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THURSDAY, OCTOBER 28, 1993, 9:00 A.M.

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MR. DEL PIERO: Ladies and gentlemen, this hearing of the State Water Resources Control Board will again come to order. This is a continuation of the hearing regarding the Amendment to the City of Los Angeles' Water Rights Licenses for the Diversion of Water From Creeks Tributary to Mono Lake.

When we broke last night, we had just finished with the one panel and we are getting ready to call the fourth panel of individuals on behalf of Jones and Stokes, the contract firm that prepared the Environmental Impact Report.

Before I begin, anyone wishing to present testimony today, would you please rise and raise your right hand if you have not been previously sworn.

(Witnesses were sworn.)

MR. DEL PIERO: All right, Mr. Frink.

MR. FRINK: Yes, Mr. Del Piero and members of the Board, we will begin this morning with our fourth and last group of witnesses who assisted in preparing the Draft Environmental Impact Report, or prepared information that was used in the Draft Environmental Impact Report.

These witnesses are the ones who worked on topics that were loosely grouped together under the heading of socio-economics. They involved the evaluation of recreation, evaluation of impacts of the various alternatives on the Los

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Angeles Water Supply, impacts on power generation, the chapter on economic assessment of visual resources and assessments of resource impacts.

The witnesses includes Thomas Wegge, who served as team leader, Thomas Packard, Dr. Nicholas Dennis, Edward Timothy Rimpo, David Larsen, and Dr. Michael Hanemann. Also, available to respond to cross-examination or further cross-examination are two earlier witnesses who have testified in previous days of the proceeding, Mr. Ken Casaday and Roger Trott.

We will begin this morning with the testimony of Thomas Wegge.

THOMAS WEGGE,

having been sworn, testified as follows.

DIRECT EXAMINATION

BY MR. FRINK:

Q Mr. Wegge, would you please state your name and place of employment for the record.

MR. DEL PIERO: Before you begin, this is a new panel, and when you state your name, I would appreciate it if you could spell it so the court reporter gets a clear and complete record.

MR. WEGGE: A My name is Thomas Wegge, W-e-g-g-e. I am with Jones and Stokes Associates.

MR. FRINK: Q And you were just sworn; correct?

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A Yes, I was.

Q Did you prepare a document that is entitled, Written Testimony of Thomas Wegge, for the Mono Basin Water Rights Hearing?

A Yes, I did.

Q Is this the document that has been designated as State Water Resources Control Board Exhibit 28 in this proceeding?

A Yes, it is.

Q Mr. Wegge, could you please describe your role in preparing the Draft EIR and identify the portions of the Draft EIR that you assisted in preparing.

A Yes. I served as the Technical Team Leader for all of the socio-economic topics, including visual resources, recreation, power supply, water supply, and the economics chapter, and I directly assisted in the preparation of the water supply and economics chapter, and also the recreation.

I also participated in the development of Appendix X, the economics chapter, and reviewed Appendix, whatever the recreation is. W.

Q Could you give us a brief summary of your education and

21 professional qualifications and experience that are relevant to the work that you did on the draft EIR?

23 A Certainly. I have a Bachelor of Arts degree in urban studies from the University of Southern California, and a Master of Science degree in environmental economics from the

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1 California State University at Fullerton. I am Associate Principal and Senior Economics at Jones and Stokes Associates, where I worked for the past 14 years.

4 Over this time, I have directed and prepared recreation and economics studies on a variety of projects including an analysis of recreation and economic effects related to water marketing for the Central Valley project, the preparation of an economic impact study on sport fishing in Alaska.

9 I have prepared a socio-economic impact study for the State Water Board on the proposed in-stream flow program. I have also recently prepared an analysis of costs and benefits of EPA's proposed water quality standards for the San Francisco Bay Delta.

14 Q Is Attachment A to SWRCB Exhibit 28 a true and accurate summary of your professional qualifications and experience?

16 A Yes, it is.

17 Q Would you affirm that SWRCB 28 is a true and accurate summary of your testimony in this proceeding?

19 A Yes, it is.

20 Q Are there any additions or corrections that you wish to make in your testimony at this time?

22 A Not at this time, no.

23 Q Thank you very much, Mr. Wegge.

24 Our next witness is Thomas Packard.

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THOMAS PACKARD,

having been sworn, testified as follows.

DIRECT EXAMINATION

BY MR. FRINK:

5 Q Mr. Packard, could you please state your name and place of employment?

7 A My name is Thomas Packard, P-a-c-k-a-r-d, and I work for a firm in San Francisco called EDAW, and I have been employed there for the last eight and a half years.

10 Q Did you prepare a document that is entitled, Written Testimony of Thomas Packard, for the Mono Basin Water Rights hearings?

13 A Yes, I did.

14 Q And is that the document that has been designated as SWRCB Exhibit 29 in this proceeding?

16 A It is.

17 Q Your testimony indicates that you assisted in providing information for the Draft EIR. Would you please summarize your professional education and experience relevant to the area or areas that you worked in with regard to the Draft EIR?

21 A Yes. I hold a Bachelor degree in landscape architecture from the University of Illinois. I also completed two years of graduate study at the University of Illinois in landscaping architecture and my last eight and a half years of professional experience with EDAW has been

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1 specifically in the realm of assessment of visual impacts related to a variety of projects, many of which include water resource features.

4 Q And what was the role that you played and your employer, EDAW, with regard to the preparation of the environmental impact report?

7 A We conducted a study of the visual impacts of the project alternatives and submitted a report on those impacts. We also prepared Auxiliary Report Number 24, I believe.

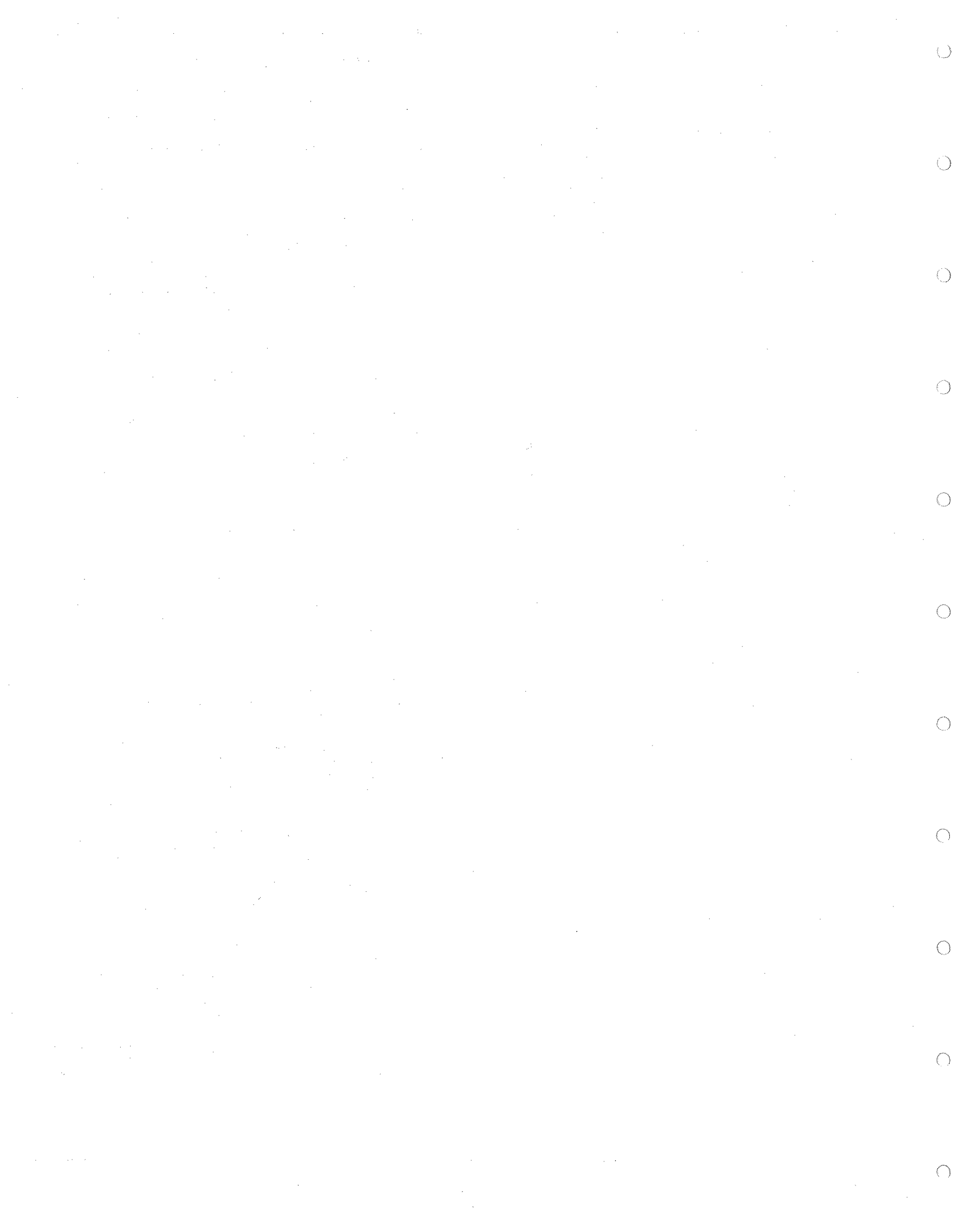
10 Q Were you involved in the preparation of Appendix V on visual resources?

12 A We provided information that was used to prepare Appendix V.

13 Q And EDAW, then, served as a subcontractor to Jones and Stokes?

16 A That is correct?

17 Q In the preparation of the Draft Environmental Impact



12 generation topic area, which is Chapter 3-M of the report.  
 13 Q Did RMI serve as a subcontractor to Jones and Stokes in  
 14 this project?  
 15 A Yes, we did.  
 16 Q Could you give us a brief oral summary of your  
 17 professional education and experience regarding the subject  
 18 and work that you did for the Draft EIR?  
 19 A Yes. I graduated from South Dakota State University in  
 20 1970 with a Bachelor of Science in electrical engineering. I  
 21 have been with RMI about seven and a half years. Prior to  
 22 that time I worked for the Electric Power Cooperative in  
 23 Arizona where I was responsible for both the resource and  
 24 transmission planning efforts for the cooperative.  
 25 Since joining RMI, I have continued in that vein, in both

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1 the generation, resource, and transmission planning areas and  
 2 have performed power supply studies for RMI's clients  
 3 throughout the United States, including --

4 Q Would you move the mike a little closer?  
 5 A Sure.  
 6 Q I don't pick up sounds very well.  
 7 A Since joining RMI, I have continued to be involved in  
 8 both resource and transmission planning activities working for  
 9 clients throughout the country including Nevada, California,  
 10 and Arizona. That's pretty much it.

11 Q Is Attachment A to State Water Resources Control Board  
 12 Exhibit 32 a true and accurate summary of your professional  
 13 education and experience?

14 A Yes, it is.  
 15 Q And do you affirm that State Water Resources Control  
 16 Board Exhibit 32 is a true and accurate summary of your  
 17 testimony in this proceeding?

18 A Yes, I do.  
 19 Q Are there any additions or corrections you wish to make?  
 20 A No, there isn't.  
 21 Q Thank you very much, sir. I believe that our last new  
 22 witness, if I am not losing count here, is Dr. Michael  
 23 Hanemann.

MICHAEL HANEMANN,

25 Having been sworn, testified as follows:

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DIRECT EXAMINATION

2 BY MR. FRINK:  
 3 Q Dr. Hanemann, would you please state your name and place  
 4 of employment?

5 A My name is William Michael Hanemann, H-a-n -e-m-a-n-n,  
 6 and I am a professor in the Department of Agriculture in  
 7 resource economics at U.C. Berkeley.

8 Q Did you prepare a document that is titled, Written  
 9 Testimony of W. Michael Hanemann?

10 A Yes.  
 11 Q And is that the document that has been designated as  
 12 SWRCB Exhibit 34 in this proceeding?

13 A Yes.  
 14 Q What portions of the Draft EIR did you provide  
 15 information for?

16 A I worked on part of the water supply and the public trust  
 17 resources and that's parts of Chapter 3-L and 3-M and Appendix  
 18 X, and I also wrote an auxiliary report which, I believe, is  
 19 Number 27.

20 Q Could you give us a brief oral summary of your  
 21 professional qualifications and experience in the area of work  
 22 that you did for the draft EIR?

23 A My field is environmental economics and resource  
 24 economics. I have taught a course on water resource economics  
 25 at Berkeley for more than a decade, and I have an

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1 undergraduate degree in economics, philosophy, and politics  
 2 from Oxford University, a Master's degree in economics from  
 3 London School of Economics, and then a PhD from Harvard in  
 4 economics.

5 I had the privilege of serving as the Board's economist  
 6 in 1987 in its analysis of regulating drainage discharges to  
 7 the San Joaquin River. I worked with the Board staff, with  
 8 Rich Satkowski and Jerry Johns, and then, in 1987, you engaged

9 me as the staff economist for the first part of the Bay-Delta  
 10 hearings and I served through the end of 1989 and wrote the  
 11 economic analysis and the staff report that came out five  
 12 years ago at the end of 1988.

13 I have continued to conduct research to advise -- I was  
 14 involved in the negotiations of the Memorandum of  
 15 Understanding on urban conservation. In March 1992, I was  
 16 asked to serve as the technical advisor to Mayor Bradley's  
 17 Blue Ribbon Committee on Water Rights that was set up to  
 18 examine Los Angeles water rights structure.

19 I should add that I have been asked, in the last month,  
 20 to play a similar role with regard to the Metropolitan Water  
 21 District, which set up a Blue Ribbon Citizen's Committee to  
 22 examine its water rights and expansion policies, and I had the  
 23 pleasure of meeting with them for two days last week.

24 Q Is Attachment A to SWRCB Exhibit 34 a true and accurate  
 25 summary of your professional education and experience?

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1 A Yes.  
 2 Q And do you affirm that SWRCB Exhibit 34 is a true and  
 3 accurate summary of your testimony in this proceeding today?

4 A Yes.  
 5 Q Are there any additions or corrections that you wish to  
 6 make?  
 7 A No.

8 MR. FRINK: Mr. Hearing Officer, that concludes our  
 9 presentation of these witnesses on direct examination, and  
 10 these six gentlemen, as well as Mr. Trott and Mr. Casaday will  
 11 be available to respond to cross-examination.

12 MR. DEL PIERO: Thank you very much, Mr. Frink. Mr.  
 13 Birmingham.

14 MR. BIRMINGHAM: Today we are going to start with the  
 15 better half of the tag team, Janet Goldsmith.

16 MR. DEL PIERO: Good morning, Ms. Goldsmith.

17 MS. GOLDSMITH: Good morning, Mr. Del Piero.

18 MR. DEL PIERO: Good morning, Mr. Dodge.

19 MR. DODGE: Good morning. You indicated you would know  
 20 your schedule this morning.

21 MR. DEL PIERO: I will actually know it around 11:00  
 22 o'clock, I promise you. I have not forgotten. I have pinned  
 23 it up.

CROSS EXAMINATION

25 BY MS. GOLDSMITH:

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1 Q I would like to address my questions to Dr. Hanemann with  
 2 regard to the public trust evaluation that was drawn.

3 My understanding is that the public trust evaluation that  
 4 was done was a result of a survey at which respondents were  
 5 asked to provide answers concerning three different lake  
 6 levels that were identified to them?

7 DR. HANEMANN: Yes.  
 8 Q Actually, they were given information for no diversion.

9 Would you agree with me that the results of that  
 10 contingent valuation survey show that there are very large  
 11 benefits received by the public in preserving the ecosystem at  
 12 Mono Lake?

13 A I agree.  
 14 Q Would you agree that the public trust benefits associated  
 15 with raising the lake level much above the level that would  
 16 guarantee that preservation tends not to be as great, or  
 17 eventually to decline?

18 A I agree.  
 19 Q Now, concerning the survey, the respondents were asked  
 20 about scenarios at the lake, and particularly elevations were  
 21 identified with those scenarios. Would You agree with me that  
 22 if the descriptions of those lake elevations, in fact, matched  
 23 a different lake elevation, that the responses ought to be  
 24 associated with the lake elevation that, in fact, matched the  
 25 description?

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1 MR. WEGGE: Excuse me, just a procedural matter here. We  
 2 have discussed many of the issues that may be coming up today  
 3 and this happens to be one of the issues that I was going to  
 4 take the first stab at if that's all right.

5 Q That's fine with me.



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1 are wrong in either of them, it will move around, what's the  
2 optimal lake level. If the benefits are too high or the costs  
3 are too low, then the optimal lake level would be lower than  
4 we recommended, and conversely in the upper direction.

5 Q Now, if the economic considerations had included  
6 consideration of the cost of adverse environmental effects  
7 elsewhere in California, such as in the Bay-Delta system or in  
8 the San Joaquin Valley, wouldn't inclusion of those costs tend  
9 to move the lake to a lower level?

10 MR. WEGGE: A Maybe I can respond to that.

11 Q A Yes or no would be fine.

12 A Yes.

13 Q And if the supply side developments such as limitations on  
14 Metropolitan Water District supply due to pumping  
15 restrictions, for example, associated with protection of the  
16 Delta smelt and winter-run chinook salmon increased the cost  
17 of water or shortages to Metropolitan Water District, wouldn't  
18 that tend to increase the cost of water and move the economic  
19 balancing of lake level to a lower level?

20 DR. HANEMANN: A The answer is yes, but I must also  
21 point out that new information regarding Metropolitan and  
22 referring specifically to Tim Quinn's testimony which points  
23 out that in Met's plan, it is now assumed they will be able to  
24 run the Colorado aqueduct at 1.2 million acre-foot capacity  
25 into the future, not as a guaranteed result, not if there is

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1 a nuclear war or major accident, but with luck, with the  
2 Board's assistance, water marketing will make it possible to  
3 run the Colorado aqueduct at capacity rather than at 600,000  
4 acre-feet, which they have assumed before. That pushes things  
5 in the other direction.

6 In other words, if the adverse developments that we  
7 didn't anticipate, our costs are too low, and if that  
8 development is a beneficial development, then our costs are  
9 too high.

10 MS. GOLDSMITH: Thank you. I look forward to seeing the  
11 revision.

CROSS-EXAMINATION

12 BY MR. BIRMINGHAM:

13 Q I have a few questions that relate to power supply. The  
14 Draft EIR reports did not consist of the environmental effects  
15 of replacing of power that will not be generated as a result  
16 of restricting diversions of the Mono Basin with power  
17 generated from burning fossil fuels; is that correct?

18 MR. LARSEN: A The analysis reflected the level of  
19 emissions, as the emission levels would change. It did not  
20 reflect assigning costs to those emissions, that is correct.

21 Q And it is correct that the power that is lost as a result  
22 of restricting DWP's ability to divert water out of the Mono  
23 Basin will be replaced with power generated by burning fossil  
24 fuels?  
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1 A It's probably true, the majority of it would be, that's  
2 correct.

3 Q And there are negative environmental consequences or  
4 effects associated with increased consumption of fossil fuel;  
5 is that correct?

6 A I expect in some people's minds, there is, yes.

7 Q And isn't it correct that fossil fuel that will be burned  
8 to generate electricity will be burned in what has been  
9 designated as a non-attainment area by the EPA?

10 A Which particular area are you talking about?

11 Q The South Coast region.

12 A Depends upon which one of the particular alternatives you  
13 would be looking at. In some of the alternatives, the amount  
14 of additional energy that is produced in the Los Angeles Basin  
15 is fairly significant as a portion of the total that has to  
16 be made up. In other cases, it's a little bit less.

17 Q Ms. Goldsmith asked Dr. Hanemann a few questions that  
18 related to water supply. I have a few additional questions  
19 that I don't believe will necessarily be directed at Dr.

20 Hanemann. The EIR assumes that Metropolitan Water District  
21 will be able to replace water that is needed as the result of  
22 a reduction of diversions out of Mono Basin; is that correct?

23 DR. HANEMANN: A It assumes that Los Angeles would be  
24 able to take water from Metropolitan and it allows for the  
25 indirect impact on Metropolitan's other customers who have to

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1 give up the water that Los Angeles takes.

2 Q And it's correct, isn't it, that there is some  
3 uncertainty about Metropolitan's ability to replace that  
4 water?

5 A Yes. Looking to the future, demands can change in many  
6 ways, supply can change in many ways. I must say that a year  
7 makes a difference. We did this just about a year ago, and  
8 the situation has changed considerably in the direction of  
9 greater confidence that Metropolitan and Southern California  
10 will be able to make up these supplies with a lower impact  
11 than we had assumed in our analysis, economic analysis.

12 Q Your response assumes there will be additional water  
13 available as a result of water transfers; is that correct?

14 A Yes.

15 Q In the last year, isn't it also correct there have been  
16 events which cause greater uncertainty, for instance, isn't it  
17 correct that in the last year there has been at least one  
18 species in the Bay-Delta which has been listed as a threatened  
19 species, and that restrictions imposed by the National Marine  
20 Fisheries Services on operation of the State's Water Project  
21 creates uncertainty concerning Metropolitan's ability to  
22 supply DWP with water?

23 A That's true, but the transfers I was thinking of were in  
24 the Colorado River system. That is, the major change is  
25 Metropolitan's statement now that it is relatively confident

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1 of water transfers in the Colorado Region, so that it could  
2 run its aqueduct at capacity.

3 Q Does the Environmental Impact report analyze the effects  
4 of those transfers?

5 A No -- I don't know if Thomas wants to comment.

6 MR. WEGGE: A No, those transfers were identified as a  
7 potential mitigation for the significant adverse impacts on  
8 water supplies.

9 Q Included as one of the potential mitigation measures were  
10 transfers authorized by HR 429; is that correct?

11 A That's correct.

12 Q HR 429 authorizes the transfer of water from the Central  
13 Valley Project to areas outside of the service area of the  
14 Central Valley Project; is that correct?

15 A That's correct.

16 Q If transfers are made from the San Joaquin Valley, it is  
17 likely, isn't it, that there will be increased reliance on  
18 groundwater as a source of water for irrigation in the San  
19 Joaquin Valley?

20 MR. ROOS-COLLINS: Objection, calls for speculation as to  
21 the particulars of the transaction.

22 MR. DEL PIERO: I am going to overrule the objection.

23 The fact of the matter is that under HR 429, water transfers  
24 that are subject to the approval of this Board have to make a  
25 showing that there's available groundwater and that no over

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1 drafting is going to be taking place, so you can go ahead and  
2 answer that question.

3 The transfer of surface-delivered water would, in fact,  
4 result in reliance on groundwater, it has to be approved by  
5 this Board that no adverse impact on the groundwater basin is  
6 going to be taking place because of the transfer, so go ahead  
7 and answer the question.

8 MR. WEGGE: A I will defer to Dr. Hanemann.

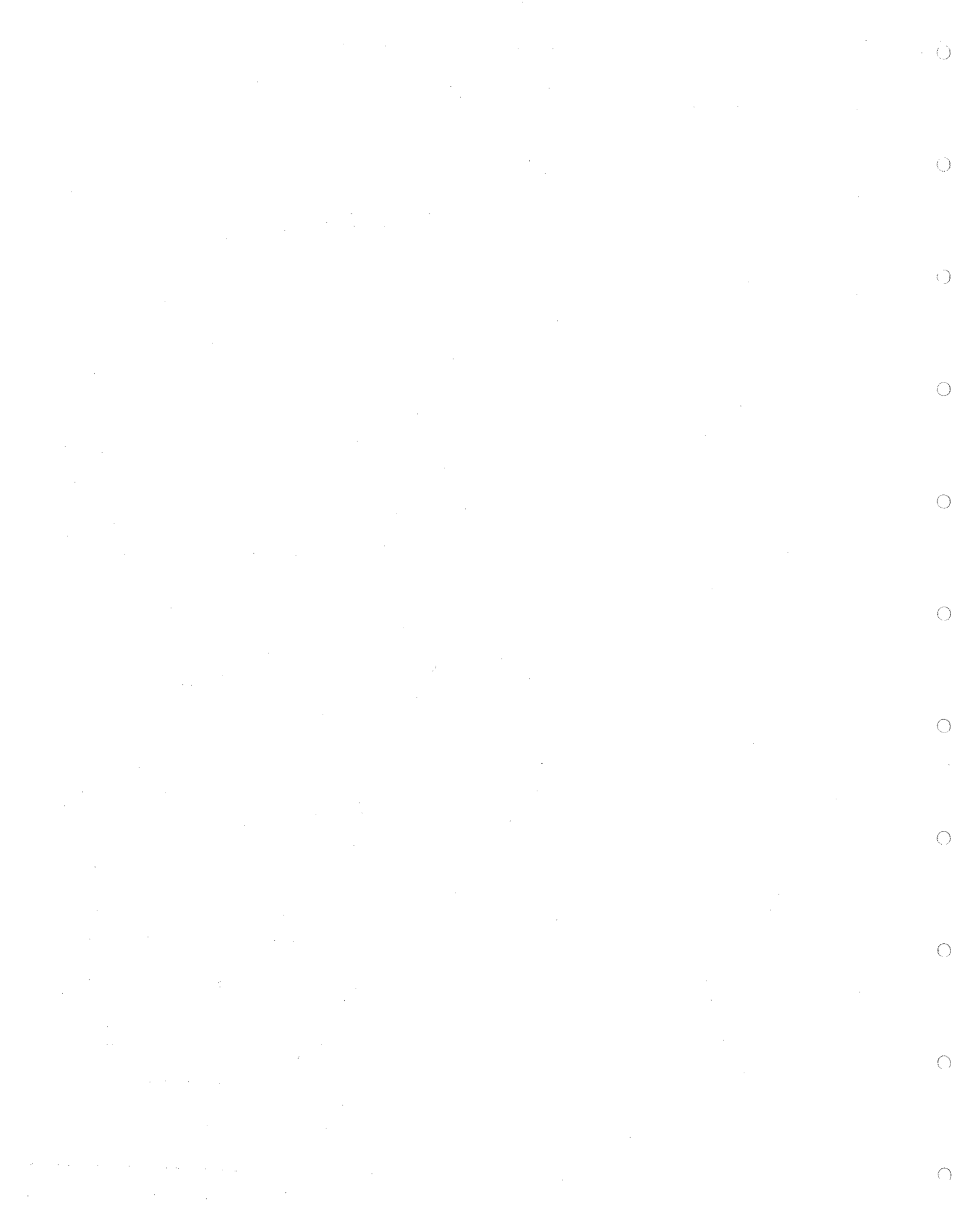
9 DR. HANEMANN: A I think the direct answer has been  
10 given.

11 MR. DEL PIERO: Except I'm not under oath.  
12 (Laughter.)

13 A That's a real problem.

14 MR. DEL PIERO: Only for everyone else.  
15 (Laughter.)

16 A The point I want to make is two things. The California  
17 water system is interconnected, and so what happens with Mono  
18 Lake relates to what happens with the Central Valley  
19 Improvement Act, with the Bay-Delta, with the Colorado River.



13 foot alternative feasible?  
 14 A Yes.  
 15 Q Is the 6377 alternative feasible?  
 16 A Yes.  
 17 Q Is the 6383.5 alternative feasible?  
 18 A Yes.  
 19 Q Is the 6390 alternative feasible?  
 20 A Yes.  
 21 Q Is the 6410 alternative feasible?  
 22 A Yes.  
 23 Q Does your, and this is basically to the whole panel,  
 24 Table S-1, page 15 in the summary concludes that the greatest  
 25 net economic benefits occur at the 6390 alternative. Mr.

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1 Casaday, is that your opinion?  
 2 A That's what we reported, yes. That isn't my opinion --  
 3 I guess I don't have an opinion.  
 4 Q Should I address this to another member of the panel?  
 5 Does the panel agree that is the point at which there is the  
 6 greatest net economic benefit?  
 7 MR. WEGGE: A Yes.  
 8 DR. HANEMANN: I would add, based on the information that  
 9 we had at the time.

10 Q And at the 6410 alternative, would Los Angeles be able to  
 11 replace the water it could no longer export from the Mono  
 12 Basin?

13 A The answer is yes. The question is the cost of the  
 14 replacement, and that's indicated in our analysis.

15 MS. CAHILL: Thank you. Now. Mr. Thomas has a few  
 16 questions.

CROSS-EXAMINATION

17 BY MR. THOMAS:

19 Q Just a clean-up question for Mr. Casaday on habitat. Mr.  
 20 Casaday, the Environmental Impact Report at 3C-67 to 3C-74 --  
 21 will you turn to that section?

22 MR. CASADAY: A Yes.

23 Q The 3C-67 indicates under the 6377 alternative, that  
 24 there will be a 1 to 32 percent increase in riparian  
 25 vegetation under that alternative. Am I correct?

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1 A Yes.  
 2 Q And turning to page 3C-70 under the 6383.5 alternative,  
 3 the report indicates that there will be a negative 1 to plus  
 4 32 percent gain of riparian vegetation and a 3 to 18 percent  
 5 gain of wetland and meadow vegetation under that alternative;  
 6 is that correct?

7 A Yes.

8 Q Both alternatives involve a gain of tributary riparian  
 9 vegetation; is that correct?

10 A Yes.

11 Q And if we turn to the 6390 alternative at 3C-73, your  
 12 report indicates that there will be a negative 2 to plus 30  
 13 gain of riparian vegetation and 48 percent gain in meadow and  
 14 wetland vegetation; is that correct?

15 A Yes, and I guess I misspoke myself on the last, or  
 16 answered incorrectly on the last question where we give a  
 17 range of the negative number, that means there is a possible  
 18 loss.

19 Q And isn't it true in parentheses you say a loss of this  
 20 magnitude is not significant, after that?

21 A Yes.

22 Q At both 3C-70 and 3C-73?

23 A Yes.

24 Q So, on each of those three alternatives there is a net  
 25 gain of tributary riparian vegetation; is that correct,

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1 according to your report?

2 A Well, I prefer to look at the summary table.

3 Q I'm asking you about --

4 A Which three alternatives, the ones we just discussed?

5 Q 6373, 6383.5 and 6390.

6 A Well, I believe -- the change from the point of  
 7 reference, is that the question?

8 Q I'm asking you, does your report at the pages I have  
 9 indicated show a net gain of riparian vegetation?

10 A Well, again, the range of estimates, the ones that have  
 11 a negative number allow for the fact that there could be a  
 12 slight loss. Now, the midpoint of those ranges are all  
 13 positive.

14 Q And isn't it true that each of the meadow and wetland  
 15 vegetations in those alternatives provide for significant  
 16 increases? You can go through them if you like, isn't it true  
 17 6377 had a 17 percent increase? I didn't intend these to be  
 18 trick questions. I'm trying to get the facts and the  
 19 progression of how we get to your results.

20 A Yes, that's correct.

21 Q And at 3C-70 you have 3 to 18 percent of meadow end  
 22 wetland vegetation increase.

23 A That's correct.

24 Q And at 6390 you have a 48 percent increase?

25 A Yes.

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1 Q And that's a significant increase. And only at the 6410  
 2 alternative at page 3C-74, do you indicate that the increase  
 3 in vegetation, and I'm quoting, would probably be offset by  
 4 the increase of willow scrub elsewhere on the creeks -- with  
 5 their loss, through the inundation, would probably be offset.  
 6 A Yes.

7 Q So, it is only the highest alternative where there is a  
 8 loss of riparian vegetation due to the rising lake; is that  
 9 correct?

10 A Now, which vegetation type are we -- well, if you combine  
 11 riparian and meadow and wetland -- I'm not sure which habitat  
 12 types you are asking about.

13 Q Let me go to 3C-74, the fourth paragraph and your text  
 14 says, however, lake level fluctuations would eliminate up to  
 15 27 acres of establishing and mature willow scrub near the  
 16 mouth of Rush Creek and up to 9 acres near the mouth of Lee  
 17 Vining Creek. This loss would probably be offset by the  
 18 increased extent of willow scrub and cottonwood-willow forest  
 19 elsewhere on the creek. Isn't that what the report says?

20 A Yes.

21 Q And isn't it true that at only the 6410 alternative is  
 22 there an offsetting of the gains due to the increased water  
 23 supply on the tributary creeks?

24 A I don't believe that's correct. If you look at Table 3C-  
 25 14.

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1 Q Let me ask you, is 3C-14 inconsistent with the text that  
 2 we just went through?

3 A No, it isn't. And I think it is easier to see the  
 4 numbers there. Here, the riparian and meadow wetland habitat  
 5 types are combined and you can see that there's a net loss  
 6 possibly under the 6383.5 and higher alternatives.

7 Q Can you explain how that table is consistent with the  
 8 text that we just went through?

9 A Well, it might take 20 minutes. I don't believe they  
 10 are inconsistent. You need to look at both the lower and the  
 11 higher estimates, and as I did point out again, I think it  
 12 comes down to the negative values stated in a couple of those  
 13 alternatives. When you take all the numbers you went through  
 14 in the text and put them in a comparative table as 3C-14 is,  
 15 you can see that what I am saying is correct.

16 MR. DEL PIERO: Mr. Thomas, you have eight minutes.

17 MR. THOMAS: Q I won't belabor the point. Let me also  
 18 ask you a different question in the clean-up. Did I hear you  
 19 correctly say yesterday that Crowley Lake in its filled  
 20 capacity is part of a prediversion baseline in analyzing  
 21 the --

22 A That's correct. In general the prediversion condition  
 23 was taken to be the presence of the aqueduct system before the  
 24 Mono Basin diversion and export began.

25 Q Are you familiar with why Crowley Lake was built?

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1 A Well, I know it was built -- well, yes, I am.

2 Q Why was it built?

3 A I believe it was built primarily to regulate exports from  
 4 Mono Basin.

5 Q So wouldn't it be logically part of the Mono Basin  
 6 project?





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1 Q In fact, wouldn't it increase the number of visitor days  
2 significantly?  
3 MR. BIRMINGHAM: Objection, calls for speculation.  
4 A Furthermore, we have not judged the significance of  
5 beneficial impacts.  
6 MR. DEL PIERO: Mr. Thomas, that is your last question.  
7 MR. THOMAS: I am done.  
8 MR. DEL PIERO: Ladies and gentlemen, we are on break for  
9 ten minutes.  
10 (Recess.)  
11 MR. DEL PIERO: Ladies and gentlemen, the hearing will  
12 again come to order. We have just completed with Mr. Thomas'  
13 cross-examination, and we are going to have Mr. Dodge on  
14 cross-examination.  
15 MR. DODGE: I would remind the chairman, Mr. Flinn will  
16 be back this afternoon, and he will have some questions for  
17 this panel.  
18 MR. DEL PIERO: Thank You for reminding me of that.  
19 That's fine.  
20 CROSS-EXAMINATION  
21 BY MR. DODGE:  
22 Q Mr. Casaday, for the last time, let's look at Table 3C-  
23 14, extent of riparian and wetland vegetation for the  
24 alternatives. Do you have that in front of you, sir?  
25 MR. CASADAY: A Yes, I do. This is my favorite table.

00048

1 Q Now, in terms of the woody riparian vegetation, you go  
2 down the various alternatives and as you testified yesterday,  
3 they are fairly close, correct?  
4 A Yes.  
5 Q And that's true for both Rush Creek and Lee Vining Creek?  
6 A Yes.  
7 Q Now, as I understood your testimony yesterday, there  
8 were two factors at work here, one is at higher lake levels  
9 the creeks are shorter, and therefore, they tend to have less  
10 riparian vegetation.  
11 A That's correct.  
12 Q And so instead of riparian vegetation, you have lake;  
13 correct?  
14 A Yes.  
15 Q And that the values of the lake are not assessed in Table  
16 3C-14?  
17 A Yes.  
18 Q The other factor that is at work, as I understood it, is  
19 at higher stream flows you get a slightly higher water table,  
20 which would tend to increase the riparian vegetation?  
21 A That's correct.  
22 Q Now, let me go back to a question I asked you, I think a  
23 couple of days ago, isn't it true that Page 3C-14 for Rush  
24 Creek and Lee Vining Creek assumes that the existing channels  
25 stay as they are?

00049

1 A Yes.  
2 Q Would you agree with me that at higher Mono Lake  
3 elevations there tend to be higher stream flows down Rush and  
4 Lee Vining Creeks to maintain those elevations?  
5 A Yes.  
6 Q And would you agree with me that potentially those higher  
7 stream flows have the ability to rewater on a continuous basis  
8 historic channels now dry?  
9 A Certainly, to a degree, yes.  
10 Q Have you analyzed to what degree?  
11 A We have tried to do a routing of stream flows in CFS down  
12 these various potential channels.  
13 Q But to the extent that higher lake levels allow  
14 rewatering of historic dry channels, that in turn will affect  
15 the riparian vegetation associated with those channels;  
16 correct?  
17 A That would be correct if the flows in those channels were  
18 sustained throughout the growing season.  
19 Q And that would tend, if I understand your testimony  
20 correctly, that would tend to increase the number under the  
21 column woody riparian for the higher elevations?  
22 A Yes.

23 Q My last question is on the far right column, which  
24 includes not only woody riparian but also meadow and wetland,  
25 and the column is entitled percentage of prediversion extent,  
00050  
1 and you have a maximum estimate and a minimum estimate. Now,  
2 we are comparing to prediversion here?  
3 A Yes.  
4 Q And the minimum estimates are roughly 60 percent and the  
5 maximum estimates are roughly 80 percent. Do you see that?  
6 A Yes.  
7 Q Can you explain to the Board why it is that all of those  
8 percentages are so far below prediversion?  
9 A The short answer would be stream incision. Our  
10 groundwater models suggest that there may be significant areas  
11 that could support riparian or wetland vegetation that don't  
12 now, and that would be the maximum estimate that if indeed  
13 there are those potential areas there now that aren't  
14 colonized yet. Eventually, we may see 80 percent of the  
15 prediversion vegetation extent is recovered.  
16 The remaining 20 percent appears to be area that is lost  
17 because of the effects of stream incision. In other words,  
18 the topography of the flood plain system has changed so  
19 radically that it is impossible to support riparian vegetation  
20 in some areas that did prediversion.  
21 Q Okay. Mr. Casaday, I think you can go into repose now.  
22 A Thank you.  
23 Q I have some questions that I believe are addressed to Mr.  
24 Wegge, but I may prove to be wrong. The questions are about  
25 the net economic benefits. Now, the DEIR says on Page 3N-20

00051

1 that the net economic benefits were maximized at 6390, do you  
2 recall that, sir?  
3 MR. WEGGE: Yes, I do.  
4 Q And that was as a result of the contingent evaluation  
5 survey?  
6 A That was the result of considering all the costs and  
7 benefits that we monitored.  
8 Q And the benefits came from the survey; correct?  
9 A The benefits came -- well, depending on which alternative  
10 we were looking at -- for the most part the benefits came from  
11 the recreation and from the preservation values. The costs  
12 came from power supply and water supply.  
13 Q Let me ask you about this contingent evaluation survey.  
14 You looked at three lake elevations; correct?  
15 A That's correct.  
16 Q And 6375 was Program A?  
17 A That's correct.  
18 Q And 6390 was Program B?  
19 A Correct.  
20 Q And 6410 was Program C; correct?  
21 A Correct.  
22 Q Was there some reason why you did not look at 6400?  
23 A 6400 was not an alternative that we were asked to look at  
24 within the Draft EIR; and if I can just clarify a little  
25 further, we did have constraints on how many alternatives we

00052

1 could look at, and our strategy as determined by the technical  
2 review team that we worked through was to try and capture a  
3 reasonable range of alternatives, so therefore, we went from  
4 6372 as a baseline, to 6410 as the highest level.  
5 Q You say constraints, what sort of constraints did you  
6 have?  
7 DR. HANEMANN: A Can I answer that? We had a very  
8 small  
9 sample for the surveys, smaller than, for example, we had when  
10 we did the study for the interagency drainage program on the  
11 San Joaquin Valley.  
12 And so I think that the decision to look at three  
13 alternatives was realistic. If we had had larger, say, twice  
14 the sample size, then we could have increased the number of  
15 alternatives. Three alternatives, I think, was reasonable.  
16 And then the second part of the decision was which three  
17 alternatives, and as Tom has said, that came out of the  
18 discussions with the technical review team.  
19 Now, at page 3N-20, the DEIR says that the majority of



12 was not the South Tufa Grove at all, but rather the tufa at  
 13 Mono Lake? In your survey, you have a picture of the County  
 14 Park.  
 15 MR. WEGGE: I am not sure what your question is. Are you  
 16 suggesting that the County Park is not a major viewing area?  
 17 Q I am suggesting to you that the tufa focus at Mono Lake  
 18 is indeed broader than the South Tufa Grove.  
 19 A That's true.  
 20 Q At 6400 feet are there visible tufa at South Tufa Grove,  
 21 Lee Vining Grove and old Marina Grove?  
 22 MR. CASADAY: Excuse me, at 6400 feet?  
 23 Q Yes.  
 24 A I don't have the data broken out for that, but between  
 25 6390 and 6410 there is quite a bit of emergence of the tufa.

00059

1 Q And if I wanted to know the answer to that question, I  
 2 would ask Dr. Stine; is that right?  
 3 A That's what I would do, yes.  
 4 Q Let me go back to 6375 and what you said to the  
 5 respondents about that relating to California gulls. At 6374  
 6 and higher lake levels historically important nesting sites  
 7 for the California gull would be restored by flooding a land  
 8 bridge over which coyotes can travel to disrupt the gulls. Do  
 9 you see that, sir?  
 10 MR. WEGGE: Yes.  
 11 Q What are the historic sites to which you refer?  
 12 A Well, I think that that question could be better directed  
 13 to somebody that's more knowledgeable about gulls than I am.  
 14  
 15 MR. CASADAY: Well, I believe we are talking here of  
 16 Negit Island or Twain and Java Islands, or both.  
 17 Q If, in fact, Negit Island is physically land bridged, and  
 18 available to coyotes at 6375. then the representation in  
 19 Program A that I just read you would be incorrect; wouldn't  
 20 it?  
 21 A Well, we know when Negit Island is bridged, as long as  
 22 Twain and Java are not, we can still sustain a large nesting  
 23 colony.  
 24 Q Now, you are saying it refers to Twain and Java?  
 25 A Well, no, I have to sit down and look at all these

00060

1 elevations again to really give you my assessment of the  
 2 accuracy of the statement.  
 3 Q Let me ask you to assume as Dr. Beedy testified to  
 4 yesterday, that at 6375 Negit and Java are invaded by coyotes  
 5 and Twain is potentially invaded by coyotes or is in danger of  
 6 being invaded, would you agree if those are the facts your  
 7 representation in Program A is correct?  
 8 A It appears that you are correct. I would agree with  
 9 that.  
 10 Q So, that in fact, that would create a larger difference  
 11 in the public's eye, wouldn't it, as between 6375 and 6390?  
 12 DR. HANEMANN: A Yes.  
 13 MR. CASADAY: A Let me qualify that. I am sorry, I  
 14 can't produce all the elevations, but I believe yesterday,  
 15 talking about wildlife, we were focusing on drought conditions  
 16 that happened at either one percent or two to four percent of  
 17 the time. I think it is Dr. Beedy's conclusion that when you  
 18 disrupt nesting, it can have an effect for several years.  
 19 That probably should be distinguished to some degree  
 20 between the assumptions used here, which is trying to look  
 21 more at the average conditions than -- I don't think there is  
 22 any way of quantifying the duration of the effects on gull  
 23 nesting of those infrequent disruptions, so it is difficult -  
 24 - I guess the best I can say is it is difficult to relate  
 25 these infrequent land bridging events with the so-called

00061

1 typical visual condition at the lake.  
 2 Q Would you agree, I will address this to Mr. Casaday  
 3 unless someone else wants to try it, that at the South Tufa  
 4 Grove at 6390 feet there are many more water based tufa towers  
 5 than at 6375 feet.  
 6 MR. CASADAY: A Let's see, at 6375 and 6390 was the  
 7 question?  
 8 Q Many more water-based tufa towers at South Park?

9 A Yes, that's correct. We estimate  
 10 Q Just a yes will do.  
 11 A Well, many more, I'm not sur  
 12 can't answer the question.  
 13 Q You may qualify your answe  
 14 A We estimated that --  
 15 Q You are working on your 20  
 16 A We estimated that 0 to 2 pe  
 17 be basically inundated at the low  
 18 6390, about 20 percent would be  
 19 Q Would you agree with me t  
 20 preferred by the visitors?  
 21 MR. DEL PIERO: Mr. Dodge, time is up.  
 22 MR. DODGE: I would request an additional 20 minutes.  
 23 MR. DEL PIERO: Gentlemen, do you have an answer?  
 24 MR. PACKARD: Yes, in general that was the conclusion of  
 25 at least the visual studies that tufa towers standing in the

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1 water protruding from the lake generally have more attraction  
 2 or scenic appeal than those that are standing on land;  
 3 although one additional component of that, I think, is worth  
 4 mentioning, that the degree to which a particular tufa  
 5 formation or tufa tower protrudes out of the water is also a  
 6 factor to consider, and that if it is minimally inundated at  
 7 its base and therefore some distance off shore, it may project  
 8 a great distance out of the water. In those cases, we found  
 9 that those towers cast long reflections and were probably more  
 10 dramatic' whereas towers that were shorter or stood in deeper  
 11 water protruded less of a distance above the surface of the  
 12 lake probably had less appeal, relatively speaking.  
 13 MR. DODGE: I asked for an additional 20 minutes.  
 14 MR. DEL PIERO: Granted.  
 15 MR. DODGE: Q Would you agree that the visitors prefer  
 16 the larger tufa to the smaller tufa?  
 17 A I wouldn't say necessarily that that is for certain the  
 18 case. I think the variety of sizes and configurations of tufa  
 19 contribute significantly to the visual experience.  
 20 Q Now, let's look at what you say about tufa on Program B.  
 21 At this higher lake level, all small tufa towers that rise  
 22 above the surface of the lake at the lowest lake level would  
 23 be covered with water, and 5 to 20 percent of the larger tufa  
 24 towers at the major tufa area along its southern shoreline  
 25 would be undercut by wave action and topple into the lake.

00063

1 Some towers currently on land would become partially covered  
 2 with water.  
 3 Do you see that, MR. Wegge?  
 4 MR. WEGGE: A Yes, I see it.  
 5 Q Now, if it were the case that at 6390 feet, very few, if  
 6 any, of the larger tufa towers would be toppled, how in your  
 7 judgment would that affect the reaction of the respondents to  
 8 this program?  
 9 A Well, it's difficult to say precisely how it would affect  
 10 the respondents to this program. I think, as Dr. Hanemann  
 11 mentioned earlier, to the extent that we inaccurately  
 12 characterized the effect on any of the environmental  
 13 attributes, including tufa, it would affect, to some degree  
 14 how people responded to the survey.  
 15 Q One of you agreed with me that water-based tufa was more  
 16 preferred by visitors than land-based tufa. Was there any  
 17 particular reason why that was not called out in the  
 18 description of the 6390-foot elevation, I am talking about  
 19 Program B now.  
 20 MR. WEGGE: A Well, Program B says that some towers  
 21 currently on land would become partially covered with water.  
 22 Q I understand that, but was there some reason why the  
 23 advantages of water-based tufa was not called out?  
 24 A The advantage, I think, is up to the individual to make  
 25 some determination about the advantage. We are just trying to

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1 report what we felt was an accurate characterization of the  
 2 effects.  
 3 MR. DODGE: Mr. Chairman, we would like to mark as next  
 4 in order Audubon and Mono Lake Committee Exhibit 215. We have  
 5 30 copies. I don't know how you want me to distribute them.



00070

1 to relate flow and the growth of riparian vegetation. On Page  
 2 3C-38, the third full paragraph it is stated that the  
 3 application of the Taylor model to the diverted tributary  
 4 streams frequently results in acreage predictions that cannot  
 5 possibly develop in this particular stream corridor  
 6 Nonetheless, a direct relationship between mean annual stream  
 7 flow and riparian vegetation extent and vigor is assumed to  
 8 generally operate in assessing the alternatives.  
 9 A Yes.  
 10 Q Is the Taylor model the model used to develop your  
 11 favorite Table 3C-14?  
 12 A No, it is not.  
 13 Q Thank you. I have no further questions about riparian  
 14 vegetation.  
 15 However, Mr. Casaday, you cannot comply with Mr. Dodge's  
 16 injunction to relax. I have questions now about the economic  
 17 impact analysis which I believe are most properly directed to  
 18 you.  
 19 A No. (Laughter)  
 20 Q Let me ask a question, Mr. Casaday, or Mr. Wegge, either  
 21 of you is welcome to answer these questions. On Page 2-24 of  
 22 the EIR, it is stated that the State Water Resources Control  
 23 Board has not determined the quantity of water needed for  
 24 fishery protection or for other public trust purposes. Then,  
 25 it further states, the quantity of water needed for protection

00071

1 of fish pursuant to Fish and Game Code Sections 5937 and 5946  
 2 is not subject to reduction to satisfy competing demands for  
 3 water.  
 4 Is that a fair statement of your opinion?  
 5 A Yes.  
 6 Q Let me ask you to assume that two remedies are  
 7 established in this proceeding, first for satisfaction of Fish  
 8 and Game Section 5937, and secondly for satisfaction of the  
 9 public trust doctrine. Let me ask you to assume further that  
 10 the Board adopts the Fish and Game flow recommendations which  
 11 result in a reservation of approximately 90,000 acre-feet of  
 12 water for environmental purposes. Are you with me so far with  
 13 those assumptions?  
 14 A Yes.  
 15 Let me ask you to also assume that the economic impacts  
 16 of the Section 5935 remedy are not relevant to this Board's  
 17 reservation of that 90,000 acre-feet of water. Using your  
 18 economic analysis as set forth in the draft EIR, can you  
 19 distinguish the economic impacts associated only with the  
 20 public trust remedy?  
 21 MR. WEGGE: A I think the short answer as it is  
 22 presented now, no. But to the extent that your solution ties  
 23 to the point of reference condition which was used as a  
 24 baseline for the economic analysis, we could determine what  
 25 those incremental effects are.

00072

1 Q Mr. Wegge, let's turn to Table 3A-7, Summary Comparison  
 2 of Hydrologic Effects of the alternatives, and for purposes of  
 3 our discussion, let's focus specifically on the 6390-foot  
 4 alternative. Does that show that the average release down the  
 5 tributaries into Mono Lake would be 95,900 acre-feet a year  
 6 for the first 50 years following the Board's amendment of Los  
 7 Angeles' licenses?  
 8 A Yes, it does.  
 9 Q Let's assume again that 90,000 acre-feet are needed to  
 10 comply with Fish and Game Code 5937. Would it be fair, then,  
 11 to say that 5,900 acre-feet in addition are necessary to  
 12 comply with the public trust?  
 13 A I presume so, yes.  
 14 Q And could you determine, based on this Draft EIR, the  
 15 economic impacts of that incremental 5,900 acre-feet of  
 16 allocation for environmental purposes?  
 17 A Not the way the data is presented in its current form.  
 18 However, we may be able to make some conclusions regarding our  
 19 analysis pertaining to that new baseline.  
 20 Q So there is no mystery, California Trout hopes this Board  
 21 will so direct you.  
 22 Let me turn now to a more specific subject which is the

23 economic impacts associated with recreation. Are such  
 24 questions best directed to you, Mr. Wegge?  
 25 A Initially.

00073

1 Q Let me ask you to turn to Table 3N-17.  
 2 A All right.  
 3 Q Entitled Average Annual Use and Spending Associated with  
 4 Recreation at Directly Affected Areas.  
 5 A Yes.  
 6 Q My questions concern the third column, Mono Lake  
 7 tributaries. Does this table show that 380 visitor-days  
 8 occurred in 1989, visitor days of recreation along the Mono  
 9 Lake tributaries?  
 10 A I don't believe it does, but Mr. Dennis could probably  
 11 answer that.  
 12 MR. DENNIS: A Except for Mono Lake, all recreation  
 13 areas that we analyzed, including the lower tributaries, used  
 14 the point of reference that was defined not with respect to  
 15 any historic year, but rather with respect to stream flows  
 16 that are mandated to protect fish resources and historic run-  
 17 off patterns.  
 18 Q Mr. Casaday, is the point of reference scenario defined  
 19 in this Draft EIR as relating to the environmental conditions  
 20 which existed on August 22, 1989?  
 21 MR. CASADAY: A I believe we defined in the first part  
 22 of the report more than that for the point of reference. I  
 23 believe you are correct, we said generally they are conditions  
 24 in 1989; however, we did go on to say for some assessments  
 25 such as recreation, power, water supply, a lot of the concerns

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1 of this panel, we generated a point of reference scenario  
 2 where we took the stream flow requirements in effect at that  
 3 time and projected the implications of continuing those rather  
 4 minimal requirements through time for some period of time,  
 5 assuming that the historical hydrology were to repeat itself.  
 6 Q My interest here is not in the dates, but rather in the  
 7 amount of use, so let me --  
 8 A What we were trying to do is say this baseline use would  
 9 be the use that would occur if nothing changed from the point  
 10 of reference.  
 11 So, under the point of reference, you predict 380  
 12 visitor-days of recreation along the Mono Lake tributaries?  
 13 MR. DENNIS: That's correct.  
 14 Q And under the 6390 and 6410-foot alternatives, you  
 15 predict 710 visitor-days of usage along the Mono Lake  
 16 tributaries; is that correct?  
 17 A That's correct.  
 18 Q That doesn't seem low to you?  
 19 MR. CASADAY: Mr. Chairman, these two individuals worked  
 20 on this together.  
 21 MR. DEL PIERO: I am waiting for them to come to a  
 22 conclusion.  
 23 MR. TROTT: These are projected over a 10-year period  
 24 based on the hydrologic sequence that was used for this  
 25 analysis and the baseline was the 370 days, and then it was

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1 altered depending on what type of water year based on the  
 2 relationship between flows and use that were developed in the  
 3 recreation section.  
 4 Q I understand that, but that isn't directly responsive to  
 5 my question. My question is do you believe that the best this  
 6 Board can hope for in the foreseeable future after adoption of  
 7 a 6390 or a 6410-foot alternative is 710 visitor-days of  
 8 recreation along the Mono Lake tributaries?  
 9 A No.  
 10 Q Will you qualify that response?  
 11 A The current use of the tributaries is extremely low,  
 12 because they have been dewatered for so long. People aren't  
 13 really aware of the resources. And in some of our analysis,  
 14 I believe it is true for economics of recreation,  
 15 consideration was made for a gradual increase in the awareness  
 16 level among recreationists as to the resources of the lower  
 17 tributaries.  
 18 And it is highly conceivable that recreation use at the  
 19 tributaries would gradually rise to approximate use levels on



14 Plan overstates Los Angeles' Department of Water and Power's  
 15 future demands to the extent that it does not include the  
 16 water savings which may accrue from the new ultra low-flow  
 17 toilet programs?  
 18 A Yes.  
 19 Q Is it also correct in the winter of 1992 LADWP  
 20 implemented a new water rate structure?  
 21 A Yes.  
 22 Q To your knowledge, was that rate structure designed to  
 23 encourage LADWP customers to conserve water?  
 24 A Yes.  
 25 Q Is it your testimony that the 1990 Urban Water Management

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1 Plan may additionally overstate LA's future water demands to  
 2 the extent it does not include any estimates of water savings  
 3 which may accrue as the result of this new rate structure?  
 4 A Yes, but let me qualify this. They made a portfolio  
 5 assumption about conservation that would take place in the  
 6 future, and I think they were thinking of price changes. They  
 7 weren't thinking of this specific plan because it hadn't been  
 8 developed then, and I think the plan that emerged went beyond  
 9 what people might have anticipated in 1990, so they didn't  
 10 anticipate it, but it is also fair to say that they do allow  
 11 for generic changes and this new price structure is the sort  
 12 of thing that is consistent with what they anticipated.  
 13 Q Is it your testimony that this new plan is likely to  
 14 result in additional savings as a result of pricing beyond  
 15 those which were estimated in the 1990 Urban Water Management  
 16 Plan?  
 17 A I think some additional savings, yes.  
 18 Q Was it also your written testimony that the 1990 Urban  
 19 Water Management Plan overstated Los Angeles' future water  
 20 demands to the extent that it did not include the after  
 21 effects of the recent drought, which may continue to depress  
 22 water use for some period of time?  
 23 A Yes, the analysis that LA did and the analysis that I did  
 24 looked at a normal year, and there is no such thing as normal,  
 25 and particularly 1991 and 1992 weren't normal, so they didn't

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1 include, and I didn't include the phenomenon that you get --  
 2 well, the reduction in demands due to the drought and the  
 3 phenomenon that the demand might stay lower for a period of  
 4 time thereafter.  
 5 Q Is that phenomenon that you referred to called a drought  
 6 memory?  
 7 A Yes.  
 8 Q And you are confident, Dr. Hanemann, there is a drought  
 9 memory, the fact that even after the drought users are likely  
 10 to continue to, customers are likely to use less water?  
 11 A The evidence that I have seen shows that there is a  
 12 drought memory. The question is how long it lasts. And I  
 13 think it will last for several years, but I am less sure of  
 14 exactly how many years.  
 15 Q I am not asking you to quantify that today, but I just  
 16 want to clarify for the record that it is your testimony that  
 17 if you believe any drought memory is down the road and --  
 18 A I think there's a real phenomenon. I just want to add  
 19 this, I think there is maybe a longer drought memory, maybe a  
 20 deeper one this time around than after 1977. What's happened  
 21 this time, I think, is local water agencies have been, if I  
 22 might put it, radicalized in a way that didn't happen after  
 23 the previous drought, so I think the memory may be more  
 24 sensitive now than last time.  
 25 MR. DEL PIERO: The term was radicalized? You are

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1 talking about water districts? (Laughter.) Pardon me, Ms.  
 2 Koehler.  
 3 MS. KOEHLER: Moving off from drought memories, Dr.  
 4 Hanemann, are you familiar with the California Urban Water  
 5 Conservation Council?  
 6 A Yes, in fact, I am an advisor to it together with a  
 7 student, David Mitchell. We are under contract to it to do a  
 8 study to develop a manual for California cities on how they  
 9 might set rates in the future.  
 10 Q Is it correct that the Urban Water Council is a coalition

11 comprised of urban water agencies and conservation groups?  
 12 A Yes.  
 13 Q Is LADWP a member of that council?  
 14 A I believe so, but I don't know the specific membership.  
 15 Q You referred earlier to BMPs and I'm going to ask you  
 16 about that now. You are familiar, then, with the memorandum  
 17 of understanding regarding urban water conservation, which was  
 18 signed by the members of the Urban Water Council in 1991.  
 19 That is Cal Trout Exhibit CT-3b.  
 20 A Yes, I spent quite a number of days sitting in on the  
 21 negotiations.  
 22 Q And as you indicated earlier, does the MOU require  
 23 implementation of a list of best management practices?  
 24 A Yes.  
 25 Q Could you very, very briefly describe for the Board what

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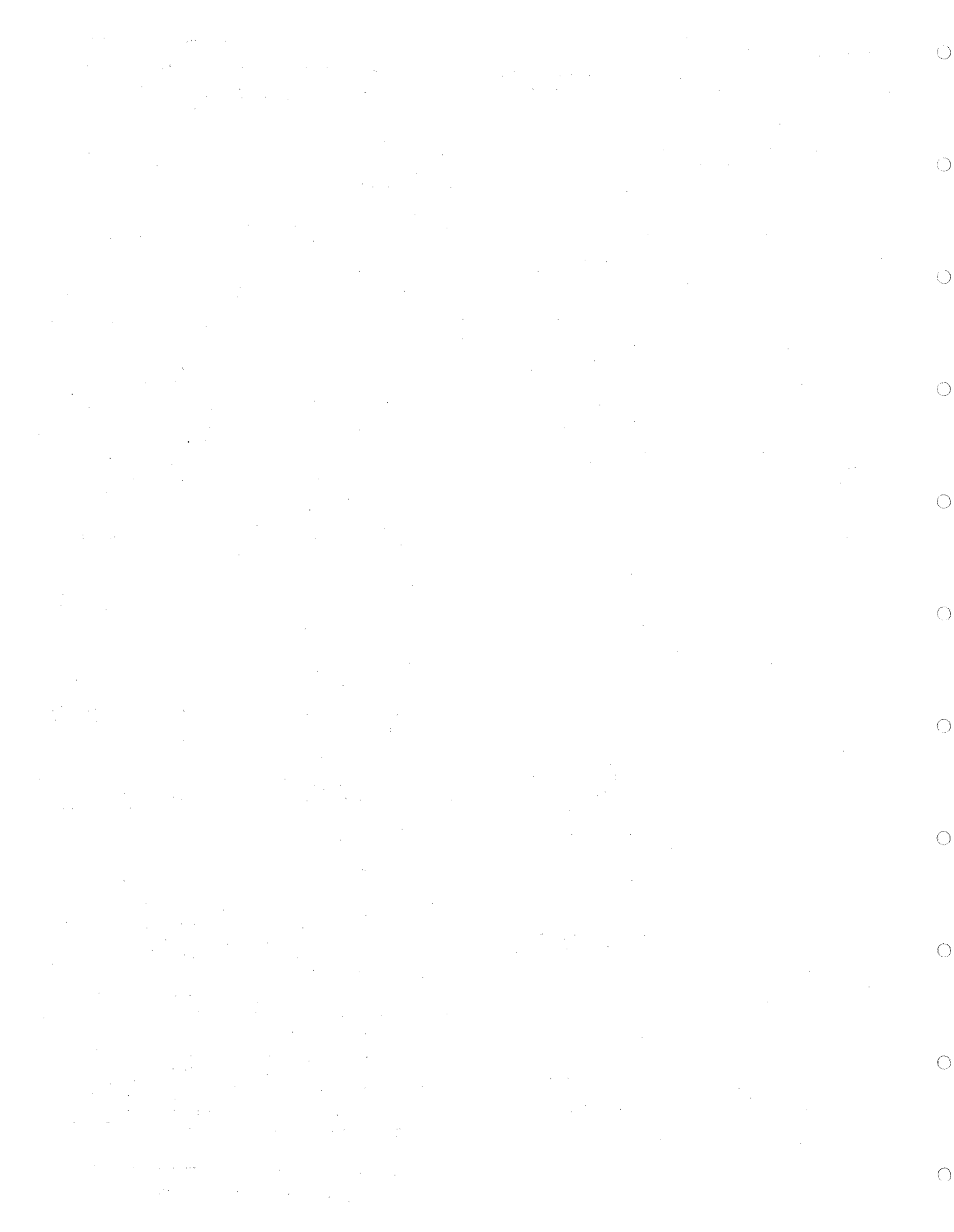
1 the BMPs consist of, or what the concept of a best management  
 2 practice is.  
 3 A Yes. As you know, the concept comes from pollution control  
 4 and the language best management practices is a specific term  
 5 in water quality. It was my impression that we were thinking  
 6 of something general in the MOU, and it's important to mention  
 7 the distinction between best management practices and  
 8 potential best management practices, that is to say, the  
 9 negotiations looked at a wide range of conservation practices,  
 10 both practices that were being implemented in California and  
 11 practices that were being implemented in other parts of the  
 12 country.  
 13 The question was to which of these practices would the  
 14 urban water agencies in California commit now and that really  
 15 was a political negotiation process. That is to say, I think  
 16 there are some things which I regard as best management  
 17 practices, but got listed as potential best management  
 18 practices because politically, that is all that the urban  
 19 water agencies would agree to.  
 20 Q Isn't it correct that ultra low-flow toilet programs were  
 21 adopted as a best management practice?  
 22 A Yes, but the data was just coming in at the time of those  
 23 negotiations and so it was agreed to adopt ultra low-flush as  
 24 the best practice, but to postpone the quantification until  
 25 later in 1992.

00086

1 Q Are you familiar with Cal Trout's Exhibit CT-3c? This is  
 2 a document which was approved by the council as you referred  
 3 to which sets forth assumptions and the methodology for  
 4 determining estimates of the reliability of water savings from  
 5 the installation of ULF toilets?  
 6 A I am familiar with that document now, but I didn't see it  
 7 before this spring. I knew it was in the works, but I didn't  
 8 know that this methodology had been approved by the council at  
 9 the time I was doing the analysis.  
 10 Q Is it your view that the methodology approved by the  
 11 Urban Water Council is in principle, I understand you haven't  
 12 independently verified it, but that it is in principle, a  
 13 reliable method for calculating savings from the installation  
 14 of ULFTs?  
 15 A Yes, I know the people involved in the negotiations, not  
 16 just negotiations, but in the analysis, so I think this was a  
 17 carefully thought out document.  
 18 Q One of the major assumptions in that document, if I am  
 19 correct, Dr. Hanemann, is that the annual turnover rate for  
 20 these toilets is about four percent. Understanding that you  
 21 have not had a chance to independently verify that figure, let  
 22 me ask you if we assume for the sake of this discussion that  
 23 it is reliable, would you expect higher conservation savings  
 24 from the ULFT program that is projected in the 1990 Urban  
 25 Water Management Plan?

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1 A Yes, and I would like to add this. When I did the  
 2 analysis in 1988 of Metropolitan's demand forecast for  
 3 Metropolitan, what struck me was the enormous significance of  
 4 the 1980 plumbing code, that a large part of the conservation  
 5 that was taking place was projected to take place after 1985,  
 6 over the next 20 years, came from replacing what were then  
 7 five and six gallon flush toilets with 3.5, and it's been





2 MR. DEL PIERO: And I'm going to be viewing the tape, and  
3 so are the other Board members, so we will be looking forward  
4 to seeing that the direction given to everyone has been  
5 followed.

6 Mr. Koehler, yesterday, I gave Ms. Goldsmith five  
7 additional minutes because of the way the cross-examination  
8 she was conducting was going. I am prepared to make an offer  
9 to you that if you read slower so that Ms. Book has some  
10 fingers left by the end of the afternoon, I will give you five  
11 additional minutes. Okay. (Laughter.)

12 MS. KOEHLER: Thank you, I appreciate that. My name is  
13 Cynthia Koehler. I am here representing California Trout.

14 CROSS-EXAMINATION CONTINUED

15 BY MS. KOEHLER:

16 Q We were discussing, Dr. Hanemann, when we left off,  
17 whether you were familiar with the testimony of David  
18 Fullerton in this proceeding.

19 A Yes.

20 Q In your view, does Mr. Fullerton's application of the  
21 methodology discussed earlier, the Urban Water Council  
22 methodology having to do with ULFTs, does his application of  
23 that appear to be a reasonable one to you?

24 DR. HANEMANN: A It appears to be a correct application  
25 of the methodology set out in June 1992, yes.

00094

1 Q Was it your earlier testimony, I just want to make sure  
2 I do understand it, that based on advances in the ULFT program  
3 since the 1990 Urban Water Management Plan, that you believe  
4 that a higher level of water conservation is likely to accrue  
5 in the future?

6 A Yes.

7 Q I want to ask you now whether you feel that is also the  
8 case with regard to other ULFT programs for commercial,  
9 government and industrial facilities?

10 A Yes.

11 Q And what about washing machines?

12 A I think there is a significant potential with other  
13 appliances like washing machines -- again, I wasn't aware of  
14 the recent development, but I think they will have an impact.

15 Q And again, neither the commercial, industrial, and  
16 governmental ULFT programs or the washing machine conservation  
17 programs are accounted for the in 1990 Urban Water Management  
18 Plan?

19 A That's correct.

20 Q And in addition to these measures, don't the BLMs in the  
21 MOU set forth even further conservation measures which are not  
22 only feasible, but which the signators to the MOU have  
23 committed themselves?

24 A Yes. I think the BMPs are anticipated to a reasonable  
25 degree, although not perfectly in 1990, but this is a moving

00095

1 target. The Council will examine some of the potential BMPs  
2 and raise them to the status of BMPs over the next 10 or 15  
3 years, and that's not reflected in the 1990 projection.

4 Q Do you feel that the 1990 projectory takes accurate  
5 account of the savings available in outdoor landscaping?

6 A No, I think it makes some reference, but I felt that the  
7 BMPs in general don't do enough with regard to outdoor use nor  
8 with regard to new construction.

9 Q If the Urban Water Management Plan were revised today, do  
10 you believe that Los Angeles DWP water demand projections  
11 would remain the same as they were in 1990, or do you believe  
12 in light of these conservation developments we have been  
13 discussing that LADWP demands for water would be lower?

14 A I'm sure the demands for water will be lower.

15 It is going to be a matter of professional judgment as to  
16 how much lower, but there is no doubt about the direction.

17 Q Thank you. I am going to now turn to the least-cost  
18 model, so I am not sure who, exactly, to direct my question  
19 to. I will rely on your judgment. Before I get into it, I  
20 just want to make clear at the outset I realize that the  
21 consultants were operating under time and budget constraints,  
22 so we are limited in what can be accomplished in terms of  
23 modeling.

24 My next questions are intended to explore the limits of

25 what the model can realistically tell the Board and the public

00096

1 about Los Angeles Department of Water and Power water supply  
2 costs and how the models may be made more accurate.

3 My first question on this subject is, isn't it correct  
4 that the least-cost model used by Jones and Stokes in  
5 preparing the Draft EIR assumed Los Angeles Department of  
6 Water and Power will minimize costs on an annual basis?

7 MR. RIMPO: A That's correct.

8 Q And by the same token, the model does not tend to  
9 minimize aggregate costs for Los Angeles DWP over the entire  
10 20-year sequence; is that right?

11 A That's correct. It tends to minimize only on an annual  
12 basis.

13 My second question was, does it not tend to minimize  
14 costs over the long term? Is that right?

15 A To the extent that costs are minimized annually, it will  
16 do that.

17 Q Let me give you an example. Doesn't the model assume the  
18 Los Angeles DWP will pump the maximum amount of ground water  
19 available every year because this is the cheaper water source?

20 A It depends on cheaper than what?

21 Q I mean cheaper than the other sources available to Los  
22 Angeles in any given year.

23 A It will pump the maximum amount if the model determines  
24 that that resource is the cheaper resource.

25 Q In that year?

00097

1 A In that year, that is correct.

2 DR. HANEMANN: A Let me just say that the model is  
3 myopic. It doesn't consider multi-year strategies where you  
4 know you will need more groundwater next year if you  
5 deliberately hold back this year.

6 Q Thank you, Dr. Hanemann. You are anticipating my next  
7 point which is that by making this assumption of minimizing  
8 costs on an annual basis, doesn't that eliminate groundwater  
9 storage during wet years as a backup source of water in dry  
10 years?

11 MR. RIMPO: A It minimizes conjunctive use within the  
12 year, but not between years, so if there is a surplus of  
13 groundwater, we will carry it over to the next year.

14 Q Right, but wouldn't groundwater be a generally cheaper  
15 source of water for Los Angeles than buying Metropolitan  
16 water, District water?

17 A Yes, it would.

18 Q So, in other words, the model would tend to, if you will,  
19 force Los Angeles to pump more groundwater even when it might  
20 be reasonable from a multi-year strategy to buy more water in  
21 a particular year and store it?

22 A That's correct.

23 Q If the model assumed instead that Los Angeles DWP would  
24 manage groundwater to build up this particular source during  
25 a wet year, isn't it likely that the model would project fewer

00098

1 shortages in the Los Angeles DWP service area than are  
2 indicated in the DEIR?

3 A It's possible, but we haven't run that scenario.

4 Q By the same token, if the model takes into account Los  
5 Angeles' groundwater management options as we have just been  
6 discussing, isn't it likely that the model would have  
7 projected lower purchases of water from Metropolitan Water  
8 District in dry years? In other words, there would be a store  
9 of groundwater that they would be able to draw on in dry years  
10 more than the model allows for in its current form?

11 A Yes, that's likely.

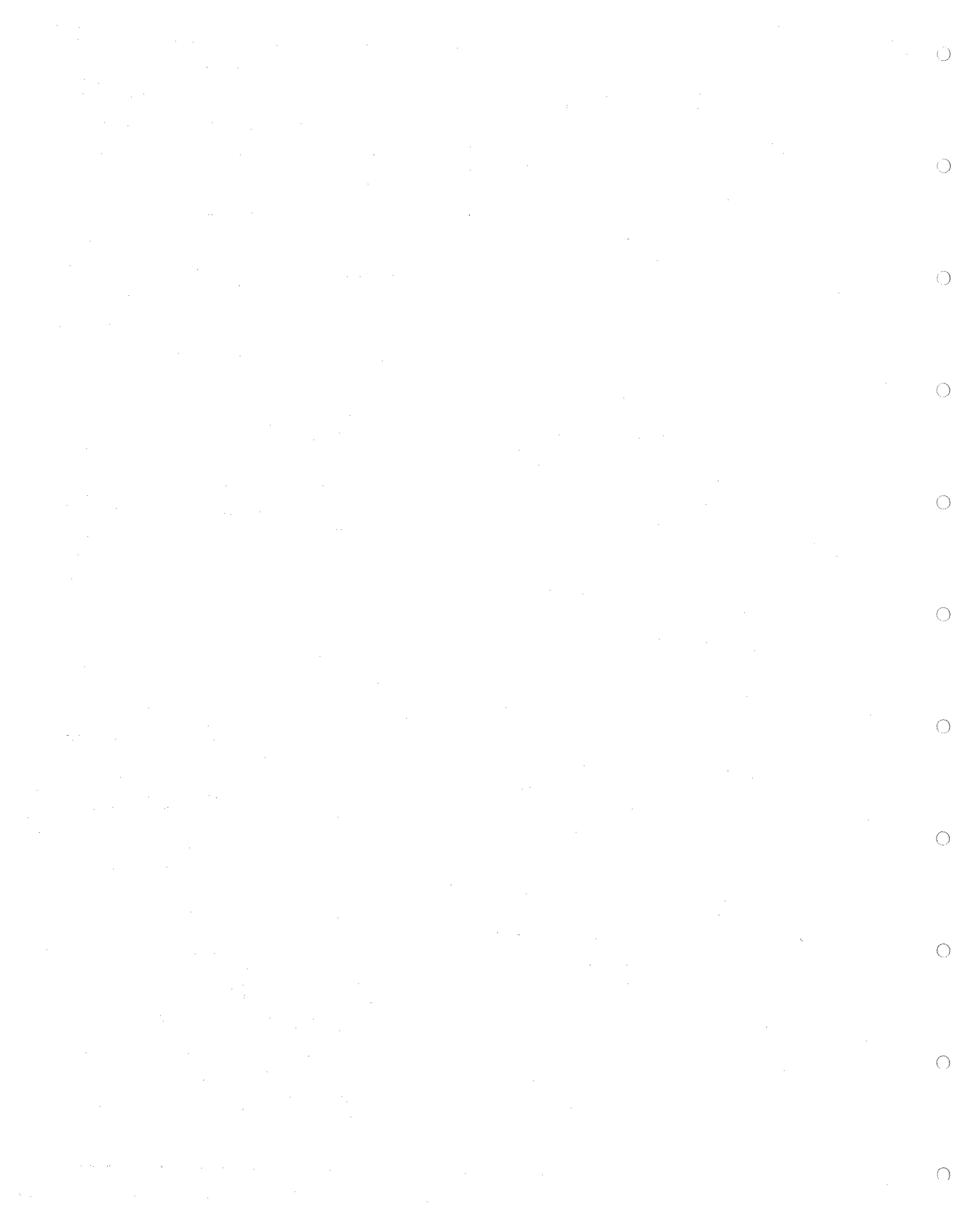
12 Q All right. On a related point, the EIR posits that  
13 Metropolitan Water District's sales prices will rise over  
14 time; is that correct?

15 A Yes.

16 Q And at some point, however, isn't it true that these  
17 prices will rise to the point where local water agencies are  
18 likely to develop alternative sources to MWD's, such as  
19 reclamation, conjunctive use, additional water conservation?

20 A That's a possibility which is becoming clear now.

21 Q What do you mean when you say "becoming clear now"?



15 valuation reflect the impacts of price rationing on different  
 16 consumers to the extent that price rationing was done?  
 17 A No, that's the one factor it doesn't incorporate.  
 18 Q Is it your testimony that you recommended use of LA's  
 19 Blue Ribbon Commission data because you felt and feel that it  
 20 is a more accurate reflection of the cost of shortages to LA's  
 21 consumers?  
 22 A Yes. I didn't want to use it because it is a lower  
 23 number or a higher number than alternatives. It seems to me  
 24 exactly on point. It dealt with Los Angeles, and it dealt  
 25 with what happens in a drought, and you can't ask for anything

00105

1 more direct than that.  
 2 Q Can you tell us whether the pricing impacts would be a  
 3 more reliable reflection of cost than contingent valuation in  
 4 this case?  
 5 A It is not the method, but it is this point: The way the  
 6 contingent valuation data have been analyzed so far, just  
 7 looks at the cost to the average consumer over all the  
 8 different uses in the service area, but what happens is with  
 9 price rationing, when you impose a surcharge as utilities have  
 10 done in the last drought, and I think will in the future, with  
 11 price rationing, the people for whom water is less valuable.  
 12 the people who can bear the outage at a relatively lower cost  
 13 are cut back and people, businesses, whatever, to whom water  
 14 is really crucial, and to whom it will be expensive to go  
 15 without, don't cut back, so you don't get the average user  
 16 cutting back. You get it skewed a little bit toward those who  
 17 can have lower shortage costs, and it's that factor which  
 18 wasn't incorporated into the analysis of the contingent  
 19 valuation data, but it's exactly that factor which the  
 20 Committee wanted from the analysis of the Commission.  
 21 Q Can you tell us very briefly about the Blue Ribbon panel  
 22 and who did the study for the Blue Ribbon panel?  
 23 A The Blue Ribbon panel had a consultant, David M.  
 24 Griffith, and it supplied the staff work.  
 25 The Technical Committee and the Economics Committee had

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1 my colleague Shmuel Oren, who has done an enormous amount of  
 2 work on electricity pricing and devising priority pricing in  
 3 electricity, and me. And actually, at the first meeting we  
 4 attended, Shmuel pointed out that you should look at who cut  
 5 back and who didn't in 1991 when there were surcharges in Los  
 6 Angeles, to get a feel for what price increase it would take  
 7 to ration demand, cut back demand by 15 percent.  
 8 So, that was the context in which the analysis was  
 9 commissioned and was performed by David M. Griffith.  
 10 Q Then, to summarize your testimony, you remain convinced  
 11 that the data developed by the Blue Ribbon Commission is more  
 12 accurate and more direct than the 1987 contingent valuation  
 13 shortage study performed by Carson and Mitchell for the State?  
 14 A It's on point. It is a limited set of data, but directly  
 15 on point.  
 16 Q My last question, Dr. Hanemann, relates to something you  
 17 said earlier. You seemed very confident in answering Mr.  
 18 Birmingham about Metropolitan Water District's supply. Could  
 19 you give us some basis for your optimism about their supply in  
 20 the future?  
 21 A The most important point, I think, is what I perceive is  
 22 the change in Metropolitan's public position regarding the  
 23 Colorado River aqueduct, that instead of framing the issue as  
 24 losing 600,000 acre-feet, it now feels it probably will be  
 25 able to keep the aqueduct running at full capacity and that's

00107

1 an extra 600,000 acre-feet, and that's a significant amount of  
 2 water.  
 3 MR. KOEHLER: Thank you. I have nothing further.  
 4 MR. DEL PIERO: Mr. Flinn, you are back.  
 5 MR. FLINN: I am.  
 6 MR. DEL PIERO: You have questions from yesterday, and my  
 7 apologies to Mr. Stevens and Ms. Schoonover. I am going to  
 8 take you first and get your out of the way, if that's okay.  
 9 MR. FLINN: I have questions of this panel.  
 10 MR. DEL PIERO: I understand you have questions of this  
 11 panel, including questions left over from yesterday.

12 MR. FLINN: Actually, I don't think I have any left over  
 13 from yesterday. My questions are only directed to this panel.  
 14 MR. DEL PIERO: Oh, really. Well, you're standing up so  
 15 we will take you.  
 16 MR. BIRMINGHAM: Is this going to necessitate the Mono  
 17 Lake Committee and the National Audubon Society making an  
 18 application for an additional amount of time in addition to  
 19 the additional time Mr. Dodge has already been granted?  
 20 MR. DEL PIERO: I was advised of Mr. Flinn's absence  
 21 yesterday, and the absence this morning, and I indicated I  
 22 would afford him an opportunity to examine this afternoon  
 23 because of that problem. Mr. Dodge, there was about 11  
 24 minutes left of your time from this morning, and that's how  
 25 much you have, Mr. Flinn.

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1 CROSS-EXAMINATION  
 2 BY MR. FLINN:  
 3 Q I want to start my examination -- I wasn't here this  
 4 morning, and I don't know all the gentlemen sitting here, so  
 5 I am going to toss my questions out and let anybody answer  
 6 them. I am going to start with Table 3N-14 from Volume II of  
 7 the Draft EIR. This is the table with the summary of  
 8 comparisons of economic costs and benefits, where you have  
 9 costs to LA for losing water on the one hand and measuring the  
 10 benefits to LA on the other, and my questions are intended to  
 11 try and see if we are weighing the same thing on one side that  
 12 we are really weighing on the other.  
 13 And more particularly, it is going to be addressed to the  
 14 point of reference paradox that I believe has been raised in  
 15 some of the Draft EIR comments.  
 16 And I want to start with whoever can answer some  
 17 questions with regard to the source of the data in the column  
 18 entitled LADWP Water Supply.  
 19 MR. WEGGE: A I will take a stab at that.  
 20 Q Dr. Wegge.  
 21 A Thomas Wegge, right.  
 22 Q Let me ask you this, starting with the point of reference  
 23 condition, that is the first one for which there is no blank,  
 24 does that assume that water was flowing to the City of Los  
 25 Angeles in some quantity?

00109

1 A The point of reference is based on the point of reference  
 2 scenario which does assume some quantities of water flowing to  
 3 Los Angeles.  
 4 Q Do you know, or does anybody know on the panel what that  
 5 quantity of water was on, say, an annual average basis?  
 6 A Yes, that number is reflected in Chapter 3L.  
 7 Q The exact number isn't accurate. Do you have any idea of  
 8 the ballpark range? It's on the order of tens of thousands of  
 9 acre-feet.  
 10 A Tens of thousands of acre-feet, that is correct.  
 11 Q Does anybody here know what the level of Mono Lake would  
 12 be over, say, a 20-year period if water were exported at that  
 13 tens of thousands of acre-feet each year for 20 years at the  
 14 point of reference assumption?  
 15 MR. CASADAY: No, I don't recall what that is. We were  
 16 aware of it at one time, but I don't recall the number. The  
 17 lake goes down.  
 18 Q It's fair to say the lake is lower after 20 Years, or  
 19 would be lower than the lake level at the point of reference,  
 20 is that right?  
 21 A Yes.  
 22 Q Let's look at the measurement of the benefits. Am I  
 23 correct that the benefits of a higher Mono Lake level were  
 24 measured simply from the level of Mono Lake at the moment of  
 25 the point of reference, to anyone?

00110

1 MR. WEGGE: A The recreation benefits, are you referring  
 2 to?  
 3 Q All of the benefits, preservation values, everything.  
 4 A Well, there was a differential -- for the recreation  
 5 benefits, it was relative, I believe, to the lake level in  
 6 August of 1989; is that correct?  
 7 MR. DENNIS: A That is the point of reference of Mono  
 8 Lake.



C.  
 3 Now, the Los Angeles consultant finds that is not so. Your  
 4 question is if C were higher, would that move the peak to the  
 5 right, and the answer is yes. How much, I don't know, but  
 6 that's the point I wanted to make.  
 7 Q One last question.  
 8 MR. DEL PIERO: That is your last question.  
 9 MR. FLINN: With regard to trying to measure the  
 10 uncertainties and the statistical situation of differences  
 11 between point A and point B, were you given the funding to  
 12 enable you to undertake a statistical analysis or an analysis  
 13 of statistical significance of the differences between A and  
 14 B?  
 15 A No, we didn't calculate that because that really would  
 16 have taken a significant amount of time and it was way beyond  
 17 our budget.  
 18 MR. FLINN: Thank you.  
 19 MR. DEL PIERO: Thank you very much. Who is up first.  
 20 Ms. Scoonover or Mr. Stevens? Mr. Stevens, you are up.  
 21 CROSS-EXAMINATION  
 22 BY MR. STEVENS:  
 23 Q I have a few questions respecting the public trust  
 24 considerations given by the panel. After that Ms. Scoonover  
 25 will have some questions regarding water supply.

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1 I think my questions are addressed principally to Dr.  
 2 Hanemann. They deal with the public trust considerations but  
 3 if there are designees who would prefer to answer that, I  
 4 would be happy to take that.  
 5 Basically, you are familiar with the general principles  
 6 of public trust which were examined by the panel in this  
 7 proceeding?  
 8 DR. HANEMANN: A Yes.  
 9 Q They deal principally with the idea of the ownership, the  
 10 manner in which the beds of waters and tidelands must be kept  
 11 to protect; is that right?  
 12 A Yes.  
 13 Q With respect to California, the bed of Mono Lake is held  
 14 in public trust; is that not correct?  
 15 A I believe so, but I'm not an attorney.  
 16 Q Basically, of course, this is what led to this proceeding  
 17 and to the Supreme Court's decision in National Audubon. If  
 18 Mono Lake were not a public trust body --  
 19 A We would all be at home.  
 20 Q But we are not, and there are public trust  
 21 considerations. You are generally familiar with the  
 22 principles in which the bed is held and the protections which  
 23 were dealt with in the public trust, that there are restraints  
 24 on alienation of public trust lands and that there are  
 25 definite restrictions in the manner in which public trust

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1 lands can be put to use?  
 2 A I have some notion of that.  
 3 Q And this is distinct from the character of privately held  
 4 land or lands which are held by the Federal government which  
 5 are not subject to public trust protections?  
 6 A Yes.  
 7 Q Was this distinction in the nature of public trust lands,  
 8 aside from privately held or Federally held lands, considered  
 9 in the public trust analysis which was given by the panel?  
 10 A I would say it wasn't. Thomas, do you agree with that?  
 11 MR. WEGGE: A Yes, I agree with that.  
 12 MR. DEL PIERO: Is there someone else on the panel more  
 13 qualified to answer these questions?  
 14 A No, in fact, I think the subject matter is well beyond  
 15 anything that our firm considered in preparing the EIR.  
 16 MR. DEL PIERO: That's what I was concerned about.  
 17 MR. STEVENS: Q Assuming that lands which were being  
 18 considered in respect to the study were treated differently  
 19 were protected in a different manner, that they were subject  
 20 to the public trust, would the consideration given to public  
 21 trust values by this panel and indeed by the study, be  
 22 different? Assume, for instance, that lands which are held by  
 23 the State as public trust lands, of sovereign character,  
 24 generally can't be conveyed as private land can be conveyed,

25 and assume that they must be held for ecological preservation,  
 00119

1 that the law prohibits their use irrespective of statute, for  
 2 such things as housing, and assume that lands which are  
 3 privately held, or held by the Federal government, are not  
 4 subject to these restrictions, would this compel a different  
 5 consideration by the panel when it evaluated the public trust  
 6 values of these lands?  
 7 MR. BIRMINGHAM: Objection on the ground it calls for  
 8 speculation.  
 9 MR. STEVENS: I think it is basically an examination into  
 10 the nature and into the manner in which public trust  
 11 considerations were applied by the panel, Mr. Del Piero.  
 12 MR. DEL PIERO: Let me ask a question. In terms of the  
 13 analysis done by this panel, can you outline for me the  
 14 consideration given to the public trust issues raised by Mr.  
 15 Stevens, if any?  
 16 MR. CASADAY: A I guess I would have to say there was  
 17 not a direct attempt to interpret the Court's meaning of  
 18 public trust values and consciously apply that to the lake.  
 19 It was more of a case --  
 20 MR. DEL PIERO: Was it unconscious?  
 21 A It was a case of identifying the resources at the lake  
 22 that could be affected by the change in lake level and trying  
 23 to describe the relative impacts on all those resources  
 24 according to change in stream flow and lake level, so again,  
 25 I'm going to find it hard to answer this line of questions.

00120

1 MR. DEL PIERO: One last question. In terms of analysis  
 2 done by members of this panel, was the issue of the nature of  
 3 the resources, i.e., public trust resources, taken into  
 4 consideration as opposed to their being any other type of  
 5 resource or was the analysis done purely based on the  
 6 scientific qualifications and ability of the individuals,  
 7 regardless of what nature the resources are?  
 8 MR. CASADAY: A I would say it was the latter with the  
 9 exception that we certainly understood that, for example, the  
 10 lake bed is not subject to development by private interests  
 11 and these kinds of things.  
 12 MR. DEL PIERO: That was a major factor in terms of your  
 13 analysis?  
 14 A There's nothing we did that I think would be directly  
 15 affected by it.  
 16 MR. DEL PIERO: Mr. Stevens, in terms of your  
 17 questioning, given that, I think it is appropriate for you to  
 18 take that into consideration in terms of the questions you  
 19 asked these individuals. They have a significant amount of  
 20 qualifications in terms of information that they produced out  
 21 of the Draft EIR, but none of them, as far as I know, unless  
 22 you all are hiding something of particular expertise in terms  
 23 of the area of public trust resources, and I would ask you to  
 24 focus on those issues that this panel is qualified to testify  
 25 to.

00121

1 Without being hard on you, I don't think they can answer  
 2 the questions.  
 3 MR. STEVENS: Q I think the sole remaining question that  
 4 really ensues from this change is whether, had the panel been  
 5 aware of the inhibitions placed on the use or development of  
 6 public trust lands as distinguished from other lands, their  
 7 consideration might have been different.  
 8 MR. BIRMINGHAM: I'm going to object. The question lacks  
 9 foundation because this panel doesn't know what those public  
 10 trust limitations are.  
 11 MR. DEL PIERO: Let me ask a question. Did you take into  
 12 consideration what public trust limitations affected the lands  
 13 around the lake?  
 14 MR. CASADAY: A Well, again, in the sense these lands  
 15 are held in public trust and not available for disposal and  
 16 development by private interests, I guess I would say yes, we  
 17 would take that into account.  
 18 MR. DEL PIERO: Can you answer Mr. Stevens' question?  
 19 A Could he ask it again.  
 20 MR. STEVENS: Q Well, let's hypothetically assume that  
 21 there are lands at the lake which are not subject to



15 Q And are you aware that the Central Arizona Project is  
16 currently discussing arrangements where California and Nevada  
17 could take advantage of unused entitlements and canal capacity  
18 to store water in Arizona for the right to increased Colorado  
19 River diversions?

20 A Yes.

21 Q Was this additional capacity, the ability to transfer  
22 water from the Central Arizona Project something that was  
23 taken into account, say, a year ago?

24 MR. BIRMINGHAM: Objection, misstates the evidence, lacks  
25 foundation.

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1 MR. DEL PIERO: Overruled.

2 A Let me answer that that's one factor, I think an  
3 important one. In principle, Southern California could get  
4 water from the Colorado system from three sources. One is the  
5 upper basin states water transfers, another is water transfer  
6 arrangements with the lower basin states, namely Arizona, and  
7 a third is with other water diverters within California, like  
8 Imperial and some of the other districts, and I think  
9 Metropolitan is thinking there is some possibility with each  
10 of these three scenarios.

11 Q Mr. Birmingham also discussed with you the Central Valley  
12 Project Improvement Act referred to as HR 429. Are you  
13 familiar with that act?

14 A Yes.

15 Q And under HR 429, aside from discussions of water  
16 transfers, there's also some discussion of methods for  
17 encouraging water reclamation; is that correct?

18 A I believe so.

19 Q Are you familiar with any of the projects that are  
20 discussed in HR 429 as reclamation projects in the southern  
21 part of the State?

22 A I would have to answer that I am not. I have just  
23 started. Jones and Stokes is doing some of the work on HR  
24 429, and I personally haven't gotten into that yet.

25 Q Okay, is there anyone else on the panel that is familiar  
00129

1 with any of the reclamation projects that are being undertaken  
2 in Southern California as part of HR 429 projects?

3 Okay, thank you.

4 MR. DEL PIERO: No one?

5 MR. WEGGE: No.

6 MS. SCOONOVER: That was easy. Finally, my last area of  
7 concern is on replacement water. Dr. Hanemann, you have  
8 provided testimony on costs of replacing water from Mono Lake  
9 and Mr. Flinn in his discussion, I think, established that the  
10 replacement costs of water are based on a 1989 point of  
11 reference exportation levels from the Mono Basin. I believe  
12 Dr. Casaday answered.

13 MR. WEGGE: Would you repeat the question?

14 Q The testimony on costs of replacing water is based on the  
15 amount of water that was exported from the basin at the point  
16 of reference, or the 1989 amounts of water that were  
17 estimated?

18 A No, that's incorrect.

19 Q Upon what were the estimates of costs of replacing water  
20 based? Where did the numbers come from?

21 A The point of reference for the water supply analysis was  
22 a 20-year simulation done using the conditions that existed  
23 regarding flows into the tributaries in 1989, but they were  
24 run out over a 20-year period.

25 Q And the amount of water that was assumed to be exported  
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1 from the basin, the amount that needed to be replaced, was a  
2 range of -- can you give me a range of numbers, 10,000 acre-  
3 feet, 50,000 acre feet?

4 A It varied from year to year depending upon whether it was  
5 a dry year, normal year, or wet year. I don't have those  
6 numbers.

7 Q Let's assume it is an average, say, of 50,000 acre-feet  
8 a year. The assumption is that the costs of replacing the  
9 water that you performed, Dr. Hanemann, included some direct  
10 costs to other members of the District within the Metropolitan  
11 Water District; is that correct?

12 DR. HANEMANN: A That's correct, yes.

13 Q And are you confident that these indirect costs are  
14 reasonable costs?

15 A I am. Let me just elaborate briefly. We used one number  
16 to cover the indirect costs anytime LA took additional water  
17 from Met over 20 years, and clearly, sometimes the costs are  
18 going to be lower and sometimes they are going to be higher.

19 What we assumed was whenever LA took an additional  
20 incremental acre-foot, some of the service areas had to forego  
21 that and would incur the cost of 800 dollars per acre-foot to  
22 make up that water.

23 What LA has proposed is that we assume that this other  
24 district would incur a cost of 1612 to make up the water and  
25 that corresponds to a situation of a 10 percent shortage in

00131

1 the service area of the other districts, and that would be so  
2 even when LA didn't have a 10 percent shortage. Now, there  
3 certainly may be some years when that happens, but it seems to  
4 me that is a somewhat implausible scenario, and assuming that  
5 whenever another district has to make up an acre-foot, it  
6 costs 1600 dollars rather than 800 dollars, it seems to me an  
7 excessive assumption.

8 MR. DEL PIERO: Your time is up.

9 MS. SCOONOVER: One last question, Mr. Del Piero?

10 MR. DEL PIERO: Sure.

11 MS. SCOONOVER: If, Dr. Hanemann, you were to assume the  
12 amount of water to be replaced in the Mono Basin was not  
13 50,000 as we had assumed earlier, but closer to a range of  
14 6,000 acre-feet per year, would the indirect impact then to  
15 the member agencies within Metropolitan Water District be even  
16 less significant than in your original assumption?

17 A Yes, I think knowing the quantity would also lower the  
18 unit cost of the indirect impacts.

19 MS. SCOONOVER: Thank you.

20 MR. DEL PIERO: Thank you very much. Is Mr. Gipsman  
21 here? Mr. Haselton, you have questions; do you not?

22 MR. HASELTON: Yes. Good afternoon. My name is Frank  
23 Haselton. I am here on behalf of Arcularius Ranch of Long  
24 Valley.

25 ////

00132

1 CROSS-EXAMINATION

2 BY MR. HASELTON:

3 Q I have just a handful of questions basically for Mr.  
4 Casaday, but first a point of clarification. I want to make  
5 sure I understood right. Yesterday there was discussion  
6 between, I think, Mr. Satkowski and the panel. I don't know  
7 who it was, but it was regarding the summary table, Table S-1,  
8 and in particular Page 6 titled Aquatic Resources of the Upper  
9 Owens River, and there was a comment about the check marks  
10 that, according to this table, indicate those are significant  
11 cumulative impacts and those check marks have been removed; is  
12 that correct?

13 MR. DEL PIERO: Yes, they were identified as errors.

14 That is correct; is it not?

15 MR. CASADAY: A That's correct.

16 MR. HASELTON: Q However, the asterisks which identified  
17 significant impacts remained?

18 A Correct.

19 Q A general question, Mr. Casaday, on CEQA. It's my  
20 understanding that for every significant impact identified, a  
21 mitigation measure has to be provided?

22 A Not exactly. We should attempt to identify feasible  
23 mitigation measures for every significant impact.

24 Q Okay, and mitigation measures are essentially actions to  
25 minimize or reduce the identified significant impacts?

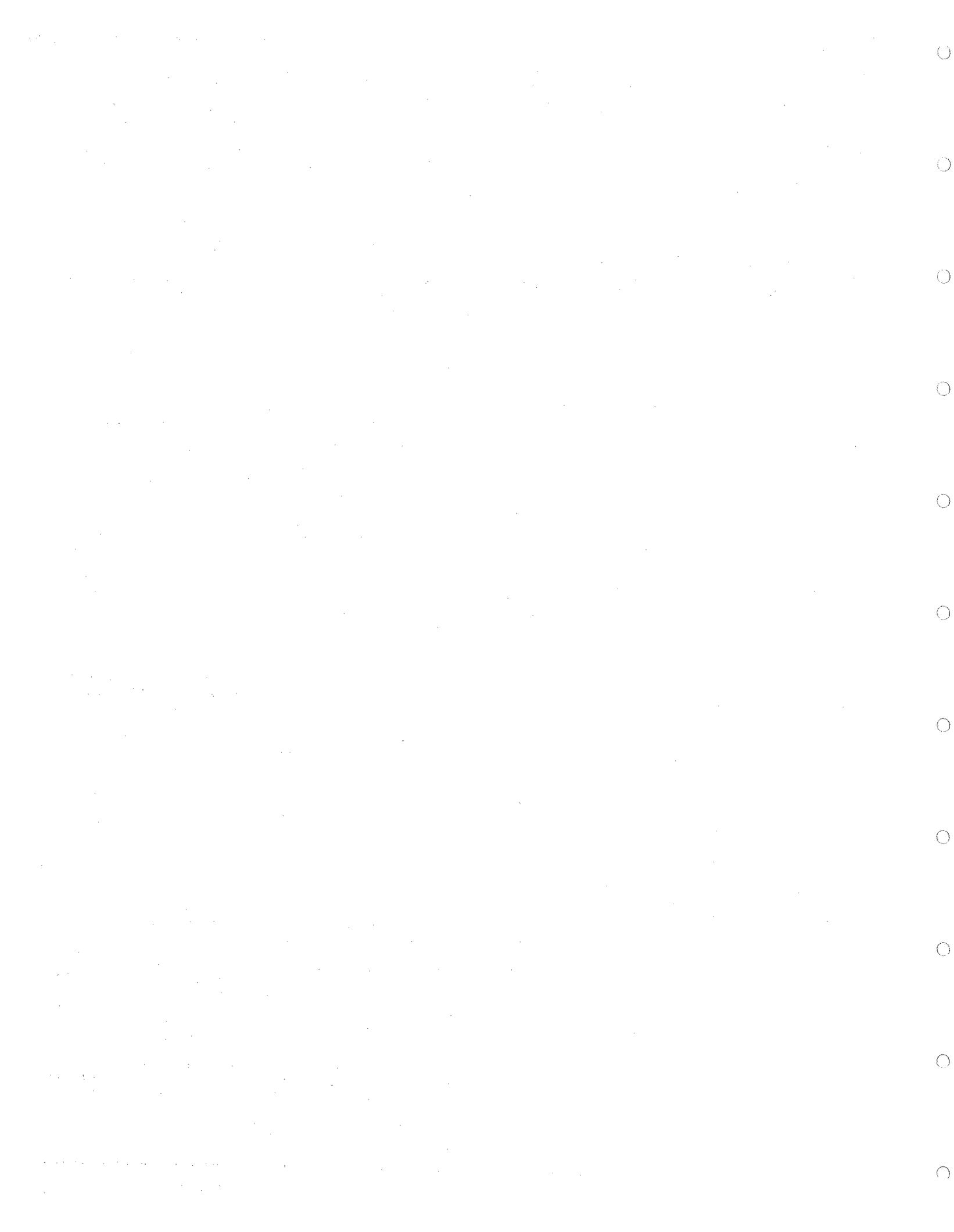
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1 A To avoid, minimize, reduce, or compensate in some cases.

2 Q Mr. Casaday, can you turn to Page 3D-73 of the Draft EIR?

3 A Yes.

4 Q Actually, I just want it for a contrast or perhaps a  
5 point of reference. On Page 3D-72 on the very top there is a  
6 paragraph headed mitigation measures, and it is for the 6377-  
7 foot alternative mitigation measures for Rush Creek. and  
8 without reading it, it generally refers to precise cubic feet





3 with the facts reported in the Draft EIR at various lake level  
4 elevations. Could you explain why this discrepancy occurred?  
5 A Yes, I can. It was a matter of timing and the need to  
6 get all these different research project analyses done.

7 The instrument for the survey had to be designed, tested,  
8 then applied to the population and there was no way for that  
9 part of the effort to occur after the wildlife studies were  
10 complete.

11 That forced the necessity of relying on some previous  
12 information about wildlife impacts, dust storm impacts, tufa  
13 impacts, that have been generated prior to our involvement in  
14 this project, and some of the preliminary reports that we were  
15 getting. But, it was simply timing. Our wildlife, dust storm  
16 and tufa analyses were not completed until just before the  
17 Draft EIR was released.

18 Q Mr. Rimpo, you testified on cross-examination that if the  
19 City of Los Angeles were to buy lower priced water from MWD  
20 when that water was available in wet years, that that would  
21 reduce the Draft EIR cost estimates for obtaining replacement  
22 water supply for water lost from the Mono Basin. Is that an  
23 accurate statement of your response to the questions?

24 MR. RIMPO: A That's correct.

25 Q Now, does your answer assume that the City would actually  
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1 be able to utilize the lower cost water at the time it was  
2 available?

3 A It assumed that the City would be able to utilize that  
4 water or store it in the ground and use it at a later period.

5 Q Now, is it possible that at the time that the lower cost  
6 water is available in wet years that the City would already  
7 have an adequate water supply from other sources?

8 A Yes, that is a possibility.

9 Q Mr. Casaday, I've kind of a rather esoteric question that  
10 you are probably the best one to answer, I hope, but I think  
11 it is something we need to clarify.

12 Mr. Flinn asked the panel about what would happen under  
13 the point of reference conditions if those conditions were  
14 continued for an extended period of time in the future. I  
15 believe he was making a comparison between the projected  
16 economic impacts under various alternatives with the point of  
17 reference. Do you recall those questions?

18 A Yes.

19 Q Now, in asking those questions, it appeared that there  
20 may have been some confusion about the point of reference with  
21 the no-restriction alternative. In order to clarify the  
22 difference between the two, which alternative would best  
23 describe what would happen or which condition would best  
24 describe what would happen if the City of Los Angeles were to  
25 continue diverting water without additional restrictions for

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1 years into the future. Would the point of reference  
2 alternative or point of reference describe that, or would the  
3 no-restriction alternative better describe that?

4 A In terms of lake level, it would be somewhere in between.  
5 It wouldn't drop as far as it would drop under the no-  
6 restriction alternative, but it would drop substantially from  
7 the point of reference, but I don't remember the equilibrium  
8 lake level.

9 The reason is that the no-restriction has no required  
10 instream flows, whereas the point of reference has some small  
11 required instream flows.

12 Q Now, the point of reference wasn't actually held out as  
13 being an alternative set of conditions that could be  
14 maintained into the future?

15 A No, it was not noted as an alternative.

16 Q Would it be more accurate to describe the point of  
17 reference essentially as a snapshot of overall conditions as  
18 they existed before the preliminary lake level injunction was  
19 issued?

20 A Well, that's generally right and that's why in most  
21 analyses we used the actual conditions at the point of  
22 reference, that is to say, in 1989 where the lake was, what  
23 the required stream flows were, but we realized that that  
24 wouldn't suffice to analyze water supply impacts, for example,  
25 because the amount of water exported in one particular year is

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1 not representative of the longer-term average, so we needed to  
2 develop some sort of long-term average export that would  
3 correspond with those court-mandated stream flows in effect at  
4 the time. Hence, we generated this point of reference  
5 scenario.

6 Q But the point of reference wasn't intended to identify an  
7 alternative set of conditions that could be carried out into  
8 the future; was it?

9 A No.

10 MR. FRINK: I believe that's all the questions I have.

11 MR. DEL PIERO: Other staff members. Mr. Satkowski.  
12 When the staff is done with the redirect, we will take a break  
13 and then we will come back for recess.

14 EXAMINATION

15 BY MR. SATKOWSKI: Q I have a couple of questions. The first  
16 one is a water supply question. In Table S1-14 of 15 it talks  
17 about aqueduct water availability to the City of Los Angeles,  
18 and it points out or it shows the values of the different  
19 alternatives, the point of reference, and the difference in  
20 the 6390 alternative is 47,000 acre-feet and the difference in  
21 the 6377 alternative is 20,000 acre-feet.

22 My question is, is there somewhere in the EIR where it  
23 shows how this water is going to be made up? I know it talks  
24 about reclamation, conservation, water transfers, items like  
25 that, but does it actually point out in a list or a table or

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1 something where this water would come from to make up the  
2 difference?

3 MR. WEGGE: A Might I take a first cut on this. In the  
4 water supply section, it identifies, I believe, for each of  
5 the alternatives, what percent of the replacement water is  
6 coming from the various sources. For example, in most cases,  
7 replacement water from Metropolitan Water District represents  
8 the major share of the replacement water. There are back-up  
9 tables that are output tables from the actual water supply  
10 model that show more specifically that.

11 Q In coming up with those figures or those values, did you  
12 first look at one source of water and see how much you could  
13 get from that source, whether it was conservation, reclamation  
14 and then look at how much more needs to come from another  
15 source such as Metropolitan Water District? Is that how you  
16 went about doing the analysis?

17 MR. RIMPO: A Well, it is based on the model results  
18 that we came up with. It is the least-cost model, so it is  
19 the next least cost resource to make up that shortfall  
20 comparing point of reference to whichever alternative.

21 Q About how much of the shortfall was estimated to come  
22 from Metropolitan Water District?

23 A For which particular alternative?

24 Q For the 6390 alternative.

25 MR. WEGGE: A I believe in most years for most

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1 alternatives, it was between, I think it was between 75 and  
2 90 percent, in that range.

3 Q Was there an analysis done to see if that water was  
4 actually available from Metropolitan Water District?

5 MR. RIMPO: What we did when we put together this least-  
6 cost supply model was review the Los Angeles Urban Water  
7 Management Plan, and in that plan, Los Angeles has projections  
8 of the amount of water they expect to get from MWD under  
9 average, dry, and drought conditions, and the assumptions in  
10 the model rebuilt was based on this table in the Urban Water  
11 Management Plan which states that Los Angeles could, under  
12 drought conditions receive between 280,000 and 300,000 acre-  
13 feet, so that was our base assumption.

14 Q And as you know, Metropolitan Water District gets some of  
15 its water from the Delta, and did you do any sort of analysis  
16 where you looked to see if that water was available in the  
17 Delta to be exported?

18 A What we did, in the Urban Water Management Plan is a  
19 table that Los Angeles put together and it shows Metropolitan  
20 Water District's projected supplies from various sources.

21 In looking at the drought condition, even under their  
22 worst-case drought assumption, I think Los Angeles' percentage



17 defined entity, so I think it is clear that there will be  
 18 blowing dust in the desert even if Mono Lake is restored to  
 19 the prediversion level.  
 20 Q Then, if this particular instrument or part of the  
 21 instrument that you are using, I think we have already  
 22 established that the comparison is the no-action alternative,  
 23 not the prediversion alternative; is that correct?  
 24 MR. WEGGE: A That's correct.  
 25 Q And if we look at the language used under the elevation

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1 6410 for goals, you said the land bridge covered with water  
 2 restoring some historic nesting sites, would be reasonable  
 3 language then because you are not referring to prediversion  
 4 conditions?  
 5 MR. CASADAY: A Yes, I believe that would be correct.  
 6 Q There were earlier questions or there was earlier cross  
 7 that referred to this as prediversion conditions, and that's  
 8 not what this instrument is intended to compare; correct?  
 9 A You are correct. It is made from the no-action level.  
 10 The wording does say "restoring some historic nesting sites,"  
 11 and as I said before, I believe that I agreed with Mr. Dodge  
 12 that historic nesting sites is intended to speak of the  
 13 prediversion conditions.  
 14 Q But this instrument is not testing the prediversion  
 15 conditions, it is comparing the no-action level alternative  
 16 scenario that you presented in this instrument?  
 17 A I would agree with that also.  
 18 Q So, therefore, the language that "some historic nesting  
 19 sites would be restored" is a reasonable description rather  
 20 than all?  
 21 MR. DODGE: Objection. I think Mr. Canady is arguing  
 22 with his own witness.  
 23 MR. DEL PIERO: I don't know if he is arguing, he is  
 24 asking a question. What is the response?  
 25 MR. CASADAY: A I guess my opinion is this very brief

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1 characterization here is relatively accurate.  
 2 MR. DEL PIERO: Let's take a break.  
 3 (Recess.)  
 4 MR. DEL PIERO: Folks, we are going to start again. I  
 5 would like to get this panel finished by the end of the day if  
 6 at all possible.  
 7 MR. CANADY: Q Mr. Larsen, I have a question for you.  
 8 You were earlier questioned about replacement supplies for  
 9 power generation or generation capacity lost to the City of  
 10 Los Angeles, and I need to get some clarification.  
 11 Is it necessarily so that all the replacement supplies  
 12 would come from within the Los Angeles Basin air shed?  
 13 MR. LARSEN: A No, it is not.  
 14 Q Where else could replacement supplies come from?  
 15 A The City of Los Angeles has resources located in Arizona,  
 16 for example, and they purchase power from the Northwest and  
 17 depending on the relative price of energy from those  
 18 resources, replacement energy could come potentially from  
 19 those resources as well.  
 20 Q So, then it is not an automatic given that it is going to  
 21 come from --  
 22 A No, it's not.  
 23 Q Mr. Wegge or Mr. Packard, early in your testimony there  
 24 was some discussion about the differences or a difference in  
 25 the significant criteria as it related to tufa, and I would

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1 like to have that clarified. First, maybe Mr. Packard, you  
 2 could describe your criteria and then Mr. Wegge, you would  
 3 describe the JSA criteria.  
 4 MR. PACKARD: A The criteria that EDAW applied as it  
 5 related to tufa was related to total or near total loss of  
 6 visible tufa as the result of an alternative either through  
 7 inundation or in combination with toppling effects. And  
 8 applying that criteria to each of the alternatives, the  
 9 identification of significant adverse effects of the 6390  
 10 alternative did not happen in the EDAW report.  
 11 Q Mr. Wegge.  
 12 MR. WEGGE: I will defer this question to Mr. Casaday.  
 13 MR. CASADAY: A The reason he is deferring this to me is

14 that I am the Jones and Stokes interpreter of Scott Stine,  
 15 having a background similar to Dr. Stine's, and certainly not  
 16 as extensive.  
 17 Basically, we felt the recommended threshold that Mr.  
 18 Packard just outlined was really too permissible from a CEQA  
 19 standpoint. We recognized the tufa was a very important  
 20 resource of Mono Lake and that to call a loss significant when  
 21 all of it was lost was, as I say, too permissive.  
 22 We had some discussions about this. We realized that  
 23 this is a fairly subjective judgment call, but didn't feel at  
 24 all comfortable with that approach.  
 25 As I recall, there were also some conclusions from EDAW

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1 also on the significance of a visual impact alternative, and  
 2 also combined visual impact of different kinds before the  
 3 judgment call was made, and our interpretation of CEQA is  
 4 that you shouldn't, in a sense, balance different things  
 5 together, but you should identify adverse changes without  
 6 trying to see if they are compensated by some other different  
 7 impacts that someone might feel is offsetting.  
 8 Anyway, considering all that, we still were at a loss to  
 9 say what the threshold should be. So we simply turned at that  
 10 point to what we had done for other impact areas, other  
 11 resources where there wasn't a good criteria available, and  
 12 that was to simply say that significant means something that's  
 13 less than minor and defined it to mean nothing more than that.  
 14 At a quantified level, we said, well, less than minor is,  
 15 and we applied this to other resource topics, is something on  
 16 the order of 10 percent, and when you get less than that, it's  
 17 essentially negligible or less than significant.  
 18 There's nothing magic here in this definition. It is  
 19 nothing more than what I just described.  
 20 Now, on tufa, though, at least with the data that we  
 21 used and have in the Draft EIR, and I must qualify this  
 22 because I understand there may be some testimony from Dr.  
 23 Stine that we may have misinterpreted some of his information,  
 24 but let's assume for a minute the data in the draft is  
 25 essentially correct. It turns out that one could change that

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1 significant criteria from 10 percent up to 50 percent loss and  
 2 it wouldn't change the conclusions of the report. And I say  
 3 that because the loss of tufa towers at South Grove, which we  
 4 considered significant at some level, changes from one  
 5 alternative, 6383, from only 3 to 5 percent, which would be  
 6 considered not significant, to about 50 percent under the 6390  
 7 alternative.  
 8 So, I guess that's a long way of saying that the selected  
 9 criteria of 10 percent could be enlarged to 20 or 30 or 40, or  
 10 even 50 percent and you still would draw the same conclusion  
 11 here.  
 12 And I guess, just coming back to sort of common sense,  
 13 our opinion was if you look at Table 3I-6, when you lose 50  
 14 percent of the tufa at South Grove, especially in combination  
 15 with some of the other effects such as the loss of sand tufa  
 16 and some of the inundation, that that's clearly a less than  
 17 minor change in the tufa resources.  
 18 Q One final kind of clarifying question on the work of the  
 19 whole panel in general, is that my understanding is that there  
 20 were groups established to identify available information both  
 21 under contract to Jones and Stokes and under contract or the  
 22 employ of a lot of the parties in this room, and that  
 23 represented a data base that was the best information  
 24 available at the time.  
 25 And what we have heard today from you is that there has

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1 been in some instances an evolution of information or policy.  
 2 There has also been actual new data supplied or will be  
 3 supplied in this hearing that will allow you to better refine  
 4 your analysis, and you intend to do that; is that correct?  
 5 MR. CASADAY: A Well, that's true. It's almost a human  
 6 disease that the information comes faster than you can use it.  
 7 While we are responding to the reports that have been  
 8 submitted to date in preparing the final, there's going to be  
 9 more information being generated. Can we ever catch up? I  
 10 hope, at least, we can do so enough to make an adequate



5 operate it?  
 6 A I would say so, yes.  
 7 Q In your opinion, would it be possible, given the  
 8 variables we have just discussed, for anyone to be able to  
 9 evaluate what the potential impact of a shortage of  
 10 electricity in one area of the Southern California grid would  
 11 result in terms of qualitatively and quantitatively evaluating  
 12 the amount of air pollution that would be produced?  
 13 A I would say that you can get a reasonable estimate of  
 14 different levels of pollution and so forth that you could use  
 15 for comparative purposes.  
 16 Q Last question. Is it reasonable to assume that in  
 17 replacing the loss of electricity, that that would result in  
 18 any kind of violation of air quality standards, given the fact  
 19 those agencies are required to operate within the confines of  
 20 the law?  
 21 A I would think in actual operation of the system, you  
 22 know, you would not exceed the permits that were available or  
 23 granted.  
 24 Q Mr. Brown asked me to ask some questions in regard to Dr.  
 25 Hanemann. Mr. Brown; as some people know, is an expert in

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1 agricultural irrigation. He has particular expertise in terms  
 2 of the San Joaquin Valley and the Delta. He also was the  
 3 senior engineer for the Irvine Ranch Company for a good number  
 4 of years, so he has understanding of the operation of the Met,  
 5 too, and he asked me to ask you, first of all, in regard to  
 6 the Central Arizona Project. I think it was an issue raised  
 7 by Ms. Scoonover, but I am going to pursue it a little bit  
 8 more for his benefit.

9 How much water, he is talking about the Central Arizona  
 10 Project, talking about freeing up, how much water would then  
 11 be available to Nevada and California?

12 DR. HANEMANN: A I am afraid I can't answer that  
 13 question. I am not familiar with the details.

14 Q Are you familiar with an agency called the Palo Verde  
 15 Irrigation District?

16 A Yes.

17 Q Are you familiar with negotiations that took place last  
 18 year between the Palo Verde Irrigation District and agencies  
 19 in Southern California?

20 A I know there were negotiations. I don't know the detail  
 21 of the amounts of water involved.

22 Q Are you aware the proposed transfer was a significant  
 23 amount of water?

24 A Yes.

25 Q Are you aware that there was at least capacity identified

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1 by those agencies through those negotiations with Palo Verde  
 2 Irrigation District to transport that water to the coastal  
 3 area of Southern California?

4 A That was my impression.

5 Q Do you know why that negotiation was not completed?

6 A No, I don't. I have some notions, I have some private  
 7 information from conversations with Tim Quinn a couple of  
 8 years ago, but first of all, those conversations were private  
 9 and they may not apply to the more recent negotiations.

10 Q Those are the questions he asked me to ask. Let me ask  
 11 you a couple of questions now. You discussed water transfers  
 12 early on, and that's your particular area of expertise. Are  
 13 water transfers by definition the transfer of water that would  
 14 otherwise be used in some other locale, or at least be  
 15 available for use in some other area?

16 A Yes.

17 Q Diversions from Mono Lake stopped in 1989 except for some  
 18 experimentation; is that not correct?

19 A I believe so, yes.

20 Q And prior to that time, the City of Los Angeles was  
 21 diverting 80,000 plus acre-feet annually; is that correct?

22 A Yes.

23 Q In 1989, the diversion from Mono Basin stopped because of  
 24 a court order; is that correct?

25 A Yes.

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1 Q Was there a corresponding reduction in consumptive use by

2 the City of Los Angeles, given your analysis of their  
 3 consumptive history at the time of the reduction?

4 A I think the answer is yes and no.

5 Q You are a Bill Hutchison, too. (Laughter)

6 A I think the initial reaction was to take more water from  
 7 Metropolitan and, indeed, the Los Angeles diversions from  
 8 Metropolitan increased sharply in 1990 to 885,000 acre-feet,  
 9 but I want to also add that the drought came along and that  
 10 led to a reduction in use, but the reduction isn't necessarily  
 11 triggered by Mono Lake.

12 Q What year did the drought start?

13 A It is my impression that the effects were really felt in  
 14 1991.

15 Q Assuming that the shortfall or assuming that the order of  
 16 cessation of diversion in the Mono Basin took place in 1989  
 17 and assuming that the people serviced by that 80,000 plus  
 18 acre-feet of water didn't stop drinking or washing their  
 19 clothes, the replacement source came from where?

20 A Let me answer it this way. If the question is was it  
 21 possible to do without that water --

22 Q No, I'm not asking whether it was possible to do without it.  
 The

23 question I am asking is where did the replacement water come  
 24 from?

25 A I think it came largely from increased supplies from

00166

1 Metropolitan Water District.

2 Q How is it that the Metropolitan Water District gets the  
 3 water?

4 A It is imported from the State Water Project and the  
 5 Colorado River, and of course, from the Los Angeles aqueduct  
 6 system and then local surface and groundwater.

7 Q Is it your impression that when the MWD takes an action,  
 8 it is within the confines of the law, generally?

9 A Yes.

10 Q Mr. Casaday, if an agency proposed to take 85,000 acre-  
 11 feet of water and divert it someplace where it had never  
 12 previously been, would that constitute a project under CEQA?

13 MR. CASADAY: A I believe it would.

14 Q Mr. Casaday, was an EIR done to allow for the diversion  
 15 of water by Metropolitan to Los Angeles to compensate for the  
 16 loss of 85,000 acre-feet of water that was stopped from being  
 17 diverted from Mono Basin?

18 A Well, I actually don't know how that decision was done.

19 Q Are you aware --

20 A No, I am not aware that it was.

21 Q Anyone on the panel aware of such a document being  
 22 prepared?

23 DR. HANEMANN: A No.

24 Q Would you say that the Court's action in 1989 would have  
 25 prompted the necessity of that action?

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1 MR. CASADAY: A I guess I would have to agree.

2 Q Courts normally don't violate the law; do they?

3 A No, sir.

4 Q Would that assume, then, that an environmental impact  
 5 report was necessary?

6 A This is an area that I am fuzzy on, but I believe --

7 Q Given your familiarity with CEQA, would it strike you as  
 8 odd that an environmental document would have to be prepared  
 9 in order to attempt to remediate what a court might decide to  
 10 be an environmental problem?

11 A It would be odd, yes.

12 MR. DEL PIERO: It strikes as it being odd, too, for  
 13 anybody having to prepare an environmental document to  
 14 remediate an environmental problem.

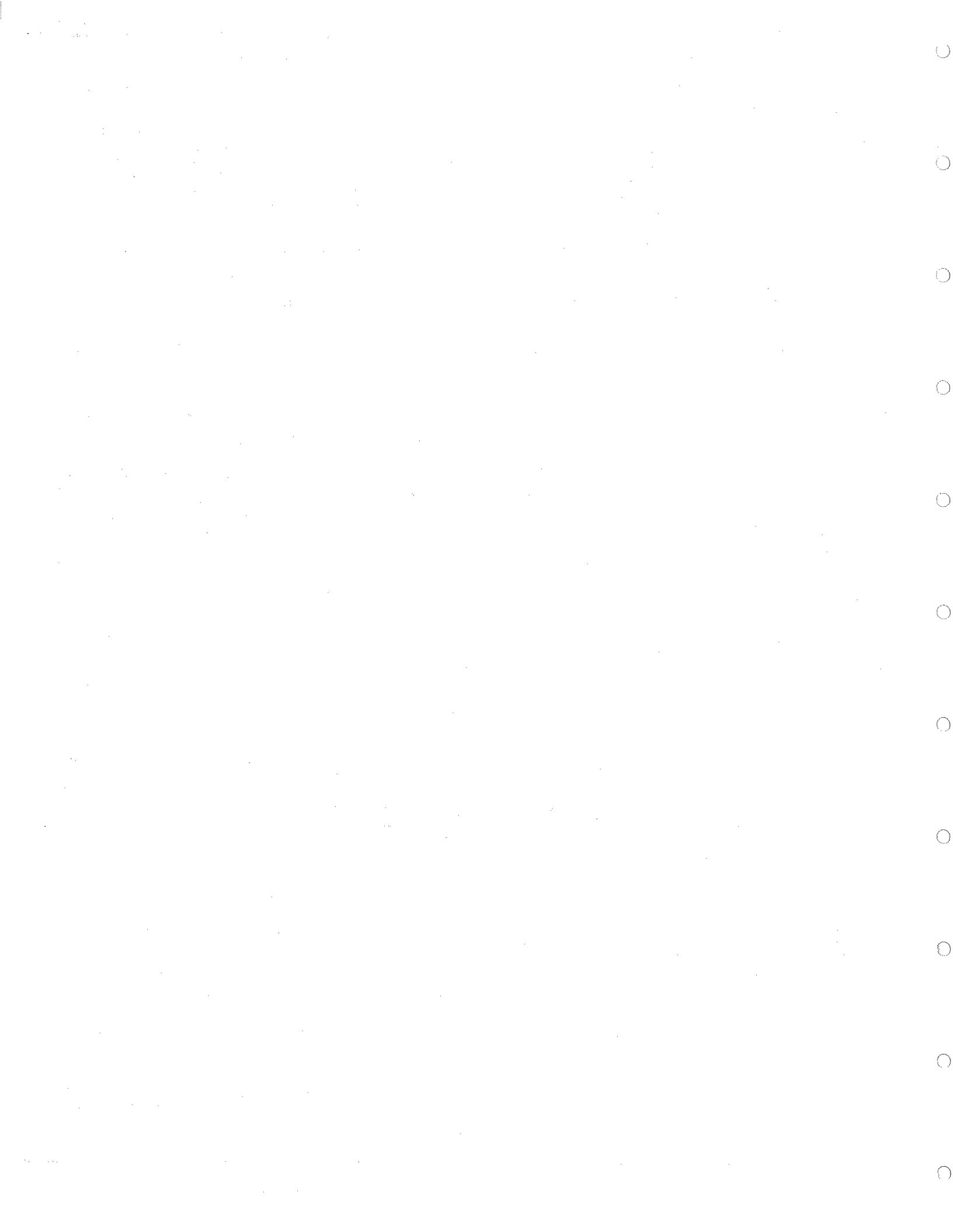
15 I have no further questions.

16 Mr. Birmingham.

17 RECROSS-EXAMINATION

18 BY MR. BIRMINGHAM:

19 Q Let's start with Dr. Hanemann. Dr. Hanemann, you had  
 20 some transparencies that you used in connection with some  
 21 questions that were asked of you by Mr. Flinn. I wonder, Mr.  
 22 Del Piero, if we could have these marked as exhibits, and I  
 23 presume that would be --



16 Q Was there a significant event at Metropolitan Water  
 17 District that you are aware of that occurred during that four-  
 18 week period between the time they submitted the comments and  
 19 the time they submitted the testimony?  
 20 A Actually, yes, I believe so.  
 21 Q Metropolitan has a new general manager; is that correct?  
 22 A Yes, but I don't think that's the event -- I should  
 23 explain I spent two days meeting with staff and members of the  
 24 Blue Ribbon Citizens Committee that's reviewing Metropolitan  
 25 on Wednesday and Thursday of last week, so I am referring to

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1 my sense of information presented at that meeting, and I would  
 2 like, if I may, to say briefly what the event is.  
 3 I don't know the precise time it occurred, but  
 4 Metropolitan has been engaged in an integrated resource  
 5 planning effort since spring. I think it moved into higher  
 6 gear in the summer, and one activity was interaction between  
 7 Metropolitan staff and the staff of the local agencies  
 8 regarding what local agencies saw as future local supplies,  
 9 reclaimed water, local surface water, and local groundwater,  
 10 and it is my impression that in the recent interactions this  
 11 summer or since then, Metropolitan discovered a greatly  
 12 increased interest in local supplies from the local water  
 13 agencies, and that's the event I think that is changing  
 14 Metropolitan's assessment of its supply situation. I  
 15 apologize.

16 MR. BIRMINGHAM: As long as it didn't count against my  
 17 time, there is no need to apologize.

18 MR. DEL PIERO: I point out Mr. Smith is now the keeper  
 19 of the clock and he has been appropriately instructed and  
 20 didn't count against you.

21 MR. BIRMINGHAM: Q Is it correct, Dr. Hanemann, that at  
 22 the time the interstate compact was signed between the  
 23 Colorado Basin states that the anticipated project yield of  
 24 the Colorado River for the Lower Basin was 5 million acre-  
 25 feet?

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1 A Yes.

2 Q And historically, that yield has been significantly lower  
 3 than 5 million acre-feet; hasn't it?

4 A Yes.

5 Q Now, in response to some questions by Mr. Del Piero, I  
 6 think you might have misspoken. He asked you where does  
 7 Metropolitan get its water and you said Metropolitan imports  
 8 water from the State Water Project, the Colorado River, and  
 9 the Los Angeles aqueduct.

10 A I misspoke. The customers of Metropolitan get water from  
 11 the Los Angeles aqueduct.

12 Q The Metropolitan Water District of Southern California  
 13 get its water from the State Water Project and the Colorado  
 14 River; is that correct?

15 A Yes.

16 Q Just following up again, and I guess I will direct this  
 17 to Mr. Casaday, isn't it your understanding, based on your  
 18 experience in preparing environmental impact reports that even  
 19 projects that are designed to enhance the environment have to  
 20 be preceded by an environmental impact report if there is a  
 21 potential that that project may have a significant effect on  
 22 the environment someplace else?

23 MR. CASADAY: A I believe that's actually correct.  
 24 There are, you know, some regulatory exceptions that addressed  
 25 this issue, but generally, there is not a blanket exemption.

00176

1 Q You are referring to categorical Exemptions 7 and 8 which  
 2 talk about projects that are intended to enhance or preserve  
 3 the environment or natural resources?

4 A Yes.

5 Q Isn't there another regulation which provides that those  
 6 categorical exemptions are unavailable for projects which may  
 7 have a significant effect on the environment?

8 A Well, I believe you are correct. Again, I haven't  
 9 reviewed those guidelines in sometime.

10 Q Again, let's go back to water supply, and I don't  
 11 remember who responded to Ms. Koehler's questions about water  
 12 supply and the reliance upon the 1990 Urban Water Management

13 Plan developed in the analysis for the Draft EIR.

14 MR. RIMPO: A That was me.

15 Q That 1990 Urban Water Management Plan was produced in  
 16 1990, I take it?

17 A Yes, that is my understanding.

18 Q Since 1990, have there been any changes in the estimate  
 19 of population growth in Southern California?

20 A I would have to defer.

21 DR. HANEMANN: A Yes. I think the estimates are now  
 22 higher populations and higher rates of growth.

23 Q And those estimates were based upon the 1990 census; is  
 24 that correct?

25 A Yes.

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1 Q And those new estimates of increased population growth  
 2 would not be reflected in the Urban Management Plan produced  
 3 in 1990; isn't that correct?

4 A Right, that is correct. And I discussed them in my  
 5 analysis and in my report Number 27.

6 Q And the increased estimates of population growth, if they  
 7 are correct, would result in increased demands for water in  
 8 the future in the service area of the Los Angeles DWP; isn't  
 9 that correct? Does anybody on the panel know the answer to  
 10 that question?

11 A The population estimate is low, and the capita estimate  
 12 from the plan, of course, would be unchanged.

13 Q But because there will be more people, there will be an  
 14 increased demand; is that correct?

15 A Yes.

16 Q With respect to this memorandum of understanding that was  
 17 reached among urban water agencies, Ms. Koehler asked a lot of  
 18 questions about that, and she referred to a statute that was  
 19 enacted that now requires that all toilets sold in California  
 20 be ultra low-flush toilets. Isn't it correct that the LA  
 21 Department of Water and Power has had a longstanding program  
 22 that provided ultra low-flush toilets to its consumers?

23 A Yes, and it's that experience which was the basis for the  
 24 analysis in the June memo.

25 Q And isn't it correct that over 800,000 toilets in the

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1 service area of the Los Angeles DWP have been replaced as a  
 2 result of DWP's innovative program?

3 A Exactly. It's the leader in the State.

4 Q And I would take it from your answers to Ms. Koehler's  
 5 questions, Dr. Hanemann, that you would concur that LA DWP has  
 6 an excellent record in water conservation?

7 A Absolutely.

8 Q And isn't it correct that 15 out of 16 best management  
 9 practices identified in the memorandum of understanding  
 10 referred to by Ms. Koehler have now been implemented in the  
 11 City of Los Angeles?

12 A Yes, absolutely.

13 Q There were questions regarding the inundation of tufa and  
 14 the value that was placed on tufa, and before I go to those,  
 15 let me ask one final question of Dr. Hanemann. Dr. Hanemann,  
 16 both Ms. Goldsmith and Mr. Dodge asked you a series of  
 17 questions which suggested that some of the conclusions of the  
 18 contingent valuation study might be called into question.

19 Isn't it correct that the contingent valuation study that you  
 20 performed in connection with this Environmental Impact Report  
 21 can be used to conclude that there is a very high public trust  
 22 value associated with preserving tufa and preserving birds?

23 A Yes.

24 Q And so even if some of the other conclusions may be  
 25 questionable, those two conclusions are not subject to

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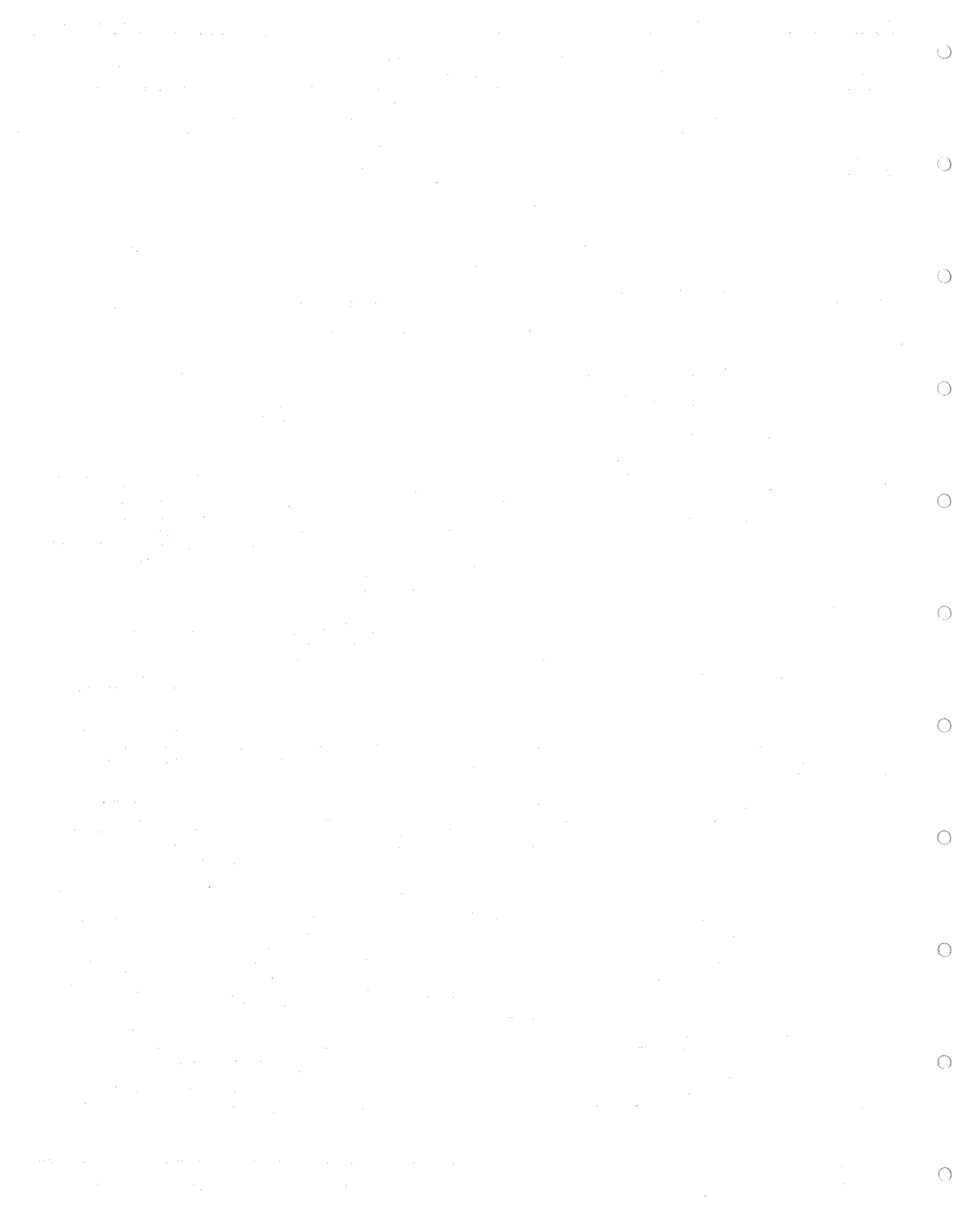
1 questions; isn't that correct?

2 A Yes.

3 Q Now, this morning, Mr. Dodge asked some questions about  
 4 the differences associated with water-based tufa and land-  
 5 based tufa. Who responded to those questions?

6 MR. CASADAY: Q I may have.

7 Q As I recall, the Draft EIR actually contains the table in  
 8 which the different values of those two types of tufa were  
 9 identified; isn't that correct?





3 hunting, and the like?  
 4 DR. DENNIS: That's true.  
 5 Q And that the tributaries to Mono Lake, including Rush  
 6 Creek, were renowned for their trophy fishery?  
 7 A Some of them.  
 8 Q And Rush Creek was particularly?  
 9 A In particular. Rush Creek.  
 10 Q And you have stated that in the environmental work you  
 11 have done at 3N-3 of the report?  
 12 A Correct.  
 13 Q Now, is it also true that since that time, the  
 14 prediversion time, that the conditions at the lake have  
 15 degraded for those activities that I listed, boating,  
 16 swimming, sunbathing and waterfowl hunting and trophy fishing?  
 17 A It is true except for trophy fishing which never existed  
 18 at the lake.  
 19 Q Then, I will be more specific. Is it true that the  
 20 trophy fishing at Rush Creek has been degraded since the  
 21 prediversion period?  
 22 A That's true.  
 23 Q Now, when you conducted your recreation analysis, which  
 24 I gather led to the building of these tables of 3N-14 and 3N-  
 25 17, and I think 3N-20 -- am I correct that your methodology

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1 was to go out to particular recreational sites and conduct  
 2 surveys of what was going on?  
 3 A In general.  
 4 Q You analyzed at a particular point in time what people  
 5 were doing, made some lists, and surveyed all different  
 6 locations, one at Crowley Lake, one at Grant Lake, one survey  
 7 at Mono Lake, or several surveys; is that correct?  
 8 A Correct.  
 9 Q You conducted your survey and then assigned an economic  
 10 value to the activities these people were engaged in?  
 11 A We asked questions to determine people's expenditure  
 12 patterns as part of the survey and in analyzing those  
 13 expenditure patterns, came up with average expenditure levels  
 14 per visitor day.  
 15 I don't think any attempt was made to put values on the  
 16 recreational experiences.  
 17 MR. WEGGE: I might correct that. There was an intent to  
 18 put a value on the recreational benefits. There were  
 19 questions also asked about individuals' willingness to pay for  
 20 different conditions that were described in the survey.  
 21 Q So, in effect, there were two economic analyses  
 22 conducted?  
 23 A That is correct.  
 24 Q And Appendix W talks about the first of the economic  
 25 analyses which is how much people pay out of their pockets

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1 while they are engaged in these recreational activities?  
 2 DR. DENNIS: A That's correct.  
 3 Q And you went from place to place and the location of each  
 4 individual place is listed on Table 3N-20 and determined how  
 5 much people would pay?  
 6 A Correct.  
 7 Q And various amounts, for instance, 9 dollars, 65 cents  
 8 would have been spent at Rush and Lee Vining Creeks; is that  
 9 correct?  
 10 A Yes.  
 11 Q And 9 dollars and 72 cents would have been spent at Grant  
 12 Lake Reservoir per day per person?  
 13 A 9 dollars. 72 cents, right.  
 14 Q And the real big spenders down there on Crowley Lake went  
 15 to 14 dollars and 48 cents?  
 16 A Correct.  
 17 Q So, each of these measurements of economic value or  
 18 economic activities out of pocket, were conducted at a time  
 19 when the public trust activities listed earlier, boating,  
 20 fishing, swimming, et cetera, were functioning in a somewhat  
 21 degraded state from the point of prediversion?  
 22 A That's true except for Crowley Lake which didn't exist  
 23 prior to diversions.  
 24 Q Which we have created in the analysis of the resource in  
 25 the prediversion period.

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1 So, if there were some prediversion activities that were  
 2 particularly valuable to the public such as hunting and  
 3 fishing activities in the 30s, that wouldn't show up in your  
 4 9 dollars 65 cents a day; isn't that correct?  
 5 A That's correct. Again, I would draw a distinction  
 6 between the value of the experience to the individual and the  
 7 amount of money they pay.  
 8 Q I am just speaking of the out of pocket now.  
 9 A There is not necessarily a linear relation between out of  
 10 pocket expenditures and the value of the experience in 1930 or  
 11 at present.  
 12 Q The people engaged in a wonderful hunting and fishing  
 13 activity in the 30s and their expenditure is not reflected in  
 14 this 9 dollars 65 cents because you measured that during 1989?  
 15 A That's also true.  
 16 Q When we weren't doing much hunting and fishing. We  
 17 weren't doing any hunting.  
 18 A No, hunters were very few. Incidental hunters were  
 19 interviewed, primarily anglers.  
 20 Q And there was no trophy fishery at Rush Creek. You've  
 21 already testified to that; am I correct?  
 22 MR. FRINK: I'm going to object. The question has been  
 23 asked and answered. He stated what his survey measured.  
 24 MR. DEL PIERO: Sustained.  
 25 MR. THOMAS: Q Am I correct in understanding that these

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1 types of hunting and fishing activities that exist  
 2 prediversion are not reflected in the current day analysis  
 3 that you have prepared for Appendix W?  
 4 A That's true.  
 5 Q And if the million ducks that were said to exist in  
 6 Dombrowski's report were there. Your economic analysis,  
 7 because it was prepared for Your recreational analysis,  
 8 because it was prepared at the point of reference, does not  
 9 reflect those values or the economic spring from using those  
 10 numbers?  
 11 A Would you be more specific about which economic values  
 12 relating to hunting and fishing?  
 13 Q The out of pocket economic values you have discussed.  
 14 A That's correct.  
 15 Q And if there was a stunning visual interplay between  
 16 water tufa and land tufa that existed in this prediversion  
 17 period, and people came from Los Angeles and traveled days to  
 18 get there, that out-of-pocket expense would not be reflected  
 19 in your Appendix W?  
 20 A That's correct.  
 21 Q And this is for Mr. Casaday. This technique of relying  
 22 on the Mono Basin in its currently degraded state, isn't it  
 23 true that you replicated that idea in your vegetation and  
 24 wildlife analysis when you measured conditions at the point of  
 25 diversion and omitted the ponds and lagoons?

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1 MR. CASADAY: I'm sorry, I didn't follow that question.  
 2 Q Isn't it true that the technique of measuring wildlife  
 3 values that existed at the point of reference omits those  
 4 potentially great values that we have been alleging that  
 5 existed prediversion. You can't measure those values?  
 6 A That's a complicated question. The measurement of values  
 7 was different for different resources. I don't think I can  
 8 answer that question. It is too general. I could go on --  
 9 Q There's no point in taking --  
 10 MR. DEL PIERO: I believe You answered the question.  
 11 MR. THOMAS: That's fine. I will conclude with that.  
 12 MR. DEL PIERO: Thank you very much. Mr. Dodge.  
 13 MR. DODGE: I was told Mr. Flinn will have a few questions  
 14 after I finish, and I'm pretty sure we won't overlap.  
 15 RE-CROSS-EXAMINATION  
 16 BY MR. DODGE:  
 17 Q Mr. Casaday, I was interested in your answer to Mr.  
 18 Stevens' questions as to how you dealt with public trust  
 19 issues, and you said you don't attempt to interpret the Court  
 20 and apply it to Mono Lake. Do you recall that?  
 21 MR. CASADAY: A Actually, no, I don't recall saying  
 22 that.



that.

17 or correct what I just said? I believe I was in error there.  
18 I recognize now that we were at least in the initial stages of  
19 recognizing the prediversion presence of ducks and geese, and  
20 that is, in fact, included on the so-called cheat sheet that,  
21 I guess, the survey in general has a separate entity, actually  
22 ducks and geese.  
23 Q You're quite right, sir.  
24 Last question: One of you testified that there was a  
25 3.91 value on land-based tufa, 4.9 value on water-based tufa,

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1 and I believe one of you testified that there was no study as  
2 to whether this was statistically significant. Who testified  
3 to that?

4 MR. PACKARD: I did.  
5 Q Do you have an opinion as to whether the value of water-  
6 based tufa is significant to Los Angeles Water and Power?

7 MS. GOLDSMITH: Objection.  
8 MR. DODGE: Let me represent to you, sir --  
9 MR. DEL PIERO: Excuse me. Let me rule on that. I mean,  
10 I'm going to sustain the objection.

11 MR. DODGE: Q I am going to withdraw the question.  
12 MR. DEL PIERO: Fine.

13 Q If you assume hypothetically that this is the flyer that  
14 promotes the Los Angeles-Mono Lake Management Plan with the  
15 picture of water-based tufa on the front, would that help you  
16 answer the prior question I asked.

17 MR. BIRMINGHAM: I object to the question, it lacks  
18 foundation.

19 MR. DEL PIERO: He is correct. I am going to sustain the  
20 objection. Do you want to lay a foundation? You can go  
21 forward.

22 MR. DODGE: Thank you.  
23 MR. FLYNN: I certainly want to commend those members of  
24 the Board staff who are keeping an eye on Mr. Dodge's time,  
25 his half of it. I am going to try to make up my remaining

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1 time because I do have a few questions.

2 RECCROSS-EXAMINATION  
3 BY MR. FLINN:

4 Q This is probably for Dr. Hanemann, but anyone can answer.  
5 This has to do with the questions Mr. Birmingham asked on  
6 population. Let me ask you generally, the panel is familiar  
7 with the statistics that show over the past 10, if not 20  
8 years, that prior to the recent drought, percapita use, or the  
9 use of water, increased at a rate faster than the population  
10 growth. Are you generally familiar with that statistic?

11 DR. HANEMANN: For Southern California or urban  
12 California as a whole, yes.

13 Q Is the explanation that economic growth, that is,  
14 economic activity apart from people simply using water,  
15 explains this consequence?

16 A Actually, I don't think so. I think it is mainly new  
17 urban development in hot areas, and with housing styles that  
18 use more water per house.

19 Q Under that assumption, let me back up for a second.  
20 Since 1981 or 1990 when the Urban Water Management Plan  
21 expectations were projected or were made, has there been a  
22 lingering economic recession focused particularly on Southern  
23 California?

24 A Yes.

25 Q And would that lingering economic recession affect the

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1 rate at which new housing would be built, especially in these  
2 hotter areas?

3 A Yes.

4 Q So, to the extent that economic projections of population  
5 might go up, you might likewise not see the same increase in  
6 demand because of the economic recession?

7 A Yes.

8 Q Mr. Birmingham asked You, Dr. Hanemann, if you would  
9 agree that the Department of Water and Power has an excellent  
10 record for water conservation activities, and you agreed  
11 emphatically with that statement. Let me ask you, do you  
12 think some small credit for that success should be shared by

13 DWP's ratepayers?

14 A Yes.

15 Q And, in fact, did DWP ratepayers succeed in reducing  
16 their demand, I believe, from over 700,000 acre-feet to  
17 approximately 585,000 acre-feet for the end of fiscal 1992?

18 A Yes, it was clearly a collaborative effort.  
19 MR. FLINN: That's all the questions I have.

20 MR. DEL PIERO: Thank you very much, Mr. Flinn.

21 Mr. Roos-Collins, or is it Ms. Koehler?

22 MR. ROOS-COLLINS: Both, Mr. Del Piero.

23 RECCROSS-EXAMINATION

24 BY MR. ROOS-COLLINS:

25 Q Mr. Casaday and Mr. Wegge, let's return to the discussion  
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1 of the marginal costs. Do you recall my questions earlier  
2 today regarding such marginal costs?

3 MR. WEGGE: A You respond to that.

4 MR. CASADAY: A Well, my response is, frankly, no. It's  
5 getting late.

6 Q Let's turn, then, to Table 3N-15 --

7 MR. DEL PIERO: We would appreciate it if the witnesses  
8 could be as responsive as possible.

9 MR. ROOS-COLLINS: Q Entitled Marginal Economic Costs  
10 and Benefits of the Alternatives.

11 MR. WEGGE: A Yes.

12 Q Does that table purport to show the marginal costs and  
13 benefits of moving from one lake level alternative to another?

14 A Yes, it does.

15 Q Does this table show that the benefits exceed the costs  
16 by a factor of 4.3 to 1 as you move from 6388.5 to 6390?

17 A Yes, it does.

18 Q On page 3D-45, the DEIR states that the 6383.5-foot  
19 alternative is the nearest alternative that satisfies  
20 preliminary Department of Fish and Game recommendations  
21 developed to optimize fishery conditions. Let's assume that's  
22 true. Returning to Table 3N-15, would you then say that the  
23 ratio of marginal benefits to costs for moving from the fish  
24 flow remedy, 6383.5 to the next higher lake level would be 4.3  
25 to 1?

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1 A I'm not sure I follow Your question.

2 MR. BIRMINGHAM: May that question be reread?

3 MR. DEL PIERO: Do you want to restate it?

4 MR. ROOS-COLLINS: Let me restate it. Again, we are  
5 assuming that 6383.5 is the alternative selected pursuant to  
6 the Department of Fish and Game recommendations to comply with  
7 Section 5937. If this Board chose 6390 as the public trust  
8 remedy, Table 3N-15 shows that the ratio of marginal benefits  
9 to costs were moving from 6383.5 to 6390 is 4.3 to 1; is that  
10 correct?

11 MR. BIRMINGHAM: I am going to object on the ground I  
12 believe the question misstates the evidence. Mr. Roos-Collins  
13 is asking about the flows recommended to optimize fishery  
14 conditions and is using that synonymous with the requirements  
15 of 5937. I don't believe that's been established.

16 MR. DEL PIERO: Mr. Roos-Collins.

17 MR. ROOS-COLLINS: I didn't do that. I said if this  
18 Board chose the Department of Fish and Game's recommendations  
19 as the 5937 remedy, then --

20 MR. DEL PIERO: It is a hypothetical question, so you may  
21 answer.

22 A The answer is yes.

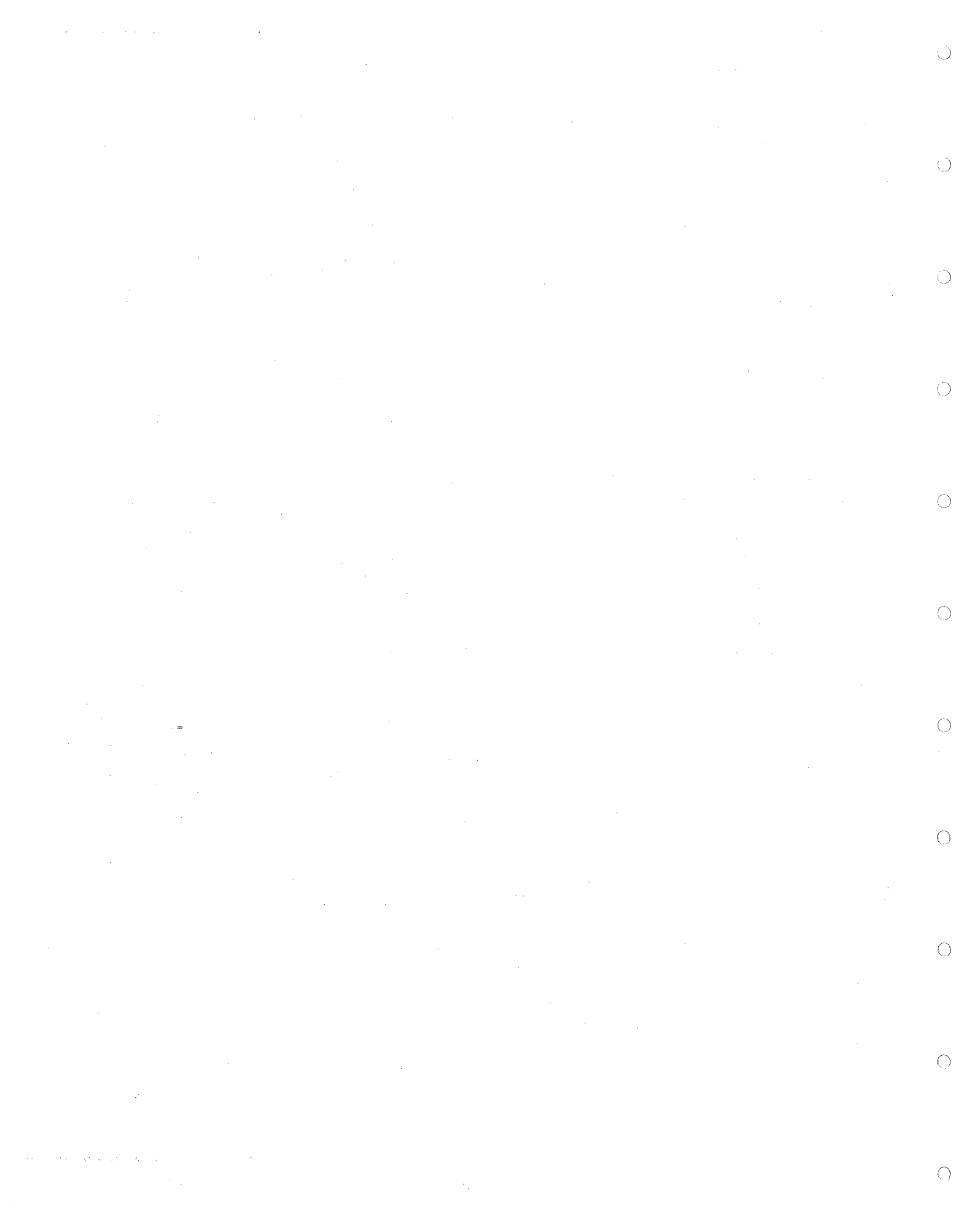
23 MR. ROOS-COLLINS: Q Let's turn now to Table S-1, Page  
24 14 and 15, which shows the annual cost to Los Angeles DWP for  
25 //

00202

1 reduced diversions. Again, let's assume that 6383.5 is the  
2 alternative chosen to comply with Section 5937, and let's  
3 assume that 6390 is the alternative chosen to comply with the  
4 public trust doctrine, does Table S-1 Page 14 show that the  
5 marginal cost to Los Angeles DWP in terms of water supply is  
6 4 million dollars?

7 A Yes.

8 Q The absolute cost under the 6390 alternative is 205  
9 million dollars?



4 A Yes.  
 5 Q And that will also reduce their demand and their need for  
 6 MWD water?  
 7 A Potentially. You have the effect of a growing population  
 8 moving in the other direction.  
 9 Q Right. I just want to ask you a couple more questions  
 10 about water conservation. To put Mr. Birmingham's mind at  
 11 ease, I would like him to know that California Trout is second  
 12 to none in admiration of Los Angeles' water conservation  
 13 efforts.  
 14 The point remains, it seems to me, though that whatever  
 15 Los Angeles is doing either as a result of the MOU or the  
 16 statutory directive or its own civic spiritedness, those  
 17 efforts have not been fully accounted for in the 1990 Urban  
 18 Water Management Plan?  
 19 MR. BIRMINGHAM: Is that a question?  
 20 MR. DEL PIERO: I was going to say this is an evidentiary  
 21 hearing, not a policy statement. Can You frame that as a  
 22 question.  
 23 MS. KOEHLER: My question was that regardless of all the  
 24 efforts that LA has taken as a result of all the measures that  
 25 have been discussed, the fact remains, doesn't it, that those

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 1 impacts have not been reflected in the 1990 Urban Water  
 2 Management Plan?

3 A Yes.  
 4 Q And they have not, therefore, been reflected in the Draft  
 5 EIR?  
 6 A Yes.  
 7 Q Do you stand by your earlier testimony, then Dr.  
 8 Hanemann, that Los Angeles' water conservation is likely to go  
 9 up from the numbers estimated in the Draft EIR?

10 A Yes.  
 11 MS. KOEHLER: Thank you.  
 12 MR. DEL PIERO: Thank you.  
 13 Mr. Stevens.  
 14 MS. SCOONOVER: We have no questions.  
 15 MR. DEL PIERO: Mr. Haselton?  
 16 MR. HASELTON: Just two.

7 RECCROSS-EXAMINATION  
 18 BY MR. HASELTON:

19 Q I want to pick up on the discussion of significant  
 20 impacts with Mr. Casaday. It is my understanding that water  
 21 coming through the Mono Crater Tunnel stopped in 1989 as the  
 22 result of a Court order; correct?

23 MR. CASADAY: A The export did.  
 24 Q Yes, the export water, excuse me. And up to that time,  
 25 I assume water flowed since 1941 or shortly thereafter?

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1 A Well, yes, at some level.  
 2 Q And in 1989, that was approximately in the middle of our  
 3 drought?

4 A Yes.  
 5 Q My question is after approximately 50 years of receiving  
 6 a continuous flow of water, could it be interpreted via CEQA  
 7 that this abrupt halt could be considered as an adverse or  
 8 potentially significant impact on a resource such as the Upper  
 9 Owens River?

10 A The question is could the halt in 1989 be considered as  
 11 having a --

12 Q Yes, could the sudden abrupt stop or halt of water coming  
 13 through the Mono Craters Tunnel, could that action be  
 14 considered as a significant adverse impact on the Upper Owens  
 15 River?

16 A Well, I guess I would first have to answer the question  
 17 of whether the halting of the exports is a project, and I  
 18 think that what Mr. Del Piero was pointing out, a Court order  
 19 is not considered a project, and you can't have a significant  
 20 impact until you have a project under CEQA. I guess the  
 21 answer would be no.

22 Q Can I maybe take it out of legislative terms and put it  
 23 in environmental terms?

24 A Yes.  
 25 Q Could that be considered environmentally speaking as a

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1 significant impact under CEQA?  
 2 A Those are potentially significant impacts that we tried  
 3 to evaluate through these alternatives that are in this  
 4 document, one of them being the no-diversion alternative. And  
 5 we have described whether we think there are significant  
 6 impacts under that alternative or not.

7 Q Was it determined that Court orders are exempt from CEQA?  
 8 MR. DEL PIERO: Pardon me, we aren't capable of rendering  
 9 that determination.

10 MR. HASELTON: I didn't think it was. Okay, thank you.  
 11 MR. DEL PIERO: Anyone else wishing to recross at this  
 12 time? Staff?

13 MR. FRINK: No questions.  
 14 MR. DEL PIERO: I have no questions either.  
 15 It is 20 minutes after 5:00 and I think we are done.

16 Ladies and gentlemen, we will begin again at 9:00 o'clock  
 17 tomorrow morning in this room. Thank you very much.

18 MR. FRINK: Mr. Birmingham has a comment to make.  
 19 MR. BIRMINGHAM: Can this panel then be excused?

20 MR. FRINK: Yes, I am glad Mr. Birmingham is looking  
 21 after the housekeeping better than I am. This is the last day  
 22 of the appearances of the witnesses who worked on the Draft  
 23 EIR.

24 MR. DEL PIERO: The introduction of documents?  
 25 MR. FRINK: Staff Exhibits 18 through 34, I would move

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1 those be accepted into evidence.  
 2 MR. DEL PIERO: Fine. Any objection? No objection. So  
 3 ordered.

4 MR. FRINK: Thank you.  
 5 MR. DEL PIERO: Mr. Canady.

6 MR. CANADY: The staff would like to thank the staff of  
 7 Jones and Stokes for being here for three continuous long days  
 8 and providing answers to many difficult questions. We  
 9 appreciate this -- four days -- see how time flies when we are  
 10 having fun.

11 MR. DEL PIERO: I, too, would like to express on behalf  
 12 of the State Board our appreciation in terms of your assisting  
 13 us in handling this problem.

14 MR. CASADAY: Thank you very much.  
 15 MR. DEL PIERO: See you at 9:00 o'clock.  
 16 (Evening recess.)

17 --oOo--  
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