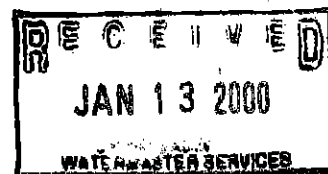


COPY

STATE WATER RESOURCES CONTROL BOARD

PUBLIC HEARING

DIVISION OF WATER RIGHTS



PETITIONS TO REVISE
DECLARATION OF FULLY APPROPRIATED STREAMS
TO ALLOW PROCESSING OF TWO SPECIFIED APPLICATIONS TO
APPROPRIATE WATER FROM THE SANTA ANA RIVER

BONDERSON BUILDING
SACRAMENTO, CALIFORNIA

DECEMBER 7, 1999

REPORTED BY:

ESTHER F. WIATRE
CSR NO. 1564

CAPITOL REPORTERS (916) 923-5447

APPEARANCES

BOARD:

ARTHUR G. BAGGET, JR., HEARING OFFICER
MARY JANE FORSTER

STAFF:

KATHERINE MROWKA

COUNSEL:

DANIEL FRINK

---oOo---

1 REPRESENTATIVES

2 SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT &
3 WESTERN MUTUAL WATER DISTRICT:

4 DOWNEY BRAND SEYMOUR & ROHWER
5 555 Capitol Mall, 10th Floor
6 Sacramento, California 95814
7 BY: KEVIN O'BRIEN, ESQ.
8 and
9 DAVID R.E. ALADJEM, ESQ.

10 ORANGE COUNTY WATER DISTRICT:

11 PILLSBURY MADISON & SUTRO
12 725 South Figueroa Street, Suite 1200
13 Los Angeles, California 90017
14 BY: CHRISTOPHER J. MCNEVIN, ESQ.

15 SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT:

16 RUTAN & TUCKER
17 611 Anton Boulevard, 14th Floor
18 Costa Mesa, California 92626
19 BY: DAVID B. COSGROVE, ESQ.

20 CITY OF SAN BERNARDINO:

21 MOSKOWITZ, BRESTOFF, WINSTON & BLINDERMAN
22 1800 Century Park East, Suite 350
23 Los Angeles, California 90067
24 BY: JOEL MOSKOWITZ, ESQ.

25 INLAND EMPIRE UTILITIES ASSOCIATION:

CIHIGOYENETCHE, GROSSBERG & CLOUSE
3602 Inland Empire Boulevard, Suite C315
Ontario, California 91764
BY: JEAN CIHIGOYENETCHE, ESQ.

RICHARD ATWATER
9400 Cherry Avenue, Building A
Fontana, California 92335

1 REPRESENTATIVES (CONT.)

2 EAST VALLEY WATER DISTRICT:

3 BRUNICK, ALVAREZ & BATTERSBY
4 1839 Commercenter West
5 San Bernardino, California 92412
6 BY: STEVEN M. KENNEDY, ESQ.

7 SANTA ANA RIVER LOCAL SPONSORS:

8 ELLISON & SCHNEIDER
9 2015 H Street
10 Sacramento, California 95814
11 BY: ROBERT E. DONLAN, ESQ.

12 CUCAMONGA COUNTY WATER DISTRICT, CITY OF RIVERSIDE &
13 MONTE VISTA WATER DISTRICT:

14 BEST BEST & KRIEGER
15 400 Mission Square
16 3750 University Avenue
17 Riverside, California 92502
18 BY: ERIC L. GARNER, ESQ.

19 ROBERT NEUFELD
20 9615 San Bernardino Road
21 Rancho Cucamonga, California 91729

22 CITY OF ONTARIO:

23 KEN JESKE
24 1425 South Bon View Avenue
25 Ontario, California 91761

BIG BEAR MUNICIPAL WATER DISTRICT:

SHEILA HAMILTON
DON EVENSON
P.O. Box 2863
Big Bear Lake, California 92315

CALIFORNIA DEPARTMENT OF FISH AND GAME:

NANCEE MURRAY, ESQ.
RONALD REMPEL, Deputy Director
1416 Ninth Street, 12th Floor
Sacramento, California 95814

1 REPRESENTATIVES

2 U.S. FOREST SERVICE:

3 OFFICE OF GENERAL COUNSEL
4 DEPARTMENT OF AGRICULTURE
5 33 New Montgomery Street, 17th Floor
6 San Francisco, California 94105
7 BY: JACK GIPSMAN, ESQ.

8 CITY OF CORONA:

9 GLENN E. PRENTICE
10 815 West Sixth Street
11 Corona, California 91720

12 CITY OF CHINO:

13 JAMES ERICKSON
14 12616 Central Avenue
15 Chino, California

16 STATE OF CALIFORNIA AND STATE AGENCIES:

17 DEPARTMENT OF JUSTICE
18 OFFICE OF THE ATTORNEY GENERAL
19 300 South Spring Street, Suite 5000
20 Los Angeles, California 90013
21 BY: MARILYN H. LEVIN, ESQ.

22 ---oOo---

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

INDEX

PAGE

OPENING OF HEARING:	9
AFTERNOON SESSION:	126
POLICY STATEMENTS:	
RONALD REMPEL	18
DON EVENSON	19
KEN JESKE	21
ROBERT NEUFELD	24
GLENN PRENTICE	28
MARILYN LEVIN	29
RICHARD ATWATER	32
ROBERT DONLAN	36
JACK GIPSMAN	81
SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT & WESTERN MUTUAL WATER DISTRICT:	
OPENING STATEMENT:	
BY MR. O'BRIEN	40
G. LOUIS FLETCHER	
DIRECT EXAMINATION:	
BY MR. O'BRIEN	48
DONALD L. HARRIGER	
DIRECT EXAMINATION:	
BY MR. O'BRIEN	54
ROBERT L. REITER	
DIRECT EXAMINATION:	
BY MR. O'BRIEN	56
R. G. BEEBY	
DIRECT EXAMINATION:	
BY MR. ALADJEM	64
PANEL	
CROSS-EXAMINATION:	
BY MR. MCNEVIN	88
BY MR. COSGROVE	91
BY STAFF	114
REDIRECT EXAMINATION:	
BY MR. O'BRIEN	123
RECROSS-EXAMINATION:	
BY MR. COSGROVE	124

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

INDEX (CONT.)

PAGE

ORANGE COUNTY WATER DISTRICT:

OPENING STATEMENT:

BY MR. MCNEVIN

128

WILLIAM R. MILLS, JR.

DIRECT EXAMINATION:

BY MR. MCNEVIN

137

CROSS-EXAMINATION:

BY MR. CIHIGOYENETCHE

155

BY MR. GARNER

160

BY STAFF

163

BY BOARD

172

SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT:

OPENING STATEMENT:

BY MR. COSGROVE

176

D. BURNELL CAVENDAR

DIRECT EXAMINATION:

BY MR. COSGROVE

183

DOUGLAS HEADRICK

DIRECT EXAMINATION:

BY MR. COSGROVE

187

CROSS-EXAMINATION:

BY MR. O'BRIEN

200

BY MR. MCNEVIN

222

BY STAFF

223

BY BOARD

228

REDIRECT EXAMINATION:

BY MR. COSGROVE

230

CITY OF SAN BERNARDINO:

OPENING STATEMENT:

BY MR. MOSKOWITZ

232

STACEY ALDSTADT

DIRECT EXAMINATION:

BY MR. MOSKOWITZ

240

CROSS-EXAMINATION:

BY MR. MCNEVIN

245

BY MR. KENNEDY

251

BY STAFF

253

BY BOARD

253

INDEX (CONT.)

PAGE

EAST VALLEY WATER DISTRICT:

OPENING STATEMENT:
BY MR. KENNEDY

254

---oOo---

1 SACRAMENTO, CALIFORNIA

2 TUESDAY, DECEMBER 7, 1999, 9:00 A.M.

3 ---oOo---

4 HEARING OFFICER BAGGET: Good morning.

5 This is the time and place for a hearing on the
6 petition to revise provisions for the declaration of fully
7 appropriated streams concerning the Santa Ana River. This
8 hearing is being held in accordance of the Notice of Hearing
9 dated September 10th, 1999.

10 I am Art Bagget, Member of State Water Resources
11 Control Board. To my left is Mary Jane Forster, a Member of
12 the Board.

13 MEMBER FORSTER: Morning.

14 H.O. BAGGET: I will be assisted today, or we will be,
15 by Kathy Mrowka, an engineer with the Division of Water
16 Rights, and staff counsel, Dan Frink.

17 As explained in the hearing notice, Water Code Sections
18 1205 through 1207 establish a procedure for declaring all or
19 portions of the stream system to be fully appropriated for
20 all or a portion of the year. Santa Ana and its tributaries
21 have been declared to be fully appropriated throughout the
22 year from the Pacific Ocean upstream, and a stream that has
23 been declared to be fully appropriated the State Water
24 Resources Control Board may not accept for filing any
25 applications to appropriate water from that stream except in

1 accordance with the provision of the declaration of fully
2 appropriated streams.

3 The purpose of this hearing is to provide an
4 opportunity for the petitioners and other interested parties
5 to present evidence which will assist the State Water
6 Resources Control Board in determining whether to revise the
7 declaration to allow for processing two applications to
8 appropriate water from the Santa Ana River.

9 The first application was submitted by the petitioners
10 San Bernardino Valley Municipal Water District and the
11 Western Municipal Water District, on October 3rd, 1991.

12 The second application was submitted by the petitioner,
13 Orange County Water District, on November 5th, 1992.

14 Neither application has been accepted for filing due to the
15 fact that the Santa Ana River is listed on the declaration
16 of fully appropriated streams for all months of the year.

17 In accordance with Section 827 of Title 23 of the
18 California Code of Regulations, both applications have filed
19 petitions requesting modification to the declaration to
20 allow for processing the application.

21 This hearing is not to consider the merits of the
22 projects identified in the water rights application, nor
23 would approval of either or both petitions require a finding
24 that water is available in the quantities or during the
25 entire season adversion specified in those applications.

1 Rather, this hearing is limited to receiving evidence
2 relevant to the determining the declaration of fully
3 appropriated streams should be revised for the limited
4 purpose of processing the two water rights application as
5 submitted by the petitioners.

6 If either petition is granted, petitioner's water
7 rights application would be accepted for filing and all
8 other issues regarding that application would be addressed
9 pursuant to the provision of Water Code Section 1200, et
10 seq.

11 The order of proceedings in this hearing will be to
12 first hear policy statements from those who wish only to
13 present a policy statement. The Board will also accept
14 written policy statements for the record. A policy
15 statement is not an evidentiary statement, is subject to
16 limitations listed in the hearing notice. Anyone intending
17 to make policy statements should fill out a blue card. I
18 think I have a couple here. And give it to the staff at the
19 front table. After that we will hear the cases in chief of
20 the parties presenting evidence in this hearing.

21 Each case in chief may be commenced with an opening
22 statement not to exceed 20 minutes. After an opening
23 statement we will hear testimony from the witnesses called
24 by the party presenting the case in chief followed by
25 cross-examination by other parties, Board staff and the

1 hearing officers. This procedure will be followed for each
2 party presenting a case in chief. Redirect testimony,
3 recross-examination limited to the scope of the redirect
4 testimony will be permitted.

5 Order of appearance of parties presenting a case in
6 chief will be: first, San Bernardino Valley Municipal Water
7 District and Western Municipal Water District, followed by
8 Orange County Water District, United States Forest Service,
9 San Bernardino Valley Water Conservation District, City of
10 San Bernardino, East Valley Water District, Inland Empire
11 Utilities Association, Big Bear Municipal Water District,
12 Chino Basin Water Conservation District, Santa Ana River
13 Local Sponsors.

14 If there is a problem with availability of a particular
15 witness, we may be able to adjust our schedule. Otherwise
16 we believe that the suggested order will be most efficient.

17 After the cases in chief are completed, parties may
18 present rebuttal evidence addressing evidence presented by
19 other parties. Parties are encouraged to be efficient in
20 presenting their cases and their cross-examinations. We
21 will follow the procedure set forth in the Board's
22 regulations and the hearing notice unless I approve a
23 variation.

24 As stated in the hearing notice, witnesses intending to
25 present testimony were required to submit their testimony in

1 writing prior to the hearing. Each witness will be provided
2 an opportunity to present a brief oral summary of his or her
3 written testimony, not to exceed 20 minutes, prior to being
4 available for cross-examination. Each party should limit
5 presentation of their entire case in chief to two hours or
6 less, not including the time spent on cross-examination.

7 Our suggested procedure will be that the parties having
8 multiple witnesses should complete the direct examination of
9 all their witnesses and then make the panel of witnesses
10 available for cross-examination. Each party's
11 cross-examination of the witness or panel of witnesses of
12 another party should be limited to 20 minutes. The time
13 allowed for cross-examination may be extended upon a showing
14 of good cause. Redirect examination will be permitted and
15 recross-examination will be limited to any subject raised in
16 the redirect. We will use a timer to keep track of time.
17 The timer will be stopped during objections and other
18 procedural points and objections.

19 At this point I would like to present Mr. Frink who
20 would like to cover a preliminary item.

21 MR. FRINK: Morning, Mr. Bagget. A Court Reporter is
22 here to prepare a transcript, and anyone who desires a copy
23 of the transcript should make separate arrangements with the
24 Court Reporter.

25 It is my understanding that the U.S. Forest Service,

1 Chino Basin Water Conservation District and the Santa Ana
2 River Local Sponsors who originally intended to present
3 witnesses may instead simply be presenting a policy
4 statement. And that can be confirmed or clarified at the
5 time the hearing officer asks for appearances of
6 representatives of the parties.

7 The final preliminary matter is identification of staff
8 exhibits for the hearing, and those exhibits are, 1, the
9 Division of Water Rights' files, Unaccepted Water Right
10 Application X000123 of the San Bernardino Valley Municipal
11 Water District and Western Municipal Water District.

12 And the second staff exhibit is the Division of Water
13 Rights file, the Unaccepted Water Right Application X000206
14 of Orange County Water District. The division files are
15 offered as exhibits by reference.

16 H.O. BAGGET: In the absence of objections, we will
17 take the staff exhibits into evidence, subject to the Board
18 rules on hearsay.

19 Any objections?

20 I would now like to invite the appearance by the
21 parties. Will the representatives of each party making an
22 appearance please state your name, the party you represent
23 and your address so that the Court Reporter can enter this
24 information into the record.

25 MR. O'BRIEN: Morning, Mr. Bagget, Ms. Forster and

1 staff. Kevin O'Brien of Downey Brand Seymour & Rohwer
2 representing San Bernardino Valley Municipal Water District
3 and Western Municipal Water District. With me is David
4 Aladjem of my firm.

5 MR. CIHIGOYENETCHE: Morning, sir. Jean Cihigoyenetché
6 of Cihigoyenetché, Grossberg & Clouse representing Inland
7 Empire Utilities Agency.

8 MR. MCNEVIN: Good morning. Christopher McNevin,
9 Pillsbury Madison & Sutro, representing petitioner Orange
10 County Water District. With me is Craig Miller, the general
11 counsel; William Mills the general manager; and Roy Herndon,
12 the hydrogeologist.

13 MR. COSGROVE: Morning. I am David Cosgrove from Rutan
14 & Tucker, 611 Anton Boulevard, Costa Mesa, California 92626.
15 I represent the San Bernardino Valley Water Conservation
16 District. With me is the general manager, Burnell Cavendar;
17 and Doug Headrick who will be called as a witness in this
18 proceeding.

19 MR. GARNER: Good morning. Eric Garner of Best Best &
20 Krieger representing the City of Ontario, Cucamonga County
21 Water District and the City of Riverside.

22 MR. MOSKOWITZ: Morning. I'm Joel Moskowitz with
23 Moskowitz, Brestoff, Winston & Blinderman, 1880 Century Park
24 East, Los Angeles 90067. I am here representing the City of
25 San Bernardino and with me is Stacey Aldstadt, Deputy

1 General Manager.

2 MR. KENNEDY: Morning. Steve Kennedy from Brunick,
3 Alvarez & Battersby, 1839 Commercenter West, San Bernardino,
4 California 92412. I represent East Valley Water District,
5 and with me is General Manager Robert E. Martin and
6 engineers James Hansen and Bob Wagner.

7 H.O. BAGGET: Is that all?

8 MS. MURRAY: Nancee Murray with the Department of Fish
9 and Game, 1416 Ninth Street, 12th Floor, Sacramento 95814.

10 MR. GIPSMAN: I am Jack Gipsman from the Office of
11 General Counsel U.S. Department of Agriculture representing
12 the Forest Service, 33 New Montgomery, 17th Floor, San
13 Francisco 94105.

14 MR. CIHIGOYENETCHE: I was remiss in not introducing
15 those with me today. Mr. Richard Atwater, General Manager
16 of Inland Empire Utilities Agency; Doug Drury; Traci
17 Stewart; Bud Carroll, as well.

18 MR. DONLAN: Robert Donlan, Ellison & Schneider, 2015 H
19 Street, Sacramento, California, 95814, representing the
20 Santa Ana River Local Sponsors, but I believe we will just
21 be making a policy statement.

22 MR. EVENSON: Don Evenson representing Big Bear Water
23 Master and Big Bear Municipal Water District, and with me is
24 Sheila Hamilton who will also be making an opening
25 statement.

1 MR. PRENTICE: Floyd Prentice representing the City of
2 Corona, 815 West Sixth Street, Corona, California 91720.

3 MR. ERICKSON: James E. Erickson representing the City
4 of Chino, 12616 Central Avenue, Chino.

5 MS. LEVIN: Marilyn Levin, Deputy Attorney General,
6 representing the State of California and those state
7 agencies that own land and own rights to produce water in
8 the Chino Basin, 300 South Spring Street, Los Angeles 90013.
9 And we will only be making a policy statement.

10 H.O. BAGGET: Any others?

11 Persons wishing to make an appearance?

12 If not, at this time I would like to administer the
13 oath or affirmation to all persons planning to testify
14 during this proceeding. Please stand and raise your right
15 hand.

16 (Oath administered by Hearing Officer Bagget.)

17 H.O. BAGGET: Thank you. You may be seated.

18 At this time we would like to hear policy statements.
19 The Board received notices of intent to appear from eight
20 parties who indicated that they will be presenting policy
21 statements. It appears there is more than that, at this
22 point.

23 We will begin with policy statements from each of the
24 parties, followed by an opportunity for policy statements by
25 other interested parties. With that, I would like to begin

1 first with California Department of Fish and Game.

2 MR. REMPEL: Good morning. I am Ron Rempel, Deputy
3 Director of the California Department of Fish and Game. I
4 have copies of the policy statement that we have prepared,
5 so I'll keep my comments short and just try to highlight a
6 couple of those pieces of the policy statement.

7 The Department under Section 1802 of the Fish and Game
8 Code and also under 711.7 of the Fish and Game Code has very
9 specific responsibilities. Those include jurisdiction over
10 the conservation, protection and management of the fish and
11 wildlife, native plants and habitat necessary for the
12 sustainable populations. We are also designated as the
13 State trustee agency for fish and wildlife. And we have
14 some concerns regarding any additional appropriation of
15 water here.

16 The first step would be to make the findings the water
17 districts have asked you to do regarding the fully
18 appropriated status of the Santa Ana River. We are
19 concerned that the withdrawal of additional water which
20 supports many sensitive species -- those include the lease
21 bells vario, Santa Ana sucker within the flood plans and
22 places. We have the San Bernardino kangaroo rat, Santa Ana
23 willie star and our comments in our policy statements list a
24 number of other species that could be adversely affected by
25 change in the status of the Santa Ana River.

1 We are concerned that further decline may, in fact,
2 result or further water removal there could result in
3 decline of the riparian habitat along that river course.
4 It's already declined substantially in the last 50 years,
5 and we are concerned that that effect could carry all the
6 way downstream to where we have some salt marsh habitat at
7 the ocean-end of the drainage.

8 We would like to continue to work with the Board and
9 the water districts to analyze any of the potential impacts
10 that changing the status of this river, and eventually if
11 there is any decision, to look at any additional
12 appropriation, work closely with those folks to analyze the
13 potential impacts and make sure that we do not cause any
14 additional harm to fish and wildlife resources along that
15 river system.

16 Thank you.

17 H.O. BAGGET: Next, Big Bear Water Master Committee.

18 MR. EVENSON: My name is Don Evenson. I am the
19 President of the Big Bear Water Master Committee. And the
20 Big Bear Water Master Committee oversees the stipulated
21 judgment entered in 1977 concerning the water rights on the
22 Santa Ana River above the mouth of the canyon. And this
23 judgment allowed water to be stored in Big Bear Lake and
24 also to provide an equivalent amount of water to the
25 downstream water rights holders. So, it both allows the

1 water in Big Bear Lake to be stabilized and increased while
2 protecting the downstream water rights holder.

3 Our request to the State Water Resources Control Board
4 is to simply make sure that the 1977 judgment is considered
5 in all future deliberations, whether or not you open up the
6 petition or not.

7 H.O. BAGGET: Thank you.

8 City of Ontario.

9 MR. GARNER: Mr. Chairman, Eric Garner, Best, Best &
10 Krieger, on behalf of the City of Ontario. Ken Jeske from
11 the City of Ontario is going to make a policy statement.
12 And although we are not presenting a case in chief, I would
13 like to reserve my right later to make an opening statement,
14 which I think is probably better heard when testimony is
15 being presented. So, if it is all right with Board policy,
16 statements can be heard now and I can make a brief opening
17 statement later.

18 MR. FRINK: Are you intending on participating in
19 cross-examination, Mr. Garner?

20 MR. GARNER: Yes.

21 MR. FRINK: Throughout the hearing or just a couple
22 points?

23 MR. GARNER: Just a couple points on the Orange County
24 portion, not on the Western/Muni petition.

25 MR. FRINK: In general, cross-examination in Board

1 hearings is limited to the parties who actually exchange
2 exhibits. I think if it is cross-examination it is limited
3 to the discretion of the Chair.

4 MR. GARNER: It will be limited.

5 Thank you.

6 MR. JESKE: Thank you. I am Ken Jeske, the Director of
7 Public Works for the City of Ontario. That's 1425 South
8 Bondview, Ontario, 91761.

9 The City of Ontario is a growing community of about
10 150,000 located in the heart of the Chino Basin groundwater
11 basin. Ontario is the largest producer and largest member
12 of the appropriative pool under that judgment. Ontario is
13 not a new city. It was incorporated in 1891. It was
14 founded by George Chaffee as a model colony, being the first
15 master planned community in California.

16 Ontario has a long history: first in agriculture, then
17 in residential and manufacturing and now in transportation,
18 retail industries, industry, education and residential uses;
19 and truly is a balanced community. It is a diverse
20 community, having no one demographic majority of over 50
21 percent. Ontario is truly the Inland Empire's economic
22 engine and key to the economic well-being of the area.

23 The city is poised to make the next move to enhance the
24 area and develop the second phase of this model community,
25 as the city just two weeks ago annexed about 8200 acres to

1 the south known as the San Bernardino County Dairy
2 Preserve. This was done in a cooperative planning effort
3 with the property owners in the area, and it is important to
4 continue to move forward cooperatively with this industry,
5 which, through hard work, has supplied California with over
6 25 percent of its milk supply.

7 This is an important step to the Regional Water Quality
8 Control Board and the State Board. For years the Santa Ana
9 Regional Board has been concerned regarding discharges and
10 pollution of groundwater as the Chino Basin and in the Chino
11 Basin from the dairy industry. Discharge standards and
12 orders have been issued which will cause economic impact to
13 the farmers in the area and result in political struggles.

14 The only real solution which meets water quality Board
15 objectives is to enhance the potential of removing this
16 concentrated dairy industry from this very important
17 groundwater basin. In fact, cleanup of this basin and
18 discharges has been encouraged for years by the various
19 Orange County water interests.

20 Ontario stands as the key to making this happen and
21 redevelop this area from the concentrated dairy industry to
22 a balanced model community. This must be done in
23 partnership with the dairy owners, resource interests and
24 good planning. The city's general plan for the area has
25 been completed and includes multiple uses and significant

1 environmental litigation in habitat areas. To redevelop
2 this area it will take water resources beyond the
3 agricultural conversion rights that the city will obtain
4 pursuant to the Chino Basin Judgment.

5 To eliminate this source of water pollution to Orange
6 County will require that the City of Ontario be able to
7 maximize a myriad of resources, including the recharge of
8 storm runoff water and the use of reclaimed water. The city
9 must fully be able to use these sources without threat or
10 potential claim by other parties which may interfere with
11 the ability of the city to insure that it can reliably
12 provide utility services and hence redevelop the area.

13 It is imperative that the integrity of the Santa Ana
14 River Judgment and the Chino Basin Judgment be maintained
15 without the potential for further impact to the ability of
16 Ontario to fully develop these resources and those rights
17 which were reserved in those judgments. It is imperative
18 that the reserved rights of Chino Basin be maintained to
19 allow this progress to move forward.

20 The Chino basin has the potential to serve as one of
21 the more significant water storage basins in the southland.
22 It is strategically located on both the State Water and
23 Colorado River Water Project and is located over a half
24 million additional acre-feet of water can be stored,
25 extracted and pumped in several directions. It is integral

1 to the plans to make the entire Santa Ana watershed from Big
2 Bear in the mountains to Newport Beach self-sufficient in
3 times of drought and not rely on imported water.

4 Development of these plans has great benefit to water
5 supplies in the rest of the state during times of drought.
6 To make this happen, it is imperative that the rights of the
7 Chino Basin been preserved in accordance with the Santa Ana
8 River and Chino Basin Judgments. Ontario has committed to
9 regional approaches and had spent well over \$2,000,000 to
10 date in planning the resources and redevelopment of this
11 area to meet this myriad of goals and interests.

12 Ontario respectfully encourages the Board to carefully
13 consider and act only on the matter consistent with
14 preserving the reserved rights of the Chino Basin, a
15 valuable resource to the entire state.

16 I want to thank you for the opportunity to comment from
17 a policy perspective. Ontario is an active participant in
18 the program and will be described in the expert testimony
19 from the Inland Empire Utilities Agency.

20 Thank you.

21 H.O. BAGGET: Thank you.

22 Cucamonga County Water District.

23 MR. NEUFELD: Good morning, members of the Board,
24 staff. My name is Robert Neufeld. I am the President of
25 the Board of Directors of the Cucamonga County Water

1 District. We are located at 9641 San Bernardino Road in
2 Rancho Cucamonga, California 91729.

3 Cucamonga County Water District was formed in 1955
4 under the County Water Districts Act to provide water for
5 the rural areas. Over the last 40 years the growth in the
6 area has increased significantly to the point where we serve
7 in excess of 130,000 customers within the city of Rancho
8 Cucamonga, portions of the city of Ontario, portions of the
9 city of Upland and portions of the City of Fontana.

10 Cucamonga County Water District, along with the city of
11 Ontario, was also one of the major players within the
12 regional plan to find that we will hear testimony later on
13 from IUA as the Chino Basin. Within the Chino Basin there
14 are numerous things that are happening now that are
15 significant to the decision that you will be asked to make.

16 One is the development of Optimum Basin Management Plan
17 ordered by the court, which provides for a management plan
18 to manage the water supplies within the Chino Basin. Within
19 that we have a need and a demand that is predicated upon the
20 flows that are in the Santa Ana River. With that we
21 disagree with the Orange County approach that the changed
22 circumstances are there.

23 That water that is presently flowing in the Santa Ana
24 River will be used and put to beneficial use through the
25 development of the Optimum Basin Management Plan in the near

1 future. And Cucamonga County Water District will be the
2 second largest user of that water.

3 Also treated sewer flows will be put to beneficial use
4 as a result of the plan. Cucamonga County Water District is
5 nearing completion of its recycled water master plan and has
6 the potential to use in excess of 13,000 acre-feet a year
7 from the recycled water. As part of the regional sewer
8 program for the Chino Basin, we are dependent upon those
9 regional treatment facilities for the treatment of effluent
10 which we in turn put to reuse or plan to put to reuse. The
11 plant in our agency service area was completed just one year
12 ago. So we haven't had the opportunity to take advantage of
13 those flows until presently.

14 The flows will continue to be used even though they are
15 now continuing to flow through the river. They will be put
16 to beneficial use in the very near future. Surface water
17 runoff has been accounted for also in the presentation. You
18 will hear that in the presentation of the OBMP as
19 supplemental water for basin replenishment. Recharge is a
20 significant component of that plan, also.

21 Additional water within the Santa Ana watershed was
22 anticipated at the time that the Chino Judgment was crafted.
23 And we believe, therefore, that the fully appropriated
24 status is really the only status that we need to discuss.
25 Any conserved water that has not been produced in the past

1 or put to reuse or stored, under the 1978 Chino Basin
2 Judgment is considered supplement water and also beneficial
3 to the entire basin to the safe yield and to the watershed
4 as a whole.

5 To conserve and replenish the storm water, imported
6 water and recycled water is a critical element to all of the
7 local communities within the Inland Empire area, and there
8 are a multitude of agencies that you will hear from today
9 who have a need and demand for that water as we approach
10 build out.

11 We thank you very much.

12 H.O. BAGGET: Thank you.

13 Next is Monte Vista Water District.

14 City of Chino.

15 City of Riverside.

16 MR. GARNER: Riverside will not be making a policy
17 statement.

18 H.O. BAGGET: City of Pomona.

19 MS. MROWKA: They have submitted a written policy
20 statement.

21 H.O. BAGGET: No one is here.

22 Finally, we have two new cards. See if there is anyone
23 else.

24 City of Corona.

25 MR. PRENTICE: Good morning. Glenn Prentice, City of

1 Corona, Water Utilities Director, 815 West Sixth
2 Street, 91720. I represent the City of Corona.

3 We have a population of about 130,000 people we
4 service. It is a major economic engine in the Inland
5 Empire. We have major manufacturing in the Inland Empire.

6 Recently the City has extended \$40,000,000 upgrading
7 their wastewater treatment plant. It has return flows to
8 the Santa Ana River. Also in conjunction with the Regional
9 Board we also entered into an agreement with the Regional
10 Board spending another \$30,000,000 building a desalter.

11 All this in mind is to balance our natural resource and
12 also to reclaim the water in the near future. Therefore, to
13 keep it short, is that we believe that it should not -- the
14 wastewater return flows should not be appropriated by others
15 and has beneficial use to the citizens of Corona who paid
16 for the infrastructure of bringing the water in and also
17 treating the water.

18 Next month we plan to bring to the city council a water
19 reclamation plan to use over 20,000 acre-feet of reclaimed
20 water, and should not be appropriated by others.

21 Thank you.

22 H.O. BAGGET: Thank you.

23 We have Deputy Attorney General Levin, the State of
24 California agencies.

25 MS. LEVIN: Thank you. Marilyn Levin representing the

1 State of California, and I want to make it clear that I am
2 representing the entities, the state agencies, that own land
3 and hold water rights and hold rights to produce water from
4 the Chino Basin, pursuant to the Chino Basin adjudication.

5 I wanted to make a short policy statement that I think
6 that all of the entities that have spoken within the Chino
7 Basin have adequately indicated some of the concerns that
8 any action the State Board takes needs to address and make
9 sure that the Chino Basin producers that have signed onto
10 the Chino Basin are protected. I will deal a little bit --
11 I will make some more detailed statements.

12 The state agencies that produce water from the Chino
13 Basin include the Department of Corrections, the Department
14 of Fish and Game, the California Department of
15 Transportation known as CalTrans, and the Department of
16 Toxic Substances Control. The State is the largest
17 landowner in the Chino Basin, was at the time of the 1978
18 adjudication. And because its rights were so diverse at the
19 time, the State's rights were unique and separated out from
20 all the other entities and agencies in the Chino Basin. We
21 were placed in the agricultural pool of the Chino Basin
22 Judgment, and we hold all of the same rights as all of the
23 agricultural producers.

24 The State agreed with the parties that requested a
25 continuance of this hearing, not only to have allowed

1 additional time to have a memorandum of understanding that
2 was entered into between Inland Empire, Orange County Water
3 District, Western Municipal Water District and San
4 Bernardino Valley Municipal Water District to have been
5 signed. And I understand that that has been executed. But
6 because some of the producers in the Chino Basin and who are
7 not direct signatories to that memorandum of understanding
8 believed or are certain that their rights are necessarily
9 protected by that memorandum of understanding, and we just
10 wanted additional time to make sure that any decision of the
11 State Board amending the declaration would not have an
12 impact on all the upstream producers and the entities that
13 treat wastewater in the Chino Basin.

14 And for your information the Department of Corrections
15 treats all of its wastewater and percolates that water back
16 into the Chino Basin at the present moment. We want to make
17 sure that any decision that the State Board makes does not
18 impact the State or other upstream producers. And so we are
19 concerned about amending the declaration at all and agree
20 with many of the policy statements that have been made by
21 the other Chino Basin entities here today. We just want to
22 -- the state wants to make sure that the Board, and I am
23 sure they do, understand that the declaration. Amending the
24 declaration is an extremely significant act, possibly
25 resulting in uncertainties in water rights, and that the

1 Board needs to have enough information to adequately inform
2 itself on the impact of that decision on the Chino Basin.

3 I think possibly before we all showed up today or have
4 submitted reams of paper it wasn't necessarily clear how
5 significantly we believe your decision may impact the Chino
6 Basin.

7 The State did not want to duplicate the evidence being
8 presented to the Board by the Chino Basin representatives.
9 I would like to reserve time possibly to present comments,
10 policy comments, on the evidence, if necessary.

11 H.O. BAGGET: Any questions?

12 MEMBER FORSTER: I have a question for staff.

13 How do you reserve time? This is the time, right?

14 MR. FRINK: Yes.

15 I believe if you do have other statements on matters of
16 policy, that this would be the time to make them. I believe
17 the hearing notice indicated that there would not be oral
18 closing statements. But there will be an opportunity for
19 written closing statements or briefs as the parties and
20 hearing officers discuss at the conclusion.

21 MEMBER FORSTER: I had a question. It is just a
22 curiosity. You said the Department of Toxics was one of --

23 MS. LEVIN: You don't really want to ask me that
24 question.

25 MEMBER FORSTER: It has to be a Superfund site?

1 MS. LEVIN: The Department of Toxic Substance Control
2 is a Superfund site, yes, right now, Stream Fellow. This
3 issue -- we haven't gotten into this issue. The State of
4 California has by resolution certain export rights that have
5 been worked into this along with this Chino Basin Judgment.
6 And the issue hasn't been discussed or litigated and hasn't
7 really come up. But the Department was one of the state
8 agencies in the Chino Basin at the time and just wanted to
9 include them in the list. They are in the Chino Basin right
10 now.

11 MEMBER FORSTER: That is what I thought. I just was
12 curious.

13 Thank you.

14 H.O. BAGGET: Thank you.

15 Richard Atwater, Inland Empire Utilities District.

16 MR. ATWATER: Thank you. For the record, my name is
17 Richard Atwater, General Manager of the Inland Empire
18 Utilities Agency. Address is 9400 Cherry Avenue, Building
19 A, Fontana, California 92335.

20 Inland Empire Utilities Agency, formerly known as the
21 Chino Basin Municipal Water District, is a party to the
22 Santa Ana River Judgment and a party to the Chino Basin
23 Judgment. The district was formed in 1950 and is the only
24 member agency of Metropolitan in San Bernardino County. It
25 is one of 27 member agencies of the Metropolitan Water

1 District.

2 What I would like to summarize in my policy statement:
3 one, as both the City of Ontario and the Cucamonga Water
4 District have accurately portrayed, the Chino Basin area has
5 historically undergone rapid growth and in the future the
6 area is expected to increase. Our service area population
7 today is roughly 700,000 and will exceed over a million over
8 the next ten or 15 years and double in population in the
9 next 25 to 30 years.

10 As a footnote, overall the Santa Ana River watershed is
11 probably one of the most rapidly urbanizing watersheds in
12 the United States. So the issue of water resources and
13 local water supply department is certainly a critical
14 issue.

15 The Inland Empire Utilities Agency operates today four
16 tertiary water reclamation plants that currently produce
17 60,000 acre-feet per year of recycled water. We also
18 operate a cocomposting facility that processes both
19 municipal biosolids and currently this year about 200,000
20 tons of dairy cow manure, which provides significant water
21 quality benefits to downstream users.

22 The Inland Empire Utilities Agency is working with the
23 Chino Basin Water Master, the Chino Basin Water Conservation
24 District and the San Bernardino Flood Control District, is
25 actively working to conserve both storm water, imported

1 water and recycled water to maintain the safe yield of the
2 Chino Basin, estimated today at about approximately 145,000
3 acre-feet per year. And more broadly, working with
4 Metropolitan Water District and CalFed Bay-Delta Program,
5 are examining opportunities to expand significantly the
6 conjunctive use potential for Chino Basin, which will derive
7 both local benefits to increase storage for surplus import
8 water and conserving storm water and recycled water, but
9 also benefits throughout Southern California and potentially
10 state water.

11 I just note for the record in the early 1990s -- excuse
12 me, early 1980's the California Department of Water
13 Resources identified the storage potential in the Chino
14 Basin for statewide conjunctive use at about one and a half
15 million acre-feet. Concurrently, through the efforts of the
16 Santa Ana Watershed Project Authority, enactment by the
17 California Legislature and the Governor, Prop 13, the
18 California Water Bond, which the voters will consider on
19 March 7th, provides significant funding for development of
20 recycled water and groundwater conjunctive use projects, not
21 only in the Chino Basin, but in the Santa Ana watershed,
22 which allows, as previous speakers highlight, are building
23 to reduce our dependence on import water, in particular
24 during future droughts and hopefully the State Water Project
25 and the Colorado River.

1 As a part of that, through the efforts of both the
2 Chino Water Master, as Bob Neufeld indicated, and the
3 development of an Optimum Basin Management Program, Inland
4 Empire is cooperating with all the parties to the Chino
5 Basin Water Master to implement water conservation best
6 management practices to expand our efforts to conserve and
7 replenish local storm water, import water and recycled water
8 to maintain and potentially expand the safe yield of the
9 Chino Basin. Through the efforts as discussed by Ken Jeske,
10 the City of Ontario, we are working cooperatively with our
11 water utilities service area to expand the distribution of
12 recycled water through direct use for both industrial and
13 landscape irrigation uses.

14 And then, again, working cooperatively with
15 Metropolitan Water District, the Department of Water
16 Resources and CalFed Bay-Delta program identifying both
17 through the water bond and federal matching funds the
18 opportunity to expand the groundwater conjunctive use
19 potential in the Chino Basin and cooperatively working with
20 the other parties to the Santa Ana River Judgment to expand
21 the management potential of the Santa Ana watershed.

22 With that, I appreciate the opportunity to comment and
23 wish you luck in these hearings.

24 Thank you.

25 H.O. BAGGET: Thank you.

1 Are there any other members wishing to make policy
2 statements?

3 MR. DONLAN: Good morning, Board Members, staff. My
4 name is Robert Donlan. I am submitting this policy
5 statement on behalf of the Local Sponsors of the Santa Ana
6 Mainstem Project. Those local sponsors include the San
7 Bernardino County Flood Control District, Riverside County
8 Flood Control and Water Conservation District and Orange
9 County Flood Control District.

10 The local sponsors intended to participate as a party
11 to this proceeding but unfortunately due to some scheduling
12 conflict Mr. Herb Nakasone from the Orange County Flood
13 Control District, Mr. Ken Miller from San Bernardino County
14 Flood Control District were unable to attend today. They
15 asked that we summarize their testimony in the form of a
16 policy statement, which I will do for you now.

17 In 1989 the Santa Ana River Local Sponsors entered into
18 a local cooperation agreement, or LCA, with the United
19 States Army Corps of Engineers to implement and share the
20 cost of the Santa Ana River Mainstem Project which was being
21 constructed by the Corps. The Santa Ana River Mainstem
22 Project includes Seven Oaks Dam, improvements to Prado Dam
23 and other improvements to the flood control channels along
24 the Santa Ana River. Pursuant to the Federal Resources
25 Development Act of 1986 and the terms of the LCA, Santa Ana

1 Sponsors will assume the responsibility for the operation
2 and maintenance of the Seven Oaks Dam sometime in the
3 beginning part of next year.

4 The Orange County Flood Control District will assume
5 O&M responsibility for Prado Dam and improvements to that
6 facility having been completed which the Corps colonel
7 estimates to be sometime around 2006. Operation and
8 maintenance requirements at Seven Oaks and Prado Dam will be
9 established by the Corps and will include any measures
10 established by the U.S. Fish and Wildlife Service, and I
11 presume other resource agencies for impacts to endangered
12 species.

13 The local sponsors anticipate the measures imposed in
14 these biological opinions will affect operations at Seven
15 Oaks and Prado Dam. All water conservation operations along
16 the Santa Ana River involving facilities of the Corps or the
17 local sponsors are to be consistent with the Corps'
18 prescribed flood control operation and any mitigation
19 requirements established for endangered species.

20 The Corps is currently preparing an O&M manual for
21 Seven Oaks Dam, which is expected to be completed by the end
22 of the year 2000. The Corps is also preparing an update of
23 biological assessment and the potential impacts of Seven
24 Oaks Dam operation on listed species. The biological
25 opinion is expected to be rendered by Fish and Wildlife

1 Service in the latter part of 2000.

2 At this time the dam is to be operated exclusively as a
3 flood control facility. In 1997 a Seven Oaks Dam water
4 conservation feasibility record was repaired by the Corps,
5 which identified several possible water conservation
6 alternatives. However, the Corps has not adopted or
7 approved at this time any conservation operations. Corps
8 approval will be required before any conservation will be
9 authorized to Seven Oaks Dam. In addition to Corps approval
10 implementation of water conservation at Seven Oaks Dam would
11 require, among other conditions, an agreement with the local
12 sponsors. No such agreements have yet been prepared or
13 executed.

14 Prado Dam is presently operated by the Corps primarily
15 as a flood control facility, although there is some water
16 conservation by the Orange County Water District. On behalf
17 of the Orange County Water District the Corps is currently
18 studying the feasibility of increasing water conservation at
19 Prado Dam. The Corps is also preparing an updated
20 biological assessment for Prado Dam, but no firm scheduling
21 of issues of a biological opinion have ever been set.

22 Implementation of water conservation at Prado Dam will
23 require agreement with Orange County Flood Control District
24 and Orange County Water District.

25 That is the policy statement that summarizes the

1 testimony that was distributed with the exhibit and
2 testimony package as we originally, like I said, intended to
3 appear as a party. I don't believe there is any information
4 that I just gave you that was different than that testimony
5 which I believe was marked as Exhibit LS-1 in our testimony
6 package.

7 I would request that the State Water Board take
8 official notice of the Local Cooperation Agreement, which
9 was marked as RS-2 pursuant to Board regulations 23 CCR,
10 Section 648.2 and Evidence Code Section 452 (C). And, also,
11 I would like to reserve the opportunity to cross-examine.
12 At this point I don't anticipate that the local sponsors
13 would have any desire to do that, but we did submit a
14 testimony package, and I believe that would qualify as a
15 party.

16 MR. FRINK: Yes, Mr. Bagget, Mr. Donlan did indicate
17 that they would be participating as a party, and he has
18 requested that the Board take official notice of the Local
19 Cooperation Agreement. So I believe everybody was expecting
20 that he would participate in cross-examination if he so
21 desired.

22 If there are no objections, it may be appropriate to
23 rule on his request for official notice of the 1989 Local
24 Cooperation Agreement that was designated in this hearing as
25 Exhibit LS-2.

1 H.O. BAGGET: Any objections?

2 If not, it is entered into evidence.

3 MR. DONLAN: The reservation to cross-examine is
4 approved?

5 H.O. BAGGET: Yes, it is appropriate.

6 MR. DONLAN: Thank you.

7 H.O. BAGGET: Are there any other members, anyone
8 wishing to make further policy statements?

9 If not, let's get on to the case in chief. So, would
10 the first party, the San Bernardino Municipal Water District
11 and Western Municipal Water District, proceed.

12 MR. O'BRIEN: I just have a brief opening statement,
13 Mr. Bagget.

14 First, I would like to take a moment to introduce the
15 Members of the Board of Muni who are all here today, and I
16 would also add, pursuant to proper Brown Act notice, if they
17 could just stand briefly. There they are.

18 Kevin O'Brien representing the San Bernardino Valley
19 Municipal Water District and the Western Municipal Water
20 District.

21 As you know, my clients have petitioned this Board for
22 an order revising the Fully Appropriated Stream Order as it
23 relates to the Santa Ana River. You will be hearing
24 testimony in this hearing from our hydrology expert, Mr.
25 Beeby, to the effect that, on average, there is about 13,000

1 acre-feet of water that could be diverted and beneficially
2 used at the Seven Oaks Dam location, and that in the wetter
3 years, which occur periodically in this watershed, there is
4 in excess of a hundred thousand acre-feet of water available
5 for diversion and use. That is water that would directly
6 reduce the amount of water and demands on water exported
7 from the Bay-Delta. And I know that this Board is very
8 cognizant of the need to minimize demands on the Bay-Delta,
9 both now and in the future.

10 Mr. Beeby will testify that there have been two changed
11 conditions that have occurred in the watershed over the past
12 30 years. The first has to do with the fact that there is
13 simply more water flowing in the Santa Ana River. There are
14 various reasons for that. I don't think there is one sole
15 reason. But a principal reason, and one of the reasons that
16 Mr. Beeby will focus on, is the fact that there has been
17 urbanization that has occurred in the watershed during the
18 past 30 years. And that urbanization has changed the
19 rainfall runoff relationship, allowing more water to flow
20 into the river system.

21 The second changed condition has to do with the fact
22 that we now have Seven Oaks Dam on the river. And that dam
23 is important for two reasons. First of all, of course, it
24 potentially is available for the storage of water, if and
25 when we get the necessary approvals to do so.

1 Secondly, and I think this is a point that's been
2 missed by some of the parties participating in this
3 proceeding, that just by virtue of the dam being there,
4 regardless of whether storage is ever allowed or not, there
5 is a regulating effect on flows in that river. In other
6 words, the presence of the dam slows down those high flood
7 flows and allows the diversion of more water than would be
8 possible without the dam. That is -- I'm talking really
9 about the direct diversion now.

10 And if you look at the analysis that we have done and
11 that Mr. Beeby will prepare and submit to the Board, the
12 focus of our analysis at this juncture has been on direct
13 diversions, because we understand that the rules on how that
14 reservoir will be operated for storage are not yet in
15 place. We thought it would unnecessarily complicate this
16 proceeding if we attempted to make a bunch of assumptions
17 about what those really would be. So, in effect, we focused
18 on direct diversion because we know we can get that water,
19 regardless of what happens with the issue of storage.

20 The storage, when it eventually comes, we do think it
21 will eventually be approved, is simply gravy on top of the
22 direct diversion that Mr. Beeby is going to be testifying
23 about.

24 It is worth underscoring what the order that comes out
25 of this proceeding will and won't do, because I think there

1 is a good deal of confusion with that.

2 An order coming out of this proceeding will simply
3 accept for filing and further processing the application
4 that we have filed. We have indicated that there is a
5 possibility we may be making some revisions to that
6 application before it is actually sent to the file. It will
7 not result in a finding as to specific quantities of water
8 that are available for appropriation under that
9 application. It will not result in specific findings as to
10 specific seasons of diversion. It will not result in a
11 finding as to who has what water rights in the system.

12 Those are all important issues. They are all issues
13 that will be dealt with during the next phase of this
14 process, which I think we all anticipate will be a lengthy
15 and complex process. There is no question about that.

16 We understand there are operational issues. We
17 understand there are environmental issues. We are prepared
18 to go forward with the preparation of the environmental
19 documents as we know we are obligated to do. But what we
20 really need at this point is a thumbs-up from this Board
21 that we have met the minimum standards for allowing this
22 process to move forward so that we can justify to our
23 ratepayers the expenditures of what will no doubt be a lot
24 of additional money to put this in a position to bring it
25 back to this Board down the road and get a decision on

1 whether we can appropriate water at Seven Oaks.

2 The principal opposition at this juncture in the
3 process seems to be coming from the San Bernardino Valley
4 Water Conservation District. The Conservation District
5 diverts water from the Santa Ana River downstream from Seven
6 Oaks Dam. It plans to do so under both -- couple licenses
7 issued by the Board, which amount to 10,400 acre-feet of
8 water, and also under various pre-1914 rights which they
9 assert.

10 There is no question that the issue of the extent of
11 the Conservation District's water rights will eventually be
12 an issue in this process if we are not able to resolve that
13 issue through negotiations. And we have, as you know, been
14 working on that.

15 But we don't need to get into that issue in great depth
16 in this proceeding, and I am hoping that we can avoid a
17 protracted argument about the nature and extent of the
18 Conservation District's water rights at this time.

19 There are basically four arguments that the
20 Conservation District makes in opposing the petition. The
21 first argument, there has been no changed circumstance in
22 this case because the conservation pool at Seven Oaks Dam
23 does not exist, and it apparently does not exist because it
24 has not been approved by the Corps of Engineers. That's
25 true; it has not been approved by the Corps of Engineers.

1 But the dam certainly exists and the dam, just by virtue of
2 its location on the river, as I said earlier, does regulate
3 the flows in that river and does allow diverters, such as my
4 clients, to pick up those flows during these peak flow
5 periods. That in and of itself is clearly a changed
6 circumstance regardless of whether you consider the issue of
7 storage.

8 Second, they argue that there is no water available
9 from May to December in the system. And in support of that
10 argument they have prepared an analysis of the average flows
11 in the system, going back quite a ways earlier in the
12 century. The problem with average flow analysis, and Mr.
13 Beeby is going to talk about this in his testimony, in a
14 watershed like this where you have very much variation in
15 flows from year to year -- some years you have low to medium
16 flows and other years you have very high flows in the wet
17 periods -- and to use an average in a case like this is very
18 dangerous and, frankly, very misleading. And Mr. Beeby will
19 address that question and explain why he didn't just rely on
20 averages. He went the next step, consistent with standard
21 engineering practices.

22 Third, the Conservation District argues that there is
23 no new water in the upper portions of the watershed,
24 upstream of the Seven Oaks Dam. Their argument, essentially
25 as I understand it, is there hasn't been any increase in

1 precipitation in that upstream area, there hasn't been any
2 significant increase in urbanization in that area.
3 Essentially there is no new water coming out of that upper
4 portion of the watershed.

5 Well, we don't know whether there is significant
6 urbanization that's occurred up there or not. We don't know
7 if there has been a significant increase in flows coming out
8 of Big Bear Lake during the last 20 or 30 years. Those are
9 issues that we will probably have to look at more closely as
10 we move forward in this process. But the important thing to
11 understand is you have to understand how this system works
12 from a water rights standpoint.

13 The key to the system is meeting the flow requirements
14 that were set forth in the Orange County Judgment at the
15 Riverside Narrows and Prado Dam. As long as those flow
16 requirements are met, even if they are met with inflow that
17 comes in below the dam, which seems to be the case, if that
18 allows you to put more water in the dam for storage or to
19 divert more water directly at the dam, because the flow
20 requirements are being met by downstream inflow, where is
21 the injury? There is no injury. And it will allow the
22 beneficial use of additional amounts of water that are
23 currently being lost to the upper area. This is perfectly
24 consistent with what the drafters of that Orange County
25 Judgment had in mind, where they said that the upper area

1 was entitled to conserve additional amounts of water so long
2 as it meets those two flow requirements.

3 Finally, the Conservation District and some of the
4 other parties have asked that this hearing simply be
5 postponed, that this is not ready for a decision by the
6 Board, that there needs to be additional negotiations and
7 discussions. We have no problem with the negotiations and
8 discussions. We have been involved in the process for the
9 last two years, trying to resolve some of these issues, and
10 unfortunately we have not yet been successful. But to
11 simply put this proceeding on indefinite hold would put my
12 clients in a difficult position of having to decide whether
13 to keep spending money on both environmental studies, on
14 operational studies, at a time when it is not even clear
15 whether we are going to have our foot in the door in the
16 regulatory process.

17 I think the much better approach is to grant the
18 petition, to allow this process to move forward with the
19 knowledge that these issues will continue to be discussed
20 and hopefully resolved before we have to come back to the
21 Board.

22 Thank you.

23 With that I would like to call my panel of witnesses
24 up, please.

25 H.O. BAGGET: Proceed.

• - - 000 - - -

DIRECT EXAMINATION OF
SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT &
WESTERN MUTUAL WATER DISTRICT

BY MR. O'BRIEN

MR. O'BRIEN: Our first witness will be Mr. Louis Fletcher.

Could you state your full name for the record.

MR. FLETCHER: G. Louis Fletcher.

MR. O'BRIEN: How are you employed?

MR. FLETCHER: I am the General Manager of the San Bernardino Valley Municipal Water District.

MR. O'BRIEN: Is Muni and Western Exhibit 1-1 a true and correct copy of your written testimony submitted in this proceeding?

MR. FLETCHER: Yes.

MR. O'BRIEN: Could you briefly summarize that testimony.

MR. FLETCHER: I became the General Manager of San Bernardino Valley Municipal Water District in 1980. I started with the district in 1966.

I feel like Don Quixote over this whole project. The district is the top end of the watershed. It is a State Water Project contractor, one of the 29. It has entitlement to state water of 102,600 acre-feet a year. As you know,

1 that is a fragile entitlement because of the problems in the
2 Delta. About half the water is all we can get, or less.
3 We have a hundred million dollar transmission pipeline
4 system to serve our 328 square miles and 600,000 residents.

5 Our principal cities are San Bernardino, Redlands,
6 Yucaipa, Highland, Loma Linda, Colton, Fontana, Rialto.
7 Have I missed any? Anyway, we have 14 major water purveyors
8 in the district. We have been very active in the State
9 Water Project Program, are a member of the Santa Ana
10 Watershed Project Authority, which is an agency, a joint
11 powers agency of five municipal districts. Including Orange
12 County Water District, we cover the entire watershed. We
13 think regionally we are concerned about saving any water we
14 can anywhere. We promote the spaceship concept for our
15 watershed because we know we are going to be less able to
16 get water from other sources, imported water from Northern
17 California.

18 It takes 3200 kilowatt hours of electricity to pump one
19 acre-feet of water over the Tehachapis in the San Bernardino
20 Water District; that is five and a third barrels of oil. If
21 we bring in our whole 100,000 acre-feet of water in a year,
22 because we didn't conserve wisely or we didn't do everything
23 right, that is 500,000 plus barrels of oil a year that we
24 wasted.

25 Our resources are immense. We have tremendous

1 groundwater basins. We have aqueducts from all over the
2 place, in Colorado and the state. We have an excellent
3 watershed. 43 percent of the water in the Santa Ana River
4 originates at the site of the Mentone Dam, out of the Santa
5 Ana River and its subsidiary, Mill Creek. The flows in the
6 Santa Ana River can be as high as 200,000 acre-feet in one
7 year.

8 Our district started trying to get the dam in the right
9 place in 1980. The original plans for the dam was out in
10 the valley. It was 250 foot high. It put the town of East
11 Highlands in the shadows till noon. We have a very complex
12 pipeline system for the State Water Project now known as the
13 East Branch Extension of the State Water Project, which
14 extends on to Yucaipa and to Palm Springs in the desert.
15 \$110,000,000 worth of construction going on there now that
16 intercepts right at the Seven Oaks Dam site and Metropolitan
17 pipeline to fill the East Side Reservoir also originates at
18 Devil Canyon in our district and goes right by the dam site.

19 There are all kinds of pipeline. We have really a
20 tremendous pipeline grid, where water can flow backwards,
21 fowards, in any direction to the East Side Reservoir, back
22 into the state aqueducts. Something that we have done for
23 eight years from the site of the Mentone Dam irrespective of
24 any conservation pool.

25 We have an -- in '80 we began arguing with the Army

1 Corps. We went to Congress. We asked them to consider
2 moving the dam. We met with the Water Commission in 1982.
3 They approved our concept of putting the dam where it was
4 located in the 1928 State of California engineer's report.
5 The Army Corps forgot to look at that element.

6 And when I hear all these experts, I have learned about
7 experts. They are like me. That should give you some
8 comfort or some discouragement. There aren't any real
9 experts in anything, and you really have to study these
10 problems intensively. Eventually, we got the dam moved up
11 into what is called the Seven Oaks site above where water
12 can flow by gravity from this dam into all of these
13 pipelines that I have discussed: the East Branch Extension
14 to the state aqueduct, the Metropolitan system line to the
15 East Side Reservoir.

16 The dam is 550 feet high. It will hold 145,000
17 acre-feet of water. And I think when people tell you they
18 have a stream that is fully appropriated, I would like to
19 read you some of the statistics in the summary of what the
20 dam is supposed to do.

21 The dam storage allocation, gross capacity 145,000
22 acre-feet; allocation of flood control, 113,000 acre-feet;
23 sedimentation, 32,000 acre-feet. Incidentally, that is the
24 part we kind of get free under the National Economic
25 Development Plan. Because until the sediment fills up over

1 a long period of time, they can allocate that for the local
2 people for conservation at minimal cost.

3 The peak inflows, the total imported volume of inflow
4 estimated at 115,000 acre-feet to Seven Oaks; the peak
5 inflow, 85,000 cubic feet per second. If that is a lot --

6 MR. COSGROVE: I have an objection.

7 THE COURT REPORTER: I need your name, please.

8 MR. COSGROVE: David Cosgrove on behalf of
9 Conservation.

10 It seems as though we have substantive evidence coming
11 in here on direct that wasn't included in the written
12 testimony.

13 H.O. BAGGET: If you could please limit it to written
14 testimony.

15 MR. COSGROVE: I would move to strike anything that was
16 offered that is beyond the scope of the written testimony
17 offered by Mr. Fletcher with respect to dam inflows.

18 H.O. BAGGET: Sustained.

19 MR. FLETCHER: The Seven Oaks Dam is now complete,
20 scheduled for dedication on January 7th, 2000. That makes
21 this hearing very timely and represents a milestone in the
22 watershed. I will read from the testimony, if that is all
23 right with Mr. Cosgrove from Conservation District.

24 Union and Western Municipal Water District of Riverside
25 County have filed with the State Water Resources Control

1 Board a petition for an order revising the declaration that
2 the Santa Ana River stream system is fully appropriated.

3 Those true and correct copies of this petition have
4 been submitted. If the petition is granted, San Bernardino
5 Valley Municipal and Western intend to pursue with great
6 passion with the State Water Resources Control Board an
7 application to appropriate water.

8 A true and correct copy of the application to
9 appropriate has previously been submitted. I do point out
10 our application has been on file since 1991.

11 San Bernardino's principal objective in pursuing the
12 petition and application to appropriate, passionately, is to
13 further develop local water resources for use within the
14 Santa Ana River watershed.

15 This is a key point.

16 The development of additional local water supplies is
17 preferable from an economic and water resource management
18 standpoint to increase reliance on imported State Water
19 Project water. The development of additional local supplies
20 will reduce demand for exported water from the Bay-Delta
21 with the attendant environmental and water supply benefits.

22 Thank you for your courtesy.

23 H.O. BAGGET: Thank you.

24 MR. O'BRIEN: Thank you, Mr. Fletcher.

25 Our next witness is Mr. Donald Harriger.

1 Mr. Harriger, could you state your full name for the
2 record.

3 MR. HARRIGER: I am Don Harriger.

4 MR. O'BRIEN: Your current position?

5 MR. HARRIGER: I am General Manager of the Western
6 Municipal Water District. Been with the water district for
7 25 years, 11 of those most recent years as General Manager.

8 MR. O'BRIEN: Is Muni/Western Exhibit 2-1 a true and
9 correct copy of your written testimony?

10 MR. HARRIGER: Yes.

11 MR. O'BRIEN: Could you summarize that for us, please?

12 MR. HARRIGER: To summarize, I would simply like to
13 tell you just a little bit about Western and also why
14 Western is pursuing this petition and application here
15 today.

16 First of all, Western Municipal Water District is a
17 municipal water district formed under the Municipal Water
18 District Act of 1911 here in California. We were formed in
19 1954, and we were formed largely in anticipation of the kind
20 of growth that we were seeing at the time occurring in Los
21 Angeles County. That was growth that was occurring right
22 after World War II. Saw it coming our way.

23 We formed the district to plan and manage the resources
24 on a regional basis, initially dealing primarily with local
25 resources and then more recent years addressing the question

1 of bringing imported water to the region. Our district
2 covers some 500 square miles in Western Riverside County.
3 We have a current population on the order of 500,000 people,
4 and those population centers are largely in the City of
5 Riverside, City of Corona, Norco, Elsinore and Canyon Lake.

6 Western became a member agency of the Metropolitan
7 Water District shortly after the formation, and it did so in
8 anticipation of the water demands associated with growth
9 would eventually exceed the available local water supply.
10 At the time of formation, local water rights were
11 uncertain. The uncertainty on our part, as well as others,
12 led to extensive litigation in the 1960s. And I think as
13 you all know, that litigation resulted in two major
14 settlements in 1969. One which has become commonly known as
15 the Orange County Settlement, which dealt with surface water
16 flows at the Narrows and Prado, and, secondly, the
17 Western/San Bernardino, or sometimes referred to as the
18 Western Muni Judgment, which dealt principally with the
19 issue of water resources above Riverside dams.

20 Under the Western Muni Judgment, Western and Muni are
21 jointly responsible for the administration and management of
22 the water resources above Riverside Narrows which includes
23 an opportunity to share in the conservation of any storm
24 water. As a result of our joint interest in conserving
25 water at Seven Oaks, Western and Muni have joined in the

1 petition for order revising the declaration that Santa Ana
2 River is fully appropriated. If the petition is approved we
3 intend to pursue an application to appropriate water at
4 Seven Oaks.

5 With respect to reasons for our pursuit, many of our
6 reasons for pursuing the petition and application are the
7 same as those cited here a moment ago by Mr. Fletcher.
8 However, I want to emphasize our principal reason, which is
9 to further develop local supplies and thereby reducing our
10 dependence on imported water. We are currently about 20
11 percent dependent on imported water, a substantial portion
12 of which comes from the State Water Project.

13 So, if we can capture and conserve water which would
14 otherwise be lost from our region, our dependence on water
15 from other sources, including here in Northern California,
16 will obviously be reduced.

17 Thank you. That concludes my statement.

18 MR. O'BRIEN: Thank you, Mr. Harriger.

19 My next witness will be Mr. Robert Reiter.

20 Mr. Reiter, could you state your full name for the
21 record.

22 MR. REITER: Robert L. Reiter.

23 MR. O'BRIEN: How are you employed, sir?

24 MR. REITER: I am the Assistant General Manager,
25 Assistant Chief Engineer of the San Bernardino Valley

1 Municipal Water District. I've worked for the district
2 since 1966.

3 MR. O'BRIEN: Is Muni/Western Exhibit 3-1 a true and
4 correct copy of your testimony submitted?

5 MR. REITER: Yes.

6 MR. O'BRIEN: Is Exhibit 3-2 a true and correct copy of
7 your resume?

8 MR. REITER: Yes.

9 MR. O'BRIEN: Would you please summarize for us your
10 written testimony.

11 MR. REITER: Thank you. We have had some exhibits here
12 to present as part of my testimony. I am going to give the
13 Board and hearing staff a little bit of background first on
14 the physical institutional setting, shown on the screen
15 above you, in front of you, Muni Exhibit 4-6. The area of
16 the Santa Ana River watershed is comprised of the outline in
17 black around this area. The San Bernardino Valley Municipal
18 Water District is shown in green on the exhibit. Inland
19 Empire Utility Agency, formerly Chino Basin Municipal Water
20 District, in brown. Western Municipal Water District, which
21 extends out of the watershed is shown in the blue color.
22 And then Orange County Water District down in Orange County
23 in the lower part of the watershed shown, appropriately, in
24 Orange.

25 The next exhibit that I would like to turn to is

1 Muni/Western District Exhibit 4-8. You will note throughout
2 all our exhibits that we have used the same base map to try
3 to avoid confusion. Again, the watershed boundary in this
4 case trying to show some of the major streams, which I will
5 not list for you, that are contained in my testimony. But
6 needless to say, in addition to the Santa Ana River, there
7 are a number of tributaries that flow into the river on its
8 way to the ocean in Orange County.

9 The next exhibit.

10 The final exhibit I will use as part of my testimony is
11 Exhibit 4-7. It is kind of a composite showing the agencies
12 within the watershed and all of the major hydrologic
13 features. The Santa Ana River watershed, pursuant to the
14 1969 settlement, has been divided into what we refer to as
15 an upper area, comprised of San Bernardino Valley Water
16 District, Inland Empire Utility Agency, Western Municipal
17 Water District, and a lower area below Prado Dam consisting
18 of Orange County Water District.

19 Completion of Seven Oaks Dam up here in the upper
20 watershed constitutes the second major man-made flood
21 control structure along the Santa Ana River. In the 1940s
22 the Prado Dam was constructed at the mouth of the lower
23 Santa Ana Canyon in Southwestern San Bernardino County.
24 Along this river, as Mr. Beeby will describe in more detail,
25 the U.S. Geological Survey maintains several stream gauges.

1 The gauge records are used by both the Santa Ana River Water
2 Master, of which I am a member, and the Western San
3 Bernardino Master, of which I am also a member, in the
4 preparation of our annual reports.

5 As our counsel Mr. O'Brien indicated earlier, the water
6 flows in the Santa Ana River are highly variable. There are
7 any number of periods where we had below average or average
8 flow conditions where even the storm flows in those periods
9 can actually be contained within the channel.

10 It's the infrequent but regularly occurring large flows
11 that create the need for facilities such as Prado Dam built
12 in the '40s. Subsequent urbanization downstream has led to
13 the need for more facilities, including Seven Oaks Dam in
14 the upper area. Clearly, we have several water rights users
15 up in our area interested in the district's joint petition
16 with Western Municipal Water District. Those include North
17 Fork Water Company, Lugonia Water Company, Redlands Water
18 Company, Bear Valley Mutual Water Company and San Bernardino
19 Valley Municipal Water District.

20 For the purposes of our analysis, as will be discussed
21 in more detail by Mr. Beeby, we have made the assumption
22 that we used all historical diversions for the purposes of
23 analysis and presumed they were made out to pursuant valid
24 water rights.

25 Moving to the Orange County judgment, as I indicated

1 earlier, we divided the watershed into an upper area, a
2 lower area. We have 2500 parties in the upstream area and
3 about 1500 parties, leading to a total of about 4,000 actual
4 named parties in that activity. That action was actually
5 going when I first started with the district, and we had a
6 lot of paper.

7 The end result of all of this was a stipulated
8 settlement under which the upper area entities had to assure
9 the lower area entities of a certain base flow. That base
10 flow being 42,000 acre-feet here at Prado on an average
11 annual basis with certain guaranteed minimums of wet water
12 each year, which includes -- as you can see, Valley District
13 is located upstream -- an obligation on the part of Valley
14 District to produce and deliver up to 15,250 acre-feet at
15 Riverside Narrows slightly upstream.

16 MR. O'BRIEN: Excuse me, Mr. Reiter. When you refer to
17 "Valley District," you are talking about what we are calling
18 "Muni" in this proceeding?

19 MR. REITER: Yes. Muni is -- if I slip and do that
20 again -- is San Bernardino Valley, referred to in these
21 proceedings.

22 Thank you.

23 Over the years in our work and my work on both the
24 Santa Ana River Water Master Committee and Western Water
25 Master, we've noted large flows and large accumulations of

1 credits which we received at both locations on the Santa Ana
2 River. At this point in time, as of our completion of our
3 work for this year, San Bernardino Valley/Muni has about
4 670,000 acre-feet of extra credit at Riverside Narrows and
5 Western, and Inland Empire Utilities Agency have a joint
6 credit of 1,800,000 acre-feet of base flow credit down here
7 at Prado.

8 One of the provisions that is pertinent to this
9 particular hearing, proceeding, is the fact that provided --
10 there is a proviso in the judgment such that provided the
11 upper area meets this 42,000 acre-foot flow requirement at
12 Prado, the upper area can engage in, basically, unlimited
13 capture of additional water for useful benefit -- use
14 upstream.

15 The Western Judgment was somewhat of a subset of the
16 Orange County Settlement. Orange County didn't purport to
17 do division of the upper area among the agencies. The
18 Western Judgment between Western and Muni did, in fact, make
19 an allocation of water rights on a gross sense within the
20 San Bernardino Basin area. Western was one of the
21 plaintiffs in that case. Generally acts in a representative
22 capacity to the other named plaintiffs who still remain in
23 the Western case of City of Riverside, Riverside Highland
24 Water Company, Agua Monse Water Company and Meeks and Daley
25 Water Company and the Regents of the University of

1 California at Riverside.

2 The Western Judgment, much like the Orange County
3 Settlement, recognized in the future there might be
4 opportunities to augment the water supply in the upper
5 area. We believe that Seven Oaks Dam represents just such
6 an opportunity, that has finally come to fruition, as Mr.
7 Fletcher outlined, over many years of effort by our
8 agencies.

9 The district is one of 29 state contractors. Again,
10 Western is a member of Metropolitan Water District, and as
11 such receives water either from the State Project or MWD,
12 Metropolitan Water District, Southern California's Colorado
13 Aqueduct System. As Mr. Harriger outlined, we have a
14 growing population within our district also. And the Master
15 plan that the district has completed in recent years shows
16 that the demand for water in our district will ultimately
17 and currently exceeds the current supply and will ultimately
18 grow to a point where the state supplement supply may be
19 inadequate.

20 Although Mr. Beeby will provide more detailed
21 information on the part of his testimony, the work of the
22 Water Master suggests that there are large quantities of
23 water in excess of those required under the Orange County
24 Settlement that are passing both Riverside Narrows and Prado
25 and pursuant to that those agreements should be available

1 for upstream capture and use.

2 Seven Oaks Dam has been touched on. It is located in
3 the upper -- what I referred to in my testimony as the Upper
4 Santa Ana Canyon. I won't bore you with all the
5 construction details. It is 550 feet high. It is a big
6 dam. Its function in life was constructed to be flood
7 control. As you have been told, there is a study that is
8 currently not final that suggested an opportunity for water
9 conservation at some point in the future.

10 Congress provided the funding at our district's urging
11 to do the original reconnaissance study of Seven Oaks and
12 Prado. That was a joint reconnaissance study. As all good
13 studies end up, the final recommendation was we need more
14 study. That next study is referred to as feasibility study.
15 That is the study that is referenced in one of our exhibits,
16 that jointly costs \$2,000,000, of which Western and Valley
17 District have split the cost, in accordance with our shares
18 of the safe yield of the San Bernardino Basin. That brings
19 the total cost of those activities so far to a little over
20 \$4,000,000.

21 I guess, in closing, what I would like to say is that
22 this district has an application for which we filed to seek
23 direct division and diversion to storage of up to a hundred
24 thousand acre-feet per year from the river. As Mr. Beeby's
25 presentation will show, we believe that that number turned

1 out to be a little more conservative than we thought. There
2 are, in fact, infrequent years, but they still occur, when
3 flows in excess of 150,000 acre-feet that have not
4 historically been captured may be available.

5 Given that your Board gives us permission to move
6 forward with regard to the petition, one of the things we
7 will be considering, and I know I will recommend to my
8 Board, is they consider amending the application prior to
9 being filed to 200,000 acre-feet per year. Understanding
10 full well, that that is a very rare event, but we do believe
11 that it would be inappropriate to take a hundred thousand
12 and then have to sit by and watch a whole bunch of more
13 water literally go to the ocean. Because those years are
14 years when all facilities downstream are well beyond their
15 maximum capacity and water is literally going to the ocean.

16 Thank you for your time today.

17 MR. ALADJEM: Mr. Bagget, Ms. Forster, good morning.
18 David Aladjem, also for Muni and Western.

19 Our next witness is Mr. Beeby.

20 Mr. Beeby, could you please state your full name for
21 the record.

22 MR. BEEBY: Robert G. Beeby.

23 MR. ALADJEM: How are you employed, Mr. Beeby?

24 MR. BEEBY: I am employed by Science Applications
25 International as an principal engineer.

1 MR. ALADJEM: And is Muni/Western Exhibit 4-2 a true
2 and correct copy of your resume that you have submitted in
3 these proceedings?

4 MR. BEEBY: Yes, it is.

5 MR. ALADJEM: Is Muni/Western Exhibit 4-1 a true and
6 correct copy of the testimony that you have submitted in
7 these proceedings?

8 MR. BEEBY: Yes, it is.

9 MR. ALADJEM: Lastly, are Muni/Western Exhibits 4-3
10 through 4-27 true and correct copies of the exhibits that
11 you submitted to your testimony in these proceedings?

12 MR. BEEBY: Yes.

13 MR. ALADJEM: Do you have any changes that you would
14 like to make at this point in your testimony or in those
15 exhibits?

16 MR. BEEBY: Yes. There are two changes that need to be
17 made. The first is on Page 5 of my written testimony,
18 Paragraph 11. The third line up from the bottom now reads
19 "the values shown are after all diversions." "After" should
20 be changed to "before."

21 And the next line down now reads "been made, except for
22 the Conservation District." It should read, "been made,
23 including the Conservation District."

24 Those are changes to the testimony. My second
25 correction has to do with the Exhibit 4-27. The Orange area

1 shown on Exhibit 4-27 and indicated as the potential direct
2 diversion by Muni/Western was incorrectly scaled. Would be
3 the equivalent of a typographical error on a draft. I have
4 prepared 4-27A, which is the correct rendition of the amount
5 of cumulative diversion that might be possible by Muni and
6 Western.

7 MR. ALADJEM: Mr. Beeby, you just said that the error
8 in Exhibit 4-27 was equivalent to a typographical error.
9 The numbers in your analysis do not change; is that correct?

10 MR. COSGROVE: Not an objection, a procedural question.

11 MR. BEEBY: That's correct.

12 MR. COSGROVE: It is my understanding these exhibits
13 have not been offered yet. We have objections to various
14 portions of Mr. Beeby's testimony and various exhibits, I
15 will be happy to state them now, if you like. But my
16 understanding is all we are doing is establishing a
17 foundational matter at this point.

18 H.O. BAGGET: You may proceed.

19 MR. ALADJEM: Mr. Beeby, I am not sure you had the
20 opportunity to answer my question.

21 MR. BEEBY: The figures as presented in my testimony
22 are correct. It is merely incorrect plotting on Figure 4-27
23 that caused me to revise that figure.

24 MR. ALADJEM: Mr. Bagget, we have copies of the revised
25 4-27A for distribution to the Board and to the other

1 parties.

2 MR. COSGROVE: Mr. Bagget, at this time it would
3 probably be appropriate that I enter in our objection. We
4 would like to object to the written testimony that is
5 submitted by Mr. Beeby from Paragraphs 39 through 47 and
6 also in Exhibit Numbers 4-18, I believe, through 20 on the
7 basis that it is outside the scope of the petition and
8 notice that was sent out on this.

9 As I read Mr. Beeby's testimony, Paragraph 39, he says
10 that those issues are complied and those -- that data is
11 complied in absence of the Seven Oaks Dam and any
12 conservation behind it.

13 Paragraph 14 of the petition, which is Exhibit 1-2, I
14 believe, that Muni submitted indicates that the allegation
15 of changed circumstances is that dam. And so it would
16 appear to us and, therefore, we would move to have stricken
17 any analysis or any evidence of changed circumstances apart
18 from what was stated in the petition and what was also
19 included in the hearing notice, which is the allegation of
20 changed circumstances from the dam and potential
21 conservation behind it.

22 MR. ALADJEM: Mr. Bagget, if I might reply. Mr.
23 Cosgrove has ignored the distinction that my colleague Mr.
24 O'Brien made in his opening between a regulatory effect of
25 Seven Oaks Dam and a conservation pool. As we indicated in

1 our opening, and I believe as Mr. Beeby will explain to you,
2 our analysis is all based on direct diversions that the dam
3 will have a regulating effect on the flows in the Santa Ana
4 River.

5 We understand that the conservation pool has not yet
6 been approved, and that is not part of our analysis.

7 MR. FRINK: Mr. Bagget, as I understand the objection,
8 it is based on the notion that the evidence that is being
9 objected to does not really relate to the allegation of
10 changed circumstances which is the basis of the petition the
11 San Bernardino Valley Municipal Water District has
12 submitted.

13 Looking at the Board's regulation, Section 871 of Title
14 23 of the California Code of Regulations, it provides in
15 Subsection B, "Upon recommendation of the Chief of Division
16 of Water Rights and following notice and hearing, the Board
17 may adopt an order revoking the fully appropriated status of
18 the stream system or revising any condition specified in the
19 declaration.

20 It goes on to say that:

21 The Chief of the Division of Water Rights'
22 recommendation for revocation or revision may
23 be based on any relevant factor, including
24 but not limited to, a change in circumstances
25 from those considered in the previous water

1 rights division, determining that no water
2 remains available for appropriation or upon
3 reasonable cause derived from hydrologic data
4 that water usage data or other relevant
5 information acquired by the Division of Water
6 Rights in the course of any investigation
7 conducted by it. (Reading.)

8 It would appear to me that the hydrologic information
9 that is referred to in the testimony and exhibits that have
10 been objected to are relevant information and that at the
11 conclusion of the hearing the Division of Water Rights
12 prepares a recommendation for the Board's consideration that
13 the information is being presented here would be appropriate
14 to consider.

15 MR. COSGROVE: Just by way of clarification, I
16 acknowledge the regulations do -- are broad enough to
17 probably encompass the type of evidence that is being
18 submitted here. My question really is an objection -- is
19 directed to whether the petition does and whether the
20 evidence that is now being offered is within the scope of
21 the petition.

22 But our objection is noted for the record. And what we
23 would like to do is to the extent that any ruling is
24 withheld or any ruling that is made on the objection that it
25 be made similar to subsequent motions, strike the evidence

1 if it later proves that that evidence is not appropriate to
2 be received.

3 H.O. BAGGET: I overrule the objection.

4 MR. ALADJEM: Thank you, Mr. Bagget.

5 Mr. Beeby, would you please proceed with your
6 testimony.

7 MR. BEEBY: Yes. The objective of my investigation,
8 after I was retained by Mr. O'Brien on behalf of Muni and
9 Western, was to review the hydrology of the upper portion of
10 the Santa Ana River system and estimate the amount of water
11 that Muni/Western might be able to capture and still not
12 effect the historical diversions of the prior water right
13 claimants or the downstream interests and obligations as set
14 forth in the Orange County Judgment.

15 Now, in spite of what you heard the other witnesses
16 say, the balance of my testimony is basically going to focus
17 on the hydrology and hydrologic aspects of that
18 investigation. If you don't mind, I would like to stand up
19 to the screen and use my finger as opposed to the
20 technologically advanced pointer to show 4-11.

21 H.O. BAGGET: Take that mike with you so we can hear.

22 MR. BEEBY: Yes. I was prepared to do that.

23 My Exhibit 4-11 is what is known as histogram or
24 bargraph of the hydrologic record of the Santa Ana River at
25 the very upstream end near Mentone, which is just downstream

1 from Seven Oaks Dam.

2 These annual flows are not based on one gauge reading,
3 but, in fact, are the combined flows, which is
4 representative of the full natural, sometimes referred to,
5 or run-of-the-river-type flows. They include both the
6 diversions by the upstream senior water right claimants.
7 And there is a downstream gauge, so this is a combined gauge
8 reading. The period of record runs from water year. And
9 when I am referring to years, I am then referring to water
10 years, which are from October 1st to September 30th. And as
11 you see here on this chart, the long-term average is 59,600
12 acre-feet.

13 The significance of the graph in terms of what we are
14 trying to do here, which is capture high flows that
15 otherwise are not beneficially used, is to illustrate that
16 there are numerous high flow events. The average of 50,600
17 is about this level here. The reason it is that high --

18 MR. ALADJEM: Mr. Beeby, excuse me. When you are
19 indicating this level, you were pointing to the annual
20 discharge of 50,000 acre-feet; is that correct?

21 MR. BEEBY: Yes. There is a horizontal line across
22 here, indicating 50,000 acre-feet. The horizontal lines are
23 annual flows in thousands of acre-feet. The bargraphs that
24 exceed this average are all those that are in excess of the
25 average. And as you will see, there are 13 of those graphs,

1 13 years, where the flows were well in excess of a hundred
2 thousand acre-feet. And there were seven years when they
3 were in excess of 200,000 acre-feet. That is the nature of
4 the flow that we are attempting to illustrate as potential
5 for conservation and capture by Muni and Western.

6 MR. FRINK: Excuse me, Mr. Beeby, part of
7 clarification. There are seven years where the flows are in
8 excess of 200,000 acre-feet? Did you mean 150?

9 MR. BEEBY: I meant to say 150. I am sorry. 200,000
10 there would be three years. Yes, you read the graph better
11 than I did.

12 Thank you.

13 The next exhibit I would like to talk about is Exhibit
14 4-15. In hydrology we like to use base periods. Base
15 periods are established typically by developing an
16 accumulated departure from the mean curve, which is
17 represented here in Exhibit 4-15. Essentially, the
18 methodology is fairly straightforward. You take the
19 long-term average, and then you compare the annual flow for
20 each year to the long-term average, convert it to a percent
21 and add those as you go.

22 What the significance of this curve is is that in
23 periods where you see an uptrending pattern, such as in the
24 early period between 1915 and about 1922, that would
25 indicate a wet period. As the trend goes down, that is a

1 dry period. Up, down, so forth. It always begins and ends
2 at zero.

3 Hydrologists, while they like long-term records, it is
4 a very cumbersome thing to do monthly analysis on over 80
5 years of records. We like to pick base periods with shorter
6 periods of time to facilitate the calculation process, but
7 still be representative and typical of long-term
8 conditions.

9 So, what we selected for purposes of my investigation,
10 which was done monthly, is we picked the period from 1971-72
11 through 1990-91. That is a 20-year base period. It's
12 characterized by an initial dry period, followed by wet, dry
13 periods. So it is essentially a complete cycle. The one
14 disadvantage of it is that it is slightly less than a
15 long-term average. As you will see here, the period of
16 record for our base period is 55,700 acre-feet as opposed to
17 the long-term average, which is characterized in this blue
18 box as 59,600, which is the same number that was on the
19 previous chart, 4-11.

20 Although we speak in terms of averages, because
21 averages are generally a way of understanding hydrologic
22 data, they typically are not representative of what you
23 might actually capture during an operational procedure. So
24 the next exhibit, which is 4-12, is another way of looking
25 at an average or how much water might actually be captured

1 during a particular time period.

2 I will note that this long-term average for the '72
3 through 1991 base period is 27,800. The reason for the
4 difference between this number at Mentone and the previous
5 number is this is after the diversions by the senior water
6 right claimants have been taken. So this is the amount of
7 water that actually exists downstream from Seven Oaks Dam at
8 Mentone.

9 The average as shown on the chart here is 27,800. And
10 the purpose of a probability of exceedance curve, which this
11 is, is to show that there is only a 26 percent chance that
12 the average flow will occur, essentially one out of four
13 years. Averages are used to typify how much you might get
14 on a relatively regular basis, and typically it would be
15 half the time you'd expect to get the average flow if there
16 was not these high spiky flows that were illustrated in
17 Exhibit 4-11.

18 If we take a look at what flow might occur half the
19 time, we are looking at slightly under 9,000 acre-feet.
20 9,000 acre-feet is about one-third of the long-term
21 average. So if you are planning to size facilities and what
22 you might really get if you did do all these facilities and
23 diversions, you might get on the average, on a 50-percent
24 chance probability, about one-third of the long-term
25 average.

1 The next step in our process, and I'll refer to Exhibit
2 4-19, is to take a look for our base period, our 20-year
3 base period, 1971-72 through '90-91, the actual flow, the
4 river only at Mentone. I chose to use a cumulative curve
5 for the 20 years because that is the amounts of water that
6 you could potentially capture over the long term, and it is
7 easier to illustrate what the actual amounts might be.

8 The top curve is the cumulative river only flow at
9 Mentone, which totals nearly 556,000 acre-feet over the
10 20-year period. Recognize that the Conservation District is
11 the primary senior water right claimant/diverter below Seven
12 Oaks Dam, and this purple area is their historical diversion
13 records for the same 20-year base period which totals
14 252,000 acre-feet.

15 The difference between the total flow up here of
16 555,000 and 252 gives an idea of the potential amount of
17 water that could be captured by Muni/Western. This is not
18 an insignificant amount of water. And, therefore, you then
19 go to the next step, which is to say, if there is this much
20 water there, we recognize that we have a senior water right
21 claimant, principally the Conservation District, to meet at
22 this point, plus we have to comply with the Orange County
23 Judgment.

24 So the next step is to go to Exhibit 4-20 of my
25 testimony. This looks very similar to the previous graph,

1 except that it imposes the constraints with one
2 modification, which I will explain, that are included in the
3 Muni/Western application. Again, here is the top number,
4 555,000 that I talked about before. Here is the
5 Conservation District's historical diversions. And we've
6 broken this area as --

7 MR. ALADJEM: Excuse me, Mr. Beeby. Could you please
8 refer to the points on the chart that you are referring to
9 by means of the colors so we can identify them for the
10 record.

11 MR. BEEBY: Yes, I am sorry.

12 The top line on the graph, which is indicated as the
13 Santa Ana River flow only at Mentone, which is the top line
14 on the graph, that is 555,000 as was shown on the previous
15 graph.

16 The top of the green area, which is the historical
17 diversions by the Conservation District, which are about
18 252,000 acre-feet cumulative over this 20-year period, are
19 the same that you saw in the earlier graph.

20 Now, I didn't point out, but I should have on the
21 earlier graph, the size of the blue area that was the
22 potential diversion by Muni/Western is roughly 303,000
23 acre-feet. That is unconstrained by any downstream
24 requirements, either by the Orange County Judgment or
25 interfering with the Conservation District's historical

1 diversions.

2 In the application there is 800 cfs, is one of the
3 requirements as far as what the rate of diversion they
4 wanted to take. We did not use 800 cfs because we have
5 indication from the Corps of Engineers that their maximum
6 release from Seven Oaks Dam will only be 500 cfs. That is
7 the origin of the 500 cfs diversion rate.

8 The other constraint imposed by the application is that
9 they would use 100,000 acre-feet in any one year. Now the
10 effect of these constraints, plus the Orange County Judgment
11 constraint, and I will take them sequentially -- the Orange
12 County Judgment drops the 303,000 acre-feet down to about
13 302, so it is almost insignificant. And during this period
14 of time there was only one year where that Orange County
15 Judgment constrained what could be diverted upstream without
16 affecting the conditions of judgment.

17 The top of the red bar is the constraint imposed by 500
18 cfs. The value at the top of the red bar is roughly 278,000
19 acre-feet. So instead of being able to divert 302, if you
20 have a 500 cfs diversion constraint, you can only divert
21 278,000 cumulative over this 20-year period.

22 If on top of that you had a constraint of the maximum
23 annual amount of 100,000 acre-feet, that provides and
24 additional constraint and drops you down to 261,000
25 acre-feet. The 261,000 acre-feet over the 20-year period is

1 fully recognizing the terms and conditions of the Orange
2 County Judgment. It is reflecting the existing diversion
3 requirement of 500 cfs modified, as I explained, down to
4 500, and it also fully reflects the 100,000 acre-feet of
5 requirement.

6 So, clearly, with this analysis there is substantial
7 amounts of water that could be diverted by Muni/Western in
8 the upper portion at Mentone without affecting the either
9 the downstream interests or senior water right claimants.
10 Those numbers that I gave, 278 and 261, average 13,000 to
11 15,000 acre-feet a year. Again, it is not going to be every
12 year.

13 As you can see, because it is cumulative, the earlier
14 years of the project, which are relatively dry, there is
15 almost no room for capture, but there is a little. It is
16 the big spiky years that create the huge diversions over the
17 20-year period. That is what we are trying to capture.

18 The next question is: If we do think diversion, what
19 happens at Riverside Narrows? So if he can put up Exhibit
20 4-26.

21 As you heard Mr. Reiter testify, there are two types of
22 flow that occur at Riverside Narrows. First is base flow
23 and then there is storm flow. The base flow and storm flow
24 separation are indicated by this dashed line and the large
25 arrows which are indicated to be base flow part and storm

1 flow part. The green area at the bottom end of the curve is
2 the effect of the Narrows or the obligation at the Narrows
3 imposed by the Orange County Judgment, which is 15,250
4 acre-feet a year. Over the 20-year period this amounts to
5 303,000 acre-feet.

6 As you can see, the top curve, which is the Santa Ana
7 River at Riverside Narrows, based on the Santa Ana River
8 Water Master adjusted flows, is over a million-five and is
9 roughly a million-six during this base period. So of the
10 million-six that actually occurred here, only 300,000 is
11 required to fully comply with the terms and conditions of
12 the Orange County Judgment.

13 Now I asked myself when I looked at this: Why does
14 this keep going up? Because technically it would go up and
15 down. You wouldn't have a continual accumulation. That is
16 one of the of bases for saying there is more water in the
17 river is because clearly the flows have increased over time.
18 Cumulative there have been almost no dips -- there have been
19 no dips during this periods of record. So that is another
20 indication.

21 Lastly, this purple area indicated by the boxes has
22 potential direct diversion by Western/Muni is the 261 or
23 278. Now at this scale, where we have 3.5 million acre-feet
24 down to zero, that is a relatively small difference, and
25 that's the indication here on the red portion of this curve

1 as the difference between the affect of the 500 cfs
2 diversion requirement and the 100,000 acre-feet annual total
3 diversion. Again, this is a very small portion of the
4 entire amount of water that is available, indicating,
5 clearly, that there is plenty of room to conserve.

6 H.O. BAGGET: Thank you.

7 MR. BEEBY: I would like to --

8 H.O. BAGGET: One minute.

9 MR. BEEBY: I would like to conclude my testimony by
10 summarizing the findings.

11 The Santa Ana River is typical of an arid zone-type
12 river, which is characterized by few events of extremely
13 high flows and many events of relatively low flows.

14 The second conclusion is that the flows at the Narrows,
15 which are the terms and conditions of the Orange County
16 Judgment, are so excessive that diversions upstream will
17 have no impact on those.

18 The third conclusion is Muni and Western can
19 potentially divert somewhere on the order of 260- to 280,000
20 acre-feet directly from the river or run of the river time
21 analysis with no affect of the reservoir or storage. That
22 is just taking it straight out of the river.

23 And I think the fourth conclusion is that because of
24 the number of years where there is flow in excess of a
25 hundred thousand acre-feet, it would be my recommendation to

1 the client to increase the annual diversion amount from
2 100,000 to 200,000 acre-feet.

3 Thank you very much.

4 H.O. BAGGET: Thank you.

5 MR. O'BRIEN: That concludes our direct testimony.

6 H.O. BAGGET: We would like to take a break, ten
7 minutes. Try to come back at 11:00.

8 (Break taken.)

9 H.O. BAGGET: We have a request from the Forest Service
10 for Mr. Gipsman to make a policy statement. He is not going
11 to be cross-examining witnesses. If there is no objection,
12 I would let him make his comments.

13 MR. GIPSMAN: Thank you. I am Jack Gipsman with the
14 Office of General Counsel, here on behalf of the Forest
15 Service, United States Department of Agriculture. And I
16 appreciate the opportunity to address Members of the Board
17 and staff today.

18 The Forest Service is greatly concerned about the
19 proposed development underlining the petition before you.
20 Should the Board find there is water available for
21 appropriation, the petitioners intend to apply for use of
22 that water in a reservoir or conservation pool behind the
23 Seven Oaks Dam. The proposed reservoir conservation pool
24 will inundate national forest system lands up to the Santa
25 Ana River. Because national forestlands would be occupied

1 by the proposal, regardless of what happens here today or in
2 the future, a special use permit from the Forest Service
3 will be required before the proposal could be implemented.

4 The purpose of this opening statement is to inform you,
5 the petitioners and the various parties as to the procedural
6 processes required and substantial hurdles that must be
7 overcome before the Forest Service could even entertain an
8 application for a special use permit for such a proposal.

9 Gene Zimmerman, the Forest supervisor of the San
10 Bernardino National Forest, submitted a letter to you dated
11 October 28, 1999, noting that Forest Service approval would
12 be required and that prior to granting approval the Forest
13 Service must comply with the National Environmental Policy
14 Act and the Endangered Species Act, and that is attached as
15 Attachment A to this opening statement.

16 While these are important laws that must be dealt with,
17 requirements of these laws come into play only after the
18 Forest Service accepts an application. The Forest Service
19 must also comply with the National Forest Management Act,
20 which requires that all projects be consistent with the
21 applicable forest plan. Before the Forest Service can even
22 accept an application, the proposed project must survive a
23 vigorous screening process which is based on this forest
24 plan consistency requirement.

25 This screening process is relatively new. It was

1 adopted on November 30th, 1998, when the Forest Service
2 amended its special use permit regulations. The proposals
3 that do not survive either of the screening stages are not
4 further considered and do not require environmental analysis
5 or documentation and are not required to go through the
6 process of the Endangered Species Act.

7 Now, in order to pass through the first screening
8 stage, the authorized forest officer must ensure that the
9 proposed project meets the following minimum requirements,
10 including but not limited to, first, that the project is
11 consistent or can be made consistent with the standards and
12 guidelines in the applicable forest plan. And, second, here
13 that the proposed use will not create an exclusive or
14 perpetual right of use of occupancy.

15 If the proposal can pass through the first stage, the
16 forest officer is still required to reject the project
17 proposal if he determines that the proposed use would be
18 inconsistent or incompatible with the purpose for which the
19 lands are managed or other uses or proposed use would not be
20 in the public interest.

21 So, getting back to the facts at hand, if the project
22 proponents can somehow demonstrate that the inundation of
23 Forest Service lands will not create an exclusive use or
24 occupancy of that land, which I think will be difficult to
25 do here, the San Bernardino Forest Plan still contains

1 several requirements that will make it difficult for this
2 proposal to pass through the screens.

3 I have attached excerpts from the San Bernardino Forest
4 Plan to this opening statement. I am not going to go
5 through them in any great detail now, but I will summarize
6 them. The goals, expected future conditions of the forest
7 and standards and guidelines of the forest plan are all
8 consistent in emphasizing and requiring protection and
9 enhancement of riparian areas, managing riparian areas for
10 maintenance and enhancement of riparian dependent resources,
11 and managing water to meet or exceed beneficial use
12 requirements.

13 There are also very strong requirements to manage
14 habitat for threatened or endangered Forest Service
15 sensitive species, to enhance populations for genetic and
16 geographic diversity and long-term viability, to improve the
17 distribution of productivity of habitat and to attempt to
18 reestablish species in unoccupied habitat. Habitat
19 protection and improvements is required to be emphasized in
20 all forest management activities. And management direction
21 specific to the area of this project proposal reiterates the
22 above and requires maintenance and improvement of habitat
23 conditions for species as well as managing to maintain and
24 enhance watershed integrity.

25 Now, applicants for a special use permit for this

1 project may argue that the National Forest Management Act
2 does allow forest plans to be amended. Well, that is true.
3 But the clear trend in recent years is that amended plans
4 contain far more stringent environmental protection measures
5 for fish and wildlife, riparian areas and watersheds than
6 those found in the plans such as this one adopted in the
7 1980s, which are fairly stringent already.

8 What has the Forest Service been doing in this area?
9 For the past several years the Forest Service has put in
10 countless hours in effort to get water back into this
11 portion of the Santa Ana River and restore habitat for fish
12 and wildlife. This stretch of the river is the area of the
13 Santa Ana number one and two hydro power projects, which are
14 currently up for relicensing before the Federal Energy
15 Regulatory Commission.

16 The public is well aware that the Forest Service
17 intends to use its authority under Section 4(E) of the
18 Federal Power Act to include conditions in the new licenses
19 for these projects which would require bypass flows to
20 restore and maintain fish and wildlife habitat in the Santa
21 Ana River. For the past two years the Forest Service has
22 been negotiating with Southern California Edison, the owner
23 of these projects, local water districts, state and local
24 government agencies and public interest groups over the
25 amount of bypass flow that will be required.

1 Increased bypass flow will provide suitable habitate
2 for rainbow and brown trout and enable the Forest Service to
3 reintroduce and restore less common fish species, such as
4 the Santa Ana sucker, which is proposed for listing as a
5 federally threatened species, and the Santa Ana speckled
6 dace, a Forest Service sensitive species. Bird species such
7 as the southwestern willow fly catcher, which is federally
8 listed as endangered, would also be expected to occupy
9 restored riparian habitat should it be available in this
10 area. Creation of a reservoir or conservation pool would
11 negate these efforts.

12 Now without prejudging any future special use permit
13 application, it seems clear that with the strong
14 requirements of the San Bernardino Forest Plan, the current
15 ongoing efforts of the San Bernardino National Forest to
16 restore habitat in the area and recent trends in Forest
17 Service ecosystem management, environmental restoration and
18 restoration, the likelihood of a reservoir or conservation
19 proposal passing the screens and being approved by the
20 Forest Service is not very good.

21 Should the Board decide to go ahead and open the Santa
22 Ana River to further appropriation, the Forest Service will
23 participate in that process and will be presenting evidence
24 and will forcefully argue that appropriation of the Santa
25 Ana River water to destroy the resources of a national

1 forest would not be the reasonable use of water consistent
2 with Article X, Section 2 of the California Constitution,
3 and that any available water should be allocated to restore
4 the long neglected public trust resources of this area.

5 It is our hope that the petitioners will reconsider the
6 wisdom of proceeding with this proposal before time and
7 money is needlessly wasted in further administrative filings
8 and hearings.

9 That concludes my opening policy statement. I do not
10 intend to cross-examine any witnesses here today and must
11 leave shortly for another meeting. At this time I would ask
12 the Board to allow me to offer into evidence the San
13 Bernardino National Forest Land and Resource Management Plan
14 as an exhibit. Admission of this exhibit is allowed by
15 reference, pursuant to Section 648 of this Board's rule of
16 practice. The Forest Plan is a public record. Copies of
17 the pages of the Forest Plan relied on in my opening
18 statement have been served on all the parties and the Board
19 prior to this hearing. In addition I have three copies of
20 the Forest Plan to submit to the Board for its future use.
21 Take that as official notice.

22 Thank you.

23 H.O. BAGGET: Do you have a question, Ms. Forster?

24 MEMBER FORSTER: I guess first I have a question of
25 staff.

1 This is an opening statement or a policy statement?

2 How do we know no one wants to cross-examine you?

3 MR. GIPSMAN: Well, it is a policy statement. I am not
4 here as a witness.

5 H.O. BAGGET: Policy statement.

6 MR. GIPSMAN: Expressing the views, policy views, of
7 the Forest Service in this matter. The reason I filed as a
8 party was mainly so I can get the Forest Plan into
9 evidence. I did not know if you would accept this into
10 evidence if I just made a policy statement.

11 MEMBER FORSTER: All right. Does everybody have what
12 you are submitting into the record, this Forest Plan?

13 MR. GIPSMAN: Yes. It is public record and the
14 excerpts upon were served on all the parties prior to this
15 hearing within the time constraints specified.

16 MEMBER FORSTER: I just have a question of you. Are
17 you the representative from the Forest Service that works
18 with all these parties who are looking at the upper region
19 of the Santa Ana?

20 MR. GIPSMAN: I am the attorney that's representing the
21 Forest Service in this matter, with the Forest Service
22 working with the parties.

23 MEMBER FORSTER: I guess I am a student of Santa Ana
24 River, that I wasn't that familiar with your -- what you are
25 saying today. And I just for the good of that rapidly

1 growing area, I hope you work with them in a very
2 cooperative way because water conservation and use is
3 critical for the state. And I just didn't know about this
4 particular story of the Santa Ana. So, interesting.

5 H.O. BAGGET: With that, back to cross-examination.
6 Next we will go in order of appearance of the parties. I
7 will just go down the list, see if anybody has any
8 cross-examination.

9 Orange County Water District.

10 MR. MCNEVIN: Yes, they do.

11 ---oOo---

12 CROSS-EXAMINATION OF

13 SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT &

14 WESTERN MUTUAL WATER DISTRICT

15 BY ORANGE COUNTY WATER DISTRICT

16 BY MR. MCNEVIN

17 MR. MCNEVIN: Good morning. Chris McNevin for Orange
18 County Water District. For the record, Orange County Water
19 District does not oppose this petition.

20 I have only one question. I am not sure who addressed
21 reuse on the panel this morning, but maybe Mr. Harriger
22 could address this question.

23 Do you have a rough estimate of the number of times
24 what is reused as it makes its way down the river in this
25 watershed?

1 MR. HARRIGER: Oh, my, that question takes me back a
2 long, long time. Many, many years ago, in the early 1960s,
3 one of your former executive officers and I, that was Bill
4 Denny and myself were responsible for doing the prototype
5 basin planning effort on the Santa Ana. And at that time,
6 as the chief engineer for the SAWPA organization, I was
7 responsible for numerous calculations. And one that I made
8 at the time resulted in determination that on the average
9 water is reused in the watershed approximately two and a
10 half times.

11 I will tell you, it will take some effort on my part to
12 recall exactly how I arrived at that computation. It went
13 something like this: There is -- took the total demand in
14 the watershed and subtracted that which was provided through
15 imported sources and arrived at a number somewhere in the
16 order of a million acre-feet. And also looked at the water
17 crop off of the San Gabriel and San Bernardino Mountains and
18 came to about 400,000 and divided into the million. And on
19 that basis, it was reported on numerous occasions during my
20 tenure with SAWPA that the average use on the Santa Ana
21 River is about two and a half times.

22 MR. MCNEVIN: Thank you very much.

23 No further questions.

24 H.O. BAGGET: San Bernardino Valley Water Conservation
25 District.

1 CROSS-EXAMINATION OF
2 SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT &
3 WESTERN MUTUAL WATER DISTRICT
4 BY SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT
5 BY MR. COSGROVE

6 MR. COSGROVE: Thank you. David Cosgrove on behalf of
7 the Conservation District. If you will allow me just a
8 moment to get settled here, I promise this is not going to
9 take very long. But I have been at a lot of hearings where
10 that promise has been made and not kept, so take that as a
11 lawyer promise.

12 My first question is, I guess, addressed to Mr. Beeby
13 or to anyone else that may have contributed to his
14 analysis.

15 My understanding is that there is a conclusion of
16 changed circumstances and that the data for that is the
17 flows that have been registered at Riverside Narrows and
18 Prado; is that correct?

19 MR. BEEBY: No, I wouldn't characterize it that way.

20 MR. COSGROVE: What aspect or when you state your
21 conclusions at your final -- at the end of your declaration,
22 Mr. Beeby, I am looking specifically at Paragraph 19 of your
23 written testimony, where it says that it is these increased
24 flows, referring to the data from the Santa Ana River Water
25 Master Committee, that compromised the changed circumstance

1 that has significantly altered the hydrology of the Santa
2 Ana River from the hydrology used by the State Water
3 Resources Control Board in declaring the Santa Ana River
4 system fully appropriated in Water Rights Decision 11-94,
5 how am I misreading that conclusion?

6 MR. BEEBY: Maybe I misheard your question. I thought
7 -- because, clearly to me, the increased urbanization is, in
8 my opinion, one of the reasons for the increased flows at
9 both the Narrows and at Prado. I think when you asked your
10 question the first time I thought you were talking
11 upstream.

12 MR. COSGROVE: You looked at that -- basically, when
13 you assessed your changed circumstances you've done it with
14 reference to the time period from 1964 to the present; is
15 that correct, because that is the date of the Water Rights
16 Decision 11-94?

17 MR. BEEBY: No. I looked at the overall long range
18 hydrology of the entire river system. And there was
19 apparent from just the hydrology, just the stream gauge
20 records, an increasing flow at both Prado and at Riverside
21 Narrows that looks strange because it did not -- unless you
22 can attribute increased rainfall and global warming or some
23 other cause, which I could not do, it would appear that it
24 is the effects of urbanization and the decrease in
25 percolation capacity of the watershed.

1 MR. COSGROVE: Do you think that the evidence with
2 respect to Prado and Riverside Narrows and the flows there,
3 do you think that is indicative of a change in the hydrology
4 of the Santa Ana River near Mentone?

5 MR. BEEBY: No.

6 MR. COSGROVE: Now, in analyzing the flows near
7 Mentone, if I understand, you have used flows in Mentone and
8 you've quantified them over a base period, correct?

9 MR. BEEBY: Yes.

10 MR. COSGROVE: Then you looked at how that base period,
11 with the flows during that base period, exceed the
12 historical diversions of the Conservation district, correct?

13 MR. BEEBY: During the same base period, correct.

14 MR. COSGROVE: And that the Delta between those two is
15 the amount of cumulative water that you concluded is
16 available for diversion?

17 MR. BEEBY: Yes.

18 MR. COSGROVE: If I understand it, the analysis --

19 MR. BEEBY: Let me clear it up. The way you ask the
20 question was that there was actually a two- or three-step
21 process. The first thing was to determine the cumulative
22 amount of flow available for diversion at Mentone without
23 any constraints, other than the upstream diversion. And to
24 the extent that the senior water right claimants divert
25 upstream, anything Muni/Western does downstream can have no

1 affect on what they do.

2 After I got to that point, then the next step was to
3 say, "Okay. If the diversion, in fact, takes place at
4 Mentone, what is the affect on the terms and conditions of
5 the Orange County Judgment?" So that would be the first
6 constraint.

7 Then the second constraint would be those constraints
8 as I explained in my testimony that were imposed or employed
9 by the nature of the application.

10 MR. COSGROVE: Understood. Let me ask you a little bit
11 about the base period you selected and the methodology. As
12 I understand it -- and forgive me I don't have the ability
13 to project your exhibits. So I don't know what the Hearing
14 Officer wants to do. I will make reference to exhibits that
15 everybody has in front of them.

16 H.O. BAGGET: Project them.

17 MR. COSGROVE: Okay. If I understand your methodology
18 correctly --

19 MR. BEEBY: Which one would you like?

20 MR. COSGROVE: Right now I believe we are looking at
21 4-15.

22 You've defined your base period, and it's the two black
23 lines, as I understand it, to the right on that exhibit,
24 which is the '70-71 or is it -- why don't you tell me what
25 it is? '70 to '90, roughly?

1 MR. BEEBY: Yes. It is indicated as the lower yellow
2 box on that exhibit, between water year '71-72 through
3 '90-91, and the average long-term flow during that 20-year
4 period is 55,700 acre-feet.

5 MR. COSGROVE: If I understand your methodology
6 correctly, you selected this because you believe it was
7 conservative, a little drier than normally?

8 MR. BEEBY: Clearly, it is drier than normal because of
9 the arithmetic, yes.

10 MR. COSGROVE: And if I also understand the methodology
11 correctly, by looking at this base period you think that
12 that is an indicative time frame from which to gauge or to
13 make a judgment as to water that is presently available and
14 will be prospectively available at this area of the river;
15 is that correct?

16 MR. BEEBY: I considered it to be a representative base
17 period. I wouldn't want to be locked in on relying on that
18 base period for future analysis.

19 What you want to do is if we do this two years down the
20 road, we want to take the most recent record and reevaluate
21 that. But it would not be that much different than what we
22 are talking about.

23 MR. COSGROVE: I understand an analyses can always
24 change and often do. For the purposes of what you have
25 submitted here for the bases of overturning fully

1 appropriated stream declaration, you have chosen that as
2 representative and done so, as I understand your written
3 testimony, because it is conservative, and you think that
4 that is an accurate, conservative estimate of present and
5 prospective flows that are available?

6 MR. BEEBY: Yes. It excludes the high years preceding
7 that period and the high year after that, as well.

8 MR. COSGROVE: You also looked at precipitation,
9 correct, briefly?

10 MR. BEEBY: I did in the very early processes of this,
11 yes.

12 MR. COSGROVE: Your analysis of precipitation didn't
13 indicate that there is more precipitation? In other words,
14 to the extent that there may be more water available at
15 Mentone, that is not because there is more rainfall
16 generating flows at that area of the river?

17 MR. BEEBY: That was my conclusion, yes.

18 MR. COSGROVE: Would the same be true of the
19 urbanization? We know that there is lots of urbanization,
20 let's say, below Reach 5, but did you reach any conclusion
21 as to the amount of additional flows that would be generated
22 from urbanization, let's say, above Reach 5?

23 MR. BEEBY: I didn't study the urbanization effects
24 upstream from Mentone.

25 MR. COSGROVE: And so you are not offering any opinion

1 as to the effects of the urbanization or potential
2 additional runoff in that area?

3 MR. BEEBY: Like I said, I didn't do any analysis.

4 MR. COSGROVE: Just a brief question. There was a
5 study that was attached to the petition that was filed on
6 this done by Mr. Tincher, I believe. Did you rely on that
7 study in any way in coming to the conclusions that you have
8 testified to in your written testimony and here this morning?

9 MR. BEEBY: Well, I can't recall that I did. I can't
10 recall his submission with the application. I probably
11 reviewed it, but I just don't recall.

12 MR. COSGROVE: That study did analyze the availability
13 of water on a seasonal basis, I believe, from March to
14 September. Do you recall that?

15 MR. BEEBY: No, I don't.

16 MR. COSGROVE: You didn't do any seasonal analysis of
17 the availability of the flows at Mentone, did you? You just
18 looked at the cumulative, you didn't break it down by month
19 or season?

20 MR. BEEBY: Yes. All our analyses and all the figures
21 that I reported on in any of my testimony are based on
22 monthly analyses of the flow conditions at Mentone, the
23 Narrows and at Prado. What I presented in the testimony
24 were the sum of the water year, the 12 months during the
25 water year, to get the annual water year totals. So, by

1 monthly.

2 MR. COSGROVE: You did look at monthly flows?

3 MR. BEEBY: Yes.

4 MR. COSGROVE: Now, this Exhibit 4-15 that we have
5 projected up here, if I understand this correctly, what you
6 have done is used an accumulated departure from mean
7 analysis to show that the period was representative?

8 MR. BEEBY: Well, to show that it was reasonable to use
9 for a study period. Again, we get kind of technical here.
10 The difference between a study period and a base period,
11 there is hydrologic significance to a base period. I would
12 characterize this as a study period, representative of a lot
13 in --

14 MR. COSGROVE: I can assure you that if you bring in
15 statistics, the more you are going to lose me. That is fine
16 for me.

17 MR. O'BRIEN: Mr. Bagget, can I ask that Mr. Cosgrove
18 let Mr. Beeby finish his answer before he interrupts.

19 MR. COSGROVE: I apologize.

20 H.O. BAGGET: You finished the answer?

21 MR. COSGROVE: Are you done?

22 MR. BEEBY: Yes, I think so.

23 MR. COSGROVE: The flows that you looked at here that
24 led to this graph and your selection of that base period,
25 those were the flows from USGS 11051501?

1 MR. BEEBY: I believe so, yes. They were combined
2 flows at Mentone, correct.

3 MR. COSGROVE: There is three basic gauges up near
4 Mentone, correct?

5 MR. BEEBY: Yes.

6 MR. COSGROVE: One is the one that is immediately above
7 the Conservation District's intake, correct?

8 MR. BEEBY: Yes.

9 MR. COSGROVE: That is 11051499, correct?

10 MR. BEEBY: I can't recall.

11 MR. COSGROVE: I think what you call it in your
12 testimony is the Mentone River Gauging Station. Does that
13 sound more familiar to you?

14 MR. BEEBY: Yes.

15 MR. COSGROVE: The other is 11051502, is what my client
16 calls the Bear Valley pickup. What you call auxiliary
17 diversion?

18 MR. BEEBY: Yes.

19 MR. COSGROVE: Then there is a third one, and that is
20 the SCE flows?

21 MR. BEEBY: Yes. The upstream diversion by the senior
22 water right claimants.

23 MR. COSGROVE: And that is, I think, USGS 11049500?

24 MR. BEEBY: I don't recall, but I wouldn't argue with
25 it.

1 MR. COSGROVE: This shows flow from all three of those
2 gauges?

3 MR. BEEBY: Yes. The combined flow is reported by the
4 USGS.

5 MR. COSGROVE: When you look at the water and when you
6 come to your conclusions regarding the quantity of water
7 available for diversion, you didn't use all three gauges,
8 correct?

9 MR. BEEBY: I think the river only flow was derived by
10 using the flow at the three gauges. In other words, it
11 would be taking the combined flow less the upstream
12 diversions less any auxiliary gauge flows, if there were
13 any. I think we might have even ignored the auxiliary gauge
14 flows because they are so minimal and so rare.

15 MR. COSGROVE: I guess I am a little confused, and
16 maybe it is from the terminology which is why I keep going
17 back to the numbers. Your river only, when in your written
18 testimony you talk about "river only flows" and graphs that
19 are, I think, 4-18 through 4-20, when you talked about river
20 only flows, my understanding, and correct me if I am wrong,
21 are that those flows reflect the two Conservation District
22 diversion or the -- I forget what you call it. It's the
23 Mentone River gauging station and the auxiliary diversion or
24 the Bear Valley pickup, correct, and it excludes the SCE?

25 MR. BEEBY: Yes. Just the USGS gague records reported

1 as the combined flow, using their data straight.

2 MR. COSGROVE: My mistake. I think we are talking
3 about two sides of the same coin.

4 But the bottom line is that the graph that you showed,
5 where you showed the cumulative Delta inflows, that is from
6 those two flows, not all three, those two gauges, not all
7 three?

8 MR. BEEBY: Yes. The river only, right.

9 MR. COSGROVE: Did you do any analysis similar to the
10 one here at 4-15 for how the flows at those two gauges
11 compared to the analysis that you performed with all three?
12 In other words, whether your base period was similarly a dry
13 period and similarly conservative for the two gauges that
14 you used to tally the water that was cumulatively available
15 under your conclusions?

16 MR. BEEBY: No.

17 MR. COSGROVE: Now, you also made mention a minute ago
18 that you didn't look at what you call the auxiliary, or what
19 we call the Bear Valley diversion. You didn't consider
20 those diversions or you ignored those in the analysis. Do I
21 understand you correctly?

22 MR. BEEBY: Early in the investigation we recognized
23 that that was another gauge reading. Because of the overall
24 big picture look we were trying to do of the hydrology, it
25 didn't appear that those flows were very large or that they

1 appeared very often, plus there was not much data on when
2 those flows did exist. And as a result, because of the two
3 factors, the lack of data and the fact that they were
4 generally considered to be minimal, they were not included
5 in the analysis.

6 MR. COSGROVE: In fact, if I understand your written
7 testimony, you presumed that Bear Valley would take all of
8 its water from upstream of what is the Seven Oaks Dam now
9 and that there wouldn't be any diversions downstream of
10 Seven Oaks or what would be in the auxiliary diversion, as
11 you call it, correct?

12 MR. BEEBY: Yes.

13 MR. COSGROVE: And based on that presumption, you
14 concluded all water flowing past that SCE diversion in
15 excess of the Conservation District's historical spreading
16 would be available, correct?

17 MR. BEEBY: Subject to the terms and conditions of the
18 Orange County Judgment, yes.

19 MR. COSGROVE: I believe you characterize this
20 presumption as a conservative one, correct?

21 MR. BEEBY: Yes.

22 MR. COSGROVE: And did you look at the actual data of
23 the diversions from this auxiliary diversion during your
24 base period?

25 MR. BEEBY: I did not, but Mr. Van did.

1 MR. COSGROVE: That data is available, right? There is
2 a USGS stream gauge right on that diversion, correct?

3 MR. BEEBY: Yes. But the fact that the gauge is there
4 doesn't necessarily mean the data is available. Mr. Van
5 would be able to explain more of that to you.

6 MR. COSGROVE: Do you know whether there is any data
7 regarding any diversions by Bear Valley? And Bear Valley is
8 one of the senior rights holders as you characterize that in
9 your testimony; is that correct?

10 MR. BEEBY: Yes, that is my understanding.

11 MR. COSGROVE: So diversions by Bear Valley would not
12 be available or would not constitute -- Strike that.

13 The water diversions at Bear Valley would have to be
14 subtracted off of unappropriated water that is available for
15 diversion under the analysis that you did as reflected in
16 Exhibits 4-18 through 4-20?

17 MR. BEEBY: Well, I think so, but I am a little hung up
18 on unappropriated. What we are doing is dealing with the
19 amount of water that actually exists there. It is my
20 understanding that unless the Southern Cal Edison canal is
21 down, all of Bear Valley's diversion would be made
22 upstream.

23 MR. COSGROVE: Do you know whether that is true after
24 the base period that you have defined? Have you looked at
25 what Bear Valley has diverted out of that canal after your

1 base period?

2 MR. BEEBY: I haven't looked at the Bear Valley
3 diversions specifically.

4 MR. COSGROVE: Do you know whether Bear Valley has any
5 present intention of utilizing that more than they did
6 during the base period?

7 MR. BEEBY: No. I really don't deal with intentions.

8 MR. COSGROVE: Have you asked anybody at Bear Valley
9 what their practice is for water diversions with respect to
10 the conclusions that you have been asked to offer regarding
11 present and prospective availability of water?

12 MR. BEEBY: No. My focus has only been on the wet
13 water that exists at that point.

14 MR. COSGROVE: Now in Paragraph 39 of your written
15 testimony, if I understand it correctly, you have stated
16 that you're looking at these things -- and if I am
17 mischaracterizing it tell me. I will confess I don't
18 understand. You're saying that you're looking at these
19 flows independent of the Seven Oaks Dam?

20 Go ahead.

21 MR. BEEBY: Obviously, the base period, when it
22 existed, did not include the Seven Oaks Dam. It was not
23 there during the base period. So I guess I would have to
24 answer, yes, that I did not consider the regulation effects
25 of Seven Oaks Dam and took these as direct diversions, not

1 water that would be accumulated by the dam and then be
2 released in accordance with the demand schedule by
3 Muni/Western. It was essentially a run of river-type
4 analysis based on the flow that existed in the river on a
5 monthly basis.

6 I will say that when you use monthly data as opposed to
7 daily data there could be a little bit of discrepancy but
8 for the order of magnitude that I was dealing with in this
9 case monthly analysis seemed appropriate.

10 (Reporter changes paper.)

11 MR. COSGROVE: In the analysis that you have done,
12 independent of the dam, you presumed that the flows near
13 Mentone could be diverted either in their entirety or up to
14 500 cfs; is that correct, under both models?

15 MR. BEEBY: After the Conservation District has done
16 its diversions, yes.

17 MR. COSGROVE: And the discrepancy you have touched
18 upon, if I understand you correctly, you believe that the
19 analysis of the probability and probability curves exceeding
20 annual flows is more accurate than just the use of averages
21 and that is why you, for example, used Exhibit 4-15?

22 MR. BEEBY: I wouldn't characterize it as a matter of
23 accuracy. I would characterize it more as a matter of
24 understanding of what the options are and what the potential
25 for diversion might be. If you deal with averages, there is

1 probably no water to divert in some areas, in some cases.
2 That is why averages are dangerous to use in my analysis.

3 MR. COSGROVE: Do you think they're misleading?

4 MR. BEEBY: I think they can be in a case like this or
5 any case where you have a wide disparity of data, where you
6 have a large range between the high flows and the low flows
7 or the high numbers, dollars, whatever it would be, and the
8 low numbers, the wider disparity of the data, the less
9 reliable an average might be. Also depends on the
10 scattering of data.

11 MR. COSGROVE: What is the better way to analyze other
12 than using averages? Would it be with these probability
13 exceedance curves?

14 MR. BEEBY: I think that helps you understand the
15 likelihood that the average would occur. It gives you a
16 better idea of what the probable diversion rate might be.

17 MR. COSGROVE: Did you perform this probability
18 exceedance curve analysis for seasonality of flows based on
19 a month at Mentone?

20 MR. BEEBY: No.

21 MR. COSGROVE: Do I understand correctly that it is
22 your understanding that the maximum amount of flow at
23 anytime out of the Seven Oaks Dam is going to be 500 cfs?

24 MR. BEEBY: I used that as a basis for the analysis
25 because that was the amount that was indicated as the

1 maximum release scheduled by the Corps of Engineers. That
2 is not to say that that is their final determination. It
3 was the indication we had at the time.

4 MR. COSGROVE: I have a couple further questions --

5 Thank you very much.

6 I have a couple further questions for Mr. Reiter.

7 Those questions actually are directed toward the evidence
8 that is submitted with respect to the conservation pool. I
9 will be happy to leave that alone if I understand what I
10 thought Mr. O'Brien said in his opening statement, which is
11 that the petitioner is no longer relying on the operation of
12 the conservation pool as a basis for the finding of changed
13 circumstances.

14 MR. O'BRIEN: That is incorrect. What I said was in
15 our hydrologic analysis we did not include analysis of the
16 amount of water that we could potentially store at the
17 reservoir because we did not want to make assumptions about
18 the operation of the reservoir for storage purposes.

19 Certainly the fact that the reservoir is there and is
20 potentially available for storage down the road is a factor
21 that ought to be considered in the Board's determination of
22 whether there has been a change in circumstance or whether
23 there is other information that has been submitted that
24 justifies revision of the fully appropriated stream order.

25 MR. COSGROVE: I guess my question is by reservoir are

1 we talking about the conservation pool or what has otherwise
2 been characterized as the regulatory effect of the dam?

3 MR. O'BRIEN: I am talking about seasonal storage for
4 more than 30 days.

5 MR. COSGROVE: Okay. Away we go.

6 Mr. Reiter, Paragraph 25 of your written testimony does
7 talk about conserving water behind the Seven Oaks Dam from
8 March through May; is that correct?

9 MR. REITER: That is the period that was studied by the
10 Corps of Engineers in their feasibility report, yes.

11 MR. COSGROVE: That with releases coming from June
12 through September?

13 MR. REITER: That is the proposed release regime that
14 the Corps has referred to.

15 MR. COSGROVE: You characterize that as the dry months
16 in your written testimony, correct?

17 MR. REITER: Normally, yes.

18 MR. COSGROVE: Obviously, this refers to the
19 conservation pool proposal that is pending for the Seven
20 Oaks Dam, correct?

21 MR. REITER: Yes.

22 MR. COSGROVE: And as I understand your written
23 testimony, based on that conservation pool, your testimony
24 offers data on what the study concludes would be water
25 available for downstream diverters?

1 MR. REITER: Which paragraph are you referring to?

2 MR. COSGROVE: I am looking at Paragraph 25 -- no, I am
3 not. It's 29, I am sorry.

4 MR. REITER: Paragraph 29 outlines the methodology used
5 by the Corps in their analysis of the potential of water
6 conservation at Seven Oaks Dam.

7 MR. COSGROVE: And --

8 MEMBER FORSTER: I am sorry, would you repeat that. I
9 didn't hear it.

10 MR. REITER: Paragraph 29 outlines the methodology used
11 by the Corps in their preparation of the feasibility report
12 that is currently in draft form.

13 MR. COSGROVE: Your written testimony indicates that,
14 based on the feasibility study, the conclusion is that some
15 12,950 acre-feet per year conserved water would be available
16 to downstream users?

17 MR. REITER: That is based upon the assumptions used in
18 the Corps' operational study.

19 MR. COSGROVE: Your agency funded that study or helped
20 fund that study, correct?

21 MR. REITER: In conjunction with the Western Municipal
22 Water District and Riverside County, yes.

23 MR. COSGROVE: The 12,950 number that you put in your
24 testimony, that wasn't what the feasibility study concluded
25 was the true yield under the scenario that you are drawing

1 that number from; isn't that correct?

2 MR. REITER: I guess I would have to go back to the
3 copy of the study.

4 MR. COSGROVE: Do you understand what I mean by when I
5 refer to the term "true yield"?

6 MR. REITER: As the Corps defined it, they made certain
7 adjustments.

8 MR. COSGROVE: Those adjustments related to water that
9 would otherwise be conserved elsewhere, Prado Dam and
10 various other adjustments?

11 (Time clock.)

12 H.O. BAGGET: We are trying to limit. Are you close?

13 MEMBER FORSTER: You can request more time.

14 MR. COSGROVE: Can I request four more minutes,
15 please? Okay.

16 My understanding is that the true yield, based on those
17 adjustments, had a number that was about 9200 feet, not
18 12,950 that you included in your testimony. Does that sound
19 about right to you?

20 MR. REITER: Was a number somewhat less than the yield.

21 MR. COSGROVE: The feasibility study looked at
22 different capacities of the conservation pool, did it not?

23 MR. REITER: That's correct.

24 MR. COSGROVE: The numbers that you've included in your
25 written testimony were taken from a conservation pool at a

1 capacity of 50,000 acre-feet, correct?

2 MR. REITER: I believe so.

3 MR. COSGROVE: That was not the capacity of the
4 conservation pool that was selected by the Corps for
5 implementation, correct?

6 MR. REITER: The level selected for implementation was
7 based on that which can be approved currently by the Chief
8 of the Division of the -- Division of the Corps of
9 Engineers.

10 MR. COSGROVE: That was 16,000 acre-feet, right?

11 MR. REITER: That's correct.

12 MR. COSGROVE: The true yield for the 16,000 acre-foot
13 conservation pool was 4,120 acre-feet per year, correct?

14 MR. REITER: Based on the methodology used by the Corps
15 of Engineers, that is correct.

16 MR. COSGROVE: In fact, that conservation study on the
17 50,000 acre-foot pool that you based the numbers that are
18 included in your written testimony on, concluded that that
19 was an infeasible conservation pool operation; isn't that
20 correct?

21 MR. REITER: No, that is not correct. They found a
22 positive benefit cost ratio for all alternative costs.

23 MR. COSGROVE: For each of the four, including the
24 50,000 acre-foot proposal? Mr. Fletcher?

25 MR. REITER: The 50,000 level -- correct that. The

1 50,000 acre-foot level was slightly below a one benefit to
2 cost ratio based on the Corps' methodology.

3 MR. COSGROVE: In fact, the feasibility concluded that
4 that size, 50,000, that you used to base your numbers on had
5 a negative benefit?

6 MR. REITER: Based on the methodology and the numbers
7 used by the Corps, that is correct.

8 MR. COSGROVE: That study did not take into
9 consideration any water diverted or conserved by the
10 Conservation District downstream of the dam, did it?

11 MR. REITER: That's correct.

12 MR. COSGROVE: Nor any water diverted by Bear Valley,
13 correct, downstream of the dam, I'm sorry?

14 MR. REITER: To the extent that they relied on the
15 gauge, Santa Ana River near Mentone, and not the auxiliary
16 gauge, it would not have included the Bear Valley water to
17 begin with.

18 MR. COSGROVE: Obviously, the conservation pool isn't
19 approved yet?

20 MR. REITER: That's correct.

21 MR. COSGROVE: And there is still a lot of
22 environmental consultation that needs to be done in
23 connection with any conservation pool proposal?

24 MR. REITER: Fair amount of work yet to do.

25 MR. COSGROVE: Obviously, those consultations could

1 affect how it operates or whether it is going to be
2 approved?

3 MR. REITER: Can't predict the future, but there is a
4 lot of steps to go.

5 MR. COSGROVE: Thank you.

6 I don't have any further questions.

7 H.O. BAGGET: Thank you, Mr. Cosgrove.

8 We have the City of San Bernardino.

9 MR. MOSKOWITZ: We have no questions.

10 H.O. BAGGET: East Valley Water District.

11 UNIDENTIFIED VOICE: No questions at this time.

12 H.O. BAGGET: Inland Empire.

13 MR. CIHIGOYENETCHE: No questions.

14 H.O. BAGGET: Big Bear Municipal.

15 MR. EVENSON: No questions.

16 H.O. BAGGET: Chino Basin Water Conservation District.

17 Santa Ana River Local Sponsors.

18 MR. DONLAN: No questions.

19 H.O. BAGGET: City of Ontario.

20 MR. GARNER: No questions.

21 H.O. BAGGET: Staff.

22 ---oOo---

23 //

24 //

25 //

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

CROSS-EXAMINATION OF
SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT &
WESTERN MUTUAL WATER DISTRICT

BY STAFF

MR. FRINK: Mr. Fletcher, I have a question for those who aren't completely aware of all the interrelationships of the various districts on the Santa Ana River. I wonder if you could clarify for us the functional relationship between the San Bernardino Valley Municipal Water District and the San Bernardino Valley Water Conservation District?

As I understand, the Water Conservation District is located within the boundary of the Municipal Water District?

MR. FLETCHER: Yes.

MR. FRINK: Could you briefly describe the functions of each, just your understanding of the functions of each?

MR. FLETCHER: San Bernardino Valley, the Water District, is the overlying agency, wholesaler of water, provider of supplement water, custodian of a whole bunch of judgments and contracts and lawsuits and all kinds of stuff related to water rights. We have a water supply system throughout, a broad area, much beyond that of the Conservation District.

I think maybe I better start at the other end, though, in terms of what the Conservation District does. They conserve water out of the Santa Ana River and Mill Creek.

1 They spread it and recharge it artificially. And spreading
2 grounds that they own or they have the rights to from the
3 federal government are leasehold rights. There is actually
4 a number of spreading agencies. The San Bernardino County
5 Flood Control District is the primary spreading agency in
6 our district. Water Conservation District spreads on Lytle
7 Creek.

8 The main streams are as follows:

9 The Santa Ana River for about 50,000 acre-feet, half of
10 which is usually diverted and some of which is spread by
11 Conservation.

12 Mill Creek, about 25,000 acre-feet, average annual
13 harvest, about half of that is diverted. Some portions
14 spread by Conservation District.

15 Lytle Creek is about 38,000 acre-feet.

16 The total amount spread historically in our safe yield
17 studies are 28,000 acre-feet a year on average. Again --

18 MR. FRINK: Who spreads that?

19 MR. FLETCHER: The County Flood District and all the
20 spreaders: Bear Valley Mutual, the Lytle Water Conservation
21 Association. The cities have some spreading rights and
22 spreading activities. The total amount in the safe yield
23 study from 1934-35 to '59-60 was about 27,564 acre-feet.
24 How is that for memory?

25 MR. FRINK: I think you basically answered my

1 question.

2 MR. FLETCHER: What I want to say is that the
3 Conservation District's share of that was only 4,900
4 acre-feet. So, about 75 percent of the spreading in our
5 district, the water conservation, the artificial
6 conservation, not naturally --

7 MR. COSGROVE: Objection. Nonresponsive.

8 MR. FLETCHER: I am trying to answer the question. The
9 point is that the Conservation District spreads one share of
10 the amount of water, but there are lots of conservation
11 activities within Valley District. We recognize --

12 MR. FRINK: I believe you have answered the question.

13 Thank you.

14 Does the San Bernardino Water Conservation District
15 receive any water from the San Bernardino Valley Municipal
16 Water District?

17 MR. FLETCHER: I am glad you asked that question.

18 MR. FRINK: I don't need to know a precise amount.

19 MR. FLETCHER: We have a contract with them to spread
20 water from any source in their spreading grounds as we have
21 had in the past with the Flood Control District. We
22 actually pay the Conservation District about \$41,000 a year
23 to manage what is called the Santa Ana River Mill Creek
24 Water Cooperative Water Project. The word "cooperative" is
25 sometimes a question.

1 This is a ten-party agreement. Conservation District
2 manages that for the Municipal Water District and other
3 parties. And that is under our umbrella of activities. And
4 the pipelines and the plumbing are primarily those of the
5 old diverters and the State Water Project plumbing that
6 Valley District has installed.

7 So, they have a management function for us, and they
8 also have a contract with us in force to spread any water
9 from either the state or any other water we ask them to
10 spread.

11 MR. FRINK: I have a couple questions for Mr. Beeby
12 regarding your testimony.

13 What was -- the exhibit number of that, Mr. Beeby,
14 Exhibit 4-1. Looking at Page 19 of your testimony, I
15 believe it indicates that the affect of imposing 100,000
16 acre-foot per year limit on any diversions that might be
17 made under the new application would be to reduce the amount
18 of cumulative diversions over a 20-year period from 278,000
19 acre-feet to 261,000 acre-feet; is that correct?

20 MR. BEEBY: Yes. If you are talking about the -- well,
21 the first effect is the Orange County Judgment. Then the
22 500 cfs, and then the 100,000. It does drop it from 278 to
23 271. Yes, you are correct.

24 MR. FRINK: From 278 to 261?

25 MR. BEEBY: Yes, excuse me.

1 MR. FRINK: Is that cumulative amount of water that
2 might be available for diversion both through direct
3 diversion and utilizing the potential storage potential of
4 Seven Oaks reservoir if that were approved?

5 MR. BEEBY: No, it is not. It is likely that with the
6 ability to regulate these flows over more than a 30-day
7 period, we would be able to capture more water because of
8 the regulated effect of the reservoir.

9 MR. FRINK: Have you made any assessment of that
10 quantity?

11 MR. BEEBY: No, I have not.

12 MR. FRINK: What was the total amount of water that
13 might be available for diversion under the district's
14 application? Maybe I should rephrase that.

15 Have you made an assessment of the total amount of
16 water that might be available for diversion under the
17 district's applications for direct diversion and storage?

18 MR. BEEBY: No. Only through the direct diversion.

19 MR. FRINK: And what was the maximum amount of water
20 that might be available through direct diversion in any one
21 year?

22 MR. BEEBY: I would refer you to Exhibit 4-16 of my
23 testimony, Column 13. Those last three columns, Columns 11,
24 12 and 13, are entitled Potential New Diversions. Column 11
25 is as limited by the judgment. Column 12 is limited by the

1 500 cfs; and Column 13 is limited by the 500 cfs, the
2 judgment and the 100,000.

3 So, to answer your question, the maximum diversion
4 would be 100,000 acre-feet in years 1979-80.

5 MR. FRINK: If the application were amended, the
6 limitations of the judgment still apply and the direct
7 diversion limitation of 500 cfs still apply, and the maximum
8 amount you could divert in any one year would be 116,996
9 acre-feet; is that correct?

10 MR. BEEBY: Yes.

11 MR. FRINK: That would be 1979?

12 MR. BEEBY: Yes, still sticking with the 500 cfs
13 diversion, correct. It would just ratchet up to the
14 116,000.

15 MR. FRINK: Based on that, I wonder if you could
16 explain the reason for your recommendation that the district
17 increase the annual limit on diversions from 100,000 to
18 200,000 acre-feet in any application that might be accepted
19 for filing by Water Board?

20 MR. BEEBY: Mr. Frink, I refer you to Exhibit 4-11,
21 which is the histogram that was the first exhibit I showed
22 in my testimony. And if you are looking at that exhibit,
23 you see that there are three years during the long-term
24 period of record where flow exceeded 200,000 acre-feet,
25 one year when the flow exceeded 250,000 acre-feet, and seven

1 when the flows were greater than 150-.

2 Since they were greater than 200,000 acre-feet in three
3 out of the period of record, using the historical hydrology
4 as a surrogate for what might happen in the future, it would
5 seem reasonable that they might want to increase the
6 diversion capacity to capture those huge flows when they do
7 occur.

8 MR. FRINK: Does that reflect the limit of 500 cfs on
9 discharges from Seven Oaks Dam? Excuse me, perhaps a better
10 way of phrasing that: the quantities of water stated here
11 are simply the quantity of water in the river that could
12 potentially be available under some project or combinations
13 of projects; is that correct?

14 MR. BEEBY: Not exactly. Exhibit 4-11 is the flow in
15 the river including the diversions by the senior water right
16 holders and not accounting for any diversions by
17 Conservation District. So this would be the wet water in
18 the river. And the analyses in Figure 16 then reflects that
19 there are upstream diversions that are required by the
20 senior water right claimants. There is the downstream
21 diversion required by the Water Conservation District, also
22 a senior right claimant. There is also conditions imposed
23 by the judgment.

24 So if you will refer back to 4-16 and look at the river
25 only near Mentone, Column 3 on 4-16, you will see that the

1 maximum year there is also in 1979-80 of 180,000 acre-feet.

2 MR. FRINK: In fact, if you account for the limitation
3 that the District acknowledges that exist, a maximum that
4 would be available in any of the years you looked at would
5 be in 1979-1980 and it would be 116,996 acre-feet; is that
6 correct?

7 MR. BEEBY: Correct. With the 500 cfs limitation.
8 Recall that the actual amount in the application is 800 cfs
9 and the 500 cfs was used because that is the indicated
10 maximum release rate that the Corps is now thinking about.
11 If they would consider increasing greater amounts of water,
12 then this number would go up and would approach the 141,000,
13 which is the limitation as only affected by the Orange
14 County Judgment.

15 MR. FRINK: That is all my questions.

16 MS. MROWKA: I have a few questions for Mr. Beeby. One
17 of my questions is this: You utilized the gauge flow at
18 Mentone, and yet we are looking at a petition that is asking
19 us to modify the declaration for a specific application, and
20 it lists specific points of diversions in it. Is there any
21 necessity to modify any of the data that you have given us
22 to account for the fact that the points of diversion are at
23 different locations than the gauges?

24 MR. BEEBY: I don't think so. Because it is my
25 understanding that most of the diversions would be in the

1 area of Mentone, certainly upstream from Riverside Narrows.
2 What I have tried to evaluate is the potential diversions at
3 Mentone and illustrated in several of these exhibits the
4 effects of the Narrows and at Prado to show that could still
5 make the diversion at Mentone and have no effect at Prado
6 and the Narrows, key measuring points.

7 So, even though those gauges would be slightly
8 downstream from where the Mentone site is, there would still
9 be adequate water to take care of them. That is not
10 reflected in my calculation. Is assumed all diversion would
11 take place at Mentone. In other words, I am not taking
12 advantage of additional flows coming from Mill Creek or
13 Lytle Creek or some of the other tributary inflows.

14 MS. MROWKA: Therefore, if I understand you correctly,
15 that you're saying no data adjustments are necessary to the
16 gauge data at Mentone that you provided in order to assess
17 whether or not these quantities of water would be found
18 where this application has asked to divert?

19 MR. BEEBY: Well, I don't think I would want to limit
20 myself to any further analysis unless we get down to trying
21 to quantify the flow at particular diversion points. I
22 think the point of my testimony is to show that there is
23 sufficient water at Mentone to allow the diversion both in
24 terms of rate and total annual capacity as set forth in the
25 application, and there is such a huge surplus in addition to

1 those diversions that is about as far as I want to go at
2 this stage. And as we go into the application stage and
3 tie down more where the other diversion points would be, we
4 might want to get more into the quantification, the specific
5 quantification.

6 MS. MROWKA: Thank you.

7 H.O. BAGGET: Any questions?

8 MEMBER FORSTER: No.

9 H.O. BAGGET: Mr. O'Brien.

10 ---oOo---

11 REDIRECT-EXAMINATION OF

12 SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT &

13 WESTERN MUTUAL WATER DISTRICT

14 BY MR. O'BRIEN

15 MR. O'BRIEN: Just had a couple redirect and this is
16 probably for Mr. Van because in response to some questions
17 that Mr. Beeby or Mr. Cosgrove related to this auxiliary
18 diversion, I believe Mr. Beeby indicated that Mr. Van had
19 evaluated the magnitude of these occasional diversions at
20 this auxiliary diversion. And my first question, I guess,
21 is:

22 Is that correct?

23 MR. VAN: That is correct.

24 MR. O'BRIEN: And Mr. Beeby I believe testified that
25 his analysis did not take into account any diversions that

1 may have occurred at this so-called auxiliary diversion
2 point. Is that your understanding?

3 MR. VAN: Yes.

4 MR. O'BRIEN: Can you tell me in rough percentage terms
5 the approximate magnitude of the affect if you were to go
6 back and deduct out any diversions at the auxiliary
7 diversion point and what affect that would have on this
8 ultimate conclusion?

9 MR. VAN: For the base period that Mr. Beeby used in
10 his analysis, it would make less than a 5 percent change in
11 the quantities he estimated.

12 MR. O'BRIEN: Thank you.

13 Nothing further.

14 H.O. BAGGET: Mr. Cosgrove.

15 ---oOo---

16 RE-CROSS-EXAMINATION OF
17 SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT &
18 WESTERN MUTUAL WATER DISTRICT
19 BY SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT
20 BY MR. COSGROVE

21 MR. COSGROVE: David Cosgrove.

22 Mr. Van, did you look at those flows after the base
23 period?

24 MR. VAN: No.

25 MR. COSGROVE: Thank you.

1 H.O. BAGGET: Any other party for recross?

2 Mr. O'Brien.

3 MR. O'BRIEN: That is it.

4 H.O. BAGGET: We will take a break for lunch. How
5 about 1:10 ready to come back.

6 (Luncheon break taken.)

7 ---oOo---

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1 AFTERNOON SESSION

2 ---oOo---

3 H.O. BAGGET: Let's get back to this. I know a lot of
4 people have busy schedules. I would like to adjourn by five
5 unless people want to spend the night here.

6 I know you have all a lot going this time of the year,
7 so I would like to get out before five today, anyway. Then
8 tomorrow see where it takes us, see what the day looks
9 like.

10 With that, back to Mr. O'Brien.

11 MR. O'BRIEN: At this time, Mr. Bagget, I would like to
12 offer Muni/Western Exhibits 1-1 through 1-3, 2-1 through 3-7
13 and 4-1 through 4-27A; 4-27A was the corrected version of
14 4-27 which Mr. Beeby submitted.

15 MR. COSGROVE: No objection, apart from what was
16 previously stated.

17 H.O. BAGGET: They will be admitted.

18 MR. O'BRIEN: Thank you.

19 H.O. BAGGET: With that, Mr. McNevin with Orange
20 County.

21 MR. MCNEVIN: Thank you.

22 Good afternoon. Again, I am Chris McNevin with
23 Pillsbury Madison & Sutro, representing petitioner Orange
24 County Water District.

25 I am here with Mr. William Mills, General Manager of

1 Orange County Water District, he has prepared written
2 testimony and exhibits, and he will provide an overview of
3 that testimony and those exhibits today. And Roy Herndon is
4 going to flip overheads for us, although I assure you his
5 skills go well beyond that.

6 Let me discuss, first, the limited object of our case.
7 Orange County Water District was formed in 1933 by a special
8 act of the California Legislature, and it was chartered to
9 protect the Orange County groundwater supply and now to meet
10 the needs of over 2,000,000 people in Orange County. The
11 district now produces over 350,000 acre-feet of water from
12 the groundwater basin, much of which --

13 (Time clock.)

14 MR. MCNEVIN: A good deal of that 350,000 acre-feet is
15 produced from recharge from the Santa Ana River. And with
16 population growth and the annexations proposed in the
17 district, the water demand for year 2020 is projected to be
18 over 680,000 acre-feet per year.

19 Orange County Water District meets these needs in
20 substantial part by reclaiming and reusing water that has
21 already been withdrawn and used and reused upstream. Orange
22 County diverts these flows or much of these flows through
23 500 acres of wetlands to renew nitrates. It percolates them
24 in the groundwater basin to remove particulates. These
25 operations are an absolute model of the constitutional

1 mandate of California for maximum beneficial use of our
2 water resources.

3 Orange County filed its petition for a limited revision
4 of the declaration only to enable the Board to proceed on
5 its application to appropriate. And the purpose of that
6 application is to formalize Orange County's rights to the
7 waters that actually get to Prado Dam after, again, all
8 reuse, all recycling, all conservation and storage
9 upstream.

10 The purpose of the application is so that Orange County
11 Water District has a valid basis for its planning and its
12 reuse projects. Without this ability these waters would not
13 be put again to beneficial use, but would run off to the
14 ocean, and we would end up importing the water to meet the
15 needs of the 2,000,000 residents that we serve.

16 Mr. Fletcher described this morning the cost in barrels
17 of oil of that type of import scheme. The only alternative
18 and the only one that made sense is for Orange County's
19 program of reuse and recycling to proceed.

20 I will review the major points made in our testimony
21 and exhibits. In the case of the Santa Ana River, the
22 declaration is based on Decision 11-94, a 1964 decision in
23 favor of Orange County Water District that the river was
24 fully appropriated. The fullest appropriation language in
25 11-94 in itself was based on a 1961 decision that said that

1 this river has no unavailable water.

2 So, that is the basis for the full appropriation that
3 we are talking about today. The testimony in exhibits that
4 we put forth as well as some of the testimony in exhibits
5 brought forth by others here show that after Decision 11-94
6 there have been changes in circumstances in the river.
7 These changes have occurred over the past several decades.
8 The changes continue today, and the projections are that
9 these changes will continue into the future.

10 Mr. Mills discussed three separate material changes in
11 his testimony, each of which constitutes a basis to revise
12 the declaration. The first change, may I have Exhibit 9,
13 please. Next exhibit.

14 The first change is that the base flows of the Santa
15 Ana River at Prado, which is where Orange County Water
16 District takes control of the water, the base flows have
17 increased dramatically. These base flows are determined
18 annually by the Santa Ana River Watermaster, which consists
19 of representatives not only from Orange County Water
20 District, but from Muni, from Western and from Inland Empire
21 Utilities Agency.

22 These reports themselves are based on data collected by
23 USGS and the Army Corps of Engineers. This is objective
24 data. Given the membership of the Watermaster Committee,
25 this is data which is carefully scrutinized and that is the

1 basis for these flow charts. We submitted all 29 years of
2 the Watermaster reports as exhibits by reference 11 and
3 submitted a copy to the Board.

4 The data shows increased base flow at Prado from 30,000
5 acre-feet in 1964 to 155,000 acre-feet in the last water
6 year, 1997 to '98.

7 May I have the next chart, please.

8 The base flow as we have shown, and this is our Exhibit
9 10, correlates with increased wastewater discharge
10 upstream. These wastewater discharges themselves are
11 projected to increase, not just to continue, but to increase
12 to 230,000 acre-feet per year by year 2020. This is not an
13 Orange County Water District projection. This is a SAWPA
14 projection. SAWPA, the Santa Ana Watershed Project
15 Authority, is a multi-district entity made of OCWD, Western,
16 Eastern, now Muni, and Inland Empire. Through SAWPA, the
17 member districts have projected wastewater generated in the
18 watershed to increase by a factor of three by year 2040.

19 I note that in his written testimony submitted to the
20 Board, Dr. Douglas Drury of Inland Empire concurs in the
21 existence of these increased flows of wastewater.

22 Change two: The storm flow reaching Prado has
23 increased considerably since 1964 due in part to increased
24 urbanization. Again, as with base flows, the storm flows
25 are plotted and reported each year by the Watermaster, our

1 Exhibit 11, based on data from the USGS and the Army Corps
2 of Engineers.

3 This is our Exhibit 16, which charts the storm flows
4 per inch of rainfall and shows an increasing trend. This
5 trend correlates, if we can have the next chart, this trend
6 correlates with the Army Corps of Engineers' estimates of
7 impervious cover in the Santa Ana watershed above Prado and
8 that is what is shown on our Exhibit 18 on this projection.

9 Again, we have increased flow trend that is tracked
10 over a 35-year period, and it is projected that the increase
11 will continue into the future. Again, I note that Dr. Drury
12 for Inland Empire concurs that there is increased impervious
13 cover causing increased storm flow at Prado.

14 Change three: Orange County Water District's ability
15 to capture these flows has increased. As the testimony in
16 the exhibit shows, OCWD has invested over \$127,000,000 in
17 capital projects which have given it this annual production
18 of 350,000 acre-feet.

19 What is the relation of these major points to the key
20 issues in the notice?

21 The first key issue was has adequate information been
22 provided to show a change in circumstances after the
23 declaration? The three changes that I just discussed, as
24 elaborated in the testimony in the exhibits, certainly do
25 show these changes in circumstances not only after the

1 declaration, but over the entire 35 years since Decision
2 11-94, the original basis for the declaration.

3 Key issue number two: Is there adequate information to
4 show the appropriate diversion season? The testimony in
5 exhibits show that the water which Orange County Water
6 District captures and recharges and reuses is available
7 year-round. The base flows certainly are available all
8 year. And even as to storm flows, as Exhibit 22 shows,
9 that's a variable, to divert these to storage and release
10 them slowly throughout the dry summer months.

11 Key issue three in notice: Is there adequate
12 unappropriated water to justify revision of the declaration
13 to process the application? Clearly the answer is yes. The
14 base flow has been increasing at an average rate of 3,800
15 acre-feet per year. The storm flow reaching Prado has more
16 than tripled on an average annual basis since Decision
17 11-94, and both of these trends are, again, projected to
18 increase into the future.

19 Bear in mind that these are flows that get to Prado.
20 These are flows that have been used upstream, have been
21 reused, have been captured and either discharged or returned
22 through percolation to the river. That is all Orange County
23 Water District is after here, this left over amount.

24 Key issue number four: Are any senior applications
25 affected? No. Our understanding is that there are none

1 beyond Muni's and the one by Muni and Western and the one by
2 Orange County Water District.

3 With this, then, what are the objections? Again, this
4 objective data developed not by Orange County Water
5 District, but by the Corps of Engineers, by the USGS, by
6 SAWPA, and reviewed, frankly, by probably everybody in this
7 room, against the basic proposition that in this arid water
8 short environment we should continue to use and reuse every
9 drop of water to the maximum beneficial extent.

10 There are three points raised in the objection. The
11 first point is that we may open the door to uncertainty if
12 we lift this declaration. That is not our intent. We are
13 after increased certainty. We need to be able to plan a
14 budget to put this water to reuse. We need to be able to
15 plan to meet the water needs of Orange County and we need
16 certainty to do that.

17 We filed our petition for a very limited revision to
18 the declaration, only to the extent necessary to process our
19 application. And our petition was based on specific facts
20 peculiar to Orange County Water District.

21 Could I have the watershed map, please, the first one.
22 Try to use this pointer without doing any laser eye surgery
23 on anybody. Does that pick up that far?

24 We take our flows at Prado, and we are the only entity
25 with diversion facilities, percolation facilities and

1 storage facilities in this lower reach of the river. We
2 have the legislative charter to manage the aquifer
3 downstream of Prado where these flows are stored. So that
4 the facts here in our petition are unique to Orange County
5 Water District. They are not designed to open the door to
6 uncertainty.

7 The second objection is that the water supply is not
8 reliable. And that for some reason due to future plans by
9 others to reuse, our use of this water should be curtailed.
10 Against that objection, we have the historical certainty
11 that this water has been available to Orange County Water
12 District in increasing amounts virtually every year since
13 Decision 11-94.

14 We have the certainty that this water is available to
15 Orange County Water District today. We have the fact that,
16 absent any long-term climate change the rains will continue
17 and we will continue to have storm flows. We have the fact
18 that, as set out by several parties here, they plan to
19 increase imports of water upstream, some of which will make
20 its way down.

21 We have the facts of increased urbanization and
22 increased generation of water. Upstream Inland Empire, for
23 example, has recognized and provided testimony on that. And
24 we have SAWPA projections with input from many here today
25 that those flows will increase in the Santa Ana River.

1 Against these facts we are offered speculation and a
2 number of policy statements this morning that upstream
3 entities may reuse some of their wastewater and this reuse
4 may cut into the flows available at Prado.

5 This is not an argument that there are no changed
6 conditions today. It is an argument that conditions may
7 change again in the future. It is not a basis to deny the
8 petition, and it is factually accurate, in any event. The
9 assumption that reuse upstream will curtail these flows at
10 Prado is not supported. The projects that have been
11 discussed, even if they are ultimately implemented, are not
12 expected to impact the bulk of these flows. That is why the
13 SAWPA flow projections already take into account use and
14 reuse upstream. And it is those flow projections that we
15 used to base our charts.

16 The third objection is that Orange County's petition is
17 contrary to the 1969 stipulated judgment. That is not so
18 for several reasons. First of all, may I have the next one
19 in order, please. Bring it up and center it on Paragraph
20 Number 3.

21 Thanks.

22 Paragraph Number 3 from the stipulated judgment
23 specifically recognizes the right of Orange County to engage
24 in conservation activities that we are talking about. As
25 you read Paragraph 3, it specifically states that OCWD will

1 have full freedom to engage in any activities for
2 conservation or storage of storm flow at or below Prado
3 Reservoir, subject overly to flood control use.

4 May I have the next one, please? If you will center on
5 paragraph -- actually I think there is another one on
6 Paragraph 5.

7 Page 11. Well, never mind. I will read it.

8 Paragraph 5 says that Orange County Water District may
9 make full conservation use at Prado Dam in the reservoir.
10 Moreover, Orange County Water District has signed the MOU,
11 which we attached as Exhibit 8 to our papers. That affirms
12 Orange County is not seeking rights against any upstream
13 entities inconsistent with the 1969 judgment.

14 The MOU affirms the upstream rights to conserve, to
15 store, to divert and reuse. Moreover, the judgment states,
16 at Page 4, Paragraph 2:

17 Said physical solution accomplishes a general
18 interbasin allocation of the natural water
19 supply of the Santa Ana River system and
20 leads to each of the major hydrologic units
21 in the watershed, the determination and
22 regulation of individual rights therein and
23 development and implementation of its own
24 basin management plans. (Reading.)

25 This is what Orange County Water District affirmed in

1 this MOU. That is Exhibit 8.

2 So, there is no interference with the stipulated
3 judgment, and we went to great lengths in that MOU to put
4 that issue to rest.

5 In conclusion, the three objections raised to our
6 petition are not well-taken. Moreover, frankly, they
7 generally concern site issues, not the key issues before
8 this Board. Orange County Water District has submitted
9 testimony in documents on three changed conditions: the
10 increased base flows, increased storm flows and the
11 increased ability to capture those flows. And there is no
12 serious dispute of those flows. Indeed, Inland Empire made
13 virtually the same points in its own written testimony as
14 did Muni and Western in their petition.

15 We are prepared now with Mr. Mills to review several of
16 these facts, and once that is done we will request the Board
17 to grant our limited petition.

18 Thank you.

19 ---oOo---

20 DIRECT EXAMINATION OF ORANGE COUNTY WATER DISTRICT

21 BY MR. MCNEVIN

22 MR. MILLS: My name is William R. Mills, Jr. I am the
23 General Manager of Orange County Water District. I have had
24 that distinction for the last 12 years. My qualifications
25 are and my bibliography are set forth in Exhibit 1 of our

1 submittal. I've appeared as an expert witness before this
2 State Water Resources Control Board on several other
3 occasions, as well as some water rights determinations on a
4 judicial basis.

5 I have worked prior, many years ago, for the Department
6 of Water Resources where, ironically, I worked on
7 development of a water quality model on the Chino Basin. I
8 soon decided it was not the thing I could do, so I moved
9 on. I spent 20 years in the field of consulting. I am
10 currently a chairman of the Santa Ana Watershed
11 Committee. I have served on that committee for the past 17
12 years. I replaced Mr. John Tupps who was an original
13 Watermaster, and I worked for John all those years, and I
14 worked on every one of the master reports prepared during
15 all these periods.

16 My written testimony is included in Exhibit 31 to my
17 submittal.

18 MR. MCNEVIN: Mr. Mills, is your written testimony true
19 and correct, to the best of your knowledge?

20 MR. MILLS: It is.

21 MR. MCNEVIN: Are the exhibits attached, Numbers 1
22 through 37, materials which you either prepared or caused to
23 be prepared or copied from public scientific records?

24 MR. MILLS: That's correct.

25 MR. MCNEVIN: Are those exhibits true and correct to

1 the best of your knowledge?

2 MR. MILLS: Yes, they are.

3 MR. MCNEVIN: Let's move, then, to your written
4 testimony. Would you briefly describe the charter of Orange
5 County Water District.

6 MR. MILLS: We formed in 1933 by the special act of the
7 state Legislature. Two primary purposes. One was to
8 protect the district's, Orange County's, rights to the Santa
9 Ana River and also to manage the massive aquifer on the
10 coastal plan of Orange County.

11 We have over the years developed an extremely large
12 reputation in the field of water reclamation. We have been
13 a leader in the field of water reuse, starting with our
14 water factory in 1975, using reverse osmosis to cleanse
15 wastewater and also known for our research in this
16 particular area as well.

17 One of our major activities is located along the Santa
18 Ana River here. These are our groundwater recharge
19 facilities. This is the largest groundwater recharge system
20 in any urban environment that we have been able to find.

21 MS. MROWKA: Excuse me, for record keeping purposes,
22 would you please identify what you are referring to on the
23 overhead?

24 MR. MILLS: Exhibit Number 24.

25 UNIDENTIFIED VOICE: Twenty-three.

1 MR. MILLS: Excuse me, Number 23. We have about 1,100
2 acres devoted entirely to the purpose of groundwater
3 recharge. There are four distinct systems here. Along the
4 river itself, the active channel of the river, an off-river
5 channel, a conservation channel along the river, and a
6 number of deep basins here which go up to 150 feet in depth.
7 The reason we go to 50 feet in depth over here, and also a
8 major system here to divert water for the lower portion of
9 the system and transport it over to a fourth system called
10 the Santiago Recharge Pits. I will mention more about that
11 in a few moments.

12 We have a total storage capacity in all these basins
13 here about 27,000 acre-feet and a sustained percolation rate
14 of about 500 cubic feet per second.

15 MR. MCNEVIN: Mr. Mills, what is the source of water
16 for Orange County Water District operations?

17 MR. MILLS: There are basically four types of water
18 that we receive here. The first of these is storm water,
19 which we will show you increasing amounts of that. We also
20 have groundwater, rises up and discharges in some of the
21 upstream groundwater basins and also we purchase
22 nontributary water, primarily imported water from
23 Metropolitan Water District. The fourth and final of these
24 is wastewater that is discharged upstream of Prado. This,
25 as indicated previously, we have a water quality control

1 plan in the watershed which provides for multiple uses of
2 that water. The watershed is in a state of severe salt in
3 imbalance. Salinity is a major issue in our watershed.
4 This is the last opportunity to capture any water coming
5 down the Santa Ana River.

6 MR. MCNEVIN: Could you explain, please, your
7 observations of increased base flow reaching Prado?

8 MR. MILLS: This is a graphic. This is Exhibit Number
9 9. I believe that is correct. Exhibit Number 9, which we
10 have prepared primarily using the data from Watermaster
11 reports. Again, those are derived from U.S. Geological
12 Survey measurements below Prado and reservoir operations by
13 the Corps of Engineers.

14 What we see here, of course, is an ever increasing
15 trend line, indicating that there is more and more base flow
16 coming down the river at this location. The primary driver
17 of that water, that increased water, is wastewater as
18 indicated.

19 This graphic here is a graphic, again, prepared from
20 the same sources of data as Exhibit Number 9. The red dots
21 indicate that the wastewater discharges above Prado Dam
22 while the blue are the base flow determinations by the
23 Watermaster. As you can see, there are a couple of trend
24 lines there that run parallel, and they both trend out to
25 the year 2020 and show an intercept somewhere around 235- to

1 255,000 acre-feet of water based on a trend basis.

2 But when we look at the water resources report of
3 SAWPA, the 1998 version of that table, 5-2, which is
4 Exhibit 12 of ours, we also find those projections of
5 available water after taking full account of water
6 reclamation upstream, that that would be confirmed to be
7 about the quantity of water that would appear at Prado in
8 that year.

9 MS. MROWKA: Excuse me, Mr. Mills. I believe your
10 overhead is Exhibit 10; is that correct?

11 MR. MCNEVIN: That's correct.

12 MR. MILLS: That's right. I had 9 first and now 10.
13 Thank you.

14 MR. MCNEVIN: Mr. Mills, do you expect these increases
15 in flows to continue into the future?

16 MR. MILLS: Yes, we do. We do believe that they will
17 continue into the future for a number of reasons. We have
18 not only the SAWPA estimates who have surveyed those
19 agencies upstream and identified their wastewater
20 reclamation potentials. But we also have a graphic here;
21 this is Exhibit Number 13.

22 Number 13 taken also from the SAWPA report shows the
23 quantities of expected water, generation into the watershed,
24 all the way out to the year 2040. As you can see, the lower
25 portion over here. The graphic is divided into two

1 components here. One is from the main stem of the Santa Ana
2 River over here as defined by the 1969 judgment and the San
3 Jacinto River watershed, which is not shown on the earlier
4 graphic but does, from time to time, discharge into the main
5 river system above Prado Dam.

6 We are showing in the bottom, in the dashed or dotted
7 pink area. And so, all these flows will be available in the
8 Santa Ana River for reclamation, reuse, or perhaps discharge
9 into the Santa Ana River. This is an enormous quantity of
10 water for the future. To begin to think about recycling
11 all that water is a tremendous undertaking. My personal
12 experience is that landscape irrigation projects, and we
13 have developed one, a very costly one, are very difficult to
14 implement. Primarily for two reasons.

15 One is we have to put in a dual piping system. The
16 cost of that is substantial. Secondly, there is a demand.
17 There is seasonal demand on these systems, whereas we sell
18 virtually no water during the winter periods and high rate
19 during the summertime, which makes the design of those
20 systems very difficult. So we have a seasonal demand issue,
21 marketing issue, as well as cost of the pipeline.

22 In terms of groundwater recharge, we have done a lot of
23 that. We have helped try to formulate some of the
24 regulations for the Department of Health Services. They are
25 rather complex. They are difficult. We are putting water

1 directly into a municipal water supply, when we do
2 groundwater recharge. It is called indirect potable reuse,
3 and the Department of Health Services is quite concerned
4 about that. So, they imposed very strict regulations on
5 this whole process.

6 There are in our watershed, as I mentioned earlier, a
7 number of salinity issues that have to be met. Generally,
8 the salting has to occur when we go to groundwater
9 recharge.

10 And last of all, and perhaps not the most important, but it
11 can be at times if it is not done properly, is public
12 perception.

13 As you are all aware, the San Diego Project in terms of
14 reuse there died because primarily of public perception. We
15 have taken great pains in our district because we have a
16 major project, a hundred thousand acre-feet a year, of
17 potential recycled water, to get out in front of this, to
18 get the public behind such a project.

19 For those reasons, we believe it is very difficult to
20 implement a large reclamation system that would virtually
21 take all this water and recycle it. So we believe that
22 there will be continued large quantities of water available
23 for the Orange County Water District to capture in its
24 facilities.

25 MR. MCNEVIN: Are these base flows available year-round

1 at Prado?

2 MR. MILLS: Yes, they are. We prepared Exhibit Number
3 14, and Exhibit Number 14 shows the seasonality, at least
4 during the May through September period. Again, we are
5 dealing with historic amounts over here. And as you can see
6 here, this is acre-feet per year of volume over here, but
7 just for the period of May through September, the five-month
8 summer period. This goes to, I believe, 1998 over here.

9 If you look at the last several years over here, we are
10 looking at values of 40 to as much as 50,000 acre-feet per
11 year. One might ask the question: Why are these flows
12 available to us in such large quantities? They're
13 available, I think, for the reasons that I have discussed
14 before. It is difficult to implement large recycling
15 projects, very costly and so forth.

16 So, with that difficulty I believe that these will
17 continue to be available to us in the future.

18 MR. MCNEVIN: Would you explain your observations of
19 increased storm flow reaching Prado?

20 MR. MILLS: The issue of storm flow has been addressed
21 by some others over here. We wanted to prepare a graphic
22 here that shows -- this is graphic Number 15, I believe.
23 These are the storm flows arriving at Prado, dating from
24 1963-64 all the way to 1998. It is quite variable. You
25 have seen the variability of storm flows that hit upon the

1 watersheds. It is true in our portion as well. There is
2 particularly a dry period over here, but occasionally we get
3 rather spiky, very heavy rainfall years. Those large
4 quantities of water are the El Nino years of the past. We
5 have been able to figure that one out over the years now.

6 Again, all this information comes from the Watermaster
7 reports which are derived by using USGS data as well as the
8 Corps of Engineers data. In order to try to get some kind
9 of a trend and make some sense of this, we prepared Exhibit
10 Number 16. Exhibit Number 16 is taking the information in
11 Exhibit 15 and dividing it by the annual rainfall that
12 occurs in San Bernardino.

13 So what we have now is a graphic that shows runoff per
14 inch of rainfall. And again, our best line use of a
15 computer shows an increasing trend here. So, in some years
16 we get large amounts of runoff per unit of rainfall, while
17 in other years we don't get as much. I think if you look at
18 the later part of the period, it is clearly increasing.

19 Now the reason for this, we clearly believe it is not
20 very difficult to figure that one out, is there's been a
21 substantial growth in the population and development of
22 homes, housing, in the upper part of the watershed. Each
23 time a home is built, there is an impervious rooftop.
24 There's driveways, asphalt and there is a storm drain that
25 leads the water, speeds the water, away from the

1 subdivision. There has been enormous number of channels
2 that have been developed upstream, some of which are
3 unlined, but still have the ability to move water at a more
4 rapid rate away from those subdivisions, which land use to
5 be primarily agricultural and readily absorbed water.

6 So we have a system here that has, through no purpose
7 at all, other than the fact it just has occurred, has
8 occurred in every type of development here. We wind up with
9 increasing amounts of impervious area.

10 In order to try to confirm that in a little bit more
11 objective fashion rather than just a thought about that, we
12 did -- we used Corps of Engineers information. Corps of
13 Engineers has done a study for us in terms of water
14 conservation in the watershed.

15 MR. MCNEVIN: You are referring to Exhibit 18.

16 MR. MILLS: Exhibit 18. We find here that it is the
17 Corps who has the responsibility of determining what would
18 be the flood flows arriving at Prado Dam, have a model to
19 project that. And one of the key components of that model
20 is a determination, a survey, of amount of impervious area
21 in the valley floor in the area above Prado Dam.

22 You can see, those are the blue dots we show here. By
23 the way, this is the same graphic that I showed you
24 previously, same one as Exhibit Number 16, showing annual
25 rainfall, annual runoff per inch of annual rainfall, our

1 trend line and so forth.

2 What is interesting here is we did have a nice trend
3 line here for impervious area. It reads out on this side
4 over here as the percentage of impervious cover. In 1970 we
5 had about 16 percent of the area above Prado was of
6 impervious nature, and by 1990, right about here or so, we
7 are looking at about 28 percent of the watershed.
8 Projections by the Corps of Engineers, of course, show that
9 the area -- as we expect, there is substantial housing
10 development throughout the area right now. They do expect
11 it to increase somewhere around 35 percent into the future.

12 MR. MCNEVIN: Do you expect increase storm flows to
13 continue into the future?

14 MR. MILLS: As I indicated, I believe that there will
15 be continued development. The area is rapidly growing.
16 Southern California, in general, is going to have a
17 substantial increase in population and housing, and so I
18 think we will see an increase in impervious areas, which
19 results in more water from each storm arriving at Prado.

20 MR. MCNEVIN: What is the season of availability of
21 storm flows at Prado?

22 MR. MILLS: We've prepared Exhibit Number 22 to
23 illustrate that issue. Again, we are looking at the period
24 of May through September. This is Exhibit 22, May through
25 September. And for the last ten years of data we've kept

1 very accurate records on, and we show two items on here. In
2 the dark blue we show the summertime base flow at Prado,
3 which we, of course, can capture all of that readily. But
4 in terms of river capture, the light blue shows what we have
5 been able to capture in terms of storm flow. And you will
6 notice in periods, the years 1993, 1995 and in 1998 that the
7 amount of total recharge here in excess of the base flow is
8 all storm flow.

9 So, any time the light blue is greater than the dark
10 blue you're capturing storm flow which is basically a
11 carryover issue from the storm season. This comes about
12 primarily because in 1990 we were able to negotiate a water
13 conservation program for the first time ever at Prado Dam.
14 Prado Dam is a Corps of Engineers facility, and they are not
15 prone to keep any water behind their dam. So over the years
16 we have been able to effect an agreement between them,
17 ourselves and the Fish and Wildlife Service to fully
18 mitigate for environmental issues as well. We have a
19 substantial amount of water conservation potential at Prado.
20 In fact, we currently have a 2,000,000 study with the Corps
21 of Engineers to further increase that conservation pool.

22 MR. MCNEVIN: Can you explain the increase in Orange
23 County Water District's ability to capture and recharge
24 Santa Ana River flows?

25 MR. MILLS: We have done a number of things in this

1 area. I will refer now to just a few of the items here.

2 This is Exhibit Number 24.

3 I mention the off-river channel of the Santa Ana River.
4 We construct T levees and L levees along the river system.
5 Our intent here is to slow the water down to a very low rate
6 so it can spread out entirely. That is the important aspect
7 in terms of groundwater recharge.

8 Exhibit Number 5 is a picture --

9 MR. MCNEVIN: 25.

10 MR. MILLS: 25.

11 -- of an inflatable rubber dam; seven feet in diameter,
12 320 feet long, cost us about \$2,000,000 a piece. We have
13 two of these. These are designed to divert the water out of
14 the main channel in the river, which flows in this direction
15 into our recharge facilities. The important thing here is
16 prior to the development of the construction of these dams
17 we were unable to enter the recession curve behind a storm
18 until the flows got down to roughly 200 cubic feet per
19 second before we can build a sand dike in order to capture
20 that water. With these, we are able to inflate them in a
21 matter of 30 minutes and begin operations again in capturing
22 that water. These have saved us tens of thousands acre-feet
23 of water which would have otherwise been lost.

24 I mentioned our off channel facilities. Exhibit Number
25 26 is a typical example of Anaheim Lake. It's a large lake,

1 holds about 2,000 acre-feet of water. It is used also for
2 recreational purposes. We fish out of it. And this is a
3 major recharge facility that we constructed about 1964, has
4 a very high recharge capacity. We have several of these
5 basins, as well.

6 Now I want to mention one of our key facilities here.
7 This is our pumping station at Burris Pit. You recall, at
8 the very end of our recharge system we had a pipeline that
9 extended about four miles over to the Santiago Pits. This
10 recharge facility has four pumps in it. We can pump 240 to
11 250 cubic feet per second, out of this system over here into
12 Santiago Pits, where the pits themselves have a storage
13 capacity of 14,000 acre-feet in them and a percolation
14 capacity up to 150 cubic feet per second. The pipeline is
15 68 inches in diameter, so a major facility.

16 This is really with a water conservation program behind
17 Prado Dam and our ability to take this much water and
18 recharge it through another basin has been key to our
19 development of additional water conservation programs behind
20 Prado Dam.

21 Last, I would like to show -- I don't have a graphic,
22 but I just would refer to Exhibit Number 28. And that is a
23 detailed listing of all the cost that we incurred since
24 about 1964 in developing these recharge systems to their
25 maximum potential. They consist of pumping stations, other

1 than those I showed you here, pipelines, land and so forth.
2 We spent about \$128,000,000 on those facilities as of now.

3 What do we have for the future? We are developing a
4 device here which involved a patent. This is a basin
5 cleaning vehicle. This is a \$1.2 million expenditure. This
6 looks like a pool sweep. It operates automatically at the
7 bottom of these deep basins and removes the material that
8 tend to clog up our basins. Clogging is a major issue in
9 terms of our recharge capability. It pumps the fine
10 sediments to the surface where we dispose of those. Then it
11 rejuvenates the basin so we have high percolate rates again.

12 MS. MROWKA: Isn't that Exhibit 29?

13 MR. MILLS: Thank you very much. It is.

14 And we are also working on other recharge enhancement
15 projects. We are now looking at ways -- we have no
16 additional land in Orange County. It is all developed. We
17 are looking at other ways to take water from the river and
18 put it into -- beneath large parking lots and seepage
19 fields. There's some very new techniques that we are
20 developing here.

21 But what all this means to us is that we have developed
22 a major -- this graphic shows over time, go back to prior to
23 1988. This shows our annual recharge capacity here from the
24 Santa Ana River and Anaheim Lake. Those were the only
25 recharge facilities we have at the time.

1 MR. MCNEVIN: Excuse me. This is Exhibit 30.

2 MR. MILLS: Thank you.

3 Then also on Exhibit 30 we show here Crater Basin, more
4 deep basins being added. You see that these are additive
5 here, recharge capacity. Burris Pits pump station pipe line
6 and so forth. We are also dewatering our basins so we can
7 rapidly clean those again.

8 Brings us up to this present time. We are now working
9 along Santiago Creek and build more recharge capacity
10 there and our basin cleaning vehicle. Our expectation is
11 that we will have a recharge rate, annual recharge rate,
12 when we are through with this in a few more years of more
13 than half a million acre-feet per year of recharge
14 capacities.

15 Lastly, I wanted to mention this is Prado Dam. An
16 aerial view of --

17 UNIDENTIFIED VOICE: Exhibit 19.

18 MR. MILLS: It is Exhibit 19.

19 Prado Dam here, and this is the area behind Prado
20 here. One of the largest wetlands in Southern California,
21 a beautiful riparian area. And this is where we are
22 developing with great difficulty a water conservation
23 program. We do have a major facility here for a constructed
24 wetlands project over here. Remove other contaminants and
25 nitrates as well.

1 MR. MCNEVIN: Thank you very much.

2 H.O. BAGGET: Expended your time.

3 MEMBER FORSTER: I have a question. I can ask before
4 they cross-examine, can I?

5 H.O. BAGGET: Board Members can do anything they want.

6 MEMBER FORSTER: We figured that out in the Bay-Delta
7 hearings. We can ask anything we want at any time. I just
8 -- has nothing to do with the content.

9 I wrote down a little thing that you said, Bill. You
10 said this is our last opportunity to capture water. I mean,
11 I never think anything is the last. I don't know -- what
12 did you mean by that?

13 MR. MILLS: I meant that at Prado Dam in our recharge
14 facility, what passes our recharge facility is lost to the
15 ocean. There is no recharge beyond that. So, we have a
16 model here that says, "Not a drop to the ocean." We don't
17 always accomplish that, but that is our objective, is to
18 make sure that the maximum beneficial use of all water in
19 the watershed takes place.

20 H.O. BAGGET: Cross-examination, San Bernardino.

21 MR. O'BRIEN: No questions.

22 H.O. BAGGET: San Bernardino Water Conservation
23 District.

24 MR. COSGROVE: No questions, thank you.

25 H.O. BAGGET: City of San Bernardino.

1 MR. MOSKOWITZ: No questions.

2 H.O. BAGGET: East Valley.

3 UNIDENTIFIED VOICE: No questions.

4 H.O. BAGGET: Inland Empire.

5 ---oOo---

6 CROSS-EXAMINATION OF ORANGE COUNTY WATER DISTRICT

7 BY INLAND EMPIRE UTILITIES AGENCY

8 BY MR. CIHIGOYENETCHE

9 MR. CIHIGOYENETCHE: Just a few. Jean Cihigoyenetché.

10 I represent Inland Empire Utilities Agency.

11 Afternoon, Mr. Mills.

12 MR. MILLS: Afternoon.

13 MR. CIHIGOYENETCHE: Just a few brief questions for
14 you. Out of curiosity, you were a participant in the
15 discussions and negotiations relative to the 1969 judgment?

16 MR. MILLS: I was a young engineer. They didn't ask me
17 any questions about it. But I did work on the technical
18 aspects of it.

19 MR. CIHIGOYENETCHE: You weren't actually directly
20 involved in those discussions?

21 MR. MILLS: I was not.

22 MR. CIHIGOYENETCHE: We have heard some statements
23 eloquently presented by counsel in his opening statement
24 with respect to the concern of upper stream, upper region
25 entities such as Inland Empire. I am here on behalf of many

1 of our colleagues that feel the same way that we do.

2 I would like to direct your attention to what has been
3 identified as Exhibit 7 by your counsel in your packet. It
4 is a letter dated August 21st, 1998.

5 MR. MILLS: I have it.

6 MR. CIHIGOYENETCHE: Have you seen that document before?

7 MR. MILLS: Yes, I have.

8 MR. CIHIGOYENETCHE: It purports to be a letter
9 authored by you; is that correct?

10 MR. MILLS: That's correct.

11 MR. CIHIGOYENETCHE: That letter was submitted by you
12 with a supplement to your application; is that correct?

13 MR. MILLS: I believe it was.

14 MR. CIHIGOYENETCHE: I am going to refer beginning on
15 the third paragraph of that letter, Mr. Mills, and if you
16 can indulge me to read some language into the record that I
17 am concerned with. It states, basically:

18 Accordingly OCWD renews its commitment to
19 work with the division and all upstream
20 users. We recognize that under the 1969
21 stipulated judgment upstream entities can
22 divert, extract, store and use water without
23 interference from OCWD as long as OCWD
24 receives its entitlement under the judgment.
25 Thus, we do not contest the pending water

1 rights application at Seven Oaks Dam.

2 However, we seek to confirm our rights
3 against third parties for all waters reaching
4 Prado subject, of course, to all upstream
5 rights granted by the judgment as indicated
6 above. OCWD's application is not intended to
7 disrupt existing rights of upstream entities
8 as established by the 1969 stipulated
9 judgment. Its purpose is to establish that
10 subject to those existing rights OCWD is
11 entitled to use all water reaching Prado
12 Dam. (Reading.)

13 Does that continue to be Orange County's position at
14 this time, sir?

15 MR. MILLS: That is correct.

16 MR. CIHIGOYENETCHE: Judging by the comments of your
17 counsel earlier, that would seem to be true.

18 Now, in the declaration or written testimony that you
19 submitted in support of your petition, I'd ask that you turn
20 to Page 6 of your written testimony, if you would.

21 You have that before you, sir?

22 MR. MILLS: I do.

23 MR. CIHIGOYENETCHE: Beginning at Line 5, it is the
24 first complete paragraph on that page.

25 SAWPA's projected wastewater discharges are

1 premised on and reflect significant amounts
2 of wastewater reuse by upstream water
3 agencies. If these plan reuse projects are
4 not developed, projected wastewater
5 discharges into the Santa Ana River and
6 consequently projected Santa Ana River base
7 flows would increase. (Reading.)

8 My question to you, sir, is: Has Orange County Water
9 District done any calculations to determine what effects
10 upon those flows would result if such reuse projects were
11 developed?

12 MR. MILLS: We have looked at some of those. We have
13 looked at the testimony of Mr. Doug Drury and have made an
14 analysis of that. We also have looked at that submitted by
15 the City of San Bernardino.

16 MR. CIHIGOYENETCHE: Have you reviewed any of the
17 proposed projects or currently ongoing projects being
18 implemented by Inland Empire Utilities Agency for purposes
19 of water reuse conservation and things of that nature in
20 coming to your conclusions that you presented here today?

21 MR. MILLS: I have reviewed Mr. Drury's presentation.
22 I am also familiar with the Ely Basin Recharge Project.

23 MR. CIHIGOYENETCHE: We heard testimony earlier today
24 regarding the Seven Oaks Dam project. And the thought
25 occurred to myself and Mr. Drury, however, listening to the

1 testimony was that everybody is arguing over the same
2 water.

3 If we assume hypothetically that the Seven Oaks project
4 in the petition that was discussed here today is granted,
5 does that have any effect upon the flows that you are
6 relying upon in your presentation here today?

7 MR. MILLS: I am not sure we are arguing over the same
8 water, but I won't necessarily agree with that. We've
9 studied the Corps of Engineers report, and based on the
10 information there about the approved or recommended water
11 conservation program in there, which develops a yield of
12 about 4100 acre-feet per year, the Corps' estimate is that
13 that would impact the yield at Prado by about 900 acre-feet
14 per year.

15 MR. CIHIGOYENETCHE: Now, is it fair to say, Mr. Mills,
16 that by virtue of the MOU that was recently fully executed
17 by all of the parties and the representations that have been
18 made to this Board today thus far that Orange County has no
19 intentions at this point in time to seek to amend the 42,000
20 acre-foot figure that is required to be delivered at Prado
21 Dam aggregate by Inland Empire and Western?

22 MR. MILLS: That is correct.

23 MR. CIHIGOYENETCHE: I have nothing further.

24 H.O. BAGGET: Big Bear.

25 MR. EVENSON: No questions.

1 H.O. BAGGET: Chino Basin.

2 Santa Ana River Local Sponsors, do you have any
3 questions?

4 MR. DONLAN: No questions.

5 H.O. BAGGET: City of Ontario.

6 MR. GARNER: Just a couple questions.

7 ---oOo---

8 CROSS-EXAMINATION OF ORANGE COUNTY WATER DISTRICT
9 BY CITY OF ONTARIO, CUCAMONGA COUNTY WATER DISTRICT &
10 CITY OF RIVERSIDE
11 BY MR. GARNER

12 MR. GARNER: Eric Garner on behalf of the City of
13 Ontario, Cucamonga County Water District and the City of
14 Riverside.

15 Good afternoon, Mr. Mills. Just a couple questions
16 about your Exhibit 8, which you referred to in your
17 testimony as the now fully signed version of the MOU that
18 your counsel submitted on, I think, December 1st to the
19 State Board.

20 Specifically on Paragraph 3 on Page 3, directing your
21 attention to the last sentence. And you signed that
22 document did you not?

23 MR. MILLS: We signed it.

24 MR. GARNER: The sentence reads:

25 Through the OCWD petition and application

1 OCWD shall not obtain any right as against an
2 upper area water user or entity inconsistent
3 with the terms of the judgment despite any
4 expenditure made by OCWD to capture and use
5 the flows. (Reading.)

6 My question is: Does OCWD intend to obtain any right
7 at all against any upper area parties pursuant to its
8 petition and application in its rights as modified that is
9 inconsistent with the terms of the judgment?

10 MR. MILLS: We do not intend to acquire any additional
11 rights other than those which we believe we have under the
12 '69 judgment.

13 MR. GARNER: So, through this petition and application
14 OCWD does not intend to acquire any rights in addition to
15 those it has under the 1969 judgment?

16 MR. MILLS: That is correct, except as to third parties
17 who are not a signator or part of the judgment. We do
18 expect to acquire rights over third parties that are not a
19 part of the judgment.

20 MR. GARNER: "Third parties," could you define that
21 term a little bit for me?

22 MR. MILLS: A third party is someone who is not a
23 signatory to the '69 judgment and is -- I believe is someone
24 who resides, perhaps, outside the watershed. Could be the
25 City of San Diego. Could be a south county interest. Could

1 be any number of parties outside of our watershed.

2 MR. GARNER: Doesn't include parties that were -- I
3 believe there are actually only four parties to the '69
4 judgment. A number of parties were dismissed pursuant to
5 stipulation.

6 Are you considering those third parties or are those
7 parties effectively parties to the judgment through your
8 definition?

9 MR. MILLS: Are you talking about those parties that
10 reside within the watershed such as Chino Basin
11 Watermaster?

12 MR. GARNER: Yes, and other entities like that.

13 MR. MILLS: We believe that those, however, when this
14 was signed that we intend to live by what is indicated as
15 our intent of the '69 judgment, not interfere with those
16 rights.

17 MR. GARNER: So that the third parties that you are
18 referring to are parties outside, primarily outside, the
19 watershed?

20 MR. MILLS: That's correct.

21 MR. GARNER: I have no further questions.

22 Thank you.

23 H.O. BAGGET: Thank you.

24 Staff.

25 ---oOo---

1 CROSS-EXAMINATION OF ORANGE COUNTY WATER DISTRICT

2 BY STAFF

3 MR. FRINK: Mr. Mills, I have a few questions.

4 OCWD Exhibit 6 was your water right application, and
5 Attachment 3D to the application states:

6 Water is diverted directly to the groundwater
7 basin through the river bottom along a
8 six-mile stretch between Imperial Highway and
9 Ball Road. (Reading.)

10 It also lists a number of other places that water is
11 diverted to the groundwater basin. But with regard to the
12 direct diversion of water to the groundwater basin in that
13 six-mile stretch of river, my question is --

14 MR. MCNEVIN: Excuse me, Mr. Frink, which attachment?

15 MR. FRINK: 3B to Exhibit 6, to the water right
16 application.

17 MR. MCNEVIN: We've go it now. Thank you.

18 MR. FRINK: The question I had is this: Is a portion
19 of the water diversion that is referred to in that six-mile
20 stretch of river between Imperial Highway and Ball Road, is
21 that simply the seepage that occurs in the river as the
22 water flows down the channel of the river?

23 MR. MILLS: Yes. We augment that seepage by
24 artificially constructing the T levees and the L levees that
25 we described earlier. It is a natural occurrence, but we

1 augment it through our construction of these levees. The
2 idea is to slow the water down and spread it out to a
3 maximum surface area. That is an optimum way to recharge
4 water, spread it out to its maximum extent.

5 MR. FRINK: So you have augmented the natural channel
6 in such a way that it increases the seepage?

7 MR. MILLS: I have an exhibit that shows the T levee
8 construction early on. I think that was Exhibit Number 24,
9 I believe.

10 MR. FRINK: Also, is there anything that is done to
11 control the rate of flow in the river in order to effect
12 greater seepage?

13 MR. MILLS: Yes. We have operational control of Prado
14 Dam under certain conditions. Prado Dam is a Corps of
15 Engineers operated facility, but we have been able to
16 develop a water conservation manual, an operational manual,
17 there that recognizes a conservation element in the
18 operation of that dam. And in the winter period the dam is
19 operated on a flood-forecasting basis. So they hold water
20 to a certain elevation, I believe 500 feet above -- 496 feet
21 above sea level. And if there is a pending, immediately
22 pending, storm, they will release that. Otherwise they will
23 hold it and release it at a right which we can absorb
24 downstream.

25 After March 1st of each year our agreement with them is

1 to hold water all the way up to an elevation of 505, some
2 27,000 acre-feet of water. They would release that at a
3 rate of 500 cubic feet per second, which is our sustained
4 percolation rate downstream, but no more than that.

5 MR. FRINK: I believe that answers my question.

6 MS. MROWKA: Just to follow up on the question, then.

7 On your Exhibit 22 where you depict the summer Santa
8 Ana River flow recharge and the base flow at Prado, in your
9 testimony you were indicating this as storm flows. What
10 those are would be the released flows from Prado under the
11 terms of your agreement?

12 MR. MILLS: Exactly. We have complete operational
13 control of the dam during the summer period, unless there is
14 some torrential rain that occurred and there might be a
15 flood issue. What you see on this Exhibit 22 is the total
16 amount of recharge during that particular period, including
17 both base and storm flow. We've simply shown on here how
18 much of that is base flow during that period. So the
19 difference between the two is the storm flow that we
20 captured.

21 So in some years it is taken by us at the end of
22 September before we were able to completely empty the
23 reservoir because of its large capacity.

24 MS. MROWKA: Thank you.

25 MR. FRINK: I would refer you to Exhibit 7. You were

1 looking at it earlier in response to a question. It is the
2 letter dated August 21st, 1998, from yourself to --

3 MR. MILLS: I have it.

4 MR. FRINK: Page 4 of that exhibit, actually the second
5 page of the supplement to the letter, it includes a table in
6 the middle of the page that is entitled "Total Combined
7 Direct Diversion and Storage."

8 Do you see that?

9 MR. MILLS: Yes, I do.

10 MR. FRINK: Some of the quantities of water listed as
11 current conditions on the table, if I am reading it
12 correctly, would be the 255,000 acre-feet under maximum
13 diversion plus the 51,400 acre-feet under storage. So, it
14 would equal 366,400 acre-feet.

15 Is that the total amount of water that Orange County
16 Water District presently diverts from the Santa Ana River?

17 MR. MILLS: A total of 300- -- we actually recharge
18 approximately 300,000 acre-feet per year, but not all years
19 provide this kind of natural flow. So, our recharge
20 capability is in this vicinity, but we actually supplement
21 it with recharging of imported water supply. Typically, we
22 recharge 300,000 -- 275- to 300,000 acre-feet per year.

23 MR. FRINK: Now, the total number at the end of the
24 table is 507,800 acre-feet. Is it correct to conclude the
25 amount of water that would be diverted as a result of future

1 projects, then, is the difference between the 507,800
2 acre-feet and approximately 300,000 or 306,000 acre-feet?

3 MR. MILLS: I have to study that a little bit, but I
4 think that might be correct. But, again, we are dealing
5 with natural flows here of the river system as opposed to
6 supplemental purchases of water and recharged, but this
7 would be of the native system.

8 MR. FRINK: So, of the water that is available in the
9 Santa Ana River that you don't import, under current
10 conditions you've recharged somewhere in the neighborhood of
11 300,000 acre-foot a year, acre-feet a year, and you would
12 ultimately plan to increase that to approximately 507,800
13 acre-feet per year?

14 MR. MILLS: That's correct. This would be -- the
15 numbers here reflect a maximum potential and this would only
16 occur in extremely wet years, a couple of el nino years in a
17 row that would generate the kind of water we are talking
18 about here.

19 Normally, the river wouldn't produce this kind of water
20 supply in a year-in-and-year-out basis. This is a -- as we
21 were advised by the staff here some time ago to submitting
22 our application what we thought we would need to do in the
23 future, include our future capacity as well, also on a very
24 wet period analysis. That is what this table reflects.

25 MR. FRINK: That answers my question.

1 Thank you.

2 MR. MILLS: Thank you.

3 MS. MROWKA: Mr. Mills, have you done any evaluation as
4 to whether or not there is sufficient flows in the stream
5 system for this Board to approve your petition and the other
6 petition that is pending before us?

7 MR. MILLS: Repeat that.

8 MS. MROWKA: Have you done any evaluation of whether
9 there is sufficient flow in the stream system for this Board
10 to approve your petition and the other petition that is
11 before us?

12 MR. MILLS: We have indicated that we have no grounds
13 or intent or idea or even desire to interfere with the
14 applicant's petition at Seven Oaks Dam. While it may result
15 in some diminishment of flows to Prado, a few hundred feet
16 that I mentioned or so, we stand behind the 1969 judgment.
17 We agreed to that and we continue to stand behind that.

18 MS. MROWKA: Can you point me at, point me toward any
19 exhibits that you prepared that address the issue of the
20 quantity sought under the first petition and deducted from
21 your evaluation?

22 MR. FRINK: Excuse me, I just have a point of
23 clarification. You were referring in your question to the
24 amount sought under the petition?

25 MS. MROWKA: Both petitions by San Bernardino and the

1 Orange County Water District.

2 MR. FRINK: I would like the record to refer to the
3 amount sought under the application so that we maintain
4 distinction between a petition to revise the declaration
5 versus an application to appropriate water.

6 MR. MILLS: I mentioned that we had previously analyzed
7 the Corps of Engineers' study. And they indicated the new
8 yield of Seven Oaks would be 4100 acre-feet, of which 900
9 acre-feet would be a diminishment of the yield at Prado Dam.
10 That was submitted and we did submit that in an earlier
11 submittal to the State Board staff.

12 MS. MROWKA: We heard testimony this morning that San
13 Bernardino may choose to increase, and, in fact, double, the
14 amount they seek under the application if this Board accepts
15 the application to move it from 100,000 acre-feet to 200,000
16 acre-feet.

17 Does that have any affect upon your project and what
18 you are seeking today?

19 MR. MILLS: I haven't had time to analyze that, but we
20 do believe that what is occurring is that the dam in Seven
21 Oaks is actually capturing much of the water or some of the
22 water, a lot of the water they would capture there is water
23 that we would have lost anyway. It is those very large
24 spikes, those el nino years, that are just unavailable for
25 capture in the Southern California environment. We can't

1 build reservoirs large enough to capture that flow.

2 I think as they move toward increasing their storage
3 potential up there, I think that they will probably not
4 really impact. I think a diminishing returns issue that
5 they will impact us less and less as they capture more and
6 more of a storm flow that we would have not been able to
7 capture as well. But I have not had time to analyze that.
8 But, again, we have no desire to object to that. We do
9 believe that there will be a continuation of urban
10 development in the valley floor which will continue to
11 increase the amount of water available to us.

12 MS. MROWKA: And if I take the information you have
13 given me which is flow records for Prado Dam and I wanted to
14 apply that information to your application, I want to do
15 evaluation of the amount of water that may be down there for
16 purposes of revising the declaration, do I have to adjust
17 the data in any fashion to account for the fact that your
18 proposed points of diversions are not followed with that dam?

19 MR. MILLS: You adjust for what purpose now?

20 MS. MROWKA: Because the proposed points of diversion
21 on your application are at different locations to the stream
22 system, is it necessary to do anything to the data you are
23 presenting today to make adjustment to it in order to
24 account for the fact your points of diversion are at
25 different locations in the stream system?

1 MEMBER FORSTER: Can I ask while they have a moment to
2 converse, I don't understand your question, Kathy.

3 MS. MROWKA: They have presented us with information
4 that is based on stream gauge data at a specific location at
5 Prado Dam. But they are seeking water rights at different
6 locations in the stream system. And I simply want to know
7 if I need to adjust the information that they have given me
8 in the exhibits in any fashion to account for the fact that
9 they are actually downstream from that location.

10 MR. MILLS: If I understand the question correctly, I
11 think you're asking me that since we developed a lot of
12 information at Prado and yet our diversion points are below
13 Prado is there any need to adjust our figures of capture
14 based on the fact that they're different locations?

15 MS. MROWKA: That is what I am asking.

16 MR. MILLS: The answer is no.

17 MS. MROWKA: Could you elaborate?

18 MR. MILLS: I can't get away with it. That is because
19 the Prado Dam and our facility are operating conjunctively.
20 We are able to operate those so we can maximize the capture
21 of flow. We have developed a computer model of the two
22 systems and how they work best together.

23 So when we talk about capturing flows at Prado Dam, we
24 are talking about recharging those flows. Those are flows
25 that we have incorporated into this particular table that I

1 referred to as Exhibit Number 7. There would be no
2 adjustment, in my mind, for that.

3 MS. MROWKA: So I can simply utilize this data for any
4 conclusions we need to make?

5 MR. MILLS: I think so. That is a difficult question.
6 Of course, this is not an -- the application is not the
7 subject of this hearing, but we can provide a better answer
8 to that question later if you like.

9 MS. MROWKA: I understand.

10 Thank you.

11 MR. MILLS: You're welcome.

12 ---oOo---

13 CROSS-EXAMINATION OF ORANGE COUNTY WATER DISTRICT

14 BY BOARD

15 MEMBER FORSTER: I want to talk about this a little bit
16 longer. When I understand their point of diversions, it is
17 all their management area where they are trying to recharge
18 in the basin, in Anaheim Lake, the side basins, the gravel
19 pits.

20 And so, that is what you mean, right, about your point
21 of diversions?

22 MR. MILLS: I guess I am getting the sense of your
23 question now. What we presented here is simply the fact
24 that we believe there's surplus water. There is new water
25 available at Prado Dam. And our charge is to find a way to

1 put it underground. So, we have this map here that shows
2 all of your facilities that do that job for us. We are also
3 in the process of improving and optimizing those
4 facilities. So I don't mean to say that the water, all
5 water, appears at Prado Dam from the exhibits I have show
6 here is water that we capture. I'd love to be able to do
7 that, but there is more there than we can capture in many
8 years. Some years we can capture all the water, but that is
9 the variability of water resources in Southern California
10 and the state, in general.

11 But in operating Prado Dam we know what the
12 availability of water and increased availability of Prado
13 Dam is. Then we need to find ways, and this is the way we
14 do it, is using these facilities to capture that water. The
15 base flow, of course, is not an issue with respect to
16 ability to capture. It is always less than our ability to
17 percolate water. Were we never to get any storm water in
18 the system, we could capture every drop of base flow that
19 came down the river. It is only storm flow that is the most
20 troublesome because it comes in such a variable rate.

21 Am I making this more confusing?

22 H.O. BAGGET: Any redirect?

23 MR. MCNEVIN: No, sir.

24 H.O. BAGGET: Mr. McNevin, do you have any exhibits you
25 would like to enter into evidence?

1 MR. MCNEVIN: At this point, Mr. Bagget, we would like
2 to offer into evidence Orange County Water District's
3 Exhibits 1 through 37 attached to our submittal.

4 H.O. BAGGET: No objections. They will be entered for
5 the record.

6 Thank you.

7 MR. MCNEVIN: Thank you.

8 MR. MILLS: Thank you.

9 H.O. BAGGET: San Bernardino Valley Water Conservation
10 District.

11 MR. O'BRIEN: Before Mr. Cavendar is on I have one
12 objection I thought we ought to deal with before he gets
13 into his presentation. It deals with the testimony of Mr.
14 Cavendar found at Page 2, Line 15 of his declaration, where
15 he testifies that the Conservation District has pre-1914
16 water rights that were confirmed in the 1977 decision of Big
17 Bear Municipal Water District versus the Water District
18 versus North Fork Water, et al. I am objecting to that
19 testimony and moving to strike it on the ground that Mr.
20 Cavendar has not been listed as an expert witness and
21 certainly he is not an expert in the field of water rights
22 law.

23 This judgment that he refers to has been entered in the
24 record of this case. It is Big Bear Municipal Water
25 District Exhibit A, I believe, and the judgment speaks for

1 itself. It is a stipulated judgment entered by agreement by
2 a number of parties involved in that particular litigation,
3 which did not include my clients. They're obviously not
4 bound by it. And I don't think it advances our cause here
5 to have Mr. Cavendar present his opinion as to what the
6 judgment does or doesn't do. The document speaks for
7 itself.

8 H.O. BAGGET: You are objecting not to the case?

9 MR. O'BRIEN: Not objecting to the admission of the
10 judgment into the record, but I do object to his
11 interpretation of the judgment.

12 MR. COSGROVE: This is going to shock you, I think I
13 agree with Mr. O'Brien. The document does speak for itself.
14 I disagree that his clients are not a party to that
15 litigation. I think they've intervened and they are. We
16 can argue legally at length. Possibly we will do so later,
17 as to what the impact of that judgment is on his clients.
18 The representation by Mr. Cavendar was offered by way of
19 background and it is not central to our case.

20 H.O. BAGGET: That sentence or portion of that
21 paragraph interpreting the judgment shall be struck from the
22 record.

23 MR. O'BRIEN: Thank you.

24 H.O. BAGGET: So ordered.

25 Proceed.

1 MR. COSGROVE: The Conservation District has submitted
2 an opening statement in writing, and so I am just going to
3 very briefly lay out some of the points that I think deserve
4 emphasis that we are going to try to demonstrate by way of
5 the case that we are putting on.

6 First is what I think has already been agreed to in the
7 evidence that's been presented by the petitioners, and that
8 is that there is no change in the hydrology of the Santa Ana
9 River near Mentone. We are looking at in our case as
10 directed toward Reaches 5 and 6, because those are the areas
11 where the requests for appropriation are focused. We
12 believe that evidence that there are water flows and
13 potentially increased water flows at Prado in no way
14 demonstrates changed circumstances in the area where the
15 diversions are being requested now under the application
16 that is pending.

17 We think it is a legitimate mode of analysis to look at
18 hydrology in that area. And when one does, we think it is
19 very clear, and at this point one would imagine stipulated,
20 that whatever changes may have occurred out there they
21 aren't changes to native flows in the area that my clients
22 is concerned about, which is Reach 5 and 6. That leaves us
23 with the dam and the Seven Oaks Dam and questions regarding
24 the Seven Oaks Dam.

25 And I will submit to you that questions are all that we

1 have about that dam. There is allegation that a
2 conservation pool is proposed that may hold water in the
3 future. We have had varying accounts about how much may be
4 held. One thing that is not disputed and that we will
5 affirm through the evidence that we are going to present is
6 that that is not approved. And you have heard policy
7 statements. You have heard statements from sponsors saying
8 that as it stands right now it is a flood control facility.

9 We will go over what we believe the studies on the
10 conservation pool show and that the yields that are
11 indicated on what has been selected are more than taken up
12 in the historical diversions that the Conservation District
13 undertakes. So, we don't believe that even if we take the
14 leap of faith and speculate as to whether there will be a
15 conservation pool and how it will operate, given the study
16 that is on the table right now, we don't believe there is
17 any allegation of new water.

18 In addition, although my reading of the petition, and
19 it would appear the reading of Board staff as well, from the
20 notice of hearing indicates that the conservation pool, and
21 that proposal was the thrust of the petition, we are now
22 hearing allegations that the regulatory affect of the
23 operation of the dam, if the conservation pool is never
24 approved, still there are regulatory impacts of the dam that
25 may result in a changed circumstance in this area of the

1 river that might justify overturning the fully appropriated
2 stream declaration for that region and allowing the
3 application to go forward.

4 I will submit again that what we have with respect to
5 the regulatory affect is nothing more than question
6 marks. There is no final plan approved for the operation of
7 the dam, even as a flood control facility. We know from
8 representations that have already been made and we will
9 present evidence as well in our communications with the
10 resource agencies that consultation needs to still occur
11 with respect to those.

12 So, therefore, we have no data. We simply do not have
13 evidence as to what that dam in its permanent configuration
14 is going to do even as a flood control facility. So the
15 question that we have and that we fold back into the policy
16 statement that essentially folds into our opening statement:
17 Why are we here?

18 You heard the State, the representative from the Deputy
19 AG, say that there are really, really important impacts to
20 people who hold water rights out there that come from
21 overturning the fully appropriated stream declaration. And
22 we would submit that you're going to need much harder
23 evidence than just a visceral reaction that a big dam out
24 there may operate at some point to hold flows. We are going
25 to need more than that to overturn a fully appropriated

1 stream declaration. And we don't have it, and we are not
2 going to have it, at least from what we have heard on the
3 policy statements until the end of the year 2000.

4 We believe it is appropriate to wait until we know what
5 that dam is going to do, whether in its conservation pool
6 configuration or at least under its regulatory operation
7 before we go forward with overturning a fully appropriated
8 stream declaration which will have the identical
9 consequences that Mr. O'Brien emphasized. There is a lot of
10 expenditure of money and a lot of further proceedings that
11 are going to go on. And we think we should have those
12 variables fixed, rather than speculate as to what the
13 impacts will be before we go forward.

14 MEMBER FORSTER: Can I ask you a clarifying question?
15 I know I can.

16 There is something -- I wanted to dissect what I am
17 saying. I am not questioning the fully appropriation part
18 of the things you are talking about. But I find it rather
19 infeasible that you said there is no data to help analyze
20 how the dam is going to work. That is sort of in my terms
21 what I am hearing you say. Nobody builds a dam -- the Corps
22 doesn't do things like that without having lots of data,
23 lots of projections, the local agency, the flood control
24 district. I don't understand that.

25 I mean, there has to be -- the dam wouldn't have gotten

1 built if there wasn't a projection of what is going to hold
2 back and quantify the terms. And I am sure there was a big
3 debate on whether it should be a conservation dam or just a
4 flood control dam. We listen to dam issues day in and day
5 out. So I don't understand what you are saying, there is no
6 data.

7 MR. COSGROVE: Precisely correct. I think that to the
8 extent that the petitioners are relying on the regulatory
9 impact of a dam to show changed circumstances, one would
10 fully expect that there would be data in the written
11 evidence that is submitted that would demonstrate how that
12 dam is going to operate to create new water. We don't see
13 it anywhere in the written testimony.

14 MEMBER FORSTER: That doesn't mean that data doesn't
15 exist. It just hasn't been submitted for this hearing.

16 MR. COSGROVE: My understanding is that there is no
17 permanent approved plan for that dam and it is in operation
18 as a flood control facility. We would be in a much better
19 position in this hearing to explore those issues with the
20 dam sponsors as witnesses if they were available for
21 cross-examination. I don't know if they will be.

22 As it stands right now, where we are with respect to
23 that, is we can only go on what we have been told by one of
24 the dam sponsors, and we will submit evidence. Our Exhibit
25 3 says that we haven't finished our -- we don't have a

1 permanent plan. There is a proposal of an interim plan.
2 But we are not talking about interim operations here; we are
3 talking about overturning a fully appropriated stream
4 declaration.

5 Our position is there is no reason to speculate as to
6 what that permanent plan will be or what the impacts will be
7 to overturn this declaration at this point. Quite simple.

8 The third point --

9 MEMBER FORSTER: I am going to zip it.

10 MR. COSGROVE: The final point is that we will show
11 evidence of seasonality of flows. Even if we presume, even
12 if we take that second leap of faith and speculate as to
13 what the effects are going to be of the regulatory operation
14 of the dam after it gets through all its biological hearings
15 and after it gets all of its approvals and gets hammered out
16 the way it is going to be, there is an impact of
17 seasonality. We have looked at the seasonality of flows and
18 we will introduce evidence of seasonality.

19 Contrary to what you have been told, seasonality is an
20 important aspect of this hearing. It was specifically
21 listed as a key issue. It is not an issue to just brush
22 aside until an application so we can determine a diversion
23 season. The notice said "Address seasonality." We are
24 prepared to do that.

25 Under the analysis that we present, we believe that

1 there are no flows available for diversion from May through
2 December. And so to the extent that a fully appropriated
3 stream declaration and the Board entertains overturning it,
4 that should be limited pursuant to the seasonal availability
5 of flows.

6 We don't believe that entails a water rights fight. We
7 will also attempt to address whether we believe there is
8 unappropriated water even taken aside the promised water
9 rights fight over the pre-1914 rights that my client has
10 claimed and exercised. We know that fight is coming. We
11 are not taking that fight out here, but there are other
12 appropriations that are recognized. We still think those
13 appropriations are in excess of the flows under the proper
14 method of analysis, which is monthly averages which we
15 believe is indicative and used by the Board. That is how
16 flows are shown for seasonality, and we will explain why
17 that is the manner in which we analyzed those flows. That
18 is what we plan to prove today.

19 Thanks.

20 I will start with Mr. Cavendar.

21 ---oOo---

22 DIRECT EXAMINATION OF

23 SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT

24 BY MR. COSGROVE

25 MR. COSGROVE: Mr. Cavendar, the exhibit that have been

1 submitted to the Board as Exhibit CD 1, is that a true and
2 correct copy of the written testimony that you prepared for
3 submission in this hearing?

4 MR. CAVENDAR: It is.

5 MR. COSGROVE: The Exhibits 2 through 5, are those true
6 and correct copies of exhibits that have been submitted in
7 connection with that testimony?

8 MR. CAVENDAR: They are.

9 MR. COSGROVE: Can you summarize for me your
10 testimony.

11 MR. CAVENDAR: I am the General Manager of the San
12 Bernardino Valley Water Conservation District, a position I
13 have held for about three and a half years.

14 The primary function of the district is to recharge the
15 Bunker Hill groundwater basin which provides a continuous
16 source of high quality water for the communities of
17 Highland, Redlands, Loma Linda, San Bernardino, Grand
18 Terrace and Riverside, all in the southwestern part of San
19 Bernardino County.

20 I would like to call up Exhibit 8 which is attached to
21 Mr. Headrick's declaration, which is a geographic map of the
22 area that more closely reflects, and in a very light orange
23 color you will see, the boundary of San Bernardino Valley
24 Water Conservation District and the location of Seven Oaks
25 Dam, which is about a half mile upstream of the diversion

1 facility that the San Bernardino Valley Water Conservation
2 District uses to divert water from the Santa Ana River.

3 You will note that the diversion is in Reach 5. But
4 the dam itself is in Reach 6.

5 The diversion facility has a capacity to divert up to a
6 thousand cubic feet per second. The district diverts water
7 under two licenses that the Board granted, as well as
8 pre-1914 rights that were filed in 1911. The total of the
9 two licenses is 10,400. As has shown on the next chart,
10 which is Exhibit 2 in your file, this shows the water spread
11 by the Water Conservation District for the past 30 years
12 which has been subsequent to the 1969 judgment that has been
13 mentioned to you on a number of occasions.

14 The red line on there indicates the annual average of
15 acre-feet which is 15,500 acre-feet of water spread over
16 that period of time. But as indicated in the blue bar chart
17 you will see that that varies, as Mr. Mills indicated with
18 his own operation in Orange County. This varies by the way
19 the water comes down the river. It will go anywhere from
20 60,000 acre-feet as shown for 1978 down to near zero in
21 other years of absolute drought. So the annual average is
22 what it is, but it will vary accordingly.

23 MR. COSGROVE: Mr. Cavendar, do you have any
24 communication from any of the dam sponsors in connection
25 with the status of the Seven Oaks Dam?

1 MR. CAVENDAR: Yes, I have. I've recently corresponded
2 with Ken Miller who is the head of the County Flood Control
3 District for San Bernardino County. I specifically asked
4 Mr. Miller a number of questions with regard to the
5 operation and completion of Seven Oaks Dam.

6 MR. COSGROVE: Was that done in writing?

7 MR. CAVENDAR: Yes.

8 MR. COSGROVE: And did you respond in writing?

9 MR. CAVENDAR: Yes.

10 MR. COSGROVE: Exhibit Number CD3, is that a true and
11 correct copy of the letter that you received from Mr. Miller
12 in response to your questions?

13 MR. CAVENDAR: Yes.

14 MR. COSGROVE: What did Mr. Miller tell you with
15 respect to the dam?

16 MR. CAVENDAR: The status of the dam is essentially
17 completed for construction. However, its operation as a
18 flood control district has not been finalized. They are
19 still in the process of dealing with environmental,
20 specifically for the San Bernardino kangaroo rat and the
21 slender-thorned spineflower. Those mitigations have not
22 been resolved. Until those are resolved, the Corps of
23 Engineers will need to finish its biological assessment, as
24 to the U.S. Fish and Wildlife Service to complete a
25 biological opinion under Section 7 of the Endangered Species

1 Act. Under which case, they will then decide what to do
2 with regard to operating the dam as a water conservation
3 facility.

4 When all of that is issued, then they will deal with
5 the conservation pool. But until then Mr. Miller indicates
6 that is on hold.

7 MR. COSGROVE: So, it is your understanding that the
8 consultations are not limited only to the conservation pool,
9 but rather the operation of the dam as a flood control
10 facility as well?

11 MR. CAVENDAR: The consultation that they are doing
12 right now, according to Mr. Miller, is related only to the
13 flood control facility.

14 MR. COSGROVE: And have you been in touch with anyone
15 from the United States Fish and Wildlife with respect to the
16 dam?

17 MR. CAVENDAR: I have. I have talked to the section
18 chief for San Bernardino and Riverside Counties, Mr. Jeff
19 Newman who in turn sent to me a letter that was sent to the
20 Board with respect to their position. That letter indicates
21 that they think the action here is premature, that nothing
22 has been resolved with respect to operating the dam as a
23 flood control facility. They haven't been asked to look at
24 it, the water conservation facility yet.

25 Their letter that was sent to the State Board is

1 Exhibit 4.

2 MR. COSGROVE: Thank you.

3 I would like to move on to Mr. Headrick.

4 Mr. Headrick, the written materials that have been
5 submitted to the Board as CD6, is that a true and correct
6 copy of the written testimony that you submitted in this
7 action?

8 MR. HEADRICK: Yes, it is.

9 MR. COSGROVE: And the exhibits that are attached as 7
10 through 19, are those true and correct copies of records
11 that you generated for analyses that you have looked at
12 based on public sources of information?

13 MR. HEADRICK: Yes, they are.

14 MR. COSGROVE: Can you summarize for us the --

15 MR. HEADRICK: Before I get started, I would like to
16 make a couple of modifications or changes.

17 MR. COSGROVE: Sure.

18 MR. HEADRICK: The first is on my statement of
19 qualifications. My civil engineering license number as
20 written is the wrong number. I don't know what "CC" is, but
21 it is not civil engineer. It should be C54190.

22 MR. COSGROVE: Ms. Mrowka, that is Exhibit 7.

23 MS. MROWKA: Thank you.

24 MR. HEADRICK: And on Exhibit 16, there is a
25 typographical error. The period of record being analyzed

1 here is 1989 to 1995, instead of '90 to '96.

2 MR. COSGROVE: Can you summarize for us your written
3 testimony.

4 MR. HEADRICK: I am sure we all know what area we are
5 talking about now, but I would like this map, so we will
6 show it again.

7 The regions or the reaches of the river that I will be
8 discussing are the upper reaches. Again, those are -- Reach
9 5 is the reach that encompasses the alluvial plain over the
10 top of the Bunker Hill Basin or the San Bernardino Basin.
11 And Reach 6 is the mountain watershed, the mountain stream
12 from the headwaters near Mount San Gorgonio down to the
13 Seven Oaks Dam.

14 You can also see Big Bear Lake there at the top, and I
15 have identified the precipitation gauge that I will
16 reference later in my testimony.

17 The purpose of my study was, getting back to the key
18 issues, was first of all to evaluate if unappropriated water
19 exists in the Santa Ana River in Reach 5 and 6, and, if it
20 does, during what season does that water exist.

21 The petitioners talked a lot -- and Mr. Beeby in
22 particular talked a lot about the facilities in the Santa
23 Ana Canyon Mouth. And I just want to spend a little more
24 time. There was a little confusion on some of the gauges
25 and locations. This is a blow-up of that region shown on

1 the background of the USGS quad image.

2 MS. MROWKA: Excuse me, which exhibit?

3 MR. CAVENDAR: Nine.

4 MR. HEADRICK: What this shows is the mouth of the
5 region of the location of Seven Oaks Dam and reservoir that
6 would be created at full capacity in a hundred-year
7 event. And downstream of that dam the Water Conservation
8 District's diversion structure on the northwest side of the
9 river at that point. Hanging off our structure you can see
10 a USGS, part of the USGS gauge structure that USGS uses to
11 determine the extent of significant flows by that -- past
12 that point. In the lower right-hand corner is a photograph
13 of the auxiliary river diversion, also downstream of the
14 dam, but taking water from the opposite side of the river.

15 In addition to this there is a third gauge that we
16 talked about, is the gauge that measures the flow in the
17 Edison flume which is shown up on the side of the hill to
18 the northeast.

19 Next chart, please.

20 MR. HEADRICK: This is Exhibit 10. All of this isn't
21 pertinent to today's discussion; won't go into all of that.
22 The important parts have been highlighted in nice bright
23 colors. Those are the three USGS gauges, the two that make
24 up the river only part of that, which would be 11051499 and
25 11051502. And those two flows are combined together to

1 create the record called 11051500. It is important to note
2 here that the Edison flume actually bypasses the dam. It
3 goes around the dam, through the abutment of the dam in a
4 pipe, and is delivered not only to produce federal electric
5 power but then what has been termed here as the senior water
6 right claimants, other than Conservation District. That is
7 all I want to show.

8 Next one.

9 I looked at three different aspects in trying to
10 determine the amount of unappropriated water that exists.
11 The first thing I looked at was precipitation. This happens
12 -- this is Exhibit 11. I won't spend a lot of time on
13 this. But what this shows is in the vertical bars is
14 precipitation at Big Bear Dam from the period 1884 to 1998.
15 You can see, as been discussed ad nauseam, the variability
16 of that precipitation. The long-term average or running
17 average is shown as a line, and at this point is
18 approximately 37 inches per year.

19 Exhibit 12 just shows how that gauge correlates to the
20 amount of water that is actually discharged out of the
21 river, and it is very close correlation.

22 The conclusion here is that there really hasn't been a
23 discernible increase in precipitation that could create
24 unappropriated water since the stream was declared fully
25 appropriated.

1 Next slide, please.

2 The next analysis I undertook had to do with
3 urbanization and the subsequent runoff from that
4 urbanization and wastewater flows. This is Exhibit 13, and
5 it is a satellite imaging taken in March of 1998 of the
6 Santa Ana River and Mill Creek watersheds upstream of the
7 Seven Oaks Dam. And even though it is very difficult to see
8 from that image, when you blow it up, you can very easily
9 see the level of urbanization or lack thereof in this
10 region.

11 Next exhibit, please.

12 Just focusing on the north two-thirds of that extent
13 would be the Santa Ana River watershed upstream of Seven
14 Oaks Dam, and this is Exhibit 14. This is based on land use
15 data supplied by San Bernardino County and was put together
16 for the City of Redlands in a watershed study that was done
17 in 1996. Again, somewhat -- the colors kind of blend here,
18 but the yellow area up around the lake is the urbanized
19 area. And you can see that area is relatively small
20 compared to the entire area of the watershed.

21 It is important to note that the runoff from that
22 urbanized area goes into Big Bear Lake or Baldwin Lake. As
23 far as the wastewater flow goes from that urbanized area, it
24 is treated, highly treated, and discharged out of the
25 watershed to the north into the Lucerne Valley. Therefore,

1 as urbanization increases in that area, there will be more
2 and more treated effluent being exported out of the
3 watershed.

4 The net result of that and any increased runoff from
5 urbanization, which, by the way, after the establishment or
6 the stipulated judgment of 1977, Big Bear Municipal Water
7 District was provided in that judgment the opportunity to
8 store additional water up there instead of releasing that
9 down the canyon, which had historically been done for
10 roughly the 90 years prior to that. So that water is now
11 retained in Big Bear Lake for recreational and other
12 purposes.

13 The net result between the wastewater that is being
14 exported and urbanization that is creating additional runoff
15 and subsequently being held in the lake, the net result is
16 really unknown. But you can see the offset as urbanization
17 increases, wastewater flows increase out of the watershed,
18 but urbanization runoff increases occur to the lake itself.

19 Next exhibit, please.

20 This is Exhibit 15. I didn't perform the same type of
21 analysis for the Reach 5 area, and that is because in 1989
22 it was highly urbanized already and what was important was
23 the change of urbanization that occurred since that time.

24 In trying to determine what the effects of those
25 changes were, I looked at the USGS gauge records at what is

1 considered the E Street Gauge. It is USGS gauge Number
2 11059300. That is shown in the -- approximately right
3 there. What that gauge showed during the period that I
4 examined was significant drop-off of flows right around
5 1996?

6 MS. MROWKA: Excuse me, for record keeping, you are
7 pointing to a location on the map. Can you describe that
8 location?

9 MR. HEADRICK: It would be near Interstate 10,
10 Interstate 215 interchange in South San Bernardino.

11 MS. MROWKA: Thank you.

12 MR. HEADRICK: So in seeing that these flows were
13 diminished around 1996, doing some further analysis, I
14 determined that the change of flow in that reach registered
15 at that gauge for the drier months of the year, the June
16 through December time frame, approximately, were basically
17 completely made up of the wastewater, highly treated
18 wastewater discharge from the City of San Bernardino, that
19 had been discharged to Reach 5 or the point labeled as "Old
20 Effluent Discharge" location on this map through March 22nd,
21 1996, and was then on that date removed from that reach of
22 the river, put in a pipe, taken down to another facility
23 which provides further treatment and discharges that to the
24 river. So the net effect at the bottom of Reach 5 was
25 reduction in that flow. Excuse me, the downstream discharge

1 point on the map is labeled "New Effluent Discharge
2 Location."

3 Next chart.

4 MEMBER FORSTER: What is the R-I-X?

5 MR. HEADRICK: That stands for rapid infiltration and
6 extraction. It is the treatment process, the tertiary
7 treatment process that is used on flows from not only the
8 City of San Bernardino but from other treatment plants to
9 provide that next level of treatment, which is then
10 extracted back out and discharged to the river to meet full
11 Title 22 requirements.

12 MEMBER FORSTER: Didn't we participate, put money in
13 that several years ago? Is that right?

14 MR. CAVENDAR: Who is we?

15 MEMBER FORSTER: The State Board. I just wondered if
16 that was it.

17 MR. CAVENDAR: May I ask a question? Was the City of
18 San Bernardino?

19 UNIDENTIFIED VOICE: Yes.

20 MR. CAVENDAR: The answer is yes.

21 MEMBER FORSTER: I thought so.

22 MR. HEADRICK: What this next chart shows is monthly
23 average flow at that E Street gauge for the period from the
24 fully appropriated stream declaration to just before the
25 City of San Bernardino removed their wastewater. The red

1 line is the equivalent discharge, average discharge, of that
2 treatment plant, 26,000,000 gallons per day is roughly 40
3 cfs on this chart. And what it shows on this chart is that
4 during roughly June through December the majority, if not
5 all, of the flow of the river was made up of that treated
6 effluent.

7 By the way, this period also includes a couple dry
8 years and a couple wet years and a couple dry years.

9 Back to the urbanization up in Reach 5. Again, I did
10 not analyze that specifically. I do know from being a
11 resident of the area that the building activity during that
12 time frame was relatively low. It is also my assumption
13 that the increased flow due to urbanization is low is
14 further supported by Orange County Water District Exhibit
15 18. Shows basically from the time period 1989 to 1999 there
16 was about a 1-percent increase in the impervious cover for
17 the entire region above Prado Dam, of which this is a part
18 of.

19 Again, the conclusion is, at least during the dry
20 season, the flows in the river at the bottom of Reach 5 were
21 primarily treated effluent, which is now being discharged to
22 Reach 4. And the river is basically dry at that point
23 during this time frame.

24 Next I looked at the effects of the dam or conservation
25 pool may have. I will start first looking at the monthly

1 average flow in the river. This happens to be the USGS
2 gauge 11051501 which is the combination of all three of the
3 gauges we have talked about average on a monthly basis for
4 the reliable period of record we have established, 1913 to
5 1998. I used the same water year criteria that Mr. Beeby
6 did, meaning October 1 to September 30.

7 And what we see from here is what we'd expect from a
8 natural hydrology-dominated stream system for Southern
9 California.

10 MR. COSGROVE: I am going to interrupt here for a
11 second, Mr. Headrick. Can you explain why you used monthly
12 flows, average monthly flows, in analyzing stream flows?

13 MR. HEADRICK: Yes. Getting back to the key issue that
14 was identified in the hearing notice, one of the issues was
15 the seasonality. So I summarized by month to get at
16 answering that question about seasonality. And also upon
17 review of previous State Board orders having to do with
18 fully appropriated stream declarations and their revisions,
19 I notice that many, if not all, of them include a season of
20 either fully appropriatedness or not. And it seemed to make
21 sense to look at it that way.

22 Next chart, please.

23 MS. MROWKA: Excuse me, I believe the exhibit that you
24 were just referring to was your Exhibit 17?

25 MR. CAVENDAR: That's correct.

1 Next one is 19.

2 MR. HEADRICK: Exhibit 19 shows the same monthly
3 hydrology with the values, the average flow values, shown on
4 top of each one of the bars. And overlaid on top of this
5 are some lines that I would like to explain.

6 The first line, the red line, is at the 88 cfs level.
7 This represents the rate of flow identified as the
8 entitlement water in the Santa Ana River Mill Creek
9 Cooperative Water Project Agreement. That agreement is
10 Exhibit 18.

11 That 88 cfs was actually determined by summing all the
12 capacities of all the different delivery systems that not
13 all of them -- the majority of the delivery systems out of
14 the canyon mouth for the prior rights companies as it is
15 termed in a lot of our literature. I believe today it is
16 being called the senior water right holders or claimants or
17 something other than Conversation District.

18 On top of that 88 I've taken the Conservation District
19 licenses. The first license for 8300 acre-feet, which
20 covers the time frame January 1 to May 31. Taken the 8300
21 feet and calculated as an average flow rate for that time,
22 overlaid that on top of the 88.

23 Our second license, which operates from October 1 to
24 December 31 for 2100 acre-feet is also shown in a constant
25 basis. That comes to 12 cfs. And it is added to the 88 and

1 results in a hundred cfs appropriation combination. This
2 does not include any of the district's pre-1914 rights.

3 And my conclusion from this analysis was that at least
4 during the period May through December there is no water
5 available on an average basis.

6 Next I would like to move on to the conservation
7 pool. I don't have an exhibit on this. I will just discuss
8 this item.

9 I know there has been a lot of discussion already, so I
10 won't belabor this issue. However, in my written testimony
11 I have identified what was termed the selected plan for
12 implementation out of the Army Corps of Engineers
13 feasibility study or the conservation pool behind Seven Oaks
14 Dam. That selected plan called Alternative 1 or the locally
15 preferred plan included a conservation pool of 16,000
16 acre-feet annually. However, it did not -- the analysis
17 used to determine the effective yield of that facility did
18 not include or take into account any historical diversions
19 by the Water Conservation District or by Bear Valley at the
20 river pickup which has been termed the auxiliary gauge or
21 USGS 11051502.

22 What the plan showed, this alternative one or the
23 selected plan was a yield of roughly 4100 acre-feet per year
24 that could be conserved in the conservation pool. However,
25 if you take into account what the Conservation District has

1 actually diverted during just that three-month period that
2 was analyzed, March 1st through May 31st, the Conservation
3 District has actually diverted and recharged to the basin
4 from 1912 to 1998 4,948 acre-feet. So roughly a difference
5 of 800 acre-feet per year.

6 So, in conclusion, at least based on the Corps' study,
7 it would appear as if the majority, if not all, of the water
8 identified in the selected plan has just been shifted from
9 the Conservation District's diversion upstream and being
10 held behind the dam as a conservation pool.

11 Thank you.

12 MR. COSGROVE: Nothing further.

13 H.O. BAGGET: Let's take a ten-minute break. Be back
14 at 20 after.

15 (Break taken.)

16 H.O. BAGGET: Let's start from the top and down.

17 Mr. O'Brien.

18 MR. O'BRIEN: Thank you. I think I will have a seat
19 this time.

20 ---oOo---

21 CROSS-EXAMINATION OF

22 SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT

23 BY SAN BERNARDINO VALLEY MUTUAL WATER DISTRICT &

24 WESTERN MUTUAL WATER DISTRICT

25 BY MR. O'BRIEN

1 MR. O'BRIEN: Before I get started I have marked three
2 exhibits that I will be using in cross-examination. I hope
3 I have the numbers right, Ms. Mrowka.

4 Exhibit 5, that is Muni/Western Exhibit 5, is a
5 license for diversion and use, Number 2831.

6 Exhibit 6, Muni/Western Exhibit 6, is license Number
7 2832.

8 Muni/Western 7 is a memorandum of attached data from
9 Mr. Headrick dated December 16, 1988. And I provided copies
10 of those to Mr. Cosgrove.

11 Mr. Headrick, let's start with you. Your testimony
12 seems to assume that in order for Muni/Western to obtain a
13 right to divert water at Seven Oaks Dam that they have to
14 show that there has been new water made available in the
15 watershed upstream of the dam.

16 Is that a fair summary?

17 MR. COSGROVE: That calls for a legal conclusion.

18 MR. O'BRIEN: I am just calling for his assumption he
19 made in his analysis.

20 H.O. BAGGET: I would overrule the objection. Let's
21 hear your answer.

22 MR. HEADRICK: No, that is not the presumption I was
23 under. I was just trying to determine what the avenues were
24 for new water or water to be created and discharged past
25 that point. And one of them was precipitation and the one

1 was urbanization and wastewater runoff. So I just looked at
2 those.

3 MR. O'BRIEN: You are not assuming that Muni and
4 Western have to be able to demonstrate the existence of new
5 water in that upper watershed area to be able to pursue that
6 application?

7 MR. COSGROVE: Again, legal conclusion.

8 MR. O'BRIEN: That was not your assumption?

9 MR. HEADRICK: That was not an assumption made in my
10 analysis.

11 H.O. BAGGET: I didn't rule on his last objection.

12 MR. O'BRIEN: Sorry.

13 H.O. BAGGET: I think I will overrule that one, also.
14 You can answer -- your answer doesn't have to be struck.

15 MR. O'BRIEN: Sorry.

16 Let's try a hypothetical here. Let's assume that there
17 has been no increase in the upper reach of the watershed. I
18 believe it is Reach 6; is that correct? Above Seven Oaks
19 Dam?

20 MR. HEADRICK: Yes.

21 MR. O'BRIEN: Let's assume that there has been no
22 urbanization, no precipitation. Let's assume there has been
23 new water made available to the river system in a reach
24 between the Seven Oaks Dam and Riverside Narrows.

25 Do you have that in mind? Do you understand my assumed

1 facts?

2 So, no new water in the upper reach. New water in the
3 reach between the dam and Riverside Narrows.

4 Okay?

5 MR. HEADRICK: Okay.

6 MR. O'BRIEN: Let's also assume that because of the new
7 water that has been made available in the reach below the
8 dam that there is now water flowing at the Narrows that is
9 surplus to the requirements of the 1969 Orange County
10 Judgment.

11 Okay?

12 MR. HEADRICK: Okay.

13 MR. O'BRIEN: And let's also finally assume that it is
14 possible Muni and Western to divert that increment of
15 surplus water that is present at Riverside Narrows at the
16 Seven Oaks Dam and it is possible to do that without
17 adversely affecting prior right holders. Including
18 Conservation District.

19 Do you understand that?

20 MR. HEADRICK: I am not sure if I do.

21 MR. O'BRIEN: Well, there is an increment of water at
22 Narrows in excess of the Riverside Narrows obligation.
23 Let's say, hypothetically, it is 10,000 acre-feet. Muni and
24 Western now want to try to divert that 10,000 acre-feet at
25 Seven Oaks Dam.

1 Okay?

2 And under my hypothetical they can do that without
3 adversely affecting or injuring any of the prior right
4 holders?

5 Okay? Do you understand my facts as I have given them
6 to you?

7 MR. HEADRICK: They are facts?

8 MR. O'BRIEN: They are assumed facts.

9 MR. HEADRICK: Yes, I understand them. Yes.

10 MR. O'BRIEN: To your knowledge, would there be any
11 injury to any other water user in the Santa Ana River
12 watershed if Muni and Western was to take that surplus
13 increment of water that is existent at the Narrows and
14 divert it upstream at Seven Oaks Dam under the facts of my
15 hypothetical?

16 MR. COSGROVE: I will object. The question as
17 submitted as a hypothetical is incomplete. You are -- he
18 doesn't have a hypothetical with respect to what the extent
19 of the water rights are of all the people in between the two
20 points of diversion in the state.

21 H.O. BAGGET: I will sustain --

22 MR. ALADJEM: If my numbers are correct and as Mr.
23 Headrick testified in his written testimony, there are no
24 water rights between the Conservation District diversion and
25 the Riverside Narrows or Prado.

1 MR. COSGROVE: Correct. But the hypothetical was
2 between the dam and Prado, and there is somebody in between
3 there.

4 MR. O'BRIEN: That is not correct. Between the dam and
5 the narrows. Let me ask the question.

6 Is there any water right holder within the Conservation
7 District between Seven Oaks Dam and Riverside Narrows that
8 you are aware of?

9 MR. HEADRICK: Yes.

10 MR. O'BRIEN: Who is that?

11 MR. HEADRICK: Bear Valley Mutual Water Company and
12 their contract obligations to other water companies.

13 MR. O'BRIEN: Isn't it true that Bear Valley Mutual
14 takes most, if not all, of its water out of the system
15 through the Southern California Edison diversion?

16 MR. HEADRICK: During which period of time are you
17 talking about?

18 MR. O'BRIEN: Historically.

19 MR. HEADRICK: I would say that would be true until
20 five years ago.

21 MR. O'BRIEN: Let's just assume that the Bear Valley
22 Mutual Water Company's water requirements have been met.
23 Okay? Let's assume that having met that requirement and
24 requirements of your district and the requirements of other
25 prior rights companies, there is still surplus water at the

1 Narrows in the amount of 10,000 acre-feet surplus to the
2 Narrows flow obligation under the judgment.

3 Under the fact of that hypothetical, would there be
4 injury to any water user you are aware of if Muni and
5 Western were to divert that water at Seven Oaks Dam?

6 MR. COSGROVE: I am going to object again because I
7 think that calls for a legal conclusion. And I don't
8 understand -- first off, it is vague as to what is meant by
9 injury. And, secondly, I don't see how that pertains to the
10 availability of unappropriated water or changed
11 circumstances, so I don't understand the relevance of the
12 question, either.

13 MR. O'BRIEN: Injury is a term that often is used in
14 water law, as we all know. And I think if Mr. Headrick
15 wants to assume that I mean physical injury in terms of not
16 receiving as much water to what one is entitled, perhaps
17 that helps to clarify the question.

18 H.O. BAGGET: Clarifying inquiry.

19 MR. COSGROVE: I would still object on relevance
20 grounds.

21 H.O. BAGGET: Explain relevance.

22 MR. O'BRIEN: Well, they have made an argument that
23 Muni and Western are not entitled to pursue their
24 application because there is no new water in the watershed
25 upstream of the dam. The way the system operates is if you

1 meet flow requirements at Prado and you have taken care of
2 prior right obligations, then the question is whether the
3 new water is made available upstream of the dam or
4 downstream of the dam. It becomes irrelevant from a water
5 rights standpoint.

6 And I think the only way you can legitimately oppose
7 that on water rights grounds is if you can demonstrate that
8 there would be injury by moving that water, point of
9 diversion of that water, upstream. I am trying to determine
10 whether there would be any such injury in this context.

11 H.O. BAGGET: Respond.

12 MR. COSGROVE: I think we have moved from
13 cross-examination to closing argument with respect to the
14 impacts and with respect to how the system works and what
15 needs to be shown. I guess that is the problem I am having,
16 is that essentially what we got is closing argument and not
17 questions with respect to the facts of the basis on which
18 the testimony has been offered.

19 MR. O'BRIEN: Excuse me, this man is an expert witness.
20 I think I am entitled to ask him hypothetical questions.

21 MEMBER FORSTER: Could we talk for a minute?

22 (Discussion held off the record.)

23 MR. FRINK: Mr. Bagget, I think I understand the
24 direction that Mr. O'Brien is going. I do believe that
25 there is a problem with it. In essence, he is asking a

1 witness to draw a legal conclusion about injury on other
2 holders of water rights and so forth. I think that it is
3 apparent through the interchange that we have had here, that
4 the point Mr. O'Brien is trying to make can better, more
5 expeditiously, be made on rebuttal.

6 If you want to ask, are there any other diverters in a
7 given area of the river, that is a fair question, but I
8 think asking this witness to conclude rather there is legal
9 injury to various people does call for a legal conclusion.
10 And in that sense the objection should be sustained.

11 H.O. BAGGET: I would sustain the objection.

12 Can you rephrase?

13 MR. O'BRIEN: I will move on.

14 Mr. Headrick, are you familiar with the concept of
15 regulatory affect of a dam like Seven Oaks Dam; is that
16 correct?

17 MR. HEADRICK: The concept of it, yes.

18 MR. O'BRIEN: The concept is that a dam like Seven Oaks
19 slows down the flow of a river like Santa Ana River. Would
20 you agree with that?

21 MR. HEADRICK: Yes, it could do that.

22 MR. O'BRIEN: Would you agree that the existence of
23 Seven Oaks Dam currently on the Santa Ana River does, in
24 fact, slow down the flows of the river?

25 MR. HEADRICK: Today?

1 MR. O'BRIEN: Yes.

2 MR. HEADRICK: No.

3 MR. O'BRIEN: When it becomes operational for flood
4 control purposes, would it then slow down the flow to the
5 river?

6 MR. HEADRICK: At certain times.

7 MR. O'BRIEN: That will have to start happening as soon
8 as when?

9 MR. HEADRICK: I don't know what that date is, actually.

10 MR. O'BRIEN: Dedication I believe is in January of
11 2000; does that sound right?

12 MR. HEADRICK: I believe so.

13 MR. O'BRIEN: And you have reviewed the water right
14 application filed by Muni and Western in this proceeding,
15 have you not?

16 MR. HEADRICK: The water rights application, yes.

17 MR. O'BRIEN: You are aware that part of that water
18 rights application includes a request for direct diversion
19 of water from the Santa Ana River; is that your
20 understanding?

21 MR. HEADRICK: Yes.

22 MR. O'BRIEN: Isn't it true that the fact that the dam
23 will be there and will be slowing down flows through that
24 system will make it easier for Muni and Western to directly
25 divert water from that system if a right is initially

1 granted?

2 MR. HEADRICK: Under certain circumstances of the dam
3 operation, yes.

4 MR. O'BRIEN: Now, you prepared an analysis that you
5 went through in your direct testimony related to hydrology
6 of the Santa Ana River.

7 Would you agree that the hydrology of the river is
8 generally variable?

9 MR. HEADRICK: Yes.

10 MR. O'BRIEN: Just so we are talking about the same
11 language, what do you mean when you say the hydrology is
12 variable?

13 MR. HEADRICK: There are periods of high flows and
14 periods of low flows.

15 MR. O'BRIEN: When you are dealing with hydrology like
16 this, is there any reason why one should be cautious when
17 using averages for purposes of hydrologic analysis?

18 MR. HEADRICK: Could you repeat the question?

19 MR. O'BRIEN: Sure.

20 When you are dealing with a variable stream system such
21 as the Santa Ana River, is there any reason why an engineer
22 ought to be cautious about using averages for purposes of
23 hydrologic analysis?

24 MR. HEADRICK: I would expect there are times, yes.

25 MR. O'BRIEN: Is one of the reasons for that that an

1 average could, in some circumstance, mask this variability
2 that you described?

3 MR. HEADRICK: When you mean variability, you are just
4 talking about the peaks, the big ones?

5 MR. O'BRIEN: Right.

6 MR. HEADRICK: Yes, it could.

7 MR. O'BRIEN: Are you familiar with the concept of
8 probability of exceedance analysis?

9 MR. HEADRICK: Yes.

10 MR. O'BRIEN: Mr. Beeby prepared an analysis of that
11 type, I believe; is that correct?

12 MR. HEADRICK: On an annual average basis, yes.

13 MR. O'BRIEN: The analysis you performed is based on a
14 analysis of long-term average flows in the river, I believe;
15 is that correct?

16 MR. HEADRICK: When you mean long-term, 1913 to today,
17 1998, yes.

18 MR. O'BRIEN: Did you perform a probability of
19 exceedance analysis?

20 MR. HEADRICK: Yes, I did.

21 MR. O'BRIEN: Is that reflected in your testimony?

22 MR. HEADRICK: No, it isn't. The results are very
23 similar.

24 MR. O'BRIEN: You concluded, I believe, that based on
25 your analysis of average flows there is essentially no water

1 available for appropriation during the May through December
2 time period; is that correct?

3 MR. HEADRICK: Yes.

4 MR. O'BRIEN: I believe in your testimony you state
5 that this analysis of yours, even disregarding the pre-1914
6 rights that are claimed by the Conservation District; is
7 that correct?

8 MR. HEADRICK: That's correct.

9 MR. O'BRIEN: I want to make sure I understand that.
10 So you are saying that taking all the other water right
11 holders in the system and applying only the diversions that
12 the Conservation District makes under its post 1914 rights,
13 the two licenses, that essentially there is no extra water
14 available in May through December on an average flow basis.
15 Is that your testimony?

16 MR. HEADRICK: That is what the chart shows, yes.

17 MR. O'BRIEN: I would like you to turn your attention
18 to Muni/Western Exhibit Number 7, which is a memorandum
19 prepared by you and sent to Mr. Stan Fuller at Muni, dated
20 September 16, 1998.

21 Is that a document you prepared?

22 MR. HEADRICK: Actually, it is dated -- it was prepared
23 by Conservation District. I actually, I believe, sent this
24 fax.

25 MR. O'BRIEN: Any reason to believe the data attached

1 to the fax is inaccurate in any way?

2 MR. HEADRICK: I have no indication of that. I don't
3 know -- when was this sent? 1998, you said? I don't
4 believe so.

5 MR. O'BRIEN: You don't believe there is any reason to
6 believe it is inaccurate?

7 MR. HEADRICK: Right, correct.

8 MR. O'BRIEN: Now the two licenses that Muni holds --
9 Conservation District holds, which have been marked
10 Muni/Western Exhibits 5 and 6, they authorize the diversion
11 of, I believe up to an aggregate amount of, 10,400
12 acre-feet; is that correct, combining both of them?

13 MR. HEADRICK: Per year, yes.

14 MR. O'BRIEN: I believe there is a limitation as to the
15 diversion season in both of those licenses. In 2831 the
16 diversion season is limited to January 1 to May 31; is that
17 correct?

18 MR. HEADRICK: That's correct.

19 MR. O'BRIEN: In 2832 it's limited to October 1 to
20 December 31, correct?

21 MR. HEADRICK: Yes.

22 MR. O'BRIEN: So other than the portion from May 1 to
23 May 31 under license 2031, the Conservation District doesn't
24 have any post 1914 water rights to divert during the May
25 through October 1 time period; is that correct?

1 MR. HEADRICK: I believe so.

2 MR. O'BRIEN: Let's get back to your data and keeping
3 in mind your conclusion that there is no water available
4 during the period May through December, based on your
5 average flow analysis, it appears to me that if you look at
6 this spreadsheet, starting in 1969, and you focus on the
7 months of May through the end of September, there has been a
8 significant increase in the diversions of water by the
9 Conservation District when you compare the pre-1969 period
10 to the post 1969 period during those months.

11 Would you agree with that?

12 MR. HEADRICK: In those months you are talking about
13 would be?

14 MR. O'BRIEN: Would be May through the end of
15 September.

16 MR. HEADRICK: Looking back at 1914, '15, '16, '22, I
17 see very high diversions and recharge for that -- during
18 that period.

19 MR. O'BRIEN: But then for a period of many years there
20 is very little diversions during that period, wouldn't you
21 agree?

22 MR. HEADRICK: Yes.

23 MR. O'BRIEN: And beginning in about 1969 the
24 diversions there in the May through October 1 period seem to
25 start increasing again. Would you agree?

1 MR. HEADRICK: From 1969?

2 MR. O'BRIEN: Yes.

3 MR. HEADRICK: Yes.

4 MR. O'BRIEN: I take it all of those diversions were
5 pursuant to the Conservation District's pre-1914 rights?

6 MR. COSGROVE: I'll object. I think that calls for a
7 legal conclusion.

8 H.O. BAGGET: Sustained.

9 MR. O'BRIEN: Mr. Cavendar, what is the total amount of
10 water that the Conservation District is entitled to divert
11 under all the pre-1914 rights?

12 MR. COSGROVE: Objection. I think that calls for a
13 legal conclusion as well.

14 MR. O'BRIEN: You know, these gentlemen have been here
15 claiming that we do not have the right to move forward with
16 this process because their rights essentially take up the
17 available water in the river system. I think I am entitled
18 to cross-examine these witnesses as to the position of the
19 Conservation District with respect to the extent of the
20 water rights.

21 I am not asking for Mr. Cavendar to give me his legal
22 opinion. I am asking for his understanding as General
23 Manager of the district as to the extent of those rights.

24 MR. COSGROVE: With all due respect, the case of the
25 Conservation District isn't that the pre-1914 take up all of

1 the available water. The case that has been presented that
2 there isn't unappropriated water based on the chart that
3 shows Bear Valley and it shows from our licenses.

4 And in addition, I don't understand that we are here to
5 litigate the issue of the validity of the Conservation
6 District's pre-1914 rights, but rather the changed
7 conditions. The changed conditions pertaining to either
8 what the effect of the dam is or what the seasonality of the
9 flows are. And the evidence as presented is with respect to
10 Bear Valley and our license, not the pre-1914 rights.

11 So, I would object to the line of questions on the
12 basis of relevance as well.

13 H.O. BAGGET: I would overrule the objection.

14 Please try to answer, to the quantified rights as you
15 know they exist. We are not asking for a legal conclusion,
16 but I would tend to agree that where the question is going I
17 would like to have the question clarified, but answer it.

18 MR. CAVENDAR: The answer to the quantity is unknown.
19 It will vary from year to year, depending on what other
20 prior rights were in front of us that are senior to us, what
21 they take and what is left over.

22 MR. O'BRIEN: Is there a maximum quantity?

23 MR. CAVENDAR: No.

24 MR. O'BRIEN: There is no maximum quantity?

25 MR. CAVENDAR: There is one chart that talks to 150,000

1 or 250,000 acre-feet.

2 MR. O'BRIEN: What is the basis for that number?

3 MR. CAVENDAR: I don't know.

4 MR. O'BRIEN: Is the position of Conservation District
5 that it is essentially entitled to divert whatever water it
6 wants to divert from the Santa Ana River as it flows past
7 your diversion point?

8 MR. CAVENDAR: With respect to the amount of water
9 coming, the answer would be yes. However, I think that
10 there is some logic that needs to be applied to that dealing
11 with whether the groundwater basin really, in fact, needs to
12 be replenished.

13 MR. O'BRIEN: There has been issues as to the question
14 of whether the groundwater basin needs to be replenished; is
15 that correct?

16 MR. CAVENDAR: Apparently.

17 MR. O'BRIEN: Well, the Conservation District was sued
18 a number of years ago by the City of San Bernardino related
19 to a question of high groundwater caused by your recharge
20 practices; is that right?

21 MR. CAVENDAR: No, that is not correct. There was no
22 conclusion to that effect.

23 MR. O'BRIEN: You weren't involved in litigation?

24 MR. CAVENDAR: We were sued. There was litigation that
25 settled.

1 MR. COSGROVE: I will object to this line of
2 questioning based on relevance.

3 MR. O'BRIEN: I will move on.

4 H.O. BAGGET: Thank you.

5 MR. O'BRIEN: Mr. Cavendar, you've undertaken some
6 efforts to try to get this proceeding postponed, have you
7 not?

8 MR. CAVENDAR: Some, yes.

9 MR. O'BRIEN: You have written letters to a number of
10 water users in the area suggesting that they write letters
11 to the Board and request for postponement?

12 MR. CAVENDAR: I wrote one letter.

13 MR. O'BRIEN: Are you aware that there will be an
14 environmental process that will precede any decision by this
15 Board to grant an appropriative water right?

16 MR. CAVENDAR: Yes.

17 MR. O'BRIEN: Wouldn't you expect that that
18 environmental review process and the opportunity you will
19 have to comment on alternatives, mitigation requirements, et
20 cetera, would provide a useful procedural framework for
21 discussing some of the issues that are important to the
22 Conservation District?

23 MR. CAVENDAR: Absolutely not.

24 MR. O'BRIEN: You don't think the CEQA and NEPA process
25 will have any value to you whatsoever?

1 MR. CAVENDAR: I didn't say that.

2 MR. O'BRIEN: Will you participate in that process?

3 MR. CAVENDAR: Of course.

4 MR. O'BRIEN: Will you put up 4-17? This is a bar
5 graph that is Muni/Western 4-17. That is actually a
6 reproduction of the data that was submitted to us by Mr.
7 Headrick, and as reflected in Exhibit 7. I just had a
8 couple questions for you.

9 These represent the historical diversions of the
10 Conservation District. It appears that there was a period
11 of time from approximately 1939 to approximately 19- -- just
12 before 1969 where the district's diversions of water from
13 the Santa Ana River with one exception did not exceed the
14 amount of 10,000 acre-feet.

15 Is that consistent with your understanding?

16 MR. CAVENDAR: Are you talking to me?

17 MR. O'BRIEN: Yes.

18 MR. CAVENDAR: Would you rephrase your question?

19 MR. O'BRIEN: Sure.

20 The historical record of the Conservation District
21 diversions seems to suggest that there was a period from
22 approximately 1938-39 to approximately 1969 in which the
23 Conservation District diversions generally stayed below
24 10,000 acre-feet with I believe the exception of 1968, I
25 believe.

1 Is that consistent with your understanding?

2 MR. CAVENDAR: Yes.

3 MR. O'BRIEN: And it also appears that since 1969 the
4 Conservation District diversions from the Santa Ana River
5 have increased fairly dramatically.

6 Would you agree with that?

7 MR. CAVENDAR: Yes.

8 MR. O'BRIEN: Now, you heard the questions I asked Mr.
9 Headrick about the regulating affects of Seven Oaks Dam?

10 MR. CAVENDAR: I heard them.

11 MR. O'BRIEN: Do you agree with his testimony and
12 response to those questions?

13 MR. CAVENDAR: Yes.

14 MR. O'BRIEN: Has the Conservation District considered
15 the question of whether the existence of Seven Oaks Dam will
16 enable you to divert more water in the future because of
17 this regulating effect?

18 MR. CAVENDAR: Yes.

19 MR. O'BRIEN: Have you developed any plans in that
20 regard?

21 MR. CAVENDAR: Yes.

22 MR. O'BRIEN: What are those plans?

23 MR. CAVENDAR: We anticipate constructing more and
24 replacing the water conservation ponds that the Corps of
25 Engineers used as part of the reborrow area, similar to have

1 greater capacity to return, use other diversion facilities
2 that we have.

3 MR. O'BRIEN: Do you plan to increase your diversions?

4 MR. CAVENDAR: Part of the diversion is currently
5 closed. We have the ability to reopen that diversion.

6 MR. O'BRIEN: Do you plan to increase your diversions?

7 MR. CAVENDAR: Yes.

8 MR. COSGROVE: Object as vague as to time. What kind
9 of comparison are you calling for? Between when to when?

10 H.O. BAGGET: Could you clarify, Mr. O'Brien?

11 MR. O'BRIEN: Yes. Sure.

12 Let's say during the next ten years do you plan to
13 increase your diversions?

14 MR. COSGROVE: Same objection. From what base?

15 MR. O'BRIEN: Okay.

16 Let's say we are able to state here and calculate the
17 average diversions by the Conservation District during the
18 period 1969 to the present. Do you anticipate that the
19 average diversions by the Conservation District during the
20 next 30-year period from this point forward will be higher?

21 MR. CAVENDAR: That would depend entirely on whether
22 the water comes. If it is precipitation and rain brings it
23 to us, then the answer would be yes.

24 MR. O'BRIEN: That would be pursuant to these unlimited
25 pre-1914 rights you have discussed?

1 MR. CAVENDAR: And the licenses.

2 MR. O'BRIEN: These facilities you've constructed to
3 divert this additional water, what is the status of the
4 construction of those facilities?

5 MR. COSGROVE: Hearing Officer, I am going to object as
6 to relevance of this line of questioning, again. I don't
7 understand why this pertains --

8 H.O. BAGGET: I would sustain.

9 Can you try to wrap up, also. I have been very liberal
10 with the 20 minutes since they have two witnesses and --

11 MR. O'BRIEN: I would be glad to withdraw the question.
12 But I do want to say it is a very relevant question because,
13 clearly, what is happening here is the Conservation District
14 is planning to increase its own diversions of the water that
15 is going to be made available at Seven Oaks Dam as result of
16 the regulating affect. I think that is a relevant issue in
17 this proceeding.

18 I have no further questions.

19 Thank you.

20 H.O. BAGGET: Thank you.

21 Orange County, Mr. McNevin.

22 ---oOo---

23 CROSS-EXAMINATION OF

24 SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT

25 BY ORANGE COUNTY WATER DISTRICT

1 BY MR. MCNEVIN

2 MR. MCNEVIN: Mr. Headrick, I understand from the Santa
3 Ana Conservation District submittals it takes no position on
4 Orange County Water District's petition. Just so I am
5 clear, your testimony today is focused on Reaches 5 and 6 in
6 the upper watershed only; is that correct?

7 MR. HEADRICK: That is correct.

8 MR. MCNEVIN: It does not bear on the flows at Prado as
9 Mr. Mills described today?

10 MR. HEADRICK: Not that I am aware of.

11 MR. MCNEVIN: Thank you.

12 H.O. BAGGET: City of San Bernardino?

13 MR. MOSKOWITZ: No questions.

14 H.O. BAGGET: East Valley Water District.

15 UNIDENTIFIED VOICE: No questions.

16 H.O. BAGGET: Inland Empire.

17 MR. CIHIGOYENETCHE: No questions.

18 H.O. BAGGET: Big Bear.

19 MR. EVENSON: No questions.

20 H.O. BAGGET: Chino Basin.

21 Santa Ana Local Sponsors.

22 MR. DONLAN: No questions.

23 H.O. BAGGET: And the City of Ontario.

24 MR. GARNER: No questions.

25 H.O. BAGGET: Staff.

1 ----oOo----

2 CROSS-EXAMINATION OF

3 SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT

4 BY STAFF

5 MS. MROWKA: Mr. Headrick, did you have an opportunity
6 to review the material that Mr. Beeby prepared?

7 MR. HEADRICK: Yes.

8 MS. MROWKA: Did you find any errors in the statistical
9 methodologies that he employed? I am not asking for
10 conclusions as to the results. I am asking did you note any
11 errors in the statistical methodologies?

12 MR. HEADRICK: Can you be more specific about which one
13 you are talking about and what you mean by methodologies,
14 perhaps? I am not trying to be evasive, but I don't
15 understand.

16 MS. MROWKA: I understand that.

17 Mr. Beeby presented evidence where he employed several
18 statistical techniques, taking them by rote, the first that
19 he employed was that he utilized a specific time period for
20 his review.

21 Did you note any errors in the way he utilized that
22 time period?

23 MR. HEADRICK: I believe I did.

24 MS. MROWKA: Could you tell me what those are?

25 MR. HEADRICK: I have a chart that goes through that,

1 if you would like to go over that now. Is this the
2 appropriate time?

3 MS. MROWKA: Just asking, as an engineer, did you find
4 that there was a problem with him utilizing that specific
5 time period?

6 MR. HEADRICK: Yes, I did.

7 MS. MROWKA: If you have that chart, can you tell me
8 what exhibit that would be?

9 MR. HEADRICK: It's a -- not one of our submittals. I
10 didn't have his data packet until we had submitted ours.

11 MR. FRINK: Is that chart something you intend to
12 cover during rebuttal?

13 MR. COSGROVE: It was something that we intended to
14 offer as rebuttal. We can offer it now. He can go over
15 what the analysis was by Beeby. We are prepared to do it
16 now.

17 MR. FRINK: Is it still your intention to cover it
18 during rebuttal?

19 MR. COSGROVE: Not if it is covered now. Your call.

20 MR. FRINK: I think -- Mr. Bagget, I think it might be
21 more efficient to cross-examine Mr. Headrick on a exhibit
22 that they intend to offer after they offer it and explain
23 it.

24 H.O. BAGGET: To recross. Okay.

25 MR. FRINK: On rebuttal after conclusion of the cases

1 in chief.

2 MR. COSGROVE: For current purposes we have the
3 witnesses to answer what the subject matter was, subject
4 matter in the analysis was.

5 H.O. BAGGET: That is fine.

6 MR. HEADRICK: Is that appropriate?

7 What I found was that when you look at just the river
8 gauges, which all the further analysis of Mr. Beeby was
9 based on, which is USGS 11051500, again, the two river
10 gauges, that that period was actually a fairly significant
11 dry period. I mean a fairly significant wet period, not a
12 dry period as he found when you analyze all three gauges.
13 Remember, the third gauge bypasses the dam and does not
14 interact at all with the stream system under normal
15 conditions. It is taken through the Edison flume system and
16 delivered directly to irrigators or treatment facilities.

17 MS. MROWKA: I will hold any other questions on that at
18 the moment.

19 Did you find any errors in the fact that he did not
20 utilize the average flows referred to as means and those
21 types of numbers?

22 MR. HEADRICK: I believe his statement today was that
23 he actually did take monthly averages and just accumulated
24 those through time.

25 MS. MROWKA: Did you find any errors in that technique

1 that he employed on that?

2 MR. HEADRICK: Other than misrepresenting how the water
3 has historically been used, no.

4 MS. MROWKA: Thank you.

5 Turning to your Exhibit 12, first off, I note that it
6 states this is a Big Bear Dam precipitation versus Santa Ana
7 River flow. Can you please explain to me which gauge you
8 used to prepare that?

9 MR. HEADRICK: For the --

10 MS. MROWKA: For the Santa Ana River flows?

11 MR. HEADRICK: It's listed at the bottom, 11051501.
12 It's the total river flow. Just trying to show that
13 correlation between what rainfall happens in a fairly large
14 watershed and Big Bear seems to be indicative of what leaves
15 the canyon in any one year.

16 MS. MROWKA: I am sorry, I put an exhibit label over
17 that. That was my doing there.

18 I wanted to ask a few questions regarding this. Is it
19 standard engineering practice to compare watersheds of these
20 sizes, one versus the other, or is there any issue with
21 respect to this type of comparison?

22 MR. HEADRICK: Which watersheds are you speaking of?

23 MS. MROWKA: It strikes me that the Big Bear Dam
24 watershed is different in size than the Santa Ana River flow
25 watershed. Can you, first off, explain what the difference

1 in size of those two watersheds is as order of magnitude
2 issue?

3 MR. HEADRICK: I might be able to determine that from
4 here. I don't have that number right off. The Big Bear Dam
5 basically captures flow above this, in this general area.

6 MS. MROWKA: Can you explain that so it is apparent on
7 the transcript?

8 MR. HEADRICK: The watershed that flows into Big Bear
9 Lake. It looks like -- in comparison to the whole Santa Ana
10 River watershed above the Santa Ana or above Seven Oaks Dam?

11 MS. MROWKA: I am only referring to what you prepared
12 for Exhibit 12. I just want a sense of the size of the
13 watershed that you compared to the other watershed.

14 MR. HEADRICK: What I was trying to show with this is
15 precipitation gauge that exists at Big Bear Dam is
16 indicative of the precipitation and hence the flow out of
17 the entire watershed.

18 MS. MROWKA: If you could give me a sense of
19 perspective, how large in comparison to Big Bear Dam
20 watershed is that Santa Ana River watershed?

21 MR. HEADRICK: It looks it could be as large as an
22 order of magnitude larger. I don't know. I am trying to --
23 if you're talking about the water that ends up at the dam as
24 compared to the land that actually catches the water that
25 ends up behind Big Bear Dam in comparison to the land that

1 feeds that water behind Seven Oaks Dam, is that the
2 question?

3 MS. MROWKA: I was simply interested in knowing the
4 relative difference between these two values you have
5 compared, because one is for Big Bear and one for Santa Ana.
6 I just wanted to get a sense of scope.

7 MR. HEADRICK: One is for precipitation and one is for
8 flow.

9 MS. MROWKA: I will leave off on that.

10 Thank you.

11 ---oOo---

12 CROSS-EXAMINATION OF
13 SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT
14 BY BOARD

15 H.O. BAGGET: I had a couple questions. It was
16 follow-up, similar question.

17 Did you consider elevation of these watersheds? You
18 have substantially different elevations between above Big
19 Bear and that watershed versus a lower atmosphere that is
20 generally rainfall and precipitation.

21 MR. HEADRICK: Which precipitation? Again, all I was
22 trying to show with 12 is that it is our longest period of
23 record of any station that we have in the mountains. And it
24 appears to be indicative of the amount of water that flows
25 out of the canyon. Meaning when we have high precipitation

1 events at Big Bear, that usually means lots of water leaves
2 the Santa Ana Canyon the same year. I wasn't trying to take
3 that any further than that.

4 H.O. BAGGET: Second one I have, Exhibit 14 you talked
5 about the landscape increased around Big Bear. And your
6 testimony was it really hadn't increased significantly.

7 Did you do any analysis of the forest in terms of the
8 health of the forest, the duff layer, density of the forest
9 over time?

10 MR. HEADRICK: No, I did not.

11 H.O. BAGGET: In terms of capacity absorbed, so on?

12 MR. HEADRICK: I just made the assumption that if it is
13 forest now it was forest then and it probably hasn't
14 changed.

15 H.O. BAGGET: Thank you.

16 MS. MROWKA: If I was to utilize the information you
17 prepared today and talked about, the diversions your
18 district does, and I was to always utilize the data that we
19 have received from the petitioner, San Bernardino, what
20 would I have to do to line the data up side by side to make
21 a comparison? Is there anything special I need to do to
22 adjust your data so I can compare the results of both of
23 your work?

24 MR. HEADRICK: Which data specifically?

25 MS. MROWKA: What I want to know is I am going to

1 strike that question.

2 H.O. BAGGET: Mr. Cosgrove, do you have any --

3 MR. COSGROVE: Just a couple real brief questions.

4 ---oOo---

5 REDIRECT EXAMINATION OF

6 SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT

7 BY MR. COSGROVE

8 MR. COSGROVE: Mr. Cavendar, you had indicated
9 previously that you didn't think that CEQA and NEPA
10 processes afforded the Conservation District the adequate, I
11 am paraphrasing, an adequate opportunity for addressing the
12 issues that have apparently been raised in these
13 proceedings; is that correct?

14 MR. CAVENDAR: I did say that.

15 MR. COSGROVE: What did you mean by that?

16 MR. CAVENDAR: I think that there is a better way to
17 get at the issue of how to manage the water in the San
18 Bernardino Basin than through a CEQA and NEPA process. If
19 you can adjust and reach a conclusion on how to manage the
20 water before you go into the NEPA process then you are far
21 better off. All the parties are going to be willing to go
22 back to the process without any lips at all. So just
23 waiting, as Mr. O'Brien suggested for that process, is not
24 the best way to do it. You need to make that agreement on
25 how to manage the water beforehand.

1 MR. COSGROVE: Just one question for Mr. Headrick. You
2 had indicated that the dam could slow certain flows down and
3 potentially make more water available for diversion in
4 response to a question from Mr. O'Brien; is that correct?

5 MR. HEADRICK: Yes.

6 MR. COSGROVE: When you said that, were you discussing
7 about the operation of the dam theoretically?

8 MR. HEADRICK: That's correct.

9 MR. COSGROVE: Have you had any data made available to
10 you on how that dam will operate permanently to assess
11 whether the theoretical impact that you talked about is
12 actually going to happen under the conditions for the
13 operation of Seven Oaks Dam?

14 MR. HEADRICK: No permanent record that I know of.

15 MR. COSGROVE: I don't have any further questions.

16 H.O. BAGGET: Recross.

17 MR. O'BRIEN: Nothing further.

18 I would like to offer the three exhibits, 5, 6 and 7,
19 into the record.

20 H.O. BAGGET: The two water rights licenses and
21 amendment. Unless there is objection, they will be admitted
22 in.

23 No objection.

24 MR. COSGROVE: I don't have any objection. I would
25 like to offer Conservation District Exhibits 1 through 19.

1 MR. O'BRIEN: No objection.

2 H.O. BAGGET: No objections. They are entered into
3 the record.

4 Thank you.

5 City of San Bernardino.

6 MR. MOSKOWITZ: Joel Moskowitz of the law firm
7 Moskowitz, Brestoff, Winston & Blinderman. I am here
8 representing the City of San Bernardino.

9 I will have one witness, Stacey Aldstadt, the Deputy
10 General Manager. We have submitted for the Board's
11 convenience and the convenience of the parties our opening
12 statement. I would like to summarize it briefly and amplify
13 briefly what some of the testimony you have heard today.

14 We have heard a lot of technical testimony today. And
15 I have to tell you that lurking behind the seeming dullness
16 of that technical testimony is probably one of the most
17 interesting issues you're going to deal with and this Board
18 is going to deal with probably in the next decade.

19 This Board and Regional Boards have pursued a very
20 vigorous path over the time I have been in this field, which
21 is about 30 years, of trying to get wastewater treatment
22 plants to take what used to be nuisance water and turn it
23 into almost potable water, virus-free, disinfected
24 water. And you have achieved that. In the case of the City
25 of San Bernardino we have spent about \$40,000,000 on the RIX

1 plan doing that with your help, and thank you.

2 One of the things that happened, though, in the course
3 of making that transformation of nuisance water into pure
4 water is that water has now become a very, very valuable
5 commodity. So the question that is before the Board in the
6 context of this hearing, who's going to get that water? Is
7 it up for grabs? First one to file is going to get that
8 water? Very specifically, somebody who didn't pay the
9 \$40,000,000 going to be able to file on it and say, "It is
10 unappropriated; it happens to be there"?

11 Very, very specifically, what is at issue here is
12 whether the City of San Bernardino can take that water, put
13 it in the Santa Ana River, ship it past Orange County, ship
14 it past Prado to a customer of ours lower down on the Santa
15 Ana River? These folks say no. And that is what this case
16 is about.

17 If the Board rules that way, if the Board rules that
18 way, you're going to have trouble and your successors will
19 have trouble getting people to spend \$40,000,000 on a plant.
20 We've heard a lot of testimony from Orange County and a lot
21 of papers about the couple million they spent with basins
22 catching our water.

23 MR. MCNEVIN: I object, your Honor. As opposed to an
24 opening statement which is a review of the evidence, what we
25 are hearing now is a highly argument and somewhat

1 inflammatory and, frankly, misleading statement that is not
2 review of the evidence. It has nothing to do, frankly, with
3 the limited declaration and zero exhibits that the city
4 supplied.

5 MR. MOSKOWITZ: This is about what our testimony is
6 going to be. Our testimony is going to be that this
7 wastewater is subject to a contract of sale that we are
8 seeking to and will market this water past Prado. And what
9 this proceeding is actually about is an attempt to stop it.
10 I think that is highly relevant. That is our evidence.

11 MR. MCNEVIN: To that extent, your Honor, if I can
12 address that. The extent that counsel wants to foreshadow
13 that they are going to present evidence, they want to sell
14 their RIX water, that is fine. That is quite different from
15 the inflammatory remarks as to Orange County's intention
16 that counsel is making now. And those are remarks I object
17 to.

18 MR. MOSKOWITZ: Well, it is tone, and I apologize to
19 counsel.

20 H.O. BAGGET: The purpose of the issue, it is in the
21 evidence, contract of sale to focus --

22 MR. MOSKOWITZ: Let me tell you what I think that we
23 have heard something about storm water and storm water as we
24 view it is not an issue in this matter. And the reason it
25 is not an issue in this matter, if you consider the Orange

1 County Judgment, is that Orange County already gets an
2 unlimited right under the judgment to take storm water. So
3 they are not here for storm water. They have the right in
4 an unlimited way for storm water.

5 But you have heard some interesting presentations about
6 storm water. I don't want to belabor it here. If you look
7 at their Exhibit 16, you will see they tell you interesting
8 facts like how much runoff there is per inch of
9 precipitation, and they have a slope that goes straight up.
10 It compares the drought, when you expect that every inch of
11 precipitation is going to sink into the ground and not
12 runoff with a wet period that followed the drought when that
13 didn't happen.

14 They take these all together and they have a slope that
15 goes straight up. What you should really have is two flat
16 lines for a dry period and a wet period. So, I think you
17 have seen some manipulation. We pointed out others in our
18 statement with respect to storm water. The reality is the
19 main determinant of storm water flow is not extra paving in
20 the district. We won't belabor that.

21 We are here to tell, however, that they are not here
22 for storm water flow. They are get it anyway. We have been
23 told that the judgment is not at issue, that you have MOU's
24 that say everyone is going to obey by the judgment. Orange
25 County will obey the judgment, and that is great. Except we

1 have dramatically, dramatically different opinions as to
2 what the judgment says. And I would like to refer to two
3 pieces of their exhibit, and I would like to just read them
4 briefly. I don't think we have to dwell on them or put them
5 on the board, because they will be self-explanatory.

6 They tell you in their Exhibit 6, Attachment 10-1 of
7 Page 4, that:

8 Since the water is fully appropriated, it is
9 essential that all the affected water
10 agencies cooperate to insure that the flows
11 hereinabove described shall be utilized for
12 the highest reasonable use within the
13 watershed and not for use outside the
14 watershed. (Reading.)

15 Well, if that is not clear enough, Exhibit 6,
16 Attachment 17, Page 2.

17 Fourth, the application sets fourth our
18 position. (Reading.)

19 This is the application they would like to file.

20 It would be improper and unlawful for
21 upstream users to export water from this
22 watershed and that the rights which OCWD
23 claims are subject to existing rights of
24 conservation upstream, but are not subject to
25 any export activity by upstream users.

1 (Reading.)

2 What?

3 H.O. BAGGET: There appeared to be an objection.

4 MR. MCNEVIN: Thank you, I do have an objection. There
5 is no question but that the dispute Mr. Moskowitz refers to
6 over the ability to export natural water is out there.

7 However, that is not a part of this proceeding. In fact, at
8 Page 7, Lines 15 to 16 of his purported opening statement --

9 MR. MOSKOWITZ: That was actually my opening statement.

10 MR. MCNEVIN: -- Mr. Moskowitz states:

11 The city acknowledges that this proceeding
12 will not determine what the right to the
13 city's wastewater discharges will be as
14 between the city and OCWD. (Reading.)

15 So, again, I would move to strike this as irrelevant.
16 It is not part of the proceeding today and ask that we move
17 on to whatever relevant evidence there may be.

18 H.O. BAGGET: I sustain the objection and focus on
19 whether it is a fully appropriated stream or not, not
20 contract issues.

21 MR. MOSKOWITZ: One of the things, and really goes to
22 the relevance of our testimony, we think our testimony is
23 highly relevant. I don't hear an objection to it.

24 H.O. BAGGET: I sustained the objection. Just be aware
25 of that.

1 MR. MOSKOWITZ: If, in fact, we do what we say we are
2 going to do, we are going to take our 40,000,000 pile of
3 water and sell it, then the essential case of Orange County,
4 which is there is new base flows -- and, remember, the RIX
5 water is part of the base flow. It is not storm flow. It
6 is part of the base flow. And the argument you are hearing
7 is that there is more base flow, and the argument that you
8 heard is that the base flow is wastewater and the specific
9 argument is the base flow is our RIX water.

10 We are telling you today that it is not a reliable
11 source of water. You cannot declare the stream as having
12 unappropriated water, based upon water that is about to be
13 sold. What is the point of that? So the issue as is to
14 whether they, in fact, can stop us from doing that, well,
15 maybe that is for the Orange County Superior Court. Maybe
16 that is for the next proceeding. But the fact is that we
17 are going to do it, which is the subject of our testimony
18 today really requires you to answer the question of is there
19 unappropriated water.

20 There is no unappropriated water. We are telling you
21 that we are leaving. Seems to me you can't avoid that
22 issue, if you are going to find that there is unappropriated
23 water for them to appropriate, unappropriated water for
24 anyone to appropriate. In other words, our rights,
25 vis-a-vis, there may be the subject of something else, some

1 other proceeding. Our rights vis-a-vis the world to control
2 that water, that does have to do with this proceeding.

3 MEMBER FORSTER: Can we go off the record for a moment?

4 (Discussion held off the record.)

5 H.O. BAGGET: We are back.

6 If you could just summarize the evidence, get to the
7 evidence you are going to present, not make legal
8 conclusions, that is in closing statements, and focus on the
9 issue.

10 MR. MOSKOWITZ: I will be happy to do that. I only
11 have a few more sentences in any case.

12 You have heard testimony from Mr. Mills that his
13 opportunity to take this water is the last chance to get to
14 this water before it hits the ocean. Our testimony is going
15 to be not so. We will bypass Mr. Mills, and we will deliver
16 it farther down the Santa Ana River. That is Number 1.

17 You have heard testimony from Mr. Mills that this water
18 is hard to reuse and so, therefore, it is a reliable source
19 of continued, in fact, increased flows. Our testimony will
20 be, darn tooten it was hard to reuse. Cost us \$40,000,000.
21 We are now prepared to use. It was hard. We are here and
22 we are prepared to reuse, and it is not, therefore, this is
23 the corollary of what Mr. Mills had to say.

24 The corollary is, therefore, it is not a reliable
25 source. We are going to ask this Board to find that because

1 of our proposed reuse, therefore, it is not a reliable
2 source. Therefore, this is not water available for
3 appropriation. That is it.

4 ---oOo---

5 DIRECT EXAMINATION OF THE CITY OF SAN BERNARDINO

6 BY MR. MOSKOWITZ

7 MS. ALDSTADT: Good afternoon. My name is Stacey
8 Aldstadt. I am the Deputy General Manager for the City of
9 San Bernardino Municipal Water Department. We have
10 submitted a declaration that I signed. But in essence the
11 summary of that declaration is that the City of San
12 Bernardino Municipal Water Department and the City of Colton
13 entered into a joint powers agreement whereby they formed an
14 authority that administers the rapid infiltration and
15 extraction facility that we have been referring to as RIX
16 facility.

17 The City of San Bernardino is currently 80-percent
18 owner of that facility and Colton is a 20-percent owner of
19 that facility.

20 The City of San Bernardino Municipal Water Department
21 currently sends about, on an average, 26 mgd down to the RIX
22 facility for tertiary treatment through that facility.
23 Colton contributes about 6 mgd although that is an average
24 amount as well. We then turn around -- the RIX facility
25 turns around and discharges to the Santa Ana River

1 approximately an average of 43 mgd, which translates as I
2 understand it, and I am not a scientist or any kind of an
3 expert in engineering, which I understand translates to
4 about 47,000 acre-feet per year.

5 Again, I'm not an expert and I am just trying to do a
6 translation that I heard was fairly accurate.

7 The reason that we discharge more than comes into the
8 facility is because we overextract for containment purposes
9 so that the water that is infiltrating in our basins does
10 not exit the facility. So there is actually an
11 overextraction amount.

12 Last year the City of San Bernardino concluded
13 negotiations with a private water agency, private water
14 company, and that contract is, for all intent and purposes,
15 almost executory, except for the fact that we have to comply
16 with California Environmental Quality Act before we sign the
17 contract. So in essence what we have done is we have sat
18 down with the private water company. We negotiated a
19 price. We've negotiated a length of contract which is 20
20 years with options to extend. We have also negotiated an
21 option for that private water company in the event that we
22 undergo an expansion at the RIX facility that they would
23 have an option to purchase everything that was available for
24 them to purchase. And the only thing we are waiting for now
25 is we sent out notice of proposal, basically, to all the

1 interested stakeholders eliciting comments. And we have
2 received comments back from several agencies, and we are
3 preparing to go forward with the CEQA process.

4 Once the CEQA process has been concluded, we anticipate
5 that the contract will be signed, obviously, with all the
6 appropriate mitigation measures that may be requested of us
7 before the contract can be signed. But in essence we have
8 concluded all the negotiations on the deal points and we do
9 have a price.

10 The contract is for flows that San Bernardino owns. In
11 essence what we have done is we have not agreed to sell
12 anything that Colton contributes. So we have taken that
13 amount out. We have also taken out any amounts for
14 overextraction. So in essence I think, based upon what I
15 understand to be the average daily discharge, I think we
16 probably have approximately 14,000 acre-feet of water
17 available for sale currently. There is 16,000 acre-feet per
18 year obligation that the City of San Bernardino Water
19 Department has under contract with San Bernardino Valley
20 Municipal Water District, and that is so San Bernardino
21 Valley Municipal Water District can meet its obligations
22 under the 1969 judgment.

23 So, we will continue to release a given amount of San
24 Bernardino's allotment to meet our contractual obligations
25 with Muni. But anything above that, which is San

1 Bernardino's and which does not constitute overextraction
2 amounts is what we will be offering and have offered for
3 sale to the private water company.

4 In the event that something happens with the contract
5 or in the event that the private water company does back out
6 of the negotiation we do have a penalty clause in that
7 instance, but in the event that they do back out we do fully
8 intend to market our water. We have several preliminary
9 meetings with other interesting parties, and we intend to go
10 that route so that we can recover the cost of treatment that
11 our taxpayers have had to pay as best we can.

12 We also, in our discussions with the private water
13 company, discussed the potential for using the Santa Ana
14 River as a conduit or water wheeling facility, and that is
15 something we have contemplated and that the private water
16 company has contemplated. Because of the nature of
17 negotiations with the private water company, we have agreed
18 that we would not reveal any trade secrets, so to speak, so
19 I can't really disclose to you all of the potential markets
20 that were discussed, but there are some significant
21 potential markets that were in South Orange County that were
22 at least discussed and made, in fact -- and required that
23 the Santa Ana River be used as a conduit for water
24 wheeling.

25 MEMBER FORSTER: Can I ask a clarifying question?

1 MS. ALDSTADT: Sure.

2 MEMBER FORSTER: Are you selling your reused water to
3 another party or are you using your reused water and selling
4 what would be your fresh water? I don't know what you are
5 selling.

6 MS. ALDSTADT: The contract for sale is for our
7 recycled water. In essence, there are two alternatives.
8 One, the private water company would install infrastructures
9 sufficient to take a certain percentage of our discharge at
10 the discharge point and send it somewhere else via pipeline,
11 or, alternatively, they would take the flows in the Santa
12 Ana River. We discharge into the Santa Ana River and there
13 would be some allotment that would be sort of blocked off
14 for the private water company.

15 And that is where we are very interested in the concept
16 that everything that reaches Prado would be for the benefit
17 of another entity because we envision being able to use the
18 Santa Ana River as some type of a conduit in the future for
19 water sales, recycled water sales.

20 MEMBER FORSTER: Thank you for your clarification.

21 MS. ALDSTADT: Finally, I'm sufficiently well-familiar
22 with the facts with respect to the construction of RIX
23 facility. We have spent excess of \$40,000,000 in the
24 construction and in the construction management and the
25 approval stages and design stages of the RIX facility. It

1 is currently costing about one and a half million dollars
2 to operate. So there are some significant costs associated
3 with the tertiary treatment facility that we and Colton
4 built. And we anticipate that those costs are probably
5 going to accelerate, based upon some regulatory requirements
6 that have been placed in our soon-to-be-negotiated permit
7 with Regional Board. So, we have also invested a
8 significant amount of infrastructure that we would like to
9 offset with the sale of recycled water for our customers.

10 And I think that should conclude my testimony.

11 H.O. BAGGET: Any questions, cross-examination?

12 MR. O'BRIEN: No.

13 H.O. BAGGET: Mr. McNevin.

14 MR. MCNEVIN: Thank you.

15 ---oOo---

16 CROSS-EXAMINATION OF THE CITY OF SAN BERNARDINO

17 BY MR. MCNEVIN

18 MR. MCNEVIN: I am Chris McNevin, again.

19 Ms. Aldstadt, would you briefly describe the function
20 of the RIX plant?

21 MS. ALDSTADT: The rapid infiltration and extraction
22 facility, as I understand it, and again I have to sort of
23 preface everything with I have a very sketchy technical
24 background, but as I understand it, that what we do is we
25 take secondary treated water from our facility and from

1 Colton's secondary treated facility. It is piped down to
2 the RIX facility and placed in basins where it receives
3 disinfection and filtration through native soils versus a
4 sand filter. In a conventional tertiary treatment facility
5 my understanding is that you would achieve filtration
6 through sand filters. This in situ, native soil-type
7 filtration. Then it is drawn out, and as I said, there is
8 an overextraction and then it is sent through an ultraviolet
9 process, which is designed to act as a multi-barrier against
10 viral and bacterial stuff. And then it is discharged into
11 the Santa Ana River.

12 MEMBER FORSTER: Very technical term, "stuff."

13 MR. MCNEVIN: Is it fair to say that the RIX plant
14 treats wastewater to achieve your tertiary treatment
15 requirements?

16 MS. ALDSTADT: Yes, that is true.

17 MR. MCNEVIN: The plant was designed and constructed as
18 an alternative to a typical tertiary treatment plant?

19 MS. ALDSTADT: Yes, that is true.

20 MR. MCNEVIN: So the \$40,000,000 cost you just
21 discussed of designing and constructing this plant was a
22 cost of regulatory compliance?

23 MS. ALDSTADT: Yes, that is true.

24 MR. MCNEVIN: The same for the million and a half that
25 it cost you to operate the plant each year?

1 MS. ALDSTADT: Yes.

2 MR. MCNEVIN: As a matter of fact, part of the logic
3 for constructing the RIX plant was to save money over a
4 typical tertiary compliance system?

5 MS. ALDSTADT: Yes, that is true.

6 MR. MCNEVIN: Now, the city does not today have the
7 ability to sell that RIX water, does it?

8 MS. ALDSTADT: No, it does not.

9 MR. MOSKOWITZ: I am going to object to the question,
10 ability. Legal ability? Factual ability?

11 H.O. BAGGET: Clarify.

12 MR. MCNEVIN: Sure.

13 You do not have a signed contract to sell RIX water, do
14 you?

15 MS. ALDSTADT: No, I do not.

16 MR. MCNEVIN: You have not written your CEQA, your EIR,
17 to sell that RIX water?

18 MS. ALDSTADT: Not yet.

19 MR. MCNEVIN: You mentioned you just sent out, you
20 called it, a notice of proposal. I think you meant a
21 notice of preparation?

22 MS. ALDSTADT: Yes, I did.

23 MR. MCNEVIN: You got back adversion comments on your
24 NOP, didn't you?

25 MS. ALDSTADT: Not really, surprisingly enough.

1 MR. MCNEVIN: You didn't call our comments adverse?

2 MS. ALDSTADT: I haven't seen your comments, and, quite
3 frankly, I was surprised not to.

4 MR. MCNEVIN: The city has not filed an application to
5 appropriate the RIX water?

6 MS. ALDSTADT: No.

7 MR. MCNEVIN: And the city has not filed a petition to
8 change place of use to enable export of this water?

9 MS. ALDSTADT: Not yet, no.

10 MR. MCNEVIN: Now, the city planned to sell this water
11 to Western Water Company a couple years ago, didn't it?

12 MS. ALDSTADT: I am not sure what -- couple years ago,
13 I am not sure.

14 MR. MCNEVIN: Was there discussion several years ago
15 with Western of selling this RIX water to it?

16 MS. ALDSTADT: I am not -- again, I am not trying to be
17 difficult, several years ago. I have been involved in
18 negotiations with Western Water for approximately two years.
19 If you mean prior to that, I don't have any knowledge of any
20 negotiations. But I am not prepared to say that there
21 weren't any.

22 MR. MCNEVIN: And I appreciate that this may be before
23 your time, as well, I am not sure. The approximately two or
24 three years ago when this issue first came up, the sale to
25 Western did not go through because there was no ability to

1 access the Orange County aquifer for storage, which was a
2 fundamental part of the proposal; is that correct?

3 MS. ALDSTADT: I have no idea.

4 MR. MCNEVIN: Would you help me with the math here for
5 a second. The amount of RIX water you would sell, the
6 amount of RIX water that you discharge right now you said
7 47,000 acre-feet per year?

8 MS. ALDSTADT: Actually, I think I am -- just to be
9 sure so I am not leading anybody down the primrose path, I
10 would say probably it is safer to say 43 mgd.

11 MR. MCNEVIN: Can we agree that a conversion rate of
12 1120 for mgd into acre-feet -- would you put your 30 years
13 of experience, maybe Joel you will go along with that.

14 MR. MOSKOWITZ: I am getting so old I can't do it
15 anymore.

16 MR. MCNEVIN: I think you said 47,000, and I will agree
17 to your conversion.

18 But you would not sell 16,000 acre-feet, that's your
19 contractual obligation to San Bernardino/Muni; is that
20 correct?

21 MS. ALDSTADT: Yes, that is correct.

22 MR. MCNEVIN: And you would not sell 7,000 acre-feet
23 that is Colton's flows; is that correct?

24 MS. ALDSTADT: That's correct.

25 MR. MCNEVIN: And you would not sell your

1 overextraction amount which is 11 mgd or approximately
2 12,000 acre-feet per year; is that correct?

3 MS. ALDSTADT: I don't think I testified to our
4 overextraction amount. Sometimes it varies. Sometimes it
5 is as high as 25 percent; sometimes it is lower. So I am
6 not real sure. Again, I am not -- I don't even pretend to
7 be an engineering expert.

8 What I understand is that there is a -- there is a
9 fluctuating amount of overextraction dependent upon various
10 climatological and some other operational parameters. But I
11 am not going to argue with that that might not be an
12 accurate number.

13 MR. MOSKOWITZ: I thought his question was you are not
14 going to sell it.

15 MS. ALDSTADT: We are not going to sell any amount that
16 we overextract.

17 MR. MCNEVIN: That was my understanding from your
18 testimony.

19 If my figure of 12,000 acre-feet per year is right on
20 your overextraction, and I understand that is a moving
21 number, then we have the amount you will not sell as 16,000
22 plus 7,000 plus 12,000, leaving you to sell 13,000
23 acre-feet, roughly, from your RIX plant.

24 That is your proposal?

25 MS. ALDSTADT: I think that is close to the 14,000 that

1 I estimated as I was sitting over there. Yes, I think that
2 is a fair statement.

3 MR. MCNEVIN: And that is as compared to a base flow at
4 Prado of 150,000 in the last water years?

5 MS. ALDSTADT: I will have to take your word on the
6 base flow.

7 MR. MCNEVIN: You have no basis to disagree?

8 MS. ALDSTADT: I am not an engineering expert or
9 hydrologic expert. I have to take your representation as
10 true.

11 MR. MOSKOWITZ: No foundation that she knows. So you
12 can take it as anything.

13 MR. MCNEVIN: Thank you. No more questions.

14 H.O. BAGGET: San Bernardino Valley.

15 MR. COSGROVE: No questions.

16 H.O. BAGGET: East Valley.

17 ---oOo---

18 CROSS-EXAMINATION OF THE CITY OF SAN BERNARDINO

19 BY EAST VALLEY WATER DISTRICT

20 BY MR. KENNEDY

21 MR. KENNEDY: Good afternoon, Steve Kennedy on behalf
22 of East Valley Water District.

23 Good afternoon, Ms. Aldstadt.

24 MS. ALDSTADT: Hi.

25 MR. KENNEDY: What does the city plan to do with the

1 money generated from the sale of recycled water from the RIX
2 facility?

3 MS. ALDSTADT: I don't know if we thought that far. I
4 would think that in some measure try to offset some rates,
5 possibly invest in additional infrastructure. We haven't
6 even thought that far. There has been no actual moneys, so
7 we haven't really thought about what we are going to do with
8 money. We would try to do something to relieve either rates
9 or offset it in some way, the infrastructure cost.

10 MR. KENNEDY: Is it possible that some of those funds
11 may be used to offset the operation, maintenance and
12 expansion cost of the city's sewage treatment plant?

13 MS. ALDSTADT: That is possible, yes.

14 MR. KENNEDY: No further questions.

15 H.O. BAGGET: Inland Empire?

16 MR. CIHIGOYENETCHE: No questions.

17 H.O. BAGGET: Big Bear.

18 MR. EVENSON: No questions.

19 H.O. BAGGET: Chino Basin.

20 Santa Ana River Local Sponsors.

21 MR. DONLAN: No questions.

22 H.O. BAGGET: City of Ontario.

23 MR. GARNER: No questions.

24 H.O. BAGGET: Staff.

25 ---oOo---

1 CROSS-EXAMINATION OF THE CITY OF SAN BERNARDINO

2 BY STAFF

3 MR. FRINK: I have just one question. Where is the
4 water from the RIX plant discharged at the present time?

5 MS. ALDSTADT: Discharged and sent to Santa Ana River
6 Reach 4; it's above Riverside and below the freeway. The
7 only map that made any sense to me was the Water
8 Conservation District map. If you remember, the new
9 effluent site was down here somewhere and the old one was up
10 there. Mr. Headrick was testifying about --

11 MR. FRINK: Excuse me, I just -- I believe you have
12 answered the question. But a short answer would be all the
13 water is currently discharged to the Santa Ana River; is
14 that correct?

15 MS. ALDSTADT: Yes.

16 MR. FRINK: Thank you.

17 H.O. BAGGET: Ms. Forster.

18 ---oOo---

19 CROSS-EXAMINATION OF THE CITY OF SAN BERNARDINO

20 BY BOARD

21 MEMBER FORSTER: Is all the water you are reclaiming
22 imported water?

23 MS. ALDSTADT: To my knowledge there is very little
24 imported water, if any.

25 MR. MOSKOWITZ: If I could ask a question on redirect

1 to clarify that last question.

2 H.O. BAGGET: Yes.

3 MR. MOSKOWITZ: In terms of where the City of San
4 Bernardino gets its water, does it get it from the river or
5 not?

6 MS. ALDSTADT: The San Bernardino Municipal Water
7 Department gets its water from the Bunker Hill Basin.

8 MR. MOSKOWITZ: Groundwater?

9 MS. ALDSTADT: Groundwater.

10 H.O. BAGGET: Any redirect?

11 Any recross to that?

12 If not, then exhibits.

13 MR. MOSKOWITZ: None.

14 MR. FRINK: You have --

15 H.O. BAGGET: You want to ask, Mr. Moskowitz.

16 MR. MOSKOWITZ: I would like to have her declaration
17 admitted, if you would.

18 H.O. BAGGET: If there is no objection, then it is
19 admitted into the record.

20 MR. FRINK: It would be designated as City of San
21 Bernardino Exhibit 1.

22 MR. MOSKOWITZ: Thank you so much.

23 MS. ALDSTADT: Thank you.

24 H.O. BAGGET: It is 20 till. We have -- who's up next?
25 East Valley Water District, you have -- should we

1 start? Should we wait until tomorrow?

2 MR. KENNEDY: Actually, Mr. Bagget, I think my
3 presentation will be very short. In fact, just a few
4 minutes, if that is okay.

5 H.O. BAGGET: Okay.

6 MR. KENNEDY: Once again, Steve Kennedy on behalf of
7 East Valley Water District.

8 In addition to the witnesses listed in our notice to
9 appear, present today is George Wilson who is a member of
10 East Valley Board of Directors. I mentioned him because
11 yesterday afternoon East Valley Board approved a document
12 entitled Principal of Agreement, that was negotiated with
13 the committee of Muni Board of Directors. That addresses
14 many of the concerns that were raised in the declaration of
15 Robert E. Martin that is on file with the State Board.

16 So, in reliance upon our understanding that that
17 document has unanimous consent of Muni Board of Directors
18 and that the terms contained in that document will be
19 formalized into a final agreement at some later date, then
20 East Valley will withdraw the objections to Muni's petition
21 to revise the fully appropriated stream status of the Santa
22 Ana River without prejudice to the ability of East Valley to
23 reassert those objections at any subsequent hearing on the
24 water rights application in the event a mutually acceptable
25 final agreement with Muni is not reached.

1 With respect to the remainder of the comments raised by
2 East Valley Water District in the Orange County petition,
3 East Valley submits on the record that is on file, including
4 the Orange County Judgment and the testimony Mr. Mills gave
5 today that Orange County only seeks to obtain a water right
6 under the petition and application against third parties
7 that are defined as entities that are not signatories to the
8 MOU and were not dismissed defendants in the 1969
9 judgment.

10 In any event, East Valley's witnesses are here and are
11 made available for cross-examination, if any. East Valley
12 reserves the right to call those witnesses for rebuttal if
13 necessary.

14 I will also make an offer of proof that Mr. Martin who
15 is here would testify that his written testimony is true and
16 correct. And, therefore, I would offer into evidence that
17 declaration and exhibits that are attached, with the
18 stipulation that the objections to Muni petition are hereby
19 withdrawn without prejudice.

20 H.O. BAGGET: Is there objection to the admission, anyone?

21 MR. O'BRIEN: Well, if Mr. Kennedy is going to offer
22 the declaration which indicated opposition to our petition,
23 then I guess I feel compelled to cross-examine his witness
24 on it. I don't particularly want to do that, given the
25 representations he's made. So I am wondering if there is a

1 way procedurally for you to reserve your position that you
2 have without the necessity of going through the process of
3 putting on witnesses and cross-examination.

4 MR. KENNEDY: If I may, there is two ways to approach
5 that. One is with a stipulation that I suggested that it be
6 admitted into evidence with the stipulation that our
7 objections to Muni's petition is withdrawn. And the second
8 way is I could ask that certain paragraphs in Mr. Martin's
9 declaration be stricken and specifically those are
10 Paragraphs 15 through 18 that deal with the objections
11 directly. The rest of the paragraphs basically are
12 background, provide the foundation for the exhibits that are
13 attached to that declaration, if that is okay with Mr.
14 O'Brien.

15 H.O. BAGGET: Is that satisfactory?

16 MR. O'BRIEN: That sounds like a good approach. If I
17 could take a moment to look at it.

18 H.O. BAGGET: It will be accepted and received with
19 Paragraphs 15 through 18 which will be stricken.

20 MR. O'BRIEN: That is acceptable to us.

21 H.O. BAGGET: Does any other party have an objection to
22 the admission of these exhibits with deletions?

23 If not, staff have any comments or questions?

24 MS. MROWKA: I do. For record keeping purposes, the
25 declaration of Robert Martin was not noted as a specific

1 exhibit number. We are denoting it as Exhibit E.

2 MR. KENNEDY: Thank you.

3 H.O. BAGGET: Thank you.

4 I think it's probably time to close unless Inland
5 Empire has as equally short a presentation.

6 MR. CIHIGOYENETCHE: I am afraid I don't.

7 H.O. BAGGET: I think this is probably a good place to
8 wrap up for the day. People at least get home for dinner.

9 With that, we are adjourned for the day.

10 Thank you.

11 (Hearing recessed at 4:45 p.m.)

12 ---oOo---

13

14

15

16

17

18

19

20

21

22

23

24

25

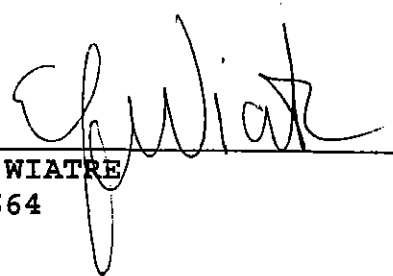
REPORTER'S CERTIFICATE

STATE OF CALIFORNIA)
) ss.
COUNTY OF SACRAMENTO)

I, ESTHER F. WIATRE, certify that I was the official Court Reporter for the proceedings named herein, and that as such reporter, I reported in verbatim shorthand writing those proceedings;

That I thereafter caused my shorthand writing to be reduced to typewriting, and the pages numbered 9 through 258 herein constitute a complete, true and correct record of the proceedings.

IN WITNESS WHEREOF, I have subscribed this certificate at Sacramento, California, on this 17th day of December 1999.



ESTHER F. WIATRE
CSR NO. 1564

