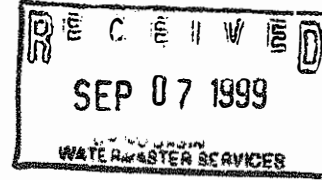


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8

9
10 BEFORE THE CHINO
11 BASIN WATERMASTER

12 CHINO BASIN MUNICIPAL WATER
DISTRICT,

13 Plaintiff,

14 v.

15 CITY OF CHINO, et al.,

16 Defendants.
17

Case No.: RCV 51010

18 COMMENTS OF STATE OF
CALIFORNIA ON OPTIMUM
19 BASIN MANAGEMENT
PROGRAM, PHASE I REPORT
DATED AUGUST 19, 1999

Hearing Date

Date: September 15, 1999
Time: 9:00 a.m. - 3:00 p.m.
Dept: City of Ontario,
Council Chambers
303 East "B" Street
Ontario, CA 91761

20
21 **I. INTRODUCTION**

22 The State of California, in compliance with the Notice of Watermaster Public
23 Hearing, submits the following comments on the Phase I Optimum Basin Management
24 Program Report dated August 19, 1999 and received by the State on August 24, 1999.
25 The State would like to commend the Watermaster Board, Chief of Watermaster Services,
26 Watermaster staff, consultants, including Wildemuth Environmental, Inc., the court
27 appointed referee and technical staff, and all the parties for their hard work and dedication
28 to the process of preparing the Optimum Basin Management Program Report.

1 The State of California has been attending meetings for the development of an
2 Optimum Basin Management Program and has been attempting to assess the financial
3 impact, if any, on the future groundwater production by the State or its departments or
4 agencies for overlying use on all State owned lands within the Chino Basin. The State,
5 however, would like to reiterate its concerns that it has raised orally and in letters filed
6 with the Watermaster that the specific cost impacts upon the parties, including the State
7 of California, have not been discussed in adequate detail as of the July 22, 1999
8 Workshop and that the parties have not had sufficient time to identify the continuing
9 revisions in Sections 1-4 of the latest Phase I Report. The State previously recommended
10 that the parties needed additional time to discuss openly, and voluntarily agree upon, a
11 plan for financing the water supply and water quality options proposed in the OBMP
12 before the program was adopted or approved by the Watermaster.

13 The State of California , including all state agencies or departments that own lands
14 within the Chino Basin, therefore, requests that the Watermaster file the August 19, 1999
15 Phase I Report and all objections with the court and seek an extension of time for the Pool
16 Committees, Advisory Committee and Watermaster Board to develop, discuss and vote
17 upon a final proposed OBMP that includes a voluntary implementation plan with detailed
18 financial impacts. This request is entirely consistent with the written comments dated
19 August 13, 1999 of the court appointed referee with respect to the manner in which the
20 parties should proceed at this time. The State of California did not attend the August 26,
21 1999 meeting and reserves its right to comment on all documents provided to date,
22 including a Memorandum Regarding a Refined OBMP Water Supply Plan dated August
23 25, 1999.

24 25 **II BACKGROUND**

26 In 1975, a complaint filed by the chino Basin Municipal Water District sought an
27 adjudication of water rights based upon allegations of overdraft circumstances
28 (Judgment, ¶ 1.) The State of California was a significant representative in the

1 development of a Stipulated Judgment and in 1978 entered into a Stipulation for Entry of
2 Judgment. (Chino Basin Municipal Water District vs. City of Chino, et al.) The
3 Judgment dated January 22, 1978 noted that the State is a significant producer of
4 groundwater from the Basin and is the largest owner of land overlying the Chino Basin.
5 (Judgment, ¶ 10). For the purposes of the Judgment, the State of California agreed to be a
6 member of the Overlying Agricultural Pool. The precise nature and scope of the claims
7 and rights of the State were not defined in the Judgment. (Id. ¶ 10.) The Agricultural
8 Pool was assigned aggregate preserved overlying rights in the safe yield that totaled
9 414,000 acre feet in any five consecutive years. (Judgment ¶ 44). Under the judgment,
10 the members of the Agricultural Pool, including the State, were assured a fixed water
11 supply with minimal administrative and replenishment assessments (if any) in exchange
12 for any rights of transferability. Under the physical solution, members of the
13 Appropriative pool had certain conversion rights to unallocated (unproduced) agricultural
14 safe yield water. (Judgment, Exh. H)

15 Beginning in 1988, all Watermaster assessments to the Agricultural Pool were paid
16 by members of the Appropriative Pool in exchange for providing early reallocation of
17 unproduced agricultural pool safe yield water.

18 On February 19, 1998, the Superior Court entered a Ruling that, among other
19 things, set a timeline for the development of an Optimum Basin Management Program.
20 The parties, as stated above, have been diligently working to comply with the deadlines
21 set forth in the court order, but in good faith need additional time to address the cost
22 impacts for each of the proposed elements of the Optimum Basin Management Program,
23 and to hopefully reach consensus.

24 ///

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1 **III ARGUMENT**

2
3 A. The Pool Committees, the Advisory Committee and the Watermaster Board
4 should request additional time from the court to consider approval and
5 voluntary implementation of a Final Optimum Basin Management Program

6 Prior to receiving the comments of the court appointed Referee, and the August 19,
7 1999 Phase I Report, the State, through the Attorney General's office and the California
8 Department of Corrections, commented orally and in writing that the positions of the
9 parties on the major issue of costs had not been adequately discussed, that the revised
10 sections of the OBMP were not red-lined to enable parties to quickly determine what
11 exact language was added or deleted in response to comments and that the parties needed
12 additional time to attempt to reach consensus before legal issues were raised and
13 opposing positions solidified. (Copies of the written comments submitted by the
14 California Department of Corrections and by the Attorney General's Office on behalf of
15 the State of California dated June 8, 1999, June 9, 1999, July 21, 1999, and July 26, 1999
16 are attached and incorporated as Exhibit "A").

17 Moreover, the parties need additional time to review the August 19, 1999 Phase I
18 Report to determine the deletions or additions from prior drafts that are not red-lined and
19 to analyze the impact of its conclusions on the future costs of implementation. In the
20 State's opinion, the parties need additional time to review the August 19, 1999 Phase I
21 Report before any action to approve or adopt this document is taken. More importantly,
22 the parties need additional time to discuss and develop alternative cost analyses for
23 implementation of the proposals.

24 With respect to the analysis of costs impacts, other entities have expressed similar
25 concerns. A memorandum from the representative of the San Antonio Water Company
26 dated July 31, 1999 noted that "as of the July 22nd OBMP workshop, we still had not
27 addressed the cost impacts and their affect upon scheduling of the nine (9) elements that
28 make up the draft OBMP. Many parties, including myself, must be prepared to discuss

1 cost impacts with their policy bodies before the scheduled hearing and submittal of the
2 Program to the court. Therefore, I've taken the liberty of preparing the attached
3 spreadsheet in order to facilitate discussion on this topic." (Letter dated July 31, 1999)

4 At that workshop, the State requested further discussion of the spreadsheet as a
5 starting point to identify the substantive concerns and issues. Moreover, the Cucamonga
6 County Water District representative, the Advisory Committee reelected Chairman,
7 submitted written comments for the first time on August 5, 1999 indicating that "further
8 discussion may be warranted on a number of items included in the present plan. While we
9 continue to make progress towards the completion of the OBMP, I will need to
10 understand how the recommended action plan will impact my agency both operationally
11 and financially as well as meet the overall objectives." (Copies of the above referenced
12 documents dated July 31, 1999 and August 5, 1999 are attached and incorporated as
13 Exhibit B.)

14 The State has continued to encourage voluntary implementation of an acceptable
15 plan in order to avoid the costly and contentious litigation that brought the parties to the
16 court regarding the issue of the Nine Member Board. Minimal reference made at various
17 meetings and workshops to solutions adopted in other Basins should be expanded to have
18 an entire workshop immediately on voluntary solutions adopted in similar basins. All of
19 the parties, in good faith, need additional time to discuss the potential cost impacts of the
20 proposed solutions.

21 B. Procedural and Legal Issues Raised in the Parties Comments Should Be
22 Deferred to Allow the Preparation of a Cost Analysis and the Preparation
23 of an Implementation Plan on Which the Parties, and Other Stakeholders,
24 Can Reach Consensus

25 The Referee stated in her comment letter that the legal and procedural issues are
26 premature if the Phase I Report is submitted to the court as a "Report" without any action
27 taken by the Watemaster. The State agrees but for completeness of the record, sets forth
28 some of the issues raised by the State.

1 The State of California and the California Department of Corrections have raised a
2 number of issues orally and in writing in order to preserve their possible objections to the
3 Optimum Basin Management Program or its implementation. (Exhibit A).

4 The State reserves its right to raise additional issues at a later time in the approval
5 process. The issues raised by the State include, but are not limited to, the following:

6 1. Authority or Jurisdiction of the Watermaster or court to assess parties to a
7 water rights adjudication for implementation of water quality proposals;

8 2. Recognition in the OBMP for individual water quality projects that improve
9 Basin resources;

10 3. Recognition in the OBMP that proposals to construct desalters mainly address
11 maintenance of safe yield, i.e. potential loss of 40,000 acre feet from reduction of
12 pumping in the southern end of the basin;

13 4. Recognition in the OBMP that the State of California, and the other members
14 of the Agricultural Pool, have a fixed allocation to the Safe Yield of 440,000 acre feet for
15 any five consecutive years and that any change to lower or increase the safe yield shall be
16 borne by the Appropriators (Judgment, ¶ 44);

17 5. Recognition and discussion in the OBMP of the cost/benefit to the
18 Appropriative pool members for the early reallocation of unallocated safe yield from the
19 Agricultural Pool. (A copy of Mr. Wildemuth's analysis dated April 4, 1999 is attached
20 and incorporated as Exhibit C);

21 6. Recognition in the OBMP that the members of the Agricultural Pool
22 anticipated a minimum administrative and replenishment assessment as part of the
23 original water rights judgment (as set forth in the Economic Evaluation of Proposed
24 Physical Solution for the Chino Groundwater Basin. March 1977);

25 7. Incorporation in Phase I of the OBMP (Sections 1-4 and Program Elements)
26 language changes suggested in the State's comments, including references to other studies
27 completed in the Basin, including a study prepared for the State of California on fissuring
28 by Geomatrix. For example, other studies may conflict with some of the conclusions in

1 Section 2, the "State of the Basin," and need to be recognized, especially with respect to
2 the nitrate legacy in the Basin. (Excerpts from "The Performance of Institutions for
3 Groundwater Management, Volume 7-Chino Basin" by William Blomquist, Indiana
4 University-Purdue University, May 1990 are attached and incorporated as Exhibit D.);

5 8. Recognition that the Judgment does not need to be amended to address the
6 change of the Watermaster to a Nine Member Board.

7 In addition to the above issues, the Agricultural Pool filed comments and issues of
8 concern to the entire pool on August 5, 1999 some of which had previously been raised
9 by the State. It is important to note that with respect to the land owned by the State in the
10 Chino Basin, including correctional facilities, agricultural fields and a dairy, the State
11 expended and continues to expend all the funds required to address monitoring and water
12 quality issues raised by the Watermaster and all of the regulatory agencies that have
13 authority over the operations of the Department of Corrections. However, with respect to
14 the history of the judgment and the development of the OBMP and its future financing
15 options, the issues raised on behalf of the Agricultural Pool in the August 5th letter
16 similarly apply to the State of California. (A copy of the Agricultural Pool comments are
17 attached and incorporated as Exhibit E.)

18 The Referee mentioned legal and other procedural issues that have been raised by
19 the parties, including whether the preparation of the OBMP is a "project" for purposes of
20 the California Environmental Quality Act ("CEQA") and what entity would be lead
21 agency. The referee indicated that the CEQA issue "is not as urgent if draft OBMP
22 Sections 1-4 are submitted and accepted as a report." (Comments, page 5) The State of
23 California concurs that the legal issues and procedural issues are premature if the Phase I
24 report is submitted to the court and no action is taken by the Watermaster.

25 C. The Phase I Report May Need to Be Revised to Reflect Comments of the
26 Parties Prior to a Vote to Approve or Adopt the Report

27 The State of California filed comments with the Watermaster requesting language
28 changes in Sections 1-4 of the proposed OBMP. The Phase I Report revised on August

1 19, 1999 was significantly condensed, and without red-lining, it is difficult to determine
2 what portions were deleted and what language was added.

3 The State of California does not necessarily agree with all the statements and
4 conclusions in the Phase I Report dated August 19, 1999. The State's comments include,
5 but are not limited to the following:

6
7 1. Summary of Groundwater Level, Storage , Production and Water Quality
8 Problems- The Report states that there exists a localized overdraft in Management Zone 1
9 (MZ1), discusses the need to increase groundwater levels, and discusses the need to
10 increase production near the Santa Ana River to enhance safe yield. The OBMP provides
11 for further study of MZ 1. Therefore, some of the conclusions, especially with respect to
12 MZ 1, may be premature. (Pages 2-36 through 2-37).

13 2. The Phase I Report should include a clear discussion in the Introduction that
14 the allocation of the safe yield to the Agricultural Pool is fixed. (Page 1-2).

15 3. Historical Groundwater Production Monitoring- The Report does not
16 recognize throughout all the sections that the State of California has always and continues
17 to maintain and report groundwater production monitoring and groundwater quality at its
18 facilities. (Page 2-15 through 2-17).

19 4. Point Sources of Concern- This section should reference, if possible, the
20 positive specific steps being taken by the entities to address the problems. (Pages 2-25
21 through 2-27).

22 5. Role of Vadose Zone in Future Water Quality- The issue of the longstanding
23 nitrate problem in the Basin and the issue of the impact of future storage on water quality
24 may need to be expanded. Some of the conclusions may be premature. (Page 2-28).

25 6. Cooperative efforts with Appropriate agencies to implement the Program-
26 The Report should reflect that the State, as a member of the Agricultural Pool, not the
27 Watermaster staff, will continue to obtain groundwater level monitoring and groundwater
28 quality monitoring with respect to State owned properties and that the State has always

1 obtained and provided the proper reports to the Watermaster. (Pages 4-2 through 4-6).

2 7. Supplemental Water Program/Water Demand- The Report needs to clearly
3 indicate that the State plans to remain in the Basin . (Page 4-17).

4 8. Legacy Contamination- The issue of legacy contamination may need to be
5 addressed in greater detail. (Page 4-16).

6 9. Comprehensive Management Plan for Management Zone 1- It is unclear to
7 whom the following language applies: "Watermaster may need to have entities that
8 increase their production to provide for the recharge of an equivalent amount of water to
9 maintain the balance of pumping and recharge." (Page 4-26).

10 10. Storage- The storage section needs to be clarified. (Page 4-35.)

11 The Phase I Report reflects the significant hard work and dedication of
12 Watermaster staff, consultants, engineers and parties to the judgment. The State of
13 California will continue to commit resources to the development of a consensual OBMP.

14 D. The State of California Supports the Recommendations of the Referee with
15 Slight Modifications.

16 The State of California indicated in its comment letter of July 26, 1999 that "it
17 will continue to work with all parties to achieve consensus on the development of the
18 OBMP and to achieve consensus with respect to implementation and costs related thereto
19 prior to submission to the court. If we do not achieve consensus with respect to actual
20 implementation and costs, this group should respectfully request that the court receive
21 submittal of our plan and set a date in the future for submittal of how the Watermaster
22 intends to implement the plan or portions thereof. As stated above, this request for an
23 extension of time is consistent with the referee's acknowledgment that discussion of the
24 authority of the Watermaster role or the Court's power to insist that parties take any
25 specific action is premature. (Comments of Referee dated August 13, 1999). Moreover,
26 the referee seemed to recognize the concern of some of the parties, including the State,
27 that a "program" should not be "approved" if the parties have not completed , or in the
28 State's opinion, reached agreement upon, an analysis of its financial impact, if any, on its

1 constituency. The Referee has recommended that the "most productive course appears to
2 be to set aside for now the questions of the scope and nature of the Watermaster's power
3 and authority and define a Phase II process which will produce a clear and completed
4 implementation program. The draft OBMP can be adopted as a report by Watermaster
5 and submitted to the court as a report by Watermaster on the schedule established in the
6 Court's February 19, 1999 ruling." (Comments of Referee dated August 13, 1999, page
7 3.)

8 The State of California, therefore, respectfully requests that the Watermaster:

9 1. Submit to the court for receipt only the Phase I Report dated August 19, 1999
10 with no action to adopt or approve the report taken by the Watermaster or to be taken by
11 the Court.

12 2. Submit to the court all written comments and objections received by the
13 Watermaster on all draft documents.

14 3. Direct the Watermaster attorney to request a continuance of the court hearing
15 originally set for October 28, 1999 to consider the entire OBMP to a future date that will
16 allow sufficient time to revise the Phase I Report and draft the remaining elements of the
17 OBMP (i.e. the implementation program), to circulate additional comments and
18 responses, and to, thereafter, hold a hearing before the Watermaster to consider the final
19 document.

20 Respectfully, it is the State's opinion that a court hearing set for March 31, 2000 ,
21 with a proposed draft Implementation Program to be circulated on February 15, 2000 (i.e.,
22 45 days) does not allow adequate time for the pools, Advisory Committee and
23 Watermaster to file comments, respond to comments , consider and vote upon a "final"
24 document , and thereafter timely prepare and file pleadings for a March 15, 2000 court
25 hearing.

26 4. Request that the court allow the parties to submit, within thirty days from the
27 September 30, 1999 hearing, a proposed schedule of meetings/workshops beginning in
28 October, 1999 to discuss and finalize alternative implementation plans and proposed costs

1 associated with the OBMP and a proposed date for a court hearing.


2
3 **CONCLUSION**

4 The State of California supports the hard work and dedication of the parties to the
5 Judgment, the Watermaster staff, the Watermaster Board and the consultants and court
6 appointed Referee. The State believes that the Stakeholders can reach consensus and that
7 discussion of the legal and procedural issues is premature. Watermaster respectfully
8 should submit the Phase I Report for receipt only, with objections raised to date, to the
9 court and continue to prepare an Implementation Program on which the appropriate
10 parties can reach consensus.

11
12 Dated: September 7, 1999

BILL LOCKYER, Attorney General
of the State of California
MARY HACKENBRACHT,
Acting Assistant Attorney General
MARILYN H. LEVIN,
Deputy Attorney General

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14
15
16 By:


MARILYN H. LEVIN,
Deputy Attorney General

17
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 10 BEFORE THE CHINO
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12 CHINO BASIN MUNICIPAL WATER
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15 CITY OF CHINO, et al.,

16 Defendants.

Case No.: RCV 51010

DECLARATIONS IN SUPPORT
 OF COMMENTS OF STATE OF
 CALIFORNIA ON OPTIMUM
 BASIN MANAGEMENT
 PROGRAM, PHASE I REPORT
 DATED AUGUST 19, 1999

Hearing Date

Date: September 15, 1999
 Time: 9:00 a.m. - 3:00 p.m.
 Dept: City of Ontario,
 Council Chambers
 303 East "B" Street
 Ontario, CA 91761

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DECLARATION OF JUDITH A. MCGILLIVRAY

I, Judith A. McGillivray hereby declare:

1. I am Deputy Director, Planning and Construction Division, California Department of Corrections, and have been employed in that capacity for two years, eight months. I have been an employee of the Department for over 14 years. I am readily familiar with the following, and if called as a witness, could and would competently testify thereto.

2. I am informed and believe that the State of California is the single largest land owner in the Chino Basin. Three State correctional facilities operate on approximately 2600 acres of the State held property in the Basin. These facilities are: 1) the California Institution for Men (CIM); 2) the California Institution for Women (CIW); and 3) the Heman G. Stark Youth Training School (YTS). The YTS is a California Youth Authority facility, not under the jurisdiction of the Department of Corrections.

3. The State of California is a member of the Agricultural Pool as defined in the 1978 Chino Basin Adjudication. The entire Agricultural Pool has a right to pump 414,000 acre-feet in any five consecutive years. The Department of Corrections estimates that through the year 2020, the projected water needs for the three correctional facilities may be approximately 8,500 acre-feet per year. This figure anticipates potential expansion of the facilities.

4. Until recently, the three facilities had operated independent of each other. But, to address water quality problems, including nitrates and total dissolved solids (TDS) in the groundwater, the Department of Corrections has implemented a remedy. This remedy involves the construction of water lines, and construction of an Ion Exchange Water Treatment Plant that will create a common water system for these facilities.

5. I have been advised that CIM has eight (8) active agricultural wells, four (4) domestic water wells, and a sewage treatment plant that provides secondary treatment to the wastewater effluent for its Minimum Support Facility, Reception Center Central and its

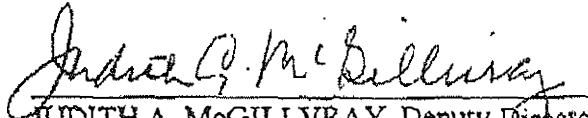
1 Reception Center West facility. The CIM Reception Center East and the YTS are connected to
 2 the City of Chino's Wastewater Treatment System. CIW has four (4) inactive wells and one
 3 (1) active well, and discharges its waste to the Santa Ana Regional interceptor line to Orange
 4 County.

5 6. The State should be given credit for assisting in the clean-up of the basin by
 6 construction of its Ion Exchange Water Treatment Plant and because all of the costs to
 7 construct, operate and maintain this plant are borne by the Department of Corrections in its
 8 construction and facilities budget. The Department does not have the ability to sell water to
 9 offset these added costs. I am informed and believe there is also a benefit to the basin by the
 10 combined correctional facilities' continued production of water from the southern end of the
 11 basin. This increases basin yield by reducing losses to the Santa Ana River.

12 7. It is the intention of the State and its facilities to continue to provide
 13 cooperation and support in participation with all of the Chino Basin Stakeholders, within
 14 the mandates of the adjudication, and all regulatory agencies for the continued effort to
 15 preserve and improve the basin water resource.

16 I declare that the foregoing is true and correct, and would and could so testify if called
 17 as a witness.

18 Executed this 7th day of September, 1999 in Sacramento, California.

19 
 20 JUDITH A. MCGILLIVRAY, Deputy Director
 21 California Department of Corrections

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DECLARATION OF THOMAS M. STETSON IN
SUPPORT OF STATE OF CALIFORNIA COMMENTS

I, Thomas M. Stetson, hereby declare:

1. I am Senior Consultant and Chairman of the Board of Directors of Stetson Engineering, Inc. I established my private practice in 1957 and since that time have been continuously retained as an engineering consultant in connection with water rights in local, state and federal matters, and in water resource planning and development. I was a consultant for the City of Barstow and Southern California Water Company in the Mojave River Basin Groundwater Adjudication between 1990 and the 1995. Since judgment was entered in the Main San Gabriel Basin adjudication in January 1973, I have been continuously retained by the court-appointed Watermaster as engineer to carry out the management plan. I have personal knowledge of the following, except where indicated, on information and belief, and if called as a witness, could and would competently testify thereto.

2. My firm was hired as the consulting engineer for the State of California during the negotiations for the Chino Basin Stipulated Judgment from 1976 through 1989.

3. Among other assignments, I was hired to analyze the effect of the proposed physical solution in the Chino Basin on the State of California, including potential assessments, under the Agricultural Pool concept.

4. The main issues addressed by the proposed physical solution were to correct the overdraft and decline in water levels.

5. My firm estimated in 1976 that the total cost per acre-foot for members of the Agricultural Pool would be approximately \$5.64 when replenishment due to overproduction was necessary and would be \$0.68 for Watermaster and Pool Administration. It was anticipated that the members of the Agricultural pool would receive a fixed allocation of the safe yield, gradually reduce their production to below their safe yield allocation, and that as members of the dairy industry went out of business leaving the state remaining, the assessments would be minimal.

6. Members of the Agricultural Pool, including the State, were allocated a total of

1 414,000 acre-feet in a five year consecutive period. (Judgment ¶ 44)

2 7. I am informed and believe that since 1988, the Appropriate Pool has paid
3 administrative assessments of the Agricultural Pool in exchange for early reallocation of
4 unallocated (or unproduced) agricultural safe yield water. (Judgment, ¶ 44)

5 8. I am familiar with at least one major basin where a regional water quality solution
6 is now being developed through the building of a consensus by the Stakeholders. In my
7 experience, I have found that the best way to solve water quality problems in a basin is
8 through enforcement by water quality regulators and consensus among the Stakeholders.

9 9. The Stipulated Judgment in 1978 did not contemplate a major regional water
10 quality component, to the best of my knowledge.

11 10. The issue of water quality in the Chino Basin was addressed in the Performance
12 of Institutions For Groundwater Management, Volume 7 - Chino Basin, by William
13 Blomquest, Indiana University - Purdue University, May 1990. Attached to the State's
14 Comments are excerpts from that report.

15 I declare under penalty of perjury under the laws of the State of California that the
16 foregoing is true and correct.

17 Executed this 7th day of September, 1999 in Los Angeles, California.


18
19 
20 THOMAS M. STETSON
21 Stetson Engineers, Inc.

EXHIBIT A

CALIFORNIA INSTITUTION FOR MEN

P.O. Box 128

Chino, CA 91710



June 8, 1999

Traci Stewart
Chief of Water Master Services
Chino Basin Water Master

**SUBJECT: STATE OF CALIFORNIA - DEPARTMENT OF CORRECTIONS -
OPTIMUM BASIN MANAGEMENT PLAN**

The following is an over-view of the efforts being undertaken by the California Department of Corrections, California Institution for Men (CIM), at Chino, to participate as a member of the agricultural pool in the Development and Implementation of the Optimum Basin Management Plan.

Management Zone One Subsidence:

The CIM facility is situated in Management Zone One, of the Chino basin. As you know, we have experienced the effects of subsidence and some ground fissuring activity.

CIM has thirteen wells that are located within or in close proximity to Management Zone 1. These include four (4) domestic and nine (9) agricultural wells. These wells are not considered deep aquifer wells. There are plans to drill two additional domestic wells south of our Central facility (designated as Wells 14 & 15). They will be in the southern portion of Management Zone 1. These wells will produce approximately 300 gallons per minute and be drilled as shallow wells. Our existing domestic wells, 11a and 1a will be modified to reduce their pumping capacity by approximately 300 gallons per minute each. Well # 1's capacity has been reduced to 500 gpm from its original capacity of 1000 gallons per minute. These changes have been or are being implemented, based on the requirements of the Regional Water Quality Control Board, Santa Ana Region, to mitigate a localized PCE contamination problem at the CIM site. We believe this may have a positive effect on the subsidence as well.

The CIM Ion Exchange Water Treatment Plant:

The Ion exchange treatment plant now being constructed East of our water storage reservoir will provide domestic water treatment to soften water, will lower the total dissolved solids to comply with sewage treatment plant effluent discharge requirements, will lower nitrate levels to acceptable levels (<45 ppm) and will include a Granular Activated Carbon (GAC) component for PCE and TCE removal. This plant will have the capacity to treat up to 4,600,000 gallons per day (14 acre feet) and will

produce as much as 140,000 gallons per day of Brine waste which will be discharged into the Santa Ana Regional Interceptor (SARI) line to Orange County. CIM's domestic water Wells #1, 1A, 3, 11a and future Wells 14 and 15 will be the source of ground water for this plant. As you may know, the Heman G. Stark Youth Training School and the California Institution for Women will also receive treated water from the CIM water system as our water distribution systems are now interconnected. The CIW and YTS Wells are used for backup and lawn irrigation.

As an agricultural pool member, the State of California believes that the CIM Ion exchange water treatment plant is a benefit to the cleanup of the basin and should be included with the solutions proposed for the basin.

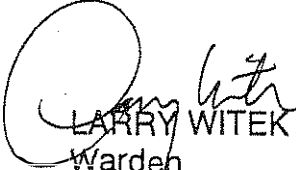
Waste Water Study:

The State of California, Department of General Services, has initiated a study of the CIM Waste Water Treatment System to determine whether the treatment plant should be expanded to accept additional sewage flows from the CIM East facility and the Heman G. Stark Youth Training School, as a cost saving measure for the operation. These later facilities presently discharge sewage into the Chino Basin Waste Water Treatment System. The study will also consider tertiary treatment for the CIM Sewage Treatment Plant so that reclaimed water can be used for lawn irrigation and other non-potable uses. This would further reduce our over all pumping of water from the basin.

Future Water Needs:

As you may know, the State of California, Department of Corrections, is in the process of evaluating the future water needs of its total prison facilities in the Basin, including the Heman G. Stark Youth Training School. We believe that the present projections listed in the OBMP developed by Wildermuth Engineering may be low (Tables 2-16, 2-17).

As always, the State and its facilities will continue to provide the cooperation and support in participation with all of the Chino Basin stake holders, within the mandates of the adjudication to improve and protect this vital resource.



LARRY WITEK
Warden

California Institution for Men



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June 9, 1999

Ms. Traci Stewart
Chino Basin Watermaster
8632 Archibald Avenue, Suite 109
Rancho, Cucamonga, CA 91730

RE: Draft Optimum Basin Management Plan

Dear Ms. Stewart:

The following information and general comments of the State of California to the draft Optimum Basin Management Plan are provided for consideration by Watermaster. We would like to commend the Watermaster, Chief of Watermaster Services and its consultants, including Wildemuth Environmental, Inc., and all the parties for their hard work and dedication to the process of preparing an OBMP in a timely fashion.

As you know, the State of California was a representative in the development of the Stipulated Judgment in 1978 and is encouraged to see the successful continuation of the management of this Basin. In 1978, the Judgment noted that the State is a significant producer of groundwater from the Basin and is the largest owner of land overlying the Chino Basin.

The State is a member of the Agricultural Pool and has been attending the meetings in the development of the Optimum Basin Management Plan. The State has been attempting to assess the Plan's impact, if any, on the future groundwater production by the State or its departments or agencies for overlying use on all State owned lands within the Chino Basin.

Specifically, the California Department of Corrections and particular institutions within the Chino Basin (California Institution for Men, California Institution for Women, Youth Training Authority and Prison Industries) have been working with the Watermaster and its technical consultants to provide as much information as possible with respect to present production, future water needs, and water quality projects. In addition, the California Department of Corrections has prepared a letter to be sent under separate cover outlining some of the specific projects that we believe have a positive impact on the Basin.

In addition to the above, the State wishes to clarify for the OBMP the future water demands for all the State agencies located within the Chino Basin. The State has previously been advised that an assumption in the OBMP is that the State's future water demands will be approximately 10,000 acre feet. However, the tables presently in Section 2 (Tables 2-16 and 2-17) and Section 4 reflect a lower number (3,420 for CIM alone and 8,000 acre ft/yr in the text.) . In addition, the Tables do not list the production or future water demands of the State of California as being within the Agricultural Pool.

For your information, in addition to the Department of Corrections and particular state institutions mentioned in the OBMP, other state agencies presently produce or may in the future seek to utilize groundwater in the Basin. The State is in the process of developing a table with present production and estimated future water needs for each of the State agencies in the Basin and will provide that table as soon as possible. We understand that all State agencies have been reporting their production to the Watermaster. A preliminary list of State agencies that presently own land or may operate wells in the Basin includes, but is not limited to, the Department of Fish and Game, the California Department of Transportation, and the California Department of Toxic Substances Control. At the present time, the Department of Transportation purchases its water from municipal entities and anticipates future demand for water to be approximately up to 1000-1500 acre feet/ yr. in the next twenty years. The Department of Fish and Game previously utilized one well pumping approximately 85 acre feet per year. The State will continue to work with Watermaster and its consultants to provide as much updated information with respect to water supply plans as are available.

The following are specific comments on the OBMP.

1. Page 2-9- The OBMP may wish to reference the study conducted by the State of California (Geomatrix) regarding fissuring.
2. Tables 2-16, 2-17 and 2-18- These tables should reflect that the State of California is a member of the agricultural pool. Their production should be included as a subset within the agricultural pool productions numbers wherever they are referenced throughout the document.
3. Table 4-7 , 4-10 and any other similar tables- These tables need to reflect that the production rights of the State fall within the agricultural pool allocation. Table 4-7 states that the CA Institute for Men, etc has production rights of zero. The State will be providing a list of agencies within the State in the Chino Basin and a higher estimate for future water needs. In Table 4-10, the total production figure for the agricultural pool probably needs to be adjusted to reflect the State Production within the AG pool.
4. Page 4-19- The reference to the remaining 8,000 acre feet/ yr of production in the southern part of the basin should be reflected in other parts of the OBMP as necessary and should be noted as an assumption or estimate only.

5. Page 4-20- Recommended Water Supply Plan for the OBMP- Define the term “new southern basin production” to exclude production by the State of California in the agricultural pool. Please explain the sentence- “all new southern basin production will require desalting prior to use.”
6. Page 4-19- Appendix B describing the Alternative Plans was referenced but not included in the copy received on June 9, 1999. Therefore, I have not had an opportunity to review Appendix B. in final form, nor the redrafted Alternative 6A. .
7. Page 4-26- We are reviewing recommendations included for MZ1.
8. Page 4-33- We are reviewing the section entitled TDS and Nitrogen(Salt) Management in the Chino Basin recently added to this Section 4.
9. Pages 4-36 to 4-45 and Program Element 8- Storage limits- These sections must be changed to add the Agricultural pool to the list of members that can potentially store water whenever this concept is mentioned in the OBMP. . This change has been orally mentioned on more than one occasion but the language has not been changed in the OBMP. In an earlier draft, the Agricultural Pool was mentioned as having a specific fixed amount of storage available. When limits were removed, the reference to the Agricultural Pool was removed. The Judgment in no way precludes storage by the Agricultural pool
10. Page 4-42- Re-determination of Safe Yield- The OBMP needs to restate that “allocations to the overlying pools are fixed. Any subsequent change in the Safe Yield shall be debited or credited to the Appropriative Pool.” (Judgment, para. 44) .
11. Table 4-6 - (a) The title of this table may be misleading and needs to be changed. I believe the Appropriators do not receive “production rights.” They receive additional “allocations of safe yield” or operating yield. (b) The last column is entitled Production Rights but it is unclear whether this is meant to describe appropriators or Ag Pool. Please clarify. (c) Next to the 82,800 acre feet and the 7,950 acre feet for the Agricultural Pool, add footnote 4 as follows: State of California is a member of the agricultural pool and it is assumed that the State’s water needs will be met on its land. This amount (7,950) may change depending upon the water needs of the State of California. (d) In addition, I do not understand why footnote 3 is next to Overlying Agricultural Pool. Please clarify.
12. Table 4-14 is missing from my package.
13. Prior Tables 4-11 , 4-12 , 4-13 , 4-15 and 4-16 were deleted. Please explain.
14. Prior Figures 4-1 through 4-5 have been deleted. New Figure 4-1 is missing from my package. With respect to the new and different Figures 4-2 through 4-5, I have not had an adequate opportunity to review these Figures.

15. With respect to the Program Elements, I will continue to review these documents and submit further comments as soon as possible. .

The State appreciates your consideration of these comments. Because changes have been continually made to this voluminous document , we believe it may be necessary to either extend the time for written comments to be submitted on the entire document, or simply indicate at this time that the State reserves its rights to comment when the entire document with all its changes is mailed to the parties.

Thank you again for your continued assistance.

Very truly yours,

A handwritten signature in black ink, reading "Marilyn H. Levin". The signature is written in a cursive style with a large, sweeping initial "M".

MARILYN H. LEVIN
Deputy Attorney General

BILL LOCKYER
Attorney General

State of California
DEPARTMENT OF JUSTICE



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July 21, 1999

VIA FACSIMILE & U.S. MAIL

Traci Stewart
CHINO BASIN WATERMASTER
8632 Archibald Ave., Suite 109
Rancho Cucamonga, CA 91730

**RE: Agenda Item 5 - Proposed Order to Show Cause Concerning Continuance of
Nine-member Board as Watermaster**

Dear Ms. Stewart:

I recently received a copy of the proposed Order to Show Cause re Continuance of the Nine-Member Board and the Notice of Ruling filed February 24, 1998. The following are my comments with respect to the proposed Order to Show Cause.

First, I do not believe that there is any requirement or need to amend the judgment to accomplish the continuance of the nine member board. Judge Gunn's Ruling provides: "The Watermaster shall notice a hearing on or before October 28, 1999 to consider all parties input as to the continuance of the nine-member board as Watermaster after June 30, 2000."

In my opinion, the Watermaster should: 1) notice a hearing before Judge Gunn with respect to the continuance of the nine-member board; 2) prepare pleadings that inform the court of the dates of the meetings in which the pools and advisory committee voted to continue the nine-member board pursuant to paragraph 16 of the Judgment; 3) Prepare a proposed order that shall include all the language set forth in the February ruling regarding the detailed appointment/nomination of the board, the composition of the board, and the term of the board without changes; 4) include language stating that paragraph 16 remains in full force and effect.

Traci Stewart
July 21, 1999
Page 2

As I have previously indicated, I would appreciate receiving a copy of any redrafted Motion/Order to Show Cause and Proposed Order.

Thank you for your consideration in this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "M. H. Levin for". The signature is written in a cursive style with a large initial "M".

MARILYN H. LEVIN
Deputy Attorney General

For BILL LOCKYER
Attorney General

cc: State of California Distribution List

BILL LOCKYER
Attorney General

State of California
DEPARTMENT OF JUSTICE



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July 26, 1999

VIA FACSIMILE & U.S. MAIL

Traci Stewart
CHINO BASIN WATERMASTER
8632 Archibald Ave., Suite 109
Rancho Cucamonga, CA 91730

RE: OBMP Comments

Dear Ms. Stewart:

The State of California received a revised Section 5, Funding Program and Sources on July 8, 1999 and a revised Section 4 on June 24, 1999. I remain concerned that the parties have not had adequate time to identify all the revisions, as we have not been provided with red-lined versions, and have not had adequate time to review the financing program and its future impact.

First, I believe the parties need additional time to discuss openly and agree upon a plan for financing the water supply options proposed in the OBMP before the plan is submitted to the court. Specifically, I believe the OBMP must clearly state that the parties in the Agricultural pool, whose safe yield is not impacted by reductions in pumping pursuant to the judgment, will not be assessed for proposals to maintain the safe yield.

Second, with respect to the water quality issues addressed in the OBMP, I have been researching the background of the physical solution which constitutes the Judgment and the authority or jurisdiction, if any, within the judgment, to require the implementation of the water quality proposals set forth in the OBMP. Notwithstanding that research, and supporting the sincere commitment by all parties, including the State, to address the problems identified in the Basin, I additionally believe that the parties need to openly begin discussions and determine which parties, if any, will be assessed for financing the water quality proposals, and whether those parties can reach agreement before any plan is submitted to the court.

In my review of the history of the development of the judgment, I discovered that all parties carefully analyzed their options only with respect to water supply and potential long term costs in implementing the physical solution. In fact, the CBMWD hired a consultant to prepare an economic evaluation. The costs anticipated by the State within the agricultural pool were initial replenishment costs for the entire pool if the Agricultural Pool exceeded its allocation of the safe yield and minor administrative costs. Without customers through whom to pass costs, any

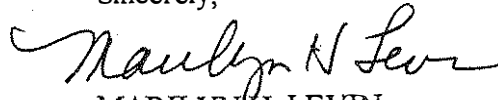
Traci Stewart
July 26, 1999
Page 2

proposal for additional costs is a critical component for members of the agricultural pool, including the State of California. Mr. Wildemuth prepared an analysis, which we should review again, on the cost/benefit to the appropriate pool members of continuing to pay assessments for the early transfer of unallocated safe yield from the agricultural pool. I suggest we continue the discussion so that we can attempt to achieve a consensus on the important issues facing us at this time.

The State of California will continue to work with all parties to achieve consensus on the development of the OBMP and to achieve consensus with respect to implementation and costs related thereto prior to submission to the court. If we do not achieve consensus with respect to actual implementation and costs, this group should respectfully request that the court receive the submittal of our plan and set a date in the future for submittal of how the Watermaster intends to implement the plan or portions thereof.

Thank you for this opportunity to comment.

Sincerely,



MARILYN H. LEVIN
Deputy Attorney General

For BILL LOCKYER
Attorney General

cc: State of California Distribution List

EXHIBIT B



San Antonio Water Company

Incorporated October 25, 1882

Serving the original Ontario Colony Lands

(Communities of Ontario · San Antonio Heights · Upland)

To: Traci Stewart, Chief of Watermaster Services

From: Ray Wellington

AUG 02 1999

Subject: **Cost Impacts and Schedules for the Draft OBMP Elements**

Date: July 31, 1999

As of the July 22nd OBMP workshop, we still had not addressed the cost impacts and their affect upon scheduling of the nine (9) elements, that make up the draft OBMP. Many parties, including myself, must be prepared to discuss cost impacts with their policy bodies before the scheduled hearing and submittal of the Program to the court. Therefore, I've taken the liberty of preparing the attached spreadsheet in order to facilitate discussion on this topic.

Although there are a variety of ways in which the needed revenues could be raised, this evaluation assumed that the total costs would be the obligation of the parties to the Judgement. In order to have a basis for the assessment of costs, I chose to use the operating safe yield (OSY of 145,000 AF) as established in the Judgement. This is only a reference point for beginning meaningful discussion on cost impacts, other alternatives and the setting of realistic schedules. There are other mixes and matches possible, but we need to start the discussion on some reference plain in order to reach a decision point soon. The spreadsheet analysis identifies the planning level costs per AF/Yr. and per HCF/Yr. for each of the nine program elements for each of the 20-years of the overall program.

The non-capital elements (#1, #4, #6, #7, #8 & #9) of the draft OBMP constitute 2.7 % of the total draft estimate. Over the twenty-year period this would average \$3.60/AF/Yr. or \$0.0083/HCF/Yr. In contract, the comprehensive recharge element (#2) constitutes 9.7% of the total draft estimate and averages \$12.75/AF/Yr. or \$0.0292/HCF/Yr. Then the major elements, the desalters (#3 & #5), constitute the balance 87.6% of the total costs or an average of \$115.31/AF/Yr. or \$0.2647/HCF/Yr. The latter elements are the most complex, costly, institutionally dependent and problematic of the total nine elements.

Most of the draft Section 5 (Funding Program and Sources) focus is on the capital-intensive elements and conjunctive-use (Element #9). The implementation of these elements is going to be linked to agreements with other entities and will take some time and effort to complete. This appears to leave five of the defined elements (#1, #4, #6, #7, & #8) within a fundable range by the parties to the Judgement. In my opinion, we need to discuss and establish a final strategy and agreement on funding and scheduling of both the easy as well as the hard elements NOW!

I am requesting that this subject be given top priority for discussion on the August 12th agenda.

Attch.(3)

Chino Basin OBMP Costs

O.S.Y. BASED FUNDING OPTION FOR THE CHINO BASIN OBMP
July 22, 1999

Program Components	20-Year Elem. Cost	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<u>PE-1--Comp. Monitoring</u>	\$5,115,000	\$562,000	\$866,500	\$571,500	\$175,000	\$210,000	\$175,000
Dollars/AF/Yr. using OSY	\$1.76	\$3.88	\$5.98	\$3.94	\$1.21	\$1.45	\$1.21
Equivalent dollars/HCF	\$0.0040	\$0.0089	\$0.0137	\$0.0090	\$0.0028	\$0.0033	\$0.0028
<u>PE-4--Subsidence Zones</u>	\$615,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$10,000
Dollars/AF/Yr. using OSY	\$0.21	\$0.69	\$0.69	\$0.69	\$0.69	\$0.69	\$0.07
Equivalent dollars/HCF	\$0.0005	\$0.0016	\$0.0016	\$0.0016	\$0.0016	\$0.0016	\$0.0002
<u>PE-6--Coop. Efforts</u>	\$582,500	\$52,500	\$55,000	\$5,000	\$10,000	\$5,000	\$10,000
Dollars/AF/Yr. using OSY	\$0.20	\$0.36	\$0.38	\$0.03	\$0.07	\$0.59	\$0.07
Equivalent dollars/HCF	\$0.0005	\$0.0008	\$0.0009	\$0.0001	\$0.0002	\$0.0013	\$0.0002
<u>PE-7--Salt Mgnt</u>	\$3,000,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
Dollars/AF/Yr. using OSY	\$1.03	\$1.03	\$1.03	\$1.03	\$1.03	\$1.03	\$1.03
Equivalent dollars/HCF	\$0.0024	\$0.0024	\$0.0024	\$0.0024	\$0.0024	\$0.0024	\$0.0024
<u>PE-8--Storage Mgnt.</u>	\$350,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
Dollars/AF/Yr. using OSY	\$0.12	\$0.03	\$0.03	\$0.03	\$0.03	\$0.03	\$0.03
Equivalent dollars/HCF	\$0.0003	\$0.0001	\$0.0001	\$0.0001	\$0.0001	\$0.0001	\$0.0001
<u>PE-9--Conjunctive Use</u>	\$772,500	\$12,500	\$210,000	\$210,000	\$20,000	\$20,000	\$20,000
Dollars/AF/Yr. using OSY	\$0.27	\$0.09	\$1.45	\$1.45	\$0.14	\$0.14	\$0.14
Equivalent dollars/HCF	\$0.0006	\$0.0002	\$0.0033	\$0.0033	\$0.0003	\$0.0003	\$0.0003
<u>Subtotal Non-Cap. Elements</u>	\$10,435,000	\$882,000	\$1,386,500	\$1,041,500	\$460,000	\$570,000	\$370,000
Dollars/AF/Yr. using OSY	\$3.60	\$6.08	\$9.56	\$7.18	\$3.17	\$3.93	\$2.55
Equivalent dollars/HCF	\$0.0083	\$0.0140	\$0.0220	\$0.0165	\$0.0073	\$0.0090	\$0.0059
CAPITAL INTENSIVE ELEMENTS							
<u>PE-2--Comp. Recharge</u>	\$36,879,634	\$93,750	\$187,500	\$150,000	\$650,000	\$2,687,399	\$2,187,399
Dollars/AF/Yr. using OSY	\$12.72	\$0.65	\$1.29	\$1.03	\$4.48	\$18.53	\$15.09
Equivalent dollars/HCF	\$0.0292	\$0.0015	\$0.0030	\$0.0024	\$0.0103	\$0.0425	\$0.0346
<u>Subtotal Non-Cap + Recharge</u>	\$47,314,634	\$975,750	\$1,574,000	\$1,191,500	\$1,110,000	\$3,257,399	\$2,557,399
Dollars/AF/Yr. using OSY	\$16.32	\$6.73	\$10.86	\$8.22	\$7.66	\$22.46	\$17.64
Equivalent dollars/HCF	\$0.0375	\$0.0154	\$0.0249	\$0.0189	\$0.0176	\$0.0516	\$0.0405
<u>PE-3&5--Desalters</u>	\$334,411,500	\$40,000	\$300,000	\$310,000	\$310,000	\$310,000	\$11,741,000
Dollars/AF/Yr. using OSY	\$115.31	\$0.28	\$2.07	\$2.14	\$2.14	\$2.14	\$80.97
Equivalent dollars/HCF	\$0.2647	\$0.0006	\$0.0047	\$0.0049	\$0.0049	\$0.0049	\$0.1859
<u>Subtotal Cap Intsve Elements</u>	\$371,291,134	\$133,750	\$487,500	\$460,000	\$960,000	\$2,997,399	\$13,928,399
Dollars/AF/Yr. using OSY	\$128.03	\$0.92	\$3.36	\$3.17	\$6.62	\$20.67	\$96.06
Equivalent dollars/HCF	\$0.2939	\$0.0021	\$0.0077	\$0.0073	\$0.0152	\$0.0475	\$0.2205
<u>TOTAL OF ALL ELEMENTS</u>	\$381,726,134	\$1,015,750	\$1,874,000	\$1,501,500	\$1,420,000	\$3,567,399	\$14,298,399
Dollars/AF/Yr. using OSY	\$131.63	\$7.01	\$12.92	\$10.36	\$9.79	\$24.60	\$98.61
Equivalent dollars/HCF	\$0.3022	\$0.0161	\$0.0297	\$0.0238	\$0.0225	\$0.0565	\$0.2264

Chino Basin OBMP Costs

Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
\$175,000	\$175,000	\$175,000	\$210,000	\$175,000	\$175,000	\$175,000	\$175,000	\$210,000
\$1.21	\$1.21	\$1.21	\$1.45	\$1.21	\$1.21	\$1.21	\$1.21	\$1.45
\$0.0028	\$0.0028	\$0.0028	\$0.0033	\$0.0028	\$0.0028	\$0.0028	\$0.0028	\$0.0033
\$10,000	\$10,000	\$10,000	\$10,000	\$5,000	\$5,000	\$10,000	\$5,000	\$5,000
\$0.07	\$0.07	\$0.07	\$0.07	\$0.03	\$0.03	\$0.07	\$0.03	\$0.03
\$0.0002	\$0.0002	\$0.0002	\$0.0002	\$0.0001	\$0.0001	\$0.0002	\$0.0001	\$0.0001
\$10,000	\$10,000	\$10,000	\$85,000	\$10,000	\$10,000	\$10,000	\$10,000	\$85,000
\$0.07	\$0.07	\$0.07	\$0.59	\$0.07	\$0.07	\$0.07	\$0.07	\$0.59
\$0.0002	\$0.0002	\$0.0002	\$0.0013	\$0.0002	\$0.0002	\$0.0002	\$0.0002	\$0.0013
\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
\$1.03	\$1.03	\$1.03	\$1.03	\$1.03	\$1.03	\$1.03	\$1.03	\$1.03
\$0.0024	\$0.0024	\$0.0024	\$0.0024	\$0.0024	\$0.0024	\$0.0024	\$0.0024	\$0.0024
\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$255,000	\$5,000
\$0.03	\$0.03	\$0.03	\$0.03	\$0.03	\$0.03	\$0.03	\$1.76	\$0.03
\$0.0001	\$0.0001	\$0.0001	\$0.0001	\$0.0001	\$0.0001	\$0.0001	\$0.0040	\$0.0001
\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
\$0.14	\$0.14	\$0.14	\$0.14	\$0.14	\$0.14	\$0.14	\$0.14	\$0.14
\$0.0003	\$0.0003	\$0.0003	\$0.0003	\$0.0003	\$0.0003	\$0.0003	\$0.0003	\$0.0003
\$370,000	\$370,000	\$370,000	\$480,000	\$365,000	\$365,000	\$370,000	\$615,000	\$475,000
\$2.55	\$2.55	\$2.55	\$3.31	\$2.52	\$2.52	\$2.55	\$4.24	\$3.28
\$0.0059	\$0.0059	\$0.0059	\$0.0076	\$0.0058	\$0.0058	\$0.0059	\$0.0097	\$0.0075
\$2,187,399	\$2,187,399	\$2,187,399	\$2,287,399	\$2,187,399	\$2,187,399	\$2,187,399	\$2,187,399	\$2,287,399
\$15.09	\$15.09	\$15.09	\$15.78	\$15.09	\$15.09	\$15.09	\$15.09	\$15.78
\$0.0346	\$0.0346	\$0.0346	\$0.0362	\$0.0346	\$0.0346	\$0.0346	\$0.0346	\$0.0362
\$2,557,399	\$2,557,399	\$2,557,399	\$2,767,399	\$2,552,399	\$2,552,399	\$2,557,399	\$2,802,399	\$2,762,399
\$17.64	\$17.64	\$17.64	\$19.09	\$17.60	\$17.60	\$17.64	\$19.33	\$19.05
\$0.0405	\$0.0405	\$0.0405	\$0.0438	\$0.0404	\$0.0404	\$0.0405	\$0.0444	\$0.0437
\$12,282,600	\$12,824,200	\$13,365,800	\$13,907,400	\$23,938,000	\$24,308,800	\$24,679,600	\$25,050,400	\$25,421,200
\$84.71	\$88.44	\$92.18	\$95.91	\$165.09	\$167.65	\$170.20	\$172.76	\$175.32
\$0.1945	\$0.2030	\$0.2116	\$0.2202	\$0.3790	\$0.3849	\$0.3907	\$0.3966	\$0.4025
\$14,469,999	\$15,011,599	\$15,553,199	\$16,194,799	\$26,125,399	\$26,496,199	\$26,866,999	\$27,237,799	\$27,708,599
\$99.79	\$103.53	\$107.26	\$111.69	\$180.18	\$182.73	\$185.29	\$187.85	\$191.09
\$0.2291	\$0.2377	\$0.2462	\$0.2564	\$0.4136	\$0.4195	\$0.4254	\$0.4312	\$0.4387
\$14,839,999	\$15,381,599	\$15,923,199	\$16,674,799	\$26,490,399	\$26,861,199	\$27,236,999	\$27,852,799	\$28,183,599
\$102.34	\$106.08	\$109.82	\$115.00	\$182.69	\$185.25	\$187.84	\$192.09	\$194.37
\$0.2350	\$0.2435	\$0.2521	\$0.2640	\$0.4194	\$0.4253	\$0.4312	\$0.4410	\$0.4462

Chino Basin OBMP Costs

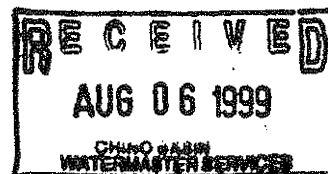
Year 16	Year 17	Year 18	Year 19	Year 20	MEDIAN VALUES	Minimum Value	Maximum Value
\$175,000	\$175,000	\$175,000	\$175,000	\$210,000	\$175,000	\$175,000	\$866,500
\$1.21	\$1.21	\$1.21	\$1.21	\$1.45	\$1.21	\$1.21	\$5.98
\$0.0028	\$0.0028	\$0.0028	\$0.0028	\$0.0033	\$0.0028	\$0.0028	\$0.0137
\$10,000	\$5,000	\$5,000	\$10,000	\$5,000	\$10,000	\$5,000	\$100,000
\$0.07	\$0.03	\$0.03	\$0.07	\$0.03	\$0.07	\$0.03	\$0.69
\$0.0002	\$0.0001	\$0.0001	\$0.0002	\$0.0001	\$0.0002	\$0.0001	\$0.0016
\$10,000	\$10,000	\$10,000	\$10,000	\$85,000	\$10,000	\$5,000	\$85,000
\$0.07	\$0.07	\$0.07	\$0.07	\$0.59	\$0.07	\$0.03	\$0.59
\$0.0002	\$0.0002	\$0.0002	\$0.0002	\$0.0013	\$0.0002	\$0.0001	\$0.0013
\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
\$1.03	\$1.03	\$1.03	\$1.03	\$1.03	\$1.03	\$1.03	\$1.03
\$0.0024	\$0.0024	\$0.0024	\$0.0024	\$0.0024	\$0.0024	\$0.0024	\$0.0024
\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$255,000
\$0.03	\$0.03	\$0.03	\$0.03	\$0.03	\$0.03	\$0.03	\$1.76
\$0.0001	\$0.0001	\$0.0001	\$0.0001	\$0.0001	\$0.0001	\$0.0001	\$0.0040
\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$12,500	\$210,000
\$0.14	\$0.14	\$0.14	\$0.14	\$0.14	\$0.14	\$0.09	\$1.45
\$0.0003	\$0.0003	\$0.0003	\$0.0003	\$0.0003	\$0.0003	\$0.0002	\$0.0033
\$370,000	\$365,000	\$365,000	\$370,000	\$475,000	\$370,000	\$365,000	\$1,386,500
\$2.55	\$2.52	\$2.52	\$2.55	\$3.28	\$2.55	\$2.52	\$9.56
\$0.0059	\$0.0058	\$0.0058	\$0.0059	\$0.0075	\$0.0059	\$0.0058	\$0.0220
\$2,187,399	\$2,187,399	\$2,187,399	\$2,187,399	\$2,287,399	\$2,187,399	\$93,750	\$2,687,399
\$15.09	\$15.09	\$15.09	\$15.09	\$15.78	\$15.09	\$0.65	\$18.53
\$0.0346	\$0.0346	\$0.0346	\$0.0346	\$0.0362	\$0.0346	\$0.0015	\$0.0425
\$2,557,399	\$2,552,399	\$2,552,399	\$2,557,399	\$2,762,399	\$2,557,399	\$975,750	\$3,257,399
\$17.64	\$17.60	\$17.60	\$17.64	\$19.05	\$17.64	\$6.73	\$22.46
\$0.0405	\$0.0404	\$0.0404	\$0.0405	\$0.0437	\$0.0405	\$0.0154	\$0.0516
\$28,734,000	\$28,929,250	\$29,124,500	\$29,319,750	\$29,515,000	\$18,922,700	\$40,000	\$29,515,000
\$198.17	\$199.51	\$200.86	\$202.21	\$203.55	\$130.50	\$0.28	\$203.55
\$0.4549	\$0.4580	\$0.4611	\$0.4642	\$0.4673	\$0.2996	\$0.0006	\$0.4673
\$30,921,399	\$31,116,649	\$31,311,899	\$31,507,149	\$31,802,399	\$21,160,099	\$133,750	\$31,802,399
\$213.25	\$214.60	\$215.94	\$217.29	\$219.33	\$145.93	\$0.92	\$219.33
\$0.4896	\$0.4926	\$0.4957	\$0.4988	\$0.5035	\$0.3350	\$0.0021	\$0.5035
\$31,291,399	\$31,481,649	\$31,676,899	\$31,877,149	\$32,277,399	\$21,582,599	\$1,015,750	\$32,277,399
\$215.80	\$217.11	\$218.46	\$219.84	\$222.60	\$148.85	\$7.01	\$222.60
\$0.4954	\$0.4984	\$0.5015	\$0.5047	\$0.5110	\$0.3417	\$0.0161	\$0.5110



Cucamonga County Water District
 9641 San Bernardino Road
 Rancho Cucamonga, CA 91729-0638
 P.O. BOX 638 • (909) 987-2591 • FAX (909) 941-8069

ROBERT A. DeLOACH
 Secretary / General Manager

August 5, 1999



Traci Stewart
 Chief of Watermaster Services
 CHINO BASIN WATERMASTER
 8632 Archibald Avenue, Suite 109
 Rancho Cucamonga, CA 91730

Subject: OBMP RECOMMENDED ACTION PLAN

Dear Ms. Stewart:

After having had an opportunity to review the "OBMP SUMMARY MATRIX & RECOMMENDED ACTION PLAN" in greater detail, it has occurred to me that further discussion may be warranted on a number of items included in the present plan. While we continue to make progress towards the completion of the OBMP, I will need to understand how the recommended action plan will impact my agency both operationally and financially as well as meet the overall objectives.

My initial concerns and questions are in regard to specific program elements as described below:

- PROGRAM ELEMENT 2 – GROUNDWATER RECHARGE

Watermaster has recognized that the Chino Basin Water Conservation District (CBWCD) would assume the lead agency responsibilities for this element as it most closely aligns itself with their mission of water conservation. Clearly the objective of water conservation through increased recharge is the mission and objective of the CBWCD. My concerns here are twofold: First, their service area boundary currently does not overlie the Chino Basin in its entirety. This may present institutional issues in the future wherein an entity such as the CBWCD is effecting improvements outside their legal and electoral boundary. Program Element 2 of Section 4 of the OBMP indicates that "Watermaster

• PROGRAM ELEMENT 3/5 - WATER SUPPLY PLANNING

Watermaster has preliminarily committed to the early implementation of a second desalter to improve the overall basin yield while preserving historic pumping patterns. ~~As such, all appropriators will benefit from the project.~~ I believe the water supply plans of those agencies that would take the finished product water such as Ontario, Chino, Chino Hills and Jurupa Community Services District should be reviewed more closely. As Ontario points out in their July 6, 1999 letter, their existing master plan indicates that their long-term demand will be met ~~without the desalter supply source.~~ I would suspect this to be the same for the other agencies as well. In fact, it is my understanding that with respect to the City of Chino, they are committed to the product water from the Santa Ana Watershed Project Authority (SAWPA) Desalter, which would have the effect of possibly lessening or eliminating their demand from a second desalter.

~~This brings us to the question of demand.~~ It has already been acknowledged that in order for this project to be financially feasible, the treated water must be competitively priced so as to encourage appropriators to modify their existing water supply plans. As evidenced by Ontario's letter, this would require that desalter product water be priced ~~less than the MWD treated rate.~~ Additionally, for some agencies this would require that the treated water be delivered at a certain point in their system to make the economics of a desalter work. The lack of specifics on the financing and demand side issues will have an impact on the implementation schedule (currently shown as 1-3 years), and the willingness of agencies to sign up for the treated water. What would be the impacts to the appropriators if the project were delayed 3-5 years or until such time as the economics were in place to drive the project? It would seem to me that there should be a phased development approach to the desalter which would correspond with the increased production plans in the south. In fact, in Program Element 3 of the OBMP it states that, *"The decline in agricultural production must be matched by new production in the southern part of the basin or the safe yield of the basin will be reduced."* It should also be noted that Orange County has not been included in our discussions up to this point regarding the desalter and their possible interest in purchasing treated water. Given some of the same economic conditions to make the desalter project feasible for local Chino Basin appropriators, Orange County may become increasingly interested which may allow Watermaster to proceed with the project on an accelerated timeframe.

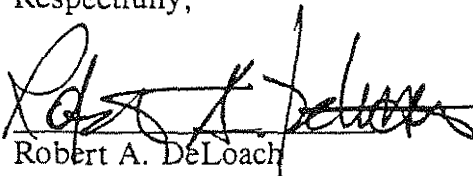
With regard to who operates the desalter, we will need to ensure that the problems associated with siting and management of the SAWPA desalter is not duplicated with the proposed second or third units. I would recommend that the

complied with. However, our agency has concerns that Watermaster is subsidizing the compliance effort and the possible precedent of establishing subsidies for other similar mitigation efforts associated with basin management. As an example, our District is contemplating a nitrate treatment project in-lieu of taking wells from service and using more costly MWD deliveries. Will Watermaster provide financial assistance to our agency or any other agency including those that have already invested in such facilities?

The Cucamonga County Water District will remain an active participant in the OBMP process and looks forward to addressing these and other issues toward a mutually agreeable and workable solution.

These comments represent our initial thoughts on the Summary Matrix and Recommended Action Plan at this time. We reserve the right to bring up additional issues at a later date if we believe it is in our best interest. Please give me a call if you have any questions.

Respectfully,


Robert A. DeLoach

cc: Board of Directors, CCWD
Richard T. Anderson, BB&K
Gene Tanaka, BB&K

EXHIBIT C

Wildermuth Environmental, Inc.
415 North El Camino Real Suite A
San Clemente, California 92672
Tel. 949/498-9294
Fax. 949/498-1712.
email mjw@wildh2o.com
www.wild-environment.com

WE INC.

MEMORANDUM

To: Traci Stewart, Chief of Watermaster Services
From: Mark Wildermuth

CC: Date: 4/1/99
Subject: Value of Re-Allocated Un-Produced Agricultural Pool Water
File: s:\clients\cbwm\ag pool re-allocation\040119999AgReallocati onMemo.doc

URGENT FOR REVIEW PLEASE COMMENT PLEASE REPLY PLEASE RECYCLE

Per your request we analyzed the value of the re-allocation of the un-produced agricultural water on an annual basis versus waiting five years.

Table 1 summarizes the history of agricultural production, the annual volume of water re-allocated to the appropriative pool and the value of that water for fiscal years 1999/00 through 2003/04. The value of the water is based on the cost of replenishment water purchased from Metropolitan Water District of Southern California (Metropolitan) that would be needed to replace the re-allocated water.

The initial process for re-allocating un-produced water from the agricultural pool consisted of allocating one-fifth of the prior five years accumulated under production of the agricultural pool. Accumulating the un-produced water for a five-year period provides a defacto storage account for the agricultural pool. The agricultural and appropriative pools recognized in the mid 1980's that agricultural pool production was declining, that the value of the un-produced water would grow large in time, and that the resulting large storage account for the agricultural pool was not necessary. The appropriators could put this water to use directly or could exchange it with Metropolitan (either for cyclic storage or for the 1986 Metropolitan-proposed storage program). Consequently, a one-time re-allocation of all the water stored in the agricultural pool's defacto storage account was made, and that all subsequent re-allocations were done annually based on the difference between 82,800 acre-ft/yr minus the prior year agricultural pool production. This can be seen in Table 1 starting in 1988 where the 1988 re-allocation is significantly larger than all other re-allocations and includes the one-time re-allocation of all water stored in the agricultural pool's defacto storage account and the transfer of the prior year un-produced water. Thereafter, the annual un-produced agricultural pool water is re-allocated annually. The appropriators recognized the benefit of the accelerated re-allocation of un-produced agricultural pool water and agreed to pay all the annual agricultural pool assessments starting in 1988.

Table 1 shows that the gross value of the re-allocated water to the appropriative pool at large for the next five years based on continuing reallocate the un-produced agricultural water annually. The value of the annual re-allocation is about \$9,800,000 per year and will equal about \$49,000,000 over the five-year period 1999/00 through 2003/04. These values will go up if agricultural production is less than projected. Table 2 shows the distribution of the re-allocated water for 1998/99, and the net benefit to each appropriator after the agricultural assessments are paid. In 1998/99, the total net benefit was about \$8,400,000. Table 2 also shows the benefit over the next five years assuming that the annual re-allocation is continued and with agricultural pool assessments increased in the first three years to cover the proposed metering program currently under consideration by the agricultural pool. The proposed metering rebate program will cost about \$157,500 per year for three years (1999/00 to 2001/02). This will increase the annual agricultural pool assessments. The value to the appropriative pool in maintaining the current re-allocation process is about \$44,000,000 for the five-year period.

What would the financial impact be on the appropriators if the current re-allocation process is rescinded? First, a five-year lag in re-allocations will occur. That is, no re-allocation of un-produced agricultural water will occur for the ensuing five years. Thereafter, re-allocation will occur on an annual basis as long as there is un-produced agricultural water to reallocate. Table 2 shows the financial impact on the members of the appropriative pool and the cumulative impact on the appropriative pool. The appropriative pool would receive no re-allocated water and no financial benefit from the re-allocation for the five-year period. They would also not pay the agricultural pool assessments ever again. Over the five-year period the net impact in the appropriative pool will be a loss of about \$48,000,000. In addition to this loss, water accumulating in the agricultural pool's defacto storage account would be assessed losses so that when re-allocations begin in the sixth year there will be less water to re-allocate. Table 3 which shows the projected underproduction by the agricultural pool, the subsequent operation of the agricultural pool's defacto storage account, losses from that storage account, and the value of these losses. Table 3 assumes a time history of agricultural pool production starting with an estimate of current production in 1999/00 and ending with about 8,000 acre-ft/yr in 2018/19. The value of water lost from storage is about \$2,300,000 over the five-year period. As the agricultural pool's production goes down the amount of water in the agricultural pool's defacto storage will increase and further increase the losses from storage. Over the 20-year period, about 96,000 acre-ft of water would be lost from storage at value of about \$22,300,000. The average annual loss of water from storage would be about 4,800 acre-ft/yr with a value of about \$1,100,000 per year. The average annual value of lost water from the agricultural pool's defacto storage account exceeds the cost of the agricultural pool assessments that are currently paid by the appropriative pool under the current re-allocation process even with the additional metering assessment for 1999/00 through 2001/02.

Table 1
Summary of Re-Allocation of Un-Produced Agricultural Pool Water
and Value of Re-Allocated Water

Year of Judgment	Production Year Ending	Historical and Projected Agricultural Operations				Value of Future Transfers at \$233/acre-ft	
		Agricultural Pool Production	Cumulative Agricultural Pool Production	Under Production in the Agricultural Pool	Cumulative Under Production in the Agricultural Pool	Actual Transfer to Appropriative Pool	Annual Cumulative Total
	1975	96,567					
	1976	95,349					
	1977	91,450					
1st	1978	84,095	84,095	(1,295)	(1,295)		
2nd	1979	74,087	158,182	8,713	7,418		
3rd	1980	70,377	228,559	12,423	19,841		
4th	1981	68,040	296,599	14,760	34,601		
5th	1982	65,117	361,716	17,683	52,284		
6th	1983	56,759	418,475	26,041	78,325		
7th	1984	59,033	477,508	23,767	102,092	26,355	
8th	1985	55,543	533,051	27,257	129,349	19,136	
9th	1986	52,061	585,112	30,739	160,088	21,902	
10th	1987	59,847	644,959	22,953	183,041	37,159	
11th	1988	57,865	702,824	24,935	207,976	78,489	
12th	1989	46,762	749,586	36,038	244,014	24,935	
13th	1990	48,420	798,006	34,380	278,394	36,038	
14th	1991	48,085	846,091	34,715	313,109	34,380	
15th	1992	44,682	890,773	38,118	351,227	34,715	
16th	1993	44,092	934,865	38,708	389,935	38,112	
17th	1994	44,298	979,163	38,502	428,437	38,708	
18th	1995	55,022	1,034,185	27,778	456,215	38,502	
19th	1996	43,639	1,077,824	39,161	495,376	27,778	
20th	1997	44,809	1,122,633	37,991	533,367	39,161	
21st	1998	43,345	1,165,978	39,455	572,822	37,991	
22nd	1999	44,800	1,210,778	38,000	610,822	39,455	
23rd	2000	42,863	1,253,641	39,937	650,759	38,000	\$8,854,000
24th	2001	40,926	1,294,567	41,874	692,633	39,937	\$9,305,284
25th	2002	38,989	1,333,557	43,811	736,443	41,874	\$9,756,568
26th	2003	37,033	1,370,610	45,747	782,190	43,811	\$10,207,833
27th	2004	35,116	1,405,725	47,684	829,875	45,747	\$10,659,137

Table 2
Benefits to Members of the Appropriative Pool from the Annual of Re-Allocation of Un-Produced Agricultural Pool Water
and a Five-Year Lag in Re-Allocation

Appropriator	1998/99 Budget Conditions			1999/00 Budget Conditions with Existing Re-Allocation Scheme			1999/00 Budget Conditions with Five-Year Lag in Re-Allocation -			Benefit to Appropriative Pool
	Re-Allocation (Acres-A)	Value of Re-Allocated Water at \$233/acre-A	Agricultural Pool Assessments Paid by Appropriative Pool at \$19.04/acre-A	Re-Allocation (Acres-B)	Value of Re-Allocated Water at \$233/acre-B	Agricultural Pool Assessments Paid by Appropriative Pool at \$19.04/acre-B	Re-Allocation (Acres-C)	Value of Re-Allocated Water at \$233/acre-C	Agricultural Pool Assessments Paid by Appropriative Pool	
City of China	4,055	\$945,048	\$77,217	4,264	\$993,478	\$94,032	0	0	\$0	\$899,446
City of China Hills	1,904	\$441,632	\$36,348	2,002	\$466,366	\$44,141	0	0	\$0	\$422,225
Oxalis County Water District	2,629	\$612,537	\$50,050	2,764	\$641,948	\$56,949	0	0	\$0	\$585,000
Frederick County Water Company	3,390	\$786,470	\$68,345	3,774	\$879,318	\$83,239	0	0	\$0	\$796,079
Frederick Water Company	0	\$0	\$0	0	\$0	\$0	0	0	\$0	\$0
Jurupa Community Water District	4,335	\$1,014,715	\$82,909	4,578	\$1,068,715	\$100,964	0	0	\$0	\$967,751
Wingold Metal Water Company	748	\$173,744	\$7,006	387	\$90,138	\$8,532	0	0	\$0	\$165,212
Meritt Vista Water District	2,744	\$639,353	\$52,239	2,843	\$672,114	\$63,615	0	0	\$0	\$608,500
Meritt Vista Irrigation Company	380	\$88,540	\$7,234	359	\$83,077	\$8,010	0	0	\$0	\$80,567
Mutual Water Company of Glen Avon	0	\$0	\$0	0	\$0	\$0	0	0	\$0	\$0
City of Norco	113	\$26,329	\$2,151	119	\$27,678	\$2,620	0	0	\$0	\$25,059
City of Occoan	7,234	\$1,690,182	\$138,099	7,605	\$1,776,797	\$168,173	0	0	\$0	\$1,608,625
City of Pahrump	6,295	\$1,466,735	\$119,842	6,618	\$1,541,900	\$145,980	0	0	\$0	\$1,395,920
San Antonio Water Company	446	\$1,071,118	\$16,106	449	\$1,072,220	\$16,613	0	0	\$0	\$1,055,607
San Bernardino County Trade Unit	0	\$0	\$0	0	\$0	\$0	0	0	\$0	\$0
State Area River Water Company	710	\$170,000	\$13,497	767	\$178,806	\$16,074	0	0	\$0	\$161,882
Southern California Water Company	2,311	\$533,803	\$43,398	2,443	\$563,381	\$53,355	0	0	\$0	\$510,026
City of Upland	1,681	\$373,003	\$30,479	1,683	\$392,150	\$37,117	0	0	\$0	\$355,033
West Pied Consolidated Water Company	532	\$123,956	\$10,128	539	\$130,308	\$12,334	0	0	\$0	\$111,975
West San Bernardino County Water District	362	\$84,346	\$8,882	381	\$88,668	\$8,372	0	0	\$0	\$80,296
Totals	37,990	\$8,851,670	\$723,238	39,977	\$9,305,284	\$880,738	0	0	\$0	\$8,424,546
Total for 1999 to 2002 (see Table 1)	119,811	\$27,915,853	\$2,642,215	119,811	\$27,915,853	\$2,642,215	0	0	\$0	\$25,273,637
Total for 2003 to 2004 (see Table 1)	69,358	\$20,666,989	\$1,705,182	69,358	\$20,666,989	\$1,705,182	0	0	\$0	\$19,161,807
Total for 1999 to 2004	209,368	\$48,582,842	\$4,347,398	209,368	\$48,582,842	\$4,347,398	0	0	\$0	\$44,435,443

Table 3
Losses from Agricultural Pool Defacto Storage Account
as Agricultural Lands Convert to Urban Uses
Case Where Current Re-Allocation Process is Terminated
and Replaced with Process Described in Judgment
 (acre-ft)

Year	Un-produced Agricultural Water	Re-allocated Water to Appropriators	Losses to River from Agricultural Pool Defacto Storage Account	End of Year Storage in Agricultural Pool Defacto Storage Account	Value of Losses at \$233/acre-ft
1999 / 2000	38,000	0	380	37,620	\$88,540
2000 / 2001	39,937	0	1,152	76,405	\$268,362
2001 / 2002	41,874	0	1,947	116,332	\$453,613
2002 / 2003	43,811	0	2,765	157,378	\$644,185
2003 / 2004	45,747	0	3,605	199,520	\$839,971
2004 / 2005	47,684	38,000	4,847	204,357	\$1,129,408
2005 / 2006	49,621	39,937	4,983	209,059	\$1,160,974
2006 / 2007	51,558	41,874	5,115	213,627	\$1,191,908
2007 / 2008	53,495	43,811	5,246	218,066	\$1,222,224
2008 / 2009	55,432	45,747	5,373	222,377	\$1,251,934
2009 / 2010	57,368	47,684	5,498	226,563	\$1,281,049
2010 / 2011	59,305	49,621	5,621	230,627	\$1,309,582
2011 / 2012	61,242	51,558	5,741	234,570	\$1,337,545
2012 / 2013	63,179	53,495	5,858	238,397	\$1,364,948
2013 / 2014	65,116	55,432	5,973	242,107	\$1,391,803
2014 / 2015	67,053	57,368	6,086	245,705	\$1,418,121
2015 / 2016	68,989	59,305	6,197	249,192	\$1,443,913
2016 / 2017	70,926	61,242	6,306	252,571	\$1,469,189
2017 / 2018	72,863	63,179	6,412	255,843	\$1,493,959
2018 / 2019	74,800	65,116	6,516	259,012	\$1,518,234
Totals			<u>95,620</u>		<u>\$22,279,462</u>
Average			<u>4,781</u>		<u>\$1,113,973</u>

EXHIBIT D

LAW OFFICES OF
Reid & Hellyer

A PROFESSIONAL CORPORATION

POST OFFICE BOX 1300

RIVERSIDE, CALIFORNIA 92502-1300

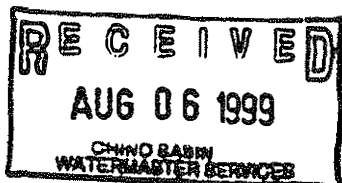
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GEO. W. HELLYER (1886-1969)
ENOS C. REID (1915-1990)

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DAVID M. DIVER
STEVEN G. LEE
DEBRA B. GERVAIS
JASON C. GLESS
DANIEL E. KATZ
PAUL J. NOLAN



OUR FILE NUMBER

August 5, 1999

VIA UPS OVERNIGHT MAIL

A0557-003

Ms. Traci Stewart
Chino Basin Watermaster
8632 Archibald Ave. Ste 109
Rancho Cucamonga, CA 91730

Re: Optimum Basin Management Plan
Comments and Concerns of the Agricultural Pool of the
Chino Basin

Dear Traci:

The following constitute the comments and concerns of the Agricultural Pool of the Chino Basin ("Ag Pool") relating to the draft of the Optimum Basin Management Plan ("OBMP").

It should be noted at the outset that the Ag Pool does now and has always supported the monitoring programs and the construction of the Desalters contemplated by the OBMP.

I

HISTORICAL DATA NOT ADEQUATELY ADDRESSED

In reviewing the OBMP, there are certain historical agreements and facts which have not been addressed by the OBMP that critically bear upon the financial allocation of responsibilities in the future. These include the Judgment provisions as well as the circumstances and intent of the Judgment, the Agreement pertaining to the first Desalter entered into in July 1996 as well as Resolution No. 93-10-1 relating to Replenishment Water for the Chino Basin Desalters.

1. **The Chino Basin Judgment.** The Chino Basin Judgment (Exhibit "A" hereto) filed January 30, 1978, was crafted in a manner not consistent with similar Basins. The parties acknowledged and agreed that the Overlying Agricultural Pool would not be given ownership or a transferrable water right. The parties anticipated that Agriculture would slowly be phased out of the basin due to development which was predicted even in the 1970's. The trade-off for this diminishing and restricted water right was the agreement

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Chino Basin Watermaster
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that the Ag Pool would not be liable for the increased cost of replenishment water or for the cost to import water due to the overdraft in the Chino Basin (unless it overproduces). The costs of curing the shortfall in the water quantity fell upon the remaining pools. The Ag Pool could be responsible only for its share of Administrative Expenses described in section 54 of the Judgment. These expenses include:

"(a) General Watermaster Administrative Expense shall include office rental, general personnel expense, supplies and office equipment, and related incidental expense and general overhead."

"(b) Special Project Expense shall consist of special engineering, economic or other studies, litigation expense, meter testing or other major operating expenses. Each such project shall be assigned a Task Order number and shall be separately budgeted and accounted for."

"General Watermaster administrative expense shall be allocated and assessed against the respective pools based upon allocations made by the Watermaster, who shall make such allocations based upon generally accepted cost accounting methods. Special Project Expense shall be allocated to a specific pool, or any portion thereof, only upon the basis of prior express and finding of benefit by the Pool Committee, or pursuant to written order of the Court."

As you can appreciate, the Judgment does not anticipate undertaking a project in the magnitude anticipated by the OBMP, nor, does it appear that the Watermaster will be the entity owning or operating the facility. As will be demonstrated further below, the OBMP effort to maximize water use within the basin is best addressed by assessments upon those parties demanding the additional supply. The Watermaster certainly does have the authority under the Judgment to undertake the OBMP as a study as well as the engineering, testing and other monitoring functions required in the OBMP for the future. The Watermaster does not have the authority under the Judgment to undertake construction or funding of projects to increase water quality or water quantity. A vast array of other public agencies have the jurisdiction and responsibility to resolve water quality concerns. The Ag Pool is not to be assessed under the Judgment for projects to increase water quantity. The OBMP appears to be a program intended to maximize water use for the benefit of the Appropriative Pool, and the expenses of OBMP implementation should be allocated accordingly.

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Finally, if the intent of the Watermaster is to amend the Judgment to expand the authority of the Watermaster to undertake such projects and assess the Ag Pool for maximizing water use within the Chino Basin as any other water producer, the Judgment should be amended to provide the Ag Pool with water rights which are transferrable and marketable. The Ag Pool should be given similar water rights enjoyed by other basin overlying pools.

2. Desalter 1 Agreement and Resolution 93-10. The Ag Pool has entered into an agreement resolving its liability for water quality issues in the Desalter 1 agreement entered into in July 1996 (Exhibit "B" hereto). This agreement was the product of many months of negotiations between the Regional Water Quality Control Board, Santa Ana Region ("RWQCB"), the Chino Basin Watermaster, and the Ag Pool as well as the Appropriative Pool and Overlying (Non-Agricultural) Pool. These negotiations resulted in an agreement between all the above parties to facilitate construction of a Desalter. This Desalter was necessary to remove excess salts from the basin groundwater. The Ag Pool agreed to contribute the replenishment water necessary to operate the Desalter(Para. 8.) The Appropriative Pool agreed to pay for the operating expenses of the Desalter(Para. 6.) The Appropriative Pool will benefit from the water created by the Desalter(Para. 9.)

The Desalter agreement contained the agreement of the parties as follows:

"This contribution shall satisfy salt offset requirements mandated for Basin clean-up on the Overlying (Agricultural) Pool members by the RWQCB, if the Overlying (Agricultural) Pool reasonably utilizes the Chino Basin co-composting facility. Subject to Paragraph 3 of this Agreement, the RWQCB further agrees that those parties to the Judgment which are members of the Overlying (Agricultural) Pool, as such parties are identified in the Judgment, shall have no further liability or responsibility for mitigating any adverse impacts of salts or nitrates in the Chino Basin Groundwater. The RWQCB and the Overlying (Agricultural) Pool and its members expressly agree not to assert or demand that any portion of the water supplies of the Chino Basin over and above the 12,000 acre feet per year specified in this Agreement should be dedicated for the purpose of mitigating any adverse impacts of salts or nitrates in the Chino Basin groundwater."

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More importantly, paragraph six of the agreement provided:

"The annual and special assessments will be levied 50% based on the prior year's Appropriative Pool total agricultural transfers, and 50% based on the prior years' Appropriative Pool total production. The annual and special assessment costs will be reduced by any amount covered by MWD's Groundwater Recovery Program. The Overlying (Agricultural) Pool and the Overlying (Non-Agricultural) Pool shall not be assessed for the costs identified in Section 5 hereinabove."

Thus, it is clear that the Ag Pool was not to be assessed for the cost of the Desalters. The Watermaster and other pools were parties to this contract which facilitated construction of the first Desalter which is currently underway. The first Desalter will be removing salts from the Chino Basin long after the Agricultural interests in the Chino Basin are gone. Pursuant to this agreement, the Ag Pool has already paid its debt for water quality. The Watermaster and other pools have agreed to this contribution and were parties to the agreement which limited the Ag Pool's responsibility to contribution of a certain amount of replenishment water. The Ag Producers cannot afford a financial contribution for future Desalters in addition to the contribution they have made, nor is it legally responsible for additional contributions of water or money.

Resolution No. 93-10-1 adopted by the Watermaster similarly anticipated the construction of two Desalters. This resolution of the Watermaster (attached hereto as Exhibit "C") provided at Section Three:

"In consideration of the accelerated transfer of unproduced Safe Yield from the Overlying (Agricultural) Pool to the Appropriative Pool as provided in Resolution No. 88-3, (providing for the accelerated transfer), the desalters' replenishment obligation offset provided by this Resolution shall be considered a contribution by the Overlying (Agricultural) Pool to the desalters which should satisfy the salt offset requirements mandated upon Overlying (Agricultural) Pool members by the Regional Water Quality Control Board."

Thus, it can be seen that the need for at least two Desalters was anticipated as early as 1993, and the Watermaster has already established the Ag Pool's contribution for the Desalters.

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Finally, Watermaster Resolution 96-3 (Exhibit "D") has clearly stated that the purpose of the first Desalter was to begin to clean-up the southern portion of Chino Basin and increase the safe yield of the basin. Further Desalters are necessary to develop water "for domestic use and to protect the Safe Yield of the basin".

Although the OBMP anticipates Chino Basin Water Conservation District funding, San Bernardino County Flood Control District funding, and Proposition 204 Bond funds, and other government sources, it defaults to Chino Basin Watermaster Assessments as an alternative funding source. (Section 5 p. 2) This would be inappropriate and the OBMP should specify that the Appropriative Pool must be the funding source in the event the other funding options fail.

II

THE OBMP DOES NOT ADEQUATELY ADDRESS THE DEGRADATION OF WATER QUALITY CAUSED BY THE OVERLYING APPROPRIATIVE POOL

The OBMP does not adequately address degradation of groundwater due to the effect of the recharge and pumping patterns in the northern portion of the Chino Basin. The position of the Ag Pool is that the degradation of water quality in the south half of the basin is largely caused by the historical citrus operation and the interception of the groundwater by the Appropriative Pool. The expenses of the solution should be borne by the Appropriative Pool.

It is also unfortunate that the OBMP addresses in minute detail the impact upon groundwater of the historical agricultural practices in the southern portions of the basin. The Ag Pool believes the detailed analysis regarding the impact upon the groundwater based upon historic agricultural practices is unproductive and misleading. The contaminated nature of the basin is the legacy of many generations of different farming and dairy practices, as well as the historic pumping patterns of municipal wells. The current owners of former agricultural property should not bear this burden simply due to the history of this basin, regardless of whether it has always been agricultural property or residential property which constituted former agricultural property.

The OBMP suggests the historic agricultural use is to blame for the poor groundwater quality. It fails to analyze the historic

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"flushing action" of the water influx from the north and discharge to the south thereby improving groundwater quality. It also fails to adequately address the fact that the water influx in the north is intercepted by the Appropriative Pool wells on the north half of the basin causing the recirculation of water and long term degradation of water quality in the south.

The only mention of this very significant phenomenon is found at section 4 page 16. If agricultural production were to cease, the rising groundwater discharge into the Santa Ana River would have an associated TDS concentration of 1,300 milligrams per liter and a nitrogen concentration of 30 milligrams per liter. Moreover, the ability to produce in the north would be reduced and the waste discharge requirements would become more stringent. Current agricultural production in the southern portion of the basin is critical to improvement of the water quality and maintaining the water quantity in the Chino basin.

Any "basin management plan" must analyze ways to encourage Agricultural production, not discourage it. The OBMP fails to address and certainly does not analyze or estimate the impact on the basin from reduced agricultural water production which would certainly occur if an assessment were placed upon such production.

III

THE OBMP DOES NOT CONSIDER CURRENT AND ANTICIPATED EXPENSES FOR AGRICULTURE

The OBMP assumes certain financing tools may be used to pay for the anticipated Desalters. The OBMP default financing tool is to assess the Pools.

In order to evaluate an assessment upon the Ag Pool, a study is necessary to determine the feasibility of a \$40 to \$200 per acre foot assessment in addition to pumping costs.¹ The OBMP does not discuss the overwhelming financial hardship that would be created for the agricultural producers, particularly field crop farmers and

¹\$200.00 per acre foot represents the estimate in the event no public funds become available. It is incomprehensive that this assessment could be paid by the Ag Pool. Nevertheless, such assessment would occur if the Desalters go forward and the financing methods fail.

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the likelihood that such assessments would make such agricultural practices infeasible. The OBMP also fails to consider current permit requirements recently established by the California Regional Water Quality Control Board and the enormous burden upon the Dairy Industry the new permit requirements include. The operating costs of the Dairies within the Chino Basin are anticipated to increase to a total of between \$12,000,000 and \$18,120,000 during the next two years to comply with the current permit demands (Exhibit "E"). It would be imprudent to simply assume that an assessment of the Ag Pool could be made to pay for the facilities without considerable inquiry as to the impact on Agriculture resulting from such assessment.

One solution to this dilemma is to simply provide in the OBMP that construction of the Desalters are contingent on the primary financing tools (Chino Basin Water Conservation District ad valorem revenue, San Bernardino County Flood Control District, and Proposition 204 Bond funds) or the many alternative funding sources identified in section 5 other than Watermaster Assessments. If the financing tools become unavailable and no water user or pool contracts to fund the balance, the parties agree to return to the drawing board and reconsider the need for the Desalters and the remaining funding sources. Perhaps a scaled down project or expansion of existing Desalters would suffice if the only financing tool were Watermaster Assessments. Moreover, the impact on Agriculture and its obligation to pay for future Desalters could be analyzed at that time.

IV

THE OBMP DOES NOT ADDRESS RESOLUTION 88-3 AND ITS FUTURE IMPLEMENTATION

Resolution 88-3 and its future implementation is not adequately addressed in the OBMP. Resolution 88-3 and its predecessor 84-2 created an accounting procedure whereby unallocated safe yield was transferred from the Ag Pool to the Appropriative Pool. In exchange for this contribution, the Appropriative Pool assumed the financial responsibility for the assessments and expenses of the Ag Pool.

This agreement has constituted one of the most successful and significant basin management arrangements heretofore undertaken within the Chino Basin. The OBMP does not discuss its future.

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A recent study by Wildermuth Environmental, Inc. indicates that this contribution has a value of up to \$9,800,000 per year and will equal \$49,000,000 over the five year period from 1999 through 2003. It appears likely that the Appropriative Pool would continue this relationship indefinitely based upon this benefit, but this must not be assumed. The OBMP should provide for and require that this arrangement be continued for the indefinite future. It should further analyze and establish the parameters upon which the arrangement would terminate, if at all.

V
CONCLUSION

The Ag Pool greatly appreciates the considerable effort put forth in the OBMP. The Ag Pool has always supported the construction of the facilities necessary to maximize beneficial water use within the Chino Basin.

It is the position of the Ag Pool, however, that it has made its required contribution for water quality. The further projects intending to maximize water quantity are worthwhile projects, but must be financed by the water users other than the 300 families within the Agricultural Pool. This policy and the procedures to implement it should be set forth in the OBMP before submission to the San Bernardino Superior Court for final approval.

Thank you for your consideration of this matter. If I may be of further assistance, please do not hesitate to call.

Very truly yours,

REID & HELLYER
A PROFESSIONAL CORPORATION

By


Dan G. McKinney

**AGREEMENT REGARDING AN ALTERNATIVE
WATER SUPPLY SOURCE FOR THE REPLENISHMENT
OBLIGATION OF THE CHINO BASIN DESALTER**

The California Regional Water Quality Control Board, Santa Ana Region ("RWQCB"), the Chino Basin Watermaster ("Watermaster"), the Chino Basin Appropriative Pool, the Chino Basin Overlying (Agricultural) Pool, and the Chino Basin Overlying (Non-Agricultural) Pool hereby enter into the following Agreement:

WHEREAS the Chino Basin Watermaster was appointed on January 27, 1978, under the Judgment in Case No. RCV 51010 (formerly Case No. SCV 164327) entitled Chino Basin Municipal Water District v. City of Chino, et al. (the "Judgment"), with powers to levy and collect administrative and replenishment assessments necessary to replace water produced from the Chino Basin in excess of Safe Yield allocations and to cover the cost of administration of the Judgment; and

WHEREAS, pursuant to the Judgment the water producers in the Chino Basin were organized into three Pools, consisting of the Appropriative Pool, the Overlying (Agricultural) Pool, and the Overlying (Non-Agricultural) Pool; and

WHEREAS the RWQCB intends to mandate salt offset requirements for Basin clean-up on the Overlying (Agricultural) Pool members; and

WHEREAS the parties hereto are endeavoring to facilitate the development and construction of a desalter project to be constructed under Santa Ana Watershed Project Authority's Project Agreement 14 (the "Desalter") for the purpose of removing high-salinity/nitrate groundwater to stabilize and eventually improve water quality in the Chino Basin; and

WHEREAS a Desalter is necessary to effect cleanup of the Chino Basin as required by the RWQCB; and

WHEREAS operation of the Desalter will require production of water, by pumping groundwater from the Chino Basin, removing excess salts from the water, making the reclaimed water available for use, and placing the resulting brine in the Santa Ana Regional Interceptor line for disposal outside of the Chino Basin; and

↓

WHEREAS the Desalter has no Safe Yield allocation in Chino Basin and all water produced by the Desalter must be replenished; and

WHEREAS due to the replenishment obligation, the Desalter will not be economically feasible for an uncertain period of time unless alternatives are found to offset said replenishment water obligation; and

WHEREAS the Watermaster has adopted Resolution 93-10-1 regarding the supply of replenishment water to be used to meet the replenishment water obligation resulting from the Desalter; and

WHEREAS the Watermaster has developed a list of various replenishment water sources to meet the replenishment obligation of the Desalter as shown on Exhibit "A" attached hereto; and

WHEREAS on or about October 21, 1993, Kaiser Resources, Inc. (now known as Kaiser Ventures, Inc.) ("Kaiser"), a party to the Judgment, and the RWQCB entered into an agreement (the "Salt Offset Agreement") pursuant to which Kaiser agreed to make certain payments and to provide water (sufficient to remove 4000 tons of salt per year for 25 years) to satisfy a portion of the replenishment water obligations of the Desalter; and

WHEREAS on or about October 18, 1995, in partial satisfaction of its obligations under the Salt Offset Agreement, Kaiser executed an Election to Abandon Water to Watermaster pursuant to which Kaiser agreed to abandon to Watermaster rights to 1,000 acre feet of water per year for 25 years (and made an initial abandonment of 18,000 acre feet of water) for the purpose of satisfying a portion of the replenishment water obligations of the Desalter; and

WHEREAS the parties hereto have proposed that Watermaster supply up to 12,000 acre feet per year of replenishment water pursuant to the terms and conditions of this Agreement; and

WHEREAS the Watermaster has stated that at current rates the value of 12,000 acre feet per year is at least \$2.7 million up to \$19.2 million each year; and

WHEREAS the parties hereto wish to enter into this Agreement to memorialize the obligations which they have undertaken;

NOW, THEREFORE the parties hereto do hereby agree as follows:

1. The Watermaster will provide up to 12,000 acre feet per year of the replenishment water obligation resulting from operations of the Desalter, subject to Section 11 hereof. The replenishment water sources stated on Exhibit "A" will be used by Watermaster to meet up to 12,000 acre feet per year of the replenishment water obligation resulting from operation of the Desalter, subject to Section 11 hereof. The 1,000 acre feet of water per year abandoned by Kaiser pursuant to its Election to Abandon Water to Watermaster shall be part of such 12,000 acre feet. Nothing in this Agreement shall be deemed to release Kaiser from any of its obligations under the Salt Offset Agreement or to release Kaiser or Watermaster from any of its obligations under the Election to Abandon Water to Watermaster.

2. Watermaster will have no obligation to supply any replenishment water in excess of 12,000 AF in any one year. Neither Watermaster nor any of the Pools created pursuant to the Judgment will be required by the RWQCB to make any contribution, including any contribution of water, water rights, or cash, to contribute to: (1) removal of salts or nitrates deposited in the Chino Basin prior to the date of this Agreement, and (2) removal of salts or nitrates contributed by agricultural sources subsequent to the date of this Agreement. This shall not limit the RWQCB's authority to require cleanup by specific dischargers of nonagricultural plumes of salts or nitrates, such as those from Kaiser, Chino Basin Municipal Water District facilities, or other regulated or unregulated nonagricultural facilities.

3. Nothing contained in this Agreement shall be construed to limit in any way the authority of the RWQCB to issue, impose and/or enforce waste discharge requirements for any agricultural operation within the Chino Basin. However, with regard to routine agricultural operations the RWQCB will not require or seek mitigation, including payment of any monies or provision of replenishment water, for deposit of salts or nitrates in the Chino Basin groundwater outside of such enforcement of waste discharge requirements. The RWQCB will adopt guidance at a later date defining waste discharges from routine agricultural operations. It is understood that the Regional Board, following public hearings, may modify the waste discharge requirements and that the modified requirements may be different or more stringent than those currently in place.

4. The legal rights and remedies of the parties to the Judgment to address the pollution of the Chino Basin groundwater or to require any regulatory agency, including the RWQCB, to fulfill its duties with respect to any

pollution of the Chino Basin groundwater, except as released herein, shall not be impaired by this Agreement.

5. Costs associated with securing the sources of replenishment water set forth in Exhibit "A" and satisfying the replenishment obligation of the Desalter will be of two types: (1) costs that are annual in nature and (2) costs that may be incurred to offset a specific replenishment water obligation once it is determined there is a deficiency. Costs that are annual in nature (such as maintenance, improvement or conveyance costs associated with spreading additional runoff or some quantity of reclaimed water) will be assessed by Watermaster as established in Section 6 of this Agreement and recovered annually. Prior to the initial year of Desalter operation, an estimate will be made of these costs and they will be presented during the budget process for assessment during the initial year of operation and annually thereafter. The Appropriative Pool shall decide which sources of replenishment water will be developed and therefore assessed. With regard to offsetting the specific replenishment water obligation of the Desalter, Watermaster will first determine if the replenishment water obligation exceeds the water developed from the replenishment water sources as stated in Exhibit "A" based on the information available each year during the budget process. If there is a replenishment water obligation, Watermaster will carryover the deficiency for the first five years of Desalter operation. In the sixth year of Desalter operation, a determination will be made whether the replenishment water obligation from the first five years of Desalter operation is greater than the replenishment water developed from the replenishment water sources stated in Exhibit "A." If the replenishment water obligation is greater, Watermaster may purchase additional replenishment water to satisfy such replenishment water obligation, or may make a determination as to whether there are any other sources of replenishment water that have not yet been utilized to offset the replenishment water obligation of the Desalter. If additional replenishment water cannot be developed, a special assessment may be levied as established in Section 6 of this Agreement.

6. The annual and special assessments will be levied 50% based on the prior years' Appropriative Pool total agricultural transfers, and 50% based on the prior years' Appropriative Pool total production. The annual and special assessment costs will be reduced by any amount covered by MWD's Groundwater Recovery Program. The Overlying (Agricultural) Pool and the Overlying (Non-Agricultural) Pool shall not be assessed for the costs identified in Section 5 hereinabove.

7. The quantity of water derived from each source specified in Exhibit "A" is anticipated to be in the range of that shown for each source in Exhibit "B."

8. After Kaiser is given salt removal rights of 4000 tons per year for 20 years, the Desalter replenishment water obligation offset provided by this Agreement shall be considered the total contribution by the Overlying (Agricultural) Pool to the Desalter. This contribution shall satisfy salt offset requirements mandated for Basin clean-up on the Overlying (Agricultural) Pool members by the RWQCB, if the Overlying (Agricultural) Pool reasonably utilizes the Chino Basin co-composting facility. Subject to Paragraph 3 of this Agreement, the RWQCB further agrees that those parties to the Judgment which are members of the Overlying (Agricultural) Pool, as such parties are identified in the Judgment, shall have no further liability or responsibility for mitigating any adverse impacts of salts or nitrates in the Chino Basin groundwater. The RWQCB and the Overlying (Agricultural) Pool and its members expressly agree not to assert or demand that any portion of the water supplies of the Chino Basin over and above the 12,000 acre feet per year specified in this Agreement should be dedicated for the purpose of mitigating any adverse impacts of salts or nitrates in the Chino Basin groundwater.

9. If more replenishment water is developed from the sources identified in Exhibit "A" than is necessary to meet the replenishment water obligation of the Desalter, then the excess water will be carried over to offset future obligations or may be sold for general replenishment purposes at the discretion of the Appropriative Pool. However, the cost of any such water purchased by a party within the Appropriative Pool for replenishment purposes shall be borne entirely by that party and shall not be subject to subsidy pursuant to the 85/15 rule.

10. Nothing herein stated shall be deemed an admission of wrongdoing by the producers of water from the Basin regarding water quality degradation currently or historically occurring in Chino Basin.


11. Watermaster agrees to continue to supply replenishment water as required by Section 1 hereof to offset Desalter production for as long as the Desalter is operational, to the extent it is necessary to make the cost of the product water from the Desalter competitive with the then current market cost of a treated replacement water supply from another source. However, Watermaster shall not have an obligation to purchase water to meet its replenishment obligations pursuant to Section 1 hereof after the period of time the Desalter is financed or 20 years, whichever is shorter.

12. This Agreement shall become effective upon its execution by the parties hereto and its approval by the Court having continuing jurisdiction with regard to the Judgment.

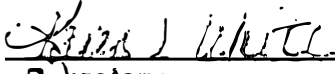
13. This Agreement constitutes the entire agreement among the parties with respect to the subject matter hereof. No modification of this Agreement shall be valid unless in writing, signed by all parties hereto, and approved by the Court having continuing jurisdiction with regard to the Judgment. All parties shall be deemed to be the drafters of this Agreement and no provision of this Agreement shall be construed against any party as the drafter thereof.

14. This Agreement shall bind and enure to the benefit of the officers, employees, agents, heirs, executors, administrators, successors and assigns of the parties hereto.


CALIFORNIA REGIONAL WATER
QUALITY CONTROL BOARD,
SANTA ANA REGION

By 
William T. Hardy, Jr.
Its Chairman

ATTEST:


Secretary

CHINO BASIN WATERMASTER

By 
Bill Hill
Its Chairman

ATTEST:


Secretary

CHINO BASIN
APPROPRIATIVE POOL

By Edwin D. James
Edwin D. James
Its Chairman

ATTEST:

Traci Stewart
Secretary

CHINO BASIN OVERLYING
(AGRICULTURAL) POOL

By Robert H. Deberard
Robert H. Deberard
Its Chairman

ATTEST:

Traci Stewart
Secretary

CHINO BASIN OVERLYING
(NON-AGRICULTURAL) POOL

By Stephen R. Arbelbide
Stephen R. Arbelbide
Its Vice Chairman

ATTEST:

Traci Stewart
Secretary

EXHIBIT A

1. Interception of rising water leaving the Basin.
2. Use of reclaimed water to recharge the Basin.
3. Water available from either transfers or abandonment by members of the Non-Ag Pool.
4. Water stored in Watermaster accounts.
5. Other new water introduced into the Basin. (This could include, but not be limited to: Introduction of Santa Ana River water, increased inflow from other basins, and additional recharge of storm runoff.)

Exhibit B
Allocation of Replenishment Sources

Desalter Production Capacity (mgd)	5	8	16
Replenishment Obligation (acre-ft)	5,598	8,957	17,914
Replenishment Sources			
Interception of Rising Water (1)	1,679 - 2,239	2,687 - 3,583	5,374 - 7,166
Use of Reclaimed Water to Recharge Basin (2)	3,000 - 5,000	3,000 - 5,000	5,000 - 7,000
Water Available from either Transfers or Abandonment by Members of the Non-Agricultural Pool; includes Kaiser (3)	2,100 - 3,500	2,100 - 3,500	2,100 - 3,500
Water Stored in Watermaster Accounts (4)	548 - 548	548 - 548	548 - 548
Other New Water Introduced to the Basin (5)	2,000 - 4,000	2,000 - 4,000	4,000 - 8,000
Total Available Replenishment	9,327 - 15,287	10,335 - 16,630	17,022 - 26,213

Notes: (1) - assumes a range of 30 to 40 percent of desalter production; also assumes that total basin production exceeds safe yield.

(2) - assumes that agencies can implement recharge program at Ely and Lower Cucamonga Basin in next three years and expand to other spreading basins as needed.

(3) - assumes that no new water will go into storage accounts, unproduced rights will be transferred at a rate equal to .75 to 1.25 of 1989 to 1994 average (~2,800 acre-ft/yr) of unproduced water by non-ag pool.

(4) - assumes water currently on account by Watermaster of 10,950 acre-ft spread over 20 years.

(5) - assumes new water developed from stormwater recharge; 1,000 acre-ft/yr of new water is under development by CBWCD at new Brook Street Basin.

RESOLUTION NO. 93-10-1**RESOLUTION OF THE CHINO BASIN WATERMASTER
ESTABLISHING AN ALTERNATIVE WATER SUPPLY
SOURCE FOR THE REPLENISHMENT OBLIGATION
OF THE CHINO BASIN DESALTERS**

WHEREAS, the Chino Basin Watermaster was appointed on January 27, 1978, under Case No. WCV 51010 (formerly Case No. SCV 164327) entitled Chino Basin Municipal Water District v. City of Chino, et al, with powers to levy and collect administrative and replenishment assessments necessary to maintain water levels and to cover the cost of administration of the Chino Basin Groundwater Basin Management Plan; and

WHEREAS, the Santa Ana Watershed Project Authority (SAWPA), is endeavoring to build two desalters for the purpose of removing high-salinity/nitrate groundwater to stabilize and eventually improve water quality in the Chino Basin; and

WHEREAS, the two desalter plants have no safe yield allocations in Chino Basin and all water produced by the desalters must be replenished; and

WHEREAS, due to the replenishment obligation the project will not be economically feasible unless alternatives are found to offset said obligation; and

WHEREAS, Watermaster staff has developed a list of various water replenishment sources to meet the replenishment obligations for the desalters as shown on Exhibit "A" attached hereto; and

WHEREAS, it is the intention of the Watermaster that any costs associated with the development of replenishment sources as stated in Exhibit "A" will be offset by selling a portion of the replenishment water identified in Exhibit "A" .

NOW, THEREFORE, the Chino Basin Watermaster does hereby DETERMINE, RESOLVE AND ORDER as follows:

Section One: That the replenishment sources stated on Exhibit "A" be used to meet the replenishment obligations resulting from the desalters.

Section Two: During the first ten years after construction, if the replenishment obligations are greater than the replenishment sources stated on Exhibit "A", and/or other replenishment sources which may be identified during the ten year period, the replenishment obligation will be carried over. If a replenishment obligation still exists in the eleventh year, a special assessment will be levied to purchase additional water to meet the shortfall. The assessment shall be based on the entire two prior years of Appropriative Pool production and may be allocated as then determined by the

members of the Appropriative Pool, over the next two years. In the twelfth year and thereafter, if the replenishment obligation is greater than the replenishment sources as identified in Exhibit "A", a special assessment will be levied to purchase additional water, and will be based on the entire Appropriative Pool production in the prior year.

Section Three: In consideration of the accelerated transfer of unproduced Safe Yield from the Overlying (Agricultural) Pool to the Appropriative Pool as provided in Resolution No. 88-3, (providing for the accelerated transfer), the desalters' replenishment obligation offset provided by this Resolution shall be considered a contribution by the Overlying (Agricultural) Pool to the desalters which should satisfy the salt offset requirements mandated upon Overlying (Agricultural) Pool members by the Regional Water Quality Control Board.

Section Four: If the replenishment water identified in Exhibit "A" exceeds the replenishment obligation of the desalters, then the excess water would be used for general replenishment purposes.

Section Five: Nothing herein shall be deemed an admission of wrong doing by the producers of water from the basin regarding water quality degradation currently or historically occurring in Chino Basin. Further, this Resolution shall be deemed only a statement of support of the herein described program by the Chino Basin Watermaster and its Advisory Committee and shall be limited to the project herein described.

Section Six: That the Secretary is hereby authorized and directed to transmit certified copies of Resolution No. 93-10-1, to the appropriate agencies.

THE FOREGOING RESOLUTION was approved and signed on this seventh day of October, 1993.

ATTEST:


Bill Hill, Chairman



John L. Anderson, Secretary
(SEAL)

Exhibit A

1. Interception of rising water leaving the basin.
2. Use of reclaimed water to recharge the basin.
3. Water available from either transfers or abandonment by members of the Non-Ag Pool.
4. Water stored in Watermaster accounts.
5. Other new water introduced to the basin. (This could include, but not be limited to, introduction of Santa Ana River water, and additional storm runoff recharge.)

MILK PRODUCERS COUNCIL

13545 Euclid Ave., Ontario, CA 91761 - (909) 628-6018 - Fax (909) 591-7328

PROJECTED COSTS OF MANURE REMOVAL TO THE DAIRY INDUSTRY IN THE SANTA ANA REGION AT CURRENT (7/26) REMOVAL RATES.

- To adequately remove the estimated 950,000 tons of manure this year, the dairy industry in the Santa Ana Region will face a huge economic impact. Manure must be removed from a dairy site to ensure herd health and milk quality. At one time in the Chino Basin, dairy producers had a free, unlimited market for their manure, but as urbanization and environmental regulation have increased over the past 20 years, manure removal has become more expensive.

The general waste discharge permit, as proposed by the Santa Ana Regional Water Quality Control Board, will ban the spreading of manure within the Chino Basin. As of today, the Chino Basin dairy producer is faced by a range of manure removal costs (cost includes a fixed \$4 fee for scraping, loading, and hauling out of the corrals; in addition to a variable tipping fee) that are charged to the dairy producer. At a total cost of \$6, there is a limited market for spreading within agricultural areas in the Chino Basin. At \$8, the market for spreading manure increases as manure can be transported to farm areas in Riverside County (i.e. Moreno Valley). Between \$10 and \$12, compost facilities within the Chino Basin can receive 300,000 to 400,000 tons. The agricultural community and composters in and around the Chino Basin can process up to 400,000 tons. At \$12, some dairy producers are able to transport and spread manure, with a back-haul, onto agricultural lands in the South Central Valley. The rest of the manure would then be transported into the Central Valley at a cost between \$14 and \$16 per ton.

By the year 2001, the cost of removing manure will significantly increase. The increase is due to the Regional Board's desire to eliminate manure spreading in other surrounding groundwater basins as well as general increases in operating costs.

cost (scrape, haul, & tipping fee)	manure removed	cost to dairy
\$ 6	25,000tons	\$ 150,000
8	50,000	400,000
10	100,000	1,000,000
12	325,000	3,900,000
14	300,000	4,200,000
16	150,000	2,400,000
Total (1999)	950,000tons	\$12,050,000
Projected Total (2001)		18,120,000

Cost Structure of Manure Removal

Cost per dairy (@302 animal feeding operations*)

1999 - \$39,900

2001 - \$60,000

Cost per milking & dry cow (@250,000 cows*)

1999 - \$48.20

2001 - \$72.48

Cost per hundred weight (@56,802,000 cwt of milk produced in the Chino Basin per year)

1999 - \$0.21

2001 - \$0.32

**California Regional Water Quality Control Board, Santa Ana Region
Fact Sheet for Order No.99-11, NPDES NO. CAG018001*

EXHIBIT E

**THE PERFORMANCE OF INSTITUTIONS
FOR GROUNDWATER MANAGEMENT**

Volume 7 – Chino Basin

by

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Considerable activity has occurred on those fronts, and results have been achieved. On the other hand, water producers (especially appropriators in the lower portion of the Basin) have been concerned that equivalent attention has not been paid to issues of water quality. As was seen with the Conjunctive Use Study begun in 1978, the issue of raising water levels is linked to issues of water quality.

Water Quality Problems in the Chino Basin

Chino Basin does not have a history of poor water quality, but it has not been without its problems, either. The water quality problem in the Chino Basin that has received the most attention has not been the water quality problem that has been the most pervasive.

The Stringfellow Acid Pits. The water quality problem in Chino Basin that has undoubtedly received the most attention nationally is the presence of a plume of contaminated groundwater moving toward the Chino Basin and caused by the Stringfellow Acid Pits. The site gained notoriety during the early 1980s when Anne Corsuch was EPA Administrator and Rita Lavelle was the Assistant to the Administrator in charge of the Superfund program. Today, the Stringfellow Acid Pits are now an EPA Superfund National Priority List site, and removal of contaminated water has begun.

The Stringfellow Acid Pits were a licensed disposal site for industrial by-products generated in Los Angeles, Orange, Riverside, San Bernardino, and San Diego Counties. The Stringfellow site leached contaminants into the underground water supply, including a high concentration of toxics and acids, among which were volatile organics, and beta and gamma constituents. In the years since the discovery of the contamination problem, a clean-up effort has been assembled and implemented, funded primarily by the national government. The agencies principally involved in the clean-up are the Region IX office of the EPA, the California Department of Health Services, and the Santa Ana Watershed Project Authority (SAWPA).²³⁴

The Santa Ana Watershed Project Authority is the principal regional water quality agency in the Santa Ana River area (there is also a State agency involved in water quality issues in the area, the Santa Ana Regional Water Quality Control Board). The predecessor of the Santa Ana Watershed Project Authority was the Santa Ana Watershed Planning Agency (which, unfortunately, had the same acronym).

In 1968, as the Santa Ana River adjudication neared its end, the four water districts involved in that litigation -- the Orange County Water District, the Chino Basin Municipal Water District, the Western Municipal Water District of Riverside County, and the San Bernardino Valley Municipal Water District -- formed the Santa Ana Watershed Planning Agency as a joint-powers agency. The Agency's purpose was "to develop a long-range plan for managing, preserving, and protecting the quality of water supplies in the Santa Ana Basin."²³⁵ Work on the

Planning Agency's first Water Quality Control Plan began in 1968 and was completed in 1974. It included recommendations for Santa Ana River system problems such as salt imbalances, protecting vulnerable surface water systems such as Newport Bay and Big Bear Lake, and separating toxics from wastewater for separate treatment and disposal so that they do not enter the water use and reuse system in the Santa Ana River watershed. ²³⁶

In January 1975, the Santa Ana Watershed Project Authority, also a joint-powers agency of the four water districts, was created to implement the Planning Agency's recommendations. The present SAWPA, then, exists "to plan, finance, construct, and operate projects which relate to water quality and quantity management on a regional (basin-wide) basis." ²³⁷ Among the important projects constructed and operated by SAWPA is the Santa Ana Regional Interceptor (SARI), also known as the "Brine Line." The SARI line transports wastewaters (high in salts, nitrates, and other mineral concentrations) from dairies and from commercial and industrial sites in the Santa Ana River watershed to municipal treatment systems operated by the County Sanitation Districts of Orange County, where the wastewaters are treated and discharged into the Ocean. ²³⁸

As the problems at the Stringfellow Acid Pits emerged, the Santa Ana Watershed Project Authority began to plan a containment, removal, and treatment approach to the contamination problem. SAWPA proposed a set of contractual arrangements with the California Department of Health Services, Region IX of the EPA, and the Orange County Sanitation Districts to intercept the movement of the contaminated plume by (1) removing the contaminated water, (2) giving it initial treatment to remove heavy metals and organic materials at an on-site treatment plant to be constructed and operated by SAWPA, then (3) transporting the treated effluent via the SARI line to the treatment plants of the Orange County Sanitation Districts for further treatment and disposal. ²³⁹

This proposal involved moving the once-treated Stringfellow water across the Chino Basin and across most of the heavily populated portion of Orange County, and it encountered a host of political and NIMBY ("not in my back yard") opposition. At one point in late 1984, the Orange County Board of Supervisors and the Cities of Fountain Valley and Huntington Beach threatened litigation. ²⁴⁰ After a process of public education to convey the message that the toxic materials would be removed at the treatment site upstream, the opposition lessened and the contracts entered into between SAWPA and the EPA and SAWPA and the California Department of Health Services in 1984 were implemented.

Within the Chino Basin, one more obstacle had to be removed. Neither the State of California nor SAWPA had the right to export waters from the Basin, yet the plan for removal, treatment, and transport of the water from the Stringfellow site would involve exporting water from the Basin. The State of California had pumping rights in the Overlying (Agricultural) Pool, but not export rights. The Watermaster Advisory Committee met and discussed the issue, and directed the Chino Basin Watermaster to petition the Court for an exception to allow the export of water by the State. The motion was submitted and granted. ²⁴¹

Removal of contaminated wastewater began during the 1985-86 water year,²⁴² and has continued each year since. As of the end of the 1988-89 water year, 88.7 acre-feet of contaminated wastewater had been removed and exported from the Stringfellow site.²⁴³ Thus far, the treatment and removal program has been successful at keeping the plume of contaminated water from migrating into the Chino Basin and further into the Santa Ana River watershed.²⁴⁴

The Nitrate Problem. The more widespread water quality problem in the Chino Basin is nitrate concentrations. Excessive concentrations of nitrates are a threat to human health, especially to newborns, whose liquid consumption is several times greater in proportion to their body weight than that of older children and adults. Among the most deadly of the effects of nitrate contamination is infant methemoglobinemia, which robs an infant's blood of its oxygen-carrying capability, leading eventually to death by suffocation.

Nitrates are also a fairly common groundwater contaminant, especially in areas where land use has been primarily agricultural and where waste disposal has not been relatively sophisticated and confined. In a groundwater basin such as the Chino Basin, where much of the overlying land use for the last century has been for dairy ranches and citrus groves, excessive nitrate concentrations are unsurprising (though no less serious).

Nitrate concentrations are not distributed evenly throughout the Basin. The greatest concentrations tend to occur in areas near waste water discharges and intensive agricultural activity.²⁴⁵ In the Chino Basin, this pattern means that nitrate concentrations have been greatest in the northwest portion of the Basin (where intensive residential and commercial development first occurred) and the lower-lying southern portion of the Basin floor (where agricultural activity has been most prevalent, and where most of the current agricultural and ranching activity in the Basin continues). These patterns are not new. They were observed by the California Department of Water Resources twenty years ago.²⁴⁶

Water quality is lower in the southern part of the Chino Plain; northwest and north of Corona... and the area east of Pomona and west of Ontario than in the other parts of the basin. In most of these areas, ground water from shallow wells is generally of poorer quality than water from deep wells. Most of these well waters are affected by local discharges of domestic and industrial waste waters, or by agricultural waste water returns. In some of these areas, such as... Corona, and the southern portion of the Chino Basin, the ground water is shallow, and only shallow wells exist....

Nitrate concentrations are highest in ground water sampled from wells in the... Corona, and lower Chino basins, north of Claremont, Pomona, Ontario, and east and southeast of Chino.

There is a relationship between the distribution of nitrate concentrations in the Chino Basin and the management program in the Chino Basin. The relationship is hinted at by the difference noted above in water quality of shallower versus deeper wells. This relationship between nitrate concentrations and the Basin management program has been the source of a recent legal challenge by some Chino Basin water producers to the management practices of the Chino Basin Watermaster.

Clearly, nitrates from fertilizers, manure, and waste water do not pass directly from the land surface into the underground water supply. They first pass through the vadose or unsaturated zone, which is the soil from the land surface to the water table. The water table then marks the beginning of the saturated zone in a groundwater basin, where water is stored and from whence it is extracted.

The implications of this for the management program in the Chino Basin are relatively straightforward. The areas within the Basin that have the highest nitrate concentrations in their groundwater also have the highest nitrate concentrations in their soils. When the water table is raised in these areas and the upper level of the saturated zone is brought nearer the land surface, the underground water supply (which may already exhibit above-average nitrate concentrations) mingles with the more contaminated soils and absorbs even more nitrates. Thus, the nitrate concentrations in these areas grow still greater.

In the Chino Basin, as already noted, the primary direction of the management program in the first decade of operation under the Judgment has been to control pumping, eliminate overdraft, and place tens of thousands of acre-feet of water in underground storage. Among the results of this management program has been the recovery of water levels in the Basin. In other words, the management program has been successful at increasing the total quantity of water in the Basin. However, the benefits and costs of this "success" have not been evenly distributed within the Basin. In some areas of the Basin, water producers have benefited without reservation from the shorter pumping lifts associated with a rising water table. In other areas, a rising water table has been accompanied by aggravated water quality problems.

In particular, the water producers at the southern end of the Basin have felt the negative consequences of the rising water table. As observed earlier, the water table in this portion of the Basin has historically been relatively close to the land surface, with depths to water generally 50 feet or less. As also noted earlier, water levels in the lower portion of the Basin have recovered by as much as 10-15 feet since the beginning of operation under the Judgment. This has brought the water table at the southern end of the Basin even nearer to the land surface.

As a result, the water users in the southern end of the Chino Basin have seen increases in the nitrate concentrations in their water supply.²⁴⁷ These water producers do not want their water table raised

still further, and so they have undertaken a program of opposition to the management practices of the Chino Basin Watermaster.

This opposition to the storage of additional water in the Basin has been coupled with the concerns of some members of the Appropriative Pool about the development by the Watermaster of an Optimum Basin Management Plan, including water quality and socio-economic studies, as provided for by the Chino Basin Judgment. The Appropriative Pool Committee members have been trying to press the pursuit of these studies and the development of this Plan. Their contention is that the Chino Basin Watermaster has ample authority to undertake these studies, and in fact has an obligation under the Judgment to develop an Optimum Basin Management Plan, but that this authority has not been used and this obligation has not been fulfilled.²⁴⁸

On November 9, 1988, the City of Norco, the City of Chino, and San Bernardino County Waterworks District No. 8, all members of the Appropriative Pool, filed a "Notice of Motion and Motion for Review of Watermaster Actions and Decisions" before Judge Don A. Turner in the Superior Court for San Bernardino County. The "Motion for Review of Watermaster Actions and Decisions" contained the charge: "Watermaster has failed and continued to fail to abide by its responsibilities and duties under the Judgment by failing to undertake and implement an Optimum Basin Management Program for Chino Basin, by failing to conduct the Socio-Economic Study and Survey mandated by the Judgment, by failing to provide proper, responsible, equitable and fair water management policy, and by failing to comment on the proposal by the Metropolitan Water District (MWD) for Groundwater Storage at Chino Basin."

A hearing before Judge Turner was scheduled for February 8, 1989.²⁴⁹ The hearing was actually held March 1, 1989.²⁵⁰ At that hearing, arguments were presented by counsel for the moving parties and for the Chino Basin Watermaster. Judge Turner issued no final decision, but indicated that he expected to direct the Watermaster to undertake the water quality and socio-economic studies as soon as possible.²⁵¹

Summary and Conclusions: Basin Management After San Fernando and San Gabriel

Among the groundwater basins of southern California, Chino Basin has undergone the most recent adjudication and implementation of a management program. Groundwater management in the Chino Basin exemplifies the changes that have occurred in groundwater basin management policies, institutional arrangements for groundwater management, and the California law of water rights during the half-century since Pasadena v. Alhambra, the Raymond Basin adjudication.

The basic policy approach to groundwater basin management has changed dramatically from Raymond Basin to Chino Basin. The early adjudications (Raymond, West, and Central Basins) reflected the prevailing view of their time, which was that any overdrafting of a groundwater basin was detrimental, that groundwater extractions should

228. Chino Basin Watermaster, 1978, op. cit., pp. 14-15.
229. Chino Basin Watermaster, 1990, op. cit., p. 16; Skrove, 1989b, op. cit., p. 8.
230. Chino Basin Watermaster (1980) Third Annual Report of the Chino Basin Watermaster, 1979-80, Rancho Cucamonga, CA: Chino Basin Municipal Water District, p. 17.
231. Chino Basin Watermaster, 1990, op. cit., pp. 20-21.
232. Ibid., pp. 12-13.
233. Ibid., pp. 20-21.
234. Interview with Donald Peters, July 25, 1988.
235. Trager, op. cit., p. 64.
236. Ibid., p. 65.
237. Ibid., p. 64.
238. Association of California Water Agencies, op. cit., p. 188.
239. Ibid.; Trager, op. cit., pp. 37-38.
240. Trager, op. cit., p. 39.
241. Chino Basin Watermaster, 1986, op. cit., pp. 8-9.
242. Chino Basin Watermaster, 1987, op. cit., p. 10.
243. Chino Basin Watermaster, 1990, op. cit., p. 10.
244. Interview with Donald Peters, July 25, 1988.
245. California Department of Water Resources, 1970, op. cit., p. 55.
246. Ibid., p. 59.
247. Interview with Donald Peters, July 25, 1988; Interview with Susan Trager, Law Offices of Susan M. Trager, Irvine, California, January 30, 1989. It should be noted that there are additional concerns with having the water table too near the land surface, including the creation of swampy conditions, seepage into building basements and other excavations, and the increased possibility of soil liquifaction in the event of an earthquake (obviously a matter of particular concern to southern Californians -- e.g., the March 1, 1990 5.5 southern California earthquake was centered just north of Upland along the fault zone that forms the northern boundary of Chino Basin).

248. Interview with Susan Trager, January 30, 1989.
249. Ibid.
250. Chino Basin Watermaster, 1990, op. cit., pp. 21-22.
251. David Bloom, "Cities Win Battle Over Managing Water Supplies." The Press-Enterprise. Riverside, California, March 2, 1990, p. B-1.
252. Lipson, op. cit., p. 17.
253. Ibid., p. 83.
254. Trager, op. cit., pp. 42-43; Tim Skrove (1989a) "Babysitting That Morning Cup of Coffee." Aqueduct. Vol. 55, No. 1, p. 4.
255. Trager, op. cit., p. 36.
256. Ibid., pp. 59-60.

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APPENDIX
THE CHINO BASIN CHRONOLOGY

The Chino Basin Chronology

- 1769 Portola expedition camps in Santa Ana Valley; river and valley named for St. Anne
- 1776 Francisco Garces expedition reaches Chino Basin floor at Cucamonga Creek
- 1837-41 Ranchos established in Chino Basin
- 1870 First drill rigs and deep pumps introduced, allowing access to ground water after Spanish ranchos largely eliminated by drought
- 1890 First irrigation districts organized in Chino Basin
- 1895 First water spreading along San Antonio Creek in western portion of Chino Basin
- 1902 Publication of J.B. Lippincott's studies of water development in the upper Santa Ana River area for U.S. Geological Survey
- 1905 Publication of W.C. Mendenhall's study of hydrology of the San Bernardino Valley for U.S. Geological Survey
- 1907 Orange, Riverside, and San Bernardino Counties form the Tri-Counties Reforestation Committee
- 1908 Early water spreading on Cucamonga Creek in northern portion of Chino Basin
- 1909 Orange, Riverside, and San Bernardino Counties form the Water Conservation Association
- 1911 Water Conservation Association begins water spreading on Santa Ana River
- 1913 Municipal Water District Act and California Water District Act adopted
- 1928 Metropolitan Water District of Southern California (MWD) created
- 1931 Chino Basin Protective Association formed by individuals and corporations in the basin; San Bernardino Valley Water Conservation District organized; California Legislature appropriates \$400,000 for water conservation and flood control in Santa Ana River watershed
- 1932 Irvine Company files suit against water users in the upper basin, claiming that upstream actions endanger the Company's riparian right and the supply to its 80 wells

1933. Orange County Water District established
- 1939 San Bernardino County Flood Control District established
- 1941 Prado Dam built by the Army Corps of Engineers
- 1942 Upper Basin-Lower Basin litigation settled with an agreement governing upstream spreading activities
- 1949 Chino Basin Water Conservation District established to succeed the Protective Association; deliveries of MWD Colorado River water to Chino Basin begin
- 1950 Chino Basin Municipal Water District formed
- 1951 Orange County sues upstream cities over ground waters of the Santa Ana River basin (Orange County Water District v. City of Riverside et al.); Chino Basin Municipal Water District annexes to MWD
- 1954 Western Municipal Water District of Riverside County formed and annexed to MWD; San Bernardino Valley Municipal Water District formed
- 1955 Cucamonga County Water District formed
- 1957 Orange County Water District suit against four upstream cities tried; judgment entered (subsequently upheld and modified on appeal)
- 1963 OCWD files action seeking adjudication of water rights of substantially all users in the area tributary to Prado Dam in the Santa Ana River watershed (Orange County Water District v. City of Chino et al.)
- 1968 Settlement of the OCWD action for adjudication of rights in the Santa Ana River watershed; Santa Ana River Watermaster created
- 1975 Complaint filed beginning Chino Basin adjudication; Senate Bill 222 passes California Legislature, authorizing collection of pump tax to fund studies of groundwater basin overdraft and development of basin management plan; Santa Ana Watershed Project Authority (SAWPA) established
- 1978 Chino Basin adjudication completed; Chino Basin Municipal Water District named Watermaster
- 1984 SAWPA and U.S. Environmental Protection Agency contract for clean-up of Stringfellow toxic waste site; first year for transfer of unallocated safe yield water from agricultural pool to appropriative pool

- 1985 Removal of contaminated wastewater at Stringfellow Acid Pits begins
- 1988 Some water users begin legal proceedings for review of Chino Basin Watermaster's performance
- 1989 Ad Hoc Committee begins work on socio-economic and other studies toward development of an Optimum Basin Management Plan