12

14

15

16

17

18

19

20

21

22

23

24

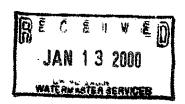
25

REPORTED BY:

STATE WATER RESOURCES CONTROL BOARD

PUBLIC HEARING

DIVISION OF WATER RIGHTS



PETITIONS TO REVISE

DECLARATION OF FULLY APPROPRIATED STREAMS

TO ALLOW PROCESSING OF TWO SPECIFIED APPLICATIONS TO

APPROPRIATE WATER FROM THE SANTA ANA RIVER

BONDERSON BUILDING

SACRAMENTO, CALIFORNIA

DECEMBER 8, 1999

ESTHER F. WIATRE CSR NO. 1564

1	REPRESENTATIVES (CONT.)
2	EAST VALLEY WATER DISTRICT:
3	BRUNICK, ALVAREZ & BATTERSBY
4	1839 Commercenter West San Bernardino, California 92412
5	BY: STEVEN M. KENNEDY, ESQ.
	SANTA ANA RIVER LOCAL SPONSORS:
6	ELLISON & SCHNEIDER
7	2015 H Street
8	Sacramento, California 95814
•	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	
14	ROBERT NEUFELD 9615 San Bernardino Road
7.7	Rancho Cucamonga, California 91729
15	
	CITY OF ONTARIO:
16	KEN JESKE
17	1425 South Bon View Avenue
	Ontario, California 91761
18	DIG BUILD ISBUTGIBLE WARREN DESCRIPTION
19	BIG BEAR MUNICIPAL WATER DISTRICT:
	SHEILA HAMILTON
20	DON EVENSON
21	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
25	Sacramento, California 95814

1	REPRESENTATIVES		
2	U.S. FOREST SERVICE:		
3	OFFICE OF GENERAL COUNSEL DEPARTMENT OF AGRICULTURE		
4	33 New Montgomery Street, 17th Floor San Francisco, California 94105		
5	BY: JACK GIPSMAN, ESQ.		:
6	CITY OF CORONA:		
7	GLENN E. PRENTICE 815 West Sixth Street		
8	Corona, California 91720	•	
9	CITY OF CHINO:		
10	JAMES ERICKSON 12616 Central Avenue		
11	Chino, California		
12	STATE OF CALIFORNIA AND STATE AGENCIES:		
13	DEPARTMENT OF JUSTICE OFFICE OF THE ATTORNEY GENERAL		
14	300 South Spring Street, Suite 5000 Los Angeles, California 90013		
15	BY: MARILYN H. LEVIN, ESQ.		
16	00		
17			
18		,	
19			
20			
21			
22			
23			
24			

INDEX

2		PAGE
3	RESUMPTION OF HEARING:	267
: 4	INLAND EMPIRE UTILITIES AGENCY:	·
5	OPENING STATEMENT:	
	BY MR. CIHIGOYENETCHE	267
6	TRACI STEWART	
	DIRECT EXAMINATION:	
7	BY MR. CIHIGOYENETCHE	270
	DOUGLAS D. DRURY	2
8	DIRECT EXAMINATION:	
	BY MR. CIHIGOYENETCHE	273
9	CROSS-EXAMINATION:	,
	BY MR. O'BRIEN	282
10	BY MR. MCNEVIN	284
	BY MR. GARNER	295
11	REDIRECT EXAMINATION:	
	BY MR. CIHIGOYENETCHE	296
12		
	BIG BEAR MUNICIPAL WATER DISTRICT:	
13		
	OPENING STATEMENT:	
14	BY MS. HAMILTON	300
	DIRECT TESTIMONY:	000
15	BY MR. EVENSON	304
	CROSS-EXAMINATION:	301
16	BY MR. MCNEVIN	309
	BY BOARD	312
17		712
	SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT &	
18	WESTERN MUTUAL WATER DISTRICT:	
		n .
19	REBUTTAL:	
20	R.G. BEEBY	
	DIRECT EXAMINATION:	
21	BY MR. O'BRIEN	317
Ì	ROBERT L. REITER	,
22	DIRECT EXAMINATION:	
1	BY MR. O'BRIEN	325
23	SAMUEL H. FULLER	
-	DIRECT EXAMINATION:	
24	BY MR. O'BRIEN	328
		340
25		

		~
1	INDEX (CONT.)	
. 2		PAGE
3	SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT & WESTERN MUTUAL WATER DISTRICT:	
4	REBUTTAL:	
5	PANEL: CROSS-EXAMINATION:	
6	BY MR. COSGROVE BY MR. MOSKOWITZ	332 345
7	BY MR. KENNEDY	349
8	ORANGE COUNTY WATER DISTRICT:	
9	REBUTTAL: WILLIAM MILLS, JR.	•
10	DIRECT EXAMINATION: BY MR. MCNEVIN	355
11	CROSS-EXAMINATION: BY MR. MOSKOWITZ	360
12	BY MR. CIHIGOYENETCHE BY MR. GARNER	367 370
13	BY STAFF	372
14	SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT:	
15	REBUTTAL: DOUGLAS HEADRICK	
16	DIRECT EXAMINATION: BY MR. COSGROVE	373
17	CROSS-EXAMINATION: BY MR. O'BRIEN	385
18	REDIRECT EXAMINATION: BY MR. COSGROVE	396
19	INLAND EMPIRE UTILITIES AGENCY:	:
20	REBUTTAL:	
21	TRACI STEWART WILLIAM CARROLL	
22	DIRECT EXAMINATION: BY MR. CIHIGOYENETCHE	398
23	CROSS-EXAMINATION:	

BY MR. MCNEVIN

BY BOARD

24

25

---000---

404, 410

SACRAMENTO, CALIFORNIA

WEDNESDAY, DECEMBER 8, 1999, 9:00 A.M.

---000---

HEARING OFFICER BAGGET: See if it sounds like we are getting close here. I think we left off with Inland Empire. Ready for the case in chief.

MR. CIHIGOYENETCHE: Morning.

H.O. BAGGET: Morning.

MR. CIHIGOYENETCHE: Couple of brief opening remarks.

My name is Jean Cihigoyenetche.

Honorable Board, I represent the Inland Empire

Utilities Agency and in another fashion many of the agencies incorporated within our geographical jurisdiction. Inland

Empire Utilities Agency is a municipal water district. It encompasses a geographical territory of approximately 235 square miles and services a population presently approaching 700,000 people.

As can be discerned thus far, I am sure by the Board, the concerns which our upper region brings us here to Sacramento is that lifting the declaration of fully appropriation would somehow jeopardize the terms and conditions of the 1969 judgment as it provides for the delivery of 42,000 acre-feet per year in the aggregate at Prado Dam. We are concerned that this hearing and ultimate ruling may be but the first step in modifying and increasing

our responsibilities.

.18

We are also concerned that Orange County and other third parties may be seeking to lay claim to our wastewater and storm flows which would adversely affect the Optimum Base Management Plan. For those reasons, we are going to put on a case in chief today that shows no change in circumstances have occurred, as suggested by Orange County Water District, which would warrant a lifting of the current declaration of full appropriation.

The evidence we believe will show, first of all, these increased flows, which are relied upon by Orange County Water District in their presentation, were fully considered and accounted for as early as 1960 when the original judgment was enacted and put into place. The evidence will show that through the terms and conditions of the judgment itself that credits were provided for and the accounting for credits were provided for.

Mr. Mills testified to a credit of over 1,000,000 acre-feet presently attributable to the northern region. Query, why would credits be taken into account in the judgment if excess flows were not contemplated at that time? Hence, no change in circumstances presently.

Secondly, the evidence will show that although perhaps historically we have not been as diligent in capturing these storm flows and utilizing our reclaimed water as we would

have liked, we are implementing complete plans. Some of these plans, including Ely Basin, and environmental reports are underway as we speak. So they are not just plans on the drawing board, but they are being presently implemented.

The evidence will show that ultimately all of the extra flows that are being referred to in this proceeding will be utilizing, enacting and implementing the Optimum Basin Management Program.

Traci Stewart will testify on behalf of the agency that she is in the process of preparing the Optimum Basin Management Plan and that she is under court order to do so. She has specific dates upon which that plan needs to be completed. And that without utilization of extra flows that we have been discussing here for the last day and a half, these plans cannot be met. They simply will not be accomplished. We are 100 percent reliant upon these flows.

Finally, in addition to the matters that we have briefly discussed as to why we believe there are no changed circumstances, we would also invoke by way of the 1969 judgment Section 8 of that judgment, which talks about jurisdiction and who has jurisdiction over changes, including changed circumstances and changes in the rights between the parties to that judgment.

We would submit in terms of the legal argument that the judgment supports exclusive jurisdiction in a Superior

1	Court, which we believe, pursuant to Section 8, has
2	preempted these issues presently before this Board.
3	So with that in mind, I would like to proceed with my
4	case in chief at this time. Ask Ms. Traci Stewart and Mr.
5	Doug Drury to step forward.
6	00
7	DIRECT EXAMINATION OF INLAND EMPIRE UTILITIES AGENCY
8	BY MR. CIHIGOYENETCHE
9	MR. CIHIGOYENETCHE: Start with Ms. Stewart.
10	If you could please state your full name.
11	MS. STEWART: My name is Traci Stewart.
12	MR. CIHIGOYENETCHE: Ms. Stewart, what is your current
13	occupation?
14	MS. STEWART: I am the Chief of Watermaster Services
15	for the Chino Basin Watermaster.
16	MR. CIHIGOYENETCHE: Now, prior to the hearing we had
17	submitted written testimony prepared by you and have
18	identified it as Exhibit B.
19	Is that a true and correct copy of your written
20	testimony?
21	MS. STEWART: Yes, it is.
22	MR. CIHIGOYENETCHE: As Chief of Watermaster Services,
23	you are presently in the process of preparing an Optimum
24	Basin Management Plan; is that correct?
25	MS. STEWART: Yes.

1	MR. CIHIGOYENETCHE: Can you explain to us what in
2	effect that is?
3	MS. STEWART: Under our adjudication, which as entered
4 .	in 1978, the Watermaster has the responsibility to develop
5	an Optimum Basin Management Program for the Chino Basin.
6	And essentially what that program is is it is to encompass
7	all of the flows and sources of water that will enable us to
8	fully utilize the groundwater basin that is the Chino
9	Basin.
10	MR. CIHIGOYENETCHE: You are under court order to
11	accomplish this task; is that correct?
12	MS. STEWART: Yes, it is. We had an order entered on
13	February 19, 1998, that required us to complete it. It
14	established a time line, and that time line is due to be
15	completed by June of 2000.
16	MR. CIHIGOYENETCHE: And how much money has been spent
17	thus far in preparing and implementing the Optimum Basin
18	Management Plan?
19	MS. STEWART: We spent at least \$3,000,000 in
20	development and early implementation items for the Optimum
21	Basin Management Program.
22	MR. CIHIGOYENETCHE: Does the OBMT, and I will use the
23	abbreviation that we banty about, does the OBMT take into
24	consideration the use of conservation and storm flows and
25	recycled water?

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

23

24

25

MS. STEWART: In our Optimum Basin Management Program we have nine program elements that we intend to pursue and develop. And among those program elements, two of them -- one of them is recharging, increasing our ability to recharge both storm flows and recycled water; and that would be in furtherance of program elements three and five which are to enhance -- maintain and enhance the yield of our basin by improving our water supply and addressing some of the impaired areas that we have in our basin, the challenges that we have there.

MR. CIHIGOYENETCHE: Now, under the judgment with which you are intimately familiar since you administer the Chino Basin Judgment; is that correct?

MS. STEWART: Uh-huh.

MR. CIHIGOYENETCHE: That is a judgment separate and apart from the Orange County Judgment that you heard discussed here previously?

MS. STEWART: That's correct.

MR. CIHIGOYENETCHE: Under the Chino Basin Judgment it is contemplated that additional water would be available for conservation and urbanization; is that correct?

MS. STEWART: Under our judgment we have established three pools, and those pools, they are based on categories of use. And one category of use is we call the appropriative pool. And those users serve municipal and

1		
2		
3		
4		
5	ı	
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		

industrial uses in our basin. And under our judgment the appropriative pool, and this is because of some things that occurred during the adjudication, some legal things. But that pool is entitled to any increases and must suffer any decreases that we take in the safe yield of the basin.

So, what was contemplated is that during development of our Optimum Basin Management Program, we would be enhancing our yield by utilizing the storm flows, improving our ability to conserve those storm flows and the increased runoff from urbanization as well as increasing our ability to use recycled water. And what we are anticipating is that we will improve our ability to do that to the extent of 30-to 40,000 acre-feet of increased storm flows and runoff and an additional, at a minimum, 30 to 40 acre-feet of recycled water.

MR. CIHIGOYENETCHE: Do you believe that lifting the declaration of fully appropriated stream would have an adverse effect on your plans?

MS. STEWART: This is why we are up here. We have concern that it could do that because of our requirement and court order mandate to use those flows and to improve our ability to manage our basin.

MR. CIHIGOYENETCHE: I have no further questions of this witness.

Mr. Drury, could you state your full name.

19

20

21

22

23

1	DR. DRURY: My name is Doug Drury.
2	MR. CIHIGOYENETCHE: What is your present occupation,
3	sir?
4	DR. DRURY: I am Executive Manager of operations and
5	Engineering for Inland Empire Utilities Agency.
6	MR. CIHIGOYENETCHE: How long have you held that
7	position?
8	DR. DRURY: For about four years.
9	MR. CIHIGOYENETCHE: Earlier I had submitted to the
10	Board the resume of Mr. Drury attached with my notice of
11	intent to produce witnesses. That was erroneously omitted
12	from my Exhibit list. If I could have that marked as
13	Exhibit H with Board's permission, the resume of Doug Drury?
14	MR. FRINK: That is fine.
15	H.O. BAGGET: That is fine.
16	MR. CIHIGOYENETCHE: Thank you.
17	And you had submitted to us earlier, Dr. Drury, a true
18	and correct copy of your resume; is that correct?
19	DR. DRURY: That's correct.
20	MR. CIHIGOYENETCHE: Previously we have submitted your
21	declaration, an amended Declaration, which has been
22	generally identified as Exhibit A. Is that a true and
23	correct copy of your written testimony, sir?
24	DR. DRURY: With the exception of the spellings of
25	percolation it is.

	!
1	MR. CIHIGOYENETCHE: Typographical errors omitted, that
2	is your testimony?
3	DR. DRURY: That's correct.
4	MR. CIHIGOYENETCHE: You had to get that in, didn't
5	you?
6	Now, you too, Dr. Drury, have involvement with the
7	Optimum Basin Management Program; is that correct?
8	DR. DRURY: That's correct. I have been an active
9	participant in the process.
10	MR. CIHIGOYENETCHE: What is the nature of your role in
11	that process?
12	DR. DRURY: Basically, just one of the participants.
13	The process includes all the different water users and
14	wastewater treatment people in the Chino Basin area, and
15	everybody's represented. And I have been one of the
16	representation people active in the process.
17	MR. CIHIGOYENETCHE: You are familiar with the nature
18	of the plans that are being implemented at the present time
19	to increase the use of wastewater?
20	DR. DRURY: Yes. We've put together a plan for
21	recycling and reuse of our wastewater in the area, and we
22	have made several presentations, both to OMP and to our
23	various agencies in the area.
24	MR. CIHIGOYENETCHE: We have attached, also, a

presentation and identified it as Exhibit D in our notice.

1	Is that a true and correct copy of the presentation you are
2	referring to, sir?
3	DR. DRURY: Yes, sir.
4	MR. CIHIGOYENETCHE: What basically is that
5	presentation about?
6	DR. DRURY: Basically it is a presentation of our plan
7	to recycle wastewater. It goes through all the possible
8	scenarios we have in terms of development of recharge
9	sites. It talks about our use of recycled water, both
10.	present and in the future, and tries to quantify those
11	waters.
12	MR. CIHIGOYENETCHE: How much water, wastewater, is
13	being discharged by Inland Empire at this point in time?
14	DR. DRURY: We discharge somewhere between 50- and
15	60,000,000 gallons per day.
16	MR. CIHIGOYENETCHE: Can you tell the Board a little
17	bit about what Inland Empire's plans for reclaimed water are
18	as time progresses?
19	DR. DRURY: Basically, we plan on increasing the amount
20	of recycle and reuse in the area. That is a very simplified
21	version. But we want to recharge. We want to blend with
22	storm water and blend with State Project Water our effluent
23	into the groundwater basin. In addition we want to dual
24	pipe new development areas and use that for landscape

irrigation.

1	MR. CIHIGOYENETCHE: You have a couple overheads you
2	have pulled directly from Exhibit D; is that correct?
3	DR. DRURY: That's correct.
4	MR. CIHIGOYENETCHE: Would you go ahead and put those
5	on the board.
6	This is part of Exhibit D; is that correct?
7	DR. DRURY: That's correct.
8	MR. CIHIGOYENETCHE: Can you explain to us what this
9	depicts?
10	DR. DRURY: What it shows is, first off, the boundaries
11	of our district. And then we have located here all of the
12	recharge basins in the area in green. We have located our
13	wastewater treatment plants in brown. And then we have
14	located our backbone of our water reclamation system in the
15	purple and the solid lines being the existing piping system.
16	The dotted lines being what we planned for the near future.
17	As you can see, we have a lot of basins in the area.
18	Our ultimate goal is to supply wastewater to every one of
19	these recharge basins in the area to blend with the storm
20	water and to blend with State Project Water. The dark blue
21	lines are the State Project Water lines that already extend
22	into some of the basins. We have to do some work there, as
23	well. You see we have future extensions of the State
24	Project Water line. And, basically, our objective is to in
25	every basin in the area put State Project Water in the basin

as well as reclaimed water in the basin.

Should notice that we have between our distance between RP4 and Carbon Canyon we have over 15 miles of pipeline. We have ability to reclaim on that line. We are going to interconnect so eventually we will have a backbone through our district of reclaimed water. And you see this area down here, this is important because we just put that system on line. We've dual piped parts of the City of Chino and Chino Hills. This just went on line this last year. And Bill Mills is correct. It is very expensive to do.

We have committed to reclamation. We installed this system in the last year, about 2000 acre-feet per year. We have just put on line Ely Basin. We have been discharging there this year in September. We are putting about 500 acre-feet per year into this basin. We are presently doing an EIR, preparing an EIR for percolation of sewage effluent in Ely and Etiwanda Basins. It is going to take very little effort for us to go through or percolate into these other two basins, one right adjacent to our plant and one right below our plants. That is basically our plan for the future.

MR. CIHIGOYENETCHE: Are these plans contingent upon delivering 17,000 acre-feet of water to Orange County Water District at Prado Dam?

DR. DRURY: That's correct.

1	MR. CIHIGOYENETCHE: If the declaration of fully
2	appropriated status is lifted, do you believe that would
3	have an adverse impact on these plans that you are
4	implementing?
5	DR. DRURY: There is no question that if we had to
6	discharge that that would alter our plans, yes.
7	MR. CIHIGOYENETCHE: If you had to discharge more than
8	that amount?
9	DR. DRURY: Right.
10	MR. CIHIGOYENETCHE: How much of the present wastewater
11	do you believe you will be able to use in terms of recharge
12	in the future?
13	DR. DRURY: Our goal is to use all but the 17,000
14	acre-feet per year.
15	MR. CIHIGOYENETCHE: That is all but your obligation
16	under the Orange County Judgment?
17	DR. DRURY: Right.
18	MR. CIHIGOYENETCHE: Salt management is also a program
19	contemplated by IEUA; is that correct?
20	DR. DRURY: That's correct.
21	MR. CIHIGOYENETCHE: What is the nature of that
22	program?
23	DR. DRURY: Basically there is three desalters planned
24	for the area. One of which is under construction which will
25	be completed this spring. And basically it is to remove the

1	salt from the water and make the waters in the bottom end of
2	our basin useful and use that as a water supply source for
3	the new development.
4	MR. CIHIGOYENETCHE: Has the salt management program
5	been implemented in any way?
6	DR. DRURY: We are beginning to implement it. Like we
7	said, the first desalter will be on line this spring. There
8	is other aspects of the program. We have established a
9	manure composting site so we can export the salts outside
10	the basin. We're actively involved in salt management in
11	our basin.
12	MR. CIHIGOYENETCHE: You indicate that your planning
13	process is reliant on the terms and conditions of the 1969
14	Orange County Judgment; is that correct?
15	DR. DRURY: That's correct.
16	MR. CIHIGOYENETCHE: I believe your written testimony
17	suggests that, if and when your plans are implemented, there
18	will be no extra water over and above what you are required
19	to deliver at Prado Dam; is that correct?
20	DR. DRURY: That is an ambitious goal, but that is our
21	goal.
22	MR. CIHIGOYENETCHE: Do you have any idea in terms of
23 [.]	dollars and cents how much has been expended thus far in
24	implementing these long-term plans?
25	DR. DRURY: Geez. Between the time planning effort and

1	what we have already got constructed, we're looking in
2	excess of \$15,000,000 to date with I am just the
3	salters are another 55,000, which is a three-party effort.
4	That is not 55,000. And you're going to build two more
5	desalters, so you are looking at another hundred million.
6	There is considerable effort to date, at least, say,
7	\$70,000,0000.
8 .	MR. CIHIGOYENETCHE: Now you have made reference to one
9	desalter. There is one under construction now; is that
10	correct?
11	DR. DRURY: That's correct.
12	MR. CIHIGOYENETCHE: When is it estimated that that
13	will come on line?
14	DR. DRURY: This spring.
15	MR. CIHIGOYENETCHE: That is a cooperative agreement
16	between several agencies?
17	DR. DRURY: That's correct.
18	MR. CIHIGOYENETCHE: Who are the parties to that?
19	DR. DRURY: Western Municipal Water District and Orange
20	County Water District working as a subcommittee of SAWPA.
21	MR. CIHIGOYENETCHE: Did you have any overheads that
22	you
23	DR. DRURY: No. I did want to make an additional
24	comment. The Regional Board is very concerned about the
25	groundwater leaving our basin, and we have been working with

1	them both in terms of nitrogen and TDS. And right now one
2	of their concerns is that the groundwater leaving our basin
3	will adversely impact Orange County downstream users. And
4	we are actively working on a plan now to try to control our
5	basin, basically control the spigot leaving our basin, we
6	hope that desalter will accomplish that. We have been
7	working actively with Orange County and Regional Board in
8	implementing these plans.
9	MR. CIHIGOYENETCHE: Anything else?
10	DR. DRURY: No.
11	MR. CIHIGOYENETCHE: I have nothing further.
12	H.O. BAGGET: Cross-examination. San Bernardino.
13	000
14	CROSS-EXAMINATION OF INLAND EMPIRE UTILITIES AGENCY
15	BY SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT &
16	WESTERN MUTUAL WATER DISTRICT
17	BY MR. O'BRIEN
18	MR. O'BRIEN: I think my questions are probably for Dr.
19	Drury, but, Ms. Stewart, you are welcome to chime in if you
20	like.
21	Dr. Drury, are you generally familiar with the proposal
22	of my clients, Muni and Western to appropriate water at
23	Seven Oaks Dam?
24	DR. DRURY: From this hearing, just the last two days,
25	yes.

1	MR. O'BRIEN: So you have a general understanding of
2	the proposal, but perhaps haven't studied the details?
3	DR. DRURY: That's correct.
4	MR. O'BRIEN: If the appropriation of water by my
5	clients were ultimately approved by this Board with terms
6	and conditions that ensured that the interest of the agency,
7 .	particular the interest related to wastewater, reuse, that
8	you have outlined in your testimony, if those interests were
9	fully protected, would your agency have any objection in
10	principle to the idea of appropriating water at Seven Oaks
11	Dam?
12	MR. CIHIGOYENETCHE: Interpose an objection. Vague.
13	No foundation. I don't know Dr. Drury has that authority to
14	agree on behalf of our agency as to anything.
15	MR. O'BRIEN: I am just asking for his understanding of
16	his agency's position with respect to our petition, which is
17	the reason we are here. If he doesn't have authority, he
18	can say so.
19	H.O. BAGGET: You can answer.
20	DR. DRURY: I have no position on their action.
21	MR. O'BRIEN: Has your agency taken a position in
22	opposition to the petition to revise the fully appropriated
23	stream order that has been filed by Muni and Western?
24	MR. CIHIGOYENETCHE: To your knowledge.
25	DR. DRURY: Not that T am aware of

1	MR. O'BRIEN: So they have taken no position on it?
2	DR. DRURY: That's correct.
3	MR. O'BRIEN: Thank you.
4	H.O. BAGGET: Mr. McNevin.
5	MR. MCNEVIN: Thank you.
6	00
7	CROSS-EXAMINATION OF INLAND EMPIRE UTILITIES AGENCY
8	BY ORANGE COUNTY WATER DISTRICT
9	BY MR. MCNEVIN
10	MR. MCNEVIN: Good morning. I am Chris McNevin,
11	again.
12	Dr. Drury, I received your amended testimony last
13	Friday. Out of curiosity, why did you amend your
14	testimony?
15	DR. DRURY: There was some typographical errors as well
16	as rephrasing of some questions.
17	MR. MCNEVIN: You basically doubled the length of it?
L8	MR. CIHIGOYENETCHE: I am going to object. It calls
L9	for a legal conclusion.
20	MR. FRINK: Mr. McNevin, excuse me. I think I can
21	answer that. We received what was essentially an outline of
22	the testimony that Dr. Drury was going to submit, and I
23	spoke with the attorney for Inland Empire and advised him,
24	in accordance with the hearing notice and our regulations,
25	he was supposed to submit the testimony in writing in full.

:	
1	And he indicated he would prepare he would work with Dr.
2	Drury, prepare the amended version and get that out as soon
3	as he could.
4	MR. MCNEVIN: Thank you very much.
5	Dr. Drury, we were surprised to hear that your
6	testimony is that these programs you described are going to
7	impact the flows at Prado, and that is what I would like to
8	talk to you about today.
9	First of all, it is my understanding that you do agree
10	that the base flows at Prado have increased as a result of
11	increased wastewater generated upstream?
12	DR. DRURY: That is one of the factors, yes.
13	MR. MCNEVIN: And you testified in your written
14	testimony as amended that Inland Empire has been developing
15	plans to reuse this wastewater since the 1969 stipulated
16	judgment; is that correct?
17	DR. DRURY: That's correct.
18	MR. MCNEVIN: So for 30 years you have been developing
19	these plans; is that correct?
20	DR. DRURY: That's correct.
21	MR. MCNEVIN: Yet notwithstanding these 30 years of
22	plans that you've been developing, the base flows at Prado
23	are still increasing each year for the past several years;
24	isn't that correct?

DR. DRURY: Yes. That is a conclusion you can come

1	to.
2	MR. MCNEVIN: Do you agree with that conclusion?
3	DR. DRURY: The difference is between planning and
4	implementing. We are now starting to implement.
5	MR. MCNEVIN: Yes. But my question is,
6	notwithstanding, your 30 years of plans, the base flows have
7	nonetheless been increasing during that whole 30-year period?
8	DR. DRURY: That's correct.
9	MR. MCNEVIN: Inland Empire is a member of the Santa
10	Ana River Watermaster?
11	DR. DRURY: That's correct.
12	MR. MCNEVIN: And the Watermaster publishes these
13	reports of base flows each year?
14	DR. DRURY: Yes.
15	MR. MCNEVIN: And when you saw Bill Mills' chart
16	showing that on the average over the past 30 years of your
17	plans the base flows have been increasing by approximately
18	3800 acre-feet per year, did you have any basis to disagree
19	with that?
20	DR. DRURY: No.
21	MR. MCNEVIN: Now, you said in your amended testimony,
22	and I will quote from Paragraph 5:
23	At the present time Inland Empire Utility
24	Agency has significantly (Reading.)
25	And that is your word, significantly

1	increased the use of reclaimed and
2	recycled water. (Reading.)
3	Do you see that in Paragraph 5, Line 13?
4	DR. DRURY: Yes.
5	MR. MCNEVIN: Your current use of recycled water is
. 6	approximately 4100 acre-feet per year?
. 7	DR. DRURY: That's correct.
8	MR. MCNEVIN: So that 4100 acre-feet is the figure you
9	are referring to as your present significant increase?
10	DR. DRURY: No. The 4100 is an absolute value, not
11	increase.
12	MR. MCNEVIN: You said what was the increase?
13	DR. DRURY: In the last we've approximately doubled
14	that with two projects we put on line. So, roughly 2,000
15	prior to last year, 4,000 this year.
,16	MR. MCNEVIN: So then the significant increase you
17	refer to in Paragraph 5 is 2,000 acre-feet?
18	DR. DRURY: That's correct.
19	MR. MCNEVIN: And the example you gave of actual use of
20	reclaimed wastewater is this dual pipeline to Chino and
21	Chino Hills?
22	DR. DRURY: That is one example.
23	MR. MCNEVIN: The other
24	DR. DRURY: Ely Basin.
25	MR. MCNEVIN: The first example is the dual pipeline?

1	DR. DRURY: Right.
2	MR. MCNEVIN: You said in Paragraph 10 that this dual
3	pipeline project has been in operation for approximately two
4	years already.
5	Do you see that, Paragraph 10?
6	DR. DRURY: That's correct.
7	MR. MCNEVIN: Paragraph 10, Line 26.
8	DR. DRURY: We're in our second year.
9	MR. MCNEVIN: Not withstanding the operation of that
10	dual pipeline program, as you testified, for two years
11	approximately the Watermaster of which Inland Empire is a
12	member, still reports significant increases in base flows at
13	Prado over the past two years, doesn't it?
14	DR. DRURY: Yes.
15	MR. MCNEVIN: Now, you mentioned also the Ely Basin
16	recharge facility, and you described that as a more
17	important project, correct? Paragraph 10, Line 23.
18	DR. DRURY: Okay.
19	MR. MCNEVIN: Is that your term for that project?
20	DR. DRURY: I said more importantly.
21	MR. MCNEVIN: That project only involves 500 acre-feet
22	per year, correct?
23	DR. DRURY: That's correct.
24	MR. MCNEVIN: Has that more important project caused
25	any detectable decrease in base flows at Prado?

1	DR. DRURY: The more important project is a
2	demonstration of the process and the potential for future
3	recharge. That is why it is more important.
· 4	Now as to your question, more important project, it has
, 5	not it is about 500 acre-feet per year; and that has not
6	significantly impacted flow at Prado yet, no.
· 7	MR. MCNEVIN: Long-term
8	DR. DRURY: Realize that was started up in September of
9	this year.
10	MR. MCNEVIN: Right.
11	500 acre-feet, does that cause any detectable or even
12	measurable decrease at Prado?
13	DR. DRURY: Probably not.
14	MR. MCNEVIN: Long-term, you testified at Paragraph 6,
15	that you hope to reuse 71,700 acre-feet wastewater by 2020?
16	DR. DRURY: Yes.
17	MR. MCNEVIN: You don't have the contracts and the
18	infrastructure to use that wastewater today, do you?
19	DR. DRURY: They are being worked out as part of OBMP,
20	so we do not have it today. The concept is in place and we
21	are working on it.
22	MR. MCNEVIN: You have a concept, but you don't have an
23	infrastructure?
24	DR. DRURY: We have some of the infrastructure, not all
25	of the infrastructure.

1	MR. MCNEVIN: And the infrastructure you've got is for
2	500 acre-feet Ely Basin
3	DR. DRURY: No, that is incorrect. We have pipelines
4	in place. We have pipelines going by recharge basins. We
5	just have not run the 200 feet of pipeline from the main
6	pipeline to the basins. We are presently doing EIRs to do
7	that.
8	MR. MCNEVIN: Do you have the infrastructure in place
9	to use anywhere near today this projection of 71,700 by
10	2020?
11	DR. DRURY: No.
12	MR. MCNEVIN: By 2020, if I understand, you also plan
13	to import a great deal more water; is that correct?
14	DR. DRURY: That's correct.
15	MR. MCNEVIN: In one of the charts on Page 1 of your
16	Exhibit E calls for importing of 111,000 acre-feet of water
17	by year 2020.
18	Did I read that right?
19	DR. DRURY: I don't have that in front of me right
20	now.
21	MR. CIHIGOYENETCHE: Exhibit D.
22	MR. MCNEVIN: Exhibit E, Page 1. I could provide my
23	copy to the witness if you don't want to give him yours.
24	MR. CIHIGOYENETCHE: That was an exhibit prepared for
25	the testimony of Richard Atwater who is not testifying. I

1	don't know how familiar the witness is with that document.
2	DR. DRURY: I am not familiar with this document.
3	MR. MCNEVIN: Was that prepared for Inland Empire and
4	submitted as an exhibit today?
5	MR. CIHIGOYENETCHE: Objection. No foundation. We've
6	had no testimony authenticating this document as an
7	exhibit.
8	H.O. BAGGET: Sustained.
9	MR. MCNEVIN: Does the figure supplied by Mr. Atwater
10	of 111,000 acre-feet of imported water comport with your
11	understanding as the manager of Inland Empire?
12	DR. DRURY: I am not familiar with the document he
13	submitted.
14	MR. MCNEVIN: Are you familiar with the figures as
15	manager of your agency?
16	MR. CIHIGOYENETCHE: Objection. He is not the manager
17	of the agency.
18	MR. MCNEVIN: Pardon me.
19	In your capacity with Inland Empire are you familiar
20	with the figure for projected water imports by 2020?
21	DR. DRURY: I don't have them roughly available. I
22	can't pull it off the top of my head.
23	MR. MCNEVIN: Let's give Mr. Atwater some credit where
24	credit is due, and I will put this in terms of a
25	hypothetical, just to put your mind at ease.

	· · · · · · · · · · · · · · · · · · ·
1	Assuming that Mr. Atwater's figure of 111,000 acre-feet
2	per year of imported water is accurate, please.
3	DR. DRURY: Okay.
4	MR. MCNEVIN: Will that cause your wastewater flows to
5	be increased by year 2020?
6	DR. DRURY: It's possible.
7	MR. MCNEVIN: Would you look at Exhibit E, Page 3.
8	Does that show increased wastewater flows projected by
9	Inland Empire for year 2020?
10	DR. DRURY: Yes.
11	MR. MCNEVIN: Are you, in your capacity with Inland
12	Empire, familiar with wastewater flow projections?
13.	DR. DRURY: Yes.
14	MR. MCNEVIN: So Exhibit E, Page 3, shows an increase
15	in wastewater flows projected at about 70,000 acre-feet by
16	2020, correct?
17	DR. DRURY: That appears roughly correct.
18	MR. MCNEVIN: And 70,000 acre-feet increased wastewater
19	flows is almost exactly the same number that you gave me a
20	minute ago, 71,700 acre-feet, of your proposed resuse or
21	your planned reuse by 2020; isn't that correct?
22	DR. DRURY: That's correct.
23	MR. MCNEVIN: So your projected reuse amount of
24	wastewater approximately equals the projected increase in
25	wastewater you are going to generate in 2020?

1	DR. DRURY: That's correct.
2	MR. MCNEVIN: Let's talk about storm flow for a
3	minute. You mentioned a capture of storm flow to mix with
4	some of the wastewater you plan to percolate. Why do you
5	need to do that?
6	DR. DRURY: To meet health department requirements for
?	the blending of wastewater before you recharge it.
8	MR. MCNEVIN: Can you give me a little more detail?
9	What is that department requirement as you understand it?
10	DR. DRURY: I can pull out an overhead if you like.
11	MR. MCNEVIN: If you feel more comfortable with that or
12	you can give me your understanding, either way.
13	DR. DRURY: Basically, the health department requires
14	blending, and the amount of blending depends on the
15	concentration of organic carbons.
16	MR. MCNEVIN: With your wastewater you are required to
17	only use approximately one-third wastewater for blending and
18	the rest has got to be either imported or storm flow?
19	DR. DRURY: That's roughly the number, yes.
20	MR. MCNEVIN: You provided the figure of 12,000
21	acre-feet of storm flows you might use for that purpose in
22	Paragraph 8, Line 15, of your testimony?
23	DR. DRURY: Yes.
24	MR. MCNEVIN: Did I read that correctly?
25	DR. DRURY: Yes.

1	MR. MCNEVIN: So you're going to need a yield of 27,000
2	acre-feet of storm flow for this purpose; is that accurate,
3	each year?
4	DR. DRURY: The question of need is either storm water
5	and/or State Project water; it has to be blended. Doesn't
6	matter, one or the other.
7	MR. MCNEVIN: I understand you don't know how much
8	wastewater or how much imported water you are going to be
.9	buying, but your figure was 12,000 acre-feet that you
10	needed?
11	DR. DRURY: That's an approximation, yes.
12	MR. MCNEVIN: Are you familiar with the rule of seven?
13	DR. DRURY: I don't know your slang.
14	MR. MCNEVIN: My slang is that if you want a yield of
15	
16	one acre-foot of storm water you need to have a storage
	volume of seven acre-feet to develop that yield on a
17	dependable basis.
18	Are you familiar with that, phrased that way?
19	DR. DRURY: No.
20	MR. MCNEVIN: Can you tell me if you take 12,000
21	acre-feet of storm flow per year, if you have the capacity
22	to take that, what percentage is that of the average annual
23	storm flow reaching Prado over the past 30 years?
24	DR. DRURY: I don't know the number.
25	MR. MCNEVIN: No more questions.

1	H.O. BAGGET: Thank you.
2	San Bernardino Valley Water Conservation District?
3	MR. COSGROVE: We have no questions.
4	H.O. BAGGET: East Valley.
5	MR. KENNEDY: No questions.
6	H.O. BAGGET: Big Bear.
7	MR. EVENSON: No questions.
8	H.O. BAGGET: Santa Ana River Local Sponsors?
9	MR. DONLAN: No questions.
10	H.O. BAGGET: City of Ontario.
11	MR. GARNER: Just a couple.
12	000
13	CROSS-EXAMINATION OF INLAND EMPIRE UTILITIES AGENCY
14	BY CITY OF ONTARIO, CUCAMONGA COUNTY WATER DISTRICT,
15	CITY OF CHINO & MONTE VISTA WATER DISTRICT
16	BY MR. GARNER
17	MR. GARNER: Eric Garner, once again.
18	Just a couple questions for you, Ms. Stewart.
19	Is the Cucamonga County Water District a party to the
20	Chino Basin Judgment?
21	MS. STEWART: Yes.
22	MR. GARNER: Is it an active participant in the OBMT
23	process?
24	MS. STEWART: It certainly is.
25	MR. GARNER: Is the same true for the City of Ontario?

. 1	MS. STEWART: Yes.
2	MR. GARNER: Is the same true for the City of Chino?
3	MS. STEWART: Yes.
4	MR. GARNER: Is the same true for the Monte Vista Water
5	District?
6	MS. STEWART: That's correct.
7	MR. GARNER: Thank you, ma'am.
8	No further questions.
9	MR. CIHIGOYENETCHE: Couple of follow-up questions for
10	Dr. Drury.
11	00
12	REDIRECT EXAMINATION OF INLAND EMPIRE UTILITIES AGENCY
13	BY MR. CIHIGOYENETCHE
14	MR. CIHIGOYENETCHE: Dr. Drury, although you have
15	testified that you have been developing plans or the agency
16	has been developing plans for the last 30 years,
17	implementing those plans takes money; is that correct?
18	DR. DRURY: That's correct.
19	MR. CIHIGOYENETCHE: The principal reason that you have
20	been delayed or been unable to implement those plans is the
21	fact that there are no resources available to construct the
22	infrastructure referred to; is that correct?
23	DR. DRURY: Yes, sir.
24	MR. CIHIGOYENETCHE: Now, there is another issue with
25	respect to infrastructure, the development of what has been

.1	referred to as the ag preserve; is that correct?
2	DR. DRURY: Yes.
3	MR. CIHIGOYENETCHE: What do you understand the ag
4	preserve to be?
5	DR. DRURY: Ag preserve is approximately 13 to 15
. 6	square miles of undeveloped agricultural lands that is in
7	the middle lower end of our district, and we will be soon
8	developing.
9	MR. CIHIGOYENETCHE: There is essentially no
10	infrastructure in that region; is that correct?
11	DR. DRURY: That's correct.
12	MR. CIHIGOYENETCHE: And as that region begins to
13	develop that will afford you an opportunity to construct the
14	infrastructure; is that correct?
15	DR. DRURY: Construct the infrastructure at the time of
16	development, not later when it is more expensive to do so.
17	MR. CIHIGOYENETCHE: Your plans include double piping
18	in that region, as well; is that correct?
19	DR. DRURY: We are discussing dual piping with both of
20	the major cities involved in that area.
21	MR. CIHIGOYENETCHE: I have nothing further.
22	H.O. BAGGET: Any recross?
23	MR. MCNEVIN: No.
24	H.O. BAGGET: Any other party?
25	No.

1, Staff. 2 MS. MROWKA: Mr. Bagget, before we move exhibits. I 3 would like to have Mr. Cihigoyenetche list the exhibits he 4 is asking us to accept. 5 MR. CIHIGOYENETCHE: That is what I was looking for. MEMBER FORSTER: I have a question about this 6 7 judgment. The City of Chino versus the Chino --8 MS. STEWART: Basin Municipal Water District. 9 MEMBER FORSTER: Tell me a little bit about that, what 10 caused that. 11 MS. STEWART: That judgment -- as a result of the '69 12 judgment going into effect, the producers in the Chino Basin 13. had been watching that activity and waiting for that to be 14 settled before they initiated a process to enter our 15 judgment. And they began the process shortly after the 169 16 judgment was entered, and then they took a stipulated 17 agreement to the court in the mid '70s, and it was entered 18 in 1978, January of 1978. 19 And the foundation was, there was a condition of 20 overdraft and they wanted to adjudicate the rights within 21 the Chino Basin, knowing that the rights along the Santa Ana 22 River were settled. 23 MEMBER FORSTER: Okay. Thanks. 24 H.O. BAGGET: Back to the exhibits.

25

MR. CIHIGOYENETCHE: I would move the written testimony

1	as amended of Douglas D. Drury as Exhibit A.
2	I would move the written testimony of Traci Stewart as
3	Exhibit B.
4	I would move the written exhibits to be utilized by Dr.
5	Drury as Exhibit D, since they have already been identified
6	as such.
7	I would move the Chino Basin Municipal Water District
8	versus City of Chino judgment as F.
9	I would move the Orange County Water District versus
10	Chino Judgment as G.
11	And then the resume of Dr. Drury as marked, as H.
12	MS. MROWKA: Thank you for the clarification.
13	H.O. BAGGET: If there is no objections, those
14	documents will be entered into evidence.
15	MR. FRINK: Just so it is clear, you are then
16	withdrawing your Exhibit C and your Exhibit E that were
17	previously submitted?
18	MR. CIHIGOYENETCHE: That's correct.
19	Thank you.
20	MR. MCNEVIN: Mr. Bagget, I would move the admission of
21	Page 3 of the Exhibit E. I believe that the witness did
22	authenticate the wastewater flows that are reflected on that
23	exhibit.
24	MR. CIHIGOYENETCHE: No objection.
25	H.O. BAGGET: So Big Bear Municipal Water District

MR. COSGROVE: Excuse me. Just one point, and that is 1 that I was a little remiss. We probably should have done it 2 before Inland Empire started up. 3 There was a question with respect to a proposed 4 stipulation yesterday and our client's potential interest in 5 cross-examining some of the parties from East Valley Water 6 7 District. The witnesses were indicated and made available. I haven't yet had a chance to formulate that stipulation or 8 talk about the specifics of it with Mr. O'Brien. I would 9 10 like to do that. 11 Before we move on too much further, we would like to, in the absence of the ability to work out a stipulation on 12 13 that, reserve the right for cross-examination of Mr. Martin 14 briefly. 15 H.O. BAGGET: If there is no objections, then we might . 16 as well do it now. 17 Would it be appropriate to take a recess now? 18 MR. O'BRIEN: I would suggest perhaps we ought to go ahead and finish with Big Bear and Mr. Cosgrove and I can do 19 20 this at the break. 21 MR. COSGROVE: Forgive the interruption. 22 H.O. BAGGET: Big Bear. 23 MS. HAMILTON: Good morning. 24 H.O. BAGGET: Good morning. 25 MS. HAMILTON: My name is Sheila Hamilton. I am the

General Manager of Big Bear Municipal Water District. I've been with the district for about 15 years, seven of those in my capacity as general manager. My remarks are going to be very brief and basically just to lay the format for Mr. Evenson who is our engineering consultant to give his expert testimony.

6 testimony

As you can see, we do not have an attorney representing us today. We didn't feel the nature of our comments today warranted legal counsel. So if you will perhaps help us with any procedural issues so we do the appropriate thing in filing our testimony.

My remarks will mostly be just to give a little background of Big Bear Lake. We have seen the overheads. You are familiar with the location of the lake at the top of the watershed. A little history on the district.

The district owns and operates the Bear Valley Dam which stores the flows from Bear Creek. As we know, Bear Creek is located in the upstream portion of the Santa Ana River watershed and is a major tributary to the Santa Ana River. The district also owns and operates various recreational facilities on Big Bear Lake and, of course, the lake is a reservoir formed by the water stored behind the Bear Valley Dam.

The reservoir was originally constructed in 1884 by Bear Valley Mutual Water Company with the construction of

the original Bear Valley Dam. Then in 1912 a larger dam was constructed and that is the dam we refer to today. The lake impounds 73,000 acre-feet of water. Important to note, I think, is that this water is all natural inflow precipitation. We have no ability to fill the lake from any other source. It is not in any way a state project reservoir; and so once water is released from the lake there is no ability to replace it.

The lake was formed as an irrigation reservoir to meet the downstream irrigation demands in Redlands for the orange growers, and over time, as is common with irrigation reservoirs of that type, it expressed drastic fluctuations in lake levels. So, in 1964 Bear Valley community decided that that fluctuation was unacceptable for the economy which was developing around the lake.

So, the water district was formed and then it took 13 years of various negotiations, court filings to decide the management of the lake. And the water district in 1977 was finally able to purchase the Bear Valley Dam, the land beneath the lake, and the right to manage the surface recreation rights. The water rights, however, remained with Bear Valley Mutual Company. The purchase price of this transaction was \$4.7 million and that included a stipulated judgment with Bear Valley Mutual Water Company, San Bernardino Valley Conservation District, and a group of

water companies which you've heard referred to, I think, in previous testimony as prior right companies.

These parties to the judgment, as I said, continue to hold the water rights to the flow in Bear Creek as well as to the flow in the Santa Ana River as it leaves the mountains and enters the valley floor.

Now, the basic concept behind the '77 judgment was that Big Bear Municipal Water District acquired the right to store water in the lake. The way to achieve that was to meet demands from Mutual for water, either releasing water from the lake or delivering other water in lieu of releases, which we now call our In Lieu Water Program. So, basically, when Bear Valley needs water and they call and say, "We need X number acre-feet," we can either release it or we can call our supplier which currently is San Bernardino Valley Municipal Water District, and they can deliver State water project water in lieu of releasing from the lake. Hench, we stabilize lake level, and that was the entire goal of the judgment when it was formulated.

This stored water is used to maintain the water level for various activities, recreational, environmental and aesthetic. Boating and fishing enthusiasts from throughout Southern California use the lake for these purposes. It is also used as water supply for snow making for the ski areas. We have two major ski areas in the area, and it is used to

7 8

9

10 11

12

13

14

15

16

17

18

19 20

21

22

23

24

25

supply their water to make snow when natural snowfall is inadequate for skiing, which generally is every year. generally inadequate in the Big Bear Valley for snow. skiers from throughout Southern California and, in fact, the entire state come to Big Bear during the winter to enjoy the excellent skiing and other winter sports.

The bottom line is that the stabilized lake level is pretty much the stabilization of the economy of Big Bear Vallev.

The judgment provided Big Bear Municipal Water District with the legal framework to provide these benefits to the people of the State of California. The purpose of our presence today is to insure that this judgment is recognized in your deliberations and that Big Bear Municipal Water District will be able to continue to utilize the waters of Bear Creek and to provide the beneficial uses in the most efficient and cost-effective manner.

We appreciate the opportunity to be included in these proceedings, and I would like to introduce our expert witness, Mr. Donald Evenson. He has been our consultant on water issues for 16 years. He serves as our representative on the Big Bear Watermaster Committee, which oversees the implementation of the 1977 judgment, and he has been serving in that capacity since 1987.

Thank you.

MR. EVENSON: Thank you. My name is Don Evenson. I
represent Big Bear Municipal Water District. I am employed
by Montgomery Watson and work out of our Walnut Creek
office. My resume has been previously submitted to the
Board when we filed a notice to appear.

I have a map that will illustrate where a couple of the features are. I have copies here for everybody in the audience and the Board Members.

As Sheila mentioned in her opening statement, Big Bear Municipal Water District owns Bear Valley Dam which is at the headwaters of Bear Creek and entered into a 1977 judgment, a stipulated judgment, that gave Big Bear Municipal Water District the right to store water in Big Bear Lake. And the purpose of this was to stabilize the water levels, to create recreational, environmental and other benefits. This is referred to in the judgment as a physical solution.

It also provided an opportunity for Big Bear to provide in lieu water, which is water that would not be released from the lake, so that they could store additional water in the lake. And in so doing, they had to protect all the downstream water rights holders.

They also had to protect the downstream groundwater

basin through what is referred to as a basin makeup account. So, if there are any deficiencies in flows entering the San Bernardino Basin for recharge purposes, Big Bear Municipal Water District is obligated to provide supplemental water to protect the downstream groundwater basins. These activities in the watershed are overseen by a Watermaster Committee that oversees the judgment, makes sure that all activities are in compliance with the judgment and files a report annually with the Superior Court of San Bernardino County.

This is referred to as Exhibit B.

A second item is the State Water Resources Control
Board Order Number 95-4 that was entered into about four
years ago which required Big Bear Municipal Water District
as the owner of the dam to release a minimum of three-tenths
of a cfs from the dam for fish, local fish, protection
purposes. It also -- this is the location, the upstream
green dot. Just below that, below the Cub Creek tributary
they had to guarantee a minimum of 1.2 cfs at all times.
This is a seven-day running average, to protect the local
trout fishery.

Now, there are times when this is an additional requirement. This is water that frequently can also be used by mutual. There are also other periods of time where this water is not needed by mutual and it is a supplemental

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

release. And what we feel is that the Seven Oaks Dam provides an opportunity to reregulate those releases once they reach the downstream reservoir so that they can subsequently be delivered to mutual as part of their water supply or be delivered to replenishment basins to get full credit in their basin makeup account. So the potential exists for improved operation of those releases for fish protection.

As the owner of the dam, Big Bear also has the responsibility for flood control. They need to protect the shoreline of Big Bear Lake. They need to prevent overtopping of the dam and they need to protect the downstream property owners from catastrophic floods. goal is to provide these flood control benefits. because the lake stabilization program is increasing the lake levels, there is an increased probability of spills. In fact, spills will occur more often under the lake stabilization program then it would without the lake stabilization program.

So Big Bear has the need to most effectively manage those flood control releases. In fact, their preference is to release water in periods where it can beneficially be used rather than be spilled in a noncontrolled manner. So their goal to better manage these flood control releases would provide additional benefits because these releases

25

24

Their

could then be credited to the basin compensation account if they can be captured and recharged rather than through uncontrolled spills.

Seven Oaks Dam provides an opportunity for further improvement of the management of those flood control releases. And in the event that those releases can't be fully managed to the benefit of Big Bear Municipal Water District they then can be used by other downstream water users for their beneficial uses. So, as a result of those benefits, the district believes that there is an opportunity for better management of the resources of the waters of Big Bear Lake, and as a result they do not object to revising the declaration of fully appropriated streams to allow processing of the two specified applications to appropriate water in the Santa Ana River.

However, we respectfully request that the State Board require three things. One, that the 1977 judgment be fully recognized and complied with to protect the rights of the parties of the judgment. Two, that Big Bear rights to manage their available resources to provide the water supply, recreational, environmental, fishery and flood control benefits not be adversely affected and preferably enhanced. And, three, that any future proceedings be limited to the two specified applications.

Thank you, and that concludes our statement.

1	H.O. BAGGET: Thank you.
2	Mr. O'Brien.
3	MR. O'BRIEN: No questions.
4	H.O. BAGGET: Mr. McNevin.
5	MR. MCNEVIN: Thank you.
6	00
7	CROSS-EXAMINATION OF BIG BEAR MUNICIPAL WATER DISTRICT
8	BY ORANGE COUNTY WATER DISTRICT
9	BY MR. MCNEVIN
10	MR. MCNEVIN: I am Chris McNevin, again.
11	Good morning, Mr. Evenson. How many years of
12	experience do you have in the field of water resources?
13	MR. EVENSON: Approximately 35.
14	MR. MCNEVIN: Can I ask you for your indulgence for a
15	minute to help me out with this rule of seven that Mr. Drury
16	didn't know about? Can you please explain that to Board?
17	MR. EVENSON: That came about, I believe it was eight
18	or ten years ago, when I was working on a task force, a
19	statewide task force, to look at conjunctive use of
20	groundwaters and surface waters throughout the state of
21	California. Bill Mills was the chairman of that task force,
22	and we were looking at how all the groundwater basins could
23	be operated conjunctively with the state water system to
24	maximize the benefits to the state.

And in so doing we were looking at all the reservoirs

1	that were part of the State water project, and it was an
2	observation that I had made that it looked as if there was a
3	ratio of about seven for every acre-foot of water yield from
4	these reservoirs. It took about seven acre-feet of
5	storage.
6	MR. MCNEVIN: So that if you want to create a yield of,
7	say, 1000 acre-feet of storm flow what storage space do you
8	need in a reservoir?
9	MR. EVENSON: That would be about 7,000 acre-feet,
10	depending it would depend on the hydrology of the
11	particular watershed, the location of the dam. But that
12	seemed to be a general number that was applicable when we
13	were doing the study.
14	MR. MCNEVIN: By storage, you are not referring to
15	underground storage space in an aquifer; you are referring
16	to surface storage in a reservoir?
17	MR. EVENSON: Correct.
18	MR. MCNEVIN: Why does this rule apply in Southern
19	California?
20	MR. EVENSON: It could apply in some of the mountainous
21	areas. For example in Big Bear the ratio is a little bit
22	higher than seven. I think that the number is closer to 11
23	or 12.
24	MR. MCNEVIN: What's the theoretical underpinning of
25	the observation? Why do you need so much storage space to

1	capture why do you need seven times the amount of storage
2	space for one acre-foot of water?
3	MR. EVENSON: For two reasons. One, for regulatory
4	water to carry over between dry years and wet years and to
5	accommodate evaporation losses that occur from the
6	reservoirs.
7	MR. MCNEVIN: Thank you. No more questions.
. 8	H.O. BAGGET: Mr. Cosgrove.
9	MR. COSGROVE: No questions. Thank you.
10	H.O. BAGGET: There are a number of other groups
11	seem to have left. One down, anyway.
12	City of San Bernardino.
13	MR. MOSKOWITZ: No.
14	H.O. BAGGET: East Valley.
15	MR. KENNEDY: No questions.
16	H.O. BAGGET: Inland Empire.
17	MR. CIHIGOYENETCHE: No.
18	H.O. BAGGET: Chino Basin.
19	Local Sponsors.
20	MR. DONLAN: No questions.
21	H.O. BAGGET: City of Ontario.
22	MR. GARNER: No.
23	H.O. BAGGET: Staff.
24	MS. MROWKA: I have no questions. I simply want to go
25	through their exhibit list before we move those.

1	H.O. BAGGET: Yes.
2	00
3	CROSS-EXAMINATION OF BIG BEAR MUNICIPAL WATER DISTRICT
4	BY BOARD
5	MEMBER FORSTER: I have a question on your expertise on
6	this issue that you were just queried about. I am just
7	trying to understand this rule of seven.
8	That is not the only way to take water and move and put
9	it into like the Chino groundwater basin. Help me
10	understand what other ways would they would the person
11	from Inland, Dr. Drury, what other way would he be able to
12	put in storm water flows besides building a reservoir seven
13	to one?
14	MR. EVENSON: In the case of Chino Basin they would use
15	the existing replenishment basins where the seven to one
16	ratio would not apply.
17	MEMBER FORSTER: Thank you.
18	H.O. BAGGET: The exhibits.
19	MS. MROWKA: Yes. I have added to the exhibit list,
20	based on what your submittals were. The testimony of Donald
21	Evenson was not given an exhibit identification number. I
22	have labeled it Exhibit D.
23	The map which you just distributed, which I am
24	entitling "Key Facilities Related to Big Bear Judgment Map,"
25	Exhibit E.

1	And the resume of Donald Evenson I am listing as
2	Exhibit F.
. 3	H.O. BAGGET: Would you like those put into evidence?
4	MS. HAMILTON: Yes, please.
5	H.O. BAGGET: Any objection?
6	If not, they will be entered into evidence for this
7	hearing.
8	Let's go down the list and see where we are at.
9	Chino Basin hasn't been here yet. They are on our
10	list.
11	Local Sponsors, do you have a case in chief?
12	MR. DONLAN: No.
13	H.O. BAGGET: City of Ontario.
14	MR. GARNER: No.
15	H.O. BAGGET: We have done the end of the list. We
16	need to take a break to discuss it?
17	MR. O'BRIEN: Yes, a brief break to discuss the
18	stipulation.
19	H.O. BAGGET: Fifteen minutes.
20	MR. O'BRIEN: I think ten is probably fine.
21	H.O. BAGGET: Ten minutes and then get back.
22	(Break taken.)
23	H.O. BAGGET: Let's get back.
24	Ready to go?
25	MR. O'BRIEN: Yes.

MR. COSGROVE: Preliminarily we have agreed.

б

In lieu of the cross-examination of the witness from East Valley Water District we have been provided a copy of the document this morning that is entitled "Principles of Agreement." We would like to submit that document as an additional exhibit to this proceeding. It is our understanding that this document has been reviewed preliminarily by the East Valley Board and has been approved, subject to subsequent changes by counsel and general manager.

Beyond that, I do not know at this point whether it has been reviewed by the Board for San Bernardino Valley Municipal Water District nor Western. It is my understanding it has not been approved by either one of those Boards. So, with the understanding that this is not a finally approved document, we would still like to submit it as part of the record.

MR. O'BRIEN: I would stipulate to the submission of the document into the record with those caveats as to the lack of finality as to the agreement. And I would also point out that this is a Principles of Agreement document which contemplates the negotiation and execution of a comprehensive agreement at some point down the road. So this is the first step of a lengthier process.

MR. KENNEDY: Steve Kennedy on behalf of East Valley.

1	As I indicated yesterday afternoon, East Valley's action
2	yesterday was in good-faith reliance upon the
3	representations that were made to East Valley that that
4	document had the unanimous consent of each member of the
5	Board of Directors of Muni. With all Brown Act
6	considerations in place, East Valley withdrawal of its
7	objections to Muni's application or its petition was based
8	upon that representation.
9	I agree that to my understanding it hasn't been
10	formally approved by Muni's Board at this time, but we have
11	been advised that it has been consented to by each member of
12	Muni's Board.
13	H.O. BAGGET: With that, there is no objection. We
14	will enter it into the record.
15	MS. MROWKA: For record keeping purposes, this will be
16	Exhibit CD-20.
17	H.O. BAGGET: Okay. Going to proceed with rebuttal.
18	MR. O'BRIEN: Yes. We have prepared some rebuttal
19	testimony, some written testimony. There are six exhibits
20	which I have provided to Ms. Mrowka. I don't know if you
21	have had a chance to pass those out. Probably need to do
22	that.
23	H.O. BAGGET: Proceed.
24	MR. O'BRIEN: Ms. Mrowka, would it be helpful for
25	record keeping purposes to go through the exhibits and

1	indicate the numbers?
2	Mr. Frink is nodding his head, so I will do that.
3	Muni/Western Exhibit 8 is rebuttal testimony, and
4	there are three witnesses that are part of this: Mr. Beeby,
5	Mr. Reiter and Mr. Sam Fuller who was listed in our list of
6	intent to appear as expert.
7	The second document is a graph, Muni/Western Exhibit
8	Number 9, a graph entitled "Accumulated Departure from the
9	Mean Flow Near Mentone River Only, Water Years 1914-15
10	through 1997-98."
11	Muni/Western Exhibit 10 is another graph entitled
12	"Cumulative Flow at Mentone - Base Period May-December Flows
13	Only."
14	Muni/Western Exhibit 11 is a graph entitled "Cumulative
15	Flow at Mentone 1914-91, May-December Flows Only."
16	Muni/Western Exhibit 12 is a graph entitled "Cumulative
17	Flow at Mentone - Base Period March-May Flows Only."
18	Finally, Muni/Western Exhibit 13 is a graph entitled
19	"Cumulative Flow at Mentone 1914-91 - March-May Flows
20	Only."
21	MR. COSGROVE: May we get copies of everything?
22	UNIDENTIFIED VOICE: They are going around.
23	H.O. BAGGET: I think everybody is ready.
24	MR. O'BRIEN: Let's start with Mr. Beeby.
25	00

1 REBUTTAL TESTIMONY OF 2 SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT & 3 WESTERN MUTUAL WATER DISTRICT 4 BY MR. O'BRIEN 5 MR. O'BRIEN: Mr. Beeby, Muni/Western Exhibit 8 6 contains some rebuttal testimony from you. Have you had an opportunity to review that rebuttal testimony? 7 8 MR. BEEBY: Yes, I have. 9 MR. O'BRIEN: Is it true and correct to the best of 10 your knowledge? 11 MR. BEEBY: Yes, it is. 12 MR. O'BRIEN: Could you please summarize the rebuttal testimony contained in Exhibit 8. 13 14 MR. BEEBY: Yes. As you may imagine, nothing quite 15 attracts the attention of an expert or an engineer much like 16 suggesting that his figures are wrong or if they are wrong 17 that they were done intentionally to distort things. That's 18 going to be the summary of two issues that we're raised 19 yesterday by Mr. Headrick regarding my testimony, which he 20 had to do --21 MR. O'BRIEN: I think you need to turn the mike on. 22 MR. BEEBY: So the focus of my testimony is on those 23 two areas where Mr. Headrick suggested I might have made errors in the hydrologic analysis. Those two areas have to

do with the selection of base period and the lack of

24

seasonal evaluation to determine what flows might be available in the months that are typically known as dry.

1.0

First, with regard to the base period, we did an analysis last night of the river flows at Mentone only using the same approach that we did for the combined flow which is accumulated departure from the mean curve. I will not go into all that derivation because I did that yesterday, except to explain to you that this was for river only. And the one that was presented yesterday was the combined flow.

One reason we did this was primarily to check what Mr. Headrick had said, to evaluate whether or not that was correct. But from a hydrologic standpoint, from an engineering viewpoint, you typically do not take a particular sub area, particularly a small one, and then subdivide into even subareas to try to prove a particular point. You are looking to try to determine what might be available over a long-term average or probability of exceedance. And depending on how complex and big the hydrologic subarea is, you can subdivide that in a way to get almost any answer you want.

I didn't want to get into that situation, which is why
I took the entire watershed upstream of Mentone for the
preliminary analysis.

My Exhibit 9 depicts the accumulated departure from the mean curve for the river only near Mentone. This is for the

1 same period of record that we analyzed the combined flow for 1914-15 through 1997-98.

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Again, the shape of the curve is quite similar to the combined flow, and the long-term average for that period depicted on this graph is 25,700 acre-feet. The selected study period that I used and testified about yesterday is the 1971-72 through 1990-91 water year period. And as you can see there is a slightly higher average amount during that period of time. Graphically, that is indicated by the fact that at the beginning of the period the curve is higher at the end of the period indicating that was slightly wetter than the normal period.

So to that extent, Mr. Headrick is correct that our base period is slightly wetter than the long-term average.

If you take that into account, it is about 8 percent higher than what I testified to yesterday.

MR. O'BRIEN: Sorry, that last statement was confusing to me, Mr. Beeby.

MR. BEEBY: Excuse me, the average, long-term average for the Mentone only flow, which is the 27,800 that I used in the analysis yesterday, is about 8 percent higher than the actual long-term average at that particular gauge, indicating that that was slightly wetter than what I used yesterday by on the order of 8 percent. If you utilize that 8 percent to extrapolate what the potential diversion might

be, and recognizing that the period that I used is wetter, if we use the long-term average instead of my period, my flows would be reduced by about 8 percent.

7 late 8 ther

So, instead of being on the order of 260,000 acre-feet, they might drop to about 240,000 acre-feet. Now, that's the arithmetic of the situation. But, again, as I testified to later, yesterday, what my objective was was to indicate that there is a large amount of potential diversion available by Muni and Western. That conclusion is unchanged and 240,000 or almost a quarter of a million acre-feet of potential diversion at Mentone to me is a significant amount, and I would not alter my conclusion as a result of this analysis.

I might also point out that the figure I just reported about, which is 240,000 acre-feet or about a quarter million acre-feet of flow during the 20-year base period on an accumulated basis, could still increase if it were not constrained by the 500 cfs that I used in analysis, which I explained yesterday as limitation on the release from Seven Oaks Dam, or the hundred thousand acre-foot annual diversion amount to be utilized by Muni. If those two factors change and it went much higher, then, obviously, the quarter million acre-feet would go higher.

But still I am not trying to pick numbers here with 2or 3,000 acre-feet. It is significantly higher than what's historically been diverted. I might add, this does reflect

б

the upstream diversions at this point. So all those upstream senior water right claimants have had their demands taken out of this analysis.

The second area that was challenged yesterday was the fact that my analysis or that I had not analyzed it on a seasonal basis. And during cross-examination I explained to Mr. Cosgrove that my analysis was done on a monthly basis, but it was monthly by year and not segregated into the portions of the year he was concerned about, which is typically the dry periods of the year.

So to address that question, and we had the data available to do so, we prepared Western/Muni Exhibit 10.

Now, the color registration, I might point out, is not quite the same on the overhead screen as it is in your graph, I will refer to the colors on the hard copy for purposes of following this along.

This is the cumulative flow during the base period, considering only the flows that occur through May and December. You will note that the bottom scale says year May to December only, and in this case I am not using water year because that period overlaps two water years. So, rather than confuse the issue, or in an attempt not to confuse the issue, I have just used the year analysis.

These are the cumulated flows for a particular year during the May to December months. Again, the area shown

here is kind of tan, but actually the hard copy on Exhibit

10 shows it as blue, shows that there is about 107,500

acre-feet of cumulative water diversions by the Conservation

District. That is this lower portion of the graph.

The upper line on the graph is the combined flow at Mentone reduced by the upstream diversions to the Southern Cal Edison canal. Recall that diversion is to satisfy the senior water right claimants upstream.

The yellow area has potential diversion by

Western/Muni, again, only May through December months.

Still a fairly substantial portion of water, 71,000

acre-feet. You divide that 71,000 acre-feet by roughly the

20-year base period, you are getting on the order of 3500

acre-feet annually of average diversions. Here I am jumping back to average even though I don't think that is the proper way to evaluate it.

Next I prepared Exhibit 11, which is essentially the same type of analysis except that it extends the study period over the period of record, from 1914 through 1989-91. Actually, that is what that is supposed to be.

'91 is the ends year here. The reason we went to '91, I will state right now, is because we did not have available to us in the hotel last night the monthly data after 1990, because that was the end of my historical base period. So, we've cut this off in 1990.

These are not exactly equivalent to what was presented yesterday, and I take the long-term average amounts.

Nevertheless, what this does show is the cumulative historical diversions, again, during May through December period, for the Conservation District have accumulated 217,000, which is this mauve area, which is blue on the hard copy. Again, the top part of the curve is labeled "The Combined Flow at Mentone Reduced by the Upstream Diversions to Southern Cal Edison Canal," showing the potential diversion by Muni/Western over this rather lengthy base period of 500 -- almost 509,000 acre-feet. Still a significant amount. Still reflecting the areas where there are spikes, which is actually what we are trying to capture in our -- through the use of the direct diversion.

Another part of my testimony that I really didn't testify to, but Mr. Headrick raised during his direct examination, was the use of a conservation pool at Seven Oaks Dam. So I did take a shot on the doing that, and estimated from March to May what the flows might be, which would be the period that the conservation at Seven Oaks might be utilized.

In that or to illustrate that I have also prepared Exhibit 12. Again, this is for the base period that I used from 1972 to 1991, the same essential description in terms of the formatting. The flows change because the difference

here is the months have changed. March flows have jumped now for the Conservation District cumulative over the 20-year period up to 107,000 acre-feet. The total flows, way up here, the potential diversion by Western/Muni is 172,00 acre-feet. Again, that is a significant amount.

You might ask if you are thinking about the graph I used previously, why there is such a huge amount more. This average is, if you take the 172 and divide that by 20, you are getting a little over 8,000 acre-feet average during that period. The principal difference is that there is such high flows in March that it distorts these, and it is the March flows that are affected by snowmelt and heavy runoff. That was not included in the previous graph which went from May to December. That is the main difference why there is a huge difference, showing the sensitivity, what period you use.

Now, Exhibit 13, and I will cut right through this one because it is essentially the same type analysis. We just extended the base period. Again, these are cumulative flows. Conservation District 320. Available potential diversions by Muni up to 635,000, almost 636,000 acre-feet.

Again, the point of all this is to illustrate that there is a significant amount of flow available at Mentone that has not been historically diverted and could be potentially diverted by Muni/Western.

I would like to summarize my rebuttal testimony by pulling up Exhibit 4-12 which was presented yesterday. As you heard me testify yesterday, there is a caution, if not a strong warning with explanation points and all bold, about using averages to evaluate the potential for diversions.

This jumps back to the probability of exceedance. And what is happening here, and the reason those flows are accumulated in the previous graphs, we are looking at this period where 26 percent of the time the flow is greater than the average. That 26 percent of the time where the flow is greater than the average is precisely the types of flow that we are trying to capture through these diversions. Again, this is not inconsistent with this analysis, and it does illustrate the danger of trying to use averages to establish policy.

And with that, I'll conclude my testimony.

MR. O'BRIEN: Just one follow-up question. Is it your understanding that Mr. Headrick did use averages in the analysis that he performed?

MR. BEEBY: Yes, it is my understanding that is precisely what he did.

MR. O'BRIEN: Thank you.

Mr. Reiter, starting at Page 5 of Exhibit 8 is some rebuttal testimony from you. Have you had an opportunity to review that?

1 MR. REITER: Yes, I have.

MR. O'BRIEN: Is it true and correct, to the best of your knowledge?

MR. REITER: I had one correction. Under Item 3, Line 4, the last word says "purchased." The correct term should be "acquired." I am sure the City of San Bernardino would like to send us an invoice. Point of fact, they provide it at no charge.

MR. O'BRIEN: Could you please summarize your testimony.

MR. REITER: Thank you. The Conservation District has argued in their case in chief that our petition and application, therefore, should be denied because there is no new water in the area above Seven Oaks. I believe this argument is based on the fundamental misunderstanding just as to how the Santa Ana River system works, both in the physical, institutional and legal standpoint.

The Orange County Judgment and within the Western Judgment provided an integrated fashion for the Santa Ana River to operate in the future, as it has since 1969 when we reached the settlement. Under that judgment, as I indicated yesterday, Muni is obligated to deliver 15,250 acre-feet of base flow at Riverside Narrows. We can use water from any source to meet that base flow. As part of the 1969 settlements, the districts entered into contracts. One in

3

4

5

б

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1969 with the City of San Bernardino and one in 1972 with the City of Colton for wastewater quantities to be dedicated to this activity.

I believe San Bernardino yesterday in their direct testimony indicated that in point of fact part of water that was not available for sale to their private water company with whom they have been negotiating was 16,000 acre-feet per year. That is the amount contained in the contract between Muni and City of San Bernardino. Likewise, we have a contract with the City of Colton for a quantity on the order of 2400 acre-feet per year.

Further, I would like to note for the record that there are no diversions, surface diversions, from the Santa Ana River between the Greenspot Road Bridge, which is downstream of the Conservation District's point of diversion and Riverside Narrows. As Mr. Beeby has just described, there is significant quantities of water passing all of the points of diversion of senior water right claimants, including the Conservation District, and quantities that are probably worth acquiring.

We believe that the existence of Seven Oaks Dam will provide the physical ability to divert those flows. The dam will have a regulating affect on the rate of flow. heard testimony in the past that flow rates at that point can be in the order of 60,000 or more cubic feet per

6 7

9

8

10

11

12

13

14 15

16

17 18

19

20

21

22

23

24

25

Clearly, nobody is going to build a pipe big enough to move 60,000 cubic feet per second when it occurs very infrequently. However, if you have a regulating benefit of a dam to reduce that rate of flow, we believe that is a goal that is worth working toward.

Capturing that water would not have any effect, adverse effect, on meeting the district's obligation at Riverside Narrows due to the use of wastewater pursuant to contracts already in existence, which have been in existence for 30 years, just slightly less than 30 years.

To summarize, the notion that we must prove that there is, if you will, brand-new water above the dam in order to pursue the right to divert water in the vicinity of the dam we believe is inconsistent with the manner in which the river system actually operates from a physical, institutional and legal standpoint.

If the Board were to determine that the only water that could be diverted from Seven Oaks were, in fact, newly minted water, if you will, to the area upstream, we believe that would result in an irrational limitation on the ability of Western and Muni to fully utilize the natural resources from this area pursuant to the rights that we believe we acquired under Western and Orange County settlements.

Thank you for your time.

MR. O'BRIEN: Mr. Fuller, starting at Page 7 of Exhibit

1 8, is your rebuttal testimony. Have you had an opportunity 2 to review that? 3 MR. FULLER: Yes, I have. MR. O'BRIEN: Is it true and correct to the best of 4 5 your knowledge? 6 MR. FULLER: Yes, it is. 7 MR. O'BRIEN: Would you please summarize that testimony 8 for us. 9 MR. FULLER: Yes. Yesterday in Mr. Headrick's 10 testimony he suggested that Mr. Beeby did not properly 11 account for the water being diverted by Bear Valley Mutual Company at the auxiliary diversion point near powerhouse --12 13 the old Powerhouse Number 3. 14 I think, believe Mr. Beeby and Mr. Van reported that 15 inspection of U.S. Geological Survey records indicated that 16 during the period of study that Mr. Beeby had used, the 17 auxiliary diversion was used infrequently and the amount of 18 that assumption might result in a 5 percent difference in 19 the numbers. 20 I think Mr. Headrick also suggested Bear Valley may in the future use this auxiliary diversion point to a greater 21 extent. And I think what Mr. Headrick was getting at is 22 23 that as part of the construction of Seven Oaks Dam, Southern 24 California Edison Company relocated Powerhouse Number 2 to

the present location of Powerhouse Number 3. And in doing

	1
,	2

5

7 8

9

10

12

11

13

14

15

16

17

18

19

20

21

22

23

24

25

that they constructed a pipeline from Powerhouse Number 2 to forebay all they way down to what was the old Powerhouse Number 3 and renamed Powerhouse Number 3 Powerhouse Number In doing that they destroyed a well at the old Powerhouse Number 2 that intercepted underflow from the bed of the Santa Ana River and pumped that into the penstocks that led to Powerhouse Number 3 then. That well produced, when first started, about two and a half cfs and quickly tapered off to about 1.8 cfs. I've shown it about 2 here.

Bear Valley will continue to divert that underflow when needed for their uses through the auxiliary gauge, because as the water flows in the bed of the Santa Ana River, it runs into the Seven Oaks Dam core trench and it pools up behind the dam and eventually flows out through the outlet works. Bear Valley will be able to divert that water as surface flow from the outlet of Seven Oaks Dam in those years when they need it to supplement their flows coming down through the penstock, where they get the majority of water.

So, Bear Valley also has another interception gallery, or infiltration gallery, in the streambed near Greenspot Road Bridge. This is called the Redlands Tunnel. Redlands Tunnel -- the water that would have historically been diverted from Redlands could also be diverted through the auxiliary gauge. That flow rate is approximately 2 cfs

nearly year-round. So Bear Valley will probably, and this 1 2 is speculation on my part as well as Mr. Headrick's, probably pick up the 4 cfs at the auxiliary diversion to 3 supplement their flows in the Edison system as needed. 4 5 Again, as documented in USGS records and as mentioned yesterday by Mr. Beeby and Mr. Van, the auxiliary gauge has 6 not been used frequently during the study period that we 7 have used, and so it does not result in a serious error, a 8 significant error, in the period of study that we used. 9 10 So, in sum, Mr. Headrick may be correct in suggesting 11 that Bear Valley will continue to take water there. amount of water they take there should not seriously affect 12 13 the diversions available to the San Bernardino Valley 14 Municipal Water District and Western Municipal Water 15 District. 16 This concludes my presentation. 17 MR. O'BRIEN: Thank you. 18 That concludes our rebuttal testimony. 19 H.O. BAGGET: Any questions? See if everybody --20 Orange County. 21 MR. MCNEVIN: 22 H.O. BAGGET: San Bernardino. 23 MR. COSGROVE: Yes. 24 ---000---

//

. 1	CROSS-EXAMINATION OF REBUTTAL TESTIMONY 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: Mr. Beeby, I guess I will start with
7	you. You originally defined the base period as
8	representative for future flows in part because you
9	concluded that that base period was conservative; isn't that
10	what you testified to?
11	MR. BEEBY: Yes. Yes, I did.
12	MR. COSGROVE: Now you are telling us, essentially it
13	seems to me, acknowledging that the flows on which you
14	based the amount of water that is available, that was
15	actually wetter than average as opposed to the drier than .
16	average which led you to conclude that the base period was
17	conservative?
18	MR. BEEBY: I would not agree with that. What you are
19	doing is mixing apples and oranges. My analysis was based
20	on the combined flow which, in fact, is conservative in that
21	it slightly underestimated the long-term average. I do not
22	necessarily agree with the approach that you can subdivide
23	this basin into a smaller area in order to illustrate a
24	different effect.
25	It is correct, however, that if you take the river only

gauge, the base period, the 1971-72 through 1990 base period, is approximately 8 percent wetter than the long-term average.

MR. COSGROVE: Apples and oranges, Mr. Beeby, is entirely the point. Because the base period was defined with all three gauges, and yet the amount of water that was available was taken from two. All three gauges showed a dry period, but when you looked at the two gauges, which led to the conclusions of available water, that was a wet period?

MR. BEEBY: No. That is precisely why you don't separate these things into small subareas. What we are trying to estimate is a reasonable base period to use for the entire upstream portion of the Santa Ana River system, upstream from Mentone. So, you can -- we can make this argument about whether it is appropriate to use smaller subareas, but I just don't agree that that is the proper approach. And if it were, we are only talking take an 8 percent difference, anyway.

MR. COSGROVE: Regardless of the propriety of dividing subareas, did you or did you not take your quantities of water available from the two gauges that you -- whose analysis you presented to us for the first time this morning? It was the auxiliary gauge and the Mentone gauging station?

MR. BEEBY: Yes. The numbers that I --

1	MR. COSGROVE: That is all I need to know.
2	MR. O'BRIEN: I think the witness should be entitled to
3	complete his answer to the question.
4	MR. COSGROVE: I think he did.
5	MR. O'BRIEN: I think you interrupted him.
6	H.O. BAGGET: Allow the witness to finish.
7	MR. COSGROVE: Go ahead.
. 8	MR. BEEBY: The numbers I presented this morning were
9	the combined flow readings, gauge readings, that I testified
10	to yesterday less the upstream diversions.
11	MR. COSGROVE: Less the SCE flows?
12	MR. BEEBY: Yes.
13	MR. COSGROVE: And if I understand the charts that you
14	presented today correctly, what you've done is adjusted it
15	for that 8 percent difference between the well, you
16	identified an 8 percent difference; is that correct?
17	MR. BEEBY: 8 percent difference is between the
18	long-term average and the average flow during the 1971 to
19	1972 base period?
20	MR. COSGROVE: Do you believe it is appropriate to
21	extrapolate that 8 percent reduction in the overall flows
22	from cumulative based on that 8 percent conclusion that you
23	reached with regard to what I characterize as the wetter
24	nature of the flows at the two gauges from which you based

your estimate of available water?

u

MR. BEEBY: Well, the reason I did the adjustment on the cumulative was to give an order of magnitude estimate of what the effect might be. So I think the answer to your question is yes. What I did was just take that off of the total cumulative. The charts that are shown up there are not adjusted. Those are the raw data.

MR. COSGROVE: My question, I suppose, then becomes do you still believe that the base period that you selected is appropriate for predicting the amounts of flows that are prospectively and presently available at the Santa Ana River near Mentone?

MR. BEEBY: To answer that question I have to come back to the idea that the selected period that I used to study this is based on that. That is the fact; that is what I used. I also indicated in response, I think, to a Board's question yesterday that I may take a look at a different study period as we get down to the application process. Because my objective in this level or at this phase of the investigation was not to precisely quantify what the potential diversion might be, but merely to indicate that it is a large amount, significantly greater than what has historically been diverted and that the moment of those potential diversions by Muni/Western would not affect historical diversion and would not affect negatively the terms and conditions of the Orange County Judgment.

1	MR. COSGROVE: So that the base period may vary
2	depending on the objective of the study?
3	MR. BEEBY: That is not correct.
4	MR. COSGROVE: The use you previously used monthly
5	averages you said in the direct exam. You used monthly data
6	which you collected by years as opposed to month. Is that a
7	fair characterization?
8	MR. BEEBY: No.
9	MR. COSGROVE: Explain to me because you did use
10	monthly data in your original direct exam?
11	MR. BEEBY: Correct. Let me explain the full process.
12	We had either data from the Conservation District or data
13	from the USGS gauging stations. USGS gauging stations are
14	typically reported in average daily flows, so many cfs per
15	day. To get those to monthly basis, typically, you can take
16	those cfs days and convert them to the number of acre-feet
17	that would occur in that month based on the number of days
18	in that month. That was our starting point. So that is how
19	we used the monthly flows.
20	Now, when I report the annual flows, both today and
21	yesterday, that is the sum of 12 months that are included in
22	water year from October 1st through September 30th.
23	MR. COSGROVE: The base data was still monthly?
24	MR. BEEBY: Which is derived from average daily, yes.
25	MR. COSGROVE: You have criticized, I think again

today, the use of the Conservation District of monthly average flows. That is correct?

MR. BEEBY: No. I haven't criticized the use of monthly average flows. I criticized their use of averages in trying to characterize a long-term period of record.

MR. COSGROVE: I would understand that to be the same thing. Thank you for the clarification.

But the point being that you believe that, for example, the chart that was shown by Conservation District which showed the monthly flows in the river by average, that that was an inappropriate analysis, correct?

MR. BEEBY: Yes. Because it was the average of a 12or 15-month period to show that the average flow in May, for example, is some number. Yes, that is inappropriate.

MR. COSGROVE: I think you testified earlier that the better way to do that would be to show an exceedance curve when those flows will be exceeded or probability of exceedance curve?

MR. BEEBY: I suggested that the probability of exceedance curve is used as another tool to help people understand the reliability of supply. I still think the best way to do it is take the historical record, as I have done in these exhibits presented today, and determine how much water can be scalped in the months where there is excess flows that are not historically diverted.

1	MR. COSGROVE: Have you used that tool in any way to
2	assess how often the types of peak flows that you that can
3	scalp occurred on a monthly basis?
4	MR. BEEBY: I have not done probability of exceedance
5	on a monthly basis.
6	MR. COSGROVE: Mr. Reiter, a couple questions for you.
7	Do I understand correctly from your testimony in paragraph
8	forgive me for just a second. Under Paragraph 6 you say,
9	to summarize, the notion that Muni/Western must establish
10	the existence of new water upstream of Seven Oaks Dam in
11	order to pursue a right to divert water in the vicinity of
12	the dam is inconsistent with the manner in which the Santa
13	Ana River system functions from a physical, institutional
14	and legal standpoint.
15	Is that an accurate statement of your understanding of
16	your testimony here today?
17	MR. REITER: That's what the testimony is.
18	MR. COSGROVE: I believe you said that to even suggest
19	that would impose an irrational limitation on these
20	proceedings and the results?
21	MR. REITER: I believe so, based on our testimony of
22	Mr. Beeby there has been water that has not been previously
23	used.
24	MR. COSGROVE: Have you reviewed the file with respect
25	to the application that your agency has made that is here,

kept here with the State Board?

MR. REITER: Some time ago.

MR. COSGROVE: Were you present at a meeting with Melanie Collins on June 13, 1997, which apparently included Mr. O'Brien, Mr. Fuller, Curtis Van, and included Melanie Collins and a number of other people from the State Board staff discussing this petition?

MR. REITER: I believe I had been at all meetings that we had with staff, Board staff.

MR. COSGROVE: Do you recall any discussion from the State Board in connection with any of those meetings where your agency was told to find the source of the water that Orange County Water District says is wasting to the ocean and that if none of it is coming through the Seven Oaks Dam and coming from a downstream tributary instead, then amounts recorded at Ball Road would have no use to SBV and MWD?

MR. O'BRIEN: Excuse me, Mr. Bagget. He seems to be reading from a document. I think it is only fair that the witness have a chance to see this document.

H.O. BAGGET: I would agree.

MR. COSGROVE: That is fine.

I will show it to you first. It is my only copy. This is a document that comes from a file, dated June 13th, I believe, 1997. It is a memorandum entitled "Contact Report" from the Division of Water Rights.

I am going to object to the introduction MR. O'BRIEN: of this document on grounds of no foundation or authenticity. I think it is irrelevant to this proceeding and it is hearsay. Ms. Collins is not here. She is the author of the document. She is not here for me to cross-examine. I think it is inappropriate for him to question this witness about a document prepared by someone else about contents of a meeting.

MR. COSGROVE: I would like to be heard on that.

MR. FRINK: I could answer the question he just raised.

MR. COSGROVE: Go right ahead.

MR. FRINK: The document was included in a file that was already in as Staff Exhibit 1. At the time that that was a accepted into evidence the Hearing Officer indicated that he would respect the limitations on use of hearsay that are set forth in Board regulations. It is in the record already.

MR. O'BRIEN: Nonetheless, I stand by my hearsay objection and my other objections. I move to strike the document on that basis.

MR. COSGROVE: Under Government Code 11513(D), hearsay can be used so long as it is not being used as an independent to support independent point, but it is

permissible to be used.

In addition, what we are going for here is basically it is inconsistent with the testimony currently on what is to be required is inconsistent with the direction, under at least under this memo, the Board has given as to what needs to be established, and I don't see where that is inadmissible in any respect in this proceeding.

MR. O'BRIEN: I just think it is irrelevant to hear the thoughts and opinions of a staff member of this Board who is no longer involved in this process, no longer employed with the Board as to what the requirements of the Board purportedly were with respect to this proceeding. It is completely irrelevant to what we are trying to accomplish here.

MR. FRINK: I think there is a question of relevancy. The author of the memorandum isn't here and unable to give her opinions on it. And, in any event, the opinions of a former staff member do not represent the opinions of the Board. If you want to quickly ask Mr. Reiter if he agrees with the particular statement, that may clarify it. I wouldn't spend a lot of time on it.

MR. COSGROVE: What I wanted to ask him was whether it was instructed at anytime by the Board to address this issue as part of these proceedings or whether anyone from his agency was instructed to do so as part of these proceedings.

MR. O'BRIEN: The question was whether the Board instructed him or whether Ms. Collins might have instructed him. I think there is an important difference.

MR. COSGROVE: The Board or its staff.

MR. FRINK: A staff member does not speak on behalf of the Board. If you want to ask the witness if he agrees with what Ms. Collins stated there, you can ask that. That is about as far as it will go.

H.O. BAGGET: I would concur.

MR. COSGROVE: I would like to make an offer of proof on that before further questioning is not permitted.

That offer would be that instructions that were received by this applicant from staff acting in the normal course of its business, I believe, are relevant to the issues that are raised by the petition. Certainly, it is relevant to the contention that a fundamental basis on which much of my client's testimony is directed and taken from this staff report. As an indication of what the Board staff is interested that the evidence needs to be directed to is appropriate. And for the applicant to come in now and say that this type of analysis is irrational and completely wrong, when the State Board's own memoranda say whether or not it is binding on the Board or whether or not it is a final determinative issue, that it is relevant to the proceeding and that that has to be shown. I think that that

belongs as part of this proceeding.

And, therefore, I would like to request that that line of questioning be permitted and that the contact report remain an exhibit and that it not be stricken.

MR. O'BRIEN: I don't know if that is an offer of proof or a motion to reconsider. But you have ruled on his objection. If the chair is not inclined to change his ruling, I have nothing further to say.

If you want to hear argument in response to that, I would be glad to address it.

H.O. BAGGET: Off the record.

(Discussion held off the record.)

MR. FRINK: Mr. Bagget, after looking at the contact report, it does appear to represent a statement of a staff member at the time. The document has already been admitted into the record as part of Staff Exhibit 1. I believe that the witness has made it clear in his testimony this morning that he disagrees with the analytical approach that that staff member suggested in the contact report. Both pieces of evidence are in the record. I think belaboring it further is repetitious and irrelevant, and for that reason should not be allowed. We should not spend any more time on it today.

MR. COSGROVE: And that hint is taken. I will move on. I do want to make sure that this contact report has not

1	been stricken from the record.								
2	H.O. BAGGET: The contact report was admitted to the								
3	record yesterday, so it remains in the record. But I will								
4	sustain the objection.								
5	MR. COSGROVE: No further questions.								
6	Thank you.								
7	My only other question would be for Mr. Fuller.								
8	Mr. Fuller, are you aware whether the facilities that								
9	Bear Valley uses to take water off of what you have called								
10	the auxiliary diversion point has been modified any time								
11	recently?								
12	MR. FULLER: Yes, they have been modified.								
13	MR. COSGROVE: As I understand it, those facilities								
14	have been modified to include two 40-inch pipes. Is that								
15	accurate?								
16	MR. FULLER: I actually think they are two 48-inch								
17	diameter culverts under the access road that the Corps of								
18	Engineers left in the canyon for their accessibility to the								
19	dam, yes.								
20	MR. COSGROVE: What's the combined capacity of those								
21	two 48-inch culverts?								
22	MR. FULLER: I don't know the answer to that question,								
23	assuming other factors involved for me to give you an answer								
24	to that.								
ì									

MR. COSGROVE: There is not a design capacity of those

1	pipes that you are aware of?
2	MR. FULLER: I don't know who would have done that work
3	to design those, no.
4	MR. COSGROVE: I don't have any further questions.
5	H.O. BAGGET: Thank you.
6	City of San Bernardino.
7	00
8	CROSS-EXAMINATION OF REBUTTAL TESTIMONY OF
9	SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT &
10	WESTERN MUTUAL WATER DISTRICT
11	BY THE CITY OF SAN BERNARDINO
12	BY MR. MOSKOWITZ
13	MR. MOSKOWITZ: I am Joel Moskowitz. Again, I have a
14	couple clarifying questions for Mr. Reiter.
15	Mr. Reiter, turning back to Paragraph 3 on Page 5 of
16	the rebuttal submission. You stated here that Muni entered
17	into contracts with the cities of San Bernardino and Colton
18	to obligate specified quantities of water discharged from
19	the cities' treatment plants. Now these contracts were
20	entered into in '69 and '72.
21	Is that your understanding, you still don't get it from
22 -	two different plants nowadays?
23	MR. REITER: No, that's correct, there were two plants
24	at the time the contracts were entered in.

MR. MOSKOWITZ: Today, however, you get all the water

from the RIX plant?

MR. REITER: That's correct.

MR. MOSKOWITZ: Do you know how much water you purchase from the City of San Bernardino from that plant?

MR. REITER: If you recall my opening statement, I changed that word from "purchased" to "acquired." There is a quantity of 16,000 acre-feet from the City of San Bernardino. I believe it is 2400 acre-feet from the City of Colton.

MR. MOSKOWITZ: That was my next question. The City of Colton is 2400 acre-feet. Let me get on to the acquired versus purchased. Isn't it true that the City of San Bernardino can, under specified circumstances, get a credit for state project Water under that contract in return for that supplied water?

MR. REITER: Yes.

MR. MOSKOWITZ: Could you explain those terms?

MR. REITER: This is the best of my recollection. It's been a while since I read the contract.

The City of San Bernardino and the City of Colton were subject to pumping limitations under an old case, Orange County versus City of Riverside, et al., of which San Bernardino, Colton and Redlands were part of the "et al.," which limited their pumping. Under the 1969 Orange County Settlement that was one of two judgments affecting our area

2

3

4 5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

which Orange County is prohibited from enforcing, provided the base flow requirements are met.

The provision of state project Water to San Bernardino is conditioned on the fact that if somebody subsequently or some party subsequently in judicial action manages to limit San Bernardino's water to a quantity of less than a quantity they are limited by under the Orange County Settlement, the district agreed to provide state project Water at no charge.

MR. MOSKOWITZ: That was in consideration in part for the supplying of wastewater at Riverside Narrows; was it not?

MR. REITER: I think there were two facets there. was by district's accepting the obligation to meet the base flow requirements that allowed San Bernardino to have their limitation lifted; and the other part of the action was, yes, if somebody independently succeeded in limiting San Bernardino's right to produce from the San Bernardino Basin that our district would provide, at no charge, provide state project water. Yes, it was basically an exchange for the wastewater.

MR. MOSKOWITZ: There are other things that might restrict San Bernardino's production of groundwater, aren't there, such as contamination or prior rights or other things? It is not just limited to that judgment?

1	MR. REITER: There are other things that would limit								
2	their production, but I do not think they were spoken to in								
3	that agreement.								
4	MR. MOSKOWITZ: Your recollection of that agreement, it								
5	specifically referenced that judgment rather than pumping								
6	limitation?								
7	MR. REITER: Yes. I think it referenced that judgment								
8	and then if somebody subsequently got another judgment								
9	against San Bernardino, a third party, if you will, other								
10	than Orange County at that point our district had to								
11	provide water.								
12	MR. MOSKOWITZ: You mentioned that the amount that the								
13	City of San Bernardino is planning to sell to another								
14	private entity is the same number as the amount we are								
15	supplying under our contract with you; you mentioned that?								
16	MR. REITER: If I said that, I misspoke. What I was								
17	trying to say, the quantity in excess of the 16,000 was what								
18	they were planning to sell.								
19	MR. MOSKOWITZ: It is not as though they are going to								
20	take water away from you and ship it somewhere else?								
21	MR. REITER: I did not mean to put that in the record,								
22	if that is the way it came across.								
23	MR. MOSKOWITZ: You didn't say that. Just wanted to								
24	make sure there was no confusion in the mind of the								
25	listener. That is all.								

1	H.O. BAGGET: East Valley.
2	MR. KENNEDY: Yes, briefly.
3	00
4	CROSS-EXAMINATION OF REBUTTAL TESTIMONY OF
5	SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT &
6	WESTERN MUTUAL WATER DISTRICT
7	BY EAST VALLEY WATER DISTRICT
8	BY MR. KENNEDY
9	MR. KENNEDY: Just a couple of questions for Mr.
10	Reiter.
11	Mr. Reiter, you indicated in your rebuttal testimony
12	that you wanted to present some argument regarding the legal
13	framework behind the Santa Ana River, the rights in the
14	Santa Ana River was part of what your rebuttal testimony was
15	regarding?
16	MR. REITER: My point was with regard to the Orange
17	County Settlement and the opportunities it provided for
18	areas upstream to conserve water.
19	MR. KENNEDY: Have you discussed the senior water right
20	holders in the Santa Ana River, specifically Paragraphs 4, 5
21	and 6?
22	MR. REITER: Just in the context of the fact that if
23	their needs were met, that water downstream from there
24	should be available.
25	MR. KENNEDY: Okay. Under Section 9 of the application

that has been filed by Muni, that provision states that the permit which is sought by this application would be junior as a matter of law to such pre-1914 appropriate rights of Edison and mutual water companies that are listed. One of the mutual water companies that is listed is North Fork Water Company. Is that your recollection?

MR. REITER: I believe so, yes.

MR. KENNEDY: Does that continue to be the position of Muni at this time?

MR. REITER: Yes.

MR. KENNEDY: Does that -- will that be the position of Muni if this petition is granted and there will be a further hearing on the application?

MR. O'BRIEN: Can we have a clarification when he talks about the pre-1914 rights, I don't want to get into a situation where we are talking about Mr. Cavender's version where it is basically unlimited rights. If we can have some definition of quantities we are talking about I think it would be a more relevant question.

MR. KENNEDY: I am simply asking Mr. Reiter if the position of Muni, as stated in its application, continues to be the same today and will continue to be the same if the petition is granted and we have further hearing on the application.

I am not asking Mr. Reiter any statements as to the

1.	actual numbers, but rather just whether or not the position
2	of Muni remains the same.
3	MR. REITER: I believe that the agreement that you
4	submitted yesterday, alluded to yesterday, between our two
5	districts, anticipate we execute in the near future speaks
6	to that issue. I believe the answer is yes.
7	MR. KENNEDY: Muni is a signatory to the exchange
8	plain; is that correct?
9	MR. REITER: That's correct.
10	MR. KENNEDY: And the water rights of North Fork Water
11	Company was included as part of exchange plain; is that
12	correct?
13	MR. REITER: Lumped together with Bear Valley and
14	Lugonia, yes.
15	MR. KENNEDY: And it is your understanding that the
16	terms of the exchange plan there is a provision that
17	provides that no party in the exchange plan will lose the
18	water rights that are recognized in the exchange plan by
19	reason of nonuse?
20	MR. O'BRIEN: Mr. Bagget, excuse me. I think we are
21	going beyond the scope of the rebuttal testimony that was
22	presented. I think if he wanted to get into issues about
23	the exchange plan or other issues that the proper time to do
24	that was yesterday. This ought to be limited to the
25	rebuttal testimony.

H.O. BAGGET: I would concur.

MR. KENNEDY: If I may, Mr. Reiter's rebuttal testimony dealt with the legal framework under which the senior water rights holders exercise their pre-1914 water rights. That is specifically referenced in Sections 4, 5 and 6 of his testimony. And, in fact, he indicates that those rights or the water that could be captured as result of this application if the petition is granted would be in excess of the historical diversion requirements of the senior water right holders.

I am simply following up on that portion of Mr. Reiter's rebuttal testimony.

MR. O'BRIEN: I withdraw my objection. I don't want to be an obstructionist. I think we can focus in on rebuttal testimony. This can be moved along.

MEMBER FORSTER: I have a question. Are you just confirming Number 5, what he said? Why don't you just read that and ask him?

MR. KENNEDY: No, that is not my intent. My question is whether or not it is the position of Muni that the provisions of the exchange plain that provide that water rights of the senior water right holders have not been lost by nonuse continues to be something that Muni continues to enforce through this proceeding.

So you may answer that question.

1	MR. O'BRIEN: I would like to have a definition of
. 2	"senior water right holders" that he is talking about.
· 3	MR. KENNEDY: Since your rebuttal testimony refers to
4	senior water right claimants, perhaps you can define how you
5	used that term in your rebuttal testimony.
6	MR. REITER: We were talking about the historic demands
7	of North Fork, Bear Valley, Lugonia, Redlands water and the
8	Edwards Line as part of the Bear Valley North Fork
9	system. I think that the agreement that was stipulated into
10	evidence this morning speaks for itself as far as my
11	district's Board's position with regard to existing rights.
12	MR. KENNEDY: So, the entities that you just named,
13	those would qualify as senior water right claimants as you
14	used the term in your rebuttal testimony?
15	MR. REITER: People upstream of that Greenspot Bridge.
16	MR. KENNEDY: That would include North Fork Water
17	Company?
18	MR. REITER: That's correct.
19	MR. KENNEDY: As I asked and I think as you answered,
20	North Fork Water Company is a party to the exchange plan?
21	MR. REITER: Yes.
22	MR. KENNEDY: And Muni is a party to the exchange plan?
23	MR. REITER: Yes.
24	MR. KENNEDY: And Section 14A of the exchange plan
25	provides that no party under that agreement will lose any

1	right by nonuse; is that correct?
2	MR. O'BRIEN: You know, I am going to object on
3	relevance, beyond the scope of rebuttal testimony.
4	Yesterday you had a tight rein on relevance issues. I
5	am going to impose
6	H.O. BAGGET: I would sustain the objection.
7	Get to where you're going.
8	MR. KENNEDY: I have no further questions.
9	H.O. BAGGET: Thank you.
10	Inland Empire.
11	MR. CIHIGOYENETCHE: No questions.
12	H.O. BAGGET: Big Bear.
13	MR. EVENSON: No questions.
14	H.O. BAGGET: Chino Basin Local Sponsors.
15	MR. DONLAN: No questions.
16	H.O. BAGGET: And City of Ontario.
17	MR. GARNER: No questions.
18	H.O. BAGGET: Thank you.
19	MR. O'BRIEN: We would just offer into evidence
20	Exhibits 8 through 13, Muni/Western 8 through 13.
21	H.O. BAGGET: If no objections, they are entered into
22	evidence.
23	Thank you.
24	Orange County.
25	MR. MCNEVIN: Thank you.

1	H.O. BAGGET: While waiting for rebuttal, how many								
2	other rebuttals?								
3	Two other parties.								
4	Do you have a rough estimate on what your time is going								
5	to be?								
6	MR. COSGROVE: I would say about 20 minutes.								
7	MR. CIHIGOYENETCHE: About 15 minutes.								
8	H.O. BAGGET: I guess the debate, we will see how this								
9	one goes. If we can extend this one straight through to								
10	1:00 and be done, that would certainly be my preference. We								
11	will see. I imagine a few other people in the audience								
12	also.								
13	MR. MCNEVIN: We are ready to proceed, your Honor.								
14	H.O. BAGGET: I have a robe, but I didn't wear one up								
15	here.								
16	00								
L7	REBUTTAL TESTIMONY OF								
L8	ORANGE COUNTY WATER DISTRICT								
L9	BY MR. MCNEVIN								
20	MR. MCNEVIN: Mr. Mills, yesterday Mr. Moskowitz								
21	indicated that OCWD's Exhibit 16 did not represent increased								
22	storm flow as a result of urbanization upstream, but merely								
23	represented a contrast between a wet period and a dry								
24	period.								
	\cdot								

Have you had an opportunity to study this issue

	_		_			
	€-	 	:h	_		•
	т 1		- m	_	~	

MR. MILLS: Yes, I have.

MR. MCNEVIN: Have you drawn any conclusions as to that?

MR. MILLS: Yes, I have. I would like to begin by refreshing my memory as to the contents of this particular graphic. The graphic illustrates the runoff storm flow at Prado Dam beginning the period 1963-64 to 1997-98 in terms of the runoff divided by the number of inches of rainfall. And as can be seen, we show an increasing trend.

Daring this period of time there was, of course, wet periods and dry periods. Short dry period occurred during the mid '70s and, of course, there was a substantial dry period that occurred during last of '80s and early 1990s, known as the six-year drought period.

MR. MCNEVIN: Would you identify that exhibit?

MR. MILLS: This is Exhibit 16 from yesterday's testimony.

We would like to provide here a new exhibit, Exhibit

Number 38, where we took a look at simply the last portion

of that -- the more recent portion of that graphic beginning

in 1978-1979 to the present. And we have shown also a

computer-generated best fit curve here, and we see once

again there is an increasing trend in the runoff or per inch

of rainfall.

We do note, though, that there are five years in here that are relatively wet, and we felt that may skew the analysis. So we then prepared another exhibit, which we'd like to call Exhibit 39, in which we have deleted those wet years. And you can see that we still have a trend line, an upper trend line. I want to be careful to note that we changed the scale on this substantially here because we don't need the high numbers. But you still see a trend line here, slope of a trend line is less than it was on prior charts because we moved those five wet years.

We offer this as still evidence that there is increasing runoff at Prado, per inch of rainfall, due to the increased urbanization and channelization of flows upstream of Prado.

MR. MCNEVIN: Thank you.

Over the past 30 years could you describe the average annual storm flow at Prado based on the Watermaster reports?

MR. MILLS: Yes. I've done a calculation of that, and over this period of time there has been approximately 99,000 acre-feet of annual -- average annual runoff at Prado Dam over the 30-year period from storm flow.

MR. MCNEVIN: The 12,000 acre-feet per year of storm flow that Dr. Drury testified he may use to blend with his recycled water would equal what percent of this average annual storm flow over the past 30 years?

-	Į	

12 ·

MR. MILLS: The 12,000 would be approximately one-twelfth of the average annual amount or about 8 percent of the runoff that has occurred historically.

MR. MCNEVIN: At the risk of creating further confusion, let's go back to the rule of seven for a moment.

Does the rule of seven apply in the event that Inland Empire

Utilities Agency desires to capture and infiltrate storm

flows using the existing replenishment basins?

MR. MILLS: The rule of seven applies. I've had a discussion with Don Evenson during the recess, and we both agreed that our work during the conjunctive use projects several years ago indicated to us that in order to develop one acre-foot per year of annual firm yield, one needed to have at least seven acre-feet of storage capacity in order to do that.

Thus, this means that for 12,000 acre-feet of annual yield one would need a surface reservoir of seven times that value. And the surface reservoir should be located, have to be located, on a drainage course. This would include a reservoir somewhat similar to Prado Dam or similar to the Seven Oaks Dam, having the water conservation pool entirely dedicated, that capacity entirely dedicated to that particular purpose. And I think that the recharge facilities that are indicated there would be the location of the water, where the water would be delivered to. So that

there is no connection between the recharge facilities and the requirement for having this large volume of storage in order to generate the 12,000 acre-feet of average annual firm yield for that particular program.

MR. MCNEVIN: Thank you.

Last, I understand that you wish to correct a potential misunderstanding in your testimony yesterday. Mr. Garner, referring to the MOU which was OCWD Exhibit 8, quoted language that said OCWD did not seek to obtain any right against the parties to the stipulated judgment which was inconsistent with the stipulated judgment.

And he then asked if OCWD was seeking any right at all against the upstream entities.

Did you wish to amend your answer?

MR. MILLS: I would like to clarify that with this statement. The intent of the MOU was to affirm the stipulated judgment, and I stand behind that statement. The MOU was drafted, in fact, by Mr. Garner's office. I think by Mr. Jim Morris. And I do not wish to go beyond the MOU at this particular time. If anyone wishes to amend the MOU, we can discuss it. But I am not comfortable expressing a legal opinion as to the affect of the application. So I cannot agree with Mr. Garner's statement. Fortunately, I am not a lawyer, and I leave MOU's to them.

MR. MCNEVIN: No more questions.

1	H.O. BAGGET: Mr. O'Brien.
2	MR. O'BRIEN: No questions.
3	MR. FRINK: Mr. Cosgrove.
4	MR. COSGROVE: No questions, thank you.
5	H.O. BAGGET: Mr. Moskowitz.
6	MR. MOSKOWITZ: Yes.
7	00
8	CROSS-EXAMINATION OF REBUTTAL TESTIMONY OF
9	ORANGE COUNTY WATER DISTRICT
10	BY THE CITY OF SAN BERNARDINO
11	BY MR. MOSKOWITZ
12	MR. MOSKOWITZ: I would like, Mr. Mills, turn to your
13	new Exhibit 39 with the deletions. First of all, I see your
14	upward sloping line.
L 5	Do you know what the actual numbers are at the
L6	beginning and at end of that line?
L7	MR. MILLS: I can try to read them from the graphic.
L8	Do you mean where they intersect the Y axis?
L9	MR. MOSKOWITZ: Yes. The first one looks to be about
20	31 and
21	MR. MILLS: It looks to be 31. I would say 31,000 and
22	at the end of this period approximately 44,000.
23	MR. MOSKOWITZ: One of the interesting things I'm
4	noticing about this chart is that at any point along the
5	line there are giv barg that outond above the line and the

are eight bars that extend below the line, which means that, 1 notwithstanding this upward trend which is, I gather, kind 2 3 of an average, isn't it? ; 4 MR. MILLS: It is a computer-generated best fit curve line. 5 6 MR. MOSKOWITZ: At any point of the line it would -maybe you have to explain a best fit curve line for a 7 8 nonmathematician. 9 What is that? 10 MR. MILLS: Like I said, I am not a lawyer, and I am 11 not a mathematician, either, but --12 MR. MOSKOWITZ: Maybe we ought to strike your exhibit. MR. MILLS: 13 Thank you very much for that. 14 My understanding of this is best curve fit would be one which would minimize the deviation between the line that you 15 see on this graph at any particular point on either side of 16 17 Sum of the squares, to be specific, I think. object would be to minimize the sum of the squares and the 18 19 differences between those periods. 20 MR. MOSKOWITZ: That is, to use lay speak as best we 21 can understand it, both of us are not a mathematician, it is 22 kind of an average, isn't it? In other words, it is an attempt to manipulate some data, to normalize it in some 23 24 way?

MR. MCNEVIN: Objection. There is no attempt to

1	manipulate data here.
2	MR. MOSKOWITZ: I wasn't speaking pejoratively. To
3	handle it
4	H.O. BAGGET: Sustain the objection.
5	MR. MOSKOWITZ: To handle the data, if you prefer, to
6	normalize it in some way? In other words, to basically
7	combine data in a way that says something about it in the
8	aggregate, as we can understand that as well, what I mean by
9	aggregate?
10	MR. MILLS: I don't think I agree with that. Simply,
11	this is a process to determine whether or not there is a
12	trend in a set of data.
13	MR. MOSKOWITZ: Okay. That is probably the best we can
14	do with nonmathematicians. Let me ask you this: At any
15	point in which the bars intersect your slope line, there are
16	more bars under the line than over the line, isn't that
17	correct?
18	MR. MILLS: That is true in this case, but I've already
19	deleted five that were above the line.
20	MR. MOSKOWITZ: I didn't ask you how many you deleted.
21	I'm just saying is that, notwithstanding you have a slope
22	line, eight times the bar fails to achieve the predicted
23	slope line; isn't that correct? Isn't that what you tried
24	to say?

MR. MILLS: There are eight periods which fall below

1 | the slope line.

MR. MOSKOWITZ: And only six in which they exceed it?
MR. MILLS: That's correct.

MR. MOSKOWITZ: What I am asking you is if more times than not you can't make your slope line, why not? Do you know? In other words, this slope line is predicting a certain result, but more times than not you can't achieve it. So, why not?

MR. MILLS: I don't think the idea here is to develop a line here that has equal number of periods above it and below it. That is not the mathematical process that we go through when we develop a trend analysis.

MR. MOSKOWITZ: My question is much simpler than that. These numbers are different. In other words, for any given year -- let's take two specific years. Let's take a look at 1983 and 1984 and right next to it, 1984 and 1985. If we look there, we see that 1983-1984 seems to have about more than 5,000, around 5,000; and '84-85 is below 3,000. So we have right there on your chart rather different results in adjacent years, notwithstanding this unmistakable, given the change in scale, not really important trend.

Why would these two numbers be different, is what I am asking you. How come we can't get the same result in '84 and '85 as we just got to '83-84, given the unmistakable trend?

MR. MILLS: I think I can answer that question for you. It is not a mathematical issue. The runoff from any watershed is dependent upon the intensity of the rainfall. In other words, in some watersheds it may take six or eight inches per year to have any runoff to occur. And after that incipient or that threshold is reached, you generally get some kind of a parabolic curve, which indicates that you tend to get more runoff per inch of rainfall as you move into the higher years.

MR. MOSKOWITZ: Exactly. So, what influence is how much the soil will absorb before it starts running off is a function of what is already in the soil, right?

MR. MILLS: A function -- partly a function of that.

MR. MOSKOWITZ: Water years don't start fresh every year, do they, with the soil being absolutely dry all the way to bedrock, right? It depends on also what happened the previous year?

MR. MILLS: Not necessarily. Water years that we use here begin on October 1st of each year. And in Southern California we have very little rainfall in the summertime, so we tend to start off each water year with the same antecedant conditions.

MR. MOSKOWITZ: That wasn't what I was asking. Let's say that we had a period of ten really wet years. It was one of these rare things in Southern California, floods us

1	out ten years in a row. Comes year 11, wouldn't you think
2	that the runoff would start sooner per inch of rainfall than
3	if we hadn't had these ten really wet years?
4	MR. MCNEVIN: Objection. Incomplete hypothetical.
5	MR. MOSKOWITZ: I don't know how to make it any more
6	complete, but I will try again if you didn't understand. If
7	you do understand, I would like an answer.
8	MR. MILLS: Are you saying that we had ten
9	MR. MOSKOWITZ: Let's say the groundwater is let's
10	stay let's try Bunker Hill Basin. I know something a
11	little bit about that. Half the time it is threatening to
12	be a lake. Let's say the groundwater is two foot below
13	ground surface as it sometimes is, unfortunately, and we
14	have then the new year's rainfall.
15	Wouldn't there tend to be runoff sooner than if the
L6	groundwater was, say, 50 feet below ground surface?
L7	MR. MILLS: I am not that familiar with the Bunker Hill
L8	Basin, whether two feet of unsaturated system would be
L9	filled very rapidly or not. I couldn't answer that
20	question.
21	MR. MOSKOWITZ: Forget the Bunker Hill Basin. It's not
22	important to the question. The question is: If soil is
23	saturated already from what it's already experienced in the
24	last season, and it didn't go anywhere and it is still
25	there, would you tend to get runoff sooner than if you were

just exiting from a big drought?

MR. MILLS: As I indicated, that is not a likely situation in Southern California because we have dry summers here.

MR. MOSKOWITZ: That is why people ask hypotheticals, so you can just grasp the concept if you understand the answer to that concept. In other words -- let me try this.

MR. MCNEVIN: Objection. I think we're getting into argument here. And whatever point counsel wants to make he can make in his closing argument without pursuing this line any further.

MR. MOSKOWITZ: I think that this is a very important point. If we are talking about an upward trend and the point that I was making, and this is supposed to be rebuttal, is that when you get runoff per inch of rain depends on what you've already experienced. That is why they deleted these dry years.

So what I was saying, and what I think it actually proves, is that what kind of runoff you get in one year depends on how wet the soil was from the previous year. In a wet period you are going to get runoff pretty quick. What I think this witness will eventually say, if he wants to, is that that factor completely swamps the paving factor that we are being offered here, that urbanization is the important

	· ·
1	thing. The really important thing is are you in a wet year
2	or dry year.
3	H.O. BAGGET: I would sustain the objection. I think
4	you are getting into testimony, your argument that you are
5	going to be making in your closing briefs.
6	Do you have anything else that's
7	MR. MOSKOWITZ: No. If this line of inquiry is cut
8	off, then I will, of course, make it in my argument.
9	Thank you.
10	H.O. BAGGET: East Valley.
11	Do we have Inland Empire?
12	MR. CIHIGOYENETCHE: Brief.
13	000
14	CROSS-EXAMINATION OF REBUTTAL TESTIMONY OF
15	ORANGE COUNTY WATER DISTRICT
16	BY INLAND EMPIRE UTILITIES AGENCY
17	BY MR. CIHIGOYENETCHE
18	MR. CIHIGOYENETCHE: Mr. Mills, in your review of
L9	Exhibits 16, 38 and 39 you point to an increasing trend of
20	storm flow per inch of rainfall, correct?
21	MR. MILLS: That's correct.
22	MR. CIHIGOYENETCHE: In my logic of thinking is that
:3	you're tying this increasing trend as a changed circumstance
4	to warrant the granting of the application of why we are

here today; is that correct?

1	MR. MILLS: That's correct.
2	MR. CIHIGOYENETCHE: Isn't it true, Mr. Mills, that
3	this increasing trend was indeed anticipated as early as
4	1969 when the stipulated judgment was entered into between
5	the parties?
6	MR. MCNEVIN: Objection. Whether or not it was
7	anticipated doesn't mean it occurred and what the testimony
8	has been is what has factually occurred over the part 30
9	years, not what was anticipated.
10	MR. CIHIGOYENETCHE: My question is just that. The
11	trends that you are displaying to the Board right now in
12	Exhibit 38 and 39 are precisely those trends that were
13	addressed by implementing the formula for calculation of
14	credits in the 1969 judgment, correct?
15	MR. MILLS: I don't agree with that.
16	MR. CIHIGOYENETCHE: You believe that these increasing
17	trends that you've pointed out are something completely new
18	and unique that were not taken into contemplation in the
19	original judgment?
20	MR. MCNEVIN: Objection. Mischaracterizes the
21	testimony.
22	H.O. BAGGET: Rephrase the question.
23	MR. CIHIGOYENETCHE: Is it your testimony, Mr. Mills,
24	that the increasing trends that you displayed here with
25	Exhibits 38 and 39 are increasing flows that were not

1	anticipated in the original judgment?
· 2	MR. MILLS: I have no knowledge that they were. I
3	might add, these are storm flows that are not subject to the
4	42,000 figure that was in the judgment.
5	MR. CIHIGOYENETCHE: The 12,000 acre-feet that you
6	testified to as being 8 percent of the historical runoff,
, 7	that 12,000 acre-feet is set forth in the testimony of Drury
8	is only that amount used to blend; is that correct?
9	MR. MCNEVIN: Excuse me, you mischaracterized Mr.
10	Mills' testimony. He didn't say it as historic runoff. He
11	said storm flow over the past 30 years.
12	MR. CIHIGOYENETCHE: With that in mind?
13	MR. MILLS: Yes.
14	MR. CIHIGOYENETCHE: Would you answer the question?
15	MR. MILLS: Would you repeat the question?
16	MR. CIHIGOYENETCHE: The question is that that 12,000
17	acre-foot reference is only to that amount utilized to
18	blend; is that correct? Is that your understanding?
19	MR. MILLS: That is my understanding. That is what
20	they would they and I think he said he could blend with
21	either state water or storm water.
22	MR. CIHIGOYENETCHE: Nothing further.
23	H.O. BAGGET: Thank you.
24	Big Bear.
25	MR. EVENSON: No questions.

1	H.O. BAGGET: Chino Basin Local Sponsors.
2	MR. DONLAN: No.
3	H.O. BAGGET: And City of Ontario.
4	MR. GARNER: I have to ask one or two, I am afraid.
5;	H.O. BAGGET: That is why we are here.
6	00
7	CROSS-EXAMINATION OF REBUTTAL TESTIMONY OF
8	ORANGE COUNTY WATER DISTRICT
9	BY CITY OF ONTARIO
10	BY MR. GARNER
11	MR. GARNER: Mr. Mills, as you can imagine, I don't
12	think your clarification gave the upper area parties much
13	comfort, so I need to ask one or two questions here.
14	You're standing behind the terms of the MOU; is that
15	correct?
16	MR. MILLS: I've said that.
17	MR. GARNER: In your understanding in filing this
18	application is OCWD trying to obtain a right against the
19	upper area parties different than the rights outlined in the
20	1969 judgment?
21	MR. MCNEVIN: Objection, calls for a legal conclusion.
22	MR. GARNER: I asked for his opinion, and there is
23	testimony. In fact, in his testimony, Page 4, the first
24	paragraph, he has testimony regarding existing upstream
25	rights. In fact, there are numerous legal references in his

1	direct testimony. I think he is well qualified to answer in
2	his opinion, if that is the case.
3	MR. MCNEVIN: I don't think there are any legal
4	references. There are factual references from stipulated
5	judgment.
6	MR. GARNER: We can go through it, but I believe there
7	are legal references.
8	H.O. BAGGET: I would overrule the objection.
9	What is your understanding?
10	MR. MCNEVIN: Can we have the question read back?
11	MR. GARNER: In filing its application, in your
12	understanding in your understanding, Mr. Mills, in filing
13	its application is OCWD trying to obtain a right different
14	than the rights given to it in the 1969 judgment against the
15	upstream or upper area parties?
16	MR. MILLS: We are not attempting to acquire a right.
17	We are simply trying to stand behind the MOU and what is in
18	the stipulated judgment.
19	MR. GARNER: So you are not trying in your
20	understanding you are not trying to acquire any additional
21	right against upper area parties?
22	MR. MCNEVIN: Same objection. To the extent that this
23	witness' understanding of what rights may be inherent in the
24	stipulated judgment versus what rights are inherent in its
25	application has any relevance, he can provide that limited

1	testimony.
2	MR. GARNER: In your understanding, Mr. Mills, is OCWD
3	trying to use the petition/application process to prevent
4	
	export of water from the Santa Ana River watershed?
5	MR. MCNEVIN: Objection. Irrelevant.
6	MR. GARNER: That is my final question. I think it is
7	relevant.
. 8	H.O. BAGGET: I would sustain the objection.
9	MR. GARNER: All right. No further questions.
10	000
11	CROSS-EXAMINATION OF REBUTTAL TESTIMONY OF
12	ORANGE COUNTY WATER DISTRICT
13	BY STAFF
14	MR. FRINK: I did have a clarification.
15	Mr. Mills, I believe there was a reference made, and
16	maybe it mistakenly, but in one of the questions you were
17	asked someone referred to the years that were deleted from
18	Exhibit 39 as being the dry years. In fact, are the years
19	that were deleted the relatively wetter years?
20	MR. MILLS: That is absolutely true. That was a
21	misstatement by counsel.
22	MR. FRINK: That you. That is all.
23	MR. MCNEVIN: If there are no further questions, I move
24	the admissions of the Exhibits 38 and 39.
25	H.O. BAGGET: If there are no objections, they are

1	admitted in evidence for the record.
2	MR. MCNEVIN: Thank you.
3	H.O. BAGGET: Two more. Let's go for it.
4	MR. COSGROVE: My preference would be to break for
5	lunch.
6	H.O. BAGGET: Let's take a show of hands.
7	MR. COSGROVE: We'll go.
8	H.O. BAGGET: Let's do it. Maybe we can take I
9	would like three minutes. I have to make one quick phone
10	call.
11	Let's take till 12:00, five minutes, seven minutes.
12	(Break taken.)
13	H.O. BAGGET: Let's get going here.
14	Mr. Cosgrove, you can proceed.
15	MR. COSGROVE: Thank you. We are going to call on
16	rebuttal Mr. Headrick.
17	00
18	REBUTTAL TESTIMONY OF
19	SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT
20	BY MR. COSGROVE
21	MR. COSGROVE: Mr. Headrick, you reviewed the analysis
22	done by Mr. Beeby, correct?
23	MR. HEADRICK: Yes.
24	MR. COSGROVE: And you're familiar with the use he
25	makes of the time between 1971-72 and 1990-91 as the base

1 period? 2 MR. HEADRICK: Yes, I am. MR. COSGROVE: And how he uses that period to reach a 3 cumulative conclusion regarding water available in the Santa 4 Ana River near Mentone? 5 MR. HEADRICK: Yes. 6 7 MR. COSGROVE: Do you believe that the base period he's identified provides an accurate basis for concluding what 8 9 unappropriated water might be presently available at that 10 location? 11 MR. HEADRICK: No, I do not. 12 MR. COSGROVE: Do you agree with his conclusion that 13 the base period was a conservative indicator of available 14 river flows? 15 MR. HEADRICK: No, I do not. 16 MR. COSGROVE: Now, in our testimony this morning he had anticipated a little bit of what we've done. 17 Have you 18 done an analysis similar to that which was presented by Mr. 19 Beeby this morning with respect to the characterization of 20 that base period as a conservative or dry period with 21 respect to the two gauges from which the amounts of water inthere were calculated as cumulatively available was done? 22 23 MR. HEADRICK: Yes. 24 MR. COSGROVE: What don't you tell us about that

25

analysis.

1 MR. HEADRICK: I am sure everybody's tired of these 2 squiggly lines. 3 MEMBER FORSTER: They are wonderful. 4 MR. HEADRICK: All this is is a combination of the two 5 charts that was presented before with some additional notes 6 made on them. The top or the red line was the original 7 submittal by the petitioner, which is for the river and the 8 flume. The blue line is the river only. 9 MR. COSGROVE: We will call this Conservation District 10 21. 11 MR. HEADRICK: As has been previously explained how you 12 use these charts to determine wet, relatively wet or dry 13 periods, what this chart shows in one place is the downward 14 trend of the accumulated departure from mean for the entire 15 gauge system of the river only and the flume, and just the 16 opposite conclusion can be made by looking at the river 17 only. 18 MR. COSGROVE: What does the analysis tell you about 19 Mr. Beeby's use of base period as an indicator of present or 20 prospectively available flows? 21 MR. HEADRICK: It obviously, using the methodology 22 presented in the original testimony, it would overstate the 23 amount of water available. Some estimates on how much that 24 overstatement might be are shown down in the lower left-hand

25

corner.

What that slows is how much additional water during that 20-year period above the average or the change in the accumulated departure in mean from the beginning of the period to the end of the period was. You can see before in the original testimony we use all gauges. It shows a dry period by 46,000 acre-feet. But if you use just the river only, actually shows a wet period of 58,000 acre-feet. Combined difference there is over 100,000 acre-feet.

MR. COSGROVE: Mr. Beeby in his testimony that he presented today appears to take the 8 percent by which the base period exceeds average flows at those two gauges and then makes an adjustment to the cumulative amount of water available.

Do you believe that that is a valid calculation?

MR. HEADRICK: It is not.

MR. COSGROVE: Why not?

MR. HEADRICK: Using the same criticism about using averages for this flow is apparent in the use of the 8 percent. If you remember during the rebuttal testimony, they took 8 percent off the top of the total available water that was there, which I believe dropped it 21,000 acre-feet over the 20 period by just using this average. But because we have variable hydrology we really can't do that.

What we see is when we look at the accumulated parts per mean curves, that it really changed, closer to 60,000

1.	acre-feet.
2	MR. COSGROVE: Are you also familiar with the
3	presumption that Mr. Beeby made with respect to where Bear
4	Valley takes its water?
· 5	MR. HEADRICK: Yes.
6	MR. COSGROVE: And the presumption that Bear Valley is
7	a senior right holder would take its water downstream
8	would not take its water downstream of the dam?
. 9	MR. HEADRICK: Yes.
10	MR. COSGROVE: Was this presumption accurate first
11	off, is there data available to test the validity of this
12	presumption?
13	MR. HEADRICK: Yes, there is. It's the auxiliary
14	gauge, 11051502.
15	MR. COSGROVE: Have you looked at that data?
16	MR. HEADRICK: Yes, I have.
17	MR. COSGROVE: Have you assessed whether Mr. Beeby's
18	presumption with respect to the fact that Bear Valley uses
19	infrequent or not at all during the base period, have you
20	used that data to assess the validity of that presumption?
21	MR. HEADRICK: Yes.
22	MR. COSGROVE: Was it valid during the base period that
23	he defined?
24	MR. HEADRICK: Yes, it was.
25	MR. COSGROVE: Is it valid data?

1	MR. HEADRICK: I do not believe so.
2	MR. COSGROVE: Have you done any kind of compilation of
3	data from Bear Valley's diversion from this pickup area?
4	MR. HEADRICK: Yes.
5	MR. COSGROVE: I would like to mark and offer, mark in
6	any event, and ask that we put on Conservation District's
7	Number 22, a chart entitled, "Annual Diversion BVMWCM River
8	Pickup."
9	You see that chart, Mr. Headrick?
10	MR. HEADRICK: Yes.
11	MR. COSGROVE: Did you prepare that chart?
12	MR. HEADRICK: Yes, I did.
13	MR. COSGROVE: Could you tell us what that is?
14	MR. HEADRICK: This shows annual flows that have been
15	taken in by Bear Valley Mutual Company into their diversion
16	downstream of the dam.
17	MR. COSGROVE: There was some testimony this morning
18	that Bear Valley had reconstructed its facilities on the
19	Bear Valley pickup or auxiliary diversion; is that correct?
20	MR. HEADRICK: That is correct.
21	MR. COSGROVE: Are you familiar with the reconstruction
22	facilities?
23	MR. HEADRICK: Yes, I am.
24	MR. COSGROVE: Do you know what capacity those
25	facilities have for diversion downstream of the dam?

1	MR. HEADRICK: Yes, I am.
2	MR. COSGROVE: What is it?
: 3	MR. HEADRICK: The pinch point in that diversion system
· 4	is the USGS gauge, a section itself; and it is designed for
5	45 cfs, 45 to 50 cfs.
6	MR. COSGROVE: The increasing diversions that are shown
7	here on the chart shown from Bear Valley, do you have any
8	reason to believe that Bear Valley will continue its more
9	recent use of this diversion downstream of the Seven Oaks
10	Dam in taking its water?
11	MR. HEADRICK: Yes. Since I work with their field
12	personnel on a weekly basis, they have told me they plan to
13	continue to use this diversion to meet their needs.
14	MR. COSGROVE: What impact does Bear Valley Mutual
15	Water Company's use of the river pickup have on available
16	flows from the river only gauges as projected from Mr.
17	Beeby's base period?
18	MR. HEADRICK: The analysis done by Mr. Beeby, again,
19	tends to overstate the available water because this
20	diversion was not taken into account.
21	MR. COSGROVE: Do you remember in cross-examination
22	yesterday Mr. O'Brien asked you if you'd done an analysis of
23	the probability of the average flows, the monthly average
24	flows, that you testified to on direct being exceeded?
25	MR. HEADRICK: Yes.

1	MR. COSGROVE: You indicated that you had done that
2	analysis?
3	MR. HEADRICK: That's correct.
4	MR. COSGROVE: Did you do that with respect to the
5	seasonal availability of flows in this area near Mentone?
6	MR. HEADRICK: Yes.
7	MR. COSGROVE: Did you do that with reference to on a
8	monthly basis?
9	MR. HEADRICK: That's correct.
10	MR. COSGROVE: Can you describe for us what analysis
11	you undertook in that regard?
12	MR. HEADRICK: Again, took the monthly average flow for
13	the 87 years of record that we have and summarized them or
14	put them in a column and sorted them from lowest to highest,
15	and assigned each one of those a value of probability that a
16	flow would be equal or exceeded.
17	MR. COSGROVE: Have you compiled the results of that
18	analysis in any graphic form?
19	MR. HEADRICK: Yes.
20	MR. COSGROVE: I would like to offer and show Exhibit
21	CD 23, a chart entitled "Summary of Probability of Monthly
22	Average Flows cfs Being Exceeded."
23	Can you tell me what this chart reflects?
24	MR. HEADRICK: Again, this is just a summary of the
25	analysis I just described wherein I took some reference or

1	benchmark flows, ranging from 5 to 500 cfs, and chose the
2	probabilities that those reference or benchmark flows would
3	be equaled or exceeded.
4	For example, at the 500 cfs level you can see the
5	chance that an average flow during that time was equaled or
6	exceeded between April and November is zero.
7	MR. COSGROVE: The percentages that are shown here on
8	this chart, are these after diversions by the Conservation
9	District or Bear Valley?
10	MR. HEADRICK: No. This is before. This is the raw
11	river.
12	MR. COSGROVE: What conclusions do you draw from this
13	analysis regarding the seasonal availability of flows and
14	the exceedance of monthly averages?
15	MR. HEADRICK: Again, it looks to be typical of what a
16	Southern California river would look like dominated by a
17	natural stream system. It shows a very dry period in the
18	summer and fall time. And a wetter period during the
19	spring.
20	MR. COSGROVE: Now, there has been some criticism here
21	on your use of monthly averages and, indeed, on the use of
22	any types of averages for analysis of flows on a variable
23	stream.
24	Have you done any analysis of the seasonable
25	availability of flows near Mentone that doesn't use

1	averages?
2	MR. HEADRICK: Yes, I have.
3	MR. COSGROVE: What analysis did you undertake in that
4	regard?
5	MR. HEADRICK: I actually performed the same type of
6	analysis, but instead of doing any averaging I took the raw
7	USGS daily data and performed the same type of exceedance
8	analysis where you take the roughly 2500 days in January
9	that have occurred the last 87 years, and you sort those
10	from highest to lowest and assign probabilities to each one
11	of those.
12	MR. COSGROVE: And did you compile the results of that
13	analysis in any kind of graphic form?
14	MR. HEADRICK: Yes.
15	MR. COSGROVE: What did you do?
16	MR. HEADRICK: I've actually put together 12 charts,
17	one for each month, that showed the probability of
18	exceeding. We'll put up just a couple representative. A
19	wet period, let's pick March or October.
20	MR. COSGROVE: What I would like to do is collectively
21	mark the months' charts for the probability of daily flow
22	being equaled or exceeded as Conservation District's 24,
23	consisting of 12 charts, January through December.
24	MR. HEADRICK: What we see, looking at this March, is
25	what we consider our wet period where the chance that any

1	day in the last 87 years was above the daily flow, was above
2	200, is in the 10-percent range. If we overlay on top of
3	that the October, which we consider one of the drier months.
4	MR. COSGROVE: Let's hold off a minute. I can see that
5	I've caused some consternation. I am going to mark these
6	individually, 24 through I am sorry.
7	MS. MROWKA: You have to pick a plan.
8	MR. CAVENDER: 24 through 35.
9	MR. COSGROVE: 24 through 35.
10	Go ahead, Mr. Headrick.
11	MR. HEADRICK: What you see when you overlay this dry
12	and a wet period is the difference between the probability
13	that flows will exist in a wet month and a dry month. We
14	see that in October the opportunity for the probability
15	that a flow would exceed 200 cfs during October, based on
16	data from the last 87 years, is zero.
17	MR. COSGROVE: Have you taken the data and results from
18	this analysis and compiled it in a chart form similar that
19	you did for that analysis of the monthly average flows being
20	exceeded?
21	MR. HEADRICK: Yes, I have.
22	MR. COSGROVE: Could you show that to us, please.
23	MR. HEADRICK: Again, using the same layout as before,
24	but this has no averaging other than averaging used by the
25	USGS to come up with our actual discrete points of daily

flow.

Again, we see a very dry period. And if we were to overlay the graph from the monthly chart to the daily chart, you would see that the results are quite similar. Again, we have a roughly eight-month period where the flows, the probability of the flows exceeding 500 cfs. Again, that was the point that I identified yesterday as the regulatory point or regulating effect point for the dam.

The chance that those flows would ever be reached during the period April through December is less than 1 percent.

MR. COSGROVE: What do you conclude on the basis of the analysis that you have done, both with the exceedance analysis for monthly flows and the exceedance analysis with respect to doing no averages, but just looking at the raw data with respect to the season of availability that you testified to on direct?

MR. HEADRICK: I believe it supports the conclusions that we made before. And based on Mr. Beeby's assumption that the dam will regulate flows above 500 cfs, it appears that the 500 cfs row or the bottom row that is shown on the two charts is an appropriate basis for determining the new water or the probability that new water will be created by regulatory effects of the dam.

I believe that these two charts that we have prepared

1	are tools that the State Board can use to determine the
2	answer to one of the key issues, and that is is there
3	adequate water available and, if there is, during what
4	periods does it exist.
5	MR. COSGROVE: We don't have any further questions at
6	this time.
7	MR. FRINK: Just so the record is clear, the last chart
8	that you referred to is Summary of Probability of Daily
9	Flows Being Exceeded, Water Years 1912 to 1998, would be
10	Exhibit 36.
11	MS. MROWKA: No, 38 no, 36; you are right.
12	H.O. BAGGET: Mr. O'Brien.
13	MR. O'BRIEN: Thank you.
14	00
15	CROSS-EXAMINATION OF REBUTTAL TESTIMONY OF
16	SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT
17	BY SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT &
18	WESTERN MUTUAL WATER DISTRICT
19	BY MR. O'BRIEN
20	MR. O'BRIEN: Mr. Headrick, you have reiterated your
21	concerns about Mr. Beeby's base period and provided us with
22	this analysis reflected in Exhibit 21.
23	As I understand it, your analysis is based essentially
24	on data from different gauges than that used by Mr. Beeby;
25	is that correct?

1 MR. HEADRICK: That is not correct. MR. O'BRIEN: Mr. Beeby in the analysis that he 2 performed to come up with his numbers for the base period 3 used, I believe, the combined gauge, Number 11051 and 501; 4 5 is that correct? MR. HEADRICK: That's correct. MR. O'BRIEN: Your analysis you used the river only 7 8 gauge, which is Number 11051500? 9 MR. HEADRICK: That's correct. 10 MR. O'BRIEN: So you did use different gauges? 11 MR. HEADRICK: I used the same gauges. 12 MR. O'BRIEN: Just different data? 13 I just combined two of them instead of HEADRICK: 14 three. 15 MR. O'BRIEN: Fair enough. 16 Now, leaving aside the question of whether the data Mr. 17 Beeby used was the right set of data or the set of data you 18 used was the right set of data, and I understand you 19 disagree with the data set he used, but what I want to get to is in performing his analysis of that data, the 20 mathematical computations that he did, do you have any 21 22 problems with the way he computed his numbers? 23 MR. HEADRICK: Are you speaking just about his accumulated departure from mean that he presented in his 24 25 original testimony?

1	MR. O'BRIEN: Correct.
2	MR. HEADRICK: No. I believe that is represented on
3	our chart; it is the same. We are using the same data set.
4	MR. O'BRIEN: Okay.
5	So, is it fair to say, based on what you just told me,
6	that if you were to use Mr. Beeby's gauge data, as opposed
7	to the gauge data you used, you would expect to come to the
8	same conclusions that he came to with respect to the
9	question of water available at that location?
10	MR. HEADRICK: If I were to use his methodology and
11	MR. COSGROVE: I am going to object. I think that
12	mischaracterizes his testimony.
13	MR. O'BRIEN: Do you understand my question, Mr.
14	Headrick?
1 5	MR. HEADRICK: I understand your question. If I were
L6	to do the exact same analysis that he did, would I come to
L7	the same conclusions? The answer is yes.
L8	MR. O'BRIEN: Mathematically.
L9	Thank you.
20	Now, getting back to your analysis, you concluded that
21	the base period that Mr. Beeby utilized is, in your words,
2	wetter than normal, correct?
:3	MR. HEADRICK: That's correct.
4	MR. O'BRIEN: I believe you testified in your rebuttal
5	testimony that you think that the impact of his use of his

base period versus a more normal base period is in the range of about 60,000 acre-feet; is that correct?

MR. HEADRICK: Yes.

MR. O'BRIEN: Mr. Beeby had testified in his direct testimony that he thought, based on his analysis, that there was between 261,000 and 278,000 acre-feet of water potentially available for appropriation based on his analysis; do you recall that?

MR. HEADRICK: Yes.

MR. O'BRIEN: You are saying that, in fact, in order to be conservative he ought to take 60,000 acre-feet off those numbers?

MR. HEADRICK: That would not be conservative; that would get it back to normal. To be conservative you could potentially decrease it by the number that he was making use of before, to determine what was conservative and what wasn't conservative, the minus 46,000. So, if you actually want to be conservative you wouldn't put it back to neutral or normal hydrology, you would actually want to make it a little drier. So that change --

MR. O'BRIEN: If you were going to be conservative based on the curve that you prepared in estimating the amount of water that is available at that location what number would you subtract from his number of 261,000 acre-feet?

1	MR. COSGROVE: I'll object. That is vague as to time.
2	Available when?
3	MR. HEADRICK: I haven't had any chance to analyze
4	that. I would have to actually sit down and go through the
5	numbers to determine what I would consider to be
6	conservative.
7	MR. O'BRIEN: I am trying to figure out how that 60,000
8	acre-foot number fits into this. You have given us that
9	number. I would like you to explain what that number
10	represents.
11	MR. HEADRICK: That number represents the difference
12	between the accumulated departure from mean at the beginning
13	of the chosen base period and accumulated departure from the
14	mean at the end of the base period. So it is increased by
15	that much mean. On average that much more water went by
16	through that period.
17	MR. O'BRIEN: That represents the increment by which
18	you believe Mr. Beeby's analysis may be, shall I say, less
19	conservative. Is that fair?
20	MR. HEADRICK: That is part of it, yes.
21	MR. O'BRIEN: Would you disagree, though, based on the
22	analysis that you have done that there is surplus water that
23	passes the river at that point at Mentone, regardless
24	let's not talk about what the number, let's talk about the
25	gross terms. Is there surplus water?

1	MR. COSGROVE: Again, vague as to time.
2	H.O. BAGGET: Over what time period?
3	MR. O'BRIEN: The time periods reflected in your
4	exhibit.
5	MR. HEADRICK: I believe my analysis shows that during
6	certain periods of the year, January through April, January
7	through May, there are significant flows.
8	MR. O'BRIEN: Those flows would be available for
9	diversion at Seven Oaks Dam, assuming that the State Board
10	grants the necessary permits?
11	MR. COSGROVE: I think that calls for a legal
12	conclusion. Object to it on that basis.
13	H.O. BAGGET: Sustained.
14	MR. O'BRIEN: Those quantities would be physically
15	capable of diversion in the vicinity of Seven Oaks Dam,
16	right?
17	MR. HEADRICK: That is not known yet. Physically
18	meaning the facilities exist to perform that function?
19	MR. O'BRIEN: Let's assume the facilities exist. The
20	question is, is the water there?
21	MR. HEADRICK: Yes, I believe analysis shows that.
22	MR. O'BRIEN: Thank you.
23	On the Bear Valley Mutual diversions, which is your
24	Exhibit Number 22, these increases in Bear Valley Mutual
25	diversions that occurred let's say beginning in 1995

you know what precipitated that change?
MR. HEADRICK: I believe construction of the dam.
MR. O'BRIEN: And is it fair to say that the increases
in diversions starting in 1995 occurred outside the base
period which Mr. Beeby used for his analysis?
MR. HEADRICK: Yes.
MR. O'BRIEN: So this these increases in the
diversions occurring in 1995 would not effect the validity
of Mr. Beeby's analysis?
MR. HEADRICK: That is not correct.
MR. O'BRIEN: Are you aware of any net increase in the
diversions of water by Bear Valley Mutual during the past
ten years?
MR. HEADRICK: I am not.
MR. O'BRIEN: So this is a situation where they're
taking the same amount of water but they are doing it at a
different location?
MR. HEADRICK: I don't know if they are taking the same
amount of water.
MR. O'BRIEN: You have no knowledge of that?
MR. HEADRICK: I do not have that information with me.
MR. O'BRIEN: If Bear Valley Mutual were to in the
future divert more water at a point farther downstream, as
you've suggested, would that make diversion capacity in the
Southern California Edison facilities available for other

1	parties to use at an elevation higher?
2	
3	MR. COSGROVE: I think that calls for a legal
3	conclusion, as well.
4	MR. O'BRIEN: Physically?
5	MR. HEADRICK: Repeat that question.
6	MR. O'BRIEN: If Bear Valley Mutual were to do what you
7	are suggesting and move some of its diversions farther
8	downstream, would that free up physical capacity in the
9	Southern California Edison system for use by other parties
10	at a higher elevation?
11	MR. HEADRICK: I don't believe so. The Edison system
12	is run by Edison. They put as much water into it as they
13	can, based on the flows, as I understand it. Would not free
14	anything up.
15	MR. O'BRIEN: So, the fact of Bear Valley Mutual taking
16	more water at a different location wouldn't make any
17	diversion capacity available at the higher point?
18	MR. HEADRICK: No.
19	MR. O'BRIEN: Taking a look at your Exhibit 23, I
20	believe, the summary of probability of monthly average flows
21	being exceeded, you testified in your previous testimony, I
22	believe, that based on your analysis of averages that there
23	was no water available for diversions in a period May
24	through December. Is that a fair summary?
25	MR. HEADRICK: With the averages I used, yes.

1	MR. O'BRIEN: I am glad you added that qualifier.
2	Is it fair to say that in some years there will be
3	significant amount of water available during the years of
4	May through December in some wet years?
5	MR. HEADRICK: Over and above the historic diversions?
6	MR. O'BRIEN: Yes.
7	MR. HEADRICK: I don't believe so. When you say
8	significant, I don't know what that means. Obviously, the
9	water is not in the river in significant levels.
10	MR. O'BRIEN: Your previous testimony was that there is
11	no water May through December, taking into account the
12	diversion requirements of the senior water right claimants
13	and only taking into account the Conservation District's
14	licensed water rights. Is that a fair summary?
15	MR. HEADRICK: Yes. On a monthly average basis that is
16	correct.
17	MR. O'BRIEN: Yes. Thank you for continuing to remind
18	my about that.
19	The record of diversions by the Conservation District,
20	which we looked at yesterday, shows significant quantities
21	of water being diverted May through December period for
22	some years by the Conservation District, correct?
23	MR. HEADRICK: That's correct.
24	MR. O'BRIEN: All of that water is being diverted
25	under your claim of pre-1914 right?

1	MR. COSGROVE: I will object that it calls for a legal					
2	conclusion.					
3	MR. O'BRIEN: It is outside the season of your					
4	licenses, and it is either an illegal diversion or pre-1914					
5	rights.					
6	MR. COSGROVE: The recharacterization doesn't change					
7	the fact that he is asking for a legal conclusion.					
8	H.O. BAGGET: I will sustain the objection.					
9	MR. O'BRIEN: To your knowledge, are those diversions					
10	within the season of diversion under your licenses?					
11	MR. HEADRICK: Which ones?					
12	MR. O'BRIEN: The May through December diversions.					
13	MR. HEADRICK: Part of them is. Our licenses go					
1.4	through the end of May.					
15	MR. O'BRIEN: Fair enough.					
16	Are the diversions that occur between June 1 and the					
17	end of September by the Conservation District within the					
18	season of diversion under your licenses?					
19	MR. COSGROVE: I will object on relevance. It seems as					
20	though we are setting up a water rights fight.					
21	MR. O'BRIEN: I will explain the relevance, if I may.					
22	He is saying there is no water available in the system over					
23	and above his license rights and the rights of the other					
24	claimants. Yet his employer, the district, has diverted					
25	vast quantities of water during those same months under the					

1	pre-1914 rights when he said there is no water in excess of
2	the licensed rights. So something is inconsistent here, and
3	I am entitled to explore that.
· 4	H.O. BAGGET: I would overrule the objection.
5	MR. O'BRIEN: Are the diversions that occur by the
6	Conservation District between the months of between June
7	1 and the end of September within the season of diversion
8	under the Conservation District's license rights?
9	MR. COSGROVE: To the extent that the witness is
10	testifying to his understanding. I think that does also
11	call for a legal conclusion. To the extent that you
12	understand.
13	MR. HEADRICK: Could you ask the question again?
14	MR. O'BRIEN: Your licenses set forth season of
15	diversion. In fact, you just pointed out to me one takes
16	you through the end of May. So you are familiar with the
17	licenses?
18	MR. HEADRICK: Yes.
19	MR. O'BRIEN: Is it your understanding that water
20	that's been diverted by the Conservation District during the
21	period of June 1 through the end of September in various
22	years is water that's diverted outside the authorized season
23	of diversion under the two licenses?
24	MR. HEADRICK: That's correct.
25	MR. O'BRIEN: Thank you.

1	If I could just have one minute.	:
2	I have nothing further.	
3	H.O. BAGGET: Thank you.	
4	Mr. McNevin.	
5	MR. MCNEVIN: No questions.	
6	H.O. BAGGET: City of San Bernardino.	
7	MR. MOSKOWITZ: No questions.	
8	H.O. BAGGET: East Valley.	
9	MR. KENNEDY: No questions.	
10	H.O. BAGGET: Inland Empire.	
11	MR. CIHIGOYENETCHE: No questions.	
12	H.O. BAGGET: Big Bear.	
13	MR. EVENSON: No questions.	
14	H.O. BAGGET: Local Sponsors.	
15	MR. DONLAN: No questions.	
16	H.O. BAGGET: City of Ontario.	
17	MR. GARNER: No questions.	
18	H.O. BAGGET: Redirect.	
19	MR. COSGROVE: Just one question.	
20	000	
21	REDIRECT-EXAMINATION OF REBUTTAL TESTIMONY OF	
22	SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT	
23	BY MR. COSGROVE	
24	MR. COSGROVE: You were asked if you would perform the	.
25	exact same analysis as Mr. Beeby in connection with the	

1	accumulated departure from mean flow whether you would come
2	up with the same conclusions and you answered yes; is that
3	correct, with respect to the three gauges?
4	MR. HEADRICK: Yes.
5	MR. COSGROVE: Would you perform that exact same
6	analysis to determine the availability of flow at Mentone
7	from the gauges?
8	MR. HEADRICK: Reask the question again.
9	MR. COSGROVE: Would you have selected the same
1.0	methodology? The question that you were asked if adopting
11	the same methodology as they did, if you ran the numbers
12	would it be the same? I guess my question is, would you
13	adopt that same methodology?
14	MR. HEADRICK: No.
15	MR. COSGROVE: I have no further questions.
16	MR. O'BRIEN: Nothing further.
17	H.O. BAGGET: Exhibits.
18	MR. COSGROVE: We will offer Conservation District
19	Exhibits Number 21 through 36, I believe.
20	MS. MROWKA: Yes.
21	H.O. BAGGET: Objections.
22	If not, they are entered into the record.
23	MR. CIHIGOYENETCHE: Mr. Bagget, I have Traci Stewart
24	in rebuttal, and also a new witness in rebuttal, Mr. Bud
25	Carroll.
1	

1	REBUTTAL TESTIMONY OF INLAND EMPIRE UTILITIES AGENCY			
2	BY MR CIHIGOYENETCHE			
3	MR. CIHIGOYENETCHE: Mr. Carroll, spell your name for			
4	the record.			
5	MR. CARROLL: It's Carroll. My first name is William,			
6	W-i-l-i-a-m.			
7	MR. CIHIGOYENETCHE: I am going to begin briefly with			
8	Ms. Stewart, if that is okay.			
9	Ms. Stewart, you have an overhead. You heard the			
10	testimony of Mr. Mills earlier with regard to the 12,000			
11	acre-feet per year, and how it represents 8 percent of the			
12	overall runoff?			
13	MS. STEWART: Yes. And I borrowed this overhead from			
14	Dr. Drury. Under our judgment, which is very much like the			
15	other adjudications for the watershed, it is a stipulated			
16	judgment and a physical solution in response to Ms.			
17	Forster's inquiries about it.			
18	Our parties to this judgment consider this, in essence,			
19	like a kind of implementation of their rights under the			
20	Santa Ana judgment. That is why it was done subsequent to			
21	the Santa Ana River Judgment, the 1969 judgment, because			
22	this in essence represents what they then agree to on how we			
23	are going to use the water resources in our basin.			
24	In developing this Optimum Basin Management Program			
25	very recently each of the basins that you see up there, they			

	`

	gt.		

are indicated in green, those are existing basins that we have available to us in furtherance of optimally managing our basins. We had our engineer, Mark Wildermuth, analyze our ability to use those basins. And with some modification, but minor modification, primarily reoperation of those basins, what we have found is that with these existing basins we have the ability to not only --

MR. MCNEVIN: Objection. I object on hearsay grounds.

Apparently this witness is now recharacterizing the
testimony of a person who did this work, who is not
available for cross, Mr. Wildermuth.

MR. CIHIGOYENETCHE: She can testify as to technical data that she has received in the course of managing and performing her duties as Watermaster. I think it goes to the weight of testimony as opposed to the admissibility of the testimony.

MR. MCNEVIN: If I can respond. It doesn't go to weight at all. The rules for this Board on hearsay are that hearsay is only admissible if the underlying evidence would be admissible. Here Mr. Wildermuth is not available. This is hearsay on hearsay. Not only is he not available, but now we have this witness' recharacterization without any legitimate opportunity by us. No exhibits were submitted on this. No testimony. We have no opportunity to cross Mr. Wildermuth on this.

1	T O DIGGER
τ.	H.O. BAGGET: Response.
2	MR. CIHIGOYENETCHE: The response is that this is
3	information that she is imparting to us based on her
4	knowledge in the course of management of the Watermaster. I
5	could rephrase the question as to whether or not she's
6	familiar with recharge capabilities of the basin.
7	H.O. BAGGET: If you could rephrase the question.
8	MR. CIHIGOYENETCHE: Are you familiar with the recharge
9	capabilities of the basin?
10	MS. STEWART: I am familiar with the recharge
11	capabilities of the basin. What we find is that with these
12	existing facilities we have the ability to recharge not only
13	the storm water runoff that we are anticipating recharging
14	under our Optimum Basin Management Program, but also the
15	recycled water and the imported flows.
16	The only thing that we feel that we would need
17	additional recharge capability is to implement a large scale
18	conjunctive use program.
19	And that is the extent of what I wanted to provide to
20	the Board.
21	MR. CIHIGOYENETCHE: Going to Mr. Carroll at this point
22	in time.
23	Mr. Carroll, what is your present occupation, sir?
24	MR. CARROLL: I am a retired civil engineer. However,
25	I have spent my career, most of my career, with the firm of

	i e e e e e e e e e e e e e e e e e e e
1	James Montgomery, now known as Montgomery Watson. I was the
2	President and Chief Executive Officer for the last 20 years
3	of my career with the company.
4	MR. CIHIGOYENETCHE: You have also served on the Board
5	of Watermaster for the Santa Ana River; is that correct?
6	MR. CARROLL: Yes. I served on the Watermaster Board
7	from its inception until the last year when I resigned.
8	MR. CIHIGOYENETCHE: Its inception would be?
9	MR. CARROLL: Its inception was in 1970.
10	MR. CIHIGOYENETCHE: Are you familiar with the
11	stipulated judgment in the Orange County case, which we have
12	been referring to during these proceedings?
13	MR. CARROLL: Yes, I am. I was one of the engineers
14	that worked on that whole physical solution from the years
15	1965 through 1969.
16	MR. CIHIGOYENETCHE: You have been present here during
17	the course of this hearing, both yesterday and today; is
18	that correct?
19	MR. CARROLL: Yes, I have.
20	MR. CIHIGOYENETCHE: Did you hear the testimony of Mr.
21	Mills on behalf of Orange County Water District?
22	MR. CARROLL: Yes, I have.
23	MR. CIHIGOYENETCHE: You have heard then his position
24	is that the increased flows in the river constitute changed
25	circumstances warranting a reconsideration of the

declaration of fully appropriation; is that correct?

MR. CARROLL: I am hesitating because I understand Mr. Mills' position as being there's increased flow in the river. For a lot of reasons there is increased flow in the river. But I am not sure that he is claiming that they have the right to that increased flow. I don't know whether that answers your question.

MR. CIHIGOYENETCHE: Kind of.

MR. CARROLL: My understanding here, if I can just carry on, is that, well, all the data shows that there's been increased flow. Both increased base flow and increased storm flow that reaches Prado, that the Orange County interest understands, that they only have the right to the 42,000 acre-foot base flow. And you have to understand that that right may decrease in the future.

This hasn't come out in the testimony at all. But what happened was in the base period that we used in developing this whole solution, the base flow was 47,000 acre-feet a year over that period. However, during the negotiation of the settlement, because the upstream interests actually were willing to guarantee 42,000 acre-feet every year of base flow, there was a 5,000 acre-foot reduction just because of the fact that this was a guarantee that lasted year after year after year.

There was also a further situation that occurs that

1	after the year 1986 that that flow could be reduced to
2	34,000 acre-feet if there was a surplus greater than 10,000
3	acre-feet. Now, this is actual water they wanted you
4	have to deliver actually 34,000 acre-feet of actual water.
5	To make up the 42,000 acre-feet you could start using some
6	of that surplus if the surplus exceeded 10,000 acre-feet.
7	Of course, the surplus is about 1.8 million acre-feet.
8	MR. CIHIGOYENETCHE: Back during the course of
. 9	negotiations there was some concern by the upper region of
10	their ability to meet the guarantee of 42,000 acre-feet; is
11	that correct?
12	MR. CARROLL: That's correct.
13	MR. CIHIGOYENETCHE: And during the course of those
14	discussions in which you were a participant, Mr. Carroll,
15	future urbanization and resulting increase inflows was, in
16	fact, considered; isn't that correct?
17	MR. CARROLL: Yes, it was.
18	MR. CIHIGOYENETCHE: What was the understanding as to
19	the upper region, and the lower region for that matter, who
20	would have the right to those increased flows?
21	MR. CARROLL: The understanding was that each of the
22	upstream districts had the right to manage their own whole
23	water resource system independent of the Orange County
24	situation, as long as the base flow requirement was met at

Prado. So there was discussion what each one of these upper

25

1	districts could do relative to conserving storm flow,
2	reclaiming the wastewater and that whole situation.
3	MR. CIHIGOYENETCHE: That was all part of the
4	discussions and negotiations leading up to the stipulated
5	judgment?
6	MR. CARROLL: Yes.
7	MR. CIHIGOYENETCHE: I have nothing further of this
8	witness at this time or either of the witnesses.
9	H.O. BAGGET: Mr. O'Brien.
10	MR. O'BRIEN: No questions.
11	H.O. BAGGET: Mr. McNevin.
12	MR. MCNEVIN: May I have one moment, please?
13	H.O. BAGGET: Yes.
14	Mr. Cosgrove.
15	MR. COSGROVE: No questions.
16	H.O. BAGGET: Save my list. Is there any other party
17	having any 'questions?
18	Mr. McNevin, are you ready?
19	MR. MCNEVIN: Yes. Thank you, your Honor.
20	000
21	CROSS-EXAMINATION OF REBUTTAL TESTIMONY OF
22	INLAND EMPIRE UTILITIES AGENCY
23	BY ORANGE COUNTY WATER DISTRICT
24	BY MR. MCNEVIN
25	MR. MCNEVIN: Mr. Carroll, thank you for that history.

1	MR. CARROLL: You're welcome.
2	MR. MCNEVIN: Thank you also for confirming the
3	increased basin storm flows at Prado.
4	Ms. Stewart, I have one question for you. You said
5	that you have the ability to recharge the storm flow?
6	MS. STEWART: Yes.
7	MR. MCNEVIN: Now, we don't have the underlying data
. 8	for us, and I am not going to get into that with you, but
9	isn't it your understanding that the ability to recharge
10	into a basin is significantly different than that ability to
: 11	capture and divert so that you can recharge?
12	MS. STEWART: That's correct.
13	MR. MCNEVIN: And the ability to capture the storm flow
14	and hold it so that you can recharge is the subject of this
15	rule of seven that we were discussing this morning; is that
16	not correct?
17	MS. STEWART: I would say that the ability to capture
18	is based on what I heard Mr. Evenson say that that is
19	correct. But I was addressing our ability to recharge.
20	MR. MCNEVIN: That is what I thought.
21	Thank you very much.
22	H.O. BAGGET: Any redirect?
23	MR. CIHIGOYENETCHE: No.
24	MEMBER FORSTER: I have a question for Mr. Carroll.
25	00

---000---

CROSS-EXAMINATION OF REBUTTAL TESTIMONY OF INLAND EMPIRE UTILITIES AGENCY

BY BOARD

MEMBER FORSTER: I think I understand that what you were talking about, there was an understanding in the '69 settlement about reclamation and storm flows and that was all considered at that time?

MR. CARROLL: Yes, it was. What we had to consider, and you have to realize back in that period of time there was -- the flows were quite low. The base flows were quite low. And the end result was we had to worry about how we were going to meet this guarantee. And by both -- and that guarantee was by both Western and then Chino Basin Municipal Water District. The Western engineer was Mr. Burt Web and I, together with two attorneys, Art Littlebert [phonetic] and Donald Stark got together. And what we did was we concluded that we would have to meet the base flows by discharging wastewater to the stream for a period of time. And, of course, there were other wastewater flows going into the river.

But the concept was always that the wastewater streams could be made available to satisfy the base flow. But in the big period as the area developed other consideration would be given to what would be done with the waste flows, such as reclaiming them, recharging them, dumping them in

the river, a lot of alternatives.

MEMBER FORSTER: Isn't it conceivable -- I mean, did
you -- I moved here in the '60s. When you were working on
this, you said from '65 to '69, do you think that anybody
had the concept of how much growth there would be in
impervious ground? You know, who knew the Inland Empire
would become such an affordable place to live and would be
have such rampant growth, and maybe -- I think it is said
that it is one of the fastest growing communities in the
United States.

So, isn't it feasible that no one had any understanding of how much runoff there would really be?

MR. CARROLL: Actually, as engineers analyzing that situation, we did anticipate there would be increasing runoff with time. The big question is what rate, I mean, of time, whether it would be five years, ten years, 15 years or a hundred years for this development to take place. But we did always realize that we were going to have increased wastewater flows and increased storm runoff due to the development of the area.

Because all of us engineers fool around with looking at long range plans and development. And whether you work for the Chino Basin Water District or Western, they all have long range plans of what is going to happen in the future. We always make population estimates, and we have done all

1 that for these area over long periods of time. , 2 MEMBER FORSTER: Was it -- my final thing: But the general plans of those days and the populations compared 3 with these days aren't quite equivalent, do you think? 4 MR. CARROLL: I would say that they are the same. The 5 same procedure's used. You might say a certain area has 6 7 increased more rapidly than you thought. If I can give you 8 an example. I made a lot of long range forecasts for 9 cities. The City of San Diego anticipated a large increase in development, the City of San Diego. The City of Las 10 Vegas, the same way. Manila, Philippines, around the world. 11 12 And it is true that you may make a mistake on the rate 13 of growth, how fast it is going to grow, but we have been proven correct that growth will occur. But possibly, maybe 14 15 we miss it by a few years here and there. 16 MEMBER FORSTER: That is all. 17 H.O. BAGGET: Any --MR. MCNEVIN: I have some rewhatever it would be. Just 18 19 three. 20 MR. GARNER: Do the Board procedures provide for 21 redirect --22 MEMBER FORSTER: He is redirection on me. 23 H.O. BAGGET: Is that the end of the procedure when a 24 Board Member --25 MR. MCNEVIN: In light of Ms. Forster's question, I

1	wanted to follow up on the issues that were raised at that
2	point. I will be extremely brief.
3	MR. GARNER: I will defer to Mr. Frink. Just in the
4	normal course, the purpose of cross-examination is to
5	H.O. BAGGET: I understand, but I guess I was remiss in
6	not allowing
7	MEMBER FORSTER: Board Members
8	H.O. BAGGET: Prior to
9	MR. FRINK: Has Mr. McNevin participated in recross?
10	MR. MCNEVIN: But not on the topics that were just
11	raised by the Board.
12	MR. FRINK: It would be prior to Bear Valley, Ms.
13	Forster, so
14	MEMBER FORSTER: I don't think excuse me. I don't
15	think there is any prohibition on anything a Board Member
16	wants to ask. I tried to keep it to what he said. He
17	talked about runoff that was anticipated and reclamation
18	that was anticipated. Maybe I just built on that. But I
L 9	don't think it was I think that it was part of what he
20	was stating, in any perspective.
21	MR. GARNER: My only point was that direct had
22	occurred and cross had occurred. Then at that time Board
23	asks whatever questions that they choose. That usually
24	closes the proceedings.

MR. MCNEVIN: I guarantee that we are taking more time

1	to talk about it than my short questions. I think you have
2	the authority to let me ask the questions.
3	H.O. BAGGET: I will allow the questions. I
4	understand. Just so it doesn't start a round of questions.
5	MR. MCNEVIN: Mr. Carroll, in 1969 when you were
6	negotiating a stipulated judgment, did you have available to
7	you any fact regarding the population of Inland Empire
8	today?
9	MR. CARROLL: Actually, we had made population
10	forecasts for the Inland Empire over a period of time,
11	whether it was and I can't say that it is factual now. I
12	can't even remember what they were.
13	MR. MCNEVIN: Did you have information as to the volume
14	of wastewater that comes down that river today? Again this
15	is in 1969.
16	MR. CIHIGOYENETCHE: Objection. These are
17	argumentative. They suggest the answer.
18	MR. MCNEVIN: I don't mean to argue. The witness said
19	that he made some projections and I am asking what he
20	projected.
21	H.O. BAGGET: Overruled.
22	MR. CARROLL: Our projections were that the wastewater
23	flow was going to increase.
24	MR. MCNEVIN: Did your projections match the numbers
25	that we actually have today?

1	MR. CARROLL: I can't remember.
2	MR. MCNEVIN: Did you make a projection of impervious
3	ground cover that matches what we have today?
4	MR. CARROLL: No.
5	MR. MCNEVIN: Thank you very much.
6	Thank you.
7	H.O. BAGGET: Any other?
8	If not, anything to get into evidence?
9	MR. CIHIGOYENETCHE: There were no additional
10	exhibits. Exhibit used by Ms. Stewart was already in the
11	record.
12	H.O. BAGGET: With that, we need to come up to closing
13	statements or briefs for the parties. I was going to
14	suggest towards the end of January.
15	MR. O'BRIEN: What we've done in past hearings is 30
16	days after the transcript is ready, and I understand that
17	the transcript will probably be ready sometime toward the
L8	end of December, early January. Comes out about the same.
L9 ,	That way we all have the benefit of the transcript, which I
20	think is actually a help for the Board to go through.
21	H.O. BAGGET: I realize some people have a pretty heavy
22	December workload. I would like in fairness to give people
23	an opportunity to at least catch New Year's. I hope I did.
24	So 30 days after the transcript? Does that work for

staff?

. 1	(Discussion held off record.)
2	H.O. BAGGET: February 11th.
,3	MR. O'BRIEN: That will be simultaneous brief, all
4	briefs due on the same day?
5	H.O. BAGGET: February 11th. That works for
6	everybody.
7	With that, this brings us to the close of the
8	evidentiary hearing. The evidentiary record in this matter
9	is now closed.
10	The Board will take this matter under submission. All
11	persons who participated in this hearing will be sent notice
12	of the Board's proposed order on this matter or any further
13	Board meeting at which time this matter will be considered.
14	After the Board adopts an order on this matter, any person
15	who believes this order is in error will have 30 days within
16	which time to submit a written petition for reconsideration
17	by the Board.
18	I thank you for your interest, participation and
19	cooperation, particularly, personally, being my first
20	hearing the ability to keep what I saw as a fairly
21	potentially lengthy process, I think I appreciate you
22	keeping your comments to the point and on the issues which
23	were relative to the proceedings.
24	Thank you. Have a good holiday.
25	(Hearing adjourned at 1:10 p.m.)

1 REPORTER'S CERTIFICATE 2 3 4 STATE OF CALIFORNIA SS. 5 COUNTY OF SACRAMENTO 6 7 I, ESTHER F. WIATRE, certify that I was the 8 9 official Court Reporter for the proceedings named herein, 10 and that as such reporter, I reported in verbatim shorthand 11 writing those proceedings; That I thereafter caused my shorthand writing to be 12 13 reduced to typewriting, and the pages numbered 267 through 14 412 herein constitute a complete, true and correct record of 15 the proceedings. 16 17 IN WITNESS WHEREOF, I have subscribed this certificate 18 at Sacramento, California, on this 23rd day of December 19 1999. 20 21 22 23 24 ESTHER

CSR NO. 1564