

FEE EXEMPT

1 Scott S. Slater (SBN 117317)
Michael T. Fife (SBN 203025)
2 HATCH AND PARENT
21 East Carrillo Street
3 Santa Barbara, CA 93101
Phone: 805-963-7000
4 Fax: 805-965-4333

FILED - West District
San Bernardino County Clerk

JAN 30 2001

By Swartzberg
Deputy

5 Attorneys for CHINO BASIN WATERMASTER

6
7
8 SUPERIOR COURT OF THE STATE OF CALIFORNIA

9 COUNTY OF SAN BERNARDINO - RANCHO CUCAMONGA DIVISION

10
11 CHINO BASIN MUNICIPAL WATER DISTRICT,)
12 Plaintiff,)
13 v.)
14 THE CITY OF CHINO,)
15 Defendants.)

CASE NO. RCV 51010

Judge: Honorable J. MICHAEL GUNN

EX PARTE APPLICATION FOR
AN ORDER SHORTENING TIME
FOR THE FILING OF MOTION
TO CONTINUE FEBRUARY 1,
2001 HEARING

Date: January 31, 2001
Time: 8:30 PM
Dept: R8 A

16
17
18
19
20
21 APPLICATION FOR AN ORDER SHORTENING TIME

22 Watermaster hereby applies for an Order Shortening Time for the hearing of a Motion to
23 Continue the scheduled February 1, 2001 hearing.

24 This Court may order that the time prescribed by statute for notice and hearing a motion
25 may be shortened for good cause. Code.Civ.Proc. § 1005; Rules 317, 325, California Rules of
26 Court; San Bernardino Local Court Rule 510.

27 Good cause exists for this Court to enter an Order Shortening Time for the hearing of
28 Watermaster's Motion to Continue. The parties have been working diligently to complete the

HATCH AND PARENT
21 East Carrillo Street
Santa Barbara, CA 93101

HATCH AND PARENT
21 East Carrillo Street
Santa Barbara, CA 93101


1 revised Rules and Regulations which will be the subject of the scheduled hearing, but will be
2 unable to complete their task with sufficient time left for approval of the revisions by the
3 Watermaster Board and Advisory Committee, and with sufficient time left to enable the Court to
4 review the revisions prior to the hearing. The parties have remained committed to completing
5 their work prior to the February 1, 2001 deadline, and it has only been in the last week that they
6 have considered the need to extend the deadline.

7 In addition, financial data that was necessary in order to progress with negotiations
8 concerning the purchase and sale of water from the desalters only became available on January
9 23, 2001. Because of this, it is not possible to fully resolve the issues leading to Western's
10 conditional approval of the Peace Agreement prior to February 1, 2001. Again, the parties
11 involved in these negotiations have remained optimistic that they would meet their deadline and
12 so have not considered the need to ask for a continuance until now.

13 No parties oppose this Application for an Order Shortening Time, and none of the parties
14 oppose Watermaster's Motion for a Continuance of the February 1, 2001 hearing.

15
16 DATED: January 29, 2001

HATCH AND PARENT

17
18 

19 SCOTT S. SLATER
20 MICHAEL T. FIFE
21 Attorneys for Chino Basin Watermaster
22
23
24
25
26
27
28

FEE EXEMPT

1 Scott S. Slater (SBN 117317)
2 Michael T. Fife (SBN 203025)
3 HATCH AND PARENT
4 21 East Carrillo Street
5 Santa Barbara, CA 93101
6 Phone: 805-963-7000
7 Fax: 805-965-4333
8 Attorneys for CHINO BASIN WATERMASTER

FILED - West District
San Bernardino County Clerk

JAN 30 2001

By Swartz King Deputy

SUPERIOR COURT OF THE STATE OF CALIFORNIA

COUNTY OF SAN BERNARDINO - RANCHO CUCAMONGA DIVISION

10 CHINO BASIN MUNICIPAL WATER DISTRICT,)
11 Plaintiff,)
12 v.)
13 THE CITY OF CHINO,)
14 Defendants.)

CASE NO. RCV 51010

Judge: Honorable J. MICHAEL GUNN

EX PARTE MOTION FOR A
CONTINUANCE

Date: January 31, 2001
Time: 8:30 am
Dept: R8

HATCH AND PARENT
21 East Carrillo Street
Santa Barbara, CA 93101

I

INTRODUCTION

19 In June of last year, the parties to the Judgment negotiated a Peace Agreement that resolved long-
20 standing issues that were inhibiting the finalization of the Chino Basin Optimum Basin Management Program
21 ("OBMP"). This Peace Agreement and the OBMP Implementation Plan were submitted to the Court
22 which issued an Order requiring Watermaster to proceed in accordance with the Peace Agreement.

23 Certain compromises negotiated in the Peace Agreement necessitated that minor changes be made
24 to the Judgment. Accordingly, on September 28, 2000, the Court heard arguments concerning a motion
25 to amend the Judgment. The Court granted this motion, but had further questions concerning the Peace
26 Agreement that had not yet been addressed by the parties. The parties agreed to resolve many of these
27 issues through the submittal of a Post-Order Memorandum, and to resolve others through a revision of the
28 Rules and Regulations for the Chino Basin.

1 The Court thus scheduled a hearing for February 1, 2001 in order to: (1) approve the revised Rules
2 and Regulations; (2) approve the Post-Order Memorandum; (3) receive a report on the status of Western
3 Municipal Water District's rescission of its conditional execution of the Peace Agreement; and (4) receive
4 Watermaster's 23rd Annual Report.

5 II

6 MOTION FOR A CONTINUANCE

7 A. RULES AND REGULATIONS

8 The parties have been meeting diligently since the end of September and have made tremendous
9 progress in their revision of the Rules and Regulations. The basic concepts to be addressed by the Rules
10 and Regulations have been established, and the parties are now working to draft refinements to the specific
11 language needed to express these concepts. Since the parties have achieved closure on the high-level policy
12 issues to be covered by the revised Rules and Regulations, it is expected that the remainder of the effort
13 will merely be a matter of drafting appropriate language. While the parties are thus very close to finalizing
14 the revision, it will not be possible to complete the task by February 1, 2001. If the parties are permitted
15 a small amount of extra time, it will be possible to produce a revision that is complete and that is truly an
16 expression of a consensus by the parties.

17 In addition, the revised Rules and Regulations are of sufficient detail and complexity that the Court's
18 review would be facilitated if the parties were given an opportunity to conduct a workshop to present the
19 revisions to the Special Referee prior to asking the Court to approve the revisions. Since the Watermaster
20 Advisory Committee and Board have scheduled meetings for February 15, 2001 whose purpose will be
21 to adopt the revised Rules and Regulations, the parties can committ to having a complete draft to present
22 to the Referee by the end of February.

23 The parties therefore request that the Court continue the February 1, 2001 hearing to a date no
24 earlier than March 8, 2001. Instead, the parties request the Court to schedule a workshop to occur at the
25 end of February in order to present the Rules and Regulations to the Special Referee. A working draft of
26 the Rules and Regulations will be presented to the Court on February 1, 2001. Even though this will not
27 represent the final work-product of the parties, it will allow the Court to introduce itself to the great effort
28 that has gone in to these revisions.

Santa Ana Watershed Project Authority

Integrated Chino/Arlington Desalination System

**ICADS Alternatives, Financial Analysis,
and Schedules Summary**

January 23, 2001

Prepared by:

RBF

CONSULTING

PLANNING ■ DESIGN ■ CONSTRUCTION

A. General

This summary report presents, for review and comment by the Project Participants, the current set of project alternatives, results of the financial analysis, and the current implementation strategy and proposed schedules for the Integrated Chino/Arlington Desalination System (ICADS). The information contained herein will also be presented by the Consultant Team to the Project Participants on Friday, January 26, 2001.

The goal of this summary report and presentation is to gather comments for use in completing Term Sheet processing and finalization of the ICADS Feasibility Report, which was submitted in draft form on November 14, 2000. Several key developments throughout December, 2000 and the beginning of January, 2001 have impacted the content of the draft report, and are summarized herein to provide an update of the project status to the Project Participants. The summary report is formatted as follows:

- Introduction: Background history on project development and the methods by which the current project status was achieved.
- Current Alternatives: The set of project alternatives currently considered as part of the feasibility report.
- Capital and Operations and Maintenance Costs: Summary of the Capital and O&M cost estimates for the project alternatives.
- Financial Analysis: Summary of the financial model and analysis of the project alternatives, as prepared by Salomon Smith Barney, Inc.
- Implementation Strategy and Proposed Schedules: Description of the proposed "Three-prong" implementation strategy for Chino I, Arlington, and Chino II Desalter Systems and the anticipated project schedules.

B. Introduction

The purpose of the Feasibility Report is to determine the feasibility requirements, estimated costs, and resulting economics of integrating SAWPA's existing and proposed desalination facilities in the Chino Basin and the Arlington Basin to deliver desalter water to parties who have expressed an interest in receiving this water. The development of the Feasibility Report is Phase IIA of the ICADS project, which was originally defined by SAWPA in its request for proposals from engineering consultants to include the following general project concept:

- Upgrade the 6 MGD Arlington Desalter to produce potable water, as presented in the April, 1999 SAWPA Report.
- Expand the Chino I Desalter to 10 MGD utilizing reverse osmosis and construct a new 10 MGD Chino II Desalter utilizing reverse osmosis, as presented in the June, 2000 OBMP Report.

- Analyze the feasibility of providing an integrated delivery system for the three desalters to multiple end-users in the Chino and Arlington groundwater basins.

The Consultant Team initiated preparation of the draft Feasibility Report utilizing this general project concept. The general project concept was refined through engineering analysis and coordination with potential end users to determine their needs for project water deliveries. The requests received from end-users were included in the project costs analysis as directed by SAWPA, and resulted in the development of a "project base alternative" for inclusion in the draft report. In addition, SAWPA conducted a treatment workshop to analyze alternative treatment methods. The outcome of the workshop was direction to the Consultant Team to include analysis of ion exchange (IX) and electro dialysis reversal (EDR) for possible inclusion in the "project base alternative".

The engineering analysis and cost estimates for the "project base alternative" were submitted in the draft report on November 14, 2000 and presented to the Project Participants on November 17, 2000. Comments from the Project Participants were gathered, a number of which suggested various changes to the "project base alternative" components. As a result, the Consultant Team performed additional engineering and cost analysis of various project alternatives.

Throughout December, 2000 and the beginning of January, 2001, additional coordination with SAWPA and the PA 14/9 Committee resulted in five key developments which significantly impacted the project concept as presented in the draft report:

- The development of various new alternatives for analysis;
- The inclusion of the Chino I enhancements of the existing facility into the project capital and O&M costs, including VOC treatment of bypass wells and provisions for sufficient new wells to provide flow to the expansion and to meet existing needs;
- The introduction of a project phasing approach (including fast-track implementation of the Chino I Desalter improvements and Arlington Desalter);
- Several iterations of the recommended geohydrology approach and methodology for the project, in coordination with the Chino Basin Watermaster; and
- Direction to incorporate a detailed financial analysis, to be prepared by Salomon Smith Barney, Inc.

Because these developments significantly impact the content of the draft report and present significant new information not previously provided to all Project Participants, SAWPA directed the Consultant Team to prepare this preliminary document to focus on the new feasibility analysis concepts as regards project alternatives, financial analysis, and project schedules. This document will provide all Project Participants an opportunity to familiarize themselves with these items and provide their comments prior to preparation of the finalized Feasibility Report document.

C. Current Alternatives

The current set of project alternatives are taken from over thirty iterations developed through Project Participant input and analyzed by the Consultant Team. Nine (9) project alternatives are included herein as directed by the PA 14/9 Committee and SAWPA, and are summarized in the following Table 1:

**TABLE 1
 SUMMARY OF PROJECT ALTERNATIVES**

Project	Title	Components
1	Benchmark Project	Chino I Enhancements - VOC treatment, wells, and 2 MGD IX Expansion; Chino II - new 10 MGD plant and wells; Arlington - Upgrade to produce 6 MGD potable water, with Arlington debt service and reimbursements included.
2	4 MGD Chino I Expansion Using IX	Chino I Enhancements- VOC treatment, wells, 4 MGD IX Expansion, and delivery facilities to Chino and Chino Hills; Chino II - new 10 MGD plant, wells, and delivery facilities; Arlington - Upgrade to produce 6 MGD of potable water, with Arlington debt service and reimbursements included.
3	Dedicated Ontario Pipeline (No Wheeling Thru JCSD)	Chino I Enhancements -VOC treatment, wells, and 2 MGD IX Expansion; Chino II - new 10 MGD plant, wells, and delivery facilities, and a dedicated pipeline to Ontario; Arlington - Upgrade to produce 6 MGD of potable water, with Arlington debt service and reimbursements included.
4	End Users Pay O&M Costs for Dedicated Off-Site Facilities	Chino I Enhancements - VOC treatment, wells, and 2 MGD IX Expansion; Chino II - new 10 MGD plant, wells, and delivery facilities; Arlington - Upgrade to produce 6 MGD of potable water, with Arlington debt service and reimbursements included; O&M costs for dedicated pump stations and pipelines not included.
5	Maximize Ion Exchange Expansion at Chino I (4.2 MGD)	Chino I Enhancements - VOC treatment, wells 4.2 MGD IX Expansion, and delivery facilities to Chino, Chino Hills, and Ontario; Chino II - new 10 MGD plant, wells, and delivery facilities; Arlington - Upgrade to produce 6 MGD of potable water, with Arlington debt service and reimbursements included.
6	2 MGD Chino I Expansion Using Reverse Osmosis	Chino I Enhancements - VOC treatment, wells and 2.0 MGD RO Expansion; Chino II - new 10 MGD plant, wells, and delivery facilities; Arlington - Upgrade to produce 6 MGD of potable water, with Arlington debt service and reimbursements included.
7	"Baseline" – Maximize IX Expansion at Chino I, 8 MGD at Chino II	Chino I Enhancements - VOC treatment, wells, and 4.2 MGD IX Expansion; Chino II - new 8 MGD plant, wells, and delivery facilities; Arlington - Upgrade to produce 6 MGD potable water, with Arlington debt service and reimbursements included.
8	Project with No Arlington Facilities	Chino I Enhancements - VOC treatment, wells and 2 MGD IX Expansion; Chino II - new 10 MGD plant, wells, and delivery facilities; Arlington not included in project. Includes reduction of grant funding for the ICADS Project by \$8 million.
9	"Revised Baseline" – Project 7 without Chino II Clearwell	Chino I Enhancements - VOC treatment, wells, and 4.2 MGD IX Expansion; Chino II - new 8 MGD plant, wells, and delivery facilities w/o 5 MG clearwell; Arlington - Upgrade to produce 6 MGD potable water, with Arlington debt service and reimbursements included.

The specific components of each alternative, including wells, treatment plants, and conveyance and distribution facilities, can be read from the detailed capital and O&M cost tables attached to this document. The conceptual layout of the project components are included on the attached Exhibit entitled "Proposed Project Facilities for CEQA evaluation", which was developed to include all potential project components to achieve environmental documentation which is flexible to meet each of the project alternatives.

These project alternatives achieve water deliveries as described in the following Table 2.

TABLE 2
 ALTERNATIVE PROJECT WATER DELIVERIES

Project	Title	Chino I Expansion Deliveries (afy)	Chino II Deliveries (afy)	Arlington Deliveries (afy)	Total ICADS Deliveries (afy) *	Total Desalter Deliveries (afy) **
1	Benchmark Project	Chino Hills: 2,200	JCSD: 5,500 Ontario: 4,500 SARWC: 1,200	Norco: 4,400 HGCWD: 400 OCWD: 1,600	19,800	29,000
2	4 MGD Chino I Expansion Using IX	Chino Hills: 2,400 Chino: 2,000	JCSD: 5,500 Ontario: 4,500 SARWC: 1,200	Norco: 4,400 HGCWD: 400 OCWD: 1,600	21,000	30,200
3	Dedicated Ontario Pipeline (No Wheeling Thru JCSD)	Chino Hills: 2,200	JCSD: 5,500 Ontario: 4,500 SARWC: 1,200	Norco: 4,400 HGCWD: 400 OCWD: 1,600	19,800	29,000
4	End Users Pay O&M Costs for Dedicated Off-Site Facilities	Chino Hills: 2,200	JCSD: 5,500 Ontario: 4,500 SARWC: 1,200	Norco: 4,400 HGCWD: 400 OCWD*: 1,600	19,800	29,000
5	Maximize Ion Exchange Expansion at Chino I (4.2 MGD)	Chino Hills: 2,400 Chino: 2,000 Ontario: 300	JCSD: 5,500 Ontario: 4,500 SARWC: 1,200	Norco: 4,400 HGCWD: 400 OCWD: 1,600	22,300	31,500
6	2 MGD Chino I Expansion Using Reverse Osmosis	Chino Hills: 2,200	JCSD: 5,500 Ontario: 4,500 SARWC: 1,200	Norco: 4,400 HGCWD: 400 OCWD: 1,600	19,800	29,000
7	"Baseline" – Maximize IX Expansion at Chino I, 8 MGD at Chino II	Chino Hills: 2,200 JCSD: 2,500	JCSD: 3,300 Ontario: 4,500 SARWC: 1,200	Norco: 4,400 HGCWD: 400 OCWD: 1,600	20,100	29,300
8	Project with No Arlington Facilities	Chino Hills: 2,200	JCSD: 5,500 Ontario: 4,500 SARWC: 1,200	NA	13,400	22,600
9	"Revised Baseline" – Project 7 without Chino II Clearwell	Chino Hills: 2,200 JCSD: 2,500	JCSD: 3,300 Ontario: 4,500 SARWC: 1,200	Norco: 4,400 HGCWD: 400 OCWD: 1,600	20,100	29,300

* Including delivery to OCWD from Arlington Desalter at reduced water rate.

** Including contracted deliveries of 9,200 afy from the existing Chino I Desalter as follows JCSD = 3,200 afy; City of Norco = 1,000 afy; City of Chino = 3,000 afy; City of Chino Hills = 2,000 afy.

D. Capital and Operations and Maintenance Costs

Capital costs and Annual Operations and Maintenance costs were estimated for each of the project alternatives. Detailed cost tables are attached to this document describing the unit cost assumptions and the assumed project components for each alternative. Note that these tables provide estimates for new facilities (Chino II) and modifications to existing facilities (Chino I enhancements and Arlington) only.

Capital costs include:

- Construction with 20% Administrative, Engineering and Legal Fees and 15% Contingency,
- Land
- SARI and OCSD Brine Disposal Fees
- Reimbursement Fees

Operations and Maintenance costs include:

- Fixed and Variable labor and materials
- Fixed and Variable SARI and OCSD annual fees
- Energy Costs

The capital and O&M costs for new facilities and facility modifications (not including existing Chino I Desalter O&M and debt service or Arlington Desalter debt service) for each alternative are summarized below in Table 3.

**TABLE 3
 ICADS CAPITAL AND O&M COST SUMMARY BY ALTERNATIVE**

PROJECT	Capital Cost (\$)	O&M Cost (\$/yr) *
Project #1 "Benchmark"	\$ 77,600,000	\$ 5,760,000
Project #2	\$ 84,800,000	\$ 6,190,000
Project #3	\$ 80,300,000	\$ 5,760,000
Project #4	\$ 77,600,000	\$ 5,430,000
Project #5	\$ 85,200,000	\$ 6,220,000
Project #6	\$ 83,800,000	\$ 6,020,000
Project #7 "Baseline"	\$ 71,600,000	\$ 5,580,000
Project #8	\$ 65,000,000	\$ 3,830,000
Project #9 "Revised Baseline"	\$ 68,800,000	\$ 5,573,000

* Does not include O&M costs for existing Chino I Desalter.

E. Financial Analysis

Salomon Smith Barney, Inc. prepared an integrated financial model dated January 22, 2001, utilizing the project components, assumed water allocations, and capital and O&M costs developed for each alternative. The function of the model is to develop a financing plan and project water break-even cost per acre-foot for each alternative, after incorporating restructured debt service and O&M costs for the existing Chino I Desalter, existing debt service for the Arlington Desalter, rebates from the Metropolitan Water District subsidy, and up to \$56 million dollars in grant funding.

Based upon data submitted by Salomon Smith Barney, the following assumptions apply to the model output:

- Chino I debt service including the State and Federal Loans was restructured with a combination of fixed rate bonds at 5.75% and variable rate bonds at 4%. This scenario was presented to the Project 14 committee in December.
- Debt Service for Chino I Upgrade, Chino II and Arlington Expansion was structured for 30 year amortization of principal at 5.5% with a capitalized interest from 2001-2003.
- Operation and Maintenance costs provided by RBF Consulting, were adjusted for inflation 2.5%.
- All water rates besides rates for OCWD and Met rebates were adjusted for inflation at 2.5%.
- Assumed Met rebates are taken under existing agreements.
- For purposes of determining Bond funding for capital costs we assumed \$56 million of Proposition 13 funding, except that \$48 million was assumed for Project 8 "No Arlington Facilities".

The detailed summary of annual break-even water rates calculated from the model are attached to this document. Note that the break-even water rate varies each year based upon the timing of existing debt service and MWD rebates, and are based upon an assumed 2.5% annual inflation. For purposes of comparing the break-even water rates to the proposed Term Sheet water rate, the break-even water rate for the year 2005 (the first complete year of water sales and debt service) was converted to an equivalent year 2003 water rate by adjusting for inflation. The resulting comparative year 2003 water rate for each alternative is listed below in Table 4, along with the capital and O&M costs.

TABLE 4
 Year 2003 Comparative Water Rates by Alternative

PROJECT	Capital Cost ^[1] (\$)	Annual O&M Cost ^{[1][2]} (\$/yr)	Year 2005 Rate ^[3] (\$/af)	Year 2003 Equivalent Rate ^[4] (\$/af)
Project #1 "Benchmark"	\$ 77,600,000	\$ 9,740,000	\$ 419	\$ 399
Project #2	\$ 84,800,000	\$ 10,220,000	\$ 425	\$ 405
Project #3	\$ 80,300,000	\$ 9,743,000	\$ 430	\$ 409
Project #4	\$ 77,600,000	\$ 9,384,000	\$ 399	\$ 380
Project #5	\$ 85,200,000	\$ 10,250,000	\$ 421	\$ 401
Project #6	\$ 83,800,000	\$ 10,033,000	\$ 461	\$ 439
Project #7 "Baseline"	\$ 71,600,000	\$ 9,548,000	\$ 373	\$ 355
Project #8	\$ 65,000,000	\$ 7,610,000	\$ 443	\$ 422
Project #9 "Revised Baseline"	\$ 68,800,000	\$ 9,537,000	\$ 359	\$ 342

[1] Costs based upon assumption of 1060 TDS and 232 NO3 at Chino II Desalter and energy rate of \$0.08/ kW-hr.

[2] O&M annual cost provided for Year 2005 and includes O&M costs for existing Chino I.

[3] Information provided by Salomon Smith Barney. Note 2005 is first year of 100% ICADS flow delivery.

[4] The Year 2003 equivalent rate is provided in order to compare with the Term Sheet initial cost per acre-ft.

I. Implementation Strategy and Proposed Schedule

The project schedule presented in the Draft Feasibility Report was developed from an approach of designing and constructing all ICADS facilities concurrently utilizing a design-bid-build approach. This approach was first outlined in the project Request for Proposal, where four phases of the ICADS project were identified. These phases include:

- **PHASE I** Preliminary Feasibility Analysis (Completed)
- **PHASE II (A)** Final Feasibility Report
- **PHASE II (B)** Environmental, Preliminary Facility Design and Final Design and Construction of Wells
- **PHASE III** Detailed Design of Remaining Facilities
- **PHASE IV** Construction and Start-Up of Facilities.

Throughout the month of December, 2000 and the beginning of January, 2001, the Consultant Team worked with SAWPA and the PA 14/9 Committee to develop an approach that would expedite completion of specific portions of the ICADS facilities. The concept of separating the ICADS project into several components was introduced, which resulted in identification of the following three components:

- **Chino I Enhancements** Fast-Track Implementation Strategy
- **Arlington Enhancements** Fast-Track Implementation Strategy
- **Chino II** Scheduled Completion Unchanged

Assumptions used to generate new schedules for each component are as follows:

- State funding will be used for all components. State funding will be acquired separately for each component.
- Separate environmental documents will be prepared for each project component. The environmental documents anticipated for each component are:

Chino I: Initial Study

Arlington: Initial Study

Chino II: EIR

- The implementation strategies used for designing and constructing each project component are:

Chino I : Design-Build

Arlington: Design-Bid-Build

Chino II: Design-Bid-Build

(Incorporated in the schedules that assume a design-bid-build approach is a decision milestone, which identifies the cut-off date when the implementation strategy may still be changed to a design-build approach without impacting the progress of work)

Implementation flowcharts for the Chino I Enhancements and Arlington Enhancements are attached at the end of this report. A summary schedule for Chino II is also attached, and a summary of completion dates for each project component is shown in the table below:

TABLE 5
ICADS Project Components Estimated Completion Dates

PROJECT COMPONENT	Implementation Method	Estimated Completion Date
Chino I Enhancements	Design-Build	August 1, 2002
Arlington Enhancements	Design-Bid-Build *	April 8, 2003
Chino II	Design-Bid-Build *	December 31, 2003

* Possible conversion to design-build approach will be analyzed during preliminary design.

TABLE IX-i
SANTA ANA WATERSHED PROJECT AUTHORITY
INTEGRATED CHINO/ARLINGTON DESALINATION SYSTEM (ICADS)
Cost Analysis - List of Tables

Table No.	Title	Description
IX-ij	Summary of Cost Variables	Table summarizing capital, fixed and variable O&M
IX-1	Summary of Construction Unit Costs	Unit costs for estimation of capital costs
IX-1a	Pipeline System Detailed Cost Summary	Summary for estimation of pipeline costs
IX-2	Summary of O&M Unit Costs	Unit costs for estimation of fixed and variable O&M costs
IX-3	Benchmark Project Capital Cost Summary	Benchmark project
IX-4	Benchmark Project O&M Summary	Benchmark project (note all at worst case water quality and \$0.08/KWH energy)
IX-5	Project 2 Capital Cost Summary	Revise Chino I costs from Benchmark to reflect 4.0 MGD expansion
IX-6	Project 2 O&M Summary	Revise Chino I costs from Benchmark to reflect 4.0 MGD expansion
IX-7	Project 3 Capital Cost Summary	Revise Benchmark to include dedicated pipeline from Chino II to Ontario
IX-8	Project 3 O&M Summary	Revise Benchmark to include dedicated pipeline from Chino II to Ontario
IX-9	Project 4 Capital Cost Summary	Same as Benchmark
IX-10	Project 4 O&M Summary	Revise Benchmark to have end-users pay O&M for dedicated facilities
IX-11	Project 5 Capital Cost Summary	Revise Chino I costs from Benchmark to reflect 4.2 MGD expansion
IX-12	Project 5 O&M Summary	Revise Chino I costs from Benchmark to reflect 4.2 MGD expansion
IX-13	Project 6 Capital Cost Summary	Revise Chino I costs from Benchmark to reflect RO instead of IX
IX-14	Project 6 O&M Summary	Revise Chino I costs from Benchmark to reflect RO instead of IX
IX-15	Project 7 Capital Cost Summary - "Baseline"	Revise Benchmark to Maximize Chino I Expansion and Chino II at 8.0 MGD
IX-16	Project 7 O&M Summary - "Baseline"	Revise Benchmark to Maximize Chino I Expansion and Chino II at 8.0 MGD
IX-17	Project 8 Capital Cost Summary	Revise Benchmark to Exclude Arlington Facilities
IX-18	Project 8 O&M Summary	Revise Benchmark to Exclude Arlington Facilities
IX-19	Project 9 Capital Cost Summary - "Revised Baseline"	Revise Baseline to exclude 5 million gallon clearwell at Chino II
IX-20	Project 9 O&M Summary - "Revised Baseline"	Revise Baseline to exclude 5 million gallon clearwell at Chino II

TABLE IX-ii
SANTA ANA WATERSHED PROJECT AUTHORITY
INTEGRATED CHINO/ARLINGTON DESALINATION SYSTEM (ICADS)
Summary of Cost Variables

Project	Scenario	Capital Cost	Fixed O&M	Variable O&M	Electric Power
# 1	Low	\$77,613,633	\$782,700	\$2,166,500	\$1,705,000
	Medium	\$77,613,633	\$782,700	\$2,207,500	\$2,728,000
	High	\$77,613,633	\$782,700	\$2,246,500	\$4,092,000
# 2	Low	\$84,833,199	\$859,600	\$2,332,000	\$1,825,750
	Medium	\$84,833,199	\$859,600	\$2,373,000	\$2,921,200
	High	\$84,833,199	\$859,600	\$2,412,000	\$4,381,800
# 3	Low	\$80,281,745	\$795,100	\$2,166,500	\$1,698,750
	Medium	\$80,281,745	\$795,100	\$2,207,500	\$2,718,000
	High	\$80,281,745	\$795,100	\$2,246,500	\$4,077,000
# 4	Low	\$77,613,633	\$760,100	\$2,166,500	\$1,517,500
	Medium	\$77,613,633	\$760,100	\$2,207,500	\$2,428,000
	High	\$77,613,633	\$760,100	\$2,246,500	\$3,642,000
# 5	Low	\$85,201,299	\$871,600	\$2,347,000	\$1,825,938
	Medium	\$85,201,299	\$871,600	\$2,388,000	\$2,921,500
	High	\$85,201,299	\$871,600	\$2,427,000	\$4,382,250
# 6	Low	\$83,795,333	\$827,200	\$2,291,000	\$1,765,625
	Medium	\$83,795,333	\$827,200	\$2,332,000	\$2,825,000
	High	\$83,795,333	\$827,200	\$2,371,000	\$4,237,500
# 7	Low	\$71,567,084	\$748,600	\$2,083,000	\$1,669,688
	Medium	\$71,567,084	\$748,600	\$2,124,000	\$2,671,500
	High	\$71,567,084	\$748,600	\$2,163,000	\$4,007,250
#8	Low	\$65,008,013	\$507,700	\$1,386,500	\$1,158,125
	Medium	\$65,008,013	\$507,700	\$1,427,500	\$1,853,000
	High	\$65,008,013	\$507,700	\$1,466,500	\$2,779,500
#9	Low	\$68,807,084	\$738,600	\$2,083,000	\$1,669,688
	Medium	\$68,807,084	\$738,600	\$2,124,000	\$2,671,500
	High	\$68,807,084	\$738,600	\$2,163,000	\$4,007,250

Notes: Capital Cost: Fixed capital cost for project alternative
Fixed O&M: Labor and SARI fixed capacity charge
Variable O&M: Variable material costs and SARI disposal charge
Electric Power: Scenarios based on variation from current water quality to worst case degraded water quality
All energy; scenarios based on 5, 8, and 12 cents/KWH

TABLE IX-1
SANTA ANA RIVER WATERSHED PROJECT AUTHORITY
INTEGRATED CHINO/ARLINGTON DESALINATION SYSTEM (ICADS)

SUMMARY OF CONSTRUCTION UNIT COSTS

FACILITY		CONSTRUCTION	
Treatment Plant			
	<i>Reverse Osmosis System</i>	\$0.80/gpd of permeate capacity	
	<i>Complete RO Facility</i>	\$1.80/gpd of plant production	
	<i>Ion Exchange (IX)</i>	\$0.80/gpd of denitrified product < 3.75 MGD	
		\$2,200,000 +\$0.21/gpd for product > 3.75 MGD	
Pump Stations			
		Horsepower (additional operating)	Cost
	<i>Chino I Desalter Facilities</i>		
	Pump station Upgrade	200 HP	\$60,000
	City of Chino Hills Pump Station	300 HP	\$495,000
	City of Chino Pump Station	225 HP	\$300,000
	<i>Chino II Desalter Facilities</i>		
	Jurupa Pump Station	1575 HP	\$2,441,000
	Ontario Pump Station	375 HP	\$975,000
	<i>Arlington Desalter Facilities</i>		
	Pump Station	600 HP	\$625,000
Pipelines			
		Diameter	Unit Costs (\$/LF)
See Table VII-1A for a detailed breakdown of pipeline costs.		12	\$85.00
		16	\$95.00
		20	\$110.00
		24	\$125.00
		30	\$175.00
(Special Construction & Traffic Additional)			
Wells			
	<i>Production Wells</i>		
	Well Construction		\$336,000/well
	Equipment & Finish		\$340,000/well
Land Acquisition			
	<i>Production Wells</i>	15,000 SF @ \$4.00/SF	
	<i>Pump Stations</i>	10,000 SF @ \$4.00/SF	
	<i>Treatment Plants</i>	8 Acres @ \$3.0/SF	
Waste Disposal			
	<i>SARI</i>	\$3,750,000/MGD	
	<i>OCSD</i>	\$4,240,000/MGD	

**TABLE IX-1a
SANTA ANA WATERSHED PROJECT AUTHORITY
INTEGRATED CHINO/ARLINGTON DESALINATION SYSTEM (ICADS)
PIPELINE SYSTEM DETAILED COST SUMMARY**

Pipeline	Segment	Length	Diameter	Base Unit Cost	Pipeline Direct Cost by Segment	Segment Cost (\$/Segment)		Total
						Special Const.	Traffic Control	
BENCHMARK PROJECT								
CHINO I DESALTER PIPELINES								
Chino I Raw Water Pipeline Extension								
Cloverdale Road	Harrison Avenue to Cucamonga Creek	5,600	16	95.00	532,000	40,000	2,800	574,800
Total Chino I Raw Water Pipeline Extension:		5,600			532,000	40,000	2,800	574,800
TOTAL CHINO I DESALTER PIPELINES		5,600			532,000	40,000	2,800	574,800
CHINO II DESALTER PIPELINES								
Chino II Raw Water Pipeline								
Cloverdale Road/Limonite Avenue	1500' east of Harrison to Wineville	10,000	16	95.00	950,000	115,200	5,000	1,070,200
Wineville Avenue	Limonite to Belgrave	7,000	24	125.00	875,000		7,000	882,000
Belgrave Avenue	Wineville Avenue to Chino II Desalter	5,500	36	175.00	962,500		2,750	965,250
Total Chino II Raw Water Pipeline:		22,500			2,787,500	115,200	14,750	2,917,450
City of Ontario Connection								
Milliken Avenue	Philadelphia to Francis	2,600	20	110.00	286,000		2,600	288,600
Total City of Ontario Connection		2,600			286,000	0	2,600	288,600
Chino II Brine Disposal Pipeline								
	On Site to Sari Line	1,000	15	120.00	120,000			120,000
Total Chino II Brine Disposal Pipeline:		1,000			120,000			120,000
TOTAL CHINO II DESALTER PIPELINES		26,100			2,907,500	115,200	14,750	3,326,050
ARLINGTON DESALTER PIPELINES								
Arlington Potable Water Pipeline								
Magnolia Avenue	Arlington Desalter to Pierce Street	2,000	24	125.00	250,000		2,000	252,000
Pierce Street	Magnolia Avenue to Promenade Avenue	4,000	24	125.00	500,000	72,000	4,000	576,000
Promenade Avenue	Pierce Street to McKinley Street	8,500	24	125.00	1,062,500		8,500	1,071,000
McKinley Street	Promenade Avenue to Hidden Valley Parkway	7,000	24	125.00	875,000		7,000	882,000
(New Road)	McKinley Street to 2nd Street	6,000	24	125.00	750,000		6,000	756,000
Second Street	(New Road) to Hamner Avenue	5,500	24	125.00	687,500		5,500	693,000
Hamner Avenue	Second Street to Schleissman Road	19,000	24	125.00	2,375,000	500,000	19,000	2,894,000
Total Arlington Potable Water Pipeline:		62,000			6,500,000	572,000	52,000	7,124,000
TOTAL ARLINGTON DESALTER PIPELINES		62,000			6,500,000	572,000	52,000	7,124,000

TOTAL BENCHMARK CONVEYANCE SYSTEM PIPELINES

83,700

9,939,500

727,200

69,550

11,924,850

ALTERNATIVE PIPELINES								
Chino Hills Potable Water Pipeline								
El Prado Road	Kimball Avenue to Soquel Canyon Road	3,500	16	95.00	332,500	72,000	1,750	406,250
Soquel Canyon Road	El Prado Road to new Chino Hills Pump Station	5,000	16	95.00	475,000		2,500	477,500
Total Chino Hills Potable Water Pipeline:		8,500			807,500	72,000	4,250	883,750
City of Chino Alternate Delivery Pipeline								
Benson Avenue	Schaeffer Avenue to Phillips Blvd	16,000	12	85.00	1,360,000		16,000	1,376,000
Phillips Blvd	Benson Avenue to Central Avenue	1,500	12	85.00	127,500		1,500	129,000
Total City of Chino Alternate Delivery Pipeline:		17,500			1,487,500	0	17,500	1,505,000
City of Ontario Potable Water Pipeline								
Belgrave and Milliken Avenue	Chino II to Francis	25,000	20	106.00	2,650,000		20,000	2,670,000
Total City of Ontario Potable Water Pipeline		25,000			2,650,000	0	20,000	2,670,000

TABLE IX-2
SANTA ANA RIVER WATERSHED PROJECT AUTHORITY
INTEGRATED CHINO/ARLINGTON DESALINATION SYSTEM (ICADS)

SUMMARY OF O&M UNIT COSTS

FACILITY		OPERATIONS & MAINTENANCE				
		UNIT COSTS - FIXED ITEMS		UNIT COSTS - VARIABLE ITEMS		
Treatment Plant		<i>Labor</i>		<i>Chemicals</i>	<i>Replacement</i>	<i>Energy</i>
	<i>Reverse Osmosis (1000 gallons permeate)</i>	\$0.061		\$0.210	\$0.045	\$0.150
	<i>Ion Exchange (1000 gallons denitrified water)</i>	\$0.015		\$0.200	\$0.044	\$0.005
Pump Stations		<i>Labor and Materials</i>		<i>Energy</i>		
	<i>Chino I Desalter Facilities</i>	\$10,000/pump station		\$0.08/KWH		
	Pump station Upgrade					
	City of Chino Hills Pump Station					
	City of Chino Pump Station					
	<i>Chino II Desalter Facilities</i>					
	Jurupa Pump Station					
	Ontario Pump Station					
	<i>Arlington Desalter Facilities</i>					
	Pump Station					
Pipelines		<i>Labor and Materials</i>				
	Diameter	\$1.00 / LF		NA		
	12					
	16					
	20					
	24					
	30					
Wells						
	<i>Production Wells</i>					
	Well Construction	NA		NA		
	Equipment & Finish	\$10,000/well		\$0.08/KWH		
Land Acquisition						
	<i>Production Wells</i>	NA		NA		
	<i>Pump Stations</i>					
	<i>Treatment Plants</i>					
Waste Disposal		<i>Annual Fixed</i>		<i>Monthly Variable</i>		
	SARI/OCSD	\$34,140/MGD of capacity		\$711/MG		

TABLE IX-3
SANTA ANA WATERSHED PROJECT AUTHORITY
INTEGRATED CHINO/ARLINGTON DESALINATION SYSTEM (ICADS)
BENCHMARK PROJECT CAPITAL COST SUMMARY

I.D. No.	Facility Description	Construction Cost	Land cost	SARI/OCSD Connection Fee	Reimbursement
I	CHINO I DESALTER FACILITIES (incl. 2.0 MGD Expansion)				
1	VOC Treatment				
2	VOC Treatment	700,000			
3	Subtotal VOC Treatment:	700,000	0	0	0
4	Treatment Plant Expansion Modifications (to 10.53 MGD)				
5	Ion Exchange (1.68 MGD)	1,345,000			
6	Pump Station Upgrade	60,000			
7	Subtotal Treatment Plant Modifications:	1,405,000	0	0	0
8	Pump Station				
9	City of Chino Hills Pump Station	495,000	40,000		
10	Subtotal Pump Station:	495,000	40,000	0	0
11	Pipelines				
12	Chino I Raw Water Pipeline Extension	574,800			
13	Brine Disposal Line (0.034 MGD)			280,000	
14	Subtotal Pipelines:	574,800	0	280,000	0
15	Supply Wells				
16	Well Construction (3 wells)	1,008,000	180,000		
17	Well Equipment (3 Wells)	1,020,000			
18	Subtotal Supply Wells:	2,028,000	180,000	0	0
19	SUBTOTAL CHINO I DESALTER FACILITIES:	5,202,800	220,000	280,000	0
II	CHINO II DESALTER FACILITIES (10 MGD)				
1	Treatment Plant (to 10.53)				
2	RO & Ion exchange (10.53 MGD)	14,640,000	1,045,000		
3	Subtotal Treatment Plant:	14,640,000	1,045,000	0	0
4	Clearwell				
5	Five Million Gallon Welded Steel Tank	2,000,000			
6	Subtotal Clearwell:	2,000,000	0	0	0
7	Pump Stations				
8	Jurupa Pump Station	2,441,000			
9	Ontario Pump Station	975,000	40,000		
10	Subtotal Pump Stations:	3,416,000	40,000	0	0
11	Pipelines				
12	Chino II Raw Water Pipeline	2,917,450			
13	City of Ontario Connection	288,600			
14	Brine Disposal Line (1.88 MGD)	120,000		15,040,000	
15	Subtotal Pipelines:	3,326,050	0	15,040,000	0
16	Wells				
17	Well Construction (9 wells)	3,024,000	540,000		
18	Well Equipment (9 wells)	3,060,000			
19	Subtotal Wells:	6,084,000	540,000	0	0
20	SUBTOTAL CHINO II DESALTER FACILITIES:	29,466,050	1,625,000	15,040,000	0
III	ARLINGTON DESALTER FACILITIES				
1	Treatment Plant Modifications				
2	Facility				
3	Disinfection System	200,000			
4	Pump Station	625,000			
5	Clearwell (450,000 gallons)	600,000			
6	Subtotal Treatment Plant Modifications:	1,425,000	0	0	0
7	Pipelines				
8	Arlington Potable Water Pipeline (to JCSD)	7,124,000			
9	Brine Disposal Line				
10	Subtotal Pipelines:	7,124,000	0	0	0
11	Arlington Reimbursement				808,000
12	SUBTOTAL ARLINGTON DESALTER FACILITIES:	8,549,000	0	0	808,000
13					
14	TOTAL ESTIMATED CONSTRUCTION COST:	43,217,850	1,845,000	15,320,000	808,000
15	Engineering/Admin./Legal @ 20%	8,643,570	NA	NA	NA
16	Contingency @ 15%	7,779,213	NA	NA	NA
17	Subtotal:	59,640,633	1,845,000	15,320,000	808,000
TOTAL ESTIMATED CAPITAL SYSTEM COST		\$77,613,633			

TABLE IX-4
SANTA ANA WATERSHED PROJECT AUTHORITY
INTEGRATED CHINO/ARLINGTON DESALINATION SYSTEM (ICADS)
BENCHMARK PROJECT OPERATIONS AND MAINTENANCE SUMMARY

I.D. No.	Facility Description	Fixed	Variable	Energy	SARI Fixed	SARI Variable	Total
I	CHINO I DESALTER FACILITIES (2.0 MGD Expansion)						
1	VOC Treatment						
2	VOC Treatment	70,000					
3	Subtotal VOC Treatment:	70,000	0	0	0	0	70,000
4	Treatment Plant Expansion Modifications						
5	Ion Exchange	10,000	143,000	3,000			156,000
6	Pump Station Upgrade	8,000		90,000			98,000
7	Subtotal Treatment Plant Modifications:	16,000	143,000	93,000	0	0	252,000
8	Pump Station						
9	City of Chino Hills Pump Station	10,000		150,000			160,000
10	Subtotal Pump Station:	10,000	0	150,000	0	0	160,000
11	Pipelines						
12	Chino I Raw Water Pipeline Extension	5,600					5,600
13	Brine Disposal Line				1,500	8,500	10,000
14	Subtotal Pipelines:	5,600	0	0	1,500	8,500	15,600
15	Supply Wells						
16	Well Construction (3 wells)						
17	Well Equipment (3 wells)	30,000		150,000			180,000
18	Subtotal Supply Wells:	30,000	0	150,000	0	0	180,000
19	SUBTOTAL CHINO I DESALTER FACILITIES:	131,600	143,000	393,000	1,500	8,500	677,600
II	CHINO II DESALTER FACILITIES						
1	Treatment Plant						
2	RO & Ion exchange	160,000	850,000	360,000			1,370,000
3	Subtotal Treatment Plant:	160,000	850,000	360,000	0	0	1,370,000
4	Clearwell						
5	Five Million Gallon Welded Steel Tank	10,000					10,000
6	Subtotal Clearwell:	10,000	0	0	0	0	10,000
7	Pump Stations						
8	Jurupa Pump Station	10,000		500,000			510,000
9	Ontario Pump Station	10,000		150,000			160,000
10	Subtotal Pump Stations:	20,000	0	650,000	0	0	670,000
11	Pipelines						
12	Chino II Raw Water Pipeline	25,000					25,000
13	City of Ontario Connection	2,600					2,600
14	Brine Disposal Line	2,000			65,000	465,000	532,000
15	Subtotal Pipelines:	29,600	0	0	65,000	465,000	559,600
16	Wells						
17	Well Construction (9 wells)						
18	Well Equipment (9 wells)	90,000		450,000			540,000
19	Subtotal Wells:	90,000	0	450,000	0	0	540,000
20	SUBTOTAL CHINO II DESALTER FACILITIES:	309,600	850,000	1,460,000	65,000	465,000	3,149,600
III	ARLINGTON DESALTER FACILITIES						
1	Treatment Plant Modifications						
2	Facility	120,000	480,000	440,000			1,040,000
3	Disinfection System	25,000		15,000			40,000
4	Pump Station	10,000		420,000			430,000
5	Clearwell (450,000 gallons)	10,000					10,000
6	Subtotal Treatment Plant Modifications:	165,000	480,000	875,000	0	0	1,520,000
7	Pipelines						
8	Arlington Potable Water Pipeline	60,000					60,000
9	Brine Disposal Line				50,000	300,000	350,000
10	Subtotal Pipelines:	60,000	0	0	50,000	300,000	410,000
11							
12	SUBTOTAL ARLINGTON DESALTER FACILITIES:	225,000	480,000	875,000	50,000	300,000	1,930,000
TOTAL SYSTEM OPERATIONS AND MAINTENANCE		\$668,200	\$1,473,000	\$2,728,000	\$116,500	\$773,500	\$5,757,200

TABLE IX-5
SANTA ANA WATERSHED PROJECT AUTHORITY
INTEGRATED CHINO/ARLINGTON DESALINATION SYSTEM (ICADS)
PROJECT 2 CAPITAL COST SUMMARY: 4 MGD CHINO I EXPANSION USING IX

I.D. No.	Facility Description	Construction Cost	Land cost	SARI/OCSD Connection Fee	Reimbursement
I	CHINO I DESALTER FACILITIES (incl. 4.0 MGD Expansion)				
1	VOC Treatment				
2	VOC Treatment	700,000			
3	Subtotal VOC Treatment:	700,000	0	0	0
4	Treatment Plant Expansion Modifications (to 12.6 MGD)				
5	Ion Exchange (3.53 MGD)	2,825,000			
6	Pump Station Upgrade	100,000			
7	Subtotal Treatment Plant Modifications:	2,925,000	0	0	0
8	Pump Station				
9	City of Chino Hills Pump Station	495,000	40,000		
10	City of Chino Pump Station	300,000			
11	Subtotal Pump Station:	795,000	40,000	0	0
12	Pipelines				
13	Chino I Raw Water Pipeline Extension	660,750			
14	Chino Hills Potable Water Pipeline	883,750			
15	City of Chino Alternate Delivery Pipeline	1,505,000			
16	Brine Disposal Line (0.072 MGD)			580,000	
17	Subtotal Pipelines:	3,049,500	0	580,000	0
18	Supply Wells				
19	Well Construction (4 wells)	1,344,000	240,000		
20	Well Equipment (4 Wells)	1,360,000			
21	Subtotal Supply Wells:	2,704,000	240,000	0	0
22	SUBTOTAL CHINO I DESALTER FACILITIES:	10,173,500	280,000	580,000	0
II	CHINO II DESALTER FACILITIES (10 MGD)				
1	Treatment Plant (to 10.53)				
2	RO & Ion exchange (10.53 MGD)	14,640,000	1,045,000		
3	Subtotal Treatment Plant:	14,640,000	1,045,000	0	0
4	Clearwell				
5	Five Million Gallon Welded Steel Tank	2,000,000			
6	Subtotal Clearwell:	2,000,000	0	0	0
7	Pump Stations				
8	Jurupa Pump Station	2,441,000			
9	Ontario Pump Station	975,000	40,000		
10	Subtotal Pump Stations:	3,416,000	40,000	0	0
11	Pipelines				
12	Chino II Raw Water Pipeline	2,917,450			
13	City of Ontario Connection	288,600			
14	Brine Disposal Line (1.88 MGD)	120,000		15,040,000	
15	Subtotal Pipelines:	3,326,050	0	15,040,000	0
16	Wells				
17	Well Construction (9 wells)	3,024,000	540,000		
18	Well Equipment (9 wells)	3,060,000			
19	Subtotal Wells:	6,084,000	540,000	0	0
20	SUBTOTAL CHINO II DESALTER FACILITIES:	29,466,050	1,625,000	15,040,000	0
III	ARLINGTON DESALTER FACILITIES				
1	Treatment Plant Modifications				
2	Facility				
3	Disinfection System	200,000			
4	Pump Station	625,000			
5	Clearwell (450,000 gallons)	600,000			
6	Subtotal Treatment Plant Modifications:	1,425,000	0	0	0
7	Pipelines				
8	Arlington Potable Water Pipeline (to JCSD)	7,124,000			
9	Brine Disposal Line				
10	Subtotal Pipelines:	7,124,000	0	0	0
11	Arlington Reimbursement				808,000
12	SUBTOTAL ARLINGTON DESALTER FACILITIES:	8,549,000	0	0	808,000
13					
14	TOTAL ESTIMATED CONSTRUCTION COST:	48,188,550	1,905,000	15,620,000	808,000
15	Engineering/Admin./Legal @ 20%:	9,637,710	NA	NA	NA
16	Contingency @ 15%:	8,673,939	NA	NA	NA
17	Subtotal:	66,500,199	1,905,000	15,620,000	808,000
TOTAL ESTIMATED CAPITAL SYSTEM COST		\$84,833,199			

TABLE IX-6
SANTA ANA WATERSHED PROJECT AUTHORITY
INTEGRATED CHINO/ARLINGTON DESALINATION SYSTEM (ICADS)
PROJECT 2 OPERATIONS AND MAINTENANCE SUMMARY: 4 MGD CHINO I EXPANSION USING IX

I.D. No.	Facility Description	Fixed	Variable	Energy	SARI Fixed	SARI Variable	Total
I	CHINO I DESALTER FACILITIES (incl. 4.0 MGD Expansion)						
1	VOC Treatment						
2	VOC Treatment	70,000					
3	Subtotal Upgrade Project:	70,000	0	0	0	0	70,000
4	Treatment Plant Expansion Modifications						
5	Ion Exchange	20,000	300,000	6,200			326,200
6	Pump Station Upgrade	10,000		150,000			160,000
7	Subtotal Treatment Plant Modifications:	30,000	300,000	156,200	0	0	486,200
8	Pump Station						
9	City of Chino Hills Pump Station	10,000		150,000			160,000
10	City of Chino Pump Station	10,000		80,000			90,000
11	Subtotal Pump Station:	20,000	0	230,000	0	0	250,000
12	Pipelines						
13	Chino I Raw Water Pipeline Extension	7,000					7,000
14	Chino Hills Potable Water Pipeline	10,000					10,000
15	City of Chino Alternate Delivery Pipeline	30,000					30,000
16	Brine Disposal Line				3,000	17,000	20,000
17	Subtotal Pipelines:	47,000	0	0	3,000	17,000	67,000
18	Supply Wells						
19	Well Construction (4 wells)						
20	Well Equipment (4 wells)	40,000		200,000			240,000
21	Subtotal Supply Wells:	40,000	0	200,000	0	0	240,000
22	SUBTOTAL CHINO I DESALTER FACILITIES:	207,000	300,000	586,200	3,000	17,000	1,113,200
II	CHINO II DESALTER FACILITIES						
1	Treatment Plant						
2	RO & Ion exchange	160,000	850,000	360,000			1,370,000
3	Subtotal Treatment Plant:	160,000	850,000	360,000	0	0	1,370,000
4	Clearwell						
5	Five Million Gallon Welded Steel Tank	10,000					10,000
6	Subtotal Clearwell:	10,000	0	0	0	0	10,000
7	Pump Stations						
8	Jurupa Pump Station	10,000		500,000			510,000
9	Ontario Pump Station	10,000		150,000			160,000
10	Subtotal Pump Stations:	20,000	0	-650,000	0	0	670,000
11	Pipelines						
12	Chino II Raw Water Pipeline	25,000					25,000
13	City of Ontario Connection	2,600					2,600
14	Brine Disposal Line	2,000			65,000	465,000	532,000
15	Subtotal Pipelines:	29,600	0	0	65,000	465,000	559,600
16	Wells						
17	Well Construction (9 wells)						
18	Well Equipment (9 wells)	90,000		450,000			540,000
19	Subtotal Wells:	90,000	0	450,000	0	0	540,000
20	SUBTOTAL CHINO II DESALTER FACILITIES:	309,600	850,000	1,460,000	65,000	465,000	3,149,600
III	ARLINGTON DESALTER FACILITIES						
1	Treatment Plant Modifications						
2	Facility	120,000	480,000	440,000			1,040,000
3	Disinfection System	25,000		15,000			40,000
4	Pump Station	10,000		420,000			430,000
5	Clearwell (450,000 gallons)	10,000					10,000
6	Subtotal Treatment Plant Modifications:	165,000	480,000	875,000	0	0	1,520,000
7	Pipelines						
8	Arlington Potable Water Pipeline	60,000					60,000
9	Brine Disposal Line				50,000	300,000	350,000
10	Subtotal Pipelines:	60,000	0	0	50,000	300,000	410,000
11							
12	SUBTOTAL ARLINGTON DESALTER FACILITIES:	225,000	480,000	875,000	50,000	300,000	1,930,000
TOTAL SYSTEM OPERATIONS AND MAINTENANCE		\$741,600	\$1,630,000	\$2,921,200	\$118,000	\$782,000	\$6,192,800

TABLE IX-7
SANTA ANA WATERSHED PROJECT AUTHORITY
INTEGRATED CHINO/ARLINGTON DESALINATION SYSTEM (ICADS)
PROJECT 3 CAPITAL COST SUMMARY: DEDICATED ONTARIO PIPELINE

I.D. No.	Facility Description	Construction Cost	Land cost	SARI/OCSD Connection Fee	Reimbursement
I	CHINO I DESALTER FACILITIES (incl. 2.0 MGD Expansion)				
1	VOC Treatment				
2	VOC Treatment	700,000			
3	Subtotal VOC Treatment:	700,000	0	0	0
4	Treatment Plant Expansion Modifications (to 10.53 MGD)				
5	Ion Exchange (1.68 MGD)	1,345,000			
6	Pump Station Upgrade	60,000			
7	Subtotal Treatment Plant Modifications:	1,405,000	0	0	0
8	Pump Station				
9	City of Chino Hills Pump Station	495,000	40,000		
10	Subtotal Pump Station:	495,000	40,000	0	0
11	Pipelines				
12	Chino I Raw Water Pipeline Extension	574,800			
13	Brine Disposal Line (0.034 MGD)			280,000	
14	Subtotal Pipelines:	574,800	0	280,000	0
15	Supply Wells				
16	Well Construction (3 wells)	1,008,000	180,000		
17	Well Equipment (3 Wells)	1,020,000			
18	Subtotal Supply Wells:	2,028,000	180,000	0	0
19	SUBTOTAL CHINO I DESALTER FACILITIES:	5,202,800	220,000	280,000	0
II	CHINO II DESALTER FACILITIES (10 MGD)				
1	Treatment Plant (to 10.53)				
2	RO & Ion exchange (10.53 MGD)	14,640,000	1,045,000		
3	Subtotal Treatment Plant:	14,640,000	1,045,000	0	0
4	Clearwell				
5	Five Million Gallon Welded Steel Tank	2,000,000			
6	Subtotal Clearwell:	2,000,000	0	0	0
7	Pump Stations				
8	Chino II Pump Station	2,997,000			
9	Subtotal Pump Stations:	2,997,000	0	0	0
10	Pipelines				
11	Chino II Raw Water Pipeline	2,917,450			
12	City of Ontario Potable Water Pipeline	2,670,000			
13	Brine Disposal Line (1.68 MGD)	120,000		15,040,000	
14	Subtotal Pipelines:	5,707,450	0	15,040,000	0
15	Wells				
17	Well Construction (9 wells)	3,024,000	540,000		
18	Well Equipment (9 wells)	3,060,000			
19	Subtotal Wells:	6,084,000	540,000	0	0
20	SUBTOTAL CHINO II DESALTER FACILITIES:	31,428,450	1,585,000	15,040,000	0
III	ARLINGTON DESALTER FACILITIES				
1	Treatment Plant Modifications				
2	Facility				
3	Disinfection System	200,000			
4	Pump Station	625,000			
5	Clearwell (450,000 gallons)	600,000			
6	Subtotal Treatment Plant Modifications:	1,425,000	0	0	0
7	Pipelines				
8	Arlington Potable Water Pipeline (to JCSD)	7,124,000			
9	Brine Disposal Line				
10	Subtotal Pipelines:	7,124,000	0	0	0
11	Arlington Reimbursement				808,000
12	SUBTOTAL ARLINGTON DESALTER FACILITIES:	8,549,000	0	0	808,000
13					
14	TOTAL ESTIMATED CONSTRUCTION COST:	45,180,250	1,805,000	15,320,000	808,000
15	Engineering/Admin./Legal @ 20%	9,036,050	NA	NA	NA
16	Contingency @ 15%	8,132,445	NA	NA	NA
17	Subtotal:	62,348,745	1,805,000	15,320,000	808,000
TOTAL ESTIMATED CAPITAL SYSTEM COST		\$80,281,745			

TABLE IX-8
SANTA ANA WATERSHED PROJECT AUTHORITY
INTEGRATED CHINO/ARLINGTON DESALINATION SYSTEM (ICADS)
PROJECT 3 OPERATIONS AND MAINTENANCE SUMMARY: DEDICATED ONTARIO PIPELINE

I.D. No.	Facility Description	Fixed	Variable	Energy	SARI Fixed	SARI Variable	Total
I	CHINO I DESALTER FACILITIES (2.0 MGD Expansion)						
1	VOC Treatment						
2	VOC Treatment	70,000					
3	Subtotal VOC Treatment:	70,000	0	0	0	0	70,000
4	Treatment Plant Expansion Modifications						
5	Ion Exchange	10,000	143,000	3,000			156,000
6	Pump Station Upgrade	6,000		90,000			96,000
7	Subtotal Treatment Plant Modifications:	16,000	143,000	93,000	0	0	252,000
8	Pump Station						
9	City of Chino Hills Pump Station	10,000		150,000			160,000
10	Subtotal Pump Station:	10,000	0	150,000	0	0	160,000
11	Pipelines						
12	Chino I Raw Water Pipeline Extension	5,600					5,600
13	Brine Disposal Line				1,500	8,500	10,000
14	Subtotal Pipelines:	5,600	0	0	1,500	8,500	15,600
15	Supply Wells						
16	Well Construction (3 wells)						
17	Well Equipment (3 wells)	30,000		150,000			180,000
18	Subtotal Supply Wells:	30,000	0	150,000	0	0	180,000
19	SUBTOTAL CHINO I DESALTER FACILITIES:	131,600	143,000	393,000	1,500	8,500	677,600
II	CHINO II DESALTER FACILITIES						
1	Treatment Plant						
2	RO & Ion exchange	160,000	850,000	360,000			1,370,000
3	Subtotal Treatment Plant:	160,000	850,000	360,000	0	0	1,370,000
4	Clearwell						
5	Five Million Gallon Welded Steel Tank	10,000					10,000
6	Subtotal Clearwell:	10,000	0	0	0	0	10,000
7	Pump Stations						
8	Chino II Pump Station	10,000		640,000			650,000
9	Subtotal Pump Stations:	10,000	0	640,000	0	0	650,000
10	Pipelines						
11	Chino II Raw Water Pipeline	25,000					25,000
12	City of Ontario Potable Water Pipeline	25,000					25,000
13	Brine Disposal Line	2,000			65,000	465,000	532,000
14	Subtotal Pipelines:	52,000	0	0	65,000	465,000	582,000
15	Wells						
16	Test Wells Program						
17	Well Construction (9 wells)						
18	Well Equipment (9 wells)	90,000		450,000			540,000
19	Subtotal Wells:	90,000	0	450,000	0	0	540,000
20	SUBTOTAL CHINO II DESALTER FACILITIES:	322,000	850,000	1,450,000	65,000	465,000	3,152,000
III	ARLINGTON DESALTER FACILITIES						
1	Treatment Plant Modifications						
2	Facility	120,000	480,000	440,000			1,040,000
3	Disinfection System	25,000		15,000			40,000
4	Pump Station	10,000		420,000			430,000
5	Clearwell (450,000 gallons)	10,000					10,000
6	Subtotal Treatment Plant Modifications:	165,000	480,000	875,000	0	0	1,520,000
7	Pipelines						
8	Arlington Potable Water Pipeline	60,000					60,000
9	Brine Disposal Line				50,000	300,000	350,000
10	Subtotal Pipelines:	60,000	0	0	50,000	300,000	410,000
11							
12	SUBTOTAL ARLINGTON DESALTER FACILITIES:	225,000	480,000	875,000	50,000	300,000	1,930,000
TOTAL SYSTEM OPERATIONS AND MAINTENANCE		\$678,600	\$1,473,000	\$2,718,000	\$116,500	\$773,500	\$5,759,600

TABLE IX-9
SANTA ANA WATERSHED PROJECT AUTHORITY
INTEGRATED CHINO/ARLINGTON DESALINATION SYSTEM (ICADS)
PROJECT 4 CAPITAL COST SUMMARY: END USERS PAY O&M FOR DEDICATED OFF-SITE FACILITIES

I.D. No.	Facility Description	Construction Cost	Land cost	SARI/OCSD Connection Fee	Reimbursement
I	CHINO I DESALTER FACILITIES (incl. 2.0 MGD Expansion)				
1	VOC Treatment				
2	VOC Treatment	700,000			
3	Subtotal VOC Treatment:	700,000	0	0	0
4	Treatment Plant Expansion Modifications (to 10.53 MGD)				
5	Ion Exchange (1.68 MGD)	1,345,000			
6	Pump Station Upgrade	60,000			
7	Subtotal Treatment Plant Modifications:	1,405,000	0	0	0
8	Pump Station				
9	City of Chino Hills Pump Station	495,000	40,000		
10	Subtotal Pump Station:	495,000	40,000	0	0
11	Pipelines				
12	Chino I Raw Water Pipeline Extension	574,800			
13	Brine Disposal Line (0.034 MGD)			280,000	
14	Subtotal Pipelines:	574,800	0	280,000	0
15	Supply Wells				
16	Well Construction (3 wells)	1,008,000	180,000		
17	Well Equipment (3 Wells)	1,020,000			
18	Subtotal Supply Wells:	2,028,000	180,000	0	0
19	SUBTOTAL CHINO I DESALTER FACILITIES:	5,202,800	220,000	280,000	0
II	CHINO II DESALTER FACILITIES (10 MGD)				
1	Treatment Plant (to 10.53)				
2	RO & Ion exchange (10.53 MGD)	14,640,000	1,045,000		
3	Subtotal Treatment Plant:	14,640,000	1,045,000	0	0
4	Clearwell				
5	Five Million Gallon Welded Steel Tank	2,000,000			
6	Subtotal Clearwell:	2,000,000	0	0	0
7	Pump Stations				
8	Jurupa Pump Station	2,441,000			
9	Ontario Pump Station	975,000	40,000		
10	Subtotal Pump Stations:	3,416,000	40,000	0	0
11	Pipelines				
12	Chino II Raw Water Pipeline	2,917,450			
13	City of Ontario Connection	288,600			
14	Brine Disposal Line (1.88 MGD)	120,000		15,040,000	
15	Subtotal Pipelines:	3,326,050	0	15,040,000	0
16	Wells				
17	Well Construction (9 wells)	3,024,000	540,000		
18	Well Equipment (9 wells)	3,060,000			
19	Subtotal Wells:	6,084,000	540,000	0	0
20	SUBTOTAL CHINO II DESALTER FACILITIES:	29,466,050	1,625,000	15,040,000	0
III	ARLINGTON DESALTER FACILITIES				
1	Treatment Plant Modifications				
2	Facility				
3	Disinfection System	200,000			
4	Pump Station	625,000			
5	Clearwell (450,000 gallons)	600,000			
6	Subtotal Treatment Plant Modifications:	1,425,000	0	0	0
7	Pipelines				
8	Arlington Potable Water Pipeline (to JCSD)	7,124,000			
9	Brine Disposal Line				
10	Subtotal Pipelines:	7,124,000	0	0	0
11	Arlington Reimbursement				808,000
12	SUBTOTAL ARLINGTON DESALTER FACILITIES:	8,549,000	0	0	808,000
13					
14	TOTAL ESTIMATED CONSTRUCTION COST:	43,217,850	1,845,000	15,320,000	808,000
15	Engineering/Admin./Legal @ 20%	8,643,570	NA	NA	NA
16	Contingency @ 15%	7,779,213	NA	NA	NA
17	Subtotal:	59,640,633	1,845,000	15,320,000	808,000

TOTAL ESTIMATED CAPITAL SYSTEM COST	\$77,613,633
--	---------------------

TABLE IX-10

SANTA ANA WATERSHED PROJECT AUTHORITY
 INTEGRATED CHINO/ARLINGTON DESALINATION SYSTEM (ICADS)

PROJECT 4 OPERATIONS AND MAINTENANCE SUMMARY: END USERS PAY O&M FOR DEDICATED OFF-SITE FACILITIES

I.D. No.	Facility Description	Fixed	Variable	Energy	SARI Fixed	SARI Variable	Total
I	CHINO I DESALTER FACILITIES (2.0 MGD Expansion)						
1	VOC Treatment						
2	VOC Treatment	70,000					
3	Subtotal VOC Treatment:	70,000	0	0	0	0	70,000
4	Treatment Plant Expansion Modifications						
5	Ion Exchange	10,000	143,000	3,000			156,000
6	Pump Station Upgrade	6,000		90,000			96,000
7	Subtotal Treatment Plant Modifications:	16,000	143,000	93,000	0	0	252,000
8	Pump Station						
9	City of Chino Hills Pump Station	0		0			0
10	Subtotal Pump Station:	0	0	0	0	0	0
11	Pipelines						
12	Chino I Raw Water Pipeline Extension	5,600					5,600
13	Brine Disposal Line				1,500	8,500	10,000
14	Subtotal Pipelines:	5,600	0	0	1,500	8,500	15,600
15	Supply Wells						
16	Well Construction (3 wells)						
17	Well Equipment (3 wells)	30,000		150,000			180,000
18	Subtotal Supply Wells:	30,000	0	150,000	0	0	180,000
19	SUBTOTAL CHINO I DESALTER FACILITIES:	121,600	143,000	243,000	1,500	8,500	517,600
II	CHINO II DESALTER FACILITIES						
1	Treatment Plant						
2	RO & Ion exchange	160,000	850,000	360,000			1,370,000
3	Subtotal Treatment Plant:	160,000	850,000	360,000	0	0	1,370,000
4	Clearwell						
5	Five Million Gallon Welded Steel Tank	10,000					10,000
6	Subtotal Clearwell:	10,000	0	0	0	0	10,000
7	Pump Stations						
8	Jurupa Pump Station	10,000		500,000			510,000
9	Ontario Pump Station	0		0			0
10	Subtotal Pump Stations:	10,000	0	500,000	0	0	510,000
11	Pipelines						
12	Chino II Raw Water Pipeline	25,000					25,000
13	City of Ontario Connection	0					0
14	Brine Disposal Line	2,000			65,000	465,000	532,000
15	Subtotal Pipelines:	27,000	0	0	65,000	465,000	557,000
16	Wells						
17	Well Construction (9 wells)						
18	Well Equipment (9 wells)	90,000		450,000			540,000
19	Subtotal Wells:	90,000	0	450,000	0	0	540,000
20	SUBTOTAL CHINO II DESALTER FACILITIES:	297,000	850,000	1,310,000	65,000	465,000	2,987,000
III	ARLINGTON DESALTER FACILITIES						
1	Treatment Plant Modifications						
2	Facility	120,000	480,000	440,000			1,040,000
3	Disinfection System	25,000		15,000			40,000
4	Pump Station	10,000		420,000			430,000
5	Clearwell (450,000 gallons)	10,000					10,000
6	Subtotal Treatment Plant Modifications:	165,000	480,000	875,000	0	0	1,520,000
7	Pipelines						
8	Arlington Potable Water Pipeline	60,000					60,000
9	Brine Disposal Line				50,000	300,000	350,000
10	Subtotal Pipelines:	60,000	0	0	50,000	300,000	410,000
11							
12	SUBTOTAL ARLINGTON DESALTER FACILITIES:	225,000	480,000	875,000	50,000	300,000	1,930,000
TOTAL SYSTEM OPERATIONS AND MAINTENANCE		\$643,600	\$1,473,000	\$2,428,000	\$116,500	\$773,500	\$5,434,600

TABLE IX-11
SANTA ANA WATERSHED PROJECT AUTHORITY
INTEGRATED CHINO/ARLINGTON DESALINATION SYSTEM (ICADS)
PROJECT 5 CAPITAL COST SUMMARY: MAXIMIZE IX EXPANSION AT CHINO I

I.D. No.	Facility Description	Construction Cost	Land cost	SARI/OCSD Connection Fee	Reimbursement
I	CHINO I DESALTER FACILITIES (incl. 4.2 MGD Expansion)				
1	VOC Treatment				
2	VOC Treatment	700,000			
3	Subtotal VOC Treatment:	700,000	0	0	0
4	Treatment Plant Expansion Modifications (to 12.86 MGD)				
5	Ion Exchange (3.7 MGD)	2,960,000			
6	Pump Station Upgrade	110,000			
7	Subtotal Treatment Plant Modifications:	3,070,000	0	0	0
8	Pump Station				
9	City of Chino Hills Pump Station	495,000	40,000		
10	City of Chino Pump Station	300,000			
11	Subtotal Pump Station:	795,000	40,000	0	0
12	Pipelines				
13	Chino I Raw Water Pipeline Extension	660,750			
14	Chino Hills Potable Water Pipeline	883,750			
15	City of Chino Alternate Delivery Pipeline	1,505,000			
16	Ontario Intertie	100,000			
17	Brine Disposal Line (0.076 MGD)			610,000	
18	Subtotal Pipelines:	3,149,500	0	610,000	0
19	Supply Wells for Treatment Plant Expansion				
20	Well Construction (4 wells)	1,344,000	240,000		
21	Well Equipment (4 wells)	1,360,000			
22	Subtotal Supply Wells for Treatment Plant Expansion:	2,704,000	240,000	0	0
23	SUBTOTAL CHINO I DESALTER FACILITIES:	10,418,500	280,000	610,000	0
II	CHINO II DESALTER FACILITIES (10 MGD)				
1	Treatment Plant (to 10.53)				
2	RO & Ion exchange (10.53 MGD)	14,640,000	1,045,000		
3	Subtotal Treatment Plant:	14,640,000	1,045,000	0	0
4	Clearwell				
5	Five Million Gallon Welded Steel Tank	2,000,000			
6	Subtotal Clearwell:	2,000,000	0	0	0
7	Pump Stations				
8	Jurupa Pump Station	2,441,000			
9	Ontario Pump Station	975,000	40,000		
10	Subtotal Pump Stations:	3,416,000	40,000	0	0
11	Pipelines				
12	Chino II Raw Water Pipeline	2,917,450			
13	City of Ontario Connection	288,600			
14	Brine Disposal Line (1.48 MGD)	120,000		15,040,000	
15	Subtotal Pipelines:	3,326,050	0	15,040,000	0
16	Wells				
17	Well Construction (9 wells)	3,024,000	540,000		
18	Well Equipment (9 wells)	3,060,000			
19	Subtotal Wells:	6,084,000	540,000	0	0
20	SUBTOTAL CHINO II DESALTER FACILITIES:	29,466,050	1,625,000	15,040,000	0
III	ARLINGTON DESALTER FACILITIES				
1	Treatment Plant Modifications				
2	Facility				
3	Disinfection System	200,000			
4	Pump Station	625,000			
5	Clearwell (450,000 gallons)	600,000			
6	Subtotal Treatment Plant Modifications:	1,425,000	0	0	0
7	Pipelines				
8	Arlington Potable Water Pipeline (to JCSD)	7,124,000			
9	Brine Disposal Line				
10	Subtotal Pipelines:	7,124,000	0	0	0
11	Arlington Reimbursement				808,000
12	SUBTOTAL ARLINGTON DESALTER FACILITIES:	8,549,000	0	0	808,000
13					
14	TOTAL ESTIMATED CONSTRUCTION COST:	48,433,550	1,905,000	15,650,000	808,000
15	Engineering/Admin./Legal @ 20%	9,686,710	NA	NA	NA
16	Contingency @ 15%	8,718,039	NA	NA	NA
17	Subtotal:	66,838,299	1,905,000	15,650,000	808,000
TOTAL ESTIMATED CAPITAL SYSTEM COST		\$85,201,299			

TABLE IX-12
SANTA ANA WATERSHED PROJECT AUTHORITY
INTEGRATED CHINO/ARLINGTON DESALINATION SYSTEM (ICADS)
PROJECT 5 OPERATIONS AND MAINTENANCE SUMMARY: MAXIMIZE IX EXPANSION AT CHINO I

I.D. No.	Facility Description	Fixed	Variable	Energy	SARI Fixed	SARI Variable	Total
I	CHINO I DESALTER FACILITIES (incl. 4.2 MGD Expansion)						
1	VOC Treatment						
2	VOC Treatment	70,000					
3	Subtotal VOC Treatment:	70,000	0	0	0	0	70,000
4	Treatment Plant Expansion Modifications						
5	Ion Exchange	21,000	314,000	6,500			341,500
6	Pump Station Upgrade	10,000		150,000			160,000
7	Subtotal Treatment Plant Modifications:	31,000	314,000	156,500	0	0	501,500
8	Pump Station						
9	City of Chino Hills Pump Station	10,000		150,000			160,000
10	City of Chino Pump Station	10,000		80,000			90,000
11	Subtotal Pump Station:	20,000	0	230,000	0	0	250,000
12	Pipelines						
13	Chino I Raw Water Pipeline Extension	7,000					7,000
14	Chino Hills Potable Water Pipeline	10,000					10,000
15	City of Chino Alternate Delivery Pipeline	30,000					30,000
16	Ontario Intertie	10,000					10,000
17	Brine Disposal Line				4,000	18,000	22,000
18	Subtotal Pipelines:	57,000	0	0	4,000	18,000	79,000
19	Supply Wells						
20	Well Construction (4 wells)						
21	Well Equipment (4 wells)	40,000		200,000			240,000
22	Subtotal Supply Wells:	40,000	0	200,000	0	0	240,000
23	SUBTOTAL CHINO I DESALTER FACILITIES:	218,000	314,000	586,500	4,000	18,000	1,140,500
II	CHINO II DESALTER FACILITIES						
1	Treatment Plant						
2	RO & Ion exchange	160,000	850,000	360,000			1,370,000
3	Subtotal Treatment Plant:	160,000	850,000	360,000	0	0	1,370,000
4	Cleanwell						
5	Five Million Gallon Welded Steel Tank	10,000					10,000
6	Subtotal Cleanwell:	10,000	0	0	0	0	10,000
7	Pump Stations						
8	Jurupa Pump Station	10,000		500,000			510,000
9	Ontario Pump Station	10,000		150,000			160,000
10	Subtotal Pump Stations:	20,000	0	650,000	0	0	670,000
11	Pipelines						
12	Chino II Raw Water Pipeline	25,000					25,000
13	City of Ontario Connection	2,600					2,600
14	Brine Disposal Line	2,000			65,000	465,000	532,000
15	Subtotal Pipelines:	29,600	0	0	65,000	465,000	559,600
16	Wells						
17	Well Construction (9 wells)						
18	Well Equipment (9 wells)	90,000		450,000			540,000
19	Subtotal Wells:	90,000	0	450,000	0	0	540,000
20	SUBTOTAL CHINO II DESALTER FACILITIES:	309,600	850,000	1,460,000	65,000	465,000	3,149,600
III	ARLINGTON DESALTER FACILITIES						
1	Treatment Plant Modifications						
2	Facility	120,000	480,000	440,000			1,040,000
3	Disinfection System	25,000		15,000			40,000
4	Pump Station	10,000		420,000			430,000
5	Cleanwell (450,000 gallons)	10,000					10,000
6	Subtotal Treatment Plant Modifications:	165,000	480,000	875,000	0	0	1,520,000
7	Pipelines						
8	Arlington Potable Water Pipeline	60,000					60,000
9	Brine Disposal Line				50,000	300,000	350,000
10	Subtotal Pipelines:	60,000	0	0	50,000	300,000	410,000
11							
12	SUBTOTAL ARLINGTON DESALTER FACILITIES:	225,000	480,000	875,000	50,000	300,000	1,930,000
TOTAL SYSTEM OPERATIONS AND MAINTENANCE		\$752,600	\$1,644,000	\$2,921,500	\$119,000	\$783,000	\$6,220,100

TABLE IX-13
SANTA ANA WATERSHED PROJECT AUTHORITY
INTEGRATED CHINO/ARLINGTON DESALINATION SYSTEM (ICADS)
PROJECT 6 CAPITAL COST SUMMARY: 2 MGD EXPANSION AT CHINO I USING RO

I.D. No.	Facility Description	Construction Cost	Land cost	SARI/OCSD Connection Fee	Reimbursement
I	CHINO I DESALTER FACILITIES (incl. 2.0 MGD Expansion)				
1	VOC Treatment				
2	VOC Treatment	700,000			
3	Subtotal VOC Treatment:	700,000	0	0	0
4	Treatment Plant Expansion Modifications (to 10.53 MGD)				
5	Reverse Osmosis (1.84 MGD)	3,310,000			
6	Pump Station Upgrade	60,000			
7	Subtotal Treatment Plant Modifications:	3,370,000	0	0	0
8	Pump Station				
9	City of Chino Hills Pump Station	495,000	40,000		
10	Subtotal Pump Station:	495,000	40,000	0	0
11	Pipelines				
12	Chino I Raw Water Pipeline Extension	574,800			
13	Brine Disposal Line (0.47 MGD)			3,750,000	
14	Subtotal Pipelines:	574,800	0	3,750,000	0
15	Supply Wells				
16	Well Construction (3 wells)	1,008,000	180,000		
17	Well Equipment (3 wells)	1,020,000			
18	Subtotal Supply Wells:	2,028,000	180,000	0	0
19	SUBTOTAL CHINO I DESALTER FACILITIES:	7,167,800	220,000	3,750,000	0
II	CHINO II DESALTER FACILITIES (10 MGD)				
1	Treatment Plant (to 10.53)				
2	RO & Ion exchange (10.53 MGD)	14,640,000	1,045,000		
3	Subtotal Treatment Plant:	14,640,000	1,045,000	0	0
4	Clearwell				
5	Five Million Gallon Welded Steel Tank	2,000,000			
6	Subtotal Clearwell:	2,000,000	0	0	0
7	Pump Stations				
8	Jurupa Pump Station	2,441,000			
9	Ontario Pump Station	975,000	40,000		
10	Subtotal Pump Stations:	3,416,000	40,000	0	0
11	Pipelines				
12	Chino II Raw Water Pipeline	2,917,450			
13	City of Ontario Connection	288,600			
14	Brine Disposal Line (1.88 MGD)	120,000		15,040,000	
15	Subtotal Pipelines:	3,326,050	0	15,040,000	0
16	Wells				
17	Well Construction (9 wells)	3,024,000	540,000		
18	Well Equipment (9 wells)	3,060,000			
19	Subtotal Wells:	6,084,000	540,000	0	0
20	SUBTOTAL CHINO II DESALTER FACILITIES:	29,466,050	1,625,000	15,040,000	0
III	ARLINGTON DESALTER FACILITIES				
1	Treatment Plant Modifications				
2	Facility				
3	Disinfection System	200,000			
4	Pump Station	625,000			
5	Clearwell (450,000 gallons)	600,000			
6	Subtotal Treatment Plant Modifications:	1,425,000	0	0	0
7	Pipelines				
8	Arlington Potable Water Pipeline (to JCSD)	7,124,000			
9	Brine Disposal Line				
10	Subtotal Pipelines:	7,124,000	0	0	0
11	Arlington Reimbursement				808,000
12	SUBTOTAL ARLINGTON DESALTER FACILITIES:	8,549,000	0	0	808,000
13					
14	TOTAL ESTIMATED CONSTRUCTION COST:	45,182,850	1,845,000	18,790,000	808,000
15	Engineering/Admin./Legal @ 20%	9,036,570	NA	NA	NA
16	Contingency @ 15%	8,132,913	NA	NA	NA
17	Subtotal:	62,352,333	1,845,000	18,790,000	808,000

TOTAL ESTIMATED CAPITAL SYSTEM COST	\$83,795,333
--	---------------------

TABLE IX-14
SANTA ANA WATERSHED PROJECT AUTHORITY
INTEGRATED CHINO/ARLINGTON DESALINATION SYSTEM (ICADS)
PROJECT 6 OPERATIONS AND MAINTENANCE SUMMARY: 2 MGD EXPANSION AT CHINO I USING RO

I.D. No.	Facility Description	Fixed	Variable	Energy	SARI Fixed	SARI Variable	Total
I	CHINO I DESALTER FACILITIES (incl. 2.0 MGD Expansion)						
1	VOC Treatment						
2	VOC Treatment	70,000					
3	Subtotal VOC Treatment:	70,000	0	0	0	0	70,000
4	Treatment Plant Expansion Modifications						
5	Reverse Osmosis	40,000	160,000	100,000			300,000
6	Pump Station Upgrade	6,000		90,000			96,000
7	Subtotal Treatment Plant Modifications:	46,000	160,000	190,000	0	0	396,000
8	Pump Station						
9	City of Chino Hills Pump Station	10,000		150,000			160,000
10	Subtotal Pump Station:	10,000	0	150,000	0	0	160,000
11	Pipelines						
12	Chino I Raw Water Pipeline Extension	5,600					5,600
13	Brine Disposal Line				16,000	116,000	132,000
14	Subtotal Pipelines:	5,600	0	0	16,000	116,000	137,600
15	Supply Wells for Treatment Plant Expansion						
16	Well Construction (3 wells)						
17	Well Equipment (3 wells)	30,000		150,000			180,000
18	Subtotal Supply Wells for Treatment Plant Expansion:	30,000	0	150,000	0	0	180,000
19	SUBTOTAL CHINO I DESALTER FACILITIES:	161,600	160,000	490,000	16,000	116,000	943,600
II	CHINO II DESALTER FACILITIES						
1	Treatment Plant						
2	RO & Ion exchange	160,000	850,000	360,000			1,370,000
3	Subtotal Treatment Plant:	160,000	850,000	360,000	0	0	1,370,000
4	Clearwell						
5	Five Million Gallon Welded Steel Tank	10,000					10,000
6	Subtotal Clearwell:	10,000	0	0	0	0	10,000
7	Pump Stations						
8	Jurupa Pump Station	10,000		500,000			510,000
9	Ontario Pump Station	10,000		150,000			160,000
10	Subtotal Pump Stations:	20,000	0	650,000	0	0	670,000
11	Pipelines						
12	Chino II Raw Water Pipeline	25,000					25,000
13	City of Ontario Connection	2,600					2,600
14	Brine Disposal Line	2,000			65,000	465,000	532,000
15	Subtotal Pipelines:	29,600	0	0	65,000	465,000	559,600
16	Wells						
17	Well Construction (9 wells)						
18	Well Equipment (9 wells)	90,000		450,000			540,000
19	Subtotal Wells:	90,000	0	450,000	0	0	540,000
20	SUBTOTAL CHINO II DESALTER FACILITIES:	309,600	850,000	1,460,000	65,000	465,000	3,149,600
III	ARLINGTON DESALTER FACILITIES						
1	Treatment Plant Modifications						
2	Facility	120,000	480,000	440,000			1,040,000
3	Disinfection System	25,000		15,000			40,000
4	Pump Station	10,000		420,000			430,000
5	Clearwell (450,000 gallons)	10,000					10,000
6	Subtotal Treatment Plant Modifications:	165,000	480,000	875,000	0	0	1,520,000
7	Pipelines						
8	Arlington Potable Water Pipeline	60,000					60,000
9	Brine Disposal Line				50,000	300,000	350,000
10	Subtotal Pipelines:	60,000	0	0	50,000	300,000	410,000
11							
12	SUBTOTAL ARLINGTON DESALTER FACILITIES:	225,000	480,000	875,000	50,000	300,000	1,930,000
TOTAL SYSTEM OPERATIONS AND MAINTENANCE		\$696,200	\$1,490,000	\$2,825,000	\$131,000	\$881,000	\$6,023,200

TABLE IX-15

SANTA ANA WATERSHED PROJECT AUTHORITY
 INTEGRATED CHINO/ARLINGTON DESALINATION SYSTEM (ICADS)

"BASELINE" PROJECT 7 CAPITAL COST SUMMARY: MAXIMIZE IX EXPANSION AT CHINO I, 8.0 MGD CHINO II

I.D. No.	Facility Description	Construction Cost	Land cost	SARI/OCSD Connection Fee	Reimbursement
I	CHINO I DESALTER FACILITIES (incl. 4.2 MGD Expansion)				
1	VOC Treatment				
2	VOC Treatment	700,000			
3	Subtotal VOC Treatment:	700,000	0	0	0
4	Treatment Plant Expansion Modifications (to 12.85 MGD)				
5	Ion Exchange (3.7 MGD)	2,960,000			
6	Pump Station Upgrade	200,000			
7	Subtotal Treatment Plant Modifications:	3,160,000	0	0	0
8	Pump Station				
9	City of Chino Hills Pump Station	495,000	40,000		
10	Subtotal Pump Station:	495,000	40,000	0	0
11	Pipelines				
12	Chino I Raw Water Pipeline Extension	660,750			
13	Brine Disposal Line (0.076 MGD)			610,000	
14	Subtotal Pipelines:	660,750	0	610,000	0
15	Supply Wells for Treatment Plant Expansion				
16	Well Construction (4 wells)	1,344,000	240,000		
17	Well Equipment (4 wells)	1,360,000			
18	Subtotal Supply Wells for Treatment Plant Expansion:	2,704,000	240,000	0	0
19	SUBTOTAL CHINO I DESALTER FACILITIES:	7,719,750	280,000	610,000	0
II	CHINO II DESALTER FACILITIES (8 MGD)				
1	Treatment Plant (to 8.42)				
2	RO & Ion exchange (8.42 MGD)	11,420,000	1,045,000		
3	Subtotal Treatment Plant:	11,420,000	1,045,000	0	0
4	Clearwell				
5	Five Million Gallon Welded Steel Tank	2,000,000			
6	Subtotal Clearwell:	2,000,000	0	0	0
7	Pump Stations				
8	Jurupa Pump Station	2,100,000			
9	Ontario Pump Station	975,000	40,000		
10	Subtotal Pump Stations:	3,075,000	40,000	0	0
11	Pipelines				
12	Chino II Raw Water Pipeline	2,917,450			
13	City of Ontario Connection	288,600			
14	Brine Disposal Line (1.50 MGD)	120,000		12,030,000	
15	Subtotal Pipelines:	3,326,050	0	12,030,000	0
16	Wells				
17	Well Construction (7 wells)	2,352,000	420,000		
18	Well Equipment (7 wells)	2,380,000			
19	Subtotal Wells:	4,732,000	420,000	0	0
20	SUBTOTAL CHINO II DESALTER FACILITIES:	24,553,050	1,505,000	12,030,000	0
III	ARLINGTON DESALTER FACILITIES				
1	Treatment Plant Modifications				
2	Facility				
3	Disinfection System	200,000			
4	Pump Station	625,000			
5	Clearwell (450,000 gallons)	600,000			
6	Subtotal Treatment Plant Modifications:	1,425,000	0	0	0
7	Pipelines				
8	Arlington Potable Water Pipeline (to JCSD)	7,124,000			
9	Brine Disposal Line				
10	Subtotal Pipelines:	7,124,000	0	0	0
11	Arlington Reimbursement				808,000
12	SUBTOTAL ARLINGTON DESALTER FACILITIES:	8,549,000	0	0	808,000
13					
14	TOTAL ESTIMATED CONSTRUCTION COST:	40,821,800	1,785,000	12,640,000	808,000
15	Engineering/Admin./Legal @ 20%	8,164,360	NA	NA	NA
16	Contingency @ 15%	7,347,924	NA	NA	NA
17	Subtotal:	56,334,084	1,785,000	12,640,000	808,000

TOTAL ESTIMATED CAPITAL SYSTEM COST	\$71,567,084
--	---------------------

TABLE IX-16

SANTA ANA WATERSHED PROJECT AUTHORITY
 INTEGRATED CHINO/ARLINGTON DESALINATION SYSTEM (ICADS)

"BASELINE" PROJECT 7 OPERATIONS & MAINTENANCE SUMMARY: MAXIMIZE IX EXPANSION AT CHINO I, 8.0 MGD CHINO II

I.D. No.	Facility Description	Fixed	Variable	Energy	SARI Fixed	SARI Variable	Total
I	CHINO I DESALTER FACILITIES (incl. 4.2 MGD Expansion)						
1	VOC Treatment						
2	VOC Treatment	70,000					
3	Subtotal VOC Treatment:	70,000	0	0	0	0	70,000
4	Treatment Plant Expansion Modifications						
5	Ion Exchange	21,000	314,000	6,500			341,500
6	Pump Station Upgrade	10,000		225,000			235,000
7	Subtotal Treatment Plant Modifications:	31,000	314,000	231,500	0	0	576,500
8	Pump Station						
9	City of Chino Hills Pump Station	10,000		150,000			160,000
10	Subtotal Pump Station:	10,000	0	150,000	0	0	160,000
11	Pipelines						
12	Chino I Raw Water Pipeline Extension	7,000					7,000
13	Brine Disposal Line				4,000	18,000	22,000
14	Subtotal Pipelines:	7,000	0	0	4,000	18,000	29,000
15	Supply Wells						
16	Well Construction (4 wells)						
17	Well Equipment (4 wells)	40,000		200,000			240,000
18	Subtotal Supply Wells:	40,000	0	200,000	0	0	240,000
19	SUBTOTAL CHINO I DESALTER FACILITIES:	158,000	314,000	581,500	4,000	18,000	1,075,500
II	CHINO II DESALTER FACILITIES						
1	Treatment Plant						
2	RO & Ion exchange	130,000	680,000	295,000			1,105,000
3	Subtotal Treatment Plant:	130,000	680,000	295,000	0	0	1,105,000
4	Clearwell						
5	Five Million Gallon Welded Steel Tank	10,000					10,000
6	Subtotal Clearwell:	10,000	0	0	0	0	10,000
7	Pump Stations						
8	Jurupa Pump Station	10,000		420,000			430,000
9	Ontario Pump Station	10,000		150,000			160,000
10	Subtotal Pump Stations:	20,000	0	570,000	0	0	590,000
11	Pipelines						
12	Chino II Raw Water Pipeline	25,000					25,000
13	City of Ontario Connection	2,600					2,600
14	Brine Disposal Line	2,000			52,000	371,000	425,000
15	Subtotal Pipelines:	29,600	0	0	52,000	371,000	452,600
16	Wells						
17	Well Construction (7 wells)						
18	Well Equipment (7 wells)	70,000		350,000			420,000
19	Subtotal Wells:	70,000	0	350,000	0	0	420,000
20	SUBTOTAL CHINO II DESALTER FACILITIES:	259,600	680,000	1,215,000	52,000	371,000	2,577,600
III	ARLINGTON DESALTER FACILITIES						
1	Treatment Plant Modifications						
2	Facility	120,000	480,000	440,000			1,040,000
3	Disinfection System	25,000		15,000			40,000
4	Pump Station	10,000		420,000			430,000
5	Clearwell (450,000 gallons)	10,000					10,000
6	Subtotal Treatment Plant Modifications:	165,000	480,000	875,000	0	0	1,520,000
7	Pipelines						
8	Arlington Potable Water Pipeline	60,000					60,000
9	Brine Disposal Line				50,000	300,000	350,000
10	Subtotal Pipelines:	60,000	0	0	50,000	300,000	410,000
11							
12	SUBTOTAL ARLINGTON DESALTER FACILITIES:	225,000	480,000	875,000	50,000	300,000	1,930,000
TOTAL SYSTEM OPERATIONS AND MAINTENANCE		\$642,600	\$1,474,000	\$2,671,500	\$106,000	\$689,000	\$5,583,100

TABLE IX-17
 SANTA ANA WATERSHED PROJECT AUTHORITY
 INTEGRATED CHINO/ARLINGTON DESALINATION SYSTEM (ICADS)
 PROJECT 8 CAPITAL COST SUMMARY: EXCLUDE ARLINGTON FACILITIES FROM PROJECT

I.D. No.	Facility Description	Construction Cost	Land cost	SARI/OCSD Connection Fee	Reimbursement
I	CHINO I DESALTER FACILITIES (incl. 2.0 MGD Expansion)				
1	VOC Treatment				
2	VOC Treatment	700,000			
3	Subtotal VOC Treatment:	700,000	0	0	0
4	Treatment Plant Expansion Modifications (to 10.53 MGD)				
5	Ion Exchange (1.68 MGD)	1,345,000			
6	Pump Station Upgrade	60,000			
7	Subtotal Treatment Plant Modifications:	1,405,000	0	0	0
8	Pump Station				
9	City of Chino Hills Pump Station	495,000	40,000		
10	Subtotal Pump Station:	495,000	40,000	0	0
11	Pipelines				
12	Chino I Raw Water Pipeline Extension	574,800			
13	Brine Disposal Line (0.034 MGD)			280,000	
14	Subtotal Pipelines:	574,800	0	280,000	0
15	Supply Wells				
16	Well Construction (3 wells)	1,008,000	180,000		
17	Well Equipment (3 Wells)	1,020,000			
18	Subtotal Supply Wells:	2,028,000	180,000	0	0
19	SUBTOTAL CHINO I DESALTER FACILITIES:	5,202,800	220,000	280,000	0
II	CHINO II DESALTER FACILITIES (10 MGD)				
1	Treatment Plant (to 10.53)				
2	RO & Ion exchange (10.53 MGD)	14,640,000	1,045,000		
3	Subtotal Treatment Plant:	14,640,000	1,045,000	0	0
4	Clearwell				
5	Five Million Gallon Welded Steel Tank	2,000,000			
6	Subtotal Clearwell:	2,000,000	0	0	0
7	Pump Stations				
8	Jurupa Pump Station	2,441,000			
9	Ontario Pump Station	975,000	40,000		
10	Subtotal Pump Stations:	3,416,000	40,000	0	0
11	Pipelines				
12	Chino II Raw Water Pipeline	2,917,450			
13	City of Ontario Connection	288,600			
14	Brine Disposal Line (1.88 MGD)	120,000		15,040,000	
15	Subtotal Pipelines:	3,326,050	0	15,040,000	0
16	Wells				
17	Well Construction (9 wells)	3,024,000	540,000		
18	Well Equipment (9 wells)	3,060,000			
19	Subtotal Wells:	6,084,000	540,000	0	0
20	SUBTOTAL CHINO II DESALTER FACILITIES:	29,466,050	1,625,000	15,040,000	0
14	TOTAL ESTIMATED CONSTRUCTION COST:	34,668,850	1,845,000	15,320,000	0
15	Engineering/Admin./Legal @ 20%	6,933,770	NA	NA	NA
16	Contingency @ 15%	6,240,393	NA	NA	NA
17	Subtotal:	47,843,013	1,845,000	15,320,000	0
TOTAL ESTIMATED CAPITAL SYSTEM COST		\$65,008,013			

TABLE IX-18

SANTA ANA WATERSHED PROJECT AUTHORITY
 INTEGRATED CHINO/ARLINGTON DESALINATION SYSTEM (ICADS)
 PROJECT 8 OPERATIONS AND MAINTENANCE SUMMARY: EXCLUDE ARLINGTON FACILITIES FROM PROJECT

I.D. No.	Facility Description	Fixed	Variable	Energy	SARI Fixed	SARI Variable	Total
I	CHINO I DESALTER FACILITIES (2.0 MGD Expansion)						
1	VOC Treatment						
2	VOC Treatment	70,000					
3	Subtotal VOC Treatment:	70,000	0	0	0	0	70,000
4	Treatment Plant Expansion Modifications						
5	Ion Exchange	10,000	143,000	3,000			156,000
6	Pump Station Upgrade	6,000		90,000			96,000
7	Subtotal Treatment Plant Modifications:	16,000	143,000	93,000	0	0	252,000
8	Pump Station						
9	City of Chino Hills Pump Station	10,000		150,000			160,000
10	Subtotal Pump Station:	10,000	0	150,000	0	0	160,000
11	Pipelines						
12	Chino I Raw Water Pipeline Extension	5,600					5,600
13	Brine Disposal Line				1,500	8,500	10,000
14	Subtotal Pipelines:	5,600	0	0	1,500	8,500	15,600
15	Supply Wells						
16	Well Construction (3 wells)						
17	Well Equipment (3 wells)	30,000		150,000			180,000
18	Subtotal Supply Wells:	30,000	0	150,000	0	0	180,000
19	SUBTOTAL CHINO I DESALTER FACILITIES:	131,600	143,000	393,000	1,500	8,500	677,600
II	CHINO II DESALTER FACILITIES						
1	Treatment Plant						
2	RO & Ion exchange	160,000	850,000	360,000			1,370,000
3	Subtotal Treatment Plant:	160,000	850,000	360,000	0	0	1,370,000
4	Clearwell						
5	Five Million Gallon Welded Steel Tank	10,000					10,000
6	Subtotal Clearwell:	10,000	0	0	0	0	10,000
7	Pump Stations						
8	Jurupa Pump Station	10,000		500,000			510,000
9	Ontario Pump Station	10,000		150,000			160,000
10	Subtotal Pump Stations:	20,000	0	650,000	0	0	670,000
11	Pipelines						
12	Chino II Raw Water Pipeline	25,000					25,000
13	City of Ontario Connection	2,600					2,600
14	Brine Disposal Line	2,000			65,000	465,000	532,000
15	Subtotal Pipelines:	29,600	0	0	65,000	465,000	559,600
16	Wells						
17	Well Construction (9 wells)						
18	Well Equipment (9 wells)	90,000		450,000			540,000
19	Subtotal Wells:	90,000	0	450,000	0	0	540,000
20	SUBTOTAL CHINO II DESALTER FACILITIES:	309,600	850,000	1,460,000	65,000	465,000	3,149,600
TOTAL SYSTEM OPERATIONS AND MAINTENANCE		\$441,200	\$993,000	\$1,853,000	\$66,500	\$473,500	\$3,827,200

TABLE IX-19
SANTA ANA WATERSHED PROJECT AUTHORITY
INTEGRATED CHINO/ARLINGTON DESALINATION SYSTEM (ICADS)
"REVISED BASELINE" PROJECT 9 CAPITAL COST SUMMARY: NO CHINO II CLEARWELL

I.D. No.	Facility Description	Construction Cost	Land cost	SARI/OCSD Connection Fee	Reimbursement
I	CHINO I DESALTER FACILITIES (incl. 4.2 MGD Expansion)				
1	VOC Treatment				
2	VOC Treatment	700,000			
3	Subtotal VOC Treatment:	700,000	0	0	0
4	Treatment Plant Expansion Modifications (to 12.86 MGD)				
5	Ion Exchange (3.7 MGD)	2,960,000			
6	Pump Station Upgrade	200,000			
7	Subtotal Treatment Plant Modifications:	3,160,000	0	0	0
8	Pump Station				
9	City of Chino Hills Pump Station	495,000	40,000		
10	Subtotal Pump Station:	495,000	40,000	0	0
11	Pipelines				
12	Chino I Raw Water Pipeline Extension	660,750			
13	Brine Disposal Line (0.076 MGD)			610,000	
14	Subtotal Pipelines:	660,750	0	610,000	0
15	Supply Wells for Treatment Plant Expansion				
16	Well Construction (4 wells)	1,344,000	240,000		
17	Well Equipment (4 wells)	1,360,000			
18	Subtotal Supply Wells for Treatment Plant Expansion:	2,704,000	240,000	0	0
19	SUBTOTAL CHINO I DESALTER FACILITIES:	7,719,750	280,000	610,000	0
II	CHINO II DESALTER FACILITIES (8 MGD)				
1	Treatment Plant (to 8.42)				
2	RO & Ion exchange (8.42 MGD)	11,420,000	1,045,000		
3	Subtotal Treatment Plant:	11,420,000	1,045,000	0	0
4	Clearwell				
5	Five Million Gallon Welded Steel Tank	0			
6	Subtotal Clearwell:	0	0	0	0
7	Pump Stations				
8	Jurupa Pump Station	2,100,000			
9	Ontario Pump Station	975,000	40,000		
10	Subtotal Pump Stations:	3,075,000	40,000	0	0
11	Pipelines				
12	Chino II Raw Water Pipeline	2,917,450			
13	City of Ontario Connection	288,600			
14	Brine Disposal Line (1.50 MGD)	120,000		12,030,000	
15	Subtotal Pipelines:	3,326,050	0	12,030,000	0
16	Wells				
17	Well Construction (7 wells)	2,352,000	420,000		
18	Well Equipment (7 wells)	2,380,000			
19	Subtotal Wells:	4,732,000	420,000	0	0
20	SUBTOTAL CHINO II DESALTER FACILITIES:	22,553,050	1,505,000	12,030,000	0
III	ARLINGTON DESALTER FACILITIES				
1	Treatment Plant Modifications				
2	Facility				
3	Disinfection System	200,000			
4	Pump Station	625,000			
5	Clearwell (450,000 gallons)	600,000			
6	Subtotal Treatment Plant Modifications:	1,425,000	0	0	0
7	Pipelines				
8	Arlington Potable Water Pipeline (to JCSD)	7,124,000			
9	Brine Disposal Line				
10	Subtotal Pipelines:	7,124,000	0	0	0
11	Arlington Reimbursement				808,000
12	SUBTOTAL ARLINGTON DESALTER FACILITIES:	8,549,000	0	0	808,000
13					
14	TOTAL ESTIMATED CONSTRUCTION COST:	38,821,800	1,785,000	12,640,000	808,000
15	Engineering/Admin./Legal @ 20%	7,764,360	NA	NA	NA
16	Contingency @ 15%	6,987,924	NA	NA	NA
17	Subtotal:	53,574,084	1,785,000	12,640,000	808,000

TOTAL ESTIMATED CAPITAL SYSTEM COST	\$68,807,084
--	---------------------

TABLE IX-20
SANTA ANA WATERSHED PROJECT AUTHORITY
INTEGRATED CHINO/ARLINGTON DESALINATION SYSTEM (ICADS)
"REVISED BASELINE" PROJECT 9 OPERATIONS & MAINTENANCE SUMMARY: NO CHINO II CLEARWELL

I.D. No.	Facility Description	Fixed	Variable	Energy	SARI Fixed	SARI Variable	Total
I	CHINO I DESALTER FACILITIES (incl. 4.2 MGD Expansion)						
1	VOC Treatment						
2	VOC Treatment	70,000					
3	Subtotal VOC Treatment:	70,000	0	0	0	0	70,000
4	Treatment Plant Expansion Modifications						
5	Ion Exchange	21,000	314,000	6,500			341,500
6	Pump Station Upgrade	10,000		225,000			235,000
7	Subtotal Treatment Plant Modifications:	31,000	314,000	231,500	0	0	576,500
8	Pump Station						
9	City of Chino Hills Pump Station	10,000		150,000			160,000
10	Subtotal Pump Station:	10,000	0	150,000	0	0	160,000
11	Pipelines						
12	Chino I Raw Water Pipeline Extension	7,000					7,000
13	Brine Disposal Line				4,000	18,000	22,000
14	Subtotal Pipelines:	7,000	0	0	4,000	18,000	29,000
15	Supply Wells						
16	Well Construction (4 wells)						
17	Well Equipment (4 wells)	40,000		200,000			240,000
18	Subtotal Supply Wells:	40,000	0	200,000	0	0	240,000
19	SUBTOTAL CHINO I DESALTER FACILITIES:	158,000	314,000	581,500	4,000	18,000	1,075,500
II	CHINO II DESALTER FACILITIES						
1	Treatment Plant						
2	RO & Ion exchange	130,000	680,000	295,000			1,105,000
3	Subtotal Treatment Plant:	130,000	680,000	295,000	0	0	1,105,000
4	Clearwell						
5	Five Million Gallon Welded Steel Tank	0					0
6	Subtotal Clearwell:	0	0	0	0	0	0
7	Pump Stations						
8	Jurupa Pump Station	10,000		420,000			430,000
9	Ontario Pump Station	10,000		150,000			160,000
10	Subtotal Pump Stations:	20,000	0	570,000	0	0	590,000
11	Pipelines						
12	Chino II Raw Water Pipeline	25,000					25,000
13	City of Ontario Connection	2,600					2,600
14	Brine Disposal Line	2,000			52,000	371,000	425,000
15	Subtotal Pipelines:	29,600	0	0	52,000	371,000	452,600
16	Wells						
17	Well Construction (7 wells)						
18	Well Equipment (7 wells)	70,000		350,000			420,000
19	Subtotal Wells:	70,000	0	350,000	0	0	420,000
20	SUBTOTAL CHINO II DESALTER FACILITIES:	249,600	680,000	1,215,000	52,000	371,000	2,567,600
III	ARLINGTON DESALTER FACILITIES						
1	Treatment Plant Modifications						
2	Facility	120,000	480,000	440,000			1,040,000
3	Disinfection System	25,000		15,000			40,000
4	Pump Station	10,000		420,000			430,000
5	Clearwell (450,000 gallons)	10,000					10,000
6	Subtotal Treatment Plant Modifications:	165,000	480,000	875,000	0	0	1,520,000
7	Pipelines						
8	Arlington Potable Water Pipeline	60,000					60,000
9	Brine Disposal Line				50,000	300,000	350,000
10	Subtotal Pipelines:	60,000	0	0	50,000	300,000	410,000
11							
12	SUBTOTAL ARLINGTON DESALTER FACILITIES:	225,000	480,000	875,000	50,000	300,000	1,930,000
TOTAL SYSTEM OPERATIONS AND MAINTENANCE		\$632,600	\$1,474,000	\$2,671,500	\$106,000	\$689,000	\$5,573,100

PRELIMINARY
 SANTA ANA WATERSHED PROJECT AUTHORITY
 INTEGRATED CHINO/ARLINGTON DESALINATION SYSTEM (ICADS)
 Financial Analysis Summary
 January 22, 2001

Project	Description	Capital Costs ^[1]	O&M Annual Costs in Year 2005 ^{[1][2]}	Water Cost per Acre-foot	
				Year 2005 ^[3]	Year 2003 Equivalent ^[4]
1	Benchmark Project 2.0 MGD Chino I Expansion 10 MGD Chino II	\$77,613,633	\$9,740,000	\$419	\$399
2	4.0 MGD Chino I Expansion	\$84,833,199	\$10,220,000	\$425	\$405
3	Dedicated Ontario Pipeline (no JCSD wheeling)	\$80,281,745	\$9,743,000	\$430	\$409
4	End-Users pay O&M for off-site dedicated facilities	\$77,613,633	\$9,384,000	\$399	\$380
5	Maximize IX capacity at Chino I (4.2 MGD)	\$85,201,299	\$10,250,000	\$421	\$401
6	2.0 MGD RO Expansion at Chino I	\$83,795,333	\$10,033,000	\$461	\$439
7	Baseline Project 4.2 MGD Chino I Expansion 8.0 MGD Chino II	\$71,567,084	\$9,548,000	\$373	\$355
8	Benchmark Project Without Arlington	\$65,008,013	\$7,610,000	\$443	\$422
9	Baseline Project Without 5 MG Reservoir	\$68,807,084	\$9,537,000	\$359	\$342

- Notes:
- [1] Costs are based upon high variable cost and medium energy cost assumptions. [1060 TDS, 232 Nitrate, and \$0.08/ kw-hr].
 - [2] O&M Annual cost provided for Year 2005 and includes O&M costs for existing Chino I, as included in Financial analysis by Salomon Smith Barney.
 - [3] Information provided by Salomon Smith Barney. Note 2005 is the first year of 100% ICADS flow delivery and all debt service in place.
 - [4] The year 2003 equivalent costs are provided in order to compare with Term Sheet initial cost per acre-foot.

Break Even Water Rates Summary (\$/AF)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Project 1											
Variable Costs- Low/Electric Power- Low	\$ 375	\$ 375	\$ 51	\$ 384	\$ 325	\$ 333	\$ 340	\$ 348	\$ 324	\$ 387	\$ 395
Variable Costs- Low/Electric Power- Medium	\$ 375	\$ 375	\$ 463	\$ 505	\$ 411	\$ 421	\$ 430	\$ 440	\$ 418	\$ 484	\$ 494
Variable Costs- Low/Electric Power- High	\$ 375	\$ 375	\$ 1,014	\$ 666	\$ 526	\$ 538	\$ 551	\$ 564	\$ 545	\$ 614	\$ 627
Variable Costs- Medium/Electric Power- Low	\$ 375	\$ 375	\$ 64	\$ 388	\$ 329	\$ 336	\$ 344	\$ 351	\$ 327	\$ 391	\$ 399
Variable Costs- Medium/Electric Power- Medium	\$ 375	\$ 375	\$ 477	\$ 509	\$ 415	\$ 424	\$ 434	\$ 444	\$ 422	\$ 488	\$ 499
Variable Costs- Medium/Electric Power- High	\$ 375	\$ 375	\$ 1,027	\$ 670	\$ 530	\$ 542	\$ 554	\$ 567	\$ 549	\$ 618	\$ 632
Variable Costs- High/Electric Power- Low	\$ 375	\$ 375	\$ 77	\$ 393	\$ 333	\$ 340	\$ 347	\$ 355	\$ 332	\$ 395	\$ 403
Variable Costs- High/Electric Power- Medium	\$ 375	\$ 375	\$ 490	\$ 514	\$ 419	\$ 428	\$ 438	\$ 448	\$ 426	\$ 492	\$ 503
Variable Costs- High/Electric Power- High	\$ 375	\$ 375	\$ 1,040	\$ 675	\$ 533	\$ 546	\$ 558	\$ 571	\$ 553	\$ 622	\$ 636
Project 2											
Variable Costs- High/Electric Power- Low	\$ 375	\$ 375	\$ 125	\$ 396	\$ 344	\$ 351	\$ 358	\$ 365	\$ 345	\$ 402	\$ 410
Variable Costs- High/Electric Power- Medium	\$ 375	\$ 375	\$ 349	\$ 502	\$ 425	\$ 434	\$ 443	\$ 452	\$ 434	\$ 493	\$ 503
Variable Costs- High/Electric Power- High	\$ 375	\$ 375	\$ 647	\$ 643	\$ 532	\$ 544	\$ 556	\$ 568	\$ 553	\$ 615	\$ 628
Project 3											
Variable Costs- High/Electric Power- Low	\$ 375	\$ 375	\$ 77	\$ 412	\$ 345	\$ 352	\$ 359	\$ 367	\$ 343	\$ 407	\$ 415
Variable Costs- High/Electric Power- Medium	\$ 375	\$ 375	\$ 490	\$ 533	\$ 430	\$ 440	\$ 449	\$ 459	\$ 438	\$ 504	\$ 514
Variable Costs- High/Electric Power- High	\$ 375	\$ 375	\$ 1,040	\$ 694	\$ 545	\$ 557	\$ 569	\$ 583	\$ 564	\$ 633	\$ 647
Project 4											
Variable Costs- High/Electric Power- Low	\$ 375	\$ 375	\$ 27	\$ 376	\$ 320	\$ 327	\$ 334	\$ 342	\$ 318	\$ 381	\$ 388
Variable Costs- High/Electric Power- Medium	\$ 375	\$ 375	\$ 413	\$ 488	\$ 399	\$ 408	\$ 417	\$ 427	\$ 405	\$ 470	\$ 480
Variable Costs- High/Electric Power- High	\$ 375	\$ 375	\$ 928	\$ 637	\$ 505	\$ 516	\$ 528	\$ 541	\$ 521	\$ 590	\$ 603
Project 5											
Variable Costs- High/Electric Power- Low	\$ 375	\$ 375	\$ 123	\$ 391	\$ 342	\$ 349	\$ 356	\$ 363	\$ 343	\$ 399	\$ 407
Variable Costs- High/Electric Power- Medium	\$ 375	\$ 375	\$ 333	\$ 494	\$ 421	\$ 430	\$ 439	\$ 449	\$ 431	\$ 489	\$ 499
Variable Costs- High/Electric Power- High	\$ 375	\$ 375	\$ 612	\$ 632	\$ 527	\$ 539	\$ 551	\$ 563	\$ 548	\$ 609	\$ 622
Project 6											
Variable Costs- High/Electric Power- Low	\$ 375	\$ 375	\$ 187	\$ 460	\$ 373	\$ 381	\$ 388	\$ 396	\$ 373	\$ 437	\$ 446
Variable Costs- High/Electric Power- Medium	\$ 375	\$ 375	\$ 617	\$ 585	\$ 461	\$ 471	\$ 481	\$ 491	\$ 471	\$ 537	\$ 548
Variable Costs- High/Electric Power- High	\$ 375	\$ 375	\$ 1,190	\$ 751	\$ 579	\$ 592	\$ 605	\$ 618	\$ 600	\$ 670	\$ 684
Project 7											
Variable Costs- High/Electric Power- Low	\$ 375	\$ 375	\$ (193)	\$ 298	\$ 277	\$ 284	\$ 290	\$ 297	\$ 268	\$ 339	\$ 346
Variable Costs- High/Electric Power- Medium	\$ 375	\$ 375	\$ 254	\$ 436	\$ 373	\$ 382	\$ 391	\$ 401	\$ 375	\$ 448	\$ 458
Variable Costs- High/Electric Power- High	\$ 375	\$ 375	\$ 849	\$ 621	\$ 502	\$ 514	\$ 526	\$ 539	\$ 517	\$ 593	\$ 607
Project 8											
Variable Costs- High/Electric Power- Low	\$ 375	\$ 375	\$ 224	\$ 401	\$ 353	\$ 360	\$ 367	\$ 374	\$ 381	\$ 388	\$ 395
Variable Costs- High/Electric Power- Medium	\$ 375	\$ 375	\$ 483	\$ 514	\$ 443	\$ 452	\$ 461	\$ 470	\$ 480	\$ 490	\$ 499
Variable Costs- High/Electric Power- High	\$ 375	\$ 375	\$ 828	\$ 664	\$ 563	\$ 575	\$ 587	\$ 599	\$ 612	\$ 625	\$ 638
Project 9											
Variable Costs- High/Electric Power- Low	\$ 375	\$ 375	\$ (193)	\$ 276	\$ 263	\$ 270	\$ 276	\$ 283	\$ 254	\$ 324	\$ 332
Variable Costs- High/Electric Power- Medium	\$ 375	\$ 375	\$ 254	\$ 415	\$ 359	\$ 368	\$ 377	\$ 387	\$ 360	\$ 433	\$ 443
Variable Costs- High/Electric Power- High	\$ 375	\$ 375	\$ 849	\$ 599	\$ 488	\$ 500	\$ 512	\$ 525	\$ 502	\$ 579	\$ 592

Preliminary, Subject to Change

Prepared by Salomon Smith Barney

Break Even Water Rates Summary (\$/AF)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Project 1											
Variable Costs- Low/Electric Power- Low	\$ 403	\$ 411	\$ 420	\$ 429	\$ 439	\$ 448	\$ 457	\$ 473	\$ 579	\$ 487	\$ 498
Variable Costs- Low/Electric Power- Medium	\$ 505	\$ 516	\$ 528	\$ 539	\$ 551	\$ 564	\$ 576	\$ 594	\$ 703	\$ 615	\$ 629
Variable Costs- Low/Electric Power- High	\$ 642	\$ 656	\$ 671	\$ 686	\$ 702	\$ 718	\$ 734	\$ 756	\$ 869	\$ 785	\$ 804
Variable Costs- Medium/Electric Power- Low	\$ 407	\$ 416	\$ 425	\$ 434	\$ 443	\$ 453	\$ 462	\$ 478	\$ 584	\$ 493	\$ 504
Variable Costs- Medium/Electric Power- Medium	\$ 510	\$ 520	\$ 532	\$ 544	\$ 556	\$ 568	\$ 581	\$ 599	\$ 708	\$ 620	\$ 635
Variable Costs- Medium/Electric Power- High	\$ 646	\$ 660	\$ 675	\$ 690	\$ 706	\$ 723	\$ 739	\$ 761	\$ 874	\$ 791	\$ 809
Variable Costs- High/Electric Power- Low	\$ 412	\$ 420	\$ 430	\$ 438	\$ 448	\$ 458	\$ 467	\$ 483	\$ 589	\$ 498	\$ 509
Variable Costs- High/Electric Power- Medium	\$ 514	\$ 525	\$ 537	\$ 548	\$ 561	\$ 573	\$ 586	\$ 605	\$ 714	\$ 626	\$ 640
Variable Costs- High/Electric Power- High	\$ 650	\$ 665	\$ 680	\$ 695	\$ 711	\$ 728	\$ 744	\$ 767	\$ 880	\$ 796	\$ 815
Project 2											
Variable Costs- High/Electric Power- Low	\$ 418	\$ 426	\$ 435	\$ 444	\$ 453	\$ 462	\$ 472	\$ 486	\$ 581	\$ 501	\$ 512
Variable Costs- High/Electric Power- Medium	\$ 514	\$ 525	\$ 536	\$ 547	\$ 559	\$ 571	\$ 583	\$ 600	\$ 698	\$ 621	\$ 635
Variable Costs- High/Electric Power- High	\$ 642	\$ 656	\$ 670	\$ 684	\$ 700	\$ 715	\$ 731	\$ 752	\$ 854	\$ 780	\$ 798
Project 3											
Variable Costs- High/Electric Power- Low	\$ 423	\$ 432	\$ 441	\$ 450	\$ 460	\$ 469	\$ 480	\$ 495	\$ 601	\$ 510	\$ 521
Variable Costs- High/Electric Power- Medium	\$ 525	\$ 537	\$ 548	\$ 560	\$ 572	\$ 585	\$ 598	\$ 616	\$ 725	\$ 638	\$ 652
Variable Costs- High/Electric Power- High	\$ 661	\$ 676	\$ 691	\$ 706	\$ 722	\$ 739	\$ 755	\$ 778	\$ 891	\$ 807	\$ 826
Project 4											
Variable Costs- High/Electric Power- Low	\$ 397	\$ 405	\$ 414	\$ 422	\$ 431	\$ 441	\$ 450	\$ 465	\$ 571	\$ 479	\$ 490
Variable Costs- High/Electric Power- Medium	\$ 491	\$ 501	\$ 512	\$ 523	\$ 535	\$ 547	\$ 559	\$ 577	\$ 685	\$ 597	\$ 611
Variable Costs- High/Electric Power- High	\$ 616	\$ 630	\$ 644	\$ 659	\$ 674	\$ 689	\$ 705	\$ 726	\$ 838	\$ 753	\$ 771
Project 5											
Variable Costs- High/Electric Power- Low	\$ 415	\$ 423	\$ 432	\$ 440	\$ 450	\$ 459	\$ 468	\$ 483	\$ 576	\$ 497	\$ 508
Variable Costs- High/Electric Power- Medium	\$ 510	\$ 520	\$ 531	\$ 542	\$ 554	\$ 566	\$ 578	\$ 595	\$ 691	\$ 615	\$ 629
Variable Costs- High/Electric Power- High	\$ 636	\$ 649	\$ 663	\$ 678	\$ 693	\$ 708	\$ 724	\$ 745	\$ 845	\$ 773	\$ 790
Project 6											
Variable Costs- High/Electric Power- Low	\$ 455	\$ 464	\$ 473	\$ 483	\$ 493	\$ 503	\$ 513	\$ 529	\$ 635	\$ 545	\$ 557
Variable Costs- High/Electric Power- Medium	\$ 559	\$ 571	\$ 583	\$ 596	\$ 608	\$ 621	\$ 635	\$ 654	\$ 763	\$ 676	\$ 691
Variable Costs- High/Electric Power- High	\$ 699	\$ 714	\$ 730	\$ 746	\$ 762	\$ 780	\$ 797	\$ 820	\$ 933	\$ 851	\$ 870
Project 7											
Variable Costs- High/Electric Power- Low	\$ 353	\$ 361	\$ 369	\$ 377	\$ 386	\$ 394	\$ 403	\$ 418	\$ 536	\$ 431	\$ 441
Variable Costs- High/Electric Power- Medium	\$ 468	\$ 478	\$ 489	\$ 500	\$ 512	\$ 524	\$ 536	\$ 555	\$ 676	\$ 574	\$ 587
Variable Costs- High/Electric Power- High	\$ 621	\$ 635	\$ 650	\$ 665	\$ 681	\$ 697	\$ 713	\$ 736	\$ 862	\$ 764	\$ 783
Project 8											
Variable Costs- High/Electric Power- Low	\$ 403	\$ 411	\$ 419	\$ 427	\$ 436	\$ 445	\$ 454	\$ 471	\$ 610	\$ 482	\$ 492
Variable Costs- High/Electric Power- Medium	\$ 510	\$ 520	\$ 531	\$ 542	\$ 554	\$ 566	\$ 578	\$ 597	\$ 740	\$ 615	\$ 628
Variable Costs- High/Electric Power- High	\$ 652	\$ 666	\$ 681	\$ 695	\$ 711	\$ 727	\$ 743	\$ 767	\$ 913	\$ 793	\$ 810
Project 9											
Variable Costs- High/Electric Power- Low	\$ 339	\$ 347	\$ 355	\$ 363	\$ 372	\$ 380	\$ 389	\$ 404	\$ 522	\$ 416	\$ 426
Variable Costs- High/Electric Power- Medium	\$ 454	\$ 464	\$ 475	\$ 486	\$ 498	\$ 510	\$ 522	\$ 540	\$ 661	\$ 559	\$ 573
Variable Costs- High/Electric Power- High	\$ 607	\$ 621	\$ 636	\$ 651	\$ 667	\$ 682	\$ 699	\$ 722	\$ 847	\$ 750	\$ 768

Preliminary, Subject to Change

Prepared by Salomon Smith Barney

Break Even Water Rates Summary (\$/AF)

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Project 1											
Variable Costs- Low/Electric Power- Low	\$ 509	\$ 521	\$ 532	\$ 544	\$ 556	\$ 569	\$ 582	\$ 595	\$ 609	\$ 622	\$ 635
Variable Costs- Low/Electric Power- Medium	\$ 644	\$ 658	\$ 673	\$ 689	\$ 704	\$ 721	\$ 737	\$ 754	\$ 772	\$ 790	\$ 807
Variable Costs- Low/Electric Power- High	\$ 822	\$ 842	\$ 861	\$ 881	\$ 902	\$ 923	\$ 945	\$ 967	\$ 990	\$ 1,013	\$ 1,036
Variable Costs- Medium/Electric Power- Low	\$ 515	\$ 527	\$ 538	\$ 550	\$ 563	\$ 575	\$ 588	\$ 602	\$ 615	\$ 629	\$ 642
Variable Costs- Medium/Electric Power- Medium	\$ 649	\$ 664	\$ 679	\$ 695	\$ 711	\$ 727	\$ 744	\$ 761	\$ 779	\$ 797	\$ 814
Variable Costs- Medium/Electric Power- High	\$ 828	\$ 847	\$ 867	\$ 887	\$ 908	\$ 929	\$ 951	\$ 974	\$ 997	\$ 1,020	\$ 1,043
Variable Costs- High/Electric Power- Low	\$ 521	\$ 532	\$ 544	\$ 556	\$ 569	\$ 582	\$ 595	\$ 609	\$ 622	\$ 637	\$ 650
Variable Costs- High/Electric Power- Medium	\$ 655	\$ 670	\$ 685	\$ 701	\$ 717	\$ 734	\$ 750	\$ 768	\$ 786	\$ 804	\$ 822
Variable Costs- High/Electric Power- High	\$ 834	\$ 853	\$ 873	\$ 893	\$ 914	\$ 936	\$ 958	\$ 980	\$ 1,004	\$ 1,027	\$ 1,050
Project 2											
Variable Costs- High/Electric Power- Low	\$ 523	\$ 534	\$ 545	\$ 557	\$ 569	\$ 581	\$ 594	\$ 607	\$ 620	\$ 634	\$ 646
Variable Costs- High/Electric Power- Medium	\$ 648	\$ 663	\$ 677	\$ 692	\$ 708	\$ 724	\$ 740	\$ 756	\$ 773	\$ 791	\$ 807
Variable Costs- High/Electric Power- High	\$ 816	\$ 835	\$ 853	\$ 873	\$ 893	\$ 913	\$ 934	\$ 956	\$ 978	\$ 1,000	\$ 1,022
Project 3											
Variable Costs- High/Electric Power- Low	\$ 533	\$ 544	\$ 556	\$ 568	\$ 581	\$ 594	\$ 607	\$ 621	\$ 635	\$ 649	\$ 662
Variable Costs- High/Electric Power- Medium	\$ 666	\$ 681	\$ 697	\$ 712	\$ 728	\$ 745	\$ 762	\$ 780	\$ 797	\$ 816	\$ 833
Variable Costs- High/Electric Power- High	\$ 845	\$ 864	\$ 884	\$ 904	\$ 925	\$ 947	\$ 969	\$ 992	\$ 1,015	\$ 1,039	\$ 1,061
Project 4											
Variable Costs- High/Electric Power- Low	\$ 501	\$ 512	\$ 523	\$ 535	\$ 547	\$ 560	\$ 572	\$ 585	\$ 598	\$ 612	\$ 624
Variable Costs- High/Electric Power- Medium	\$ 624	\$ 639	\$ 653	\$ 668	\$ 683	\$ 699	\$ 715	\$ 732	\$ 749	\$ 766	\$ 782
Variable Costs- High/Electric Power- High	\$ 789	\$ 807	\$ 826	\$ 845	\$ 865	\$ 885	\$ 906	\$ 927	\$ 949	\$ 972	\$ 993
Project 5											
Variable Costs- High/Electric Power- Low	\$ 519	\$ 530	\$ 541	\$ 552	\$ 564	\$ 577	\$ 589	\$ 602	\$ 615	\$ 629	\$ 641
Variable Costs- High/Electric Power- Medium	\$ 643	\$ 657	\$ 671	\$ 686	\$ 701	\$ 717	\$ 733	\$ 749	\$ 766	\$ 783	\$ 800
Variable Costs- High/Electric Power- High	\$ 808	\$ 826	\$ 845	\$ 864	\$ 884	\$ 904	\$ 924	\$ 946	\$ 967	\$ 990	\$ 1,011
Project 6											
Variable Costs- High/Electric Power- Low	\$ 569	\$ 581	\$ 593	\$ 606	\$ 619	\$ 633	\$ 647	\$ 661	\$ 675	\$ 690	\$ 704
Variable Costs- High/Electric Power- Medium	\$ 706	\$ 722	\$ 738	\$ 754	\$ 771	\$ 788	\$ 806	\$ 824	\$ 843	\$ 862	\$ 880
Variable Costs- High/Electric Power- High	\$ 890	\$ 910	\$ 930	\$ 952	\$ 973	\$ 996	\$ 1,019	\$ 1,042	\$ 1,066	\$ 1,091	\$ 1,114
Project 7											
Variable Costs- High/Electric Power- Low	\$ 451	\$ 461	\$ 472	\$ 483	\$ 494	\$ 506	\$ 517	\$ 530	\$ 542	\$ 555	\$ 566
Variable Costs- High/Electric Power- Medium	\$ 601	\$ 615	\$ 630	\$ 644	\$ 659	\$ 676	\$ 691	\$ 708	\$ 725	\$ 742	\$ 759
Variable Costs- High/Electric Power- High	\$ 801	\$ 820	\$ 840	\$ 860	\$ 881	\$ 902	\$ 923	\$ 946	\$ 969	\$ 992	\$ 1,015
Project 8											
Variable Costs- High/Electric Power- Low	\$ 502	\$ 513	\$ 524	\$ 535	\$ 546	\$ 558	\$ 570	\$ 583	\$ 596	\$ 609	\$ 621
Variable Costs- High/Electric Power- Medium	\$ 642	\$ 657	\$ 671	\$ 686	\$ 701	\$ 717	\$ 732	\$ 749	\$ 766	\$ 783	\$ 800
Variable Costs- High/Electric Power- High	\$ 829	\$ 848	\$ 867	\$ 887	\$ 907	\$ 928	\$ 949	\$ 971	\$ 993	\$ 1,016	\$ 1,039
Project 9											
Variable Costs- High/Electric Power- Low	\$ 436	\$ 447	\$ 457	\$ 468	\$ 479	\$ 491	\$ 503	\$ 515	\$ 527	\$ 540	\$ 552
Variable Costs- High/Electric Power- Medium	\$ 586	\$ 601	\$ 615	\$ 630	\$ 645	\$ 661	\$ 677	\$ 693	\$ 710	\$ 728	\$ 744
Variable Costs- High/Electric Power- High	\$ 787	\$ 806	\$ 826	\$ 845	\$ 866	\$ 887	\$ 909	\$ 931	\$ 954	\$ 978	\$ 1,001

Preliminary, Subject to Change

Prepared by Salomon Smith Barney

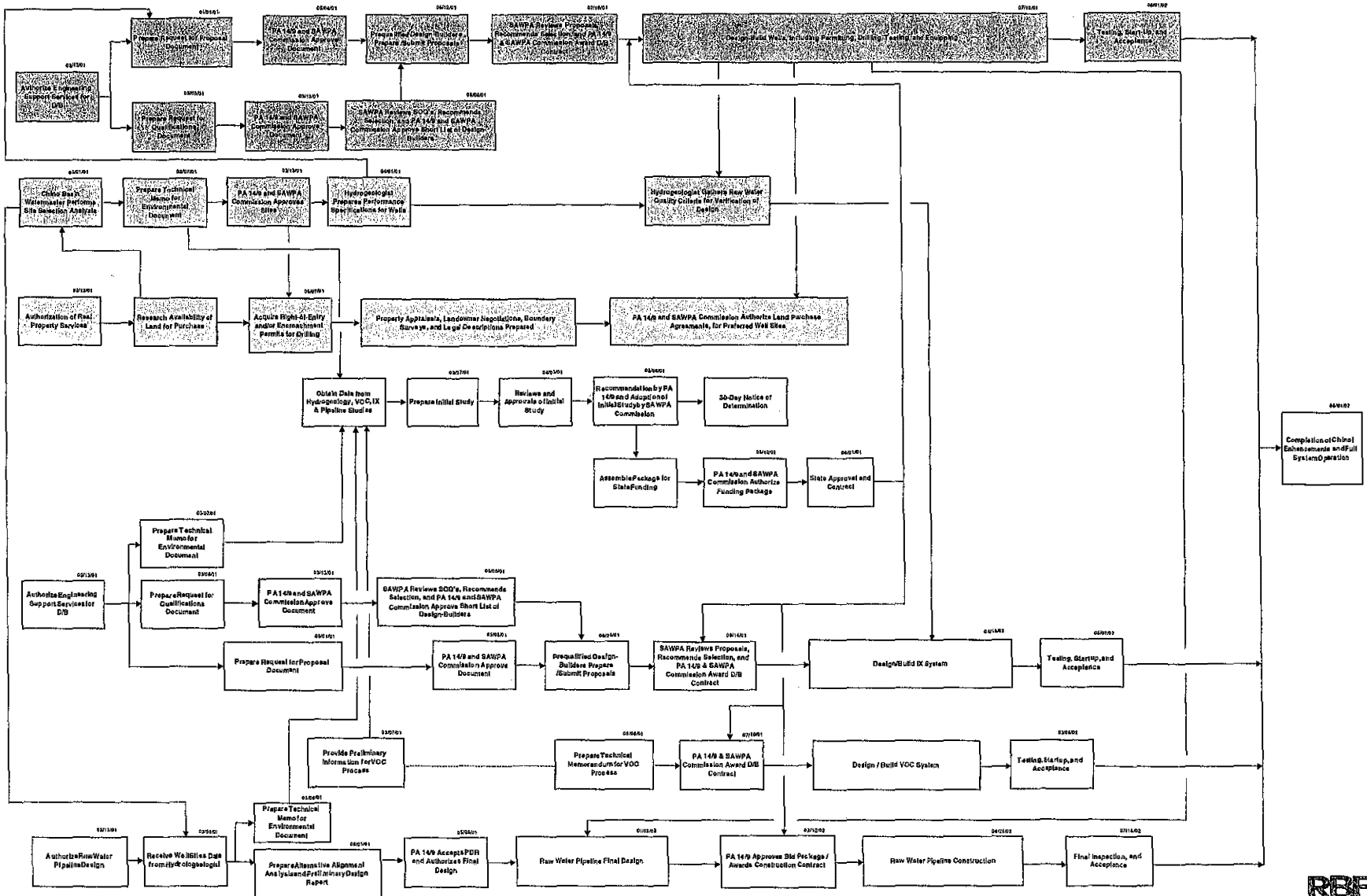
**INTEGRATED CHINO/ARLINGTON DESALINATION SYSTEM
CHINO I ENHANCEMENTS - FLOW CHART OF KEY PROJECT TASKS AND ANTICIPATED DATES OF COMPLETION**

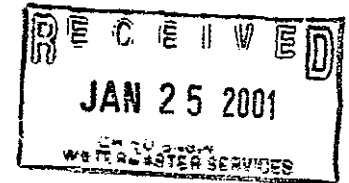
Wells Design/Bid

Hydrogeology

Funding

PA 149/SAWPA/State Funding





RESOLUTION 2146

A RESOLUTION OF THE BOARD OF DIRECTORS
OF WESTERN MUNICIPAL WATER DISTRICT OF
RIVERSIDE COUNTY TO EXTEND THE BOARD'S
PRIOR CONDITIONAL APPROVAL OF THE PEACE
AGREEMENT FOR THE CHINO BASIN OPTIMUM
BASIN MANAGEMENT PLAN

WHEREAS, on July 31, 2000, the Board of Directors ("Board") of Western Municipal Water District of Riverside County ("Western") adopted Resolution No. 2120 to approve and authorize the execution of the Peace Agreement for the Chino Basin Optimum Basin Management Plan ("OBMP"), subject to certain terms and conditions;

WHEREAS, Resolution No. 2120 requires that all terms and conditions of Western's approval and execution of the OBMP Peace Agreement be completed and satisfied pursuant to a separate written agreement, signed and executed by all parties to the OBMP Peace Agreement no later than September 30, 2000;

WHEREAS, on September 30, 2000, the Board adopted Resolution No. 2127 extending the deadline for satisfying all terms and conditions of Western's approval of the OBMP Peace Agreement until November 30, 2000;

WHEREAS, on November 15, 2000, the Board adopted Resolution No. 2136 extending the deadline for satisfying all terms and conditions of Western's approval of the OBMP Peace Agreement until January 30, 2000;

WHEREAS, the parties to OBMP Peace Agreement have continued through each extension of the deadline recited above to negotiate and work towards satisfying the terms and conditions that would make Western's execution of the OBMP Peace Agreement effective;

R-2146

- 2 -

WHEREAS, in furtherance of such negotiations, the parties have developed a document entitled "Term Sheet of Essential Deal Points for Final Desalter Contract" ("Term Sheet"), memorializing an understanding among the parties that each party will use its best efforts to develop a subsequent binding agreement based on the provisions of the Term Sheet;

WHEREAS, the parties are still refining the details of the Term Sheet, the most recent copy of which is attached hereto as Exhibit "A";

WHEREAS, the parties have recently received a comprehensive feasibility study prepared by outside consultants analyzing various design and finance options for the desalter project contemplated in the Term Sheet, Article VII of the OBMP Peace Agreement, and Resolution No. 2120; and

WHEREAS, the parties to the OBMP Peace Agreement have indicated that an additional sixty (60) days would assist in finalizing the provisions of the Term Sheet, using the feasibility study to develop a consensus on the basic design and finance of the desalter project, and reducing the provisions of the Term Sheet to a final binding agreement that satisfies the terms and conditions set forth in Resolution No. 2120.

NOW THEREFORE, the Board of Directors of Western Municipal Water District of Riverside County hereby resolves as follows:

SECTION 1. Section 2 of Resolution No. 2120, which establishes the terms and conditions to the effectiveness of Western's approval and execution of the OBMP Peace Agreement, is hereby modified to provide that all terms and conditions set

- 3 -

R-2146

forth in Section 2 of Resolution No. 2120 must be fully satisfied pursuant to a separate written agreement, signed and executed by all parties to the OBMP Peace Agreement no later than March 30, 2001.

SECTION 2. All other provisions of Resolution No. 2120 shall remain in full force and effect.

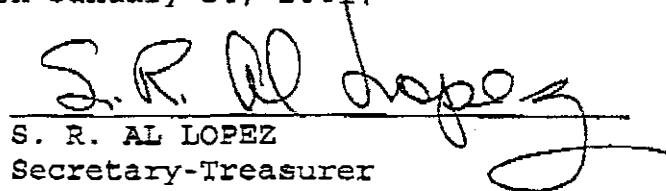
SECTION 3. The President of the Board of Directors shall sign this Resolution, the Secretary-Treasurer of the Board of Directors shall attest thereto and cause a certified copy thereof to be delivered to all parties to the Peace Agreement, and this Resolution shall take effect and be in force according to law on the date of adoption set forth below.

ADOPTED, this 24th day of January, 2001.


DONALD L. SCHROEDER
President

January 24, 2001

I HEREBY CERTIFY that the foregoing is a full, true, and correct copy of Resolution 2146 adopted by the Board of Directors of Western Municipal Water District of Riverside County at a duly-noticed regular meeting held on January 24, 2001.


S. R. AL LOPEZ
Secretary-Treasurer

R-2146

EXHIBIT "A"

**TERM SHEET OF
ESSENTIAL DEAL POINTS
FOR FINAL DESALTER CONTRACT**

The Purchasers (City of Chino, City of Chino Hills, City of Norco, City of Ontario, Jurupa Community Services District, Santa Ana River Water Company, and State of California) and Sellers (Inland Empire Utilities Agency, Orange County Water District, and Western Municipal Water District) of desalted water contemplated by the Peace Agreement mutually agree that the following represent the essential terms to be incorporated into a final agreement for the purchase and sale of desalted water. These terms are not intended to be exhaustive, and the parties expressly reserve the right to include additional and/or modified terms in the final agreement. They do, however, represent a meeting of the minds as to those matters that are agreed by all parties to be necessary and essential to a final agreement. No party is bound by the adoption of the term sheet, other than to exercise best efforts to reduce these terms to a final agreement following the completion of the current feasibility and design study for the desalter project.

1. As an express condition precedent to the effectiveness of a final agreement, Western Municipal Water District ("WMWD") and Inland Empire Utilities Agency ("IEUA"), through Project Committee No. 14 of the Santa Ana Watershed Project Authority ("SAWPA"), must secure a minimum of \$56,000,000 in grant funds from the proceeds of Proposition 13 designated for the construction of the desalter project.
2. The price for desalted water under a final agreement shall be the actual cost to construct the desalter project and to produce and deliver the desalted water, but it shall not to exceed \$375, as adjusted. In determining "actual cost," the following guidelines shall apply:
 - a. Construction of the desalter project shall be the responsibility of WMWD and IEUA, through Project Committee No. 14. No more the \$19 million of any debt financing issued for construction of the desalter project shall be considered "actual costs" and recovered from the Purchasers through the purchase price for the desalted water. Subject to Paragraph 7 below, this clause allows the Sellers some discretion to configure and design the desalter project so long as such decisions do not result in more than \$19 million of the debt financing for construction being recovered from the Purchasers through the purchase price.
 - b. All costs and all revenues attributable to each individual component of the desalter project shall be included in the calculation of "actual costs."
 - c. The \$375 per acre-foot purchase price cap includes the cost of pumping and transporting the desalted water to a point of delivery to be agreed upon. Jurupa Community Service District ("Jurupa") shall not charge WMWD, IEUA, or Project Committee No. 14 a wheeling charge for the use of its conveyance

EXHIBIT "A"

R-2146

- facilities through which desalted water is delivered to the City of Ontario ("Ontario") or other Purchaser.
- d. Adjustments to \$375 per acre-foot purchase price cap shall be based upon: (i) the change in the cost of energy as determined by the actual energy costs of the desalter project; (ii) the change in the cost of chemicals as determined by the actual chemical costs of the desalter project; and (iii) all other costs adjusted by the Consumer Price Index, Less Energy and Food Products. The parties accept the proposed adjustment in this paragraph as a guideline. They will exercise best efforts to meet the challenge of providing adjustments that meet the intent of this paragraph. If the above guideline does not appear feasible, they will exercise best efforts to develop another methodology that fairly represents the potential increases and decreases in costs for the desalter project.
- e. The trigger for making adjustments and establishing a baseline from which to make future adjustments as described in Paragraph 2(d) above, shall be the date desalted water is first delivered from the desalter project to a Purchaser.
3. The parties agree that execution of a final agreement shall be deemed to replace and satisfy the obligations of WMWD and IEUA under Article VII of the Peace Agreement, except with regards to any obligations therein concerning "Future Desalters." In addition, the parties shall submit a request to the Court that it enter an order making the foregoing accord and satisfaction binding on all other parties to the court-approved Peace Agreement.
4. The Purchasers will work with the State of California to accommodate their future potential domestic water supply requirements.
5. Upon completion of the necessary components of the desalter project, Sellers shall annually deliver, and Ontario, Jurupa, and Santa Ana River Water Company shall annually purchase at the established purchase price, a minimum of 11,200 acre-feet per year of desalted water, at a rate not to exceed 11 mgd.
6. At any time within the next ten years, the City of Chino ("Chino") and/or the City of Chino Hills ("Chino Hills") may elect, in their sole discretion, to purchase up to a combined additional 1,000 acre-feet of desalted water. WMWD and IEUA shall then have a reasonable period of time to construct, through Project Committee No. 14, an additional 1 mgd of capacity in the desalter project to meet up to a total of 1,000 acre-feet of new demand requested by Chino and/or Chino Hills. "Reasonable time" shall be defined in the final agreement.
7. The final design of the desalter project shall be selected from those alternatives, or combination of alternatives, now being analyzed in the feasibility report being prepared for SAWPA by RBF Engineering.

CHINO BASIN WATERMASTER

Case No. RCV 51010

Chino Basin Municipal Water District v. The City of Chino

PROOF OF SERVICE

I declare that:

I am employed in the County of San Bernardino, California. I am over the age of 18 years and not a party to the within action. My business address is Chino Basin Watermaster, 8632 Archibald Avenue, Suite 109, Rancho Cucamonga, California 91730; telephone (909) 484-3888.

On January 30, I served the documents identified below

- 1) **EX PARTE APPLICATION FOR AN ORDER SHORTENING TIME FOR THE FILING OF MOTION TO CONTINUE FEBRUARY 1, 2001 HEARING** for hearing January 31, 2001, 8:30 am, Department R8.
- 2) **EX PARTE MOTION FOR A CONTINUANCE** for hearing January 31, 8:30 am, Department R8.
Exhibit "A" – Integrated Chino/Arlington Desalination System dated January 23, 2001
Exhibit "B" – Resolution 2146 of the Western Municipal Water District extending the Board's prior conditional approval of the Peace Agreement.

by placing a true copy of same in sealed envelopes for delivery by United States Postal Service mail at Rancho Cucamonga, California, to each of the addresses shown on the attached service lists:

- Attorney Service List
- Mailing List A

I declare under penalty of perjury that the foregoing is true and correct and that this declaration was executed at Rancho Cucamonga, California, on January 30, 2001.



Mary L. Staulay

Attorney Service List Updated 1/30/01

RICHARD ADAMS II
DEPUTY COUNSEL - POMONA
ALVAREZ-GLASMAN & CLOVEN
505 S GAREY AVE
POMONA CA 91766

DAVID B. ANDERSON
DEPARTMENT OF WATER RESOURCES
1416 NINTH ST
P.O. BOX 94236
SACRAMENTO CA 94236-0001

WILLIAM J. BRUNICK ESQ.
BRUNICK ALVAREZ & BATTERSBY
P O BOX 6425
SAN BERNARDINO CA 92412

THOMAS S. BUNN III
LAGERLOF SENEAL BRADLEY
GOSNEY & KRUSE
301 N LAKE AVE 10TH FL
PASADENA CA 91101-4108

CHINO BASIN WATERMASTER
8632 ARCHIBALD AVE STE 109
RANCHO CUCAMONGA CA 91730

JEAN CIHIGOYENETCHE
GENERAL COUNSEL-IEUA
CIHIGOYENETCHE GROSSBERG &
CLOUSE
3602 INLAND EMPIRE BLVD STE C315
ONTARIO CA 91764

ROBERT DOUGHERTY
GENERAL COUNSEL-ONTARIO
COVINGTON & CROWE
P O BOX 1515
ONTARIO CA 91762

JIM ERICKSON
LAW OFFICES OF JIMMY GUTIERREZ
EL CENTRAL REAL PLAZA
12616 CENTRAL AVE
CHINO CA 91710

FREDERIC FUDACZ
NOSSAMAN GUTHNER KNOX & ELLIOTT LLP
445 S FIGUEROA ST 31ST FL
LOS ANGELES CA 90071-1672

ERIC GARNER
BEST BEST & KRIEGER LLP
P O BOX 1028
RIVERSIDE CA 92502-1028

JIMMY GUTIERREZ
ATTORNEY-CITY OF CHINO
EL CENTRAL REAL PLAZA
12616 CENTRAL AVE
CHINO CA 91710

SHARON JOYCE
LEGAL COUNSEL - STATE OF CA - CDC
1515 S STREET ROOM 125
SACRAMENTO, CA 95814

STEVEN KENNEDY
GENERAL COUNSEL-TVMWD
BRUNICK ALVAREZ & BATTERSBY
P O BOX 6425
SAN BERNARDINO CA 92412

ARTHUR KIDMAN
ATTORNEY-MVWD
MC CORMICK KIDMAN & BEHRENS
695 TOWN CENTER DR STE 400
COSTA MESA CA 92626

MARILYN LEVIN
STATE OF CALIFORNIA
OFFICE OF THE ATTORNEY GENERAL
300 S SPRING ST 11TH FL N TOWER
LOS ANGELES CA 90013-1232

JAMES L MARKMAN
RICHARDS WATSON & GERSON
P O BOX 1059
BREA CA 92622-1059

DAN MC KINNEY
SPECIAL COUNSEL-AG POOL
REID & HELLYER
P O BOX 1300
RIVERSIDE CA 92502-1300

THOMAS H MC PETERS
MC PETERS MC ALEARNEY SHIMFF &
HATT
P O BOX 2084
REDLANDS CA 92373

JAMES P MORRIS
BEST BEST & KRIEGER LLP
P O BOX 1028
RIVERSIDE CA 92502-1028

JARLATH OLAY
DEPUTY GENERAL COUNSEL MWD
700 N ALAMEDA ST
LOS ANGELES CA 90012

TIMOTHY J RYAN
SAN GABRIEL VALLEY WATER
COMPANY
P O BOX 6010
EL MONTE CA 91734

JOHN SCHATZ
COUNSEL-JCSD
P O BOX 7775
LAGUNA NIGUEL CA 92607-7775

ANNE J SCHNEIDER
ELLISON & SCHNEIDER
2015 H ST
SACRAMENTO CA 95814-3109

JESS SENEAL
LAGERLOF SENEAL BRADLEY
GOSNEY & KRUSE
301 N LAKE AVE 10TH FL
PASADENA CA 91101-4108

GERALYN SKAPIK ATTORNEY
CITY OF CHINO HILLS
BURKE WILLIAMS & SORENSON
611 W 6TH ST STE 2500
LOS ANGELES CA 90071-1469

SCOTT SLATER
HATCH & PARENT
21 E CARRILLO ST
SANTA BARBARA CA 93101-2782

MICHELE A STAPLES
JACKSON DEMARCO & PECKENPAUGH
4 PARK PLAZA 16TH FL
IRVINE CA 92614

GENE TANAKA
BEST BEST & KRIEGER LLP
P O BOX 1028
RIVERSIDE CA 92502-1028

ANNE T THOMAS
BEST BEST & KRIEGER LLP
P O BOX 1028
RIVERSIDE CA 92502-1028

SUSAN TRAGER
LAW OFFICES OF SUSAN M TRAGER
2100 SE MAIN ST STE 104
IRVINE CA 92614-6238

AAA AA
MAILING LIST 1
UPDATED 1/21/01

CURTIS AARON
CITY OF FONTANA
8353 SIERRA AVE
FONTANA CA 92335-3598

RICHARD ANDERSON
1365 W FOOTHILL BLVD STE 1
UPLAND CA 91786

A W ARAIZA
WEST SAN BERN CWD
P.O. BOX 920
RIALTO CA 92376-0920

STEVE ARBELBIDE
CBWM BOARD
417 PONDEROSA TR
CALIMESA CA 92320

DAVE ARGO
BLACK & VEATCH
6 VENTURE STE 315
IRVINE CA 92618-3317

DAN ARRIGHI
SAN GABRIEL VALLEY WATER COMPANY
P.O. BOX 6010
EL MONTE CA 91734-2010

RICH ATWATER
IEUA
P.O. BOX 697
RCHO CUCA CA 91729-0697

RODNEY BAKER
P.O. BOX 438
COULTERVILLE CA 95311-0438

VIC BARRION
RELIANT ENERGY ETIWANDA
8996 ETIWANDA AVE
ETIWANDA CA 91739

KEITH BELAND
STATE OF CALIFORNIA CDC
P.O. BOX 942883
SACRAMENTO CA 94283-0001

BILL BENNETT
VULCAN MATERIALS COMPANY
P.O. BOX 39756
LOS ANGELES CA 90039

BOB BEST
NAT'L RESOURCES CONS SVS
25864 BUSINESS CENTER DR K
REDLANDS CA 92374

JOHN BEZZANT
CCG ONTARIO, LLC
3990 WESTERLY PLACE STE 200
NEWPORT BEACH CA 92660

GERALD BLACK
FONTANA UNION WATER CO
P.O. BOX 309
FONTANA CA 92334

MICHAEL BOCCADORO
THE DOLPHIN GROUP
925 L ST STE 800
SACRAMENTO CA 95814

PATTI BONAWITZ
IEUA
P.O. BOX 697
RCHO CUCA CA 91729-0697

FRANK BROMMENSCHENKEL
134 DAVIS ST
SANTA PAULA CA 93060

JIM BRYSON
FONTANA WATER COMPANY
P.O. BOX 987
FONTANA CA 92334-0987

BRUCE CASH
UNITED WATER MGMT CO INC
1905 BUSINESS CENTER DR STE 100
SAN BERNARDINO CA 92408

TERRY CATLIN
CBWM BOARD
2344 IVY CT
UPLAND CA 91784

NEIL CLIFTON
IEUA
P.O. BOX 697
RCHO CUCA CA 91729-0697

LAURA COOMES
ARROWHEAD WATER COMP
5772 JURUPA RD
ONTARIO CA 91761-3672

DAVID COOPER
SUNKIST GROWERS INC
760 E SUNKIST ST
ONTARIO CA 91761

DAVID B COSGROVE
RUTAN & TUCKER
611 ANTON BLVD STE 1400
COSTA MESA CA 92626

DAVE CROSLEY
CITY OF CHINO
5050 SCHAEFER AVE
CHINO CA 91710-5549

DAVID DE JESUS
CBWM BD MEMBER (TVMWD)
146 E COLLEGE ST
COVINA CA 91723

ROBERT DEBERARD
CHAIRMAN-AG POOL
1886 UKIAH WAY
UPLAND CA 91784

ROBERT DELOACH
CUCAMONGA CTY WD
P.O. BOX 638
RANCHO CUCA CA 91729-0638

BILL DENDY
BILL DENDY & ASSOCIATES
429 F ST STE 2
DAVIS CA 95616-4111

GREG DEVEREAUX
CITY OF ONTARIO
303 E "B" ST
ONTARIO CA 91764

DOUG DRURY
IUEA
P.O. BOX 697
RANCHO CUCAMONGA CA 91730

GLENN DUNCAN
CHINO, CITY OF
P.O. BOX 667
CHINO CA 91708-0667

GLEN DURRINGTON
5512 FRANCIS ST
CHINO CA 91710

DICK DYKSTRA
10129 SCHAEFER
ONTARIO CA 91761-7973

MOHAMED EL AMAMY
CITY OF ONTARIO
1425 S BON VIEW
ONTARIO CA 91761-4406

BOB FEENSTRA
MILK PRODUCERS COUNCIL
13545 S EUCLID AVE
ONTARIO CA 91762-6656

RALPH FRANK
755 LAKEFIELD RD #E
WESTLAKE VILLAGE CA 91361

COLE FRATES
AZURIX
5657 WILSHIRE BLVD STE 330
LOS ANGELES CA 90036

CARL FREEMAN
L. D. KING
2151 CONVENTION CENTRE WAY
ONTARIO CA 91764

SAM FULLER
SAN BERNARDINO VALLEY MWD
P.O. BOX 5906
SAN BERNARDINO CA 92412-5906

MARK GAGE P E
GEOMATRIX CONSULTANTS INC
2101 WEBSTER ST #1200
OAKLAND CA 94612

JIM GALLAGHER
SOUTHERN CALIFORNIA WATER CO
2143 CONVENTION CTR WAY STE 110
ONTARIO CA 91764

JOE GRINDSTAFF
SAWPA
11615 STERLING AVE
RIVERSIDE CA 92503

JACK HAGERMAN
STATE OF CALIFORNIA CIM
4158 CENTER ST
NORCO CA 91760

LISA HAMILTON
GE/MGR ENV REMEDIATION PRGM
640 FREEDOM BUSINESS CTR
KING OF PRUSSIA PA 19406

PATSY HAMILTON
STATE OF CALIFORNIA, CIW
P.O. BOX 6000
CORONA CA 91718

DONALD HARRIGER
CBWM BD/ALTERNATE (WMWD)
P.O. BOX 5286
RIVERSIDE CA 92517-5286

CARL HAUGE
DEPT OF WATER RESOURCES
1020 9TH ST 3RD FL
SACRAMENTO CA 95814

PAUL HOFER
CBWM BOARD
11248 S TURNER AVE
ONTARIO CA 91761

ANNESLEY IGNATIUS
COUNTY OF SAN BERNARDINO FCD
825 E 3RD ST
SAN BERNARDINO CA 92415-0835

JOHN WILLIAM INGRAHAM
CNTY OF SAN BERNARDINO
7000 MERRILL AVE BOX 1
CHINO CA 91710-9027

NINA JAZMADARIAN
METROPOLITAN WATER DISTRICT
P.O. BOX 54153
LOS ANGELES CA 90054-0153

KEN JESKE
CITY OF ONTARIO
1425 S BON VIEW AVE
ONTARIO CA 91761-4406

JOSEPHINE JOHNSON
CBWM BOARD
3635 RIVERSIDE DR
CHINO CA 91710

BARRETT KEHL
CBWCD
P.O. BOX 2400
MONTCLAIR CA 91763-0900

ROB KETTLE
STATE OF CALIFORNIA, CIW
P.O. BOX 6000
CORONA CA 91718

PATRICK KING
CONSULTANT TO SENATOR NELL SOTO
822 N EUCLID AVE
ONTARIO CA 91762

MARK KINSEY
MONTE VISTA IRRIGATION CO
10575 CENTRAL AVE
MONTCLAIR CA 91763

MARK KINSEY
MONTE VISTA WATER DISTRICT
P.O. BOX 71
MONTCLAIR CA 91763-0071

GENE KOOPMAN
13898 ARCHIBALD AVE
ONTARIO CA 91761-7979

KRONICK ET AL
KRONICK MOSKOVITZ TIEDEMANN &
GIRARD
400 CAPITOL MALL 27TH FL
SACRAMENTO CA 95814-4417

KENNETH KULES
METROPOLITAN WATER DISTRICT
P.O. BOX 54153
LOS ANGELES CA 90054-0153

RONALD LA BRUCHERIE
12953 S BAKER AVE
ONTARIO CA 91761-7903

FRED LANTZ
CBWM BD/ALTERNATE (TVMWD)
P.O. BOX 2701
POMONA CA 91769

CARLOS LOZANO
STATE OF CA YTS
15180 S. EUCLID
CHINO CA 91710

MIKE MAESTAS
CITY OF CHINO HILLS
2001 GRAND AVE
CHINO HILLS CA 91709-4869

ALAN MARKS
CTY OF SAN BERN CTY CNSL
157 W 5TH ST
SAN BERNARDINO CA 92415

MIKE MCGRAW
CBWM BD MEMBER/FWC
P.O. BOX 987
FONTANA CA 92334-0987

CAROLE MCGREEVY
JURUPA COMM SVCS DIST
8621 JURUPA RD
RIVERSIDE CA 92509-3229

BILL MILLS
ORANGE COUNTY WATER DIST
P.O. BOX 8300
FTN VALLEY CA 92728-8300

RUBEN MONTES
SAN BERNARDINO CTY FLD CONT DIS
825 E THIRD ST
SAN BERNARDINO CA 92415

JIM MOODY
CITY OF UPLAND
P.O. BOX 460
UPLAND CA 91785-0460

EILEEN MOORE
SECY ONTARIO CITY COUNCIL
303 E "B" STREET
ONTARIO CA 91764

CHRIS NAGLER
DEPT OF WATER RESOURCES
770 FAIRMONT AVE SUITE 102
GLENDALE CA 91203-1035

ROBERT NEUFELD
CHAIRMAN CBWM BOARD
14111 SAN GABRIEL CT
RANCHO CUCAMONGA CA 91739

ROBERT NICHOLSON
SAN GABRIEL VALLEY WC
P.O. BOX 6010
EL MONTE CA 91734-2010

DANA OLDENKAMP
MILK PRODUCERS COUNCIL
3214 CENTURION PL
ONTARIO CA 91761

SANDY OLSON
WALNUT VALLEY WATER DISTRICT
271 S BREA CANYON RD
WALNUT CA 91789

STAN OWENS
STATE OF CA CIM
P.O. BOX 128
CHINO CA 91710

MARY PARENTE
8559 EDISON AVE
CHINO CA 91710-9242

HENRY PEPPER
CITY OF POMONA
505 S GAREY AVE
POMONA CA 91766

JEFF PIERSON
2 HEXAM ST
IRVINE CA 92612

ROBB QUINCEY
CITY OF HESPERIA
15776 MAIN ST
HESPERIA CA 92345

BILL RICE
RWQCB - SANTA ANA REGION
3737 MAIN ST STE 500
RIVERSIDE CA 92501-3339

LES RICHTER
CALIFORNIA SPEEDWAY
P.O. BOX 9300
FONTANA CA 92334-9300

DAVID RINGEL
MONTGOMERY WATSON
P.O. BOX 7009
PASADENA CA 91109-7009

ARNOLD RODRIGUEZ
SANTA ANA RIVER WATER CO
10530 54TH ST
MIRA LOMA CA 91752-2331

WAYNE SALMI
PRAXAIR
5705 AIRPORT DR
ONTARIO CA 91761

PATRICK SAMPSON
P.O. BOX 660
POMONA CA 91769

DIANE SANCHEZ
DWR
770 FAIRMONT AVE
GLENDALE CA 91203-1035

JOSEPH C SCALMANINI
500 FIRST ST
WOODLAND CA 95695

JOE SCHENK
CITY OF NORCO
P.O. BOX 428
NORCO CA 91760-0428

DONALD SCHROEDER
CBWM BOARD
3700 MINTERN
RIVERSIDE CA 92509

JUDY SCHURR
30587 LOS ALTOS DR
REDLANDS CA 92373

DAVID SCRIVEN
KRIEGER & STEWART ENGINEERING
3602 UNIVERSITY AVE
RIVERSIDE CA 92501

MICHAEL SMITH
NICHOLS STEAD BOILEAU & KOSTOFF
223 W FOOTHILL BLVD #200
CLAREMONT CA 91711-2708

KYLE SNAY
SOUTHERN CA WATER CO
401 S SAN DIMAS CANYON RD
SAN DIMAS CA 91773

NELL SOTO
STATE CAPITOL
ROOM NO 4066
SACRAMENTO CA 95814

BILL STAFFORD
MARYGOLD MUTUAL WATER CO
9725 ALDER ST
BLOOMINGTON CA 92316-1637

DAVID STARNES
MOBILE COMMUNITY MGMT CO
1801 E EDINGER AVE STE 230
SANTA ANA CA 92705

L HAIT
STERN & GOLDBERG
9150 WILSHIRE BLVD STE 100
BEVERLY HILLS CA 90210

TOM STETSON
STETSON ENGINEERS INC
3104 E GARVEY AVE
WEST COVINA CA 91791

CRAIG STEWART
GEOMATRIX CONSULTANTS INC.
330 W BAY ST STE 140
COSTA MESA CA 92629

TRACI STEWART
CHINO BASIN WATERMASTER
8632 ARCHIBALD ST STE 109
RANCHO CUCAMONGA CA 91730

SWRCB
SWRCB - DIV OF WATER RIGHTS
P.O. BOX 2000
SACRAMENTO CA 95809-2000

JIM TAYLOR
POMONA UTILITY SVS DEPT.
148 N HUNTINGTON BLVD
POMONA CA 91768

JERRY THIBEAULT
RWQCB - SANTA ANA REGION
3737 MAIN ST STE 500
RIVERSIDE CA 92501-3339

MICHAEL THIES
SPACE CENTER MIRA LOMA INC
3401 S ETIWANDA AVE BLDG 503
MIRA LOMA CA 91752-1126

JOHN THORNTON
PSOMAS AND ASSOCIATES
3187 RED HILL AVE, SUITE 250
COSTA MESA CA 92626

MANAGER
THREE VALLEYS M W D
P.O. BOX 1300
CLAREMONT CA 91711

GEOFFREY VANDEN HEUVEL
CBWM BOARD
7551 KIMBALL AVE
CHINO CA 91710

ERICK VAUGHN
ANGELICA RENTAL SERVICE
1575 N CASE ST
ORANGE CA 92867-3635

MARK WARD
AMERON INTERNATIONAL
13032 SLOVER AVE
FONTANA CA 92335-6990

RAY WELLINGTON
SAN ANTONIO WATER COMPANY
139 N EUCLID AVE
UPLAND CA 91786-6036

CHARLES R. WHITE
DWR-SO DIST
770 FAIRMONT AVE
GLENDALE CA 91203-1035

MICHAEL WHITEHEAD
SAN GABRIEL VALLEY WC
P.O. BOX 6010
EL MONTE CA 91734

MARK WILDERMUTH
WILDERMUTH ENVIRONMENTAL INC
415 N EL CAMINO REAL STE A
SAN CLEMENTE CA 92672

JEROME WILSON
CBWM BOARD
6035 FALLING TREE LN
ALTA LOMA CA 91737