# 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

APPROPRIATE WATER FROM THE SANTA ANA RIVER

BONDERSON BUILDING

SACRAMENTO, CALIFORNIA

**DECEMBER 7, 1999** 

REPORTED BY:

ESTHER F. WIATRE CSR NO. 1564

1	APPEARANCES
2	BOARD:
3	ARTHUR G. BAGGET, JR., HEARING OFFICER MARY JANE FORSTER
4	STAFF:
5	RATHERINE MROWKA
6	COUNSEL:
7	
8	DANIEL FRINK
9	000
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	

#### REPRESENTATIVES

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

DOWNEY BRAND SEYMOUR & ROHWER

555 Capitol Mall, 10th Floor Sacramento, California 95814 BY: KEVIN O'BRIEN, ESQ.

and

DAVID R. E. ALAD JEM, ESQ.

#### ORANGE COUNTY WATER DISTRICT:

PILLSBURY MADISON & SUTRO

725 South Figueroa Street, Suite 1200 Los Angeles, California 90017 BY: CHRISTOPHER J. MCNEVIN, ESQ.

SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT;

RUTAN & TUCKER

611 Anton Boulevard, 14th Floor Costa Mesa, California 92626 BY: DAVID B. COSGROVE, ESQ.

# CITY OF SAN BERNARDINO:

MOSKOWITZ, BRESTOFF, WINSTON & BLINDERMM"
1800 Century Park East, Suite 350
Los Angeles, California 90067
BY: JOEL MOSKOWITZ, ESQ.

## INLAND EMPIRE UTILITIES ASSOCIATION:

CIHIGOYENETCHE, GROSSBERG & CLOUSE 3 602 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 1839 Commercenter West
4	San Bernardino, California 92412 BY: STEVEN M. KENNEDY, ESQ.
5	SANTA ANA RIVER LOCAL SPONSORS:
6	ELLISON & SCHNEIDER
?	2015 H Street Sacramento, California 95814
8	BY: ROBERT E. DONLAN, ESQ.
9	CUCAMONGA COUNTY WATER DISTRICT, CITY OF RIVERSIDE MONTE VISTA WATER DISTRICT:
10	BEST BEST & KRIEGER
11	400 Mission Square 3750 University Avenue
12	Riverside, California 92502 BY: ERIC L. GARNER, ESQ.
13	ROBERT NEUFELD
14	9615 San Bernardino Road Rancho Cucamonga, California 91729
15	CITY OF ONTARIO:
16	KEN JESKE
17	1425 South Bon View Avenue Ontario, California 91761
18	BIG BEAR MUNICIPAL WATER DISTRICT:
19	SHEILA HAMILTON
20	DON EVENSON P.O. Box 2863
21	Big Bear Lake, California 92315
22	CALIFORNIA DEPARTMENT OF FISH AND GAME:
23	NANCEE MURRAY, ESQ. RONALD REMPEL, Deputy Director
24	1416 Ninth Street, 12th Floor Sacramento, California 95814
25	

## REPRESENTATIVES

#### U.S. FOREST SERVICE:

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

## CITY OF CORONA:

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

# CITY OF CHINO:

JAMES ERICKSON 12616 Central Avenue Chino, California

## STATE OF CALIFORNIA AND STATE AGENCIES:

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

\_\_\_\_000\_\_\_\_

1	INDEX	
2		
3	OPENING OF HEARING:	9
4	AFTERNOON SESSION:	126
5	POLICY STATEMENTS:	
6	RONALD REMPEL	18
_	DON EVENSON	19
7	KEN JESKE	21
_	ROBERT NEUFELD	24
8	GLENN PRENTICE	28
	MARILYN LEVIN	29
9	RICHARD ATWATER	32
	ROBERT DONLAN	36
10	JACK GIPSMAN	
11	SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT WESTERN MUTUAL WATER DISTRICT:	
12	WESTERN MUTUAL WATER DISTRICT:	
12	OPENING STATEMENT:	
10	BY MR. O'BRIEN	
13	G. LOUIS FLETCHER	
14	DIRECT EXAMINATION:	
14	BY MR. O'BRIEN	48
<b>1</b> F	DONALD L. HARRIGER	40
15	DIRECT EXAMINATION:	
	BY MR. O'BRIEN	
16	BI MR. O'BRIEN	
17	ROBERT L. REITER	
	DIRECT EXAMINATION:	
18	BY MR. O'BRIEN	56
	R. G. BEEBY	
19	DIRECT EXAMINATION:	
	BY MR. ALADJEM	
20	PANEL	
	CROSS-EXAMINATION:	
21	BY MR. MCNEVIN	88
	BY MR. COSGROVE	91
22	BY STAFF	114
	REDIRECT EXAMINATION:	
23	BY MR. O'BRIEN	123
	RECROSS-EXAMINATION:	
24	BY MR. COSGROVE	124

25

# INDEX (CONT.)

ORANGE COUNTY WATER DISTRICT;	PAGE
CIVINGE COUNTY WHILE DISTRICT,	
OPENING STATEMENT:	
BY MR. MCNEVIN	12 8
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	17'
D. BURNELL CAVENDAR	
DIRECT EXAMINATION:	
BY MR. COSGROVE	183
DOUGLAS HEADRICK	
DIRECT EXAMINATION:	
BY MR. COSGROVE	
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
STAGEY 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.)

EAST VALLEY WATER DISTRICT:

OPENING STATEMENT: BY MR. KENNEDY

\_\_\_\_000\_\_\_\_

#### SACRAMENTO, CALIFORNIA

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

\_\_\_\_000\_\_\_\_

HEARING OFFICER BAGGET: Good morning.

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

I am Art Bagget, Member of State Water Resources

Control Board. To my left is Mary Jane Forster, a Member of
the Board.

MEMBER FORSTER: Morning.

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

As explained in the hearing notice. Water Code Sections 1205 through 1207 establish a procedure for declaring all or portions of the stream system to be fully appropriated for all or a portion of the year. Santa Ana and its tributaries have been declared to be fully appropriated throughout the year from the Pacific Ocean upstream, and a stream that has been declared to be fully appropriated the State Water Resources Control Board may not accept for filing any 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.
- 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
- 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 adversión specified in those applications.

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

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

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

Each case in chief may be commenced with an opening statement not to exceed 20 minutes. After an opening statement we will hear testimony from the witnesses called by the party presenting the case in chief followed by 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
- will follow the procedure set forth in the Board's
- regulations and the hearing notice unless I approve a
- variation.
- As stated in the hearing notice, witnesses intending to
- 25 present testimony were required to submit their testimony in

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

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

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

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

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
- 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.
- 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 Cihigoyenetche
- 6 of Cihigoyenetche, 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.
- 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.
- 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.
- 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
- 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.

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

MR. ERICKSON: James E. Erickson representing the Cit] of Chino, 12616 Central Avenue, Chino.

MS. LEVIN: Marilyn Levin, Deputy Attorney General, representing the State of California and those state agencies that own land and own rights to produce water in the Chino Basin, 300 South Spring Street, Los Angeles 9001! And we will only be making a policy statement.

H.O. BAGGET: Any others?

Persons wishing to make an appearance?

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

(Oath administered by Hearing Officer Bagget.)

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

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

We will begin with policy statements from each of the parties, followed by an opportunity for policy statements 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
- 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
- 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.

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

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

Thank you.

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

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

- 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
- 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
- being presented. So, if it is all right with Board policy,
- statements can be heard now and I can make a brief opening
- 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

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

MR. GARNER: It will be limited.

Thank you.

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

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

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

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

the south known as the San Bernardino County Dairy

Preserve. This was done in a cooperative planning effort

with the property owners in the area, and it is important to

continue to move forward cooperatively with this industry,

which, through hard, work, has supplied California with over

25 percent of its milk supply.

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

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

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

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

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

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

The Chino basin has the potential to serve as one of the more significant water storage basins in the southland\*

It is strategically located on both the State Water and Colorado River Water Project and is located over a half million additional acre-feet of water can be stored, extracted and pumped in several directions. It is integral

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

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

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

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

Thank you.

H.O. BAGGET: Thank you.

Cucamonga County Water District.

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

- District. We are located at 9641 San Bernardino Road in Rancho Cucamonga, California 91729.
- Cucamonga County Water District was formed in 1955

  under the County Water Districts Act to provide water for

  the rural areas. Over the last 40 years the growth in the

  area has increased significantly to the point where we serve

  in excess of 130,000 customers within the city of Rancho

  Cucamonga, portions of the city of Ontario, portions of the

  city of Upland and portions of the City of Fontana.

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

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

That water that is presently flowing in the Santa Ana
River will be used and put to beneficial use through the
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

or put to reuse or stored, under the 1978 Chino Basin

Judgment is considered supplement water and also beneficial

to the entire basin to the safe yield and to the watershed

as a whole.

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

We thank you very much.

H.O. BAGGET: Thank you.

Next is Monte Vista Water District.

City of Chino.

City of Riverside.

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

H.O. BAGGET: City of Pomona.

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

H.O. BAGGET: No one is here.

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

City of Corona.

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

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

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

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

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

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

Thank you.

H.O. BAGGET: Thank you.

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

MS. LEVIN: Thank you. Marilyn Levin representing

- 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
- 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
- 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
- were placed in the agricultural pool of the Chino Basin
- 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

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

And for your information the Department of Corrections treats all of its wastewater and percolates that water back into the Chino Basin at the present moment. We want to make sure that any decision that the State Board makes does not impact the State or other upstream producers. And so we are concerned about amending the declaration at all and agree with many of the policy statements that have been made by the other Chino Basin entities here today. We just want to

the state wants to make sure that the Board, and I am sure they do, understand that the declaration. Amending declaration is an extremely significant act, possibly 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.
- How do you reserve time? This is the time, right?
- 14 MR. FRINK: Yes.
- I believe if you do have other statements on matters  $\circ f$
- 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?

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

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

Thank you.

H.O. BAGGET: Thank you.

Richard Atwater, Inland Empire Utilities District.

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

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

District.

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

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

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

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

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

I just note for the record in the early 1990s -- excuse me, early 1980's the California Department of Water

Resources identified the storage potential in the Chino

Basin for statewide conjunctive use at about one and a half million acre-feet. Concurrently, through the efforts of the Santa Ana Watershed Project Authority, enactment by the California Legislature and the Governor, Prop 13, the California Water Bond, which the voters will consider on March 7th, provides significant funding for development of recycled water and groundwater conjunctive use projects, not only in the Chino Basin, but in the Santa Ana watershed, which allows, as previous speakers highlight, are building to reduce our dependence on import water, in particular during future droughts and hopefully the State Water Project 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
- 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.

Are there any other members wishing to make policy statements?

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

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

In 1989 the Santa Ana River Local Sponsors entered int<a line a local cooperation agreement, or LCA, with the United States Army Corps of Engineers to implement and share the cost of the Santa Ana River Mainstem Project which was bein« constructed by the Corps. The Santa Ana River Mainstem Project includes Seven Oaks Dam, improvements to Prado Dam and other improvements to the flood control channels along the Santa Ana River. Pursuant to the Federal Resources Development Act of 1986 and the terms of the LCA, Santa Ana

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

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

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

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

Service in the latter part of 2000.

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

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

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

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

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

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

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

It is worth underscoring what the order that comes out 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
- 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
- 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
- ratepayers the expenditures of what will no doubt be a lot
- of additional money to put this in a position to bring it
- $\,$  back to this Board down the road and get a decision on

- 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
- issued by the Board, which amount to 10,400 acre-feet of
- S 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
- issue through negotiations. And we have, as you know, been
- working on that.
- But we don't need to get into that issue in great depth
- 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.
- 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
- periods -- and to use an average in a case like this is very
- dangerous and, frankly, very misleading. And Mr. Beeby. will •
- address that question and explain why he didn't just rely on
- 20 averages. He went the next step, consistent with standard
- 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
- as I understand it, is there hasn't been any increase in

precipitation in that upstream area, there hasn't been any significant increase in urbanization in that area.

Essentially there is no new water coming out of that upper portion of the watershed.

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

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

- 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
- simply put this proceeding on indefinite hold would put my
- 12 clients in a difficult position of having to decide whether
- 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.
- 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.

 $\mbox{MR.}$  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
- right, that is 500,000 plus barrels of oil a year that we
- 24 wasted.
- 25 Our resources are immense. We have tremendous

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

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

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

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

- 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.
- 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

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

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

MR. COSGROVE: I have an objection.

THE COURT REPORTER: I need your name, please.

MR. COSGROVE: David Cosgrove on behalf of Conservation.

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

H.O. BAGGET: If you could please limit i t to written testimony.

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

H.O. BAGGET: Sustained.

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

Union and Western Municipal Water District of Riverside
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.
- A true and correct copy of the application to
- 9 appropriate has previously been submitted. I do point out
- our application has been on file since 1991.
- 11 San Bernardino's principal objective in pursuing the
- petition and application to appropriate, passionately, is to
- further develop local water resources for use within the
- 14 Santa Ana River watershed.
- This is a key point.
- The development of additional local water supplies is
- preferable from an economic and water resource management
- standpoint to increase reliance on imported State Water
- 19 Project water. The development of additional local supplies
- will reduce demand for exported water from the Bay-Delta
- with the attendant environmental and water supply benefits.
- Thank you for your courtesy.
- H.O. BAGGET: Thank you.
- MR. O'BRIEN: Thank you, Mr. Fletcher.
- 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.
- 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
- 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
- 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
- issue of water resources above Riverside dams.
- 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
- of which comes from the State Water Project.
- 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.
- 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.
- 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

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

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

MR. REITER: Yes.

MR. O'BRIEN: Is Exhibit 3-2 a true and correct copy  $\circ$  f your resume?

MR. REITER: Yes.

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

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

The next exhibit that I would like to turn to is

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

The next exhibit.

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

Completion of Seven Oaks Dam up here in the upper watershed constitutes the second major man-made flood control structure along the Santa Ana River. In the 1940s the Prado Dam was constructed at the mouth of the lower Santa Ana Canyon in Southwestern San Bernardino County.

Along this river, as Mr. Beeby will describe in more detail, the U.S. Geological Survey maintains several stream gauges.

- 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 art
- 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
- 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

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

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

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

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

Thank you.

Over the years in our work and my work on both the Santa Ana River Water Master Committee and Western Water 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.
- 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
- 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
- capacity to the other named plaintiffs who still remain in
- the Western case of City of Riverside, Riverside Highland
- 24 Water Company, Agua Monsa Water Company and Meeks and Daley
- 25 Water Company and the Regents of the University of

California at Riverside.

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

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

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

- for upstream capture and use.
- 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^
- that jointly costs \$2,000,000, of which Western and Valley
- 17 District have split the cost, in accordance with our shares
- of the safe yield of the San Bernardino Basin. That brings
- the total cost of those activities so far to a little over
- 20 \$4,000,000,
- I guess, in closing, what I would like to say is that
  this district has an application for which we filed to seek
- 23 direct division and diversion to storage of up to a hundred
- thousand acre-feet per year from the river. As Mr. Beeby's
- 25 presentation will show, we believe that that number turned

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

Given that your Board gives us permission to move forward with regard to the petition, one of the things we will be considering, and I know 1 will recommend to my Board, is they consider amending the application prior to being filed to 200,000 acre-feet per year. Understanding full well, that that is a very rare event, but we do believe that it would be inappropriate to take a hundred thousand and then have to sit by and watch a whole bunch of more water literally go to the ocean. Because those years are years when all facilities downstream are well beyond their maximum capacity and water is literally going to the ocean.

Thank you for your time today.

MR. ALADJEM: Mr. Bagget, Ms. Forster, good morning.

David Aladjem, also for Muni and Western.

Our next witness is Mr. Beeby.

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

MR. BEEBY: Robert G. Beeby.

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

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

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

MR. BEEBY: Yes, it is.

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

MR. BEEBY: Yes, it is.

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

MR. BEEBY: Yes.

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

MR. BEEBY: Yes. There are two changes that need to be made. The first is on Page 5 of my written testimony.

Paragraph 11. The third line up from the bottom now reads

"the values shown are after all diversions." "After" should be changed to "before."

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

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

- 1 shown on Exhibit 4-27 and indicated as the potential direct
- 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, X
- 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
- 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 i t 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, X
- 14 believe, that Muni submitted indicates that the allegation
- 15 of changed circumstances is that dam. And so it would
- 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 .
- included in the hearing notice, which is the allegation of
- changed circumstances from the dam and potential
- 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

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

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

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

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

## It goes on to say that:

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

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

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

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

But our objection is noted for the record. And what we would like to do is to the extent that any ruling is withheld or any ruling that is made on the objection that it 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.
- 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

from Seven Oaks Dam.

These annual flows are not based on one gauge reading, but, in fact, are the combined flows, which is representative of the full natural, sometimes referred to, or run-of-the-river-type flows. They include both the diversions by the upstream senior water right claimants.

And there is a downstream gauge, so this is a combined gaugi reading. The period of record runs from water year. And when I am referring to years, I am then referring to water years, which are from October 1st to September 30th. And ai you see here on this chart, the long-term average is 59,600 acre-feet.

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

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

MR. BEEBY: Yes. There is a horizontal line across here, indicating 50,000 acre-feet. The horizontal lines arw annual flows in thousands of acre-feet. The bargraphs that exceed this average are all those that are in excess of the 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
- there would be three years. Yes, you read the graph better
- 11 than I did.
- 12 Thank you.
- The next exhibit I would like to talk about is Exhibit
- 14 4-15. In hydrology we like to use base periods. Base
- periods are established typically by developing an
- accumulated departure from the mean curve, which is
- 17 represented here in Exhibit 4-15. Essentially, the
- 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.
- 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

- 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,
- which was done monthly, is we picked the period from 1971-72
- through 1990-91. That is a 20-year base period. It's
- characterized by an initial dry period, followed by wet, dry
- periods. So it is essentially a complete cycle. The one
- disadvantage of it is that it is slightly less than a
- long-term average. As you will see here, the period of
- record for our base period is 55,700 acre-feet as opposed to
- the long-term average, which is characterized in this blue
- box as 59,600, which is the same number that was on the
- previous chart, 4-11.
- Although we speak in terms of averages, because
- 21 averages are generally a way of understanding hydrologic
- 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

- 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 a?
- 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 thii
- 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
- on a relatively regular basis, and typically it would be
- 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
- 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 whal
- 22 you might really get if you did do all these facilities and
- 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
- 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
- the primary senior water right claimant/diverter below Seven
- Oaks Dam, and this purple area is their historical diversion
- records for the same 20-year base period which totals
- 14 252,000 acre-feet.
- 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
- an insignificant amount of water. And, therefore, you then
- go to the next step, which is to say, if there is this much
- water there, we recognize that we have a senior water right
- claimant, principally the Conservation District, to meet at
- this point, plus we have to comply with the Orange County
- 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.

except.that it imposes the constraints with one

modification, which I will explain, that are included in th<br/>
Muni/Western application. Again, here is the top number,

555,000 that I talked about before. Here is the

Conservation District's historical diversions. And we've

broken this area as --

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

MR. BEEBY: Yes, I am sorry.

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

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

Now, I didn't point out, but I should have on the earlier graph, the size of the blue area that was the potential diversion by Muni/Western is roughly 303,000 acre-feet. That is unconstrained by any downstream requirements, either by the Orange County Judgment or 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
- of time there was only one year where that Orange County
- 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
- 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

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

So, clearly, with this analysis there is substantial amounts of water that could be diverted by Muni/Western i: the upper portion at Mentone without affecting the either the downstream interests or senior water right claimants. Those numbers that I gave, 278 and 261, average 13,000 to 15,000 acre-feet a year. Again, It is not going to be evyear.

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

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

As you heard Mr. Reiter testify, there are two types of flow that occur at Riverside Narrows. First is base flow and then there is storm flow. The base flow and storm flow separation are indicated by this dashed line and the large 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.
- 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
- 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
- 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
- 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

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

Thank you very much.

H.O. BAGGET: Thank you.

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

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

(Break taken.)

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

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

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

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

The purpose of this opening statement is to inform you,

the petitioners and the various parties as to the procedural processes required and substantial hurdles that must be overcome before the Forest Service could even entertain an application for a special use permit for such a proposal.

Gene Zimmerman, the Forest supervisor of the San

Bernardino National Forest, submitted a letter to you dated

October 28, 1999, noting that Forest Service approval would

be required and that prior to granting approval the Forest

Service must comply with the National Environmental Policy

Act and the Endangered Species Act, and that is attached as

Attachment A to this opening statement.

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

This screening process is relatively new. It was

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

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

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

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

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

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

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

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
- 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
- been negotiating with Southern California Edison, the owner
- of these projects, local water districts, state and local
- 24 government agencies and public interest groups over the
- amount of bypass flow that will be required.

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

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

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

- 1 forest would not be the reasonable use of water consistent
- 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
- 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
- prior to this hearing. In addition I have three copies of
- 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.

- 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 i f you would accept this into
- 10 evidence i f 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	000
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,
- as the chief engineer for the SAWPA organization, I was
- 7 responsible for numerous calculations. And one that I made
- S at the time resulted in determination that on the average
- 9 water is reused in the watershed approximately two and a
- 10 half times.
- 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
- order of a million acre-feet. And also looked at the water
- 17 crop off of the San Gabriel and San Bernardino Mountains and
- 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.
- MR. MCNEVIN: Thank you very much.
- 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 you
23	written testimony, where it says that it is these increased
24	flows, referring to the data from the Santa Ana River Water

Master Committee, that compromised the changed circumstance

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

MR. BEEBY: Maybe I misheard your question. I thought

-- because, clearly to me, the increased urbanization is, ii

my opinion, one of the reasons for the increased flows at

both the Narrows and at Prado. I think when you asked your

question the first time I thought you were talking

upstream.

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

MR. BEEBY: No. I looked at the overall long range hydrology of the entire river system. And there was apparent from just the hydrology, just the stream gauge records, an increasing flow at both Prado and at Riverside Narrows that looks strange because it did not -- unless you can attribute increased rainfall and global warming or some other cause, which I could not do, it would appear that it is the effects of urbanization and the decrease in 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.
- 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
- 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
- about the base period you selected and the methodology. As
- I understand it -- and forgive me I don't have the ability
- to project your exhibits. So I don't know what the Hearing
- 14 Officer wants to do. I will make reference to exhibits that
- everybody has in front of them.
- 16 H.O. BAGGET: Project them.
- MR. COSGROVE: Okay. If I understand your methodology
- 18 correctly --
- MR. BEEBY: Which one would you like?
- 20 MR. COSGROVE: Right now I believe we are looking at
- 21 4-15.
- You've defined your base period, and it's the two black
- 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 ,1 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

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

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

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

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

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

MR. BEEBY: That was my conclusion, yes.

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

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

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

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

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

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

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

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

MR. BEEBY: No, I don't.

MR. COSGROVE: You didn't do any seasonal analysis of the availability of the flows at Mentone, did you? You jus\* looked at the cumulative, you didn't break it down by month or season?

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

monthly.

MR. COSGROVE: You did look at monthly flows?

MR. BEEBY: Yes.

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

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

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

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

MR. COSGROVE: I apologize.

H.O. BAGGET: You finished the answer?

MR. COSGROVE: Are you done?

MR. BEEBY: Yes, I think so.

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

- 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?
- 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
- 4 USGS.
- 5 MR. COSGROVE: When you look at the water and when
- 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
- 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.
- 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
- 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
- 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
- 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
- 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
- would be available, correct?
- 17 MR. BEEBY: Subject to the terms and conditions of th
- 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?
- 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

base period?

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

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

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

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

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

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

Go ahead.

MR. BEEBY: Obviously, the base period, when it existed, did not include the Seven Oaks Dam. It was not there during the base period. So I guess I would have to answer, yes, that I did not consider the regulation effects 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.
- I will say that when you use monthly data as opposed to
- 7 daily data there could be a little bit of discrepancy but
- S 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
- analysis of the probability and probability curves exceeding
- 20 annual flows is more accurate than just the use of averages
- 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
- 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 oa
- 19 a month at Mentone?
- 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.
- 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. X
- 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
- there is other information that has been submitted that
- justifies revision of the fully appropriated stream order.
- MR. COSGROVE: I guess my question is by reservoir are

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

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

MR. COSGROVE: Okay. Away we go.

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

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

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

 $\mbox{MR.}$  REITER: That is the proposed release regime that the Corps has referred to.

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

MR. REITER: Normally, yes.

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

MR. REITER: Yes.

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

- 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'thearit.
- 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.
- 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

- 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
- 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?
- 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

- 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
- S 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.
- MR. COSGROVE: The true yield for the 16,000 acre-foot
- conservation pool was 4,120 acre-feet per year, correct?
- 14 MR. REITER: Based on the methodology used by the Corps
- of Engineers, that is correct.
- 16 MR. COSGROVE: In fact, that conservatism 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
- 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
- 50,000 acre-foot proposal? Mr. Fletcher?
- 25 MR. REITER: The 50,000 level correct that. The

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

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

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

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

MR. REITER: That's correct.

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

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

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

MR. REITER: That's correct.

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

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

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.
- 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.
- \_\_\_\_000\_\_\_\_
- 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.
- 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.
- 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. Ths
- 9 point is that the Conservation District spreads one share oi
- 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.

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

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

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

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

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

MR. FRINK: From 278 to 261?

MR. BEEBY: Yes, excuse me.

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

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

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

MR. BEEBY: No, I have not.

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

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

 $M\!R.$  BEEBY: No. Only through the direct diversion.

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

MR. BEEBY: I would refer you to Exhibit 4-16 of my testimony. Column 13. Those last three columns. Columns 11, 12 and 13, are entitled Potential New Diversions. Column 11 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
- 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. PRINK: 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?
- MR. BEEBY: Yes, still sticking with the 500 cfs
- 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
- 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
- period of record where flow exceeded 200,000 acre-feet,
- one year when the flow exceeded 250,000 acre-feet, and seven

when the flows were greater than 150-,

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

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

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

So if you will refer back to 4-16 and look at the river 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. PRINK: 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,
- 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

area of Mentone, certainly upstream from Riverside Narrows.

What I have tried to evaluate is the potential diversions at Mentone and illustrated in several of these exhibits the effects of the Narrows and at Prado to show that could still make the diversion at Mentone and have no effect at Prado and the Narrows, key measuring points.

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

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

MR. BEEBY: Well, I don't think I would want to limit myself to any further analysis unless we get down to trying to quantify the flow at particular diversion points. I think the point of my testimony is to show that there is sufficient water at Mentone to allow the diversion both in terms of rate and total annual capacity as set forth in the 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.
- \_\_\_\_\_000\_\_\_\_
- 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
- diversion, I believe Mr. Beeby indicated that Mr. Van had
- 19 evaluated the magnitude of these occasional diversions at
- 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.
- MR. O'BRIEN: Thank you.
- Nothing further.
- 14 H.O. BAGGET: Mr. Cosgrove.
- 15\_\_\_\_\_\_\_00o\_\_\_
- 16 RECROSS-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.
- MR. COSGROVE: Thank you.

H.O. BAGGET: Any other party for recross

Mr. O'Brien.

MR. O'BRIEN: That is it.

H.O. BAGGET: We will take a break for [ow

about 1:10 ready to come back.

(Luncheon break taken.)

—оОо—

## AFTERNOON SESSION

---oOo----

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

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

With that, back to Mr. O'Brien.

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

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

H.O. BAGGET: They will be admitted.

MR. O'BRIEN: Thank you.

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

MR. MCNEVIN: Thank you.

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

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

- 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
- S act of the California Legislature, and it was chartered to
- 9 protect the Orange County groundwater supply and now to meet
- the needs of over 2,000,000 people in Orange County. The
- district now produces over 350,000 acre-feet of water from
- 12 the groundwater basin, much of which --
- 13 (Time clock.)
- MR. MCNEVIN: A good deal of that 350,000 acre-feet is
- produced from recharge from the Santa Ana River. And with
- population growth and the annexations proposed in the
- district, the water demand for year 2020 is projected to be
- over 680,000 acre-feet per year.
- Orange County Water District meets these needs in
- substantial part by reclaiming and reusing water that has
- 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
- in the groundwater basin to remove particulates. These
- 25 operations are an absolute model of the constitutional

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

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

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

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

I will review the major points made in our testimony and exhibits. In the case of the Santa Ana River, the declaration is based on Decision 11-94, a 1964 decision in favor of Orange County Water District that the river was fully appropriated. The fullest appropriation language in 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
- 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.
- These reports themselves are based on data collected by
- 23 USGS and the Army Corps of Engineers. This is objective
- data. Given the membership of the Watermaster Committee,
- 25 this is data which is carefully scrutinized and that is the

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

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

May I have the next chart, please.

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

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

Change two: The storm flow reaching Prado has increased considerably since 1964 due in part to increased urbanization. Again, as with base flows, the storm flows 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, OCWID 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

- 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  $t \odot$
- 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
- 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

- 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, thia
- 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
- on anybody. Does that pick up that far?
- 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.
- We have the certainty that this water is available to
- 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
- itswaydown.
- 21 We have the facts of increased urbanization and
- 22 increased generation of water. Upstream Inland Empire, for
- 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.

- Against these facts we are offered speculation and a number of policy statements this morning that upstream 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 change again in the future. It is not a basis to deny the 8 petition, and it is factually accurate, in any event. 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 expected to impact the bulk of these flows. 12 That is why the 13 SAWPA flow projections already take into account use and reuse upstream. And it is those flow projections that we 14 used to base our charts. 15
  - The third objection is that Orange County's petition Is contrary to the 1969 stipulated judgment. That is not so for several reasons. First of all, may I have the next one in order, please. Bring it up and center it on Paragraph Number 3.
- 21 Thanks.

16

17

18

19

20

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 OCMID will

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

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

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

Paragraph 5 says that Orange County Water District may make full conservation use at Prado Dam in the reservoir.

Moreover, Orange County Water District has signed the MOU, which we attached as Exhibit 8 to our papers. That affirms Orange County is not seeking rights against any upstream entities inconsistent with the 1969 judgment.

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

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

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
- increased ability to capture those flows. And there is no
- 12 serious dispute of those flows. Indeed, Inland Empire made
- 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.
- \_\_\_\_\_000\_\_\_\_\_
- 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

submittal. I've appeared as an expert witness before this

State Water Resources Control Board on several other

occasions, as well as some water rights determinations on a
judicial basis.

I have worked prior, many years ago, for the Department of Water Resources where, ironically, I worked on development of a water quality model on the Chino Basin. I soon decided it was not the thing I could do, so I moved on. I spent 20 years in the field of consulting. I am currently a chairman of the Santa Ana Watershed

Committee. I have served on that committee for the past 17 years. I replaced Mr. John Tupps who was an original Watermaster, and I worked for John all those years, and I worked on every one of the master reports prepared during all these periods.

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

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

MR. MILLS: It is.

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

MR. MILLS: That's correct.

MR. MCNEVIN: Are those exhibits true and correct to

- the best of your knowledge?
- 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.
- 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
- 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?
- 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
- 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.
- 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
- 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.
- 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
- lines there that run parallel, and they both trend out to
- $_{25}$  the year 2020 and show an intercept somewhere around 235- to

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

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

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

MR. MCNEVIN: That's correct.

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

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

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

Number 13 taken also from the SAWPA report shows the quantities of expected water, generation into the watershed, all the way out to the year 2040. As you can see, the lower 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
- experience is that landscape irrigation projects, and we
- have developed one, a very costly one, are very difficult to
- 14 implement. Primarily for two reasons.
- 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
- 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.
- 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.
- And last of all, and perhaps not the most important, but i t
- 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
- 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
- available to us in such large quantities? They're
- available, I think, for the reasons that I have discussed
- before. It is difficult to implement large recycling
- projects, very costly and so forth.
- So, with that difficulty I believe that these will
- continue to be available to us in the future.
- MR. MCNEVIN: Would you explain your observations of
- increased storm flow reaching Prado?
- 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.
- 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

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

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

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

Now the reason for this, we clearly believe it is not very difficult to figure that one out, is there's been a substantial growth in the population and development of homes, housing, in the upper part of the watershed. Each time a home is built, there is an impervious rooftop.

There's driveways, asphalt and there is a storm drain that 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.
- In order to try to confirm that in a little bit more
- 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.
- 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

trend line and so forth.

What is interesting here is we did have a nice trend line here for impervious area. It reads out on this side over here as the percentage of impervious cover. In 1970 we had about 16 percent of the area above Prado was of impervious nature, and by 1990, right about here or so, we are looking at about 28 percent of the watershed.

Projections by the Corps of Engineers, of course, show that the area — as we expect, there is substantial housing development throughout the area right now. They do expect it to increase somewhere around 35 percent into the future,

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

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

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

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

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

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

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

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

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

This is Exhibit Number 24.

I mention the off-river channel of the Santa Ana River, We construct T levees and L levees along the river system.

Our intent here is to slow the water down to a very low rate so it can spread out entirely. That is the important aspect in terms of groundwater recharge.

Exhibit Number 5 is a picture --

MR. MCNEVIN: 25.

MR. MILLS: 25.

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

I mentioned our off channel facilities. Exhibit Number

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
- 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

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

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

MS. MROWKA: Isn't that Exhibit 29?

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

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

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

- 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,
- when we are through with this in a few more years of more
- 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
- program. We do have a major facility here for a constructed
- 24 wetlands project over here. Remove other contaminants and
- 25 nitrates as well.

MR. MCNEVIN: Thank you very much.

H.O. BAGGET: Expended your time.

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

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

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

I wrote down a little thing that you said. Bill. You said this is our last opportunity to capture water. I mean,

I never think anything is the last. 1 don't know -- what did you mean by that?

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

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

MR. O'BRIEN: No questions.

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

MR. COSGROVE: No questions, thank you.

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 \_\_\_\_\_00o\_\_\_\_
- 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 Cihiqoyenetche\*
- 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?
- 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
- entities such as Inland Empire. I am here on behalf of many

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

I would like to direct your attention to what has been identified as Exhibit 7 by your counsel in your packet. It is a letter dated August 21st, 1998.

MR. MILLS: I have it.

MR. CIHIGOYENETCHE: Have you seen that document before?

MR. MILLS: Yes, I have.

MR. CIHIGOYENETCHE: It purports to be a letter authored by you; is that correct?

MR. MILLS: That's correct.

MR. CIHIGOYENETCHE: That letter was submitted by you with a supplement to your application; is that correct?

MR. MILLS: I believe it was.

MR. CIHIGOYENETCHE: I am going to refer beginning on the third paragraph of that letter, Mr. Mills, and if you can indulge me to read some language into the record that I am concerned with. It states, basically:

Accordingly OCMD renews its commitment to work with the division and all upstream users. We recognize that under the 1969 stipulated judgment upstream entities can divert, extract, store and use water without interference from OCMD as long as OCMD receives its entitlement under the judgment. Thus, we do not contest the pending water

rights application at Seven Oaks Dam.

However, we seek to confirm our righto against third parties for all waters reaching Prado subject, of course, to all upstream rights granted by the judgment as indicated above. OCWD's application is not intended to disrupt existing rights of upstream entities as established by the 1969 stipulated judgment. Its purpose is to establish that subject to those existing rights OCWD is entitled to use all water reaching Prado

Dam. (Reading.)

Does that continue to be Orange County's position at this time, sir?

MR. MILLS: That Is correct\*

MR. CIHIGOYENETCHEi Judging by the comments of your counsel earlier, that would seem to be true.

Now, in the declaration or written testimony that you submitted in support of your petition, I'd ask that you turn to Page 6 of your written testimony, if you would.

You have that before you, sir?

MR. MILLS: I do.

MR. CIHIGOYENETCHEi Beginning at Line 5, it is the first complete paragraph on that page.

SAWPA's projected wastewater discharges are

premised on and reflect significant amounts of wastewater reuse by upstream water agencies. If these plan reuse projects are not developed, projected wastewater discharges into the Santa Ana River and consequently projected Santa Ana River base flows would increase. (Reading.)

My question to you, sir, is: Has Orange County Water

District done any calculations to determine what effects

upon those flows would result if such reuse projects were

developed?

MR. MILLS: We have looked at some of those. We have looked at the testimony of Mr. Doug Drury and have made an analysis of that. We also have looked at that submitted by the City of San Bernardino.

MR. CIHIGOYENETCHE: Have you reviewed any of the proposed projects or currently ongoing projects being implemented by Inland Empire Utilities Agency for purposes of water reuse conservation and things of that nature in coming to your conclusions that you presented here today?

MR. MILLS: I have reviewed Mr. Drury's presentation.

I am also familiar with the Ely Basin Recharge Project.

MR. CIHIGOYENETCHE: We heard testimony earlier today regarding the Seven Oaks Dam project. And the thought occurred to myself and Mr. Drury, however, listening to the

testimony was that everybody is arguing over the same water.

If we assume hypothetically that the Seven Oaks project in the petition that was discussed here today is granted, does that, have any effect upon the flows that you are relying upon in your presentation here today?

MR. MILLS: I am not sure we are arguing over the same water, but I won't necessarily agree with that. We've studied the Corps of Engineers report, and based on the information there about the approved or recommended water conservation program in there, which develops a yield of about 4100 acre-feet per year, the Corps' estimate is that that would impact the yield at Prado by about 900 acre-feet per year.

MR. CIHIGOYENETCHE: Now, is it fair to say, Mr. Mills, that by virtue of the MOU that was recently fully executed by all of the parties and the representations that have been made to this Board today thus far that Orange County has no intentions at this point in time to seek to amend the 42,000 acre-foot figure that is required to be delivered at Prado Dam aggregate by Inland Empire and Western?

MR. MILLS: That is correct.

MR. CIHIGOYENETCHE: I have nothing further.

H.O. BAGGET: Big Bear.

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 \_\_\_\_\_000\_\_\_\_
- 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?
- MR. MILLS: We signed it.
- 24 MR. GARNER: The sentence reads:
- 25 Through the OCWD petition and application

OCMD shall not obtain any right as against an upper area water user or entity inconsistent with the terms of the judgment despite any expenditure made by OCMD to capture and use the flows. (Reading.)

My question is: Does OCMD intend to obtain any ri<

at all against any upper area parties pursuant to its

petition and application in its rights as modified that is

inconsistent with the terms of the judgment?

MR. MILLS: We do not intend to acquire any additional rights other than those which we believe we have under the \*69 judgment.

MR. GARNER: So, through this petition and application CCWD does not intend to acquire any rights in addition to those it has under the 1969 judgment?

MR. MILLS: That is correct, except as to third parties who are not a signator or part of the judgment. We do expect to acquire rights over third parties that are not a part of the judgment.

MR. GARNER: "Third parties," could you define that term a little bit for me?

MR. MILLS: A third party is someone who is not a signatory to the '69 judgment and is -- I believe is someone who resides, perhaps, outside the watershed. Could be the City of San Diego. Could be a south county interest. Could

- 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.
- Thank you.
- H.O. BAGGET: Thank you.
- 24 Staff.
- \_\_\_\_oOo\_\_\_\_

## CROSS-EXAMINATION OF ORANGE COUNTY WATER DISTRICT BY STAFF

MR. FRINK: Mr. Mills, I have a few questions.

OCMD Exhibit 6 was your water right application, and Attachment 3D to the application states:

Water is diverted directly to the groundwater basin through the river bottom along a six-mile stretch between Imperial Highway and Ball Road. (Reading.)

It also lists a number of other places that water is diverted to the groundwater basin. But with regard to the direct diversion of water to the groundwater basin in that six-mile stretch of river, my question is

MR. MCNEVIN: Excuse me, Mr. Frink, which attachment?

MR. FRINK: 3B to Exhibit 6, to the water right application.

MR. MCNEVIN: We've go it now. Thank you.

MR. FRINK: The question I had is this: Is a portion of the water diversion that is referred to in that six-mile stretch of river between Imperial Highway and Ball Road, is that simply the seepage that occurs in the river as the water flows down the channel of the river?

MR. MILLS: Yes. We augment that seepage by artificially constructing the T levees and the L levees 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
- 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
- above sea level. And if there is a pending, immediately
- 22 pending, storm, they will release that. Otherwise they will
- 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

to hold water all the way up to an elevation of 505, some 27,000 acre-feet of water. They would release that at a rate of 500 cubic feet per second, which is our sustained percolation rate downstream, but no more than that.

MR. FRINK: I believe that answers my question.

MS. MROWKA: Just to follow up on the question, then
On your Exhibit 22 where you depict the summer Santa

Ana River flow recharge and the base flow at Prado, in
testimony you were indicating this as storm flows. What
those are would be the released flows from Prado under the
terms of your agreement?

MR. MILLS: Exactly. We have complete operational control of the dam during the summer period, unless there is some torrential rain that occurred and there might be a flood issue. What you see on this Exhibit 22 is the total amount of recharge during that particular period, including both base and storm flow. We've simply shown on here how much of that is base flow during that period. So the difference between the two is the storm flow that we captured.

So in some years it is taken by us at the end of September before we were able to completely empty the reservoir because of its large capacity.

MS. MROWKA: Thank you.

MR. FRINK: I would refer you to Exhibit 7. You were

looking at it earlier in response to a question. It is the letter dated August 21st, 1998, from yourself to --

MR. MILLS: I have it.

MR. FRINK: Page 4 of that exhibit, actually the second page of the supplement to the letter, it includes a table in the middle of the page that is entitled "Total Combined Direct Diversion and Storage."

Do you see that?

MR. MILLS: Yes, I do.

MR. FRINK: Some of the quantities of water listed as current conditions on the table, if I am reading it correctly, would be the 255,000 acre-feet under maximum diversion plus the 51,400 acre-feet under storage. So, it would equal 366,400 acre-feet.

Is that the total amount of water that Orange County Water District presently diverts from the Santa Ana River?

MR. MILLS: A total of 300- we actually recharge approximately 300,000 acre-feet per year, but not all years provide this kind of natural flow. So, our recharge capability is in this vicinity, but we actually supplement it with recharging of imported water supply. Typically, we recharge 300,000 -- 275- to 300,000 acre-feet per year.

MR. FRINK: Now, the total number at the end of the table is 507,800 acre-feet. Is it correct to conclude the amount of water that would be diverted as a result of future

projects, then, is the difference between the 507,800 acre-feet and approximately 300,000 or 306,000 acre-feet?

MR. MILLS: I have to study that a little bit, but I think that might be correct. But, again, we are dealing with natural flows here of the river system as opposed to supplemental purchases of water and recharged, but this would be of the native system.

MR. FRINK: So, of the water that is available in the Santa Ana River that you don't import, under current conditions you've recharged somewhere in the neighborhood of 300,000 acre-foot a year, acre-feet a year, and you would ultimately plan to increase that to approximately 507,800 acre-feet per year?

MR. MILLS: That's correct. This would be --the numbers here reflect a maximum potential and this would only occur in extremely wet years, a couple of el nino years in a row that would generate the kind of water we are talking about here.

Normally, the river wouldn't produce this kind of water supply in a year-in-and-year-out basis. This is a -- as we were advised by the staff here some time ago to submitting our application what we thought we would need to do in the future, include our future capacity as well, also on a very wet period analysis. That is what this table reflects.

MR. FRINK: That answers my question.

- 1 Thank you.
- 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
- or intent or idea or even desire to interfere with the
- 14 applicant's petition at Seven Oaks Dam. While it may result
- 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?
- 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

Orange County Water District.

MR. FRINK: I would like the record to refer to the amount sought under the application so that we maintain distinction between a petition to revise the declaration versus an application to appropriate water.

MR. MILLS: I mentioned that we had previously analyzed the Corps of Engineers' study. And they indicated the new yield of Seven Oaks would be 4100 acre-feet, of which 900 acre-feet would be a diminishment of the yield at Prado Dam, That was submitted and we did submit that in an earlier submittal to the State Board staff.

MS. MROWKA: We heard testimony this morning that San Bernardino may choose to increase, and, in fact, double, the amount they seek under the application if this Board accepts the application to move it from 100,000 acre-feet to 200,000 acre-feet.

Does that have any affect upon your project and what you are seeking today?

MR. MILLS: I haven't had time to analyze that, but we do believe that what is occurring is that the dam in Seven Oaks is actually capturing much of the water or some of the water, a lot of the water they would capture there is water that we would have lost anyway. It is those very large spikes, those el nino years, that are just unavailable for capture in the Southern California environment. We can't

build reservoirs large enough to capture that flow.

I think as they move toward increasing their storage potential up there, I think that they will probably not really impact. I think a diminishing returns issue that they will impact us less and less as they capture more and more of a storm flow that we would have not been able to capture as well. But I have not had time to analyze that. But, again, we have no desire to object to that. We do believe that there will be a continuation of urban development in the valley floor which will continue to increase the amount of water available to us.

MS. MROWKA: And if I take the information you have given me which is flow records for Prado Dam and I wanted to apply that information to your application, I want to do evaluation of the amount of water that may be down there for purposes of revising the declaration, do I have to adjust the data in any fashion to account for the fact that your proposed points of diversions are not followed with that daml

MR. MILLS: You adjust for what purpose now?

MS. MROWKA: Because the proposed points of diversion on your application are at different locations to the stream system, is it necessary to do anything to the data you are presenting today to make adjustment to it in order to account for the fact your points of diversion are at 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, 1
- 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
- based on the fact that they're different locations?
- 15 MS. MROWKA: That is what I am asking.
- MR. MILLS: The answer is no.
- 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.
- Thank you.
- MR. MILLS: You're welcome.
- \_\_\_\_00o\_\_\_\_
- 13 CROSS-EXAMINATION OF ORANGE COUNTY WATER DISTRICT
- 14 BY BOARD
- 15 MEMBER FORSTER: I want to talk about this a little bit
- longer. When I understand their point of diversions, it is
- all their management area where they are trying to recharge
- in the basin, in Anaheim Lake, the side basins, the gravel
- 19 pits.
- And so, that is what you mean, right, about your point
- of diversions?
- 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

put it underground. So, we have this map here that shows all of your facilities that do that job for us. We are also in the process of improving and optimizing those facilities. So I don't mean to say that the water, all water, appears at Prado Dam from the exhibits I have show here is water that we capture. I'd love to be able to do that, but there is more there than we can capture in many years. Some years we can capture all the water, but that is the variability of water resources in Southern California and the state, in general.

But in operating Prado Dam we know what the availability of water and increased availability of Prado Dam is. Then we need to find ways, and this is the way we do it, is using these facilities to capture that water. The base flow, of course, is not an issue with respect to ability to capture. It is always less than our ability to percolate water. Were we never to get any storm water in the system, we could capture every drop of base flow that came down the river. It is only storm flow that is the most troublesome because it comes in such a variable rate.

Am I making this more confusing?

H.O. BAGGET: Any redirect?

MR. MCNEVIN: No, sir.

H.O. BAGGET: Mr. McNevin, do you have any exhibits you 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.
- S 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
- certainly he is not an expert in the field of water rights
- 22 law.
- 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

itself. It is a stipulated judgment entered by agreement a number of parties involved in that particular litigation, which did not include my clients. They're obviously not bound by it. And I don't think it advances our cause here to have Mr. Cavendar present his opinion as to what the judgment does or doesn't do. The document speaks for itself.

MR. O'BRIEN: Not objecting to the admission of the judgment into the record, but I do object to his

H.O. BAGGET: You are objecting not to the case?

interpretation of the judgment.

MR. COSGROVE: This is going to shock you, I think I agree with Mr. O'Brien. The document does speak for itself\*

I disagree that his clients are not a party to that

litigation. I think they've intervened and they are. We can argue legally at length. Possibly we will do so later, as to what the impact of that judgment is on his clients.

The representation by Mr. Cavendar was offered by way of background and it is not central to our case.

H.O. BAGGET: That sentence or portion of that paragraph interpreting the judgment shall be struck from the record.

MR. O'BRIEN: Thank you.

H.O. BAGGET: So ordered.

Proceed.

MR. COSGROVE: The Conservation District has submitted an opening statement in writing, and so I am just going to very briefly lay out some of the points that I think deserve emphasis that we are going to try to demonstrate by way of the case that we are putting on.

First is what I think has already been agreed to in the evidence that's been presented by the petitioners, and that is that there is no change in the hydrology of the Santa Ana River near Mentone. We are looking at in our case as directed toward Reaches 5 and 6, because those are the areas where the requests for appropriation are focused. We believe that evidence that there are water flows and potentially increased water flows at Prado in no way demonstrates changed circumstances in the area where the diversions are being requested now under the application that is pending.

We think it is a legitimate mode of analysis to look at hydrology in that area. And when one does, we think it is very clear, and at this point one would imagine stipulated, that whatever changes may have occurred out there they aren't changes to native flows in the area that my clients is concerned about, which is Reach 5 and 6. That leaves us with the dam and the Seven Oaks Dam and questions regarding the Seven Oaks Dam.

And I will submit to you that questions are all that we

have about that dam. There is allegation that a conservation pool is proposed that may hold water in the future. We have had varying accounts about how much may be held. One thing that is not disputed and that we will affirm through the evidence that we are going to present is that that is not approved. And you have heard policy statements. You have heard statements from sponsors saying that as it stands right now it is a flood control facility.

We will go over what we believe the studies on the conservation pool show and that the yields that are indicated on what has been selected are more than taken up in the historical diversions that the Conservation District undertakes. So, we don't believe that even if we take the leap of faith and speculate as to whether there will be a conservation pool and how it will operate, given the study that is on the table right now, we don't believe there is any allegation of new water.

In addition, although my reading of the petition, and it would appear the reading of Board staff as well, from the notice of hearing indicates that the conservation pool, and that proposal was the thrust of the petition, we are now hearing allegations that the regulatory affect of the operation of the dam, if the conservation pool is never approved, still there are regulatory impacts of the dam that 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.
- 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  $\circ$ f
- 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.
- 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 statements
- 17 Why are we here?
- 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
- evidence than just a visceral reaction that a big dam out
- there may operate at some point to hold flows. We are going
- to need more than that to overturn a fully appropriated

stream declaration. And we don't have it, and we are not going to have it, at least from what we have heard on the policy statements until the end of the year 2000.

We believe it is appropriate to wait until we know that dam is going to do, whether in its conservation pool configuration or at least under its regulatory operation before we go forward with overturning a fully appropriated stream declaration which will have the identical consequences that Mr. O'Brien emphasized. There is a lot of expenditure of money and a lot of further proceedings that are going to go on. And we think we should have those variables fixed, rather than speculate as to what the impacts will be before we go forward.

MEMBER FORSTER: Can I ask you a clarifying question?

I know I can.

There is something -- I wanted to dissect what I am saying. I am not questioning the fully appropriation part of the things you are talking about. But I find it rather infeasible that you said there is no data to help analyze how the dam is going to work. That is sort of in my terms what I am hearing you say. Nobody builds a dam -- the Corps doesn't do things like that without having lots of data, lots of projections, the local agency, the flood control district. I don't understand that.

I mean, there has to be -- the dam wouldn't have gotten

built if there wasn't a projection of what is going to hold back and quantify the terms. And I am sure there was a big debate on whether it should be a conservation dam or just a flood control dam. We listen to dam issues day in and day out. So I don't understand what you are saying, there is no data.

MR. COSGROVE: Precisely correct. I think that to the extent that the petitioners are relying on the regulatory impact of a dam to show changed circumstances, one would fully expect that there would be data in the written evidence that is submitted that would demonstrate how that dam is going to operate to create new water. We don't see it anywhere in the written testimony.

MEMBER FORSTER: That doesn't mean that data doesn't exist. It just hasn't been submitted for this hearing.

MR. COSGROVE: My understanding is that there is no permanent approved plan for that dam and it is in operation, as a flood control facility. We would be in a much better position in this hearing to explore those issues with the dam sponsors as witnesses if they were available for cross-examination. I don't know if they will be.

As it stands right now, where we are with respect to that, is we can only go on what we have been told by one of the dam sponsors, and we will submit evidence. Our Exhibit 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 i t 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
- 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.
- 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
- flows are shown for seasonality, and we will explain why
- 17 that is the manner in which we analyzed those flows. That
- is what we plan to prove today.
- 19 Thanks.
- 20 I will start with Mr. Cavendar.
- \_\_\_\_00o\_\_\_\_
- 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: Itis.
- 5 MR. COSGROVE: The Exhibits 2 through 5, are those true
- 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 1
- 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.
- 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
- € 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,
- which is Exhibit 2 in your file, this shows the water spread
- 11 by the Water Conservation District for the past 30 years
- which has been subsequent to the 1969 judgment that has been
- 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
- other years of absolute drought. So the annual average is
- what it is, but it will vary accordingly.
- 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?

MR. CAVENDAR: Yes, I have. I've recently corresponded with Ken Miller who is the head of the County Flood Control District for San Bernardino County. I specifically asked Mr. Miller a number of questions with regard to the operation and completion of Seven Oaks Dam.

MR. COSGROVE: Was that done in writing?

MR. CAVENDAR: Yes.

MR. COSGROVE: And did you respond in writing?

MR. CAVENDAR: Yes.

MR. COSGROVE: Exhibit Number CD3, is that a true and correct copy of the letter that you received from Mr. Miller in response to your questions?

MR. CAVENDAR: Yes.

MR. COSGROVE: What did Mr. Miller tell you with respect to the dam?

MR. CAVENDAR: The status of the dam is essentially completed for construction. However, its operation as a flood control district has not been finalized. They are still in the process of dealing with environmental, specifically for the San Bernardino kangaroo rat and the slender-thorned spineflower. Those mitigations have not been resolved. Until those are resolved, the Corps of Engineers will need to finish its biological assessment, as to the U.S. Fish and Wildlife Service to complete a 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
- flood control facility. They haven't been asked to look at
- it, the water conservation facility yet.
- 25 Their letter that was sent to the State Board is

- 1 Exhibit 4.
- 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, itis.
- 9 MR. COSGROVE: And the exhibits that are attached as 7
- 10 through 19, are those true and correct copies of records
- that you generated for analyses that you have looked at
- based on public sources of information?
- MR. HEADRICK: Yes, they are.
- MR. COSGROVE: Can you summarize for us the --
- MR. HEADRICK: Before I get started, I would like to
- make a couple of modifications or changes.
- MR. COSGROVE: Sure.
- MR. HEADRICK: The first is on my statement of
- 19 qualifications. My civil engineering license number as
- written is the wrong number. I don't know what "CC" is, but
- 21 it is not civil engineer. It should be C54190.
- MR. COSGROVE: Ms. Mrowka, that is Exhibit 7.
- 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
- discussing are the upper reaches. Again, those are Reach
- 5 is the reach that encompasses the alluvial plain over the
- 10 top of the Bunker Hill Basin or the San Bernardino Basin.
- And Reach 6 is the mountain watershed, the mountain stream
- from the headwaters near Mount San Gorgonio down to the
- 13 Seven Oaks Dam.
- You can also see Big Bear Lake there at the top, and I
- have identified the precipitation gauge that I will
- reference later in my testimony.
- The purpose of my study was, getting back to the key
- issues, was first of all to evaluate if unappropriated water
- exists in the Santa Ana River in Reach 5 and 6, and, if it
- does, during what season does that water exist.
- 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

the background of the USGS quad image.

MS. MROWKA: Excuse me, which exhibit?

MR. CAVENDAR: Nine.

MR. HEADRICK: What this shows is the mouth of the region of the location of Seven Oaks Dam and reservoir would be created at full capacity in a hundred-year event. And downstream of that dam the Water Conservation District's diversion structure on the northwest side of the river at that point. Hanging off our structure you can see a USGS, part of the USGS gauge structure that USGS uses to determine the extent of significant flows by that past that point. In the lower right-hand corner is a photograph of the auxiliary river diversion, also downstream of the dam, but taking water from the opposite side of the river.

In addition to this there is a third gauge that we talked about, is the gauge that measures the flow in the Edison flume which is shown up on the side of the hill to the northeast.

Next chart, please.

MR. HEADRICK: This is Exhibit 10. All of this isn't pertinent to today's discussion; won't go into all of that=

The important parts have been highlighted in nice bright colors. Those are the three USGS gauges, the two that make up the river only part of that, which would be 11051499 and 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
- determine the amount of unappropriated water that exists.
- 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
- of that precipitation. The long-term average or running
- 17 average is shown as a line, and at this point is
- 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.
- 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.

- 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
- 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.
- 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
- and subsequently being held in the lake, the net result is
- 16 really unknown. But you can see the offset as urbanization
- increases, wastewater flows increase out of the watershed,
- 18 but urbanization runoff increases occur to the lake itself.
- 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.
- 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
- 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 i f
- 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.
- 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

line is the equivalent discharge, average discharge, of that treatment plant, 26,000,000 gallons per day is roughly 40 cfs on this chart. And what it shows on this chart is that during roughly June through December the majority, if not all, of the flow of the river was made up of that treated effluent.

By the way, this period also includes a couple dry years and a couple wet years and a couple dry years.

Back to the urbanization up in Reach 5. Again, I not analyze that specifically. I do know from being a resident of the area that the building activity during time frame was relatively low. It is also my assumption that the increased flow due to urbanization is low is further supported by Orange County Water District Exhibit 18. Shows basically from the time period 1989 to 1999 there was about a 1-percent increase in the impervious cover for the entire region above Prado Dam, of which this is a part of.

Again, the conclusion is, at least during the dry season, the flows in the river at the bottom of Reach 5 were primarily treated effluent, which is now being discharged to Reach 4. And the river is basically dry at that point during this time frame.

Next I looked at the effects of the dam or conservation 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
- 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
- fully appropriated stream declarations and their revisions,
- 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.
- Next chart, please.
- 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 as
- 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
- 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,
- 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

results in a hundred cfs appropriation combination. This does not include any of the district's pre-1914 rights.

And my conclusion from this analysis was that at least during the period May through December there is no water available on an average basis.

Next I would like to move on to the conservation pool. I don't have an exhibit on this. I will just discuss this item.

I know there has been a lot of discussion already, so I won't belabor this issue. However, in my written testimony I have identified what was termed the selected plan for implementation out of the Army Corps of Engineers feasibility study or the conservation pool behind Seven Oaks Dam. That selected plan called Alternative 1 or the locally preferred plan included a conservation pool of 16,000 acre-feet annually. However, it did not -- the analysis used to determine the effective yield of that facility did not include or take into account any historical diversions by the Water Conservation District or by Bear Valley at the river pickup which has been termed the auxiliary gauge or USGS 11051502.

What the plan showed, this alternative one or the selected plan was a yield of roughly 4100 acre-feet per year that could be conserved in the conservation pool. However, if you take into account what the Conservation District has

actually diverted during just that three-month period that was analyzed, March 1st through May 31st, the Conservation District has actually diverted and recharged to the basin from 1912 to 1998 4,948 acre-feet. So roughly a difference of 800 acre-feet, per year.

So, in conclusion, at least based on the Corps' study, it would appear as if the majority, if not all, of the water identified in the selected plan has just been shifted from the Conservation District's diversion upstream and being held behind the dam as a conservation pool.

Thank you.

MR. COSGROVE: Nothing further.

H.O. BAGGET: Let's take a ten-minute break. Be back at 20 after.

(Break taken.)

H.O. BAGGET: Let's start from the top and down.

Mr. O'Brien.

MR. O'BRIEN: Thank you. I think I will have a seat this time.

\_\_\_\_000\_\_\_\_

## CROSS-EXAMINATION OF

SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT

BY SAN BERNARDINO VALLEY MUTUAL WATER DISTRICT &

WESTERN MUTUAL WATER DISTRICT

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
- 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.
- 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

was urbanization and wastewater runoff. So I just looked at those.

MR. O'BRIEN: You are not assuming that Muni and Western have to be able to demonstrate the existence of new water in that upper watershed area to be able to pursue application?

MR. COSGROVE: Again, legal conclusion.

MR. O'BRIEN: That was not your assumption?

MR. HEADRICK: That was not an assumption made in analysis.

H.O. BAGGET: I didn't rule on his last objection.

MR. O'BRIEN: Sorry.

H.O. BAGGET: I think I will overrule that one, also.

You can answer your answer doesn't have to be struck.

MR. O'BRIEN: Sorry.

Let's try a hypothetical here. Let's assume that there has been no increase in the upper reach of the watershed. I believe it is Reach 6; is that correct? Above Seven Oaks Dam?

MR. HEADRICK: Yes.

MR. O'BRIEN: Let's assume that there has been no urbanization, no precipitation. Let's assume there has bean new water made available to the river system in a reach between the Seven Oaks Dam and Riverside Narrows.

Do you have that in mind? Do you understand my assumed

facts?

So, no new water in the upper reach. New water in reach between the dam and Riverside Narrows.

Okay?

MR. HEADRICK: Okay.

MR. O'BRIEN: Let's also assume that because of the nei water that has been made available in the reach below the dam that there is now water flowing at the Narrows that is surplus to the requirements of the 1969 Orange County Judgment.

Okay?

MR. HEADRICK: Okay.

MR. O'BRIEN: And let's also finally assume that it is possible Muni and Western to divert that increment of surplus water that is present at Riverside Narrows at the Seven Oaks Dam and it is possible to do that without adversely affecting prior right holders. Including Conservation District.

Do you understand that?

MR. HEADRICK: I am not sure if I do.

MR. O'BRIEN: Well, there is an increment of water at Narrows in excess of the Riverside Narrows obligation.

Let's say, hypothetically, it is 10,000 acre-feet. Muni Western now want to try to divert that 10,000 acre-feet at Seven Oaks Dam.

Okay?

And under my hypothetical they can do that without adversely affecting or injuring any of the prior right holders?

Okay? Do you understand my facts as I have given to you?

MR. HEADRICK: They are facts?

MR. O'BRIEN: They are assumed facts.

MR. HEADRICK: Yes, I understand them. Yes.

MR. O'BRIEN: To your knowledge, would there be Injury to any other water user in the Santa Ana River watershed if Muni and Western was to take that surplus increment of water that is existent at the Narrows and divert it upstream at Seven Oaks Dam under the facts of hypothetical?

MR. COSGROVE: I will object. The question as submitted as a hypothetical is incomplete. You are --he doesn't have a hypothetical with respect to what the extent of the water rights are of all the people in between the points of diversion in the state.

H.O. BAGGET: I will sustain --

MR. ALADJEM: If my numbers are correct and as Mr. Headrick testified in his written testimony, there are no water rights between the Conservation District diversion the Riverside Narrows or Prado.

MR. COSGROVE: Correct. But the hypothetical was between the dam and Prado, and there is somebody in between there.

MR. O'BRIEN: That is not correct. Between the dam and the narrows. Let me ask the question.

Is there any water right holder within the Conservation District between Seven Oaks Dam and Riverside Narrows that you are aware of?

MR. HEADRICK: Yes.

MR. O'BRIEN: Who is that?

MR. HEADRICK: Bear Valley Mutual Water Company and their contract obligations to other water companies.

MR. O'BRIEN: Isn't it true that Bear Valley Mutual takes most, if not all, of its water out of the system through the Southern California Edison diversion?

MR. HEADRICK: During which period of time are you talking about?

MR. O'BRIEN: Historically.

MR. HEADRICK: I would say that would be true until five years ago.

MR. O'BRIEN: Let's just assume that the Bear Valley

Mutual Water Company's water requirements have been met.

Okay? Let's assume that having met that requirement and

requirements of your district and the requirements of other

prior rights companies, there is still surplus water at the

- 1 Narrows in the amount of 10,000 acre-feet surplus to the
- 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
- 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
- water law, as we all know. And I think if Mr. Headrick
- 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.
- 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
- needs to be shown. I guess that is the problem I am having,
- 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

witness to draw a legal conclusion about injury on other holders of water rights and so forth. I think that it is apparent through the interchange that we have had here, that the point Mr. O'Brien is trying to make can better, more expeditiously, be made on rebuttal.

If you want to ask, are there any other diverters in a given area of the river, that is a fair question, but I think asking this witness to conclude rather there is legal injury to various people does call for a legal conclusion, And in that sense the objection should be sustained.

H.O. BAGGET: I would sustain the objection.

Can you rephrase?

MR. O'BRIEN: I will move on.

Mr. Headrick, are you familiar with the concept of regulatory affect of a dam like Seven Oaks Dam; is that correct?

MR. HEADRICK: The concept of it, yes.

MR. O'BRIEN: The concept is that a dam like Seven Oaks slows down the flow of a river like Santa Ana River, you agree with that?

MR. HEADRICK: Yes, it could do that.

MR. O'BRIEN: Would you agree that the existence of Seven Oaks Dam currently on the Santa Ana River does, in fact, slow down the flows of the river?

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?
- MR. HEADRICK: The water rights application, yes.
- 17 MR. O'BRIEN: You are aware that part of that water
- 18 rights application includes a regjuest for direct diversion
- 19 of water from the Santa Ana River; is that your
- 20 understanding?
- MR. HEADRICK: Yes.
- 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

granted?

MR. HEADRICK: Under certain circumstances of the dam operation, yes.

MR. O'BRIEN: Now, you prepared an analysis that you went through in your direct testimony related to hydrology of the Santa Ana River.

Would you agree that the hydrology of the river is generally variable?

MR. HEADRICK: Yes.

MR. O'BRIEN: Just so we are talking about the same language, what do you mean when you say the hydrology is variable?

MR. HEADRICK: There are periods of high flows and periods of low flows.

MR. O'BRIEN: When you are dealing with hydrology like this, is there any reason why one should be cautious when using averages for purposes of hydrologic analysis?

MR. HEADRICK: Could you repeat the question?

MR. O'BRIEN: Sure.

When you are dealing with a variable stream system such, as the Santa Ana River, is there any reason why an engineer ought to be cautious about using averages for purposes of hydrologic analysis?

MR. HEADRICK: I would expect there are times, yes.

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.
- € 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
- type, I believe; is that correct?
- MR. HEADRICK: On an annual average basis, yes.
- MR. O'BRIEN: The analysis you performed is based on a
- 14 analysis of long-term average flows in the river, I believe^
- 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?
- MR. HEADRICK: Yes, I did.
- 21 MR. O'BRIEN: Is that reflected in your testimony?
- 22 MR. HEADRICK: No, itism'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

available for appropriation during the May through December time period; is that correct?

MR. HEADRICK: Yes.

MR. O'BRIEN: I believe in your testimony you state that this analysis of yours, even disregarding the pre-1914 rights that are claimed by the Conservation District; is that correct?

MR. HEADRICK: That's correct.

MR. O'BRIEN: I want to make sure I understand that.

So you are saying that taking all the other water right holders in the system and applying only the diversions that the Conservation District makes under its post 1914 rights, the two licenses, that essentially there is no extra water available in May through December on an average flow basis. Is that your testimony?

MR. HEADRICK: That is what the chart shows, yes.

MR. O'BRIEN: I would like you to turn your attention to Muni/Western Exhibit Number 7, which is a memorandum prepared by you and sent to Mr. Stan Fuller at Muni, dated September 16, 1998.

Is that a document you prepared?

MR. HEADRICK: Actually, it is dated --it was prepared by Conservation District. I actually, I believe, sent this fax.

MR. O'BRIEN: Any reason to believe the data attached

- 1 to the fax is inaccurate in any way?
- 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
- Muni/Western Exhibits 5 and 6, they authorize the diversion
- of, I believe up to an aggregate amount of, 10,400
- 12 acre-feet; is that correct, combining both of them?
- MR. HEADRICK: Per year, yes.
- MR. O'BRIEN: I believe there is a limitation as to the
- diversion season in both of those licenses. In 2831 the
- diversion season is limited to January 1 to May 31; is that
- 17 correct?
- MR. HEADRICK: That's correct.
- MR. O'BRIEN: In 2832 it's limited to October 1 to
- December 31, correct?
- MR. HEADRICK: Yes.
- 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?

MR. HEADRICK: I believe so.

MR. O'BRIEN: Let's get back to your data and keeping in mind your conclusion that there is no water available during the period May through December, based on your average flow analysis, it appears to me that if you look at this spreadsheet, starting in 1969, and you focus on the months of May through the end of September, there has been & significant increase in the diversions of water by the Conservation District when you compare the pre-1969 period to the post 1969 period during those months.

Would you agree with that?

MR. HEADRICK: In those months you are talking about would be?

MR. O'BRIEN: Would be May through the end of September.

MR. HEADRICK: Looking back at 1914, '15, '16, '22, I see very high diversions and recharge for that -- during that period.

MR. O'BRIEN: But then for a period of many years there is very little diversions during that period, wouldn't you agree?

MR. HEADRICK: Yes.

MR. O'BRIEN: And beginning in about 1969 the diversions there in the May through October 1 period seem to 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.
- MR. COSGROVE: With all due respect, the case of the
- 25 Conservation District isn't that the pre-1914 take up all  $\circ$ f

the available water. The case that has been presented that there isn't unappropriated water based on the chart that shows Bear Valley and it shows from our licenses.

And in addition, I don't understand that we are here to litigate the issue of the validity of the Conservation District's pre-1914 rights, but rather the changed conditions. The changed conditions pertaining to either what the effect of the dam is or what the seasonality of the flows are. And the evidence as presented is with respect to Bear Valley and our license, not the pre-1914 rights.

So, I would object to the line of questions on the basis of relevance as well.

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

Please try to answer, to the quantified rights as you know they exist. We are not asking for a legal conclusion, but I would tend to agree that where the question is going I would like to have the question clarified, but answer it\*

MR. CAVENDAR: The answer to the quantity is unknown.

It will vary from year to year, depending on what other

prior rights were in front of us that are senior to us, what

they take and what is left over.

MR. O'BRIEN: Is there a maximum quantity?

MR. CAVENDAR: No.

MR. O'BRIEN: There is no maximum quantity?

MR. CAVENDAR: There is one chart that talks to 150,000

- 1 or 250,000 acre-feet.
- 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
- g 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
- of whether the groundwater basin needs to be replenished; is
- 15 that correct?
- 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.

MR. COSGROVE: X will object to this line of questioning based on relevance.

MR. O'BRIEN: I will move on.

H.O. BAGGET: Thank you.

MR. O'BRIEN: Mr. Cavendar, you've undertaken some efforts to try to get this proceeding postponed, have you not?

MR. CAVENDAR: Some, yes.

MR. O'BRIEN: You have written letters to a number of water users in the area suggesting that they write letters to the Board and request for postponement?

MR. CAVENDAR: I wrote one letter.

MR. O'BRIEN: Are you aware that there will be an environmental process that will precede any decision by thi; Board to grant an appropriative water right?

MR. CAVENDAR: Yes.

MR. O'BRIEN: Wouldn't you expect that that
environmental review process and the opportunity you will
have to comment on alternatives, mitigation requirements, ei
cetera, would provide a useful procedural framework for
discussing some of the issues that are important to the
Conservation District?

MR. CAVENDAR: Absolutely not.

MR. O'BRIEN: You don't think the CEQA and NEPA procesi will have any value to you whatsoever?

MR. CAVENDAR: I didn't say that.

MR. O'BRIEN: Will you participate in that process?

MR. CAVENDAR: Of course.

MR. O'BRIEN: Will you put up 4-17? This is a bar graph that is Muni/Western 4-17. That is actually a reproduction of the data that was submitted to us by Mr. Headrick, and as reflected in Exhibit 7. I just had a couple questions for you.

These represent the historical diversions of the Conservation District. It appears that there was a period of time from approximately 1939 to approximately 19- -- jui before 1969 where the district's diversions of water from the Santa Ana River with one exception did not exceed the amount of 10,000 acre-feet.

Is that consistent with your understanding?

MR. CAVENDAR: Are you talking to me?

MR. O'BRIEN: Yes.

MR. CAVENDAR: Would you rephrase your question?

MR. O'BRIEN: Sure.

The historical record of the Conservation District diversions seems to suggest that there was a period from approximately 1938-39 to approximately 1969 in which the Conservation District diversions generally stayed below 10,000 acre-feet with I believe the exception of 1968, I believe.

Is that consistent with your understanding?

MR. CAVENDAR: Yes.

MR. O'BRIEN: And it also appears that since 1969

Conservation District diversions from the Santa Ana River have increased fairly dramatically.

Would you agree with that?

MR. CAVENDAR: Yes.

MR. O'BRIEN: Now, you heard the questions I asked Headrick about the regulating affects of Seven Oaks Dam?

MR. CAVENDAR: I heard them.

MR. O'BRIEN: Do you agree with his testimony and response to those questions?

MR. CAVENDAR: Yes.

MR. O'BRIEN: Has the Conservation District considered the question of whether the existence of Seven Oaks Dam will enable you to divert more water in the future because of this regulating effect?

MR. CAVENDAR: Yes.

MR. O'BRIEN: Have you developed any plans in that regard?

MR. CAVENDAR: Yes.

MR. O'BRIEN: What are those plans?

MR. CAVENDAR: We anticipate constructing more and replacing the water conservation ponds that the Corps of 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?
- MR. O'BRIEN: Yes. Sure.
- 12 Let's say during the next ten years do you plan to
- increase your diversions?
- MR. COSGROVE: Same objection. From what base?
- MR. O'BRIEN: Okay.
- 16 Let's say we are able to state here and calculate the
- average diversions by the Conservation District during the
- period 1969 to the present. Do you anticipate that the
- 19 average diversions by the Conservation District during the
- 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 i t is precipitation and rain brings i t
- 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.
- I have no further questions.
- 19 Thank you,
- H.O. BAGGET: Thank you.
- Orange County, Mr. McNevin.
- 22 ---00o---
- 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?
- MR. MOSKOWITZ: No questions.
- 14 H.O. BAGGET: East Valley Water Districto
- 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	000
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 $\ensuremath{\mathtt{f}} \circ \ensuremath{\mathtt{r}}$
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.
- 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
- 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: Notifitis 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

in chief.

MR. COSGROVE: For current purposes we have the witnesses to answer what the subject matter was, subject matter in the analysis was.

H.O. BAGGET: That is fine.

MR. HEADRICK: Is that appropriate?

What I found was that when you look at just the river gauges, which all the further analysis of Mr. Beeby was. based on, which is USGS 11051500, again, the two river gauges, that that period was actually a fairly significant dry period. I mean a fairly significant wet period, not a dry period as he found when you analyze all three gauges. Remember, the third gauge bypasses the dam and does not interact at all with the stream system under normal conditions. It is taken through the Edison flume system delivered directly to irrigators or treatment facilities.

MS. MROWKA: I will hold any other questions on that the moment.

Did you find any errors in the fact that he did not utilize the average flows referred to as means and those types of numbers?

MR. HEADRICK: I believe his statement today was that he actually did take monthly averages and just accumulated those through time.

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
- River flow. Can you please explain to me which gauge you
- S used to prepare that?
- 9 MR. HEADRICK: For the --
- 10 MS. MROWKA: For the Santa Ana River flows?
- MR. HEADRICK: It's listed at the bottom, 11051501.
- 12 It's the total river flow. Just trying to show that
- correlation between what rainfall happens in a fairly large
- 14 watershed and Big Bear seems to be indicative of what leaves
- the canyon in any one year.
- MS. MROWKA: I am sorry, I put an exhibit label over
- 17 that. That was my doing there.
- I wanted to ask a few questions regarding this. Is it
- standard engineering practice to compare watersheds of these
- sizes, one versus the other, or is there any issue with
- 21 respect to this type of comparison?
- 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

in size of those two watersheds is as order of magnitude issue?

MR. HEADRICK: I might be able to determine that from here. I don't have that number right off. The Big Bear basically captures flow above this, in this general area.

MS. MROWKA: Can you explain that so it is apparent on the transcript?

MR. HEADRICK: The watershed that flows into Big Bear

Lake. It looks like in comparison to the whole Santa Ana

River watershed above the Santa Ana or above Seven Oaks Dam?

MS. MROWKA: I am only referring to what you prepared for Exhibit 12. I just want a sense of the size of the watershed that you compared to the other watershed.

MR. HEADRICK: What I was trying to show with this is precipitation gauge that exists at Big Bear Dam is indicative of the precipitation and hence the flow out of the entire watershed.

MS. MROWKA: If you could give me a sense of perspective, how large in comparison to Big Bear Dam watershed is that Santa Ana River watershed?

MR. HEADRICK: It looks it could be as large as an order of magnitude larger. I don't know. I am trying to if you're talking about the water that ends up at the dam as compared to the land that actually catches the water that ends up behind Big Bear Dam in comparison to the land that

- 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.
- \_\_\_\_\_000\_\_\_\_\_
- 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
- 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
- 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
- S health of the forest, the duff layer, density of the forest
- 9 over time?
- MR. HEADRICK: No, I did not.
- 11 H.O. BAGGET: In terms of capacity absorbed, so on?
- MR. HEADRICK: I just made the assumption that if it is
- forest now it was forest then and it probably hasn't
- changed.
- H.O. BAGGET: Thank you.
- 16 MS. MROWKA: If I was to utilize the information you
- prepared today and talked about, the diversions your
- district does, and I was to always utilize the data that we
- have received from the petitioner, San Bernardino, what
- 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.
- \_\_\_\_000\_\_\_\_
- 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
- am paraphrasing, an adequate opportunity for addressing the
- issues that have apparently been raised in these
- proceedings; is that correct?
- MR. CAVENDAR: I did say that.
- MR. COSGROVE: What did you mean by that?
- MR. CAVENDAR: I think that there is a better way to
- get at the issue of how to manage the water in the San
- Bernardino Basin than through a CEQA and NEPA process. If
- you can adjust and reach a conclusion on how to manage the
- 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
- 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.

MR. COSGROVE: Just one question for Mr. Headrick.

had indicated that the dam could slow certain flows down

potentially make more water available for diversion in

response to a question from Mr. O'Brien; is that correct?

MR. HEADRICK: Yes.

MR. COSGROVE: When you said that, were you discussin about the operation of the dam theoretically?

MR. HEADRICK: That's correct.

MR. COSGROVE: Have you had any data made available for you on how that dam will operate permanently to assess whether the theoretical impact that you talked about is actually going to happen under the conditions for the operation of Seven Oaks Dam?

MR. HEADRICK: No permanent record that I know of,

MR. COSGROVE: I don't have any further questions.

H.O. BAGGET: Recross.

MR. O'BRIEN: Nothing further.

I would like to offer the three exhibits, 5, 6 and 7, into the record.

H.O. BAGGET: The two water rights licenses and amendment. Unless there is objection, they will be admi in.

No objection.

MR. COSGROVE: I don't have any objection. I would 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
- General Manager. We have submitted for the Board's
- convenience and the convenience of the parties our opening
- statement. I would like to summarize it briefly and amplify
- briefly what some of the testimony you have heard today.
- We have heard a lot of technical testimony today. And
- I have to tell you that lurking behind the seeming dullness
- of that technical testimony is probably one of the most
- interesting issues you're going to deal with and this Board
- is going to deal with probably in the next decade.
- 19 This Board and Regional Boards have pursued a very
- 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
- into almost potable water, virus-free, disinfected
- 24 water. And you have achieved that. In the case of the City
- of San Bernardino we have spent about \$40,000,000 on the RIX

plan doing that with your help, and thank you.

One of the things that happened, though, in the course of making that transformation of nuisance water into pure water is that water has now become a very, very valuable commodity. So the question that is before the Board in the context of this hearing, who's going to get that water? Is it up for grabs? First one to file is going to get that water? Very specifically, somebody who didn't pay the \$40,000,000 going to be able to file on it and say, "It is unappropriated; it happens to be there"?

Very, very specifically, what is at issue here is whether the City of San Bernardino can take that water, put it in the Santa Ana River, ship it past Orange County, ship it past Prado to a customer of ours lower down on the Santa Ana River? These folks say no. And that is what this case is about.

If the Board rules that way, if the Board rules that way, you're going to have trouble and your successors will have trouble getting people to spend \$40,000,000 on a plant, We've heard a lot of testimony from Orange County and a lot of papers about the couple million they spent with basins catching our water.

MR. MCNEVIN: I object, your Honor. As opposed to an opening statement which is a review of the evidence, what w 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
- 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 --,
- 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

County Judgment, is that Orange County already gets an unlimited right under the judgment to take storm water. So they are not here for storm water. They have the right in an unlimited way for storm water.

But you have heard some interesting presentations about storm water. I don't want to belabor it here. If you look at their Exhibit 16, you will see they tell you interesting facts like how much runoff there is per inch of precipitation, and they have a slope that goes straight up. It compares the drought, when you expect that every inch of precipitation is going to sink into the ground and not runoff with a wet period that followed the drought when that didn't happen.

They take these all together and they have a slope that goes straight up. What you should really have is two flat lines for a dry period and a wet period. So, I think you have seen some manipulation. We pointed out others in our statement with respect to storm water. The reality is the main determinant of storm water flow is not extra paving in the district. We won't belabor that.

We are here to tell, however, that they are not here for storm water flow. They are get it anyway. We have been told that the judgment is not at issue, that you have MOU's that say everyone is going to obey by the judgment. Orange County will obey the judgment, and that is great. Except we

- 1 have dramatically, dramatically different opinions as to
- 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
- 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.)
- 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 COMD
- claims are subject to existing rights of
- 24 conservation upstream, but are not subject to
- any export activity by upstream users.

(Reading.)

What?

H.O. BAGGET: There appeared to be an objection.

MR. MCNEVIN: Thank you, I do have an objection. There is no question but that the dispute Mr. Moskowitz refers to over the ability to export natural water is out there.

However, that is not a part of this proceeding. In fact, at Page 7, Lines 15 to 16 of his purported opening statement --

MR. MOSKOWITZ: That was actually my opening statement.

MR. MCNEVIN: Mr. Moskowitz states:.

The city acknowledges that this proceeding will not determine what the right to the city's wastewater discharges will be as between the city and OCWD. (Reading.)

So, again, I would move to strike this as irrelevant.

It is not part of the proceeding today and ask that we move on to whatever relevant evidence there may be.

H.O. BAGGET: I sustain the objection and focus on whether it is a fully appropriated stream or not, not contract issues.

MR. MOSKOWITZ: One of the things, and really goes to the relevance of our testimony, we think our testimony is highly relevant. I don't hear an objection to it.

H.O. BAGGET: I sustained the objection. Just be aware of that.

- 1 MR. MOSKOWITZ: If, in fact, we do what we say we are
- 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.
- We are telling you today that it is not a reliable
- source of water. You cannot declare the stream as having
- unappropriated water, based upon water that is about to be
- sold. What is the point of that? So the issue as is to
- whether they, in fact, can stop us from doing that, well,
- maybe that is for the Orange County Superior Court. Maybe
- that is for the next proceeding. But the fact is that we
- are going to do it, which is the subject of our testimony
- today really requires you to answer the question of is theras
- unappropriated water.
- There is no unappropriated water. We are telling you
- that we are leaving. Seems to me you can't avoid that
- issue, if you are going to find that there is unappropriated
- water for them to appropriate, unappropriated water for
- 24 anyone to appropriate. In other words, our rights,
- vis-a-vis, there may be the subject of something else, some

- 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.
- 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
- opportunity to take this water is the last chance to get to
- 14 this water before it hits the ocean. Our testimony is going
- 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.
- You have heard testimony from Mr. Mills that this water
- is hard to reuse and so, therefore, it is a reliable source
- of continued, in fact, increased flows. Our testimony will
- 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
- 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

- of our proposed reuse, therefore, it is not a reliable
- 2 source. Therefore, this is not water available for
- 3 appropriation. That is it.
- \_\_\_\_000\_\_\_\_
- 5 DIRECT EXAMINATION OF THE CITY OF SAN BERNARDINO
- 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
- submitted a declaration that I signed. But in essence the
- summary of that declaration is that the City of San
- Bernardino Municipal Water Department and the City of Colton
- entered into a joint powers agreement whereby they formed an
- authority that administers the rapid infiltration and
- extraction facility that we have been referring to as RIX
- facility.
- The City of San Bernardino is currently 80-percent
- owner of that facility and Colton is a 20-percent owner of
- 19 that facility.
- The City of San Bernardino Municipal Water Department
- currently sends about, on an average, 26 mgd down to the RIX
- facility for tertiary treatment through that facility.
- 23 Colton contributes about 6 mgd although that is an average
- amount as well. We then turn around the RIX facility
- 25 turns around and discharges to the Santa Ana River

approximately an average of 43 mgd, which translates as I understand it, and I am not a scientist or any kind of an expert in engineering, which I understand translates to about 47,000 acre-feet per year.

Again, I'm not an expert and I am just trying to do a translation that I heard was fairly accurate.

The reason that we discharge more than comes into the facility is because we overextract for containment purposes so that the water that is infiltrating in our basins does not exit the facility. So there is actually an overextraction amount.

Last year the City of San Bernardino concluded negotiations with a private water agency, private water company, and that contract is, for all intent and purposes, almost executory, except for the fact that we have to comply with California Environmental Quality Act before we sign the contract. So in essence what we have done is we have sat down with the private water company. We negotiated a price. We've negotiated a length of contract which is 20 years with options to extend. We have also negotiated an option for that private water company in the event that we undergo an expansion at the RIX facility that they would have an option to purchase everything that was available for them to purchase. And the only thing we are waiting for now 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. Is
- 11 essence what we have done is we have not agreed to sell
- 12 anything that Colton contributes. So we have taken that
- 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
- 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
- Valley Municipal Water District can meet its obligations
- 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

- 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.
- In the event that something happens with the contract
- 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
- our taxpayers have had to pay as best we can.
- We also, in our discussions with the private water
- company, discussed the potential for using the Santa Ana
- River as a conduit or water wheeling facility, and that is
- something we have contemplated and that the private water
- company has contemplated. Because of the nature of
- negotiations with the private water company, we have agreed
- that we would not reveal any trade secrets, so to speak, so
- 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
- 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,
- 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.
- And that is where we are very interested in the concept
- 16 that everything that reaches Prado would be for the benefit
- 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 associal
- 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.
- And I think that should conclude my testimony.
- H.O. BAGGET: Any questions, cross-examination?
- MR. O'BRIEN: No.
- H.O. BAGGET: Mr. McNevin.
- MR. MCNEVIN: Thank you.
- \_\_\_\_\_000\_\_\_\_
- 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
- of the RIX plant?
- MS. ALDSTADT: The rapid infiltration and extraction
- 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
- 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?
- 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.
- 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?
- MS. ALDSTADT: Yes, that is true.
- 24 MR. MCNEVIN: The same for the million and a half that
- it cost you to operate the plant each year?

MS. ALDSTADT: Yes.

MR. MCNEVIN: As a matter of fact, part of the logic for constructing the RIX plant was to save money over a typical tertiary compliance system?

MS. ALDSTADT: Yes, that is true.

MR. MCNEVIN: Now, the city does not today have the ability to sell that RIX water, does it?

MS. ALDSTADT: No, it does not.

MR. MOSKOWITZ: I am going to object to the question, ability. Legal ability? Factual ability?

H.O. BAGGET: Clarify.

MR. MCNEVIN: Sure.

You do not have a signed contract to sell RIX water, do you?

MS. ALDSTADT: No, I do not.

MR. MCNEVIN: You have not written your CEQA, your EIR, to sell that RIX water?

MS. ALDSTADT: Not yet.

MR. MCNEVIN: You mentioned you just sent out, you called it, a notice of proposal. I think you meant a notice of preparation?

MS. ALDSTADT: Yes, I did.

MR. MCNEVIN: You got back adversión comments on your NOP, didn't you?

MS. ALDSTADT: Not really, surprisingly enough.

- MR. MCNEVIN: You didn't call our comments adverse?
- 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?
- MS. ALDSTADT: I am not sure what -- couple years ago,
- 13 I am not sure.
- 14 MR. MCNEVIN: Was there discussion several years ago
- 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

access the Orange County aquifer for storage, which was a fundamental part of the proposal; is that correct?

MS. ALDSTADT: I have no idea.

MR. MCNEVIN: Would you help me with the math here for a second. The amount of RIX water you would sell, the amount of RIX water that you discharge right now you said 47,000 acre-feet per year?

MS. ALDSTADT: Actually, I think I am -- just to be sure so I am not leading anybody down the primrose path, X would say probably it is safer to say 43 mgd.

MR. MCNEVIN: Can we agree that a conversion rate of 1120 for mgd into acre-feet -- would you put your 30 years of experience, maybe Joel you will go along with that.

MR. MOSKOWITZ: I am getting so old I can't do i t anymore.

MR. MCNEVIN: I think you said 47,000, and I will agree to your conversion.

But you would not sell 16,000 acre-feet, that's your contractual obligation to San Bernardino/Muni; is that correct?

MS. ALDSTADT: Yes, that is correct.

MR. MCNEVIN: And you would not sell 7,000 acre' that is Colton's flows; is that correct?

MS. ALDSTADT: That's correct.

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
- 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.
- 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
- your overextraction, and I understand that is a moving
- 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?
- MS. ALDSTADT: I think that is close to the 14,000 that

I estimated as I was sitting over there. Yes, I think that is a fair statement.

MR. MCNEVIN: And that is as compared to a base flow at Prado of 150,000 in the last water years?

MS. ALDSTADT: I will have to take your word on the base flow.

MR. MCNEVIN: You have no basis to disagree?

MS. ALDSTADT: I am not an engineering expert or hydrologic expert. I have to take your representation as true.

MR. MOSKOWITZ: No foundation that she knows. So you can take it as anything.

MR. MCNEVIN: Thank you. No more questions.

H.O. BAGGET: San Bernardino Valley.

MR. COSGROVE: No questions.

H.O. BAGGET: East Valley.

----oOo----

## CROSS-EXAMINATION OF THE CITY OF SAN BERNARDINO

# BY EAST VALLEY WATER DISTRICT

## BY MR. KENNEDY

MR. KENNEDY: Good afternoon, Steve Kennedy on behalf of East Valley Water District.

Good afternoon, Ms. Aldstadt.

MS. ALDSTADT: Hi.

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 i f 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
- s money. We would try to do something to relieve either rates
- 9 or offset i t in some way, the infrastructure cost.
- 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?
- 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.
- MR. GARNER: No questions.
- H.O. BAGGET: Staff.
- \_\_\_\_oOo\_\_\_\_

## CROSS-EXAMINATION OF THE CITY OF SAN BERNARDINO

#### BY STAFF

MR. FRINK: I have just one question. Where is the water from the RIX plant discharged at the present time?

MS. ALDSTADT: Discharged and sent to Santa Ana River
Reach 4; it's above Riverside and below the freeway. The
only map that made any sense to me was the Water
Conservation District map. If you remember, the new
effluent site was down here somewhere and the old one was uj
there. Mr. Headrick was testifying about --

MR. FRINK: Excuse me, I just -- I believe you have answered the question. But a short answer would be all the water is currently discharged to the Santa Ana River; is that correct?

MS. ALDSTADT: Yes.

MR. FRINK: Thank you.

H.O. BAGGET: Ms. Forster.

---oOo----

CROSS-EXAMINATION OF THE CITY OF SAN BERNARDINO

#### BY BOARD

MEMBER FORSTER: Is all the water you are reclaiming imported water?

MS. ALDSTADT: To my knowledge there is very little imported water, if any.

MR. MOSKOWITZ\*. If I could ask a question on redirect

- 1 to clarify that last question.
- 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.
- S 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.
- MR. MOSKOWITZ: Thank you so much.
- 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

start? Should we wait until tomorrow?

MR. KENNEDY: Actually, Mr. Bagget, I think my presentation will be very short. In fact, just a few minutes, if that is okay.

H.O. BAGGET: Okay.

MR. KENNEDY: Once again, Steve Kennedy on behalf of East Valley Water District.

In addition to the witnesses listed in our notice to appear, present today is George Wilson who is a member of East Valley Board of Directors. I mentioned him because yesterday afternoon East Valley Board approved a document entitled Principal of Agreement, that was negotiated with the committee of Muni, Board of Directors. That addresses many of the concerns that were raised in the declaration of Robert E.. Martin that is on file with the State Board.

So, in reliance upon our understanding that that document has unanimous consent of Muni Board of Directors and that the terms contained in that document will be formalized into a final agreement at some later date, then East Valley will withdraw the objections to Muni's petition to revise the fully appropriated stream status of the Santa Ana River without prejudice to the ability of East Valley t< reassert those objections at any subsequent hearing on the water rights application in the event a mutually acceptable 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 MOD" and were not dismissed defendants in the 1969
- 9 judgment.
- 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.
- 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 quess I feel compelled to cross-examine his witness
- on it. I don't particularly want to do that, given the
- representations he's made. So I am wondering if there is a

way procedurally for you to reserve your position that you have without the necessity of going through the process of putting on witnesses and cross-examination.

MR. KENNEDY: If I may, there is two ways to approach that. One is with a stipulation that I suggested that it be admitted into evidence with the stipulation that our objections to Muni's petition is withdrawn. And the second way is I could ask that certain paragraphs in Mr. Martin's declaration be stricken and specifically those are Paragraphs 15 through 18 that deal with the objections directly. The rest of the paragraphs basically are background, provide the foundation for the exhibits that are attached to that declaration, if that is okay with Mr.

H.O. BAGGET: Is that satisfactory?

MR. O'BRIEN: That sounds like a good approach. If I could take a moment to look at it.

H.O. BAGGET: It will be accepted and received with Paragraphs 15 through 18 which will be stricken.

MR. O'BRIEN: That is acceptable to us.

H.O. BAGGET: Does any other party have an objection to the admission of these exhibits with deletions?

If not, staff have any comments or questions?

MS. MROWKA: I do. For record keeping purposes, the declaration of Robert Martin was not noted as a specific

exhibit number. We are denoting it as Exhibit E. MR. KENNEDY: Thank you. H.O. BAGGET: Thank you. I think it's probably time to close unless Inland Empire has as equally short a presentation. MR. CIHIGOYENETCHE: I am afraid I don't. H.O. BAGGET: I think this is probably a good place to wrap up for the day. People at least get home for dinner. With that, we are adjourned for the day. Thank you. (Hearing recessed at 4:45 p.m.) \_\_\_\_000\_\_\_\_ 

1					
2					
3					
4	STATE OF CALIFORNIA )				
5	) ss. County of Sacramento )				
6					
7					
8	I, ESTHER F. WIATRE, certify that I was the				
9	official Court Reporter for the proceedings named herein,				
10	and that as such reporter, I reported in verbatim shorthand				
11	writing those proceedings;				
12	That I thereafter caused my shorthand writing to be				
13	reduced to typewriting, and the pages numbered 9 through 258				
14	herein constitute a complete, true and correct record of the				
15	proceedings.				
16					
17	IN WITNESS WHEREOF, I have subscribed this certificate				
18	at Sacramento, California, on this 17th day of December				
19	1999				
20					
21					
22	\ 1				
23					
24	ESTHER F. WIATRE				
25	CSR NO. 1564				