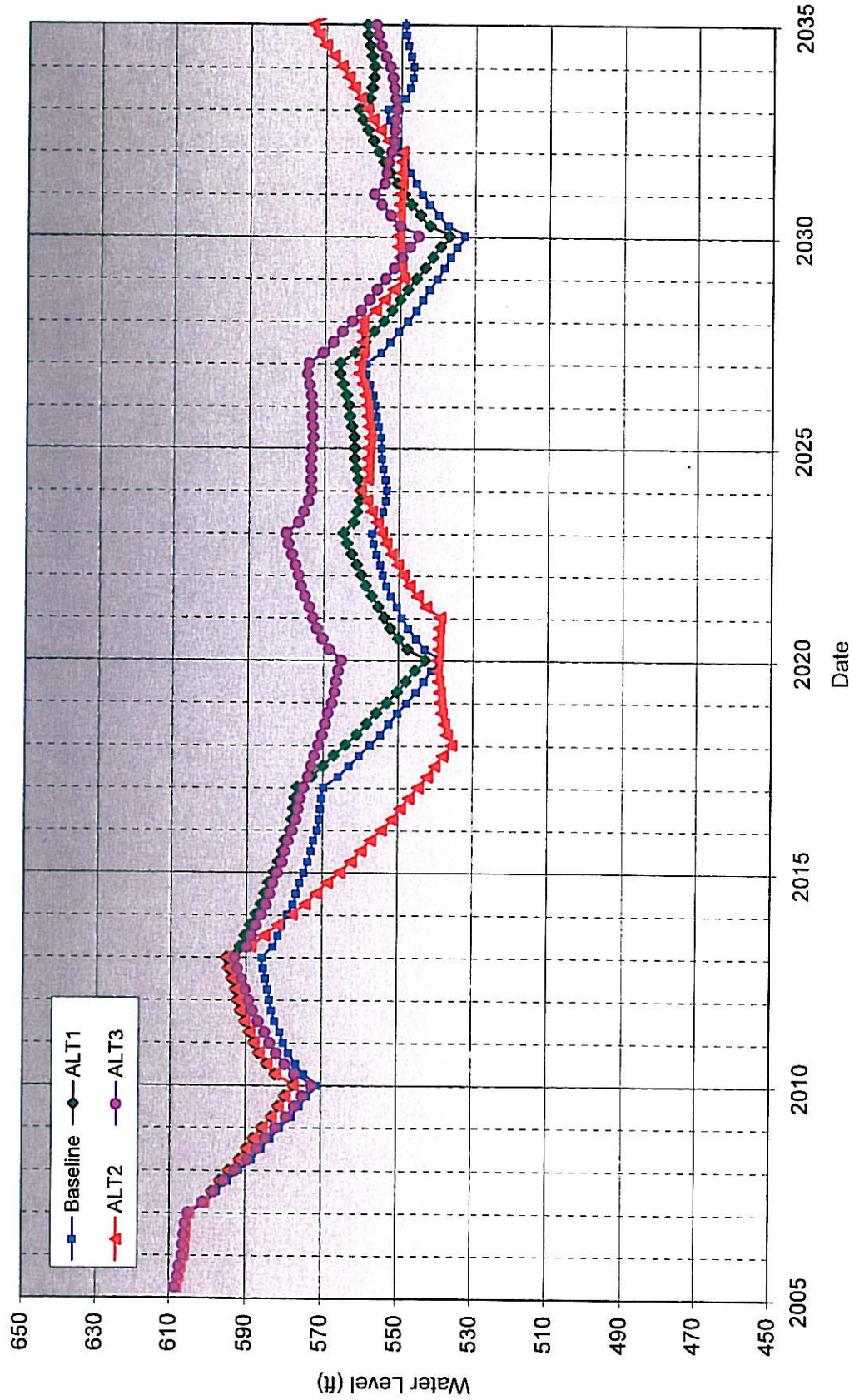


Figure 6 and Figure 14.xls

Figure 6g
 Simulated Groundwater Water Levels in Well CB-5, Cucamonga Valley Water District

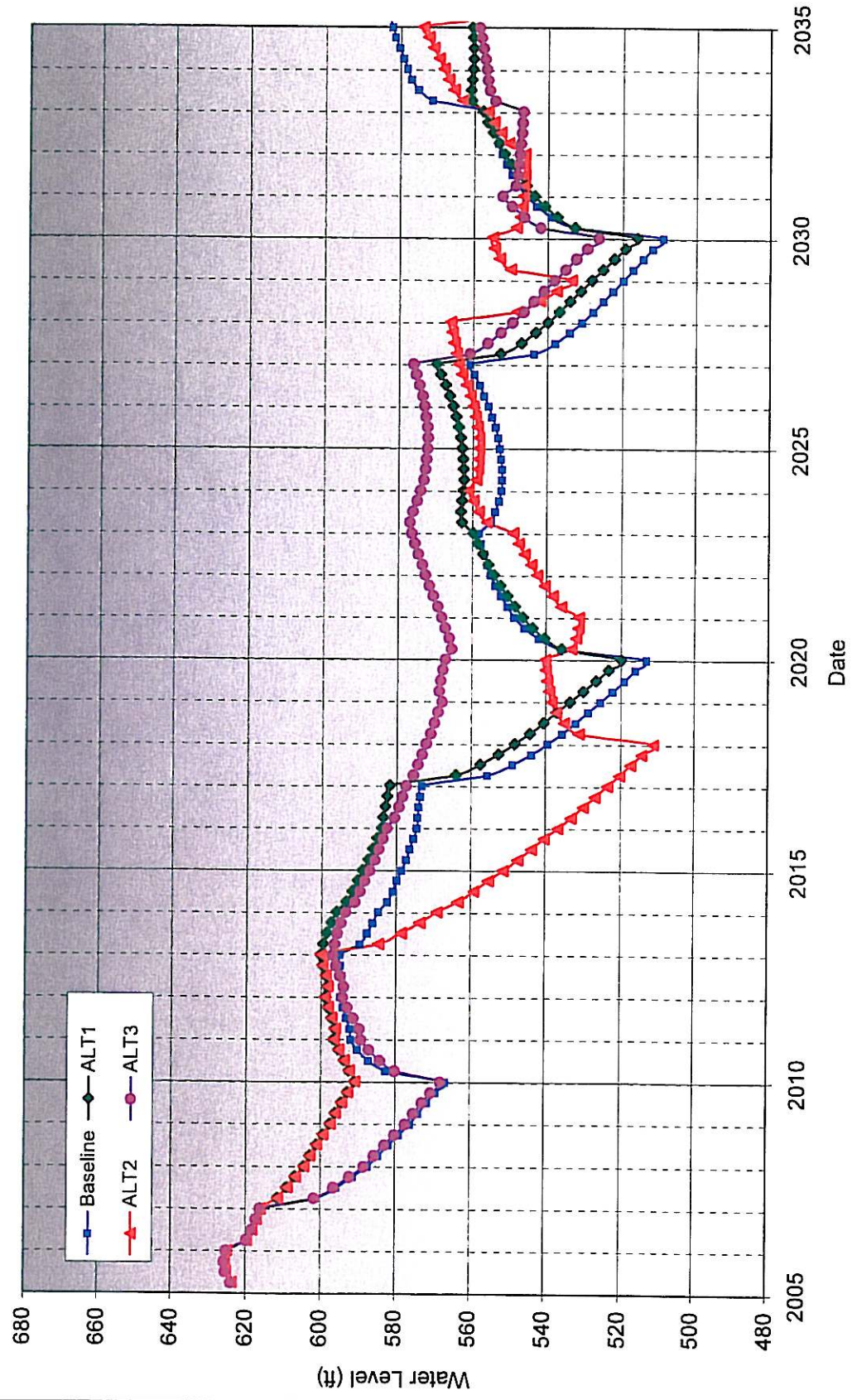


Figure 6 and Figure 14.xls



Figure 6h
 Simulated Groundwater Water Levels in Well 1, Chino Desalter Authority

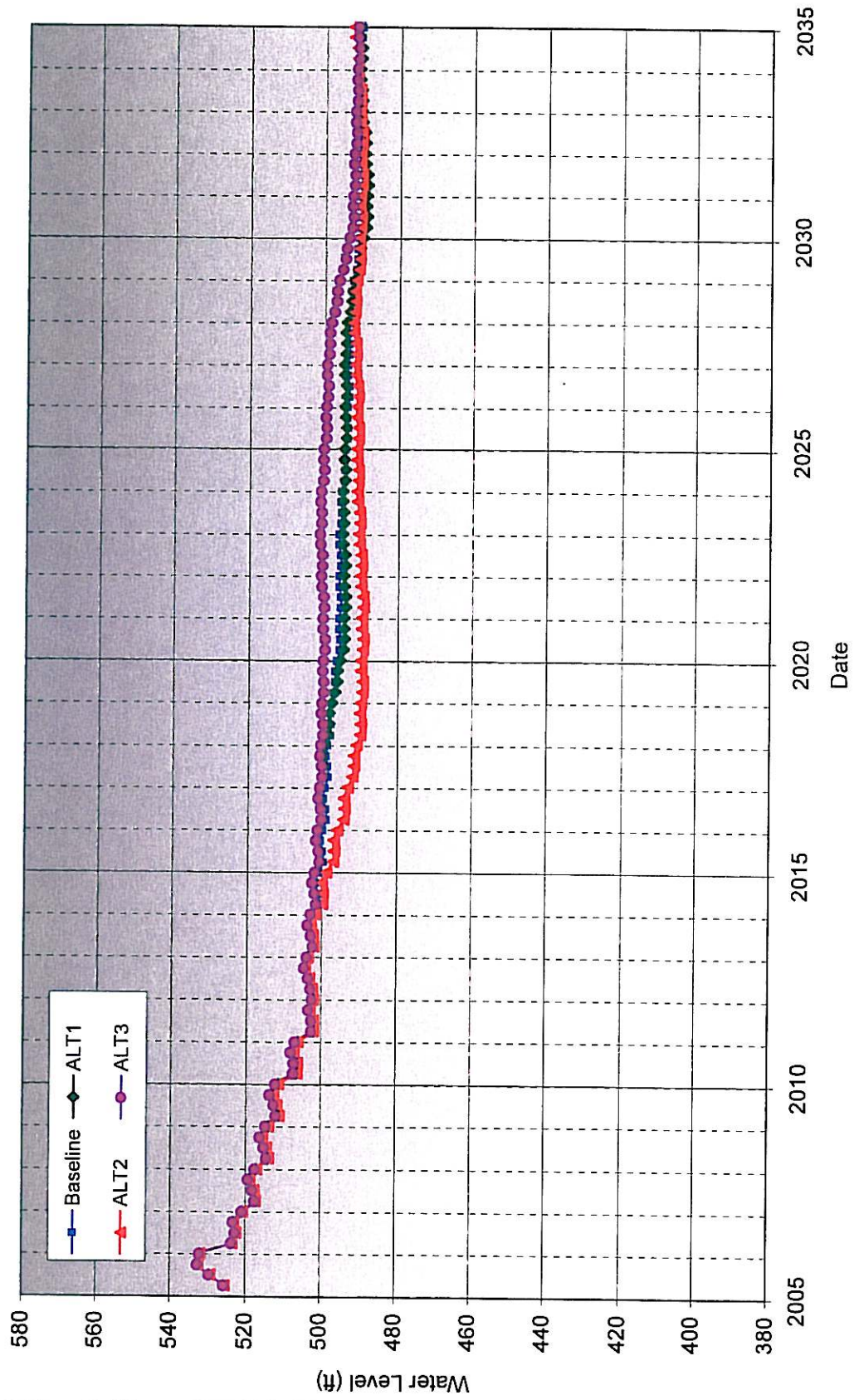


Figure 6 and Figure 14.xls

Figure 6i
 Simulated Groundwater Water Levels in Well 15B, City Of Chino Hills

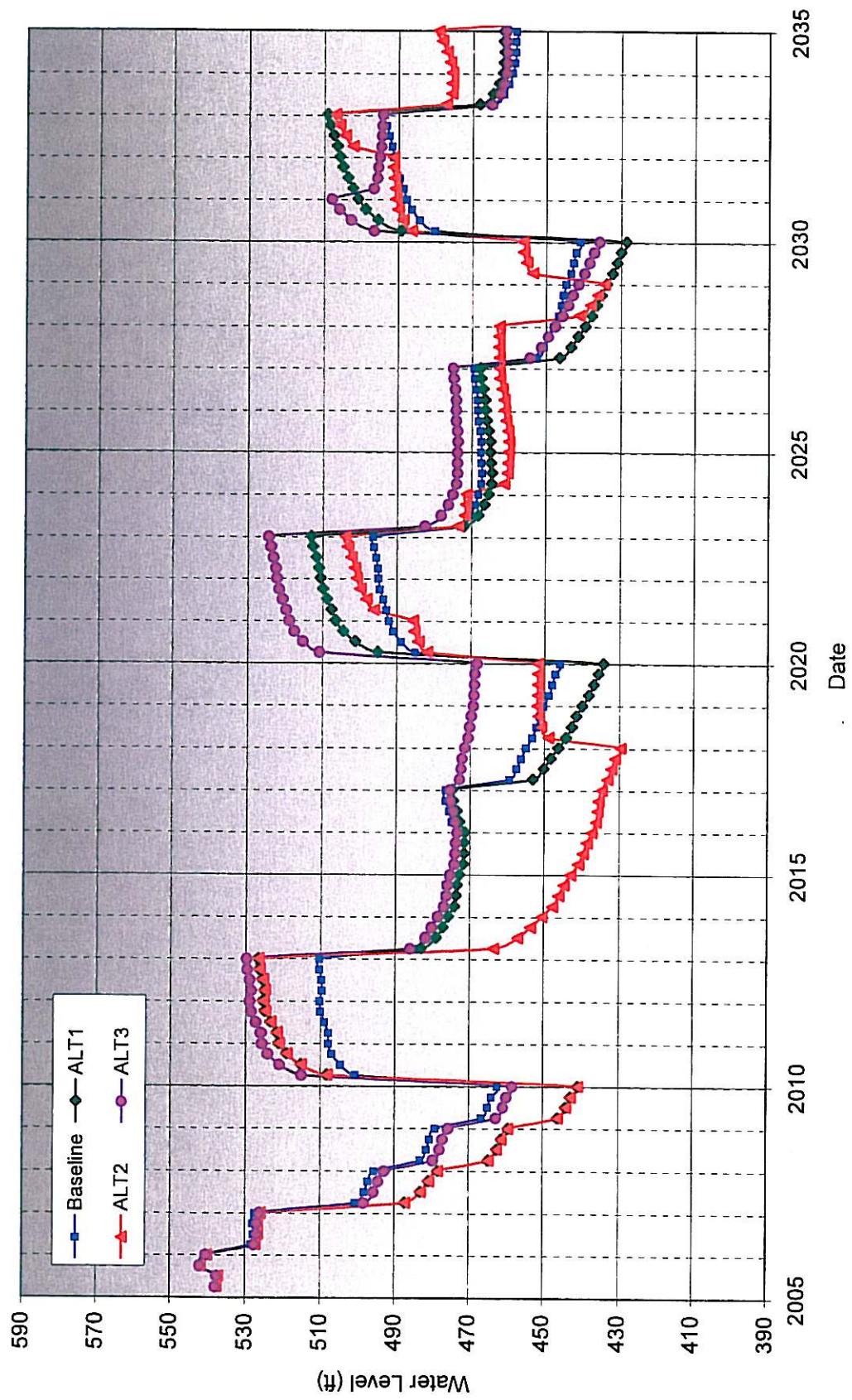


Figure 6 and Figure 14.xls

Figure 6j
Simulated Groundwater Water Levels in Well F2A, Fontana Water Company

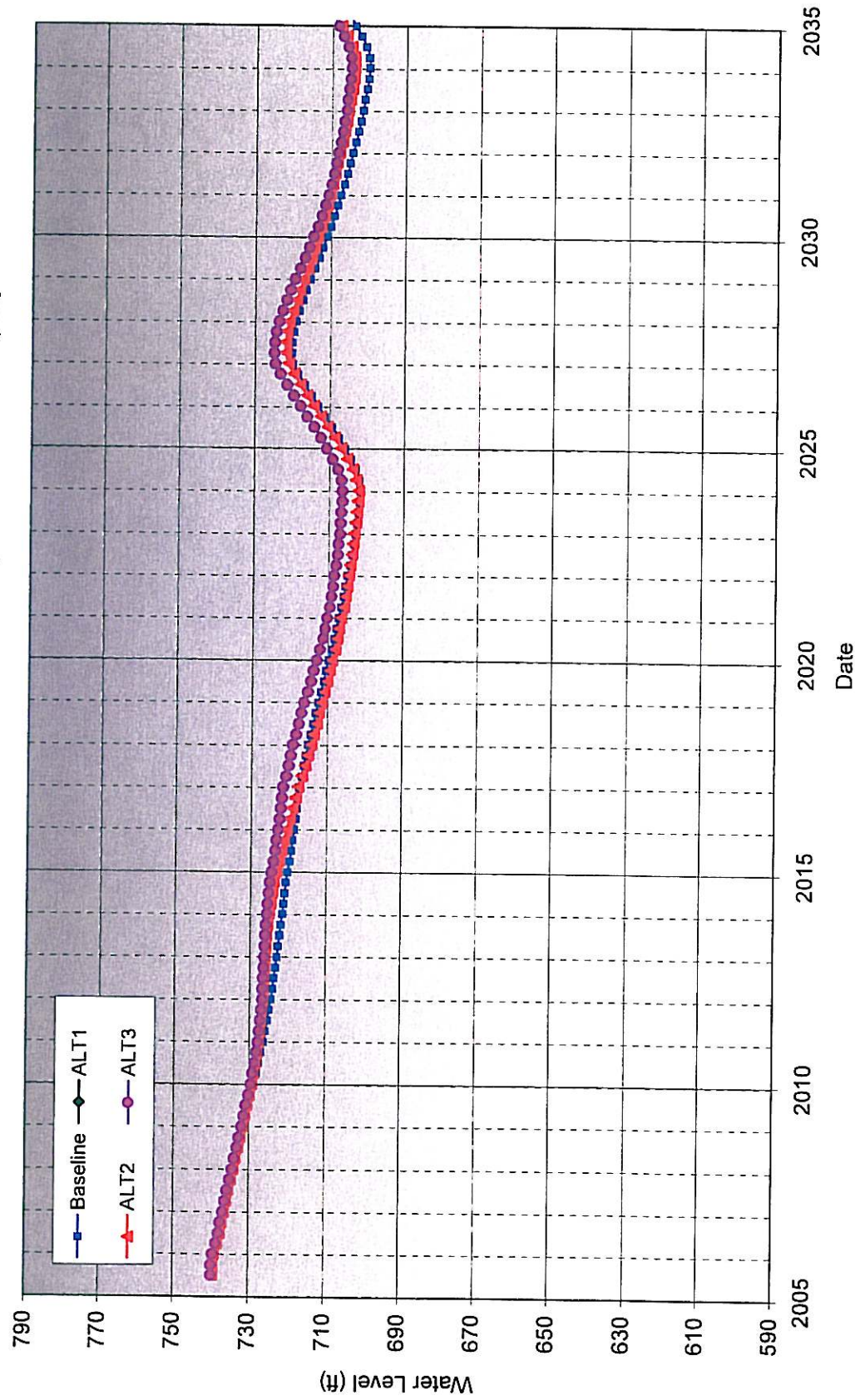
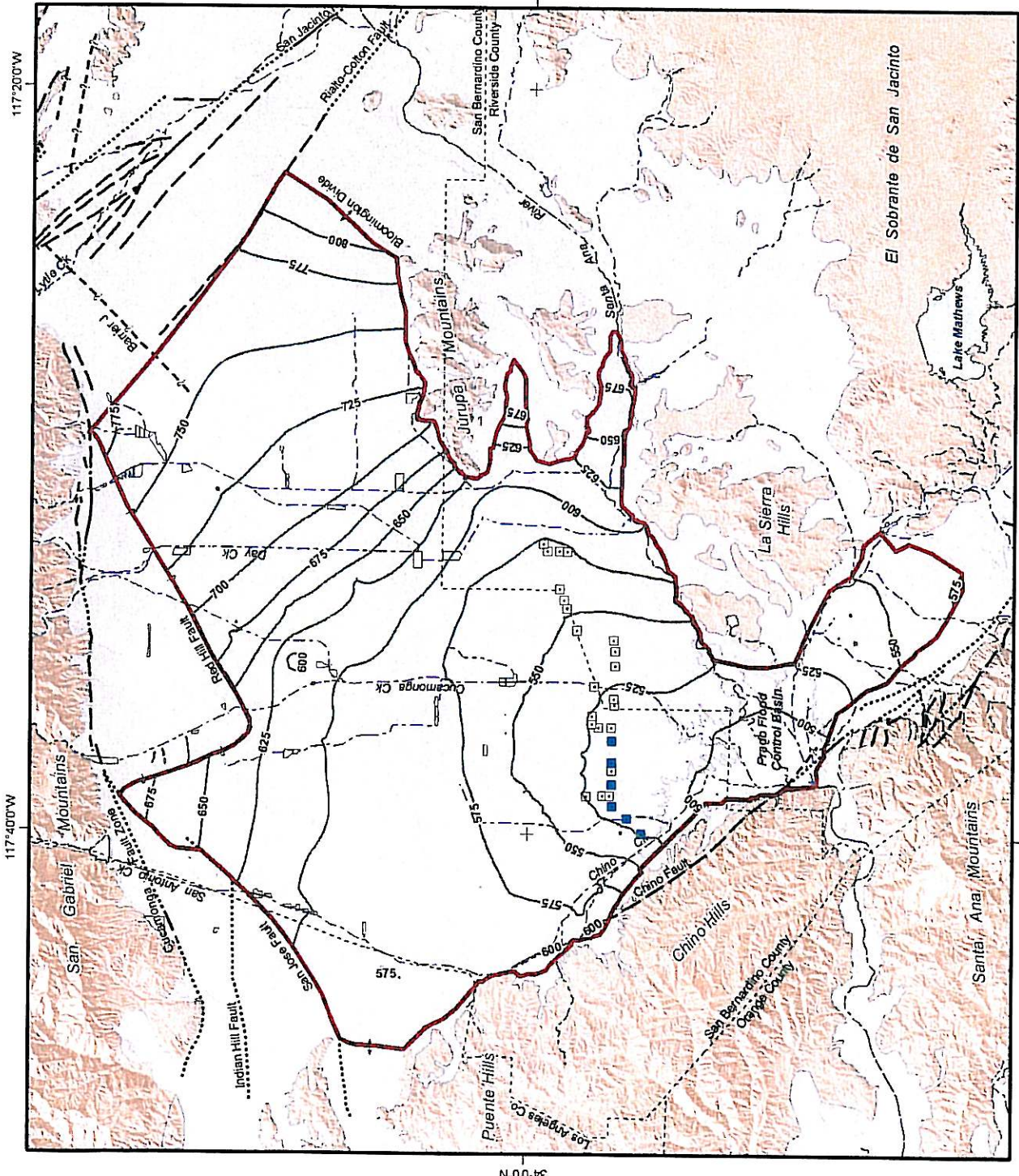


Figure 6 and Figure 14.xls

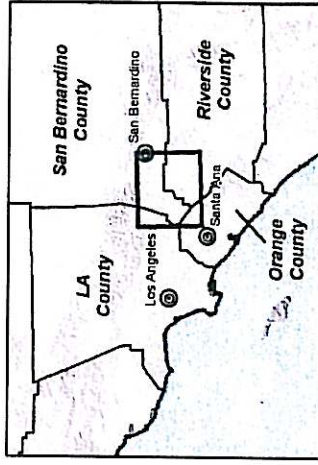


- Groundwater Elevation Contours (feet above mean sea-level)
- Existing Chino Desalter Well
- Proposed Chino Desalter Well
- MODEFLOW Groundwater Flow Model Boundary

- Geology**
- Water-Bearing Sediments
 - Quaternary Alluvium
 - Consolidated Bedrock
 - Undifferentiated Pre-Tertiary to Early Pleistocene Igneous, Metamorphic, and Sedimentary Rocks

- Faults**
- Location Certain
 - Location Approximate
 - Location Uncertain
 - Location Concealed

- Other Features**
- Groundwater Divides
 - Flood Control/Conservation Basins
 - Streams, Rivers, and Channels



Assumed Groundwater Elevations for Layer 1 Start of the Baseline Period in 2008

Figure 7a

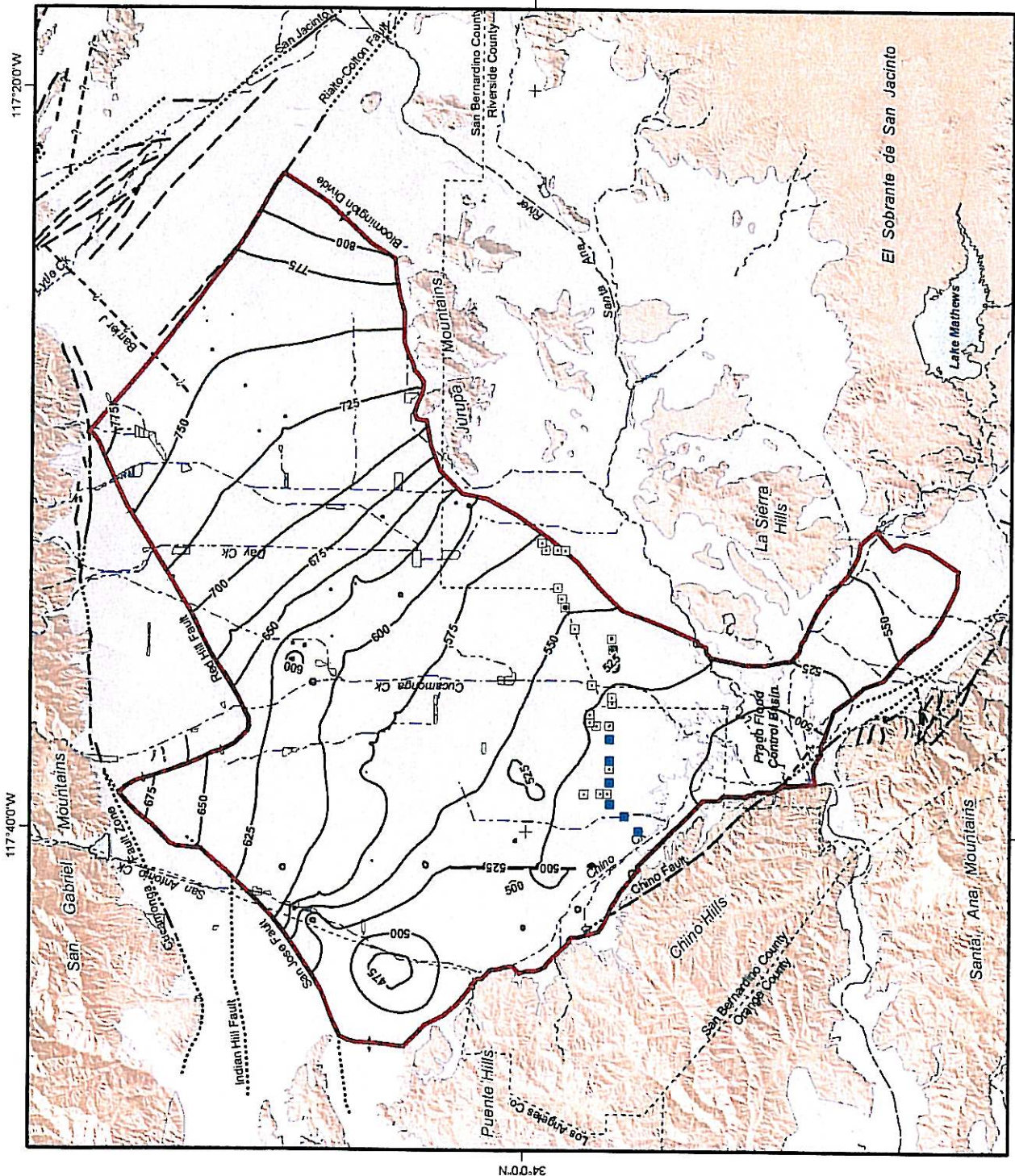
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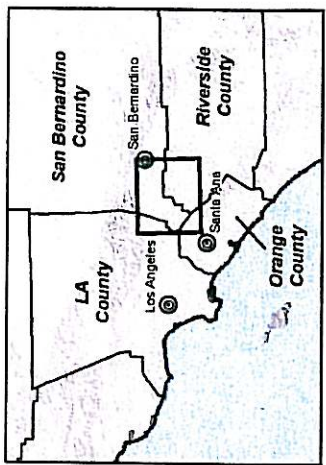
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Logos: TRINE VALLEYS, Inland Empire, BLACK & VEATCH, San Jacinto River Authority, Lake Mathews, Santa Ana River, San Gabriel River, San Antonio River, San Diego River, San Jacinto River, San Jose River, Chino River, Puente Hills, Chino Hills, La Sierra Hills, Jurupa Mountains, San Gabriel Mountains, San Jacinto Mountains, El Sobrante de San Jacinto, San Bernardino County, Orange County, Riverside County, LA County, San Bernardino County, Los Angeles, Santa Ana.

Chino Basin Dry-Year Yield Program Expansion Impact Analysis



- Groundwater Elevation Contours
(feet above mean sea-level)
 - Existing Chino Desalter Well
 - Proposed Chino Desalter Well
 - MODFLOW Groundwater Flow Model Boundary
- Geology**
- Water-Bearing Sediments
 - Quaternary Alluvium
 - Consolidated Bedrock
 - Undifferentiated Pre-Tertiary to Early Pleistocene Igneous, Metamorphic, and Sedimentary Rocks
- Faults**
- Location Certain
 - Location Approximate
 - Location Concealed
 - Location Uncertain
 - Approximate Location of Groundwater Barrier
- Other Features**
- Groundwater Divides
 - Flood Control/Conservation Basins
 - Streams, Rivers, and Channels



Assumed Groundwater Elevations for Layer 2
Start of the Baseline Period in 2008

Figure 7b

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0 1 2 3 4 Miles
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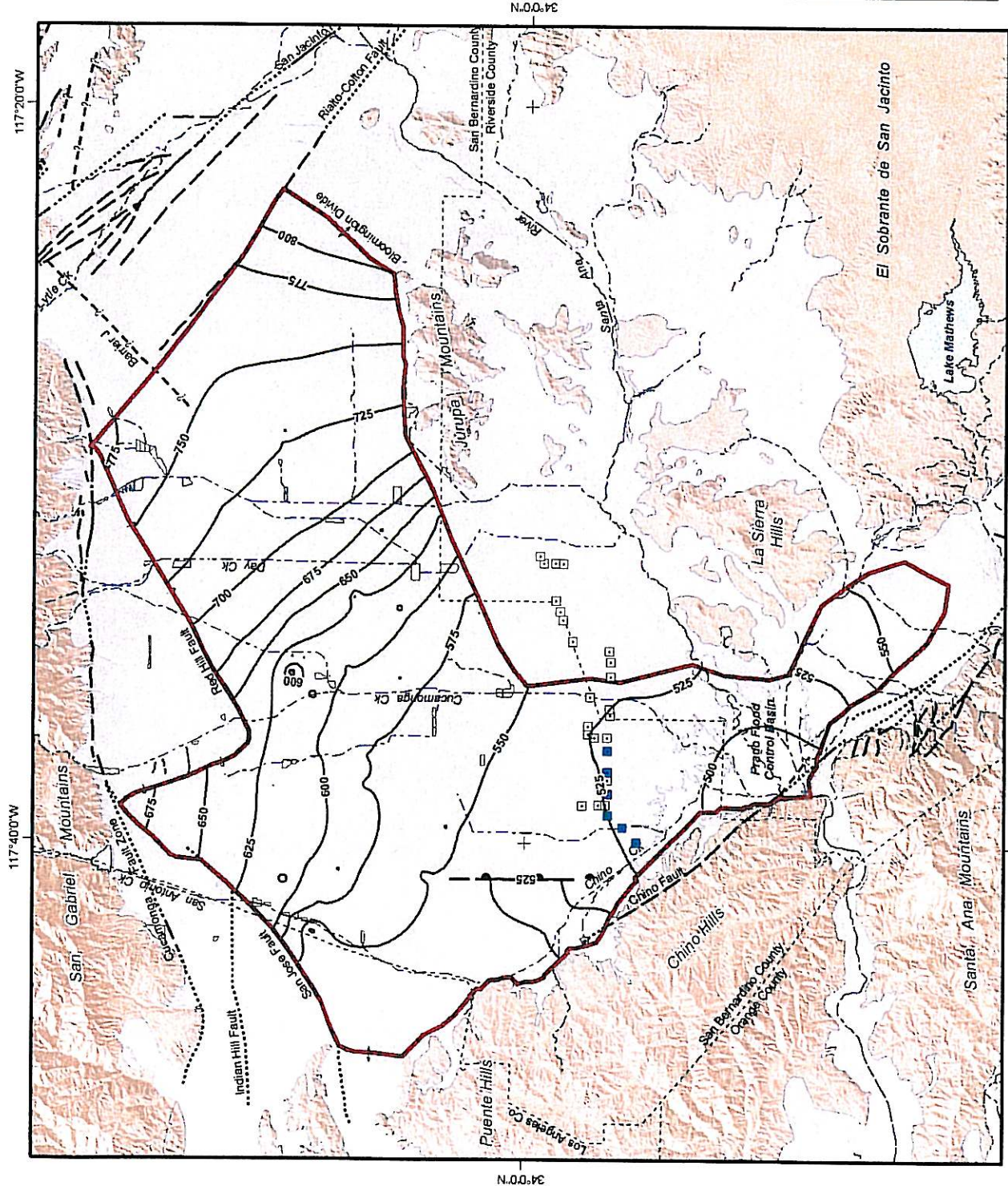
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VALLEYS WATER PARTNERSHIP

CHINO BASIN DRY-YEAR YIELD PROGRAM EXPANSION IMPACT ANALYSIS



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0 1 2 3 4 Miles
 0 2 4 6 KM

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 VALLEYS
 METROPOLITAN WATER DISTRICT

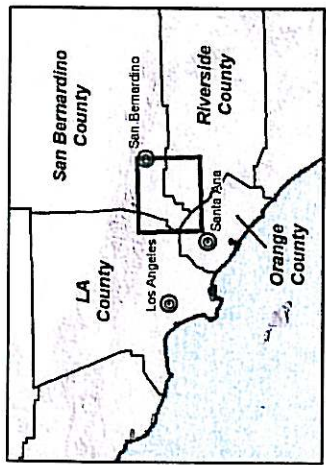
Chino Basin Dry-Year Yield Program Expansion
 Impact Analysis

- Groundwater Elevation Contours (feet above mean sea-level)
- Existing Chino Desalter Well
- Proposed Chino Desalter Well
- MODFLOW Groundwater Flow Model Boundary

- Geology**
- Water-Bearing Sediments
 - Quaternary Alluvium
 - Consolidated Bedrock
 - Undifferentiated Pre-Tertiary to Early Pleistocene Igneous, Metamorphic, and Sedimentary Rocks

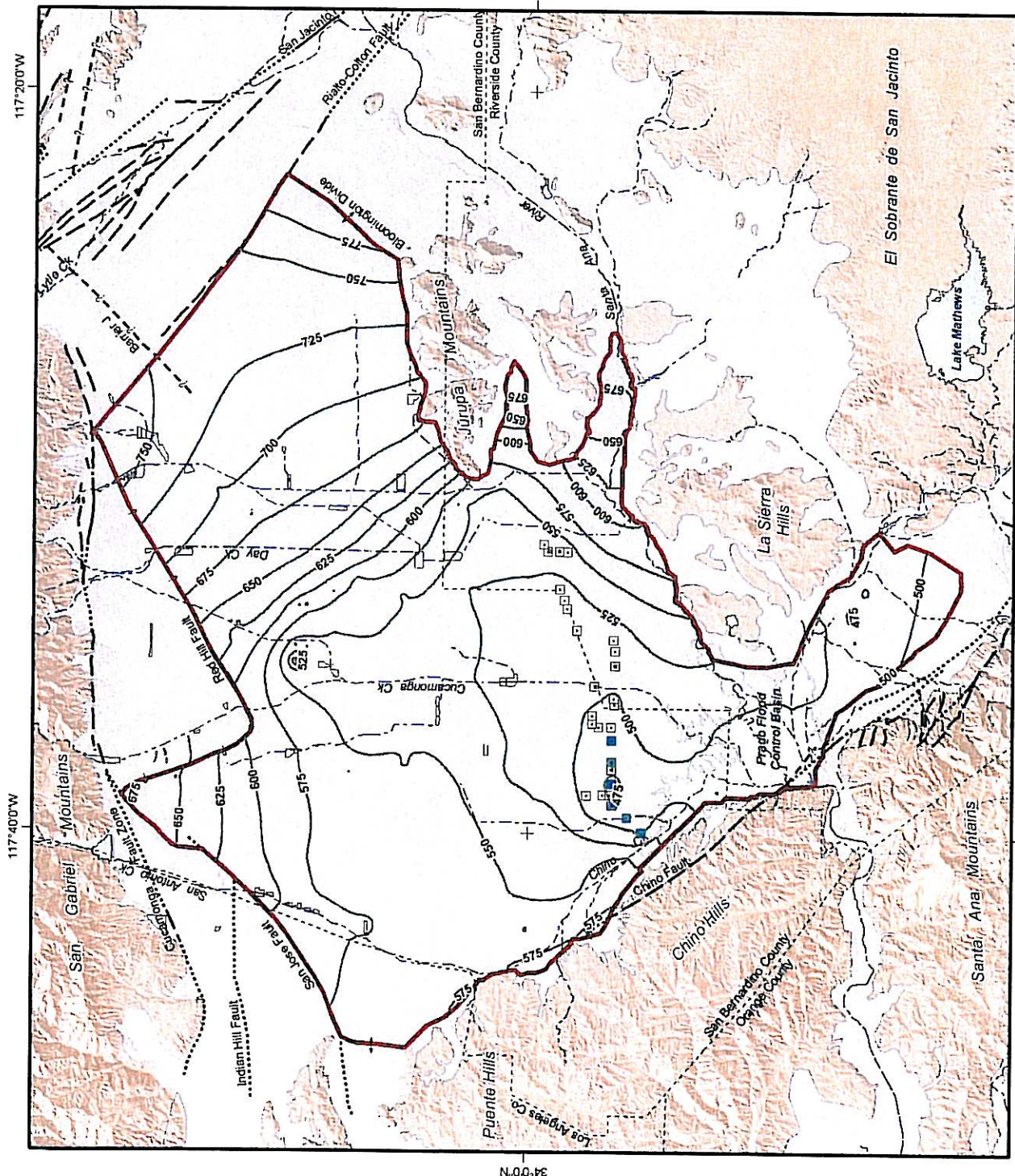
- Faults**
- Location Certain
 - Location Approximate
 - Location Concealed
 - Location Uncertain
 - Approximate Location of Groundwater Barrier

- Other Features**
- Groundwater Divides
 - Flood Control/Conservation Basins
 - Streams, Rivers, and Channels

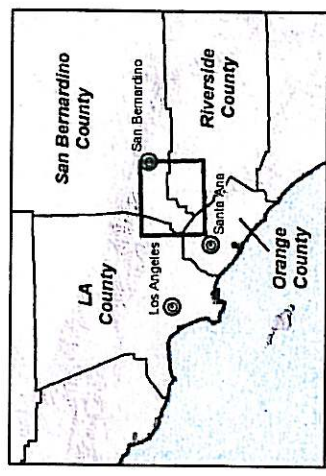


Assumed Groundwater Elevations for Layer 3
Start of the Baseline Period in 2008

Figure 7c



- Groundwater Elevation Contours (feet above mean sea-level)
 - Existing Chino Desalter Well
 - Proposed Chino Desalter Well
 - MODFLOW Groundwater Flow Model Boundary
- Geology**
- Water-Bearing Sediments
 - Quaternary Alluvium
 - Consolidated Bedrock
 - Undifferentiated Pre-Tertiary to Early Pleistocene Igneous, Metamorphic, and Sedimentary Rocks
- Faults**
- Location Certain
 - Location Approximate
 - ? Location Uncertain
 - Location Concealed
- Other Features**
- Groundwater Divides
 - Flood Control/Conservation Basins
 - Streams, Rivers, and Channels



Projected Groundwater Elevations for Layer 1
Baseline Alternative in 2035

Figure 8a

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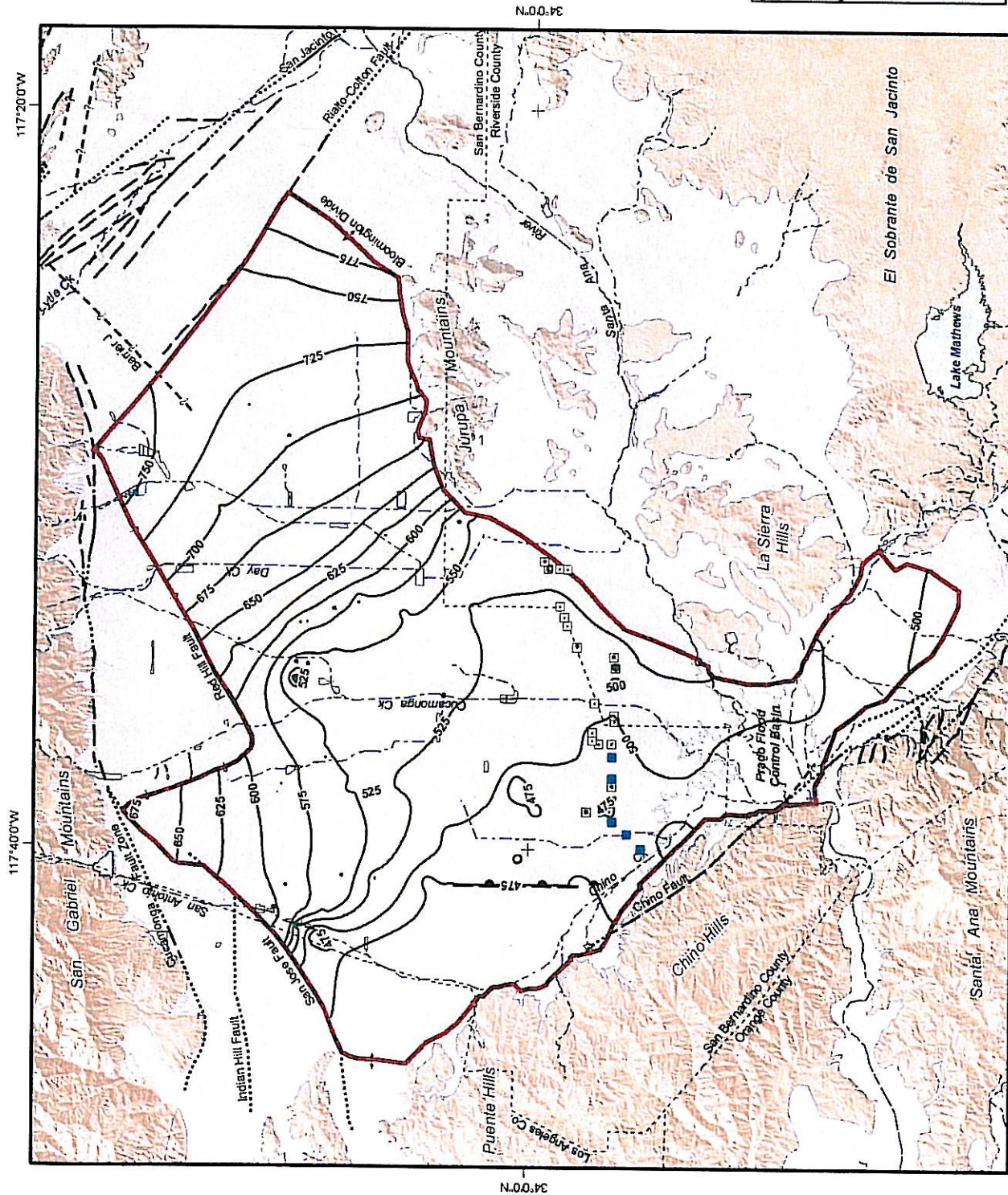
0 1 2 3 4 Miles
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 NATIONAL CENTER FOR WATER RESOURCES

Chino Basin Dry-Year Yield Program Expansion Impact Analysis



Groundwater Elevation Contours
(feet above mean sea-level)

Existing Chino Desalter Well

Proposed Chino Desalter Well

MODFLOW Groundwater
Flow Model Boundary

Geology

Water-Bearing Sediments

Quaternary Alluvium

Consolidated Bedrock

Undifferentiated Pre-Tertiary to
Early Pleistocene Igneous,
Metamorphic, and Sedimentary Rocks

Faults

Location Certain

Location Approximate

Location Concealed

Location Uncertain

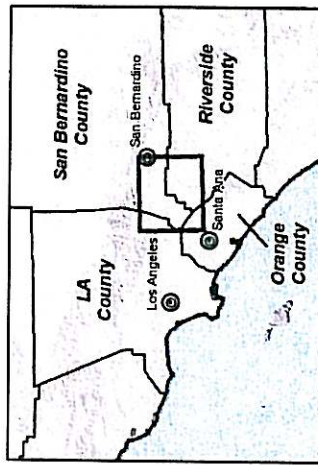
Approximate Location
of Groundwater Barrier

Other Features

Groundwater Divides

Flood Control/Conservation Basins

Streams, Rivers, and Channels



**Projected Groundwater Elevations
for Layer 2
Baseline Alternative in 2035**

Figure 8b

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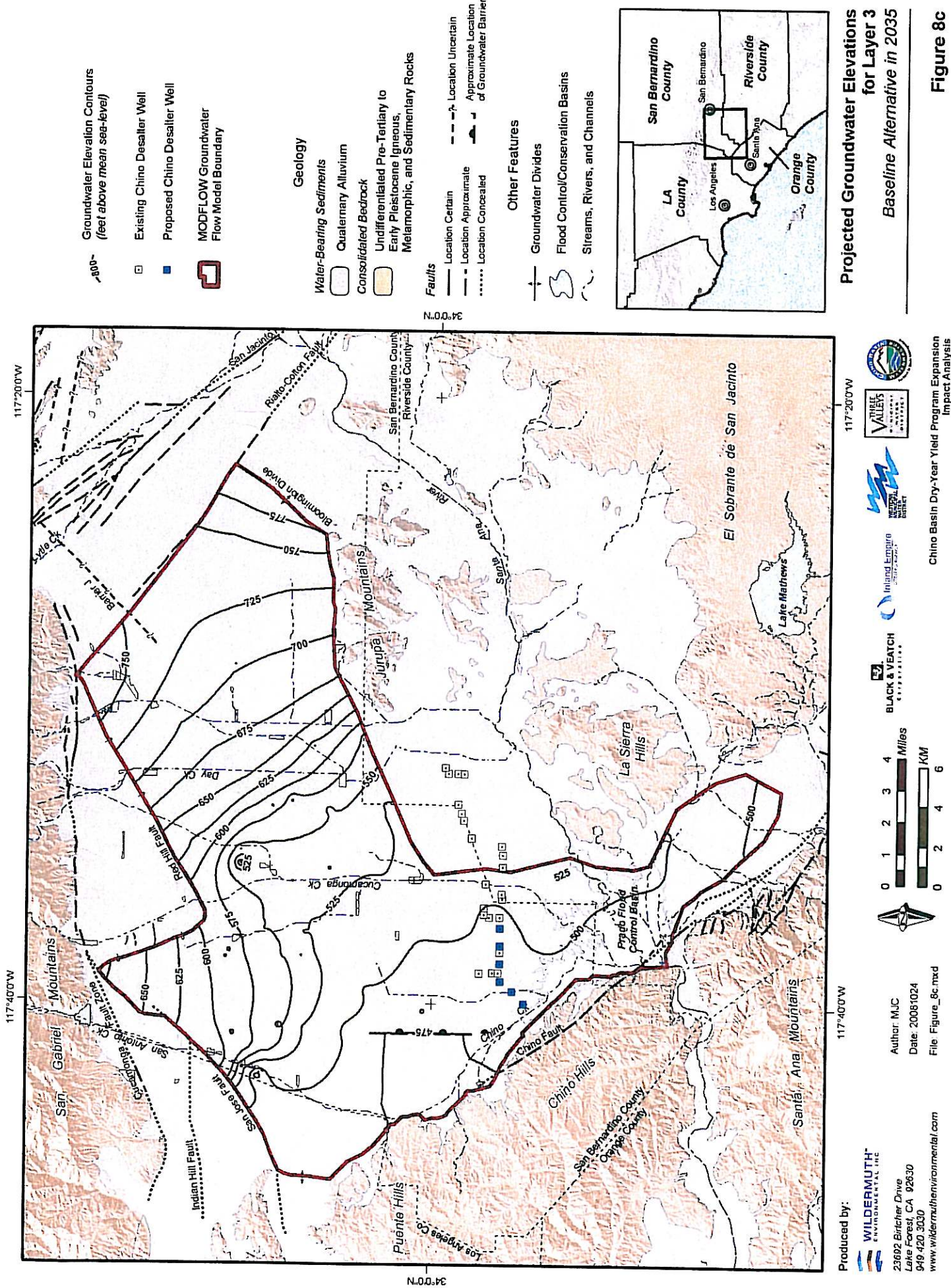
 23692 Bricher Drive
 Lake Forest, CA 92630
 949.420.3030
 www.wildermuthenvironmental.com

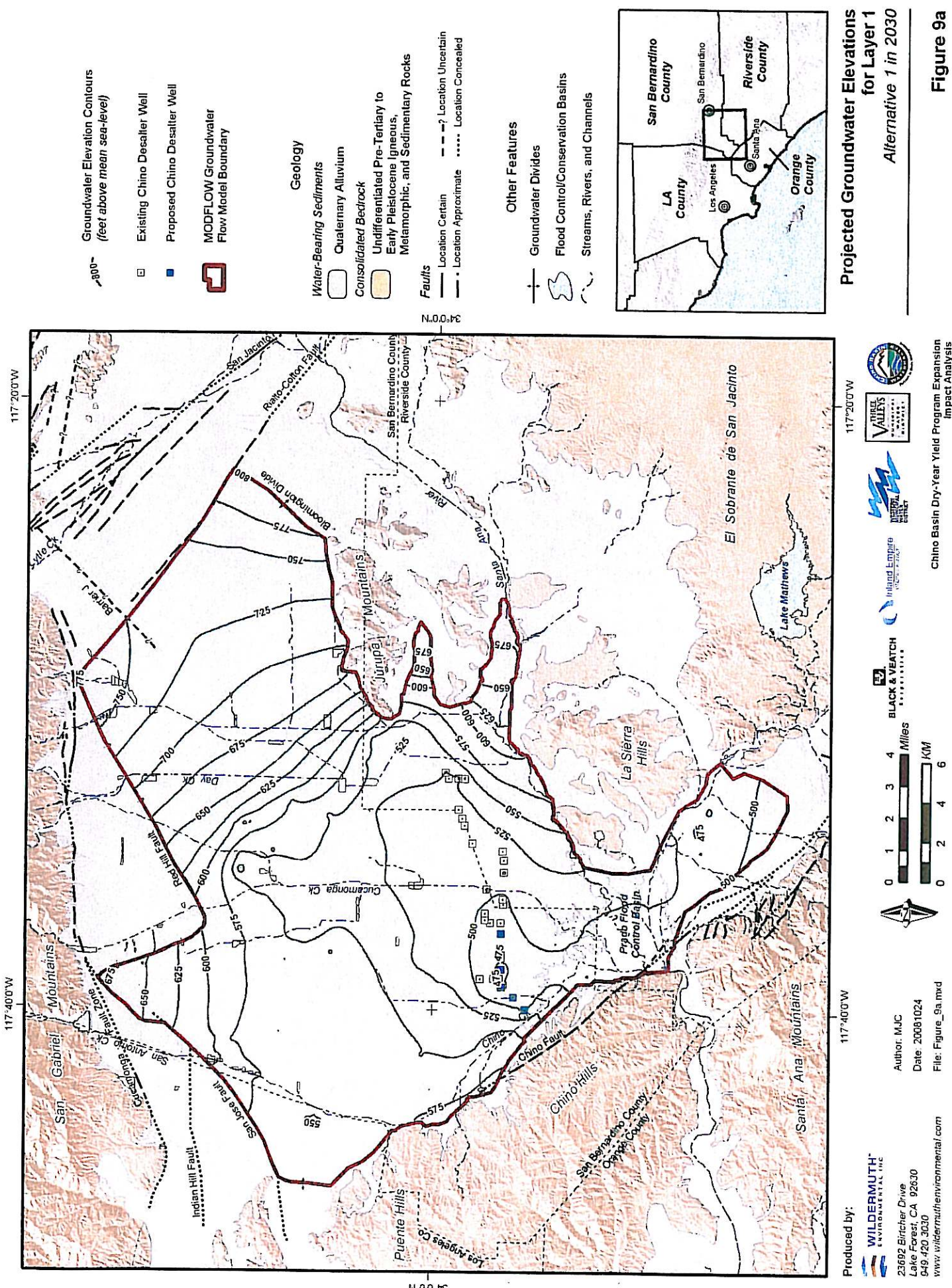
Author: MJC
 Date: 2008/02/24
 File: Figure_8b.mxd

0 1 2 3 4 Miles
 0 2 4 6 KM

BLACK & VEATCH

Chino Basin Dry-Year Yield Program Expansion
Impact Analysis





Projected Groundwater Elevations for Layer 1
Alternative 1 in 2030

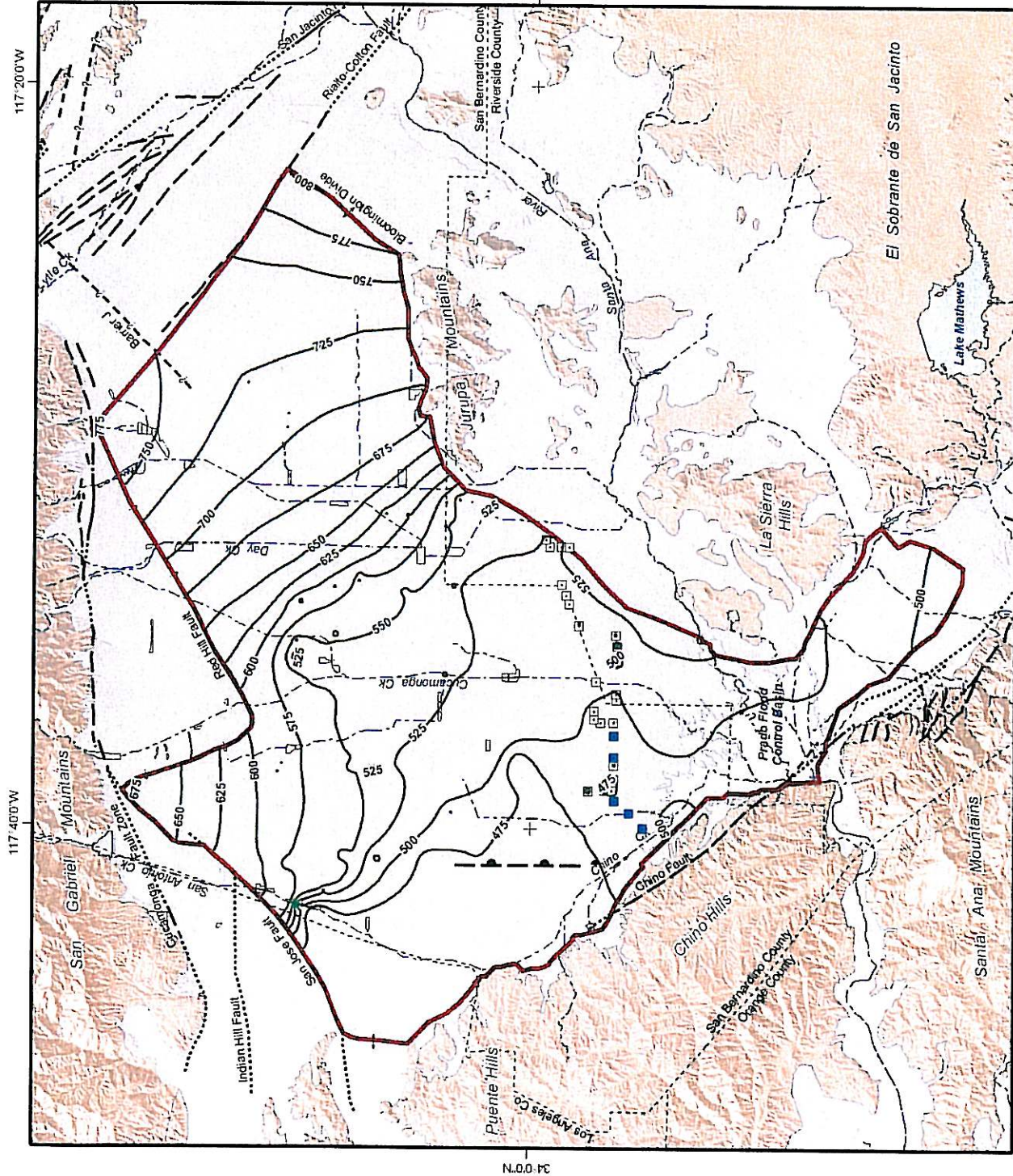
Figure 9a

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Chino Basin Dry-Year Yield Program Expansion Impact Analysis



**Projected Groundwater Elevations for Layer 2
Alternative 1 in 2030**

Figure 9b

Groundwater Elevation Contours
(feet above mean sea-level)

Existing Chino Desalter Well

Proposed Chino Desalter Well

MODFLOW Groundwater
Flow Model Boundary

Geology

Water-Bearing Sediments

Quaternary Alluvium

Consolidated Bedrock

Undifferentiated Pre-Tertiary to
Early Pleistocene Igneous,
Metamorphic, and Sedimentary Rocks

Faults

Location Certain

Location Approximate

Location Concealed

Location Uncertain

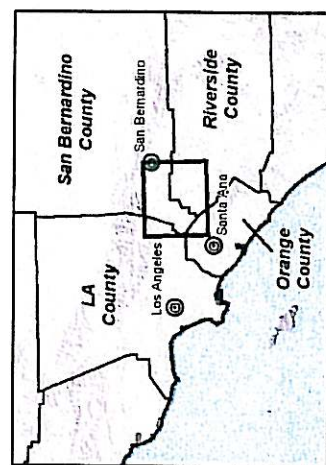
Approximate Location
of Groundwater Barrier

Other Features

Groundwater Divides

Flood Control/Conservation Basins

Streams, Rivers, and Channels



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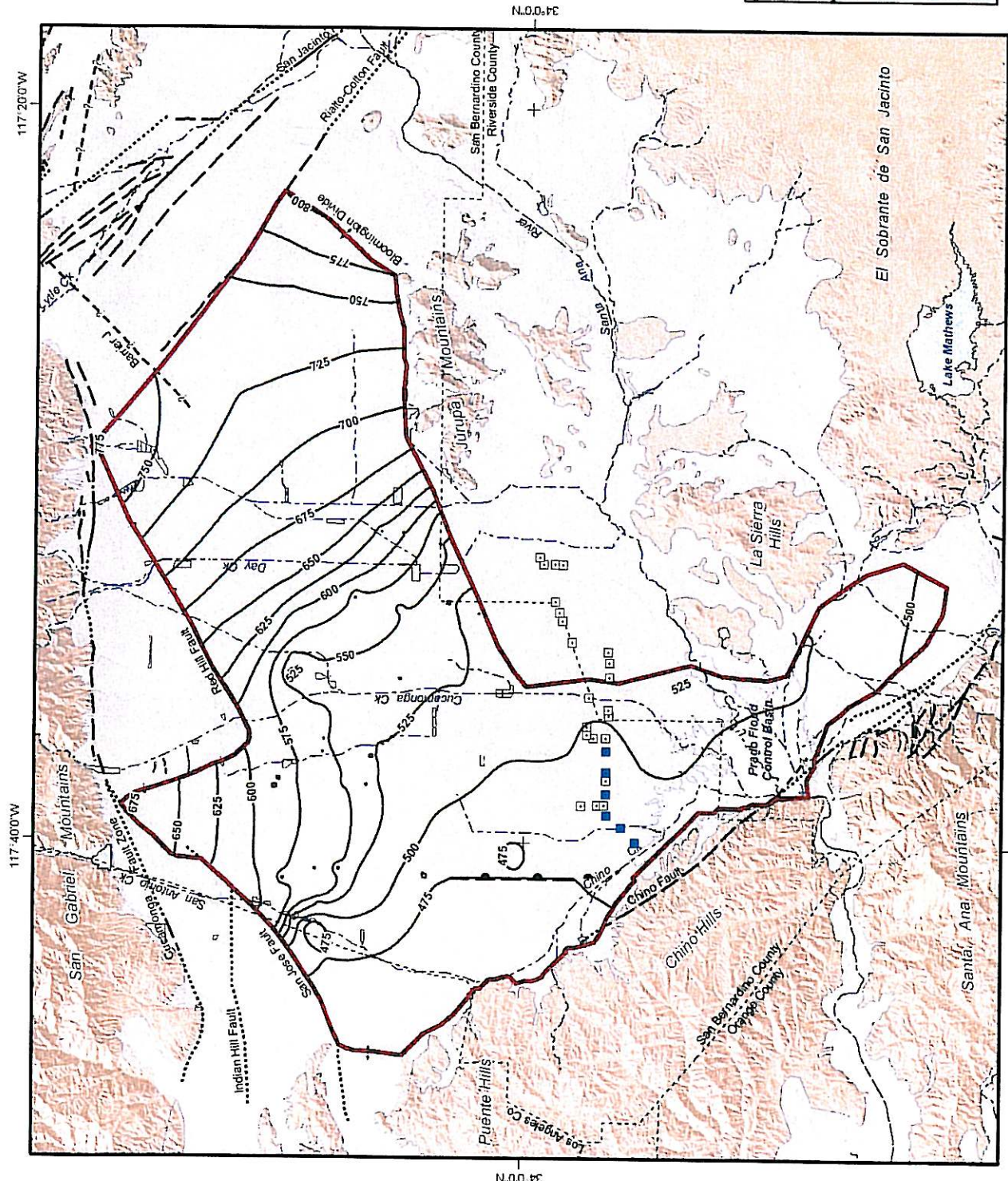
0 1 2 3 4 Miles
0 2 4 6 KM

BLACK & VEATCH

TRIPLE VALLEYS
WATER RESOURCES GROUP

INGAD EMBURE
WATER SPECIALISTS

CHINO BASIN DRY-YEAR YIELD PROGRAM EXPANSION
IMPACT ANALYSIS

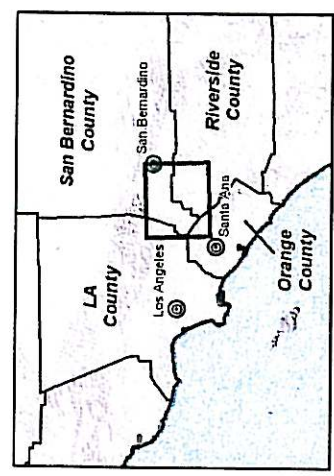


- Groundwater Elevation Contours (feet above mean sea-level)
- Existing Chino Desalter Well
- Proposed Chino Desalter Well
- MODFLOW Groundwater Flow Model Boundary

- Geology**
- Water-Bearing Sediments
 - Quaternary Alluvium
 - Consolidated Bedrock
 - Undifferentiated Pre-Tertiary to Early Pleistocene Igneous, Metamorphic, and Sedimentary Rocks

- Faults**
- Location Certain
 - Location Approximate
 - Location Concealed
 - Location Uncertain
 - Approximate Location of Groundwater Barrier

- Other Features**
- Groundwater Divides
 - Flood Control/Conservation Basins
 - Streams, Rivers, and Channels



Projected Groundwater Elevations for Layer 3 Alternative 1 in 2030

Figure 9c

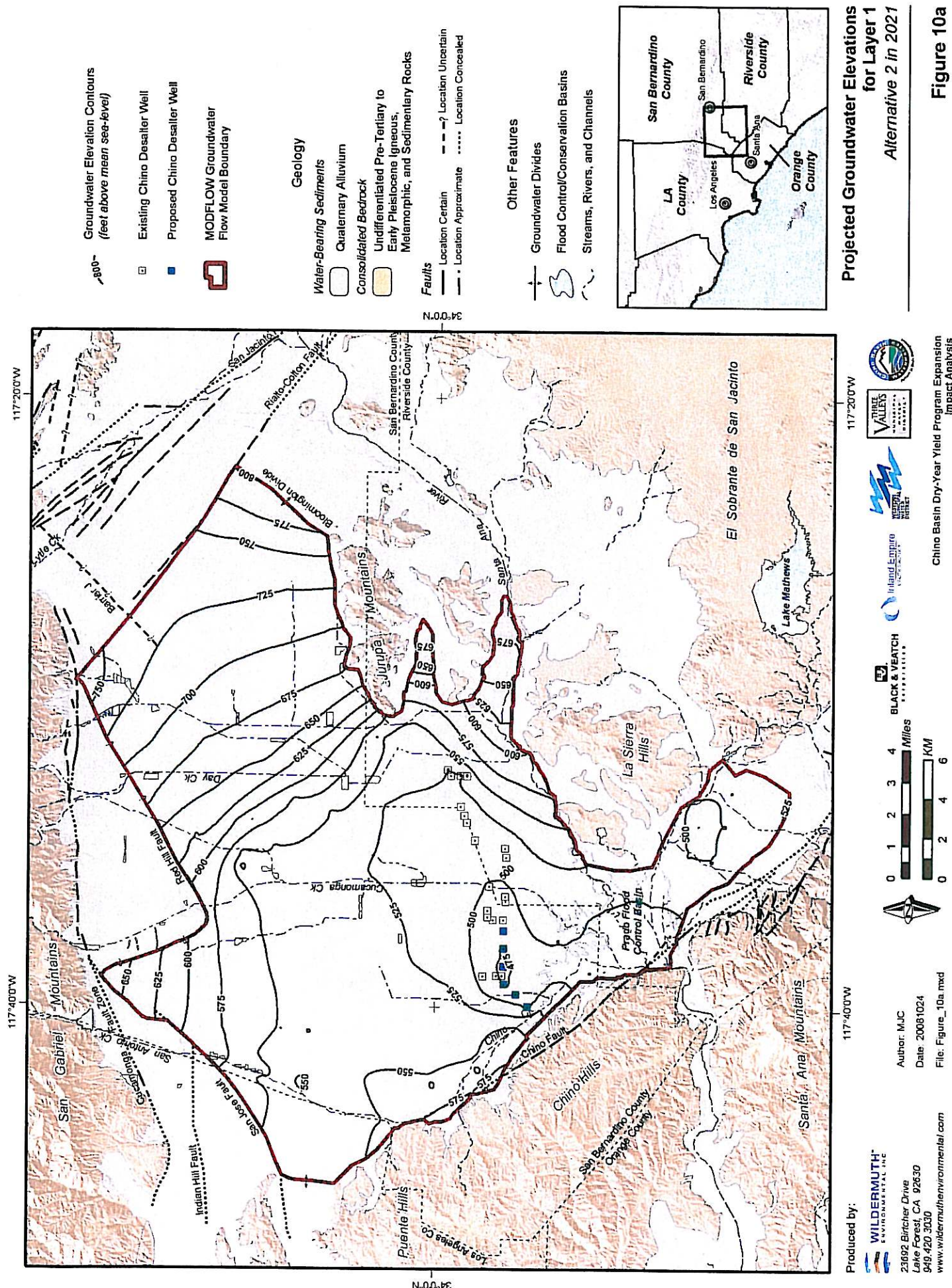
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Scale: 0 1 2 3 4 Miles / 0 2 4 6 KM

Logos: WILDERMUTH ENVIRONMENTAL INC., VALLEY'S WATER, Inland Empire WATER, BLACK & VEATCH, San Jacinto Water Authority, Lake Mathews, El Sobrante de San Jacinto, San Bernardino County, Orange County, Riverside County, Los Angeles County, San Bernardino County, LA County, San Diego County.

Chino Basin Dry-Year Yield Program Expansion Impact Analysis



Projected Groundwater Elevations for Layer 1 Alternative 2 in 2021

Figure 10a

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 File: Figure_10a.mxd

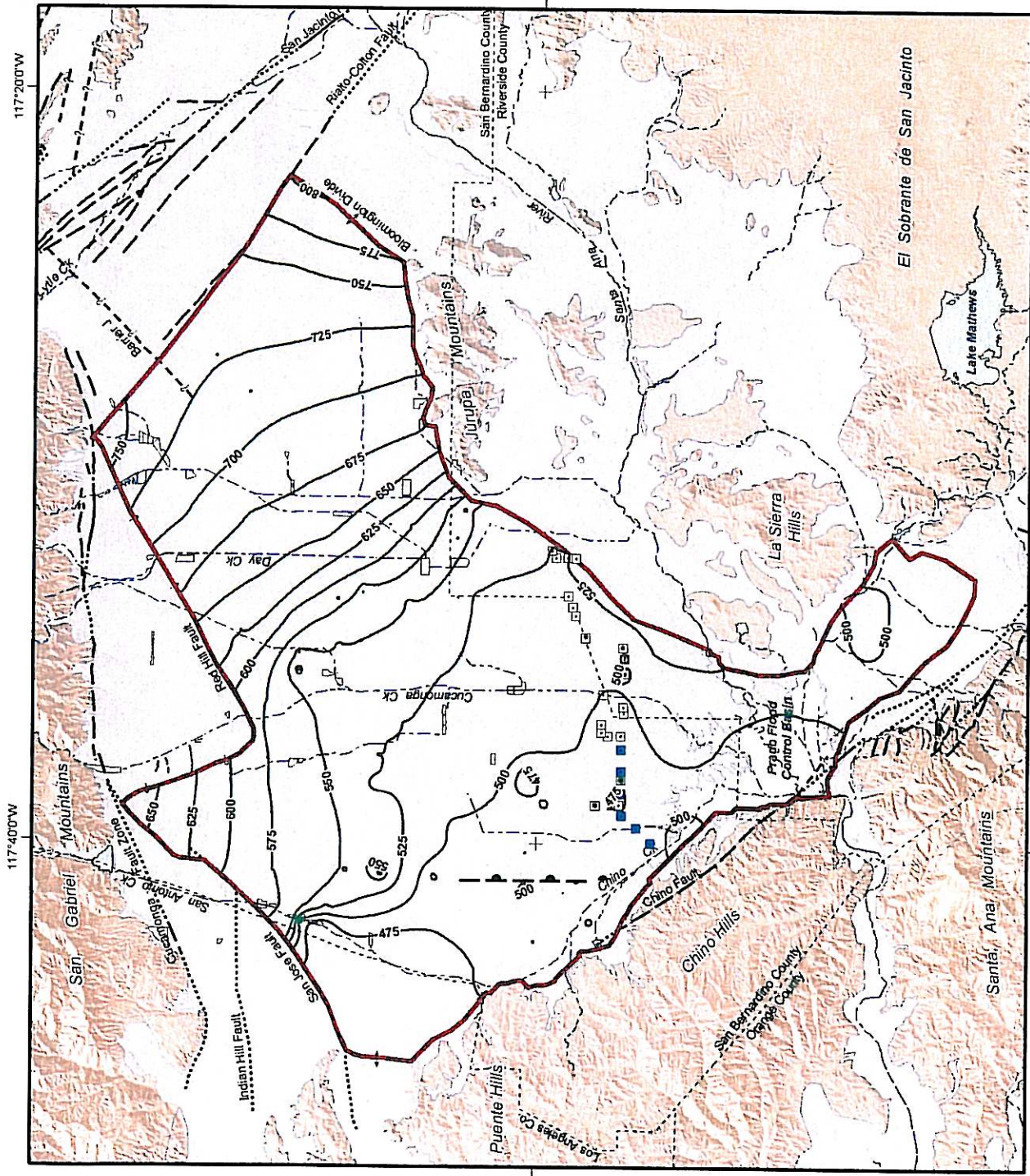
0 1 2 3 4 Miles
 0 2 4 6 KM

BLACK & VEATCH

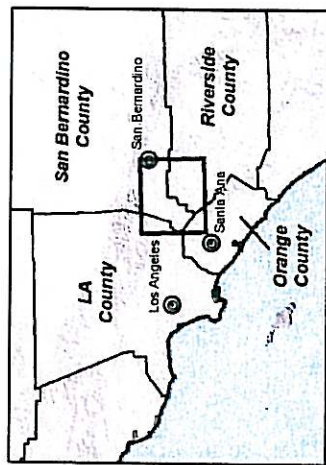
Inland Empire
 NATIONAL WATER RESEARCH CENTER

VALLEYS
 WATER RESEARCH CENTER

Chino Basin Dry-Year Yield Program Expansion Impact Analysis



- Groundwater Elevation Contours
(feet above mean sea-level)
 - Existing Chino Desalter Well
 - Proposed Chino Desalter Well
 - MODFLOW Groundwater Flow Modal Boundary
- Geology**
- Water-Bearing Sediments
 - Quaternary Alluvium
 - Consolidated Bedrock
 - Undifferentiated Pre-Tertiary to Early Pleistocene Igneous, Metamorphic, and Sedimentary Rocks
- Faults**
- Location Certain
 - Location Approximate
 - Location Concealed
 - Location Uncertain
 - Approximate Location of Groundwater Barrier
- Other Features**
- Groundwater Divides
 - Flood Control/Conservation Basins
 - Streams, Rivers, and Channels



**Projected Groundwater Elevations for Layer 2
Alternative 2 in 2021**

Figure 10b

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 Date: 20081024
 File: Figure_10b.mxd

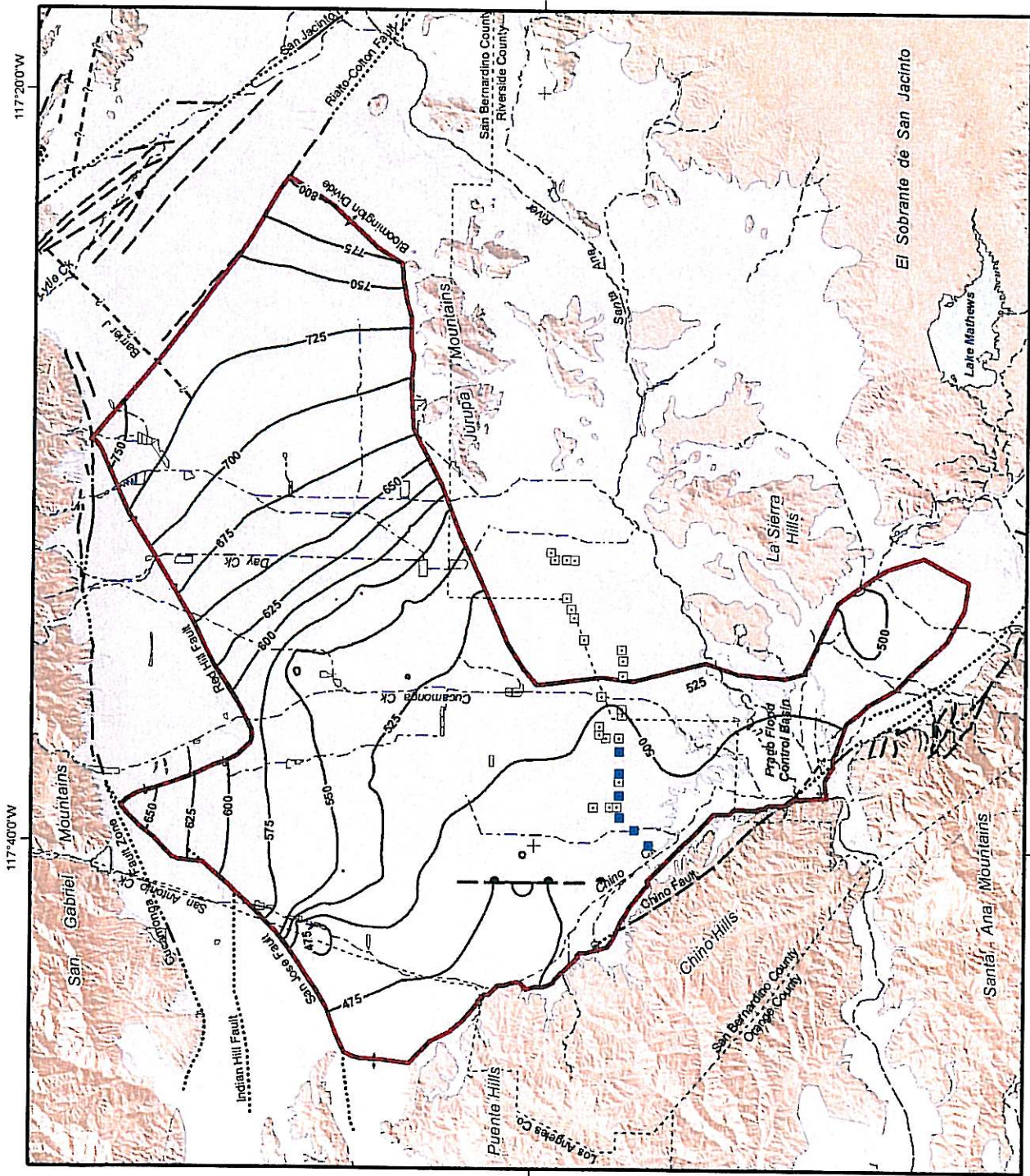
0 1 2 3 4 Miles
 0 2 4 6 KM

BLACK & VEATCH

inland Empire WATER AGENCY

VALLEY WATER SERVICES

CHINO BASIN DRY-YEAR YIELD PROGRAM EXPANSION IMPACT ANALYSIS

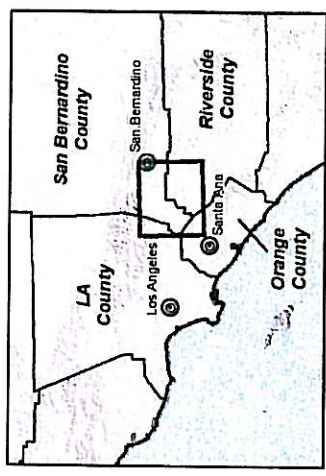


- 800- Groundwater Elevation Contours (feet above mean sea-level)
- Existing Chino Desalter Well
- Proposed Chino Desalter Well
- MODFLOW Groundwater Flow Model Boundary

- Geology**
- Water-Bearing Sediments
 - Quaternary Alluvium
 - Consolidated Bedrock
 - Undifferentiated Pre-Tertiary to Early Pleistocene Igneous, Metamorphic, and Sedimentary Rocks

- Faults**
- Location Certain
 - Location Approximate
 - Location Concealed
 - Location Uncertain
 - Approximate Location of Groundwater Barrier

- Other Features**
- Groundwater Divides
 - Flood Control/Conservation Basins
 - Streams, Rivers, and Channels



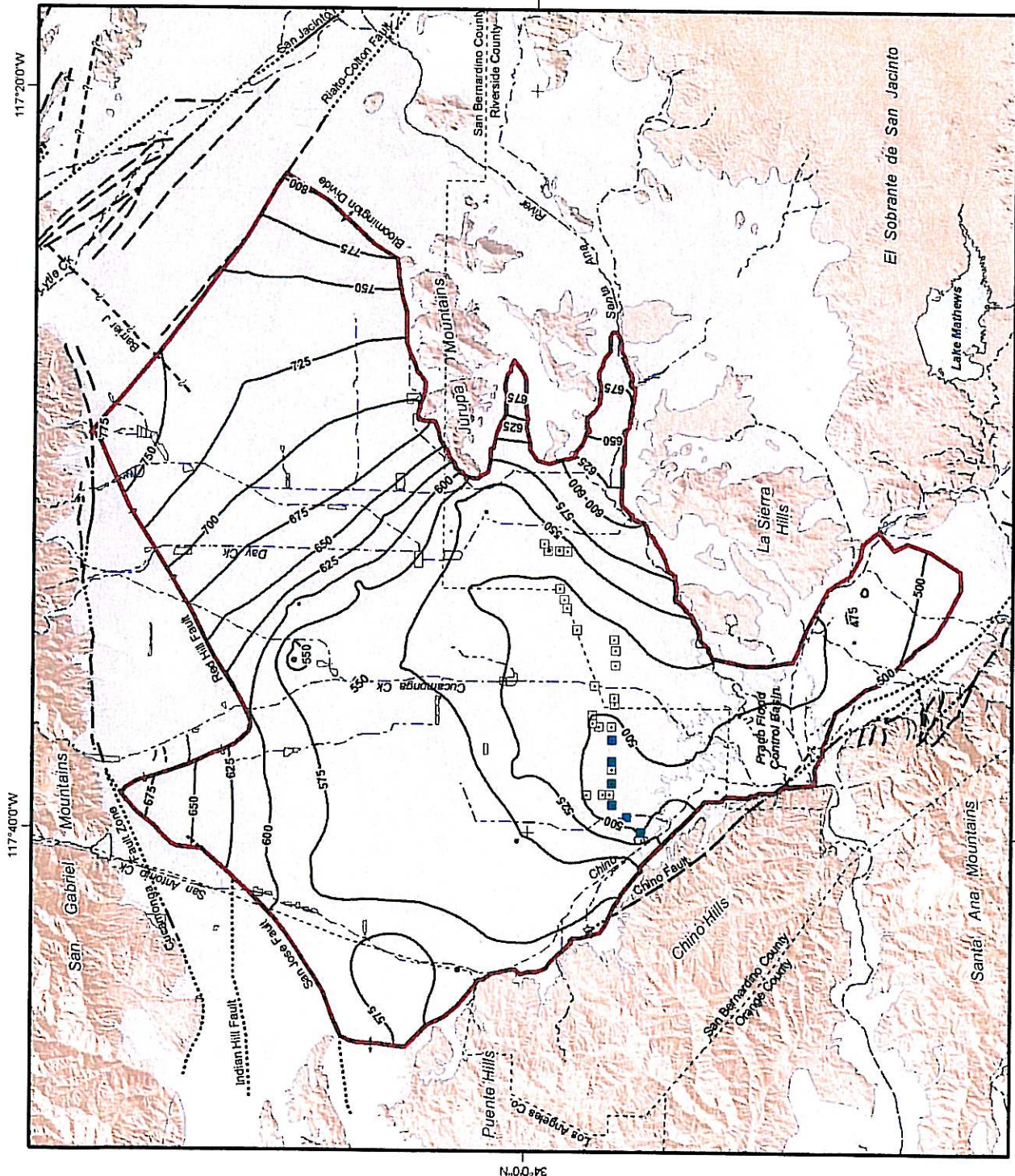
**Projected Groundwater Elevations for Layer 3
Alternative 2 in 2035**

Figure 10c

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Chino Basin Dry-Year Yield Program Expansion Impact Analysis

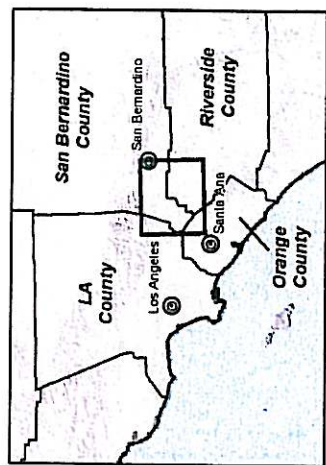


- Groundwater Elevation Contours
(feet above mean sea-level)
- Existing Chino Desalter Well
- Proposed Chino Desalter Well
- MODFLOW Groundwater Flow Model Boundary

- Geology**
- Water-Bearing Sediments
- Quaternary Alluvium
- Consolidated Bedrock
- Undifferentiated Pre-Tertiary to Early Pleistocene Igneous, Metamorphic, and Sedimentary Rocks

- Faults**
- Location Certain
- Location Approximate
- Location Uncertain
- Location Concealed

- Other Features**
- Groundwater Divides
- Flood Control/Conservation Basins
- Streams, Rivers, and Channels



Projected Groundwater Elevations for Layer 1 Alternative 3 in 2030

Figure 11a

117°20'0"W

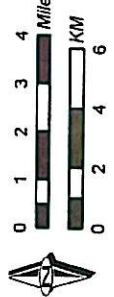
117°40'0"W

34°0'0"N

34°0'0"N

117°20'0"W

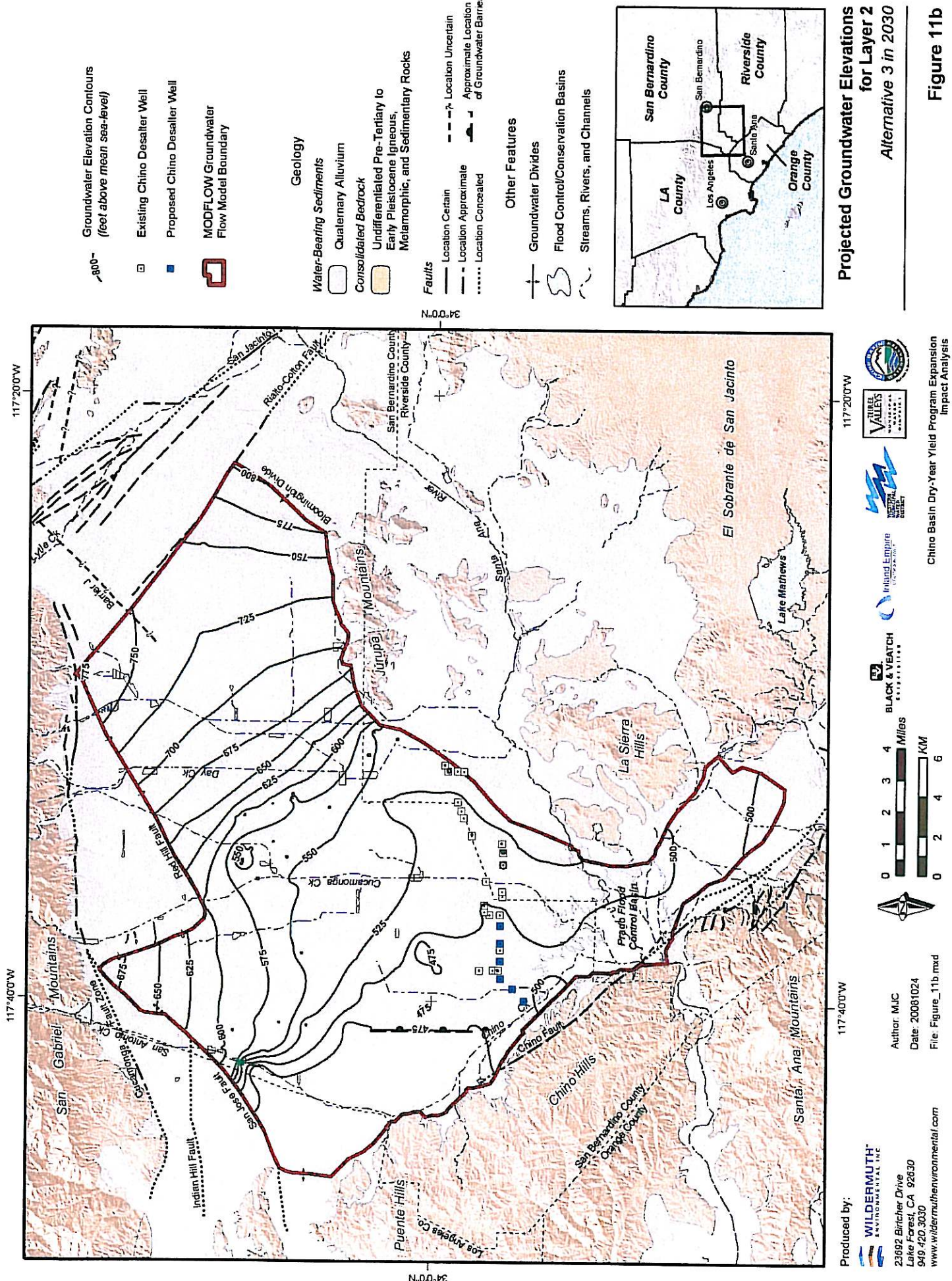
117°40'0"W



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Chino Basin Dry-Year Yield Program Expansion Impact Analysis



Groundwater Elevation Contours
(feet above mean sea-level)

Existing Chino Desalter Well

Proposed Chino Desalter Well

MODFLOW Groundwater Flow Model Boundary

Geology

Water-Bearing Sediments

Quaternary Alluvium

Consolidated Bedrock

Undifferentiated Pre-Tertiary to Early Pleistocene Igneous, Metamorphic, and Sedimentary Rocks

Faults

Location Certain

Location Approximate

Location Concealed

Location Uncertain

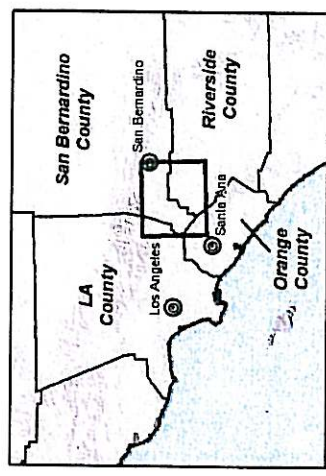
Approximate Location of Groundwater Barrier

Other Features

Groundwater Divides

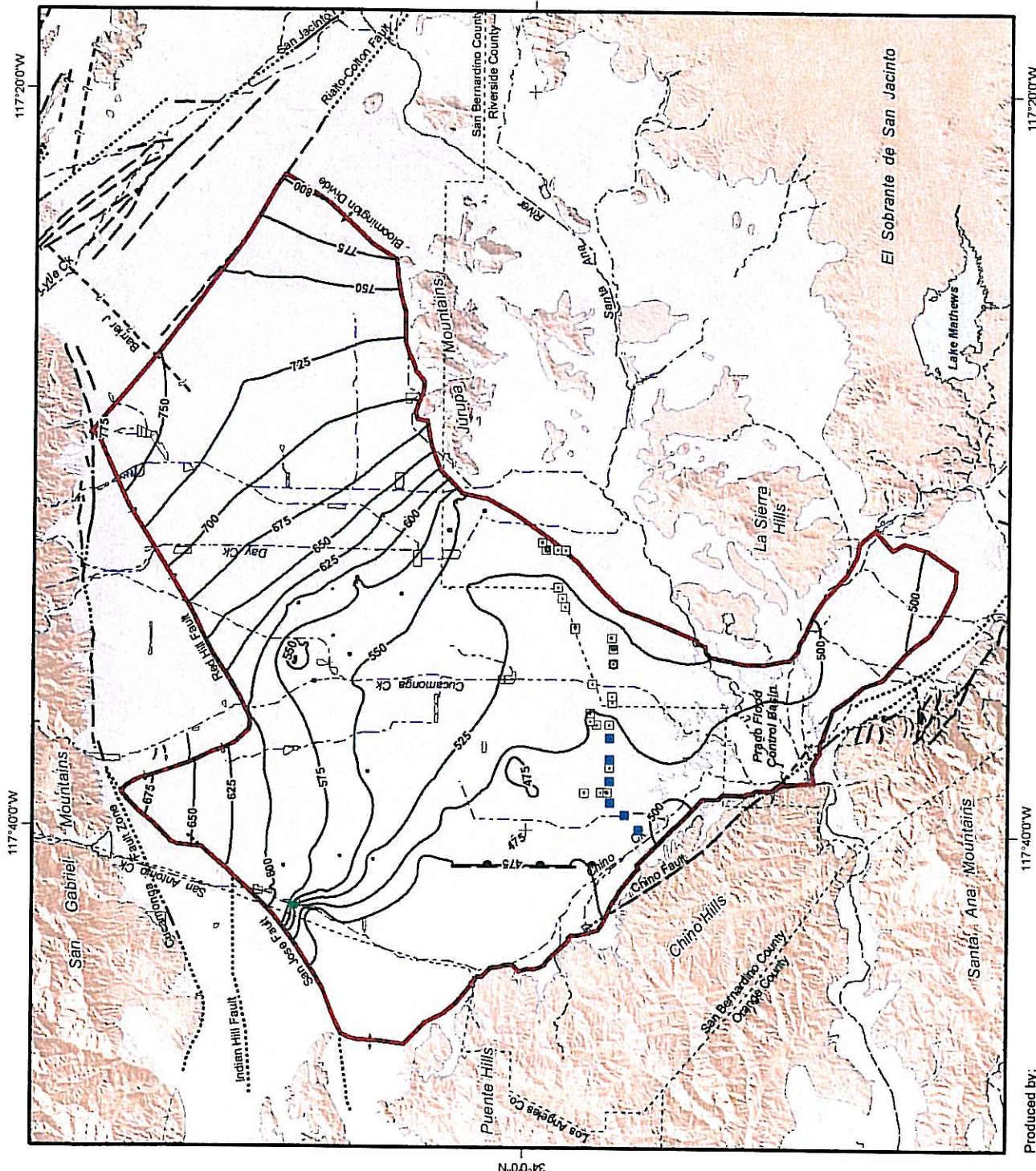
Flood Control/Conservation Basins

Streams, Rivers, and Channels



Projected Groundwater Elevations for Layer 2
Alternative 3 in 2030

Figure 11b



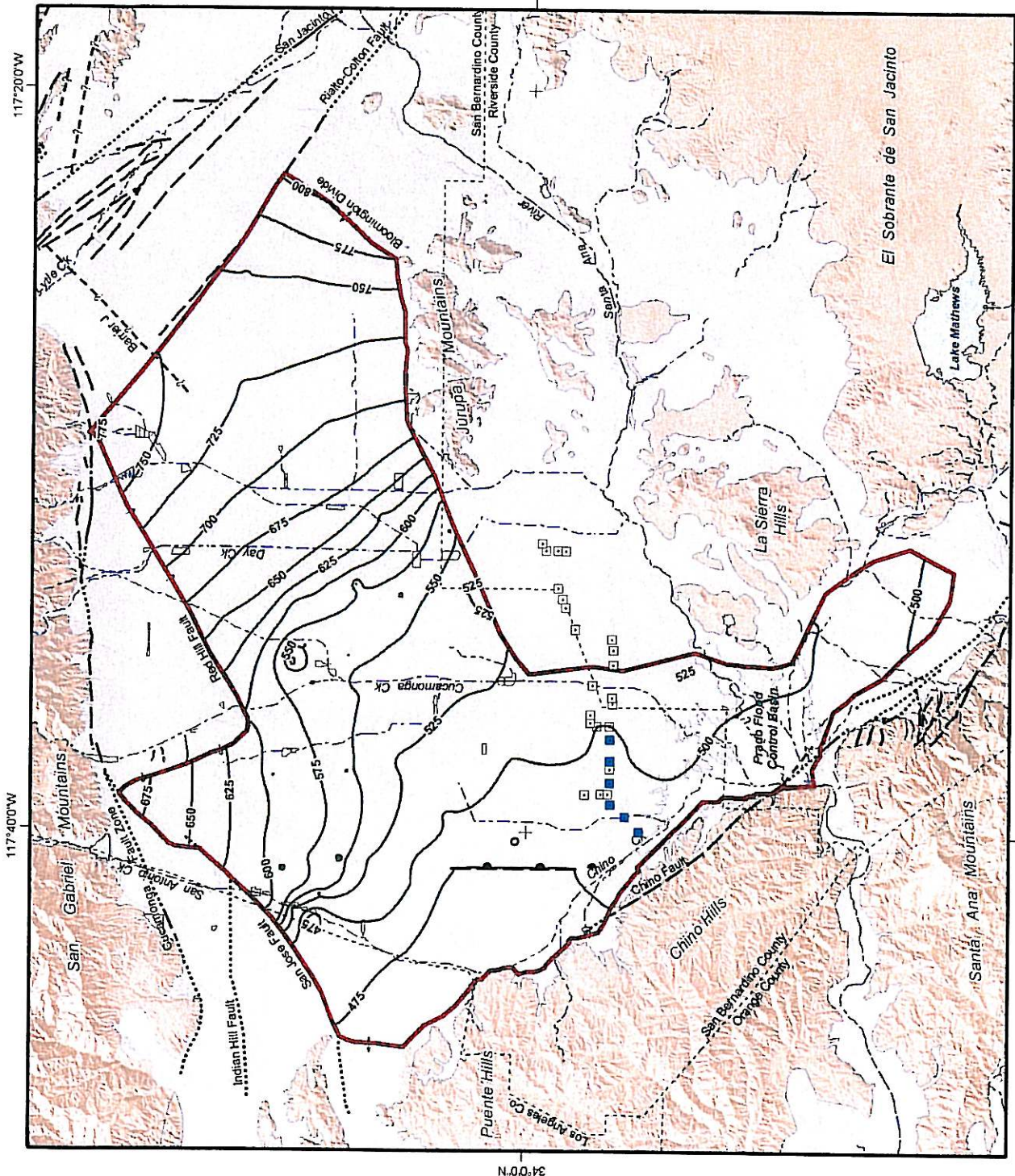
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Scale: 0 1 2 3 4 Miles / 0 2 4 6 KM

Logos: VALLES WATER, BLACK & VEATCH, Inland Empire, San Jacinto Water Authority

Chino Basin Dry-Year Yield Program Expansion Impact Analysis

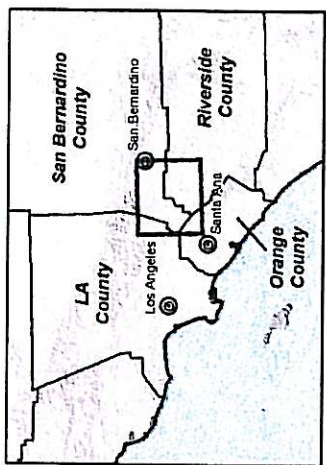


- Groundwater Elevation Contours (feet above mean sea-level)
- Existing Chino Desalter Well
- Proposed Chino Desalter Well
- MODFLOW Groundwater Flow Model Boundary

- Geology**
 - Water-Bearing Sediments
 - Quaternary Alluvium
 - Consolidated Bedrock
 - Undifferentiated Pre-Tertiary to Early Pleistocene Igneous, Metamorphic, and Sedimentary Rocks

- Faults**
 - Location Certain
 - Location Approximate
 - Location Concealed
 - Location Uncertain
 - Approximate Location of Groundwater Barrier

- Other Features**
 - Groundwater Divides
 - Flood Control/Conservation Basins
 - Streams, Rivers, and Channels



Projected Groundwater Elevations for Layer 3
Alternative 3 in 2030

Figure 11c

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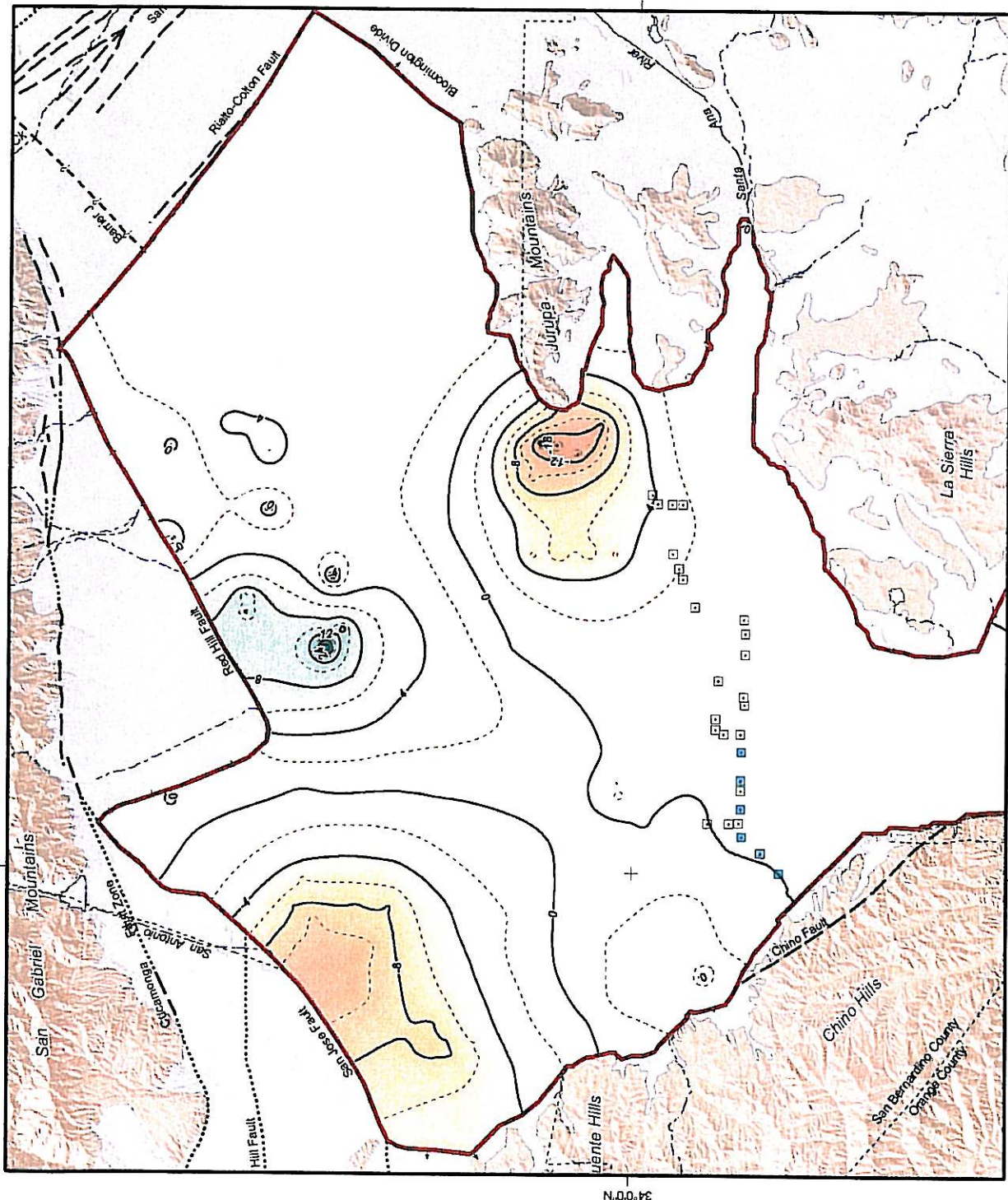
inland empire
 WATER SERVICE

VALLEYS
 WATER SERVICES

Chino Basin Dry-Year Yield Program Expansion
 Impact Analysis

0 1 2 3 4 Miles
 0 2 4 6 KM

117°40'0"W 117°20'0"W



25
-25
Grid of Difference in Groundwater-Level (ft-msf)
Negative number indicates Alternative 1 has a lower water level than the Baseline Alternative.

Contours of Equal Difference in Groundwater Level (ft-msf)
Existing Chino Desalter Well
Proposed Chino Desalter Well
MODFLOW Groundwater Flow Model Boundary

Geology

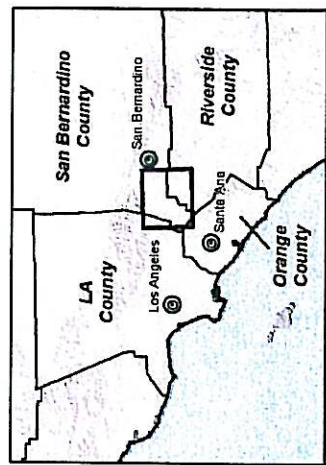
Water-Bearing Sediments
Quaternary Alluvium
Consolidated Bedrock
Undifferentiated Pre-Tertiary to Early Pleistocene Igneous, Metamorphic, and Sedimentary Rocks

Faults

Location Certain
Location Approximate
Location Uncertain
Location Concealed

Other Features

Groundwater Divides
Streams, Rivers, and Channels



Difference in Groundwater Elevations for Layer 1
Baseline - Alternative 1 -- 2030

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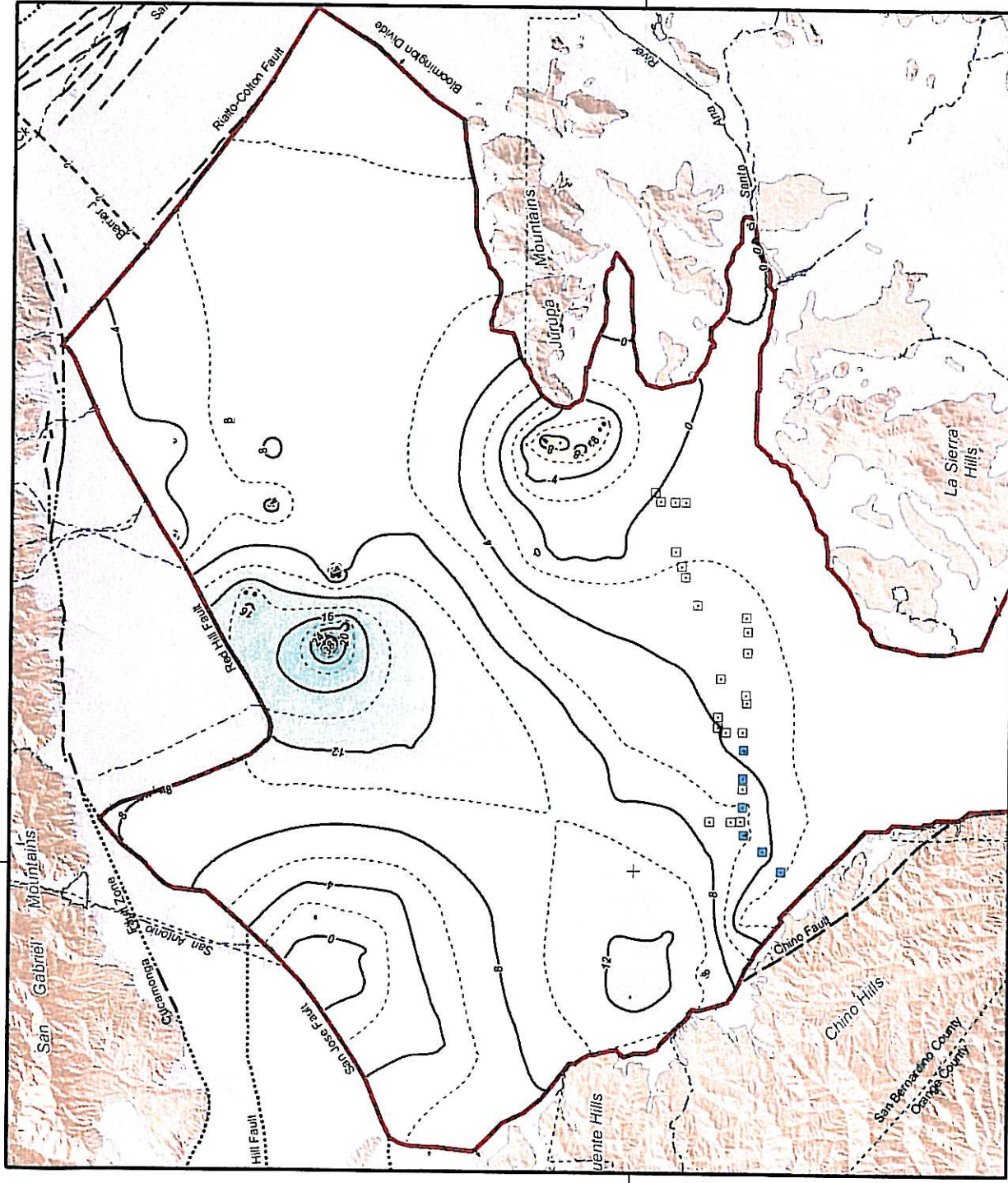
Author: MJC
 Date: 2008/02/4
 File: Figure_12a.mxd

0 1 2 3 4 Miles
 0 2 4 6 KM

N

Chino Basin Dry-Year Yield Program Expansion Impact Analysis

Figure 12a



40
Grid of Difference in Groundwater-Level
(ft-msl)

-40
Negative number indicates Alternative 2
has a lower water level than the Baseline Alternative.

Contours of Equal Difference in Groundwater Level
(ft-msl)

Existing Chino Desalter Well

Proposed Chino Desalter Well

MODFLOW Groundwater
Flow Model Boundary

Geology

Water-Bearing Sediments

Quaternary Alluvium

Consolidated Bedrock

Undifferentiated Pre-Tertiary to
Early Pleistocene Igneous,
Metamorphic, and Sedimentary Rocks

Faults

Location Certain

Location Approximate

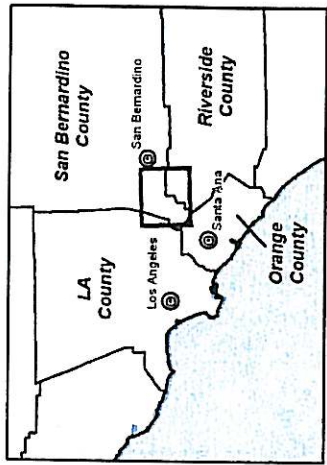
Location Uncertain

Location Concealed

Other Features

Groundwater Divides

Streams, Rivers, and Channels

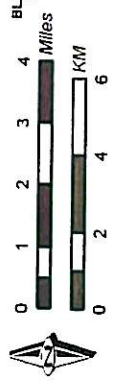


**Difference in Groundwater Elevations
for Layer 1**
Baseline - Alternative 3 -- 2030

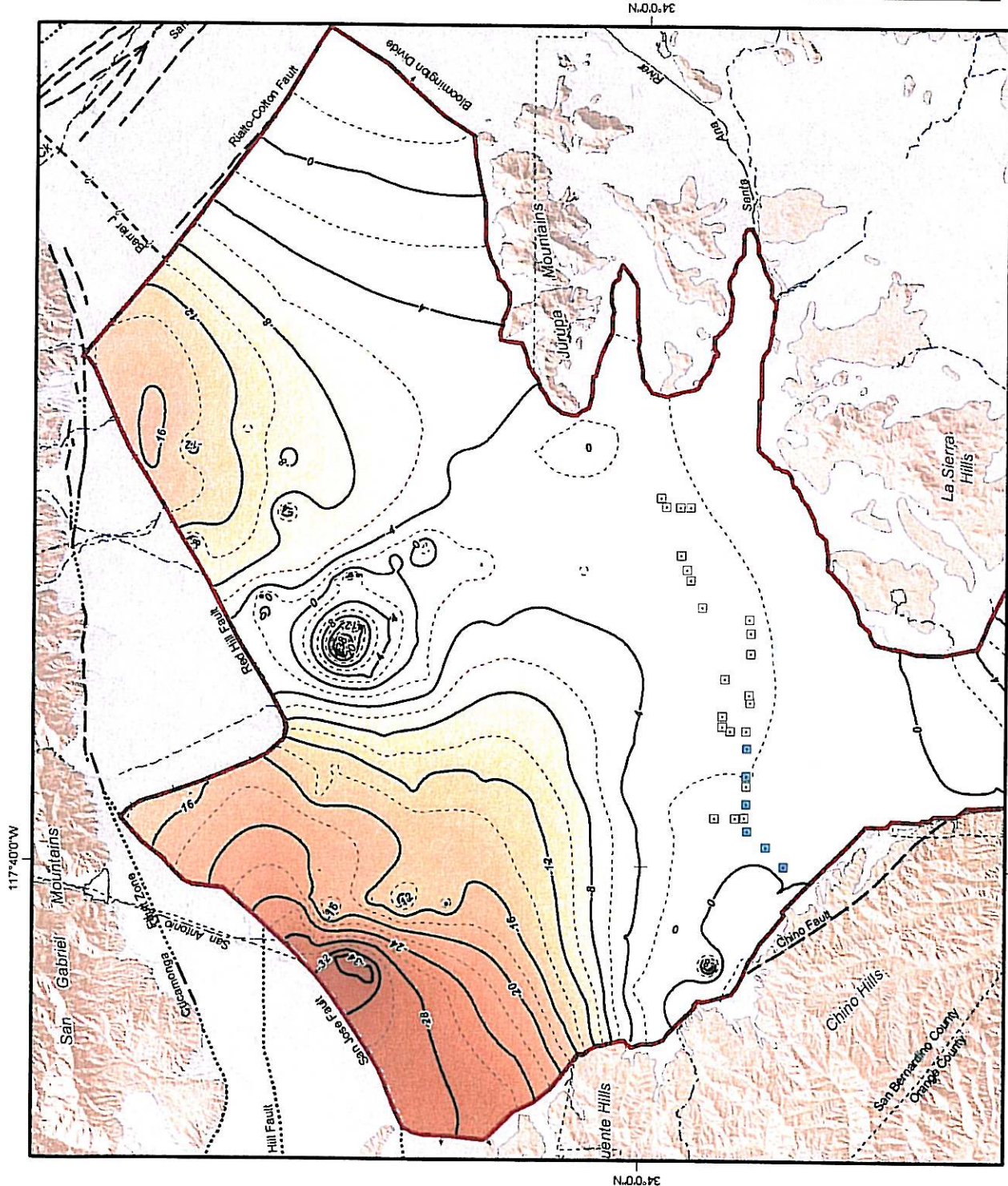
Figure 12b

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Date: 20081024
File: Figure_12b.mxd



CHINO BASIN DRY-YEAR YIELD PROGRAM EXPANSION
IMPACT ANALYSIS



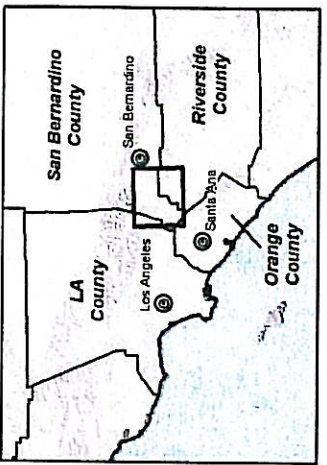
40
Grid of Difference in Groundwater-Level (ft-msl)
-40
Negative number indicates Alternative 2 in 2021 has a lower water level than the Baseline Alternative in 2030.
Contours of Equal Difference in Groundwater Level (ft-msl)

Existing Chino Desalter Well
Proposed Chino Desalter Well
MODFLOW Groundwater Flow Model Boundary

Geology
Water-Bearing Sediments
Quaternary Alluvium
Consolidated Bedrock
Undifferentiated Pre-Tertiary to Early Pleistocene Igneous, Metamorphic, and Sedimentary Rocks

Faults
Location Certain
Location Approximate
Location Uncertain
Location Concealed

Other Features
Groundwater Divides
Streams, Rivers, and Channels



Difference in Groundwater Elevations for Layer 1
Baseline 2030 - Alternative 2 2021

Figure 12c

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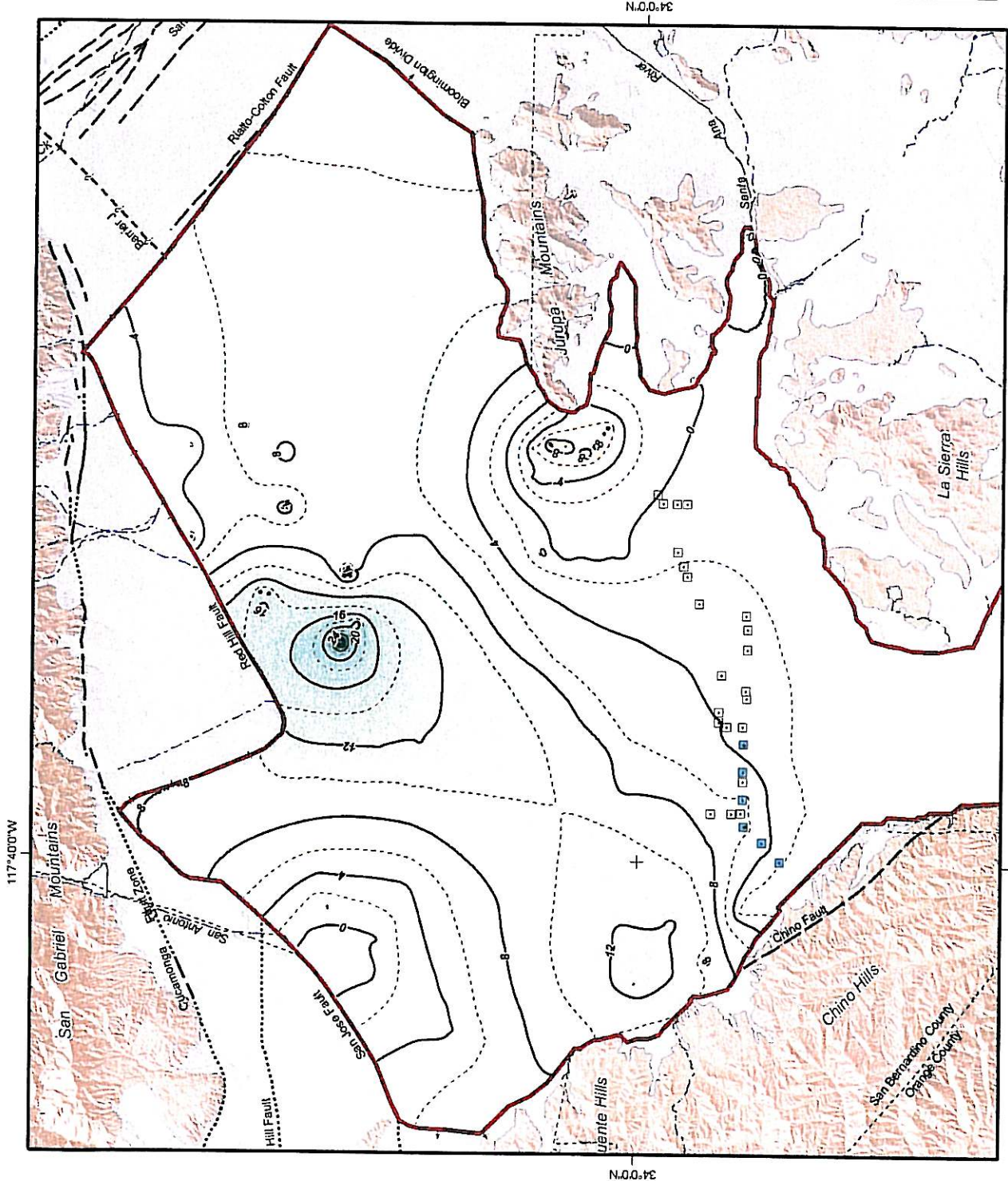
Inland Empire
METROPOLITAN WATER DISTRICT

VALLEYS
WATERSHED
AUTHORITY

Chino Basin Dry-Year Yield Program Expansion
Impact Analysis

0 1 2 3 4 Miles
0 2 4 6 KM

117°40'W
34°0'N



25
Grid of Difference in Groundwater-Level
(ft-msl)

-25
Negative number indicates Alternative 3
has a lower water level than the Baseline Alternative.

Contours of Equal Difference in Groundwater Level
(ft-msl)

Existing Chino Desalter Well

Proposed Chino Desalter Well

MODFLOW Groundwater
Flow Model Boundary

Geology

Water-Bearing Sediments

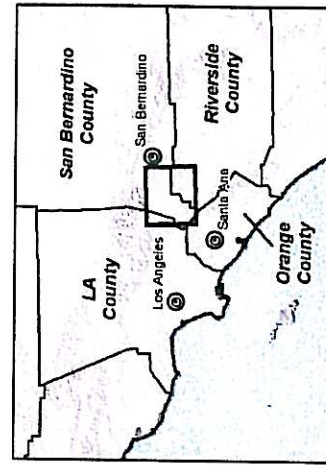
- Quaternary Alluvium
- Consolidated Bedrock
- Undifferentiated Pre-Tertiary to Early Pleistocene Igneous, Metamorphic, and Sedimentary Rocks

Faults

- Location Certain
- Location Approximate
- Location Uncertain
- Location Concealed

Other Features

- Groundwater Divides
- Streams, Rivers, and Channels



**Difference in Groundwater Elevations
for Layer 1
Baseline - Alternative 2 -- 2030**

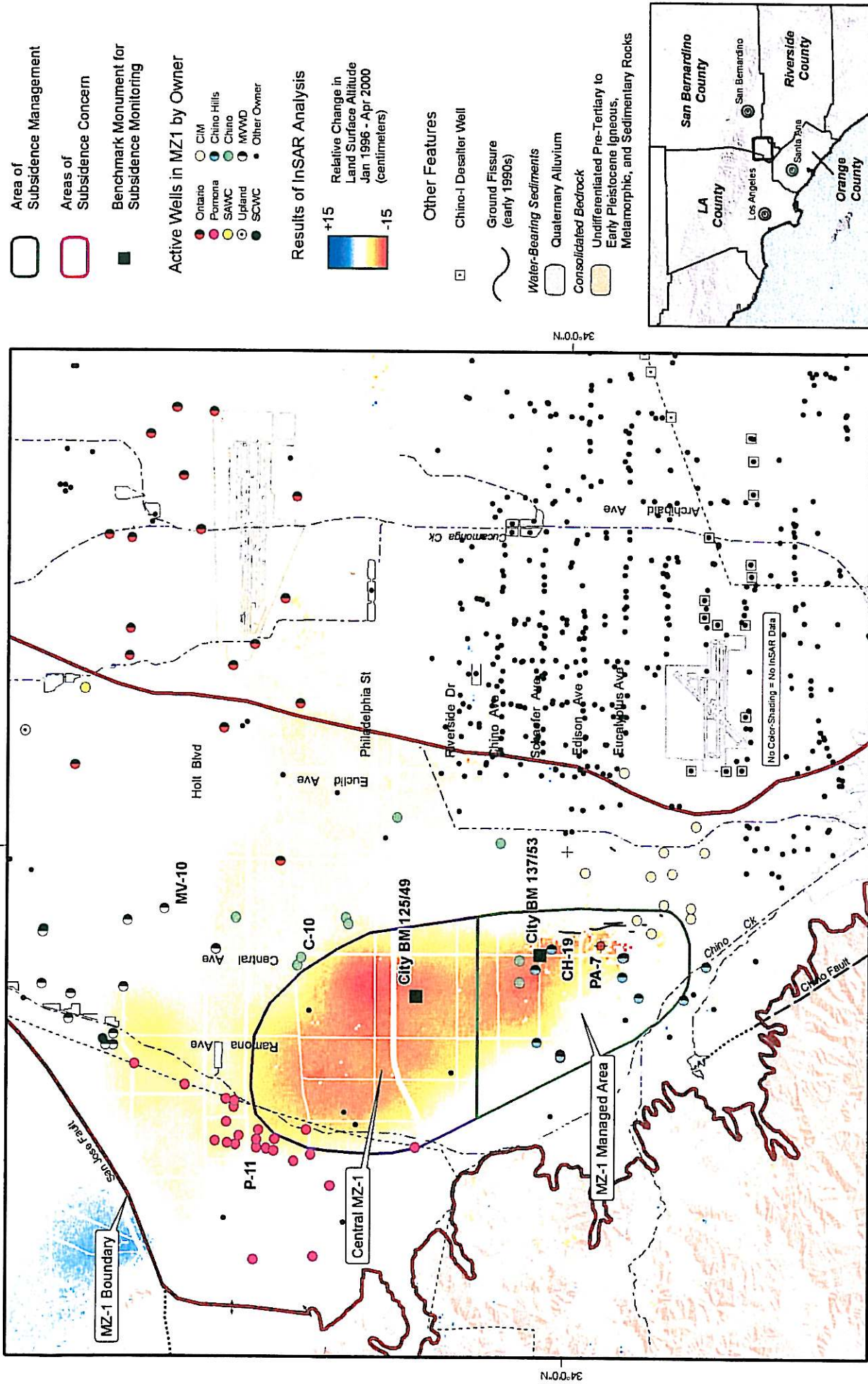
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 File: Figure_12d.mxd

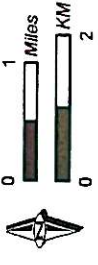
Chino Basin Dry-Year Yield Program Expansion
 Impact Analysis

Figure 12d



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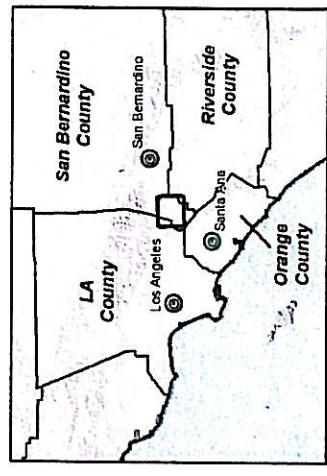
Author: MJC
 Date: 20081024
 File: Figure_13.mxd



Chino Basin Dry-Year Yield Program Expansion
 Impact Analysis

Subsidence Area in MZ1

Figure 13



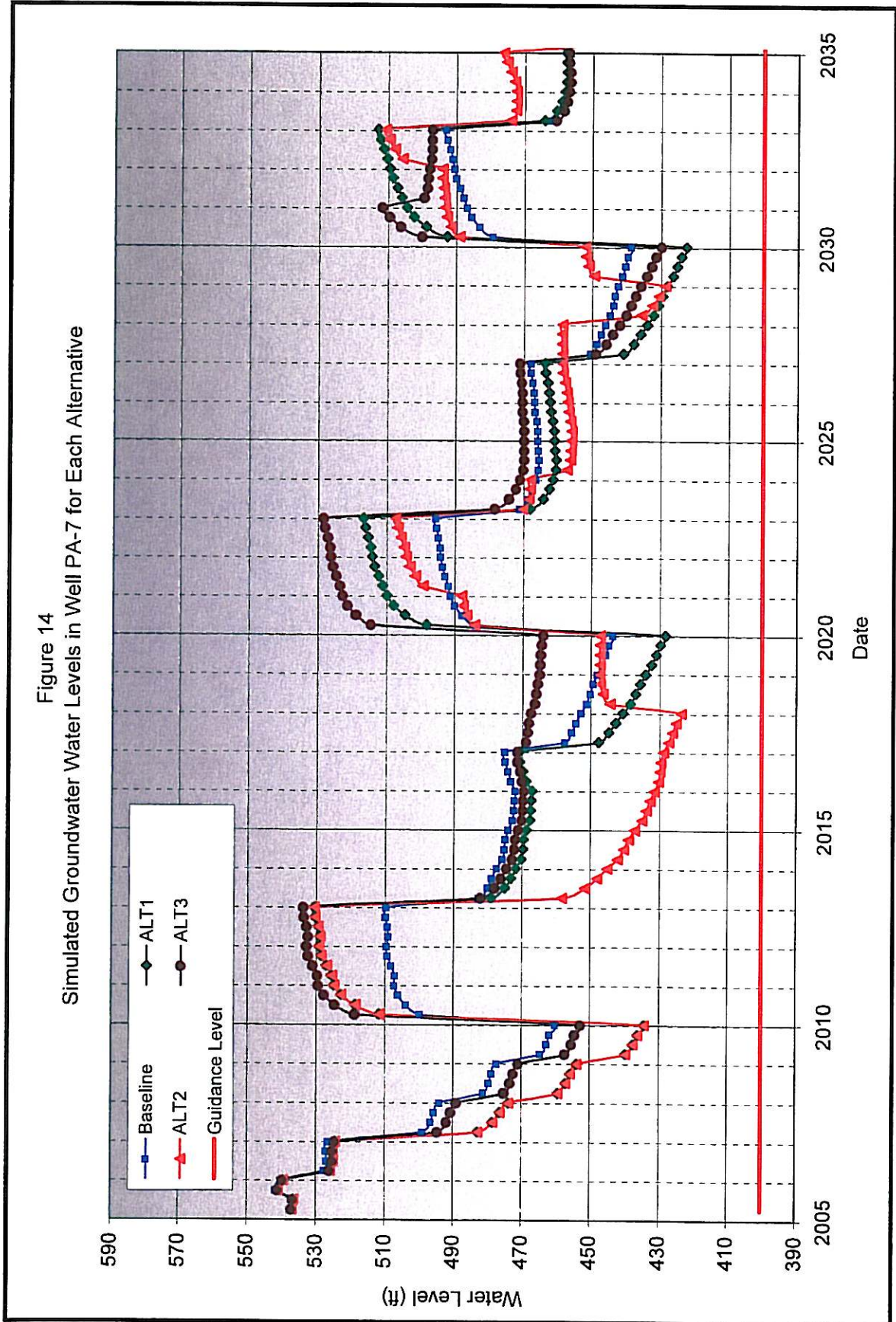


Figure 6 and Figure 14.xls

Location of Groundwater Contaminant Plumes (2006)

- Water Quality Anomaly
- Baseline Alternative Location of Groundwater Contaminant Plumes (2035)
- Water Quality Anomaly¹
- Alternative 1 Location of Groundwater Contaminant Plumes (2035)
- Water Quality Anomaly¹
- Alternative 2 Location of Groundwater Contaminant Plumes (2035)
- Water Quality Anomaly¹
- Alternative 3 Location of Groundwater Contaminant Plumes (2035)
- Water Quality Anomaly¹

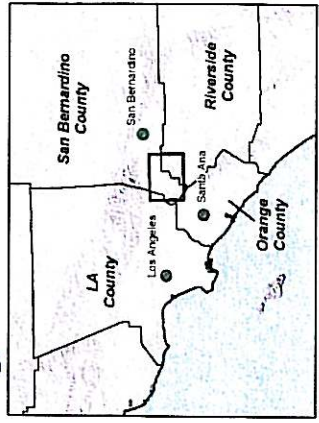
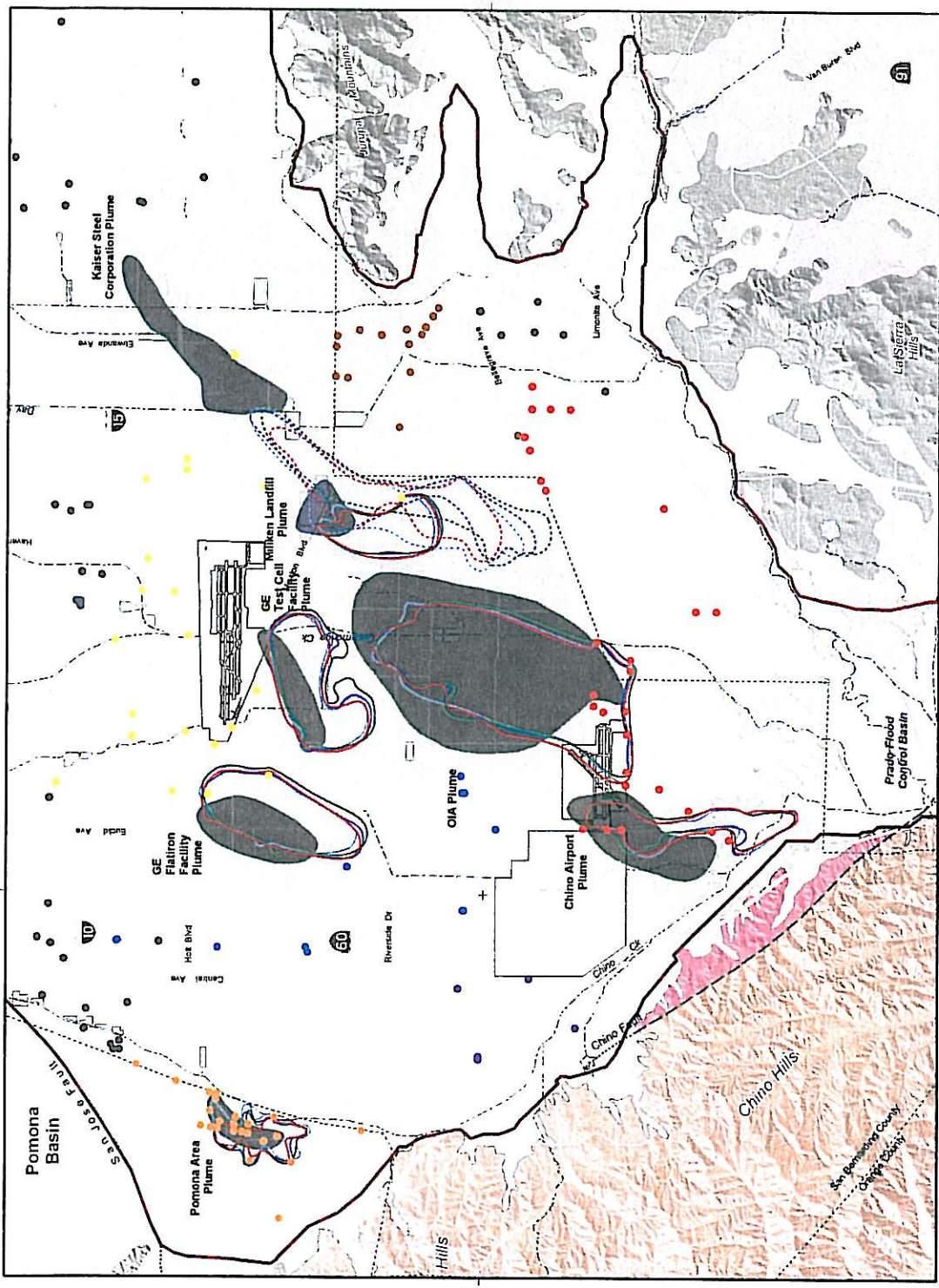
Water Quality Anomaly¹

For clarity, the Kaiser Plume is designated with a dashed outline

- Appropriate Wells
- Jirapa Community Services District
- City of Ontario
- City of Chino Hills
- Other Appropriators
- City of Chino
- City of Pomona
- Chino Desalter Aulicent

Other Features

- MODFLOW Groundwater Flow Model Boundary
- Chino Basin Hydrologic Boundary
- Flood Control and Conservation Basins



Estimated Location of Water Quality Anomalies in 2006 and their Projected Locations in 2035

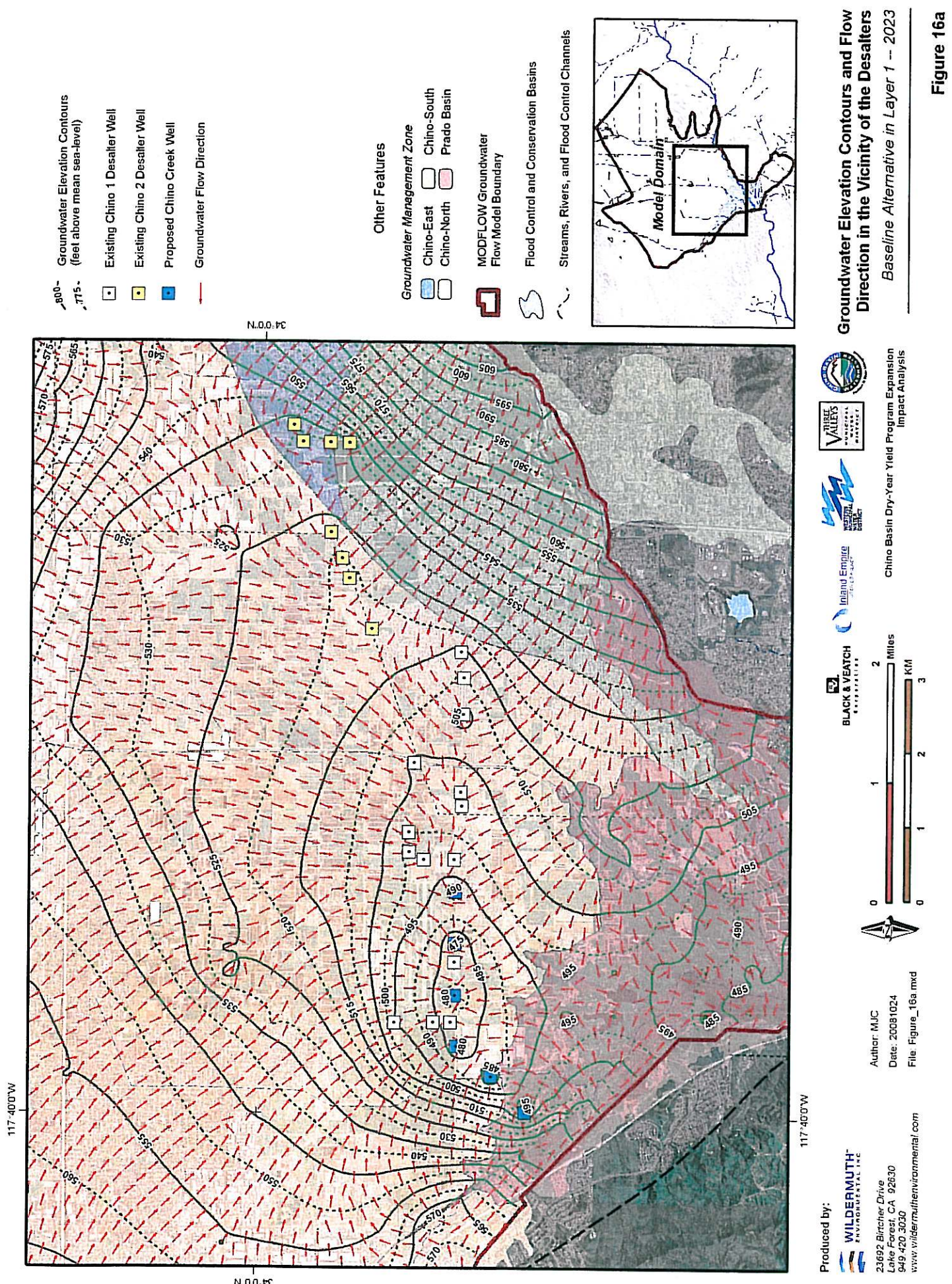
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Author: MJC
 Date: 2/20/21
 File: Figure_15

Scale: 0 1 2 3 Miles
 0 2 4 KM

Logos:

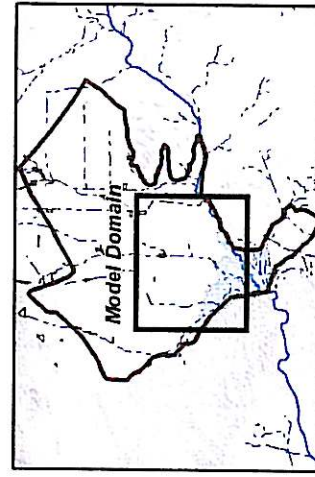
Figure 15



- Groundwater Elevation Contours (feet above mean sea-level)
- Existing Chino 1 Desalter Well
- Existing Chino 2 Desalter Well
- Proposed Chino Creek Well
- Groundwater Flow Direction

Other Features

- Groundwater Management Zone
 - Chino-East
 - Chino-South
 - Chino-North
 - Prado Basin
- MODFLOW Groundwater Flow Model Boundary
- Flood Control and Conservation Basins
- Streams, Rivers, and Flood Control Channels



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 Date: 20081024
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BLACK & VEATCH

Chino Basin Dry-Year Yield Program Expansion
 Impact Analysis

Logos for: Inland Empire, Three Valleys Municipal Water District, and other regional entities.

Groundwater Elevation Contours and Flow Direction in the Vicinity of the Desalters
 Baseline Alternative in Layer 1 -- 2023

Figure 16a

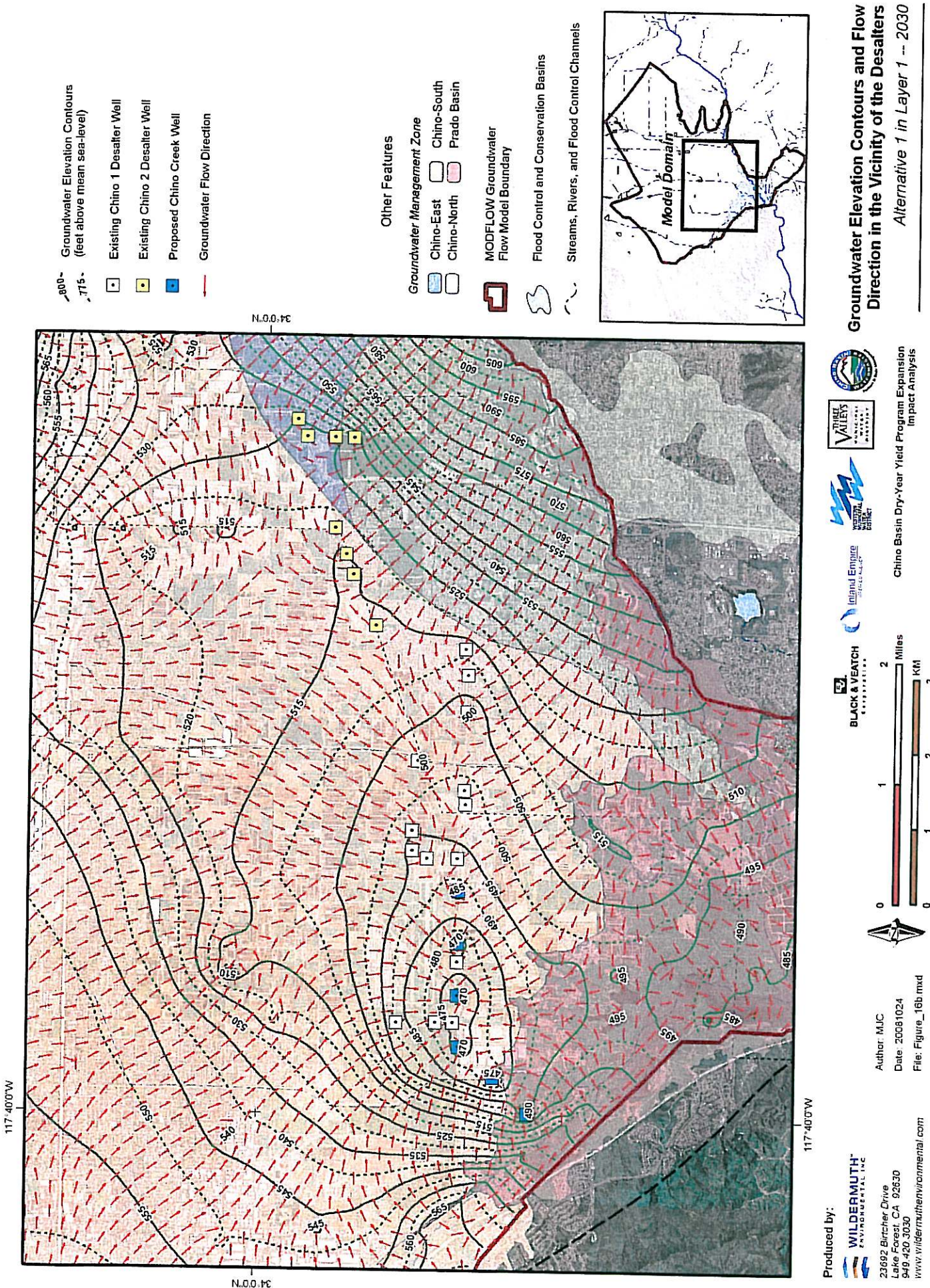
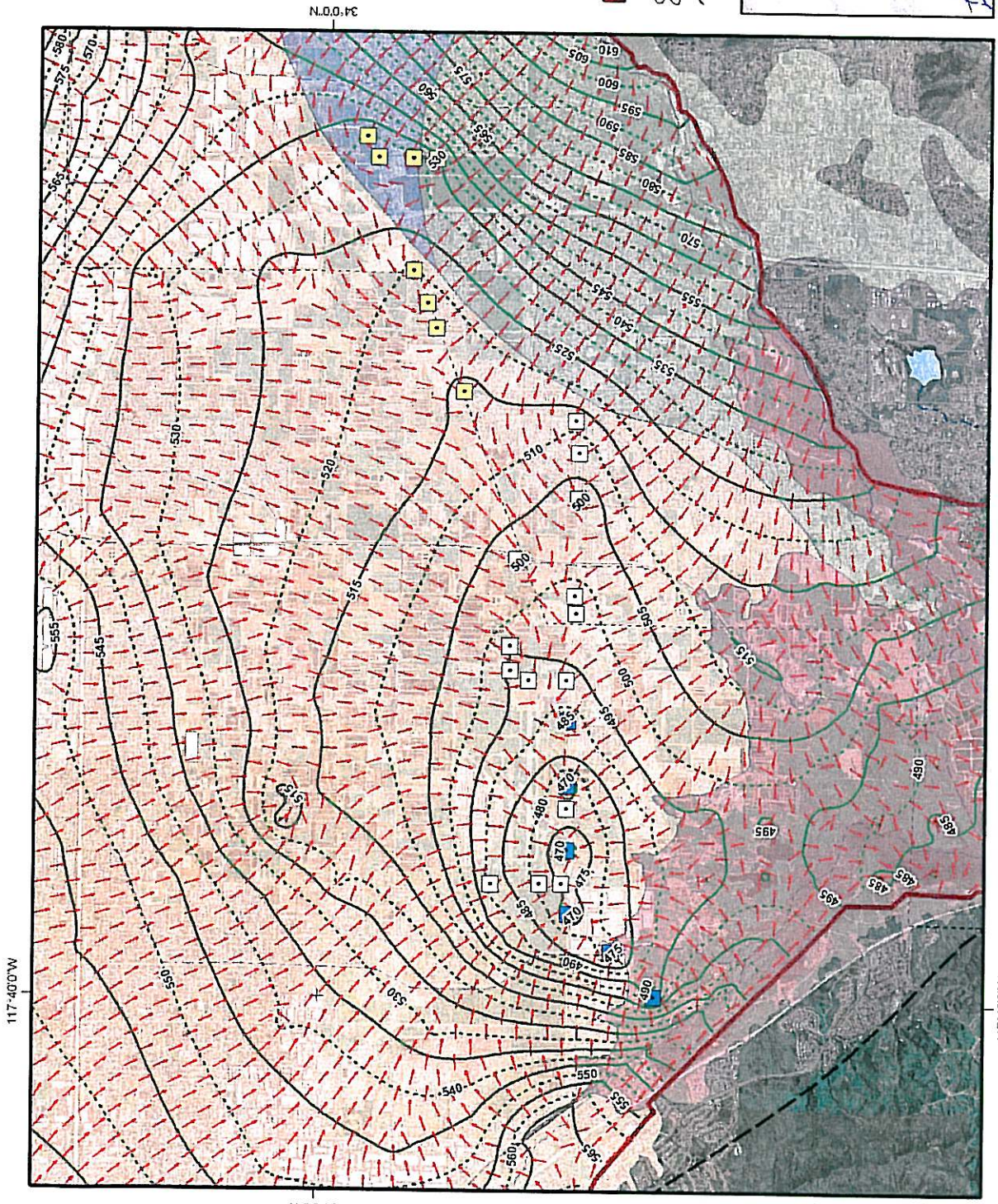


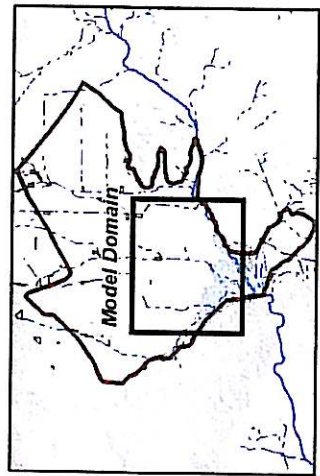
Figure 16b



- Groundwater Elevation Contours (feet above mean sea-level)
- Existing Chino 1 Desalter Well
- Existing Chino 2 Desalter Well
- Proposed Chino Creek Well
- Groundwater Flow Direction

Other Features

- Groundwater Management Zone
 - Chino-East
 - Chino-South
 - Chino-North
 - Prado Basin
- MODFLOW Groundwater Flow Model Boundary
- Flood Control and Conservation Basins
- Streams, Rivers, and Flood Control Channels



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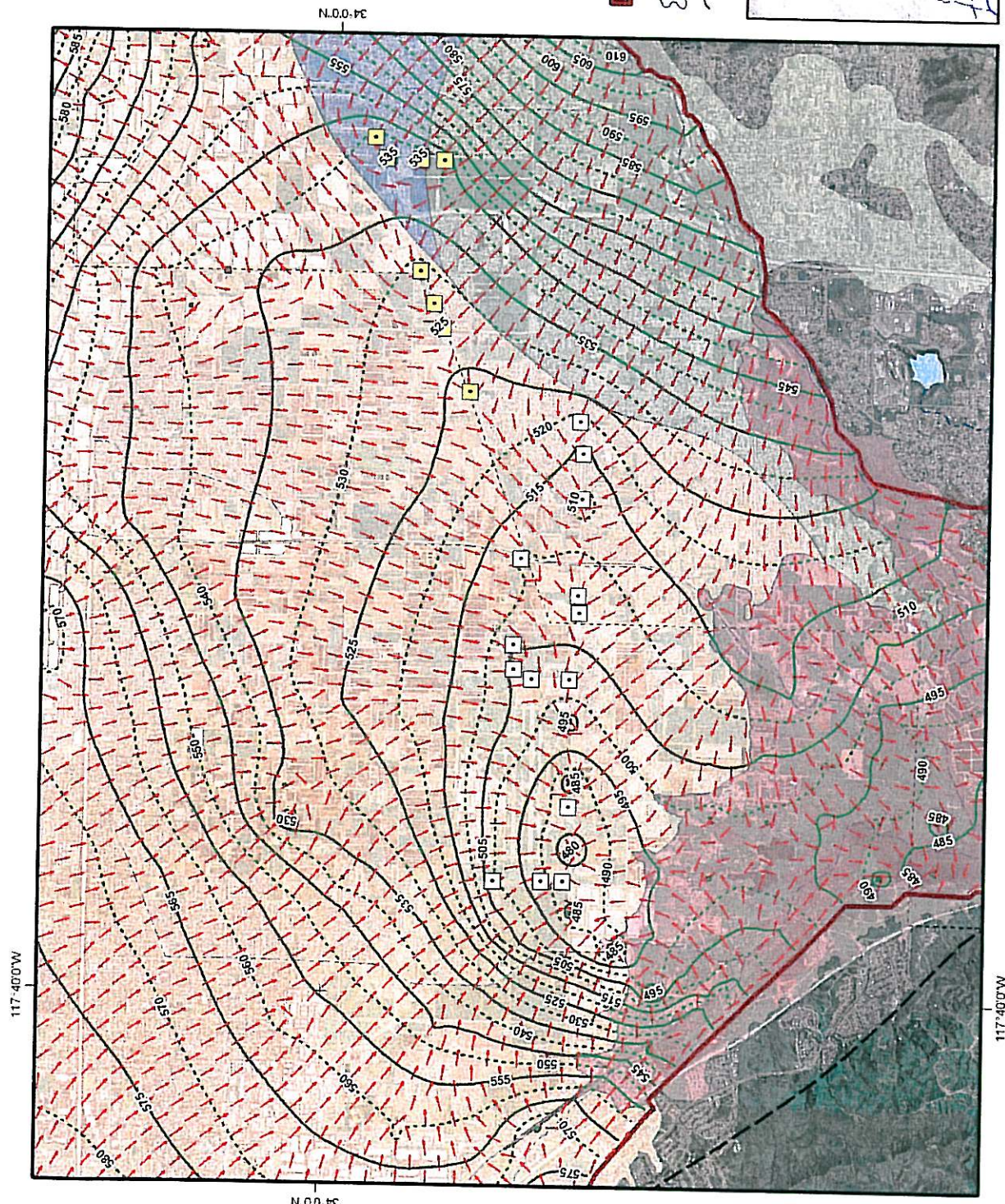
AVIAR VALLEYS
 WATER DISTRICT

Chino Basin Dry-Year Yield Program Expansion
 Impact Analysis

0 1 2 Miles
 0 1 2 3 KM

Groundwater Elevation Contours and Flow Direction in the Vicinity of the Desalters
 Alternative 2 in Layer 1 -- 2035

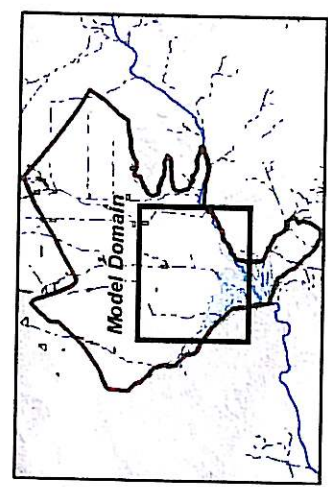
Figure 16c



- Groundwater Elevation Contours
(feet above mean sea-level)
- Existing Chino 1 Desalter Well
- Existing Chino 2 Desalter Well
- Proposed Chino Creek Well
- Groundwater Flow Direction

Other Features

- Groundwater Management Zone
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 WATER AGENCY

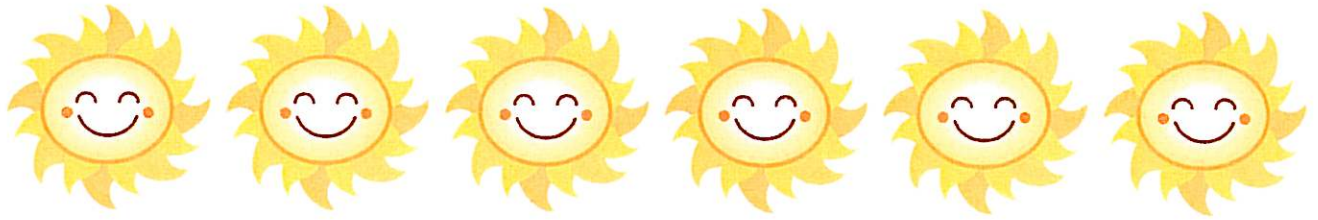
Chino Basin Dry-Year Yield Program Expansion
 Impact Analysis

Scale: 0 to 2 Miles / 0 to 3 KM

North Arrow

Groundwater Elevation Contours and Flow Direction in the Vicinity of the Desalters
Alternative 3 in Layer 1 -- 2025

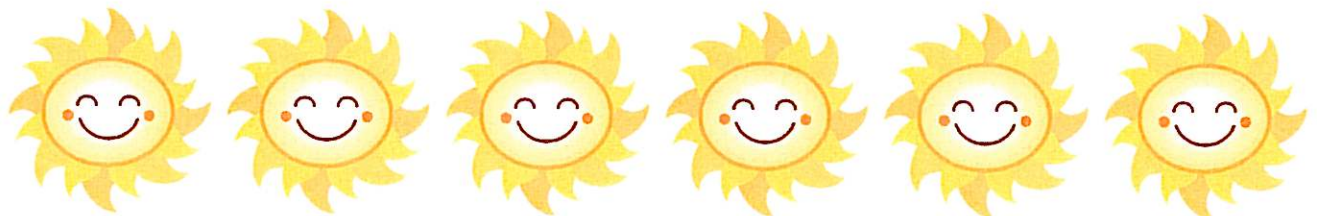
Figure 16d



CHINO BASIN WATERMASTER

IV. INFORMATION

1. Newspaper Articles



Los Angeles Times



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<http://www.latimes.com/news/local/la-me-la-water-stimulus30-2009apr30,0,2788263.story>
From the Los Angeles Times

Los Angeles water projects to get stimulus boost

The Army Corps of Engineers plans to use federal stimulus funds to help complete a raft of projects, including work on the county river system and dredging of Upper Newport Bay. By Alexandra Zavis

April 30, 2009

The Los Angeles district of the Army Corps of Engineers plans to use its share of federal stimulus dollars to help complete a backlog of projects aimed at improving the local water supply, officials said Wednesday.

The new funding includes \$6.5 million for delayed repairs and improvements to the Los Angeles County river system, \$5.1 million for water recycling and \$17.4 million to finish a dredging project to prevent mud-choked Upper Newport Bay from becoming a meadow.

Nearly \$184 million in all has been allocated to the district, which covers 226,000 square miles in Southern California, Arizona, southern Nevada and a small part of Utah. The funding is part of \$4.6 billion in allocations to the corps under the American Recovery and Reinvestment Act, which President Obama signed into law in February.

"In many cases the projects that we have on this list are projects that have kind of hung out there for a while without the necessary funds to complete them," said Col. Thomas Magness, who commands the corps' L.A. district. "We finally have a chance to complete the projects, put them in the portfolio as 100% and turn over the project."

District officers estimate that the funding will create or save about 1,472 jobs directly related to the work and 2,558 positions in supporting fields, including companies that provide materials and services to the contractors.

"We are very excited," said Dave Kiff, assistant city manager for Newport Beach.

Mud flats, fed by sediment that washes into Upper Newport Bay via the San Diego Creek, have been building up in the ecologically important estuary for years, greatly reducing the water level. Eventually, the reserve became so choked with sediment and growth that coyotes and other predators could walk across to what had been small islands, disturbing nests and eating eggs, including those of the endangered least tern. Tons of silt were also spilling over from the upper bay into the lower bay, grounding vessels in the Newport Beach marina.

In October 2005, dredging crews began removing 2.3 million cubic yards of accumulated muck, but funding started running out about halfway into the project, Kiff said.

The corps, the lead agency on the project, was supposed to cover 65% of the estimated \$38.5 million cost, with state and local agencies providing the rest. Local authorities funded their \$13.5-million share with money raised for coastal protection under Proposition 12 of 2000. Until now, however, Congress had only appropriated \$17.5 million of the roughly \$25-million federal share.

In the meantime, the corps estimates that the project's tab has ballooned to more than \$50 million, driven in part by rising fuel costs.

Together with some additional local funding, Kiff said, the new federal money should be sufficient to finish dredging by the summer of 2010.

"It's a little ironic that it took a recession and stimulus package for the government to complete its share," Kiff said.

The additional \$6.5 million for the L.A. County drainage system will allow the corps to perform delayed maintenance and repairs to the channels and dams, clear out vegetation and debris that is inhibiting water flow, remove graffiti and update recreation plans for the area, corps officials said.

"That work is never complete," Magness said.

The \$5.1 million for water recycling will help the West Basin Municipal Water District reduce the region's dependence on imported water from Northern California and Colorado, said General Manager Richard Nagel. West Basin already delivers 35 million gallons of recycled water from the El Segundo wastewater treatment plant -- water that would otherwise be dumped into the ocean. The extra funding will be used to build new pipelines and a pump station in another step toward doubling capacity by 2020, Nagel said.

Also on the corps' list are:

- * \$27.5 million for flood control along the Santa Ana River, part of a \$2-billion project that corps officials say is about 90% complete.
- * \$2.5 million to finish deepening the turning basin at the Port of Long Beach.
- * \$1.98 million to assess the condition of the San Pedro breakwater and dredge the L.A. River estuary.
- * \$500,000 for a survey of the Dana Point Harbor breakwater, where officials want to check recent storm damage repairs.

alexandra.zavis@latimes.com

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Official: Water recycling critical

DROUGHT: Inland agency executive testifies before lawmakers about where to channel stimulus funds.

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10:00 PM PDT on Tuesday, April 28, 2009

By **BEN GOAD**
Washington Bureau

WASHINGTON - With California facing a third consecutive year of drought, federal economic recovery dollars should go to water recycling programs that will both create jobs and stretch the state's ever-dwindling supply, a top Inland water official told lawmakers Tuesday.

Federal officials recently announced that roughly \$135 million from President Barack Obama's \$787 billion stimulus legislation would go toward the construction of water recycling projects across the country.

"This decision means that drought-starved communities and regions where the recession has been particularly devastating to local economies are now in a position to address two problems at once," Inland Empire Utilities Agency chief executive Richard Atwater said in prepared testimony submitted to the House Natural Resources' subcommittee on Water and Power.

Atwater said the Chino-based agency has decreased its reliance on potable water by 20 percent in the last five years through water recycling and desalting programs.

Gov. Arnold Schwarzenegger on Feb. 27 declared a statewide emergency due to drought and raised the prospect of water rationing.

"If oil becomes too expensive, we can shift our energy demands to other sources," Atwater said. "But if reliable water supplies dry up, our industries, ranging from agriculture to manufacturing to retail, cannot sustain their business operations."

Local officials have requested \$14 million of the funds for the Inland Empire Regional Recycled Water Program, with the work focused in three areas: Fontana/Upland, Rancho Cucamonga and Montclair, said Martha Davis, the agency's executive manager of policy development.

Beyond water recycling projects, water officials and lawmakers should be exploring ways to increase the region's water supply, said Inland Rep. Joe Baca, a member of the panel.

Baca suggested the possibility of importing water from other states, including South Dakota.

"They've got plenty of water," said Baca, D-Rialto. "This way, we would not always be competing with Northern California."

Reach Ben Goad at 202-661-8422 or bgoad@PE.com

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Sometimes history fails to get it right

Joe Blackstock, Staff Writer

Created: 04/06/2009 10:28:36 PM PDT

Is there any more lasting honor given to a man or woman than to have his or her name attached to some permanent building or location?

The names of Chaffey College, Howard Cattle Elementary School, Henry J. Kaiser High School and the community of Guasti remember some of the former leaders of the Inland Valley, preserving at least a little of their legacy.

Sometimes, though, history's memory is just a bit faulty.

Consider the Sainsevain brothers - Pierre and Jean Louis - who were among the first winemakers in this area.

A camping area in the San Gabriel Mountains, streets in Rancho Cucamonga, Mira Loma and Fontana, a flood control channel and spreading grounds, and even a San Bernardino County redevelopment area just east of the 15 Freeway all are named for those brothers - and every one of them is misspelled.

The name "San Sevaine" was attached, albeit spelled wrong, to all those locations in memory of the French-born brothers who came to California while it was still part of Mexico.

They were instrumental in Southern California winemaking well before the arrival of Secondo

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Guasti and other Italian and French vintners who developed the Inland Valley wine industry at the start of the 20th century.

Pierre Sainsevain arrived in Santa Barbara by ship in 1839, encouraged to come here by his uncle Jean Louis Vignes, who had a vineyard in the vicinity of today's Union Station in downtown Los Angeles. Pierre later spent time in Santa Cruz and San Jose and even took off for the Sierra Nevada chasing the lure of gold in 1848.

Pierre and his older brother bought their uncle's vineyard in 1855 for \$42,000. A carpenter by trade in his native Bordeaux, Pierre returned to France to study winemaking and brought his knowledge back to expand his vineyard in Los Angeles.

Brother Jean Louis had his own chance to make his name in Los Angeles trying to deliver something that is still more valuable here than gold: water.

In 1865, he was awarded the contract to lay water pipes through the streets of downtown L.A. and build a reservoir, putting him in the position of being a power broker.

However, he washed out of the water business. The material he chose for water pipes - wood - proved far better at aging wine than it was at carrying water. He had to quickly replace his leaking piping system with iron pipes. Then a storm destroyed the reservoir, releasing all the water stored there, and briefly leaving Los Angeles with neither a working water system nor any water to deliver.

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It was then Jean Louis decided to go back to the wine business and moved with his brother to the Inland Valley.

Jean Louis became winery superintendent on the holdings of the original Rancho Cucamonga, whose grapes were planted in 1839 near today's Foothill Boulevard and Vineyard Avenue. Pierre imported grape cuttings from France and planted a number of new varieties.

"A very superior article of wine grown in San Bernardino County is now on the market and is attracting considerable attention . . . from consumers of the juices of the grape," praised the San Francisco Times in 1869 about the brothers' wines.

"It is known as Cocomun- go, or California Madeira wine, and is

pronounced by competent judges to be as fine an article as manufactured in the world."

The brothers had sales offices in Los Angeles and San Francisco and seemed to be doing well until they decided to sell off their interests and left the area.

On Feb. 24, 1873, Pierre sold 850 acres of Etiwanda to a partner in the Cucamonga winery, Capt. Joseph Garcia. Garcia, a former ship captain from Portugal, built a ranch home and then in 1881 sold his ranch to two brothers from Canada - the Chaffey brothers - who were the developers of today's Ontario, Upland and Rancho Cucamonga.

Now, more than a century later, little sign of the vineyards of the Sainsevain brothers remains in

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the Inland Valley.

But their name, with its rather creative spelling, lives on.

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Chino proposes utility-tax hike

Public hearing set for June 2

Neil Nisperos, Staff Writer

Posted: 04/08/2009 10:29:21 PM PDT

CHINO - Residents might have to deal with utility rate increases but not before they have their say on the proposed charges.

If the increase is approved by the City Council, its impact on the average Chino home will be an increase of \$4.38 per month during the first year and \$5.18 more per month in the second year, according to a city report by David Cain, the city's director of finance.

Among the proposed rate increases for this year is \$1.08 for every 748 gallons of water and \$1.17 the next year. The current rate is \$0.9863 for every 748 gallons.

A public hearing has been scheduled by the council for June 2 to discuss proposed rate increases for water, sewer and trash collection.

The hearing is required under Proposition 218, which was passed in 1996 and requires local governments to notify residents of proposed new or increased rates.

The council on Tuesday also approved \$14,000 for the printing and mailing of notices to residents informing them of the hearing.

During the hearing, council will consider the public protests and objections.

"The rates being proposed ... are largely the result of increases from our third-party suppliers being passed through to Chino residents," said Rob Burns, deputy director of finance.

"These third parties include Metropolitan Water District, a major supplier of water for Chino; Inland Empire Utilities Agency, which provides wastewater treatment; and Waste Management, which provides refuse and recycling services."

The proposed rate increase comes as the continuing statewide drought has led to higher imported-water costs from agencies including the MWD.

According to the city report, officials are

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anticipating more rate increases from water suppliers in the near future.

The Inland Empire Utilities Agency sewage treatment service is at \$9.62 for a single-family household and \$6.73 for a multifamily household.

The proposed rates for single-family units are \$10.75 for 2009 and \$11.29 for the next year.

The multifamily charges per household are proposed at \$7.52 and \$7.90.

Waste Management does not plan to increase household trash-collection fees. Services are expected to remain at \$22.12 this year, although an increased charge is proposed in July 2010.

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Reclaiming flood basin

Rancho sizes up developers for 1,200 acres of open land

Wendy Leung, Staff Writer

Created: 04/11/2009 07:01:24 AM PDT

RANCHO CUCAMONGA - The 1,200 acres of untouched land north of Los Osos High School have sat idle while residential development sprouted on all sides. But the time has come for development to come knocking.

County and city officials are in the preliminary stages of selecting a developer to build on the rocky terrain that once served as flood control land. The City Council is considering the five developer teams that responded to the request for qualification and will forward its top two picks to San Bernardino County. The county could make a selection by June.

Located north of Banyan Street between Milliken Avenue and the Day Creek Channel, the land is partly within city limits but mostly is unincorporated land within the city's sphere of influence. Eventually, the city will annex the property.

"It's the last big piece of developable land left," said Mayor Don Kurth. "Hopefully it'll be a community within a community that's a real gem."

Council members are sifting through proposals

from five developers - Rancho Alliance Investors, Foremost Communities, K&K Development Inc., Richland Communities/Toll Brothers and Brookfield Homes.

"I'm interested in the stability of the organization, in where they had done other projects and their relationship with the city," said Councilman Sam Spagnolo.

"In the past, developers would come in and they would build and be gone and leave us with a multitude of problems. That's one of my concerns."

Of the 1,200 acres, 815 acres will be developed and 385 acres will be set aside for open space.

One of the potential developers, Rancho Alliance, is a consortium that includes Diversified Pacific, a Rancho Cucamonga-based company co-founded and managed by Jeff Burum.

Burum was a partner in Colonies project, which received a \$102 million settlement after suing the county over flood control easements at the Upland development. During the settlement talks, all or portions of the 1,200 acres, were used by the county as a bargaining chip at various points of the negotiations. Ultimately, the land was not part of the settlement.

At a meeting in March, each developer gave a 30-minute presentation on its qualifications, financial capabilities and visions for the project.

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commercial component serving as a village center were the common thread in the presentations. All the developers had proposals for a golf course and a 25-acre park - features that were sought by the city and county in the request for qualifications process.

But it's too early to determine whether those features will make it through the final design phase.

"I think our job is to look at who's the most financially qualified," Kurth said. "It's not about who does the prettiest design."

Spagnolo pointed out that the preliminary designs of Victoria Gardens included meandering streets and lakes.

"If you look at Victoria Gardens, it looks nowhere like what it was supposed to," Spagnolo said.

But that didn't stop the developers from getting painstakingly detailed in their proposals.

Rancho Alliance - an amalgam of Lewis Homes, Shea Homes and other companies - wants to create a lake park in what is currently a rock quarry. Richland/Toll Brothers wants to plant more than 400 acres of grapevines to tie the project to local history. K&K Developers proposed a 200-room hotel and recharge stations for electric cars and golf carts.

Spagnolo said building a hotel to accommodate a golf course isn't a far-fetched plan.

"If you talked about hotels in the city of Rancho Cucamonga 30 years ago, people would have said, 'No way,'" Spagnolo said. "Now we've got Fourth Street, and a high-end hotel coming on Haven and on Foothill. Thinking out of the box is not a bad idea."

Councilman Rex Gutierrez, not quite keen on another golf course in the city, has hopes for an athletic complex.

"We have plenty of access to golf courses," Gutierrez said. "We desperately need sports space. So far, we have more demand than supply."

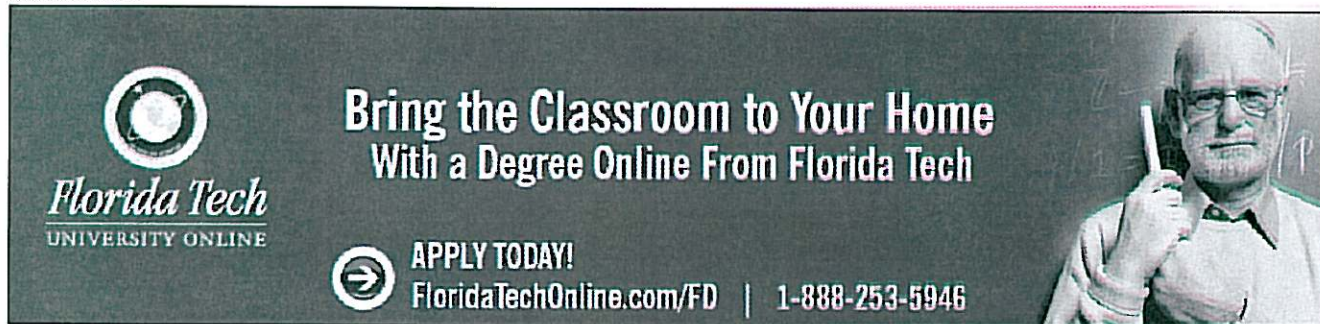
Last week, the City Council and county representatives took a tour of the site. It is not known when the council will make its picks.


The project is likely to face opposition from residents who want to preserve open space and nearby neighbors who assumed the land would be left alone, especially since it has remained unchanged despite the population boom.

The majority of the property lies on a flood plain that wasn't deemed developable until the nearby Day Creek and Deer Creek debris basins were built. The land is now considered surplus flood control property but the fire-prone hillside terrain will be a challenge for developers.


In May the county will have the land appraised. County Supervisor Paul Biane estimated the value at \$25 million to \$50 million.

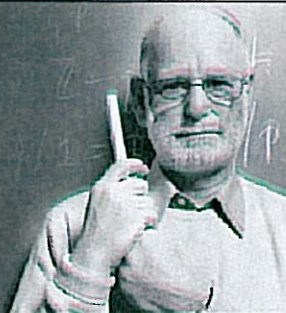
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A rock quarry operated by Hanson Aggregates is in the center of the property. The company has an agreement with the county to cease operation in 2013, said Biane.

Developing the 815 acres will be a long-term project with a land entitlement agreement process that could take five years. The city, after it picks the top two candidates, will continue to play a role in the project by sending two members to serve on a design review committee.

"It isn't often that somebody who owns the land asks their neighbor to help develop it," Spagnolo said.

Biane, a former Rancho Cucamonga councilman, said one of the reasons he ran for the Board of Supervisors was because he felt cities weren't given a voice in development and planning issues.

"I have a long history and consistent record in involving cities in every decision I make and understanding the impacts that the board makes on cities," Biane said.

There are limitations however. As the county tries to maximize its flood control assets, it retains the right to veto the city's selections with a unanimous vote by the supervisors.

"It's the county's project, it's the county's land and the county gets the money for it," Kurth said. "We expect that we will annex it and we want to have some input. Having a little seat at the table is better than not having a seat at the table at

all."

Expectations are high for the city's last grand project. The design details are far from being finalized but they are slowly being etched in the minds of local leaders. Park space is a must. Green concepts are a given. Some are even talking of an amphitheater.

"When you're driving down the freeway and you come up to Victoria Gardens, it's so distinct," Spagnolo said. "I want people to be driving up with the same feeling on this project. I don't want to be looking at a bunch of rooftops." Five developers are vying for the chance to develop 1,200 acres of untouched land in the northern part of the city. They are:

Brookfield Homes

* Based in Del Mar and is responsible for Edenglen in Ontario's New Model Colony and Mulberry at The Preserve in Chino.

* Proposes a main street with restaurants, retail and small grocery store in addition to a park with equestrian trails.

Foremost Communities

* Based in Irvine and is responsible for Sycamore Creek in south Corona and Talega in San Clemente.

* Partnering with Starwood Capital Group for the project.

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* Proposes a village center near Los Osos High School that would include commercial and medical facilities as well as a farmer's market.

* Toll Brothers has sold more than 140 homes in the city including The Heights at Haven View and The Estates.

K&K Development Inc.

* Based in Beverly Hills and built Eagle Valley project in Corona.

* Proposes a 200-room hotel, amphitheater and botanic gardens.

* Envisions homes with solar panels and recharge stations for electric vehicles.

Rancho Alliance Investors

* A consortium of developers including Lewis Homes, Diversified Pacific, Shea Homes and Pitassi Architects.

* Calls the project "Rancho Bella" and proposes an oasis lake park for the quarry site.

* Vows to initiate a community input process with workshops on project details.

Richland Communities/Toll Brothers

* The Stockton-based Richland and Pennsylvania-based Toll Brothers merged for this request for qualification.

* Calls project "Cuverra," a mixture of the words cuvee and terra. Cuvee is a wine term that refers to the best product from a grape pressing.

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MDW poised to tighten water conservation measures

Mediha Fejzagic DiMartino, Staff Writer

Created: 04/13/2009 04:46:24 PM PDT

The Metropolitan Water District's Board of Directors is expected to vote today to implement a Water Supply Allocation Plan that will reduce water supplies to its member agencies by 10 percent.

The water supply reduction will affect local agencies differently, based on their water usage levels as well as dependency on imported water.

The Metropolitan Water District of Southern California is a consortium of 26 cities and water agencies serving 19 million people in six counties. Locally, MWD provides water to Inland Empire Utilities Agency, which serves Fontana and the Cucamonga Valley Water District.

San Bernardino Valley Municipal Water District imports only 10 percent of its water supplies and does not buy water from MWD. Still, it is subject to the same supply problems. The district serves the cities of San Bernardino, Colton, Loma Linda, Redlands, Rialto, Bloomington, Highland, East Highland, Mentone, Grand Terrace and Yucaipa.

California is in a third consecutive year of drought. Rainfall levels statewide for the 2008-2009 water year are 24 percent below average.

Statewide snowpack water content is at 19 percent below normal. In addition, the water stored in the state's reservoir system is extremely low, prompting Gov. Arnold Schwarzenegger to declare a water supply emergency in February.

Over the past two years, MWD has depleted half of its water reserves to deal with the drought and with a court-ordered 30 percent restriction on water deliveries from the State Water Project and the Central Valley Project to protect the Delta smelt.

The MWD board is expected to vote to declare a change of Metropolitan's Water Supply Condition from "Condition 2 - Water Supply Alert" to "Condition 3 - Implement Water Supply Allocation," effective July 1.

Not implementing the Water Supply Allocation Plan at the recommended level would result in an over-withdrawal from MWD's storage resources and increase the risk of even lower supply allocations and more severe shortage impacts in the future, the board's voting packet stated.

Water levels in ground basins in the San Bernardino area are as low as they have been since the 1960s, said Randy Van Gelder, general manager of the San Bernardino Valley Municipal Water District.

To conserve water, Van Gelder's team is installing weather-based irrigation controllers in public parks and school districts' fields.

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"They use weather information and calculate how much water the turf needs every day," Van Gelder said. "We think that there is a lot of water that can be saved and used more efficiently."

The recession is hurting everyone, but it is working in favor of preserving the water supplies.

"The water demands are not increasing as they would have," Van Gelder said. "When a house goes into foreclosure, the bank will turn off the utilities including water."

In response to the governor's emergency declaration, the Inland Empire Utilities Agency called for all households and businesses to step up their water conservation efforts.

"We need residents and business owners to recognize the severity of the drought that is affecting us," stated IEUA Board President Terry Catlin. "It's time to take shorter showers, fix your leaky faucets, and turn off your sprinklers when it is raining outside."

IEUA imports 25 percent of its total supply from MWD. Groundwater represents 60 percent of its supply, recycled water contributes 10 percent, while mountain runoff adds another 5 percent.

Currently, local rainfall is about 80 percent of average, said Richard Atwater, general manager of the IEUA. The groundwater supplies are fine but IEUA is using its "storage reserves."

"If MWD curtails their imported supplies by 10

percent it will reduce supplies within IEUA service by about 3 percent," Atwater said. "We are asking all customers to conserve 10 percent to keep our local supplies in storage in case the drought continues next year."

U.S. Rep. Grace F. Napolitano, D-Santa Fe Springs, was recently reappointed chair of the House Water and Power Subcommittee.

"There is no simple solution to California's water problems. Everyone is going to have to give because of the decreased water supplies," Napolitano said last month at a congressional briefing. "To meet this challenge, we all need to take proactive steps to increase local supplies and lessen our dependence on imported water through conservation and water recycling."

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Less water for more money

Rebecca Kimitch, Staff Writer

Created: 04/12/2009 05:26:24 PM PDT

It appears likely that water imported to the Southland is about to get more expensive and less available.

The cumulative effects of the state's third year of drought and a judge's effort to avoid ecological collapse in northern rivers are finally taking their toll in a very real way.

The Metropolitan Water District, the agency that distributes imported water throughout Southern California, is expected to approve Tuesday two separate plans that would increase the cost of imported water by 40 percent and cut availability to water agencies by 10 percent to 15 percent.

Because many water providers throughout the San Gabriel Valley and other areas rely on local groundwater supplies as well as imported water, the end effect on consumers may not be as severe here. However, on average, water consumers in Southern California can expect to be asked to use 10 percent less water, according to MWD general manager Jeffrey Kightlinger.

They also can expect their monthly water bills to rise \$15 on average over the next three years, or about \$180 annually, he said.

"Yes, it's a double whammy," said Shan Kwan, assistant general manager for Pasadena Water and Power. "That's the nature of the business - you make money by selling more water, but when there is a need to conserve, you get less revenue, but you still have fixed costs we have to pay for. And somehow you have to recover the lost revenue."

Though the massive aquifers spreading across the Valley could protect consumers in this region, local supplies are also low. And many cities and water utilities are implementing tiered pricing structures under which water becomes increasingly expensive.

Under the MWD's plan, member agencies would receive 10 percent to 15 percent less imported water than normal based on a complicated formula that takes into consideration local supplies, cost impacts and conservation efforts.

If agencies go above the amount they are allocated under the plan, they could pay about three to five times higher than the normal price for an acre-foot of water, currently \$579.

Whether water agencies are able to avoid these hefty prices depends a lot on consumers. So far even the most successful voluntary conservation campaigns have only reduced water consumption by at most 5 percent, officials said.

"It will be difficult to reach those levels - 10 to 15 percent conservation is going to be difficult for any agency in any area," said Kirk Howie, assistant general manager of administration for

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Three Valleys Municipal Water District. "It certainly is doable ... In the long run, we'll have to change our focus and habits, but we'll learn a lot in the next year in this process."

Many cities across the region are adopting water conservation ordinances that permanently prohibit outdoor watering during some hours of the day, require leaks to be fixed, and provide incentives to install low-flow toilets and shower heads.

It has been more than 15 years since MWD has raised rates so dramatically. For the past decade, rates have increased only about 5 percent.

Water remains relatively cheap compared to other utilities. While a single family home may pay \$100 or more for electricity, the water bill for a typical family in California is \$45 a month.

Even so, water costs look poised to grow.

"The easy sources of conservation have been tapped," said Kightlinger of the MWD.

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County completes project to tame San Sevaine Creek

Wendy Leung, Staff Writer

Created: 04/09/2009 07:35:41 PM PDT

RANCHO CUCAMONGA - The San Sevaine Flood Control project at the Rancho Cucamonga-Fontana border, a \$150 million venture aimed to offer protection from 100-year floods, has been completed.

The San Bernardino County project, nearly 25 years in the making, is expected to solve the flood-prone areas of Rancho Cucamonga, Ontario, Fontana and other cities.

County Supervisor Paul Biane and other local dignitaries marked the project's completion at the Etiwanda debris basin Thursday. Biane said the region has been prone to flooding from San Sevaine Creek since the first floods were recorded in the early 1900s.

"With this project, we've tamed the San Sevaine," Biane said.

The project, partly funded by the cities of Rancho Cucamonga, Fontana and Ontario, is expected to benefit about 100,000 residents from the foothills to the Riverside County line and pave the way for future development.

Rancho Cucamonga Mayor Don Kurth said massive infrastructure projects like this one will

usher in much needed jobs to the region.

"Now we can have the development we need in this whole eastern side of Rancho Cucamonga so we'll have the industrial and commercial development we need to get people jobs," Kurth said. "Lord knows that's what we need right now. We need to get the economy going again."

The project's completion means an end to the flooding that takes place nearly every year in areas where Fourth Street and the Southern Pacific Railroad tracks cross the channel.

Louis Abi-Younes, Ontario's city engineer, said it also means no more flooding on Ontario Mills Parkway, which was closed for nearly a year due to past storms that brought three feet of mud to the street.

Part of the project also involved the construction of several water basins that will sink about 25,000 acre-feet of storm water runoff every year into the Chino Groundwater Basin.

Ontario Mayor Paul Leon said the completion of the project comes at a time of renewed understanding of water conservation.

"Most of us didn't give much thought to water back then," Leon said. "One of those bottles of water costs \$3 at the airport. I know back in the 1960s I wouldn't have paid a nickel for that bottle of water."

"We didn't think in terms of how important water was to retain it and make sure it recharges to

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our water supply."

Construction of the project will also set aside 360 acres near the Etiwanda debris basin as conservation in order to protect plant and wildlife in the area.

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Places saved, water boosted

Our view: New legislation will help produce new sources of fresh water in county and protect more than 700,000 acres of wild lands in California.

Posted: 04/04/2009 06:01:24 PM PDT

We're gratified that Congress passed and President Obama signed the Omnibus Public Land Management Act of 2009, which not only protects wild lands but also promotes important water-supply projects in San Bernardino County.

The new law authorizes \$20 million to treat tainted surface water, reclaim and reuse tainted groundwater, and provide brine disposal in the Yucaipa area.

It authorizes \$26 million for a desalination project in the Chino dairy area, and \$10 million for the construction of "natural" treatment systems and wetlands for water flowing into the Prado Basin.

Another \$26 million is authorized for the U.S. Bureau of Reclamation to design, plan and construct a series of grandwater wells, pumps and pipelines in Riverside and San Bernardino counties that will provide new, local water.

In addition, the public land act protects more than 2 million acres of wild places, more than 700,000 of them in California.

Some 190,000 acres are designated as wilderness in neighboring Riverside County alone, including the new Cahuilla Mountain, Beauty Mountain and South Fork San Jacinto wilderness areas.

The act adds acreage to the Joshua Tree, Pinto Mountains, Palen-McCoy, Orocopia Mountains, Chuckwalla Mountains and Agua Tibia wilderness areas; as well as to the Santa Rosa Peak, Southeast Boundary, Tahquitz Peak and Snow Creek monuments.

Wild and scenic river protection goes to Palm Canyon, Bautista, Fuller Mill and North Fork San Jacinto creeks.

In San Bernardino County, the Amargosa River now has wild and scenic river protection. That river lies mostly in Inyo County, but runs through several miles of San Bernardino County south of Tecopa.

The bill creates two new wilderness areas in Los Angeles County as well: Pleasant View Ridge in the San Gabriel Mountains and Magic Mountain near Santa Clarita, both part of Angeles National Forest. Piru Creek gets wild and scenic river protection.

Much of the land with new wilderness area protection in California is in the Eastern Sierra and the White Mountains, just a few hours north of here.

We're pleased that these wild places will be preserved for those who come after us.

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For Release: Immediate

Contact: Michele McKinney Underwood, Public Affairs Representative
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Western appoints representative to CDA board

RIVERSIDE, CA – April 13, 2009 – Western Board Vice President Charles D. Field has been appointed as District representative to serve on the Chino Basin Desalter Authority (CDA) Board of Directors; John V. Rossi, Western’s general manager, has been appointed as the District’s alternate representative to the CDA board.

Western membership in the CDA was approved last December. The CDA’s goal is to achieve local water sustainability by cleaning up and recharging the local aquifer. Other members include Jurupa Community Services District, the Santa Ana River Water Company, Inland Empire Utilities Agency, and the cities of Chino, Chino Hills, Norco and Ontario. Working cooperatively, these agencies built and operate the Chino Desalter facility that creates clean drinking water by removing salts and nitrates from otherwise non-useable groundwater.



Charles D. Field

“Our region faces many challenges as imported water supplies from the Colorado River and State Water Project are reduced. Now that Western has a seat at the CDA table, we can work more closely with the Authority to expand our local water supply for the region,” said Field, who also represents Western on the Chino Basin Watermaster Board.

A current CDA project is the \$112 million expansion of the Chino Desalter facilities. In partnership with the city of Ontario and Jurupa Community Services District, the project includes construction of new wells, groundwater treatment and water distribution facilities in the lower Chino Basin. When complete in 2013, the expanded facility will increase drinking water supply from 10 to 20 million gallons per day (MGD) to Western and other CDA members.

“Western’s recent membership to the CDA allows the District to continue focusing on securing new water sources as imported supplies diminish,” said Rossi. “Director Field brings extensive experience and provides a strong voice for the District on the CDA Board. Additionally, the Chino Desalter expansion project will significantly increase water supply reliability to our customers.”

In addition to expanding water supplies, benefits of the Chino Desalter operation include: achieving hydraulic control of the Chino Groundwater Basin outflow to the Santa Ana River; increasing desalter groundwater pumping from the lower Chino Groundwater Basin to 40,000 acre-feet per year; removing salts and other impurities from the groundwater basin; and 10 MGD of additional drinking water to Ontario, Jurupa and Western.

Western Municipal Water District provides water supply, wastewater disposal and water resource management to the public in a safe, reliable, environmentally sensitive and financially responsible manner.

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The Metropolitan Water District of Southern California

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April 14, 2009

SOUTHLAND CONSUMERS, BUSINESSES FACE MANDATORY CONSERVATION THIS SUMMER

Delta environmental issues, dwindling reserves, drought combine to force Metropolitan board to begin limiting imported supplies effective July 1

Southland consumers and businesses for the first time in 18 years will face mandatory water conservation restrictions this summer, a reflection of drought, the region's limited water reserves and worsening environmental and regulatory conditions in Northern California's Sacramento-San Joaquin Delta.

The board of directors of the Metropolitan Water District of Southern California today reduced supplies delivered to its member public agencies for the first time since 1991, effective July 1. The financial impacts of higher Delta costs due to supply reductions caused by new regulatory restraints also were primary factors behind a rate increase approved by the Metropolitan board in a separate action. The rate increase will take effect Sept. 1.

"Up to 19 million Southern Californians this summer will feel the impact of a new water reality that has been in the making for years, if not decades," said Metropolitan board Chairman Timothy F. Brick.

Metropolitan General Manager Jeffrey Kightlinger said the tight water supply situation has had a cumulative, region-wide effect.

"When you consider the cuts we had already made to our agricultural customers and to groundwater replenishment deliveries, along with the reductions being asked for from consumers, the total amounts to about a 20 percent reduction in water usage for Southern California," said Kightlinger.

The approved allocation action offers local water providers the flexibility to choose among various conservation strategies, from tiered pricing to limits on outdoor water use, to ensure that demands stay in balance with limited supplies. As the region's wholesale supplier of water imported from Northern California and the Colorado River, Metropolitan provides water to

more

its 26 member public agencies and helps supplement local supplies to meet the needs of 19 million Southern Californians in MWD's six-county service area.

"There is no one-size-fits-all conservation solution. All residents of Southern California, however, do rely on the same regional water reserves," Brick said. "If we want to protect the region's water reserves, we will all need to reduce our water use and use it more efficiently.

"Today's action represents the critical need for each of us to modify our water use behavior—to be more efficient on a permanent basis—to reflect our new water reality," he added.

After consecutive critically dry years in the Sierra Nevada, the state Department of Water Resources' most-recent snow survey of the winter season indicates snowpack water content statewide is 81 percent of normal. DWR officials rely on snow water content to determine the availability of supplies to be delivered from Northern California via the State Water Project.

In the face of Delta environmental restrictions, the statewide drought and low reservoir levels, DWR has currently established a 20 percent allocation of State Water Project deliveries to Metropolitan. On the Colorado River, Metropolitan cannot expect additional deliveries as that watershed has yet to recover from eight years of record drought.

Kightlinger said the prospects of replenishing the region's water reserves in the coming years have been reduced by deteriorating environmental conditions in the Delta resulting in a series of court and regulatory actions which will reduce deliveries by as much as 40 percent.

"Since 2006, we have drawn down our reserves that are set aside for dry cycles and emergencies by more than half," Kightlinger said. "We must be very careful on how we manage our remaining supplies.

"The challenge is to achieve a careful balance that maintains supplies critical to our economy and well being and conserve our remaining resources to assure Southern California has water for the coming years," he said.

Metropolitan's allocation plan, first approved by the board in February 2008, will limit supplies and impose penalty rates on member agencies for any water use above the target levels. Funds collected by Metropolitan through penalty rates would help finance conservation programs within the boundaries of that member agency.

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In its rate action, Metropolitan's board approved an 8.8 percent increase in the district's base wholesale water rate plus a \$69-per-acre-foot Delta surcharge.

The Delta surcharge reflects Metropolitan's costs in dealing with the loss of State Water Project supplies due to the environmental collapse of the Delta, Kightlinger said.

"The supply losses caused by that collapse have required us to purchase expensive replacement supplies, accelerate funding of alternative water supply programs and finance Delta sustainability projects, including the protection of endangered species," Kightlinger said.

The effect of the rate adjustment and Delta surcharge on Southland consumers will depend on how much of Metropolitan's imported water is purchased by their local water agency to augment supplies, such as groundwater and recycled supplies.

For more information on Metropolitan, visit the district's Web site at www.mwdh2o.com.

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The Metropolitan Water District of Southern California is a cooperative of 26 cities and water agencies serving 19 million people in six counties. The district imports water from the Colorado River and Northern California to supplement local supplies, and helps its members to develop increased water conservation, recycling, storage and other resource-management programs.

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Public asked to conserve water

Mediha Fejzagic DiMartino, Staff Writer

Created: 04/15/2009 06:16:01 PM PDT

CHINO - Richard Atwater is walking the talk. The General manager of Inland Empire Utilities Agency has pulled all the grass from his backyard and replaced it with native California plants.

"I cut my water bill in half and I don't have to mow my lawn every week," he said.

On Thursday, Atwater and his colleagues from IEUA asked members of the public to do their share too, and reduce water consumption by at least 10 percent. The agency's Board of Directors has adopted a drought plan in response to Metropolitan Water District's Tuesday decision Wednesday to cut supply allocations to its member agencies by 10 percent.

No one is being asked to pull out their green turf just yet, but responsible watering could do the trick.

"Sixty five (percent) to 75 percent of water use in a typical home in our area is used for outdoor irrigation," Atwater said.

IEUA's concern for the water supply started a few years ago. Anticipating drought and a reduction in the supply of imported water, the agency beefed up its local resources. The newly adopted drought plan is designed to maximize the development of local water supplies and to increase water efficiency.

"Working together with other agencies, we have been developing a portfolio of local supply," said Martha Davis, IEUA'S executive manager of policy development.

Local supply includes groundwater, surface and recycled water, as well as water reclaimed by Chino desalters. As of July 1, MWD will deliver 10,000 acre-feet less water to IEUA for the upcoming year. The agency's supply of recycled water is at 20,000 acre-feet per year, twice as much as it will lose in imported water.

"We have one of the most aggressive recycled water projects in the state of California," said Angel Santiago, IEUA's vice president. "But I don't want to

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(understate) the severity of the problem. The truth is, we don't know if we are in the third year of a three-year drought or in the third year of a 15-year drought."

The price of imported water from MWD will go up about 20 percent as of Sept. 1.

"We are getting less and paying more," Santiago said.

Some agencies, such as Las Virgenes Municipal Water District in Calabasas, import all of their water supply. IEUA buys 25 percent of its supply from MWD. The 10 percent cut represents about a 3 percent cut in IEUA's overall supply.

"If we control our demand, together with the water supplies we have developed locally, we will have sufficient supply," Davis said.

Controlling the demand can be simple. Watering lawns in the early morning hours saves 25 gallons of water per day. Using a broom instead of a hose to clean driveways saves 150 gallons of water each time. Checking sprinkler systems for leaks or overspray can save 500 gallons of water per month.

"If you are efficient about irrigation, you

can save 10 percent of water," Atwater said. "Ten percent is doable by everybody."

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Chino Council okays stronger water use rules

Neil Nisperos, Staff Writer

Created: 04/22/2009 07:26:35 PM PDT

CHINO - The City Council has enacted stronger codes for tighter water usage in light of the governor's call for conservation in a time of drought.

Gov. Arnold Schwarzenegger announced a "State of Emergency" regarding the water situation in February and requested all urban water users increase conservation activities.

In response, the city revised the Municipal Code to make it consistent with conservation measures adopted by local agencies.

Among the newly approved permanent restrictions announced by Public Works Director Jose Alire:

- Allowing irrigation water, under ordinary conditions, to run off into a gutter, ditch, drain, driveway, sidewalk, street or onto pavement or other hard

surface is prohibited.

- Outdoor irrigation of landscape for more than 15 minutes of watering per day per station is prohibited. Landscapes that utilize drip irrigation systems are exempt from the restriction.

- Automated irrigation of landscape during the hours of 6 a.m. to 8 p.m. is prohibited. Customers are also encouraged to avoid using sprinklers on windy days. Irrigation by handheld hoses with automatic shutoff nozzles, drip irrigation, or handheld buckets is permitted any time.

- Outdoor irrigation of landscape on a rainy day is prohibited.

- Restaurants serving water to their customers is prohibited unless specifically requested by a patron.

- Washing of vehicles and mobile equipment is prohibited, unless done with a handheld bucket or handheld hose equipped with a positive shut-off nozzle for quick rinses.

Councilwoman Eunice Ulloa, general manager of the Chino Basin Water Conservation District and a member of

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the Southern California Water Committee, has been a vocal advocate for water conservation.

"It's critical that we implement the ordinance and we're hoping that people are aware of how desperate the situation is," Ulloa said. "We all need to do our share of conserving this special resource."

Stronger measures needing council approval would take effect with further reductions in supply, officials said. Among the more drastic measures included with a further reduction of 10 to 20 percent of water supplies are limiting irrigation of lawns to every other day.

The move comes as imported water has become scarce because of low snow levels in the Sierra Nevada and court-ordered water use restrictions to help save an endangered fish in the San Joaquin River delta.

Local agencies have increasingly had to rely on groundwater sources and have proposed water rate increases because of the water shortage.

Last week the Metropolitan Water District announced a 10 percent cutback in

imported water deliveries to the region, which goes into effect July 1.

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Water shortage at Stage II

Monte Vista district sets mandatory restrictions

Canan Tasci, Staff Writer

Created: 05/04/2009 10:38:49 PM PDT

The Monte Vista Water District is asking residents to conserve even more water than before due to continuing drought conditions and reductions.

The district board of directors last week declared a Stage II water supply shortage condition, which includes mandatory water-use restrictions for customers that focuses on outdoor water use.

"If we're not able to maintain a level of conservation, then we'll have to buy penalty water from the Metropolitan Water District of Southern California," MWVD General Manager Mark Kinsey said.

Since October, Monte Vista - which covers Montclair, Chino Hills and portions of Chino - has been under Stage I conditions, which called for customers to voluntarily reduce water usage.

The district has been communicating with its customers for the past year-and-a-half about the need to efficiently use water, board President Sandra Rose said.

"We have seen a 12 percent reduction in water

demand during the past year, and we will need to sustain that reduction and achieve more savings this summer," Rose said.

Imported water from Northern California continues to decrease, because of the recent water allocation plan implemented by MWD, which reduced the water supply to its members by 10percent.

Monte Vista's goal with a Stage II is to maintain a 10 to 15percent reduction in water demand.

Other districts may not have declared a Stage II shortage but, for years, have been advocating water conservations.

The Cucamonga Valley Water District board of directors will consider adopting two ordinances to address local water supply needs.

"Conservation is all about real basic stuff," said Jo Lynne Russo-Pereyra, the district's assistant general manager for external affairs. "Evaluate what you're watering outdoors, because that's the biggest place you'll see conservation."

Three Valleys Municipal Water District for more than three years has urged conservation, board President Bob Kuhn said.

Three Valleys - which encompasses Inland Valley cities including Claremont, La Verne, Pomona, Diamond Bar and San Dimas - has been advising residents to use low-flush toilets and sprinkler boxes as well as not watering on a daily basis and taking shorter showers.

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But the bulk of where customers use water is outdoors, as up to 72 percent of the water usage is for landscaping, Kuhn said.

Residents can conserve by watering their lawns three days a week for six minutes, or seven minutes when it is hot, said Justin Scott-Coe, Monte Vista public affairs specialist.

The best time to water is either between 2 and 5 a.m. or late in the evening.

"You don't want to water during the day because you don't want to lose water from evaporation or wind dispersal," Scott-Coe said.

"When there are high winds, we don't recommend watering at all because the water isn't going to go where its supposed to."

Penalties for violations in Monte Vista's area start off with two written notices. The third violation will result in a \$50 fine, a \$100 fine for the fourth violation and \$150 as well as a flow restrictor for the fifth violation.

"In order to make it mandatory, this is our enforcement tool, but we want to continue to educate and encourage our customers to use water wisely," Kinsey said.

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