

STATE OF CALIFORNIA
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
STATE WATER RESOURCES CONTROL BOARD
DIVISION OF WATER RIGHTS

In the Matter of:)
)
)
PUBLIC HEARING TO DETERMINE)
WHETHER TO ADOPT A DRAFT CEASE)
AND DESIST ORDER AGAINST)
CALIFORNIA AMERICAN WATER.)
)
~~~~~ )

JOE SERNA JR./CALEPA BUILDING  
1001 I STREET  
COASTAL HEARING ROOM  
SACRAMENTO, CALIFORNIA

HEARING PHASE 2, VOLUME III  
FRIDAY, JULY 25, 2008  
8:35 A.M.

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CERTIFIED SHORTHAND REPORTER  
LICENSE NUMBER 13196

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Mr. Andrew M. Bell, Monterey Peninsula Water  
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Ms. Stephanie Pintar, Monterey Peninsula Water  
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Mr. Kevan Urquhart, Monterey Peninsula Water  
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Ms. Henrietta Stern, Monterey Peninsula Water  
Management District

Mr. Darby Fuerst, Monterey Peninsula Water Management  
District

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1 P R O C E E D I N G S

2 --o0o--

3 CO-HEARING OFFICER BAGGETT: Good morning.  
4 Where were we? I think we were at the Sierra Club to  
5 finish up your case-in-chief, and we'll just see how it  
6 goes. Mr. Silver, you're up.

7 MR. RUBIN: Hearing Officer Baggett, the  
8 Sierra Club provided us with a copy of a revised  
9 PowerPoint that has addressed our concerns. I just  
10 wanted to make that clear for the record.

11 CO-HEARING OFFICER BAGGETT: That has?

12 MR. RUBIN: That has. Therefore we have no  
13 objections to the use of the PowerPoint.

14 CO-HEARING OFFICER BAGGETT: Any other  
15 objection? If not, let's proceed. Thank you. We  
16 appreciate it.

17 MR. RUBIN: I do have general objections that  
18 I do need to raise that are unrelated to the  
19 PowerPoint.

20 CO-HEARING OFFICER BAGGETT: Okay.

21 MR. RUBIN: I'll briefly raise the first.  
22 It's the same objection I've been raising throughout  
23 the second phase of this proceeding. I believe there  
24 is quite a bit of testimony and exhibits that are  
25 unrelated to the issue at hand dealing with activities



1 and historical data that are outside the scope of this  
2 proceeding.

3           Rather than getting into to anymore detail on  
4 that, I would like to raise some unique objections to  
5 the written testimony.

6           Specifically, there is a section of  
7 Mr. Williams' testimony that I believe is outside the  
8 scope of this hearing, and I believe it's outside the  
9 scope of Mr. Williams' expertise. Particularly, on  
10 page 18 through page 19, there is a section where  
11 Mr. Williams is describing the federal Endangered  
12 Species Act. I don't believe it's relevant to the  
13 issues before this proceeding.

14           There is also a section on page 20 to 21 that  
15 deals with an assertion by the Sierra Club regarding  
16 the time California American Water has known that its  
17 diversions are illegal. Again, I believe that's  
18 irrelevant to this proceeding, particularly because of  
19 the time frame that Mr. Williams is focused.

20           Page 21 through page 23 is a characterization  
21 or attempt to characterize the attitude of California  
22 American Water. I don't believe that's relevant to  
23 this proceeding either in total. And particularly,  
24 almost all of that section relates to or appears to  
25 relate to the perceived attitude prior to 1995.

1           Then the last, I guess it's an objection, and  
2 maybe my objection would be appeased with some  
3 clarification. Mr. Williams references an extensive  
4 number of documents at the end of his written  
5 testimony. I have not seen them. They have not been  
6 served. I presume that they're not part of the record;  
7 and therefore, I object to those documents if they're  
8 going to be used for any basis for your decision.

9           CO-HEARING OFFICER BAGGETT: Let's start at  
10 the top. We will allow the testimony that -- how shall  
11 we say it -- is tangentially relevant for the purpose  
12 of informing the Board and the Hearing Team of issues  
13 in the Basin just as we've we done in prior days, but  
14 we'll note your objection for the record.

15           On the specifics, I hate to go through this  
16 thing page by page now. It might be simpler to allow  
17 the testimony. If you object, if he's getting to that  
18 ground, we'll deal with that on a case-by-case basis,  
19 and then when we allow the exhibits, ask them to come  
20 in, and we can deal with it, whether we let them in or  
21 not.

22           Specific sentences, lines, the references in  
23 the back, I don't know what they are. I don't know  
24 whether he's going to respond to them. If he's not, I  
25 don't see any reason to have them in, but that gives

1 Mr. Silver an opportunity to respond, and I think it's  
2 quite a list there, unless you were aware of what these  
3 objections were going to be.

4 DR. WILLIAMS: Only on the last point, the  
5 references are there out of academic habit more than  
6 anything else. I don't anticipate you're going to rely  
7 on them.

8 CO-HEARING OFFICER BAGGETT: Is that  
9 satisfactory? So they're unnecessary.

10 MR. RUBIN: It satisfies the last objection.

11 CO-HEARING OFFICER BAGGETT: The last  
12 objection. Let's deal with other ones as we go  
13 through. I think it's easier. Let's proceed.

14 MR. RUBIN: Just to be clear, I would prefer  
15 not to interrupt the direct of the Sierra Club. I've  
16 raised my objections, and I do think a number of the  
17 sections that I have identified are extremely  
18 prejudicial.

19 CO-HEARING OFFICER BAGGETT: Okay. Well, then  
20 let's go back so we can have the exhibit before us  
21 because I was still pulling it up. If it would make  
22 the cross-examination go a little quicker, that would  
23 be -- maybe we should deal with it now.

24 MR. RUBIN: Again, page 18, there's a section  
25 that Mr. Williams is referencing and drawing legal

1 conclusions regarding the federal Endangered Species  
2 Act.

3 MR. SILVER: If I may interject at that point,  
4 he's describing what is in the regulations. I don't  
5 think that he is making legal conclusions with respect  
6 to the Endangered Species Act. He's describing what is  
7 in the regulations.

8 MR. RUBIN: I beg to differ. What -- as I  
9 understand this section, there is a discussion of the  
10 perceived legal requirements under the federal  
11 Endangered Species Act. But specifically on page 19,  
12 there are legal conclusions that Mr. Williams is  
13 attempting to draw.

14 And again, I don't believe there is any  
15 relevance in this proceeding to either the discussion  
16 or the legal conclusions, particularly given  
17 Mr. Williams' knowledge and expertise that this Board's  
18 recognized.

19 CO-HEARING OFFICER BAGGETT: I would sustain  
20 the objection. It appears it's clearly legal argument,  
21 and I think Mr. Silver's welcome to try to put it in a  
22 closing brief if he feels it's legally relevant. We  
23 can deal with it then.

24 So what was your next one?

25 MR. RUBIN: Next section, page 20 through

1 21 -- 20, line 1 through page 21, line 9, discussion  
2 about Mr. Williams' perception of California American  
3 Water's knowledge.

4 MR. SILVER: There is here a discussion under  
5 the heading: How long has Cal Am known its diversions  
6 from Carmel Valley wells might be illegal. But I think  
7 that part of the issue here with regard to the CDO  
8 certainly involves Cal Am's conduct in the present with  
9 respect to the unauthorized -- continued unauthorized  
10 diversions as well as compliance with conditions.

11 I think in this case in particular, given the  
12 history of 95-10, that what Cal Am's knowledge and how  
13 they acted on that knowledge in the past may have a  
14 bearing upon its present intentions with respect to  
15 compliance with 95-10 and satisfying various conditions  
16 that the Board has imposed.

17 MR. RUBIN: Well --

18 MR. SILVER: So we're saying that the past  
19 conduct is relevant for purposes of assessing the  
20 present intentions as well and present conduct.

21 CO-HEARING OFFICER BAGGETT: There is  
22 reference to a letter from a former Board Member, Carla  
23 Bard. Or to -- from Carla Bard.

24 DR. WILLIAMS: The letter is an exhibit.

25 CO-HEARING OFFICER BAGGETT: I see that.

1           MR. RUBIN: And again, as you read through the  
2 section that we're talking about, the references are  
3 all to pre-1995 activities.

4           Again this is a revisit of issues that were  
5 either presented or could have been presented during  
6 the hearing that led up to Order 95-10. I believe the  
7 explanation Mr. Silver just provided helps explain why  
8 this evidence is inappropriate for this proceeding.

9           MR. SILVER: I think Mr. Rubin will have an  
10 opportunity in cross-examination to parse these  
11 matters, to examine these matters further. But I think  
12 that the Board would benefit from the observations of  
13 Dr. Williams who is very much intimately involved in  
14 these matters and has been at various times also a  
15 member of the Monterey Peninsula Water Management  
16 District and who had -- has had intimate knowledge of  
17 the activities of Cal Am over the years.

18           CO-HEARING OFFICER BAGGETT: I -- no, I agree.  
19 This is the remedy phase, though. This isn't the  
20 liability phase. This paragraph appears to be going  
21 clear back prior to 95-10.

22           DR. WILLIAMS: If I may --

23           CO-HEARING OFFICER BAGGETT: Legal status of  
24 groundwater. How is that relevant to the remedy stage?

25           DR. WILLIAMS: One of the questions that

1 you're dealing with whether to issue the cease and  
2 desist order.

3 CO-HEARING OFFICER BAGGETT: Correct.

4 DR. WILLIAMS: The flip side of that is: What  
5 would happen if you did not offer -- order -- issue a  
6 cease and desist order? And my contention is that  
7 history would inform you that if you don't issue an  
8 order, not much is going to happen. The testimony here  
9 was intended to provide evidence for that.

10 MR. RUBIN: And again, I think this is an  
11 another attempt to revisit what was already decided in  
12 Order 95-10. This was one of the issues presumably  
13 addressed in that proceeding; and if it wasn't, it  
14 could have been.

15 The issue before you is, I think, clearly  
16 defined. This is outside the definition for the scope  
17 of this proceeding as a whole, no less this second  
18 phase.

19 CO-HEARING OFFICER BAGGETT: Yeah. It's  
20 certainly not part of the remedy solution. That's what  
21 I fail to see how this has anything to do with what --

22 DR. WILLIAMS: Again, as I say, the question  
23 for you is what happens if you don't do anything. What  
24 should you expect is going to happen on the Carmel  
25 River? This testimony was intended to inform you about

1 what, at least in my opinion, is likely to happen if  
2 you do not issue a cease and desist order.

3 MR. RUBIN: But this is precisely the concern  
4 that we raised as early as the prehearing conference.

5 CO-HEARING OFFICER BAGGETT: I understand.  
6 Let's continue with the rest of them. What's your  
7 next --

8 MR. RUBIN: The last section that we objected  
9 to begins page 21 line 11, or so, and continues through  
10 page 23, line 9. Again, an attempt by Mr. Williams to  
11 characterize California American Water's attitude. And  
12 for the same reasons that we just discussed, I believe  
13 this section as well is not relevant to this  
14 proceeding.

15 CO-HEARING OFFICER BAGGETT: So from lines 11  
16 till --

17 MR. RUBIN: Page 23, line 9. Again, just so  
18 the record's clear, page 21 looks like line 10 or 11.

19 CO-HEARING OFFICER BAGGETT: Basically page 20  
20 through -- there's a prior section prior -- preceding  
21 this, right?

22 DR. WILLIAMS: Essentially, this is the same  
23 issue as the one we just discussed.

24 CO-HEARING OFFICER BAGGETT: I would agree.  
25 Can you scroll it down a little more, Larry?



1 I mean, this one, we would have to dissect  
2 whole paragraphs, Mr. Rubin. I'm not --

3 MR. RUBIN: You could just strike the whole  
4 thing. I think in totality it's very prejudicial,  
5 particularly since it's outside the scope of this  
6 proceeding.

7 CO-HEARING OFFICER BAGGETT: We'll take 21  
8 through 23, you said?

9 MR. RUBIN: Page 20, line 21 through page 23,  
10 line 9.

11 CO-HEARING OFFICER BAGGETT: I'm going to take  
12 that one under advisement. Let's continue, and we'll  
13 rule on it prior to admission. Let's go. Continue  
14 with the --

15 MR. RUBIN: For the record, my objection will  
16 stand, and I will not interrupt Sierra Club.

17 CO-HEARING OFFICER BAGGETT: Right. And we'll  
18 deal with it when they came back to admit their --  
19 admit it into the record. Okay, please.

20 JOHN G. WILLIAMS, PhD

21 Called by SIERRA CLUB

22 DIRECT EXAMINATION BY MR. SILVER

23 MR. SILVER: Dr. Williams, would you state  
24 your qualifications for the record.

25 And I'm Larry Silver, counsel for Sierra Club

1 in this proceeding.

2 DR. WILLIAMS: I also promise to tell the  
3 truth because I haven't taken the oath before here.

4 This is my name, why we are here.

5 Next slide. Outline of the testimony, I  
6 discuss my qualifications, whether a CDO should be  
7 issued, whether the draft order CDO should be modified,  
8 some principles for modifying the draft CDO, and then  
9 finally a few corrections to the written testimony  
10 which is otherwise true and correct to the best of my  
11 knowledge.

12 Next slide.

13 In terms of my qualifications, I have  
14 professional experience with salmon biology, instream  
15 flow assessment, hydrology, effluvial geomorphology,  
16 riparian vegetation, computer modeling and some other  
17 things as well.

18 More relevant perhaps, I was special master  
19 for the case of EDF v EBMUD, familiar to -- certainly  
20 to Mr. Taylor and some of the other people here, I'm  
21 sure.

22 I was a recruited member of the NMFS Central  
23 Valley technical recovery team. What that means is  
24 that NMFS invited me to be on the team, and they got  
25 some money from CALFED to pay me for doing so, which is

1 an unusual circumstance.

2 I was one of five people on a review panel  
3 that was put together by CALFED to review the  
4 biological opinion on the OCAP, and we found that NMFS  
5 had not used the best available scientific information,  
6 and I understand that judgment was just upheld by Judge  
7 Wanger a few days ago.

8 I'm also author of a CALFED paper on salmon  
9 and steelhead in the Central Valley which -- I'm going  
10 to move to the other microphone so I don't have to bend  
11 forward.

12 I'm the author of various articles and reports  
13 on the Carmel River.

14 I was twice elected to the Board of Directors  
15 of the Monterey Peninsula Water Management District,  
16 served there seven years. I was on the staff there as  
17 well for a little over a year, and was on the advisory  
18 committee that predated the Board.

19 I'm a long-time resident of the area. My  
20 mother and my sisters still live there. And I went to  
21 grammar school through sixth grade in a little two-room  
22 school house. It was about a half mile from the river  
23 mouth. So I have kind of old-timer qualifications as  
24 well as political and academic qualifications.

25 Next slide.

1 More about the Central Valley salmon paper.  
2 Was just the cover of it. It's available online at San  
3 Francisco Estuary and Watershed Science, online journal  
4 maintained by CALFED.

5 Next couple of slides are just from the table  
6 of contents to give you a sense of the breadth of the  
7 topics that I have covered in peer-reviewed documents.

8 Next slide.

9 Pretty well covers the watershed in terms of  
10 Central Valley salmon, what we know and don't know,  
11 ought to know, about salmon and steelhead in the  
12 Central Valley.

13 Next slide.

14 Should a CDO be issued, and the answer is yes  
15 for a couple of reasons. One, our important Public  
16 Resources to protect that are being damaged, and second  
17 is that history has shown that Cal Am will do as little  
18 as it has to to protect Public Trust resources, and you  
19 can draw your own judgment about the cities in the area  
20 from the testimony yesterday.

21 Next slide.

22 So what are the Public Trust resources in the  
23 river? Presently the steelhead, also riparian  
24 vegetation, fishing is a public trust use of the river.  
25 Also there's recreation. One of the slides that I had

1 to take out was a picture of kids playing in the river  
2 and park. People prefer to recreate in streams that  
3 have water in them.

4 And also there's red-legged frogs in the river  
5 which are also listed. There's been remarkably little  
6 testimony about that up to now.

7 Next slide.

8 As you fashion a remedy here, you need to  
9 think about -- you need to take a long-term look and  
10 for that purpose it's useful not only to consider Cal  
11 Am's past behavior but also what's known about the  
12 steelhead population in the river. And the historical  
13 population size is not precisely known, but evidently  
14 it was large.

15 Next slide.

16 The best evidence in that regard is testimony  
17 from a 1931 trial that dealt with property at the mouth  
18 of the river. The people that know the most about the  
19 behavior of the mouth of the river were fishermen, so a  
20 lot of them testified.

21 This slide here is testimony from Williams  
22 Stewart who worked in the area for many years, Mission  
23 Ranch, testimony about how us boys were spearing those  
24 steelhead night and day. I enjoy this kind of  
25 testimony.

1           Next slide.

2           We'd go down at low tide and wait for them at  
3 night.

4           Next slide.

5           Similar testimony from his half-brother,  
6 Carmel Martin, became a prominent attorney in the area,  
7 talking about how you get -- have to get down into the  
8 water with the steelhead in order to spear them.

9           One of the slides I took out was a picture of  
10 the mouth of the river intended to show that in many  
11 situations the mouth of the river there's no place to  
12 get down into the water from your ankles on up. If you  
13 do, you get washed out to sea.

14           So they usually went down at night -- excuse  
15 me -- low tide when probably the water was calmer. And  
16 by one report, they were still able to spear 1300 fish  
17 in one year. And if that was one percent of the  
18 population, that would be a population of 130,000.  
19 Safe to say, the population was much, much larger than  
20 it is now.

21           Next slide.

22           The run now is in the hundreds. These are  
23 from the passage at Los Padres ladder, San Clemente  
24 Dam. And what I'm showing here, the automated fish  
25 counter at San Clemente. I don't have the visual data

1 on this slide. I had it on the other slide, but I took  
2 it out because it wasn't submitted as an exhibit.

3 We can see that the number is at this point in  
4 the hundreds. There are additional fish that spawn  
5 downstream from the dam. You can say roughly half  
6 again more than the fish last year, so instead of about  
7 400 adult steelhead, perhaps 600.

8 Next slide.

9 So what are the principal factors that account  
10 for this long-term decline of the population? In my  
11 opinion there are three. Diversions; the dams,  
12 especially Los Padres; and degradation of habitat in  
13 the lagoon, primarily by loss of inflow, secondarily by  
14 artificial breaching which was discussed somewhat  
15 yesterday.

16 Next slide, please.

17 So what would be the effects of diversions on  
18 the river? They dry the river up. Fish don't do well  
19 in dry rivers. They reduce flow in the reach above the  
20 dry reach, and how long that is varies from year to  
21 year. This is the narrows. And there was -- I discuss  
22 the effect of reductions in stream flow in the written  
23 testimony.

24 The effect of diversions on riparian habitat.  
25 Ms. Ambrosius talked about that in her testimony.

1 Diversions also reduce inflow to the lagoon.

2 Next slide.

3 So in terms of the effects of the dams on the  
4 steelhead, they block passage, they drown some habitat,  
5 and they -- importantly, they -- and this is something  
6 that people are beginning to understand.

7 By blocking passage, the dams select for  
8 different life histories in the steelhead, and that is  
9 the population actually evolves to adapt to the new  
10 environment. So there is a long-term effect of the  
11 dams that can't be remedied in the short-term, even by  
12 taking the dam out, because it will take some time for  
13 the population to evolve back toward the previous  
14 adaptive peak.

15 There's a quote there, the opinion of Leo  
16 Shapovalov who was a Fish and Game biologist in the  
17 early part of the twentieth century, mid century, who  
18 probably knew more about steelhead in California than  
19 anybody else from the field point of view, talked to  
20 him in 1982. He began working on the Carmel River  
21 about 1940 and testified in the first hearing for the  
22 permit for Los Padres, and he told me that he believes  
23 the run dwindled after Los Padres was built.

24 Next slide.

25 This is the same slide as before. This time I



1 want to discuss the recent population trends. And it's  
2 quite obvious why there were no fish in the dams in  
3 1990. There was no water in the river, so no fish  
4 could get in. We were pleasantly surprised when the  
5 population went up rapidly after flows resumed. And  
6 then they went back down and back up and back down and  
7 back up again. And frankly, nobody has a really good  
8 idea why that's been happening.

9 Next slide.

10 I was getting ahead of myself. No one really  
11 knows why that was happening. We do know there's  
12 apparently good survival in the lagoon in 2006. There  
13 were estimated 3,000 fish in the lagoon in the late  
14 fall, and it's big enough that it could have a ten  
15 percent survival which could account for the uptick in  
16 2008, but nobody knows for sure.

17 Next slide.

18 So why don't we know more about the steelhead  
19 than we do? Well, a number of reasons. I'll give  
20 three.

21 First, because we haven't collected the data.  
22 The existing data simply don't allow us to assess  
23 competing hypotheses about what's going on with the  
24 steelhead, what kind of health. Some are kind of  
25 traditional data that are abundance data, size, age,

1 which is to say growth, and ways of getting this  
2 information are well known, and some data are good data  
3 of the sort was collected in 1982. For one reason or  
4 another, it has not been since.

5 We could use better data on predation and life  
6 histories, and if we want to get more sophisticated  
7 about it, we could use more on physiological  
8 conditions, stress, such analysis of heat-shock  
9 protein, looking and lipids, and that kind of thing.

10 Next slide.

11 We don't know more than we do in part because  
12 the research has not been done until recently. Since  
13 steelhead has been listed under the ESA, there's been a  
14 great more research activity, principally at Santa  
15 Cruz, the NMFS Santa Cruz lab at UC Santa Cruz, and at  
16 Humboldt State, and there was another study going on on  
17 the river that was based at UC Davis, although that's  
18 now ended.

19 Why is more research being done now? Again,  
20 because the ESA is providing the motive, and the  
21 operative word is motive.

22 Next slide.

23 Third reason we don't know more than we do  
24 about the steelhead is that we need better ways of  
25 thinking about the data. And in this respect, I think

1 we're developing better ways, the program at NMFS Santa  
2 Cruz and UC Davis, working on this for a number of  
3 years. And there's recently published work following  
4 an approach I've been working on for 15 years or so,  
5 provide a much more conceptual and mathematical way to  
6 take the kind of data that I was talking about and put  
7 them together so that you can start to answer the kinds  
8 of management questions that agencies and people like  
9 you have to face about how much water should there be  
10 in the river, what are the consequences of not having  
11 enough water in the lagoon, or not being able to get  
12 over Los Padres.

13           Next slide.

14           Should the CDO be modified? I think it  
15 should. And I give specifics in the written testimony.  
16 I talk here about some general principles.

17           In terms of reductions of illegal diversions,  
18 I think you need to provide for substantial immediate  
19 reduction. You have to get people's attention and  
20 motivate them. I think you should align the timing of  
21 the reductions with the needs of Public Trust resources  
22 in the river. There's no point putting people on  
23 rations with lots of water flowing out to the sea, and  
24 it will just engender ill will and won't really do any  
25 good.

1           And I think you need to do what probably the  
2 Board should have done in 95-10 which is to provide for  
3 continuing small incremental reductions and diversions,  
4 just to keep the motive up. I think it's no secret  
5 people thought a dam would take care of the problems  
6 raised by 95-10. That turned out not to happen.

7           Next slide.

8           Practical necessity requires that the illegal  
9 diversions continue for some time, and so the need to  
10 have mitigation while that continues, providing some  
11 inflow to the lagoon at the top of my list.

12           Second bullet there you decided you don't want  
13 to talk about, but as a biologist I can tell you I  
14 don't see how you can deal successfully with trying to  
15 protect the steelhead population without dealing with  
16 the whole life cycle and the complete habitat that  
17 occupies the life cycle.

18           And third, because of the uncertainty in the  
19 scientific information, you need to provide more  
20 adaptive management in the CDO. And that means you  
21 need to take action based on what we do know.  
22 Uncertainty is not an excuse for inaction. You need to  
23 require better monitoring, and I think that you should  
24 provide some funding for the kind of studies that need  
25 to be done and are starting to be done, and -- but much

1 more remains.

2 Next slide.

3 There's some corrections to the written  
4 testimony, and there is some typos in there, but  
5 they're obvious. Last one, I cited a source for the  
6 monthly distribution of the -- I had a bunch of water  
7 management district documents on my desk when I was  
8 writing the testimony, and I put them away before I  
9 noticed that, so I couldn't remember what it was.

10 I'm done.

11 CO-HEARING OFFICER BAGGETT: Reviewed that  
12 testimony, and I would sustain the objection to line  
13 21, page 20 through line 9, page 23 being not entered  
14 into evidence. It's issues that have been  
15 well-resolved. And they aren't relevant. They are  
16 outside of this phase of the proceeding.

17 And I think just as importantly, they'll  
18 promulgate real obviously a long line of  
19 cross-examination then redirect, then recross on all  
20 issues which really aren't relevant and just won't be  
21 efficient today. We'll be here for another hour of  
22 cross for issues which are clearly outside the scope.  
23 So with that, the motion is granted.

24 So let's continue for cross-examination.  
25 Begin with the Prosecution Team.

1 CROSS-EXAMINATION BY MR. SATO

2 FOR THE PROSECUTION TEAM

3 MR. SATO: Good morning, Mr. Williams. My  
4 name is Reed Sato. I'm an attorney representing the  
5 Prosecution Team.

6 DR. WILLIAMS: Good morning.

7 MR. SATO: I just have a couple questions for  
8 you about your recommendations for proposed  
9 modifications to the draft cease and desist order.

10 First of all, you -- I think you said that you  
11 wanted to provide for substantial immediate reduction.  
12 Is that correct?

13 DR. WILLIAMS: That's correct.

14 MR. SATO: And what do you have in mind when  
15 you say substantial immediate reduction?

16 DR. WILLIAMS: I certainly would like to get  
17 people's attention. I came up with a particular number  
18 in my written testimony, and I refer to it in terms of  
19 the percentage of the illegal diversions rather than  
20 total diversions. And the number came up about the  
21 same as the reduction proposed in the draft CDO for the  
22 low-flow season.

23 MR. SATO: Right, so I just wanted to know why  
24 you thought that the reduction schedule initially  
25 proposed in the draft CDO which I think is 15 percent

1 of. 11,200 -- something acre feet is not adequate  
2 compared to what you were recommending?

3 DR. WILLIAMS: No, no. You misheard my  
4 answer. In terms of the summertime when flows are low  
5 in the river, what I proposed is very similar to what's  
6 in the draft CDO.

7 MR. SATO: So --

8 DR. WILLIAMS: My proposal is relax those  
9 reductions when there is more water on the river.  
10 That's the difference.

11 MR. SATO: All right. Then the next thing  
12 you're talking about is to provide for a  
13 state-of-the-art passage over Los Padres?

14 DR. WILLIAMS: That's correct.

15 MR. SATO: And do you believe that the Board  
16 has the authority in this proceeding to order that?

17 DR. WILLIAMS: That would be a legal question.

18 MR. SATO: Now with regard to your third thing  
19 about providing for adaptive management, you noted a  
20 recommendation to require funding for quote basic  
21 closed quote studies at UCSC slash NMFS?

22 DR. WILLIAMS: Yes.

23 MR. SATO: Do you think the Board has the  
24 authority to order that remedy in this proceeding?

25 DR. WILLIAMS: Again, that would be a legal

1 question. But politically, my impression is that they  
2 do, but that's a legal question.

3 MR. SATO: Thank you.

4 No further questions.

5 CO-HEARING OFFICER BAGGETT: PCL? Carmel  
6 River Steelhead?

7 CROSS-EXAMINATION BY DR. THOMAS

8 FOR CARMEL RIVER STEELHEAD ASSOCIATION

9 DR. THOMAS: Good morning.

10 DR. WILLIAMS: Good morning.

11 DR. THOMAS: Roy Thomas, president of the  
12 Carmel River Steelhead Association. Our friend Michael  
13 Jackson is doing something about the Peripheral Canal  
14 for a few hours this morning. I'm sure he'll have it  
15 solved by then.

16 Dr. Williams, from your research and  
17 understanding, how important is the lagoon habitat of  
18 the Carmel River for producing adult steelhead  
19 returning?

20 DR. WILLIAMS: Historically, based on the new  
21 information that's been developed by the NMFS, the UC  
22 studies, Scott Creek particularly, I think it probably  
23 was very important. That is now less clear. And we  
24 know from 2006 that fish survived in the lagoon in some  
25 years. In other years, for example 1982 when there



1 were studies -- the Water Management District was doing  
2 studies, we know that the fish did not survive in the  
3 summer.

4           So the lagoon is an interesting case because  
5 it's probably more of a threshold effect; that is,  
6 either conditions will remain such that a good  
7 percentage of fish there will survive, and if you get  
8 past that threshold, mortality will occur very quickly.  
9 That's because of the kinds of mechanisms that are  
10 involved to cause mortality, the saltwater coming in  
11 and pushing the fish to the surface, that kind of  
12 thing.

13           DR. THOMAS: I think you're missing what was I  
14 was trying to ask you. I'm trying to ask you: Does  
15 the rich habitat value of the lagoon, if the fish  
16 survive, give them a great advantage in ocean?

17           DR. WILLIAMS: Yes, it does. That's discussed  
18 at some length in Morgan Bond's thesis which was  
19 submitted as an exhibit. And in Mangel and  
20 Satterthwaite's paper, there was a figure based on data  
21 from study in British Columbia that shows the expected  
22 survival rates as a function of size. And most studies  
23 show that it goes up very rapidly with size.

24           DR. THOMAS: So is it fair to say if the  
25 Carmel River Lagoon had enough water to predictably

1 supply high quality habitat, i.e. no death, no stress,  
2 that the expected return of steelhead two years after  
3 that time would be much greater than if the lagoon  
4 didn't function at all; is that correct?

5 DR. WILLIAMS: That's certainly a strong  
6 hypothesis.

7 DR. THOMAS: A strong hypothesis?

8 DR. WILLIAMS: That's short way of saying I  
9 think so.

10 DR. THOMAS: Okay. 2006, you said lagoon  
11 conditions were good, and --

12 DR. WILLIAMS: Well, good enough that there  
13 were apparently 3,000 fish left at the end of the  
14 summer.

15 DR. THOMAS: I happened to be there, and I  
16 thought they were nice, fat fish. But I want to know  
17 if you think that successful year in the lagoon is why  
18 in 2008 we have a higher than the last seven years'  
19 decline in population of returning steelhead in the  
20 Carmel River.

21 DR. WILLIAMS: I think I said that in my  
22 testimony.

23 DR. THOMAS: Well, I want you to say it again.

24 DR. WILLIAMS: I will say it again.

25 DR. THOMAS: Okay. How much water should be

1 applied to the lagoon, i.e. how much should the inflow  
2 be or how high should the water level be above whatever  
3 is mean ocean surface level?

4 DR. WILLIAMS: I don't know what the inflow  
5 should be. I made an informed guess of about half a  
6 CFS for starts in my written testimony. I assume there  
7 would be -- the monitoring of critical habitat in the  
8 lagoon would continue so we could find out what the  
9 effect of that was, and that biological -- more  
10 biological monitoring would be done so we could get a  
11 better idea what the effect was, and that in the  
12 written testimony I indicate that the head of the  
13 Division of Water Rights should be authorized to adjust  
14 that amount according to what's learned.

15 DR. THOMAS: Do you think -- do you think the  
16 steep decline in steelhead returns from the year 2001  
17 to the year 2007 was influenced by the management  
18 practices and the water inflow to the lagoon?

19 DR. WILLIAMS: I don't know.

20 DR. THOMAS: You don't have an opinion on it?

21 DR. WILLIAMS: No.

22 DR. THOMAS: Okay. What role do you think the  
23 close to 200,000 swim-up fry and smolts Carmel River  
24 Steelhead Association planted into the Carmel River  
25 from 1991 to '94 from their captive wild brood stock

1 had on the resurgence of rapid, as you said, resurgence  
2 of returning steelhead after the extreme drought of '87  
3 to '91?

4 DR. WILLIAMS: Again, I don't know.

5 DR. THOMAS: You don't have any speculation or  
6 opinion?

7 DR. WILLIAMS: Assuming that they didn't all  
8 die, then it accounts for some of it; but I have no  
9 idea how much.

10 DR. THOMAS: Okay. You stated you expect  
11 illegal diversions to continue for some time.

12 DR. WILLIAMS: I do.

13 DR. THOMAS: What if you heard yesterday that  
14 50,000 acre feet of Salinas farming water was available  
15 today? How long do you think we'd have to have illegal  
16 diversions?

17 DR. WILLIAMS: Well, I think must have been  
18 out of the room if Mr. Jackson said that in here, but I  
19 did hear him say it elsewhere.

20 DR. THOMAS: But the question is: Do you  
21 think illegal diversions need to continue if someone is  
22 willing to sell today 50,000 acre feet of formerly farm  
23 water that flows down the Salinas River? How long do  
24 you think from your hydrological and experience with  
25 dealing with water would it take before we wouldn't

1 have illegal diversions?

2 DR. WILLIAMS: Well, the principal delay would  
3 be simply -- I gather that the rubber dam on the  
4 Salinas River is going ahead. That would be a turn  
5 out. Still would need to develop the advance facility.  
6 Would think probably a number -- a few years. You do  
7 have the whole CEQA process to go through and that sort  
8 of thing.

9 I will say that from a hydrological point of  
10 view it has long seemed to me that getting water from  
11 the Salinas Valley is the most sensible approach to  
12 providing alternative supply for the Peninsula. The  
13 amount of water in the Salinas Valley is -- in that  
14 area is enormous compared to what the Peninsula needs,  
15 that -- Salinas valley needs money; the Peninsula has  
16 money. And in the past, the political obstacles have  
17 always been very great. So again, motivation is  
18 probably the important issue here.

19 DR. THOMAS: All right. You say you served  
20 two terms on the Monterey Peninsula Water Management  
21 District board.

22 DR. WILLIAMS: That's correct.

23 DR. THOMAS: During that time, did you  
24 conceive or plan or have anything to do with  
25 installation of low-flow, low-flush appliances for

1 housing on the Peninsula? And do you have any  
2 understanding of how that works?

3 DR. WILLIAMS: I believe while I was on the  
4 Board we began requiring low-flow, low-flush toilets in  
5 houses when they were sold, but I don't remember any of  
6 the details.

7 DR. THOMAS: Do you have any -- one detail  
8 that I would hope you would remember was what percent  
9 or approximately what percent reduction in demand that  
10 conversion would create?

11 DR. WILLIAMS: In terms of the total number,  
12 no, I don't have a memory.

13 DR. THOMAS: For each individual unit.

14 DR. WILLIAMS: Each toilet per flush? If it  
15 were --

16 DR. THOMAS: Each household on average. Just  
17 trying to get a feel for what that -- what use that is  
18 in saving water.

19 DR. WILLIAMS: Well, as I recall, five to  
20 seven gallons, and about three, and down to a gallon  
21 and a half. I'm not quite sure I know the number --  
22 I'm not sure what number you're asking for. If I  
23 did --

24 DR. THOMAS: I want to know an idea of how  
25 much improvement that household would get. Let me

1 state this. We had -- in testimony, we heard that --  
2 when the cities were here -- that the multiple family  
3 dwellings had a 41 percent decrease in demand, and it  
4 was explained to us by -- I think it was the mayor of  
5 Seaside -- that that was because all --

6 CO-HEARING OFFICER BAGGETT: Okay.

7 DR. THOMAS: -- of the multiple family  
8 dwellings had retrofit of showers and toilets.

9 CO-HEARING OFFICER BAGGETT: Wait. It's your  
10 opportunity to ask questions, not give testimony.

11 MR. RUBIN: That was going to be my objection,  
12 particularly since I believe it misstates the  
13 testimony.

14 CO-HEARING OFFICER BAGGETT: If you are  
15 crossing, ask questions.

16 DR. THOMAS: Crossing this witness with the  
17 idea he has expertise on -- because he served on the  
18 Water Management District, and looking for solutions to  
19 this problem, and I think there is a large solution  
20 left in the community in unreplaced water.

21 DR. WILLIAMS: Let me try to answer the  
22 question.

23 CO-HEARING OFFICER BAGGETT: Ask a question.  
24 Let the witness answer.

25 DR. WILLIAMS: I think I understand the

1 question now.

2 CO-HEARING OFFICER BAGGETT: Okay.

3 DR. WILLIAMS: I believe there are still  
4 substantial conservation savings to be had. My  
5 impression is that probably ten percent savings could  
6 be obtained, particularly in the dry season when people  
7 are watering outside, just by asking for it. That is,  
8 when there's a lot of publicity about the need to save  
9 water, there's about a ten percent savings. Beyond  
10 that, it starts to get harder.

11 DR. THOMAS: All right. Thank you.

12 CO-HEARING OFFICER BAGGETT: Does the Public  
13 Trust Alliance have any questions?

14 CROSS-EXAMINATION BY MR. WARBURTON  
15 FOR PUBLIC TRUST ALLIANCE

16 MR. WARBURTON: This is Michael Warburton for  
17 the Public Trust Alliance.

18 Mr. Williams, I was struck by your description  
19 of the development of knowledge about Carmel River  
20 steelhead and sustaining them and who has that  
21 knowledge.

22 Would you be surprised to hear that it is  
23 already an affirmative obligation of Public Trustees to  
24 get and use the best knowledge available?

25 DR. WILLIAMS: No.



1 MR. WARBURTON: Why is that?

2 DR. WILLIAMS: Well, talking about theoretical  
3 obligation or realized obligation?

4 MR. WARBURTON: Legal obligations.

5 DR. WILLIAMS: Basically, I think the  
6 public -- the public resources, in particular  
7 diversions, the relevant decision says that consumptive  
8 and instream uses need to be balanced. That's been  
9 recognized in various other decisions since.

10 You can't do a reasonable job with balancing  
11 unless you know what you're balancing. There's kind of  
12 an inherent obligation in there that the balancer use  
13 the best information they can in doing the balancing.

14 MR. WARBURTON: Do you think they have done  
15 that?

16 DR. WILLIAMS: I think, by and large, not.

17 MR. WARBURTON: Have you heard that  
18 obligations of Public Trustees change with changing  
19 public values and changing levels of scientific  
20 knowledge?

21 MR. RUBIN: I'm going to object to the  
22 question; outside the scope of the proceeding.

23 CO-HEARING OFFICER BAGGETT: I would sustain  
24 the objection. Also, you are asking legal questions to  
25 a recognized expert who's a biologist.

1 MR. WARBURTON: He's a scientist.

2 CO-HEARING OFFICER BAGGETT: But you're asking  
3 him to interpret the Public Trust Doctrine and laws  
4 which is --

5 MR. WARBURTON: Okay.

6 CO-HEARING OFFICER BAGGETT: I think  
7 Mr. Williams -- or Dr. Williams would agree it is not  
8 his area of expertise. I hate to speak for you.

9 DR. WILLIAMS: Actually, I know a good deal  
10 about the Public Trust Doctrine and one of the  
11 appendices in that monograph deals with the application  
12 of Public Trust in instream flows.

13 And you can call me Mr. Williams. My father's  
14 a real doctor with a stethoscope.

15 CO-HEARING OFFICER BAGGETT: Rephrase the  
16 question.

17 MR. WARBURTON: Would you be surprised to hear  
18 the obligations of Public Trustees can change with  
19 changing public values and changing levels of  
20 scientific knowledge?

21 DR. WILLIAMS: Not -- no. I can't think of  
22 the decision right now, but there was a very important  
23 decision dealing with tide lands that established that.

24 MR. WARBURTON: Yeah, Marks v Whitney. But we  
25 won't talk about that --

1           CO-HEARING OFFICER BAGGETT: Please. You have  
2 an opportunity to make legal arguments in your closing  
3 brief.

4           MR. WARBURTON: Would the application of this  
5 principal help in supporting adaptive management?

6           DR. WILLIAMS: Yes.

7           MR. WARBURTON: And in trying to move toward a  
8 solution to the regional problems, the water management  
9 problems, would some of these obligations, if they were  
10 applied to knowledge, be helpful?

11          MR. RUBIN: I'm going to object to this  
12 question. It calls for speculation. Outside the scope  
13 of this proceeding as well.

14          CO-HEARING OFFICER BAGGETT: I would sustain  
15 the objection.

16          We're going not to a theory of the remedy  
17 stage, but what are the physical remedies. That's what  
18 we're here for today. I understand where you're -- I  
19 understand, I think, your line of questioning. But  
20 they aren't relevant to the physical remedies. They  
21 are relevant to the theory of which the remedies may be  
22 applied.

23          MR. WARBURTON: Okay. Well, I'm very  
24 concerned that this Board is not getting adequate  
25 information on legal obligations in order to come to

1 its decision. I'm trying everywhere I can.

2 CO-HEARING OFFICER BAGGETT: I understand.

3 MR. WARBURTON: This information has been  
4 objected to all through this proceeding.

5 MR. RUBIN: Hearing Officer Baggett, if you  
6 don't mind. I'm objecting on the basis of trying to  
7 elicit this as part of testimony.

8 I do believe it could be presented in a  
9 closing brief to provide guidance to the Board on what  
10 its legal authorities are when it's adopting a remedy.  
11 In that case, we could brief the issues and clarify the  
12 legal parameters that you're working under.

13 CO-HEARING OFFICER BAGGETT: Okay.

14 MR. RUBIN: And I think that's the appropriate  
15 place for this type of information.

16 CO-HEARING OFFICER BAGGETT: I would concur,  
17 and I think that's the appropriate place. If you want  
18 to inform us of where you think legally we need to go,  
19 that's what a closing brief's all about. That's the  
20 legal argument, and we welcome that.

21 And I think that's a good suggestion. We  
22 can -- actually, before the end of this proceeding, we  
23 will come up with an issue which can be briefed on  
24 exactly your issue.

25 MR. WARBURTON: Okay.

1 CO-HEARING OFFICER BAGGETT: And we'll  
2 allow -- we'll craft that after we're done with the  
3 cases-in-chief when we determine what the closing  
4 briefs will address -- which normally I like to say  
5 write whatever you want, but here's the five issues we  
6 are most interested in. You can ignore them or brief  
7 them. And one of those issues which we will be  
8 interested in is legal authorities as related to the  
9 Public Trust on this issue.

10 MR. WARBURTON: And with that clarification, I  
11 have no further questions.

12 CO-HEARING OFFICER WOLFF: I would comment,  
13 Mr. Warburton, that you testified yesterday as a legal  
14 expert on this matter, and I take note of that  
15 testimony.

16 MR. WARBURTON: What?

17 CO-HEARING OFFICER WOLFF: I understand your  
18 testimony from yesterday. I understand the points  
19 you're attempting to make. I believe it isn't  
20 necessary for them to be entered again. I've heard  
21 them and take them very seriously.

22 MR. WARBURTON: A substantial portion of our  
23 testimony was struck.

24 CO-HEARING OFFICER WOLFF: I understand the  
25 portions that were not struck.

1 MR. WARBURTON: Okay.

2 CO-HEARING OFFICER WOLFF: They were  
3 substantial as well.

4 CO-HEARING OFFICER BAGGETT: Okay. Monterey  
5 Peninsula Water Management District?

6 MR. LAREDO: No questions of this witness.

7 CO-HEARING OFFICER BAGGETT: Pebble Beach  
8 Company? Any of the cities? The Monterey County  
9 Hospitality Association?

10 CROSS-EXAMINATION BY MR. LOWREY

11 FOR MONTEREY COUNTY HOSPITALITY ASSOCIATION

12 MR. LOWREY: Lloyd Lowrey for the Monterey  
13 County Hospitality Association. Noland, Hamerly,  
14 Etienne & Hoss.

15 Dr. Williams, when you were making your  
16 recommendations for the CDO and the modifications to  
17 the CDO, was it based solely on the welfare of the  
18 steelhead, or were there other considerations that you  
19 took into account?

20 DR. WILLIAMS: There were other considerations  
21 that I took into account.

22 My 93-year-old mother is a Cal Am customer.  
23 My recommendations are going to affect her. My sisters  
24 are Cal Am customers. I have lots of friends that are  
25 Cal Am customers. Most of the members of the chapter

1 of the Sierra Club are Cal Am customers.

2 MR. LOWREY: What weight did you give to those  
3 considerations?

4 DR. WILLIAMS: That consideration is part of  
5 the reason for trying to align with reductions of  
6 diversions with the needs of the river and not have  
7 them when the river doesn't need it.

8 I would say that another kind of consideration  
9 is that I would not be asking people to change their  
10 behavior in the way that my family hasn't already.

11 MR. LOWREY: Did you give any consideration to  
12 the cost of achieving the objectives that you are  
13 hoping to achieve through modification of the CDO?

14 DR. WILLIAMS: Not in any quantitative sense,  
15 no.

16 MR. LOWREY: In any qualitative sense?

17 DR. WILLIAMS: Yes.

18 MR. LOWREY: What was the nature of the  
19 qualitative consideration that you made in making your  
20 recommendations?

21 DR. WILLIAMS: The sorts of things that were  
22 discussed by the mayors yesterday. And there's no  
23 question that reductions actually -- I think the mayors  
24 strongly over-stated the effect of reductions in  
25 diversions on the, for instance, the hospitality

1 industry based on a variety of conditions back in 1976  
2 and 1977 when the Peninsula was on 50 gallons a day  
3 personal rationing.

4           Somehow the restaurants still functioned.  
5           Somehow motels and hotels functioned and people still  
6 came and spent money. But I know that there's going to  
7 be some effect, and it's going to be hard on people who  
8 ride the bus over from Salinas and -- to get a job in  
9 Monterey and ride the bus home in the evening.

10           There are costs. No question there are costs.  
11 That's what the balancing is about.

12           MR. LOWREY: Did you give any consideration to  
13 how the alternative measures to protect the fish were  
14 going to be financed?

15           DR. WILLIAMS: I would expect that it would  
16 be, based on my experience from the Water Management  
17 District, that it would come from Cal Am, but then Cal  
18 Am goes to the PUC about the rate base, so my family  
19 and other people will end up paying for it.

20           MR. LOWREY: Now you were here, I believe  
21 yesterday, were you not, when there was testimony from  
22 the Seaside Basin Watermaster and the folks associated  
23 with them?

24           DR. WILLIAMS: I wasn't listening to a good  
25 deal of it, but I know roughly what's going on there.



1           MR. LOWREY: Did you hear them discuss the way  
2 that they have arranged the incentives for preventing  
3 overpumping or the results of overpumping?

4           DR. WILLIAMS: In terms of if you pump, you  
5 have to pay?

6           MR. LOWREY: Yes.

7           DR. WILLIAMS: I heard that.

8           MR. LOWREY: In your view, is that also a  
9 possibility for any modification of the CDO as opposed  
10 to absolute decreases or ordered decreases in  
11 diversion?

12          DR. WILLIAMS: No, I don't think that would  
13 provide the kind of protection of the Public Trust  
14 resources that are involved in the Seaside case.

15          MR. LOWREY: You mentioned a few minutes ago  
16 that you believe that up to ten percent of cessation  
17 and diversions would be fairly easy?

18          DR. WILLIAMS: That's right.

19          MR. LOWREY: Can you explain how you believe  
20 those would be obtained?

21          DR. WILLIAMS: My impression is that simply  
22 getting people more conscious of their water use will  
23 result in about a five to ten percent reduction.

24          MR. LOWREY: And you also in -- primarily in  
25 what ways? You mentioned the landscaping. Do you

1 believe that's the biggest source?

2 DR. WILLIAMS: Well, if you look at the  
3 seasonal distribution of use, it's quite clear that  
4 landscaping is a major factor.

5 Other factors are simply turning off the tap  
6 when you don't -- when you brush your teeth, turn off  
7 the tap, if you let it run while you brush your teeth.  
8 Things like that can add up to quite a bit.

9 QUESTIONING ATTORNEY: Would you expect in  
10 your evaluation that the biggest part of that ten  
11 percent would come from cessation of landscape  
12 irrigation?

13 DR. WILLIAMS: That was my opinion. People  
14 won't quit irrigating, but they will be more careful  
15 about how they do it. I don't have a particular  
16 percent in mind. This is a kind of rule of thumb  
17 talking about -- it's not just my view. It's pretty  
18 common among the water community, you can get ten  
19 percent by jawboning.

20 MR. LOWREY: You also mentioned going above  
21 percent you thought would be harder.

22 DR. WILLIAMS: Progressively harder the more  
23 you reduce.

24 MR. LOWREY: And why does it get progressively  
25 harder, in your experience?

1 DR. WILLIAMS: Well, because the easiest ways  
2 to cut back water are already used. Kind of a problem  
3 with conservation, too. If you -- when you go to a  
4 low-flush toilet, you save less water by not flushing  
5 it. It's -- there isn't any magic in it. You do the  
6 easy things first. You do the harder things later.

7 MR. LOWREY: Do you have any expectation where  
8 the cuts above ten percent would come from?

9 DR. WILLIAMS: I think when you start to go  
10 much above 10, 15 percent, you have to have some kind  
11 of mandatory rations.

12 MR. LOWREY: Thank you.

13 No further questions.

14 CO-HEARING OFFICER BAGGETT: Thank you. Cal  
15 Am?

16 CROSS-EXAMINATION BY MR. RUBIN

17 FOR CALIFORNIA AMERICAN WATER COMPANY

18 MR. RUBIN: Good morning, Dr. Williams.

19 DR. WILLIAMS: Good morning.

20 MR. RUBIN: Jon Rubin, California American  
21 Water. I have a number of questions for you this  
22 morning.

23 If you don't mind, I'd like to start where we  
24 just left off, maybe ask a little bit different  
25 questions. According to your testimony, your mother

1 and sisters still live in the Carmel area?

2 DR. WILLIAMS: That's correct.

3 MR. RUBIN: And what -- can you be more  
4 specific on where they live?

5 DR. WILLIAMS: They live in the Carmel  
6 Highlands. One of my sisters lives in Monterey. Two  
7 live in the Carmel Highlands, as does my mother.

8 MR. RUBIN: And your family that lives in the  
9 Carmel area all are served by California American  
10 Water?

11 DR. WILLIAMS: That's correct.

12 MR. RUBIN: Does your sister have -- or it  
13 appears as though you have more than one sister.

14 DR. WILLIAMS: I have three sisters.

15 MR. RUBIN: Let's take the oldest sister. How  
16 many bathrooms does your oldest sister have?

17 DR. WILLIAMS: I believe she has two, but she  
18 lives by herself and she has only one bottom.

19 (Laughter)

20 MR. RUBIN: Do you know if your oldest  
21 sister's home has low-flow toilets?

22 DR. WILLIAMS: I believe they do.

23 MR. RUBIN: How about your middle sister? How  
24 many bathrooms does your middle sister have?

25 DR. WILLIAMS: Two.

1 MR. RUBIN: I'm sorry?

2 DR. WILLIAMS: Two.

3 MR. RUBIN: And are those low-flow toilets?

4 MR. LAREDO: I have to object on grounds of  
5 relevance.

6 MR. RUBIN: I think that these -- I'm  
7 exploring a line of questioning that could lead to  
8 extremely important information.

9 Particularly what I'm trying to get at is  
10 there's real implications for the recommendations. For  
11 example, a home that has two bathrooms that is required  
12 to replace a toilet, two toilets, has costs associated  
13 with it; and presumably, if you're in the circumstance  
14 the expenses of replacing the toilet could be  
15 substantial.

16 So they're asking the State Water Resources  
17 Control Board to potentially implement a remedy that  
18 has real implications for people.

19 CO-HEARING OFFICER WOLFF: But Mr. Williams  
20 has already acknowledged those implications exist, and  
21 he is not an expert on the costs of such matters. He  
22 said he didn't do quantitative analysis of it, so.

23 MR. RUBIN: Okay.

24 CO-HEARING OFFICER WOLFF: He qualitatively  
25 acknowledged your point.

1 CO-HEARING OFFICER BAGGETT: Objections

2 sustained.

3 MR. RUBIN: Mr. Williams, I'm going to ask my  
4 associate, Ms. Kincaid, to hand to you a document that  
5 you served as an -- or part of your exhibit which is  
6 marked Sierra Club 5. My associate, Valerie Kincaid,  
7 has enough copies for people here, but it has been  
8 served.

9 Mr. Williams, can you explain what this  
10 document is?

11 DR. WILLIAMS: Yes. That's a cover note to a  
12 packet of materials I sent to Mr. Sato.

13 MR. RUBIN: And why did you send that packet  
14 of material to Mr. Sato?

15 DR. WILLIAMS: Because he had agreed to scan  
16 some materials for me because my scanner was broken.

17 MR. RUBIN: Mr. Sato agreed to assist the  
18 Sierra Club in its --

19 DR. WILLIAMS: In that way, yes.

20 MR. RUBIN: I'm sorry. Mr. Sato agreed to  
21 assist the Sierra Club in its service of documents for  
22 this proceeding?

23 DR. WILLIAMS: Yes.

24 MR. SILVER: Excuse me. I don't think that  
25 characterizes the testimony. I think you indicated

1 with regard to service of documents?

2 MR. RUBIN: I asked a question, and the  
3 witness answered my question. I wasn't  
4 mischaracterizing anything. I asked a question, and he  
5 answered it.

6 CO-HEARING OFFICER BAGGETT: Continue.

7 MR. RUBIN: Dr. Williams, now turning to some  
8 specific sections of your written testimony, do you  
9 believe practical necessity requires California  
10 American Water not immediately cease its Carmel River  
11 extractions to a level allowed under its pre-1914  
12 riparian and licensed water rights?

13 DR. WILLIAMS: Yes.

14 MR. RUBIN: You also believe existing  
15 scientific information does not provide clear answers  
16 regarding most effective mitigation for impacts on fish  
17 and wildlife. Is that correct?

18 DR. WILLIAMS: That's what the testimony says,  
19 yes.

20 MR. RUBIN: Now Dr. Williams, you discuss a  
21 published experiment by a Dr. Bret Harvey of the United  
22 States Forest Service; is that correct?

23 DR. WILLIAMS: That's correct.

24 MR. RUBIN: Do you know if the experiment by  
25 Dr. Harvey has been completed?

1 DR. WILLIAMS: Well, there are two separate  
2 studies here. One is a study published that's been  
3 included as an exhibit published in the Journal of the  
4 American Fisheries Society, and the other exhibit is an  
5 abstract of the talk that he gave in April that  
6 describes work done on Weaver Creek last summer. And  
7 that work, as I indicated in the testimony, is being  
8 replicated this summer, so he will write it up for  
9 publication after the second year.

10 MR. RUBIN: So the work Dr. Harvey is doing on  
11 Weaver Creek is still considered an experiment?

12 DR. WILLIAMS: Yes. It's an experimental  
13 study, yes.

14 MR. RUBIN: Dr. Williams, have you discussed  
15 the work by Dr. Harvey with Dr. Harvey?

16 DR. WILLIAMS: Yes.

17 MR. RUBIN: Did you attend the meeting of the  
18 American Fisheries Society at which Dr. Harvey intended  
19 to present his work regarding Weaver Creek?

20 DR. WILLIAMS: I did attend it, and he did  
21 present it.

22 MR. RUBIN: That was my next question.

23 And the work by Dr. Harvey on Weaver Creek  
24 concerned salmonoids?

25 DR. WILLIAMS: Yes. Salmonids.



1           MR. RUBIN: Salmonids, thank you. And do you  
2 know where Weaver Creek is located?

3           DR. WILLIAMS: It's north of the town of  
4 Weaverville in northern California.

5           MR. RUBIN: So it's not located on the central  
6 coast of California?

7           DR. WILLIAMS: No. It has steelhead in it.

8           MR. RUBIN: Does Weaver Creek have a lagoon?

9           DR. WILLIAMS: It's a tributary to the Klamath  
10 River, I believe, which does.

11          MR. RUBIN: And you just touched my next  
12 question regarding the steelhead in Weaver Creek. The  
13 work by Dr. Harvey does not concern the south-central  
14 California coast steelhead, does it?

15          DR. WILLIAMS: It does not.

16          MR. RUBIN: And the steelhead in Weaver Creek  
17 are considered a population segment distinct from the  
18 population segment in the Carmel River?

19          DR. WILLIAMS: They're in different distinct  
20 population segments. It's a different river, different  
21 region.

22          MR. RUBIN: Has Dr. Harvey prepared a written  
23 report on the work for which he presented at the  
24 American Fisheries Society meeting?

25          DR. WILLIAMS: I don't know.

1           MR. RUBIN: The work that Dr. Harvey is doing  
2 on Weaver Creek concerns stream flow effects on fish?

3           DR. WILLIAMS: That's true.

4           MR. RUBIN: Dr. Harvey is not studying how  
5 changes in subsurface water affect fish, is he?

6           DR. WILLIAMS: No. This reach in Weaver Creek  
7 is in a canyon, would have very little subsurface flow.

8           MR. RUBIN: Turning to another document that  
9 you reference, I believe it's Sierra Club 13. That is  
10 a thesis by a Mr. Morgan Bond; is that correct?

11          DR. WILLIAMS: That is correct.

12          MR. RUBIN: Do you know if the thesis by  
13 Mr. Bond has been approved?

14          DR. WILLIAMS: Yes.

15          MR. RUBIN: Do you have a copy of Exhibit --  
16 Sierra Club Exhibit 13 before you?

17          DR. WILLIAMS: Yes.

18          MR. RUBIN: The copy that was served on the  
19 parties has three lines in which professors are  
20 intended to sign if the thesis is approved. Is the  
21 signatures of any of the three professors on Sierra  
22 Club 13 as served on the parties?

23          DR. WILLIAMS: On this copy, it is not. But  
24 this was provided to me as a PDF; and my assumption is  
25 that if you go to the library at UC Santa Cruz you can

1 find the signed copy. I do know Bruce MacFarlane, one  
2 of the professors here, personally, and it is my  
3 impression the thesis would have been approved.

4 MR. RUBIN: Have you spoken to any of the  
5 professors to confirm that the thesis has been  
6 approved?

7 DR. WILLIAMS: I just visited with Sean Hayes  
8 who is the overall leader of the lagoon research  
9 project, and he spoke about it in such a way that I  
10 believe that it has been approved.

11 MR. RUBIN: And I'm sorry, there --

12 DR. WILLIAMS: There was nowhere on the thesis  
13 that -- it was just recently approved, in the  
14 discussion of the --

15 (Interruption by the reporter)

16 DR. WILLIAMS: My point is I'm quite confident  
17 the Bond thesis has been approved.

18 MR. RUBIN: And I'm sorry, the professor you  
19 said you had the conversation with?

20 DR. WILLIAMS: Sean Hayes. He's the first  
21 author on one of the other papers that's included as an  
22 exhibit.

23 MR. RUBIN: In your discussions with Professor  
24 Hayes, did he state explicitly that Mr. Bond's thesis  
25 has been approved?

1 DR. WILLIAMS: I don't recall.

2 MR. RUBIN: Do you know if Mr. Bond's thesis  
3 has been peer-reviewed?

4 DR. WILLIAMS: It's certainly been reviewed by  
5 the professors, who are perhaps more than peers.

6 MR. RUBIN: Dr. Williams, on page 5 of your  
7 written testimony, which I believe is marked Sierra  
8 Club 20, you have a statement on line 7 that says:

9 Other diversions are approximately 2000  
10 af --

11 Presumably, "af" is acre feet?

12 DR. WILLIAMS: Acre feet per year, yes.

13 MR. RUBIN: What do you mean by other  
14 diversions?

15 DR. WILLIAMS: Well, Cal Am is not the only  
16 entity that diverts from the surface or subsurface flow  
17 of the river.

18 MR. RUBIN: And so according to this statement  
19 on page 5, line 7 of your written testimony, Sierra  
20 Club 20, you believe that approximately 2,000 acre feet  
21 of water is being diverted from the Carmel River,  
22 either surface or subsurface, by non -- excuse me -- by  
23 entities other than California American Water?

24 DR. WILLIAMS: That's correct.

25 MR. RUBIN: Turning to page 29 of your written

1 testimony, Sierra Club 20, I believe you note that  
2 reductions in extractions by California American Water  
3 should occur at times to maximize benefits relative to  
4 the burden placed on California American Water  
5 customers?

6 DR. WILLIAMS: That's correct.

7 MR. RUBIN: Based on that statement, would you  
8 support the State Water Resources Control Board  
9 rejecting a proposed remedy if it is determined the  
10 fishery benefits of the proposed remedy are uncertain  
11 and that the burden on the community of the proposed  
12 remedy is great?

13 DR. WILLIAMS: No. And a long history in  
14 fisheries management and management of other living  
15 resources has demonstrated that that's a disastrous  
16 course of action. That's the reason for adaptive  
17 management about which I testified.

18 MR. RUBIN: So it's your opinion the State  
19 Water Resources Control Board should impose a great  
20 burden on the community within the Monterey Peninsula  
21 even if the effects on fish of that burden are  
22 uncertain. Yes or no?

23 DR. WILLIAMS: Yes. It's clear that --

24 MR. RUBIN: Thank you.

25 DR. WILLIAMS: -- the extent of the effects is

1 quite uncertain; whether there will be an effect is  
2 not.

3 MR. RUBIN: Now Dr. Williams, do you believe  
4 that Order 95-10 balanced between protection and  
5 restoration of Public Trust resources on the one hand  
6 and the inconvenience and expense for California  
7 American Water's customers on the other?

8 DR. WILLIAMS: Yes, I think it did. It did in  
9 terms of the mandating a 20 percent reduction.

10 MR. RUBIN: And Dr. Williams, you believe that  
11 the proposed remedy in this proceeding is needed  
12 because the balance struck in 95-10 was not proper?

13 DR. WILLIAMS: I would say it's incomplete. I  
14 would say what the Board should have done is what I  
15 suggested in my remedy which is to impose a continuum,  
16 a gradual reduction. And the way to think about the  
17 reduction I'm suggesting is to make up for that lost  
18 reduction.

19 MR. RUBIN: Thank you. Now, I believe there's  
20 some statements in your testimony which suggest you  
21 maintain a belief that it is less obvious how changes  
22 in habitat occur with smaller reductions in flow; is  
23 that correct?

24 DR. WILLIAMS: That's correct.

25 MR. RUBIN: And you believe it is less obvious

1 how habitat changes may effect flow -- excuse me;  
2 strike that.

3 You believe it is less obvious how habit  
4 changes that may be caused by reductions in flow should  
5 be assessed?

6 DR. WILLIAMS: Yes.

7 MR. RUBIN: Nonetheless, you recommend a  
8 remedy that limits extractions of Carmel River water by  
9 California American Water?

10 DR. WILLIAMS: Yes. Do you want me to  
11 explain?

12 MR. RUBIN: I will ask you a question, and  
13 bear with me; it's a foundational question.

14 You are aware that California American Water  
15 extracts a majority of Carmel River water from wells?

16 DR. WILLIAMS: Yes, very aware.

17 MR. RUBIN: And thus the majority of Carmel  
18 River extracted by California American Water is  
19 subsurface water?

20 DR. WILLIAMS: That's correct. I had  
21 something to do with that.

22 MR. RUBIN: Let's explore that for a second.

23 What role did you have in causing California  
24 American Water to pump the majority of its water as  
25 subsurface water?

1 DR. WILLIAMS: When I was on the Board of the  
2 Water Management District, we passed an ordinance that  
3 required them to divert less from San Clemente and  
4 therefore more from the subsurface. I've been active  
5 in subsequent Board processes and also litigation in  
6 superior court to achieve the same objective.

7 MR. RUBIN: And did you also influence that in  
8 your role with the Sierra Club?

9 DR. WILLIAMS: With the Sierra Club? Yes, I  
10 represented the Sierra Club in the State Board  
11 proceedings and court proceeding.

12 MR. RUBIN: And you mentioned a court  
13 proceeding. What court proceeding are you referring  
14 to?

15 DR. WILLIAMS: We sued the State Board for --  
16 and Decision 1632 and 95-10, basically was a settlement  
17 that modified 95-10.

18 MR. RUBIN: Thank you.

19 Now turning back to some of the early  
20 statements in your written testimony, I believe that  
21 you state from your academic training you are familiar  
22 with the science pertaining to the effects of  
23 California American Water's diversions on riparian  
24 vegetation along the Carmel River?

25 DR. WILLIAMS: That's correct. I worked -- my



1 degree's in geography with climatology, but I was  
2 interested in the border between energy balance,  
3 climatology and plant physiology and ecology. And I  
4 worked for a while as a post-doctorate plant  
5 physiological ecologist. So, yes.

6 MR. RUBIN: Maybe you could state -- you  
7 started to touch on this. Maybe you could state more  
8 completely what part of your academic training did you  
9 obtain this familiarity?

10 DR. WILLIAMS: Well, my graduate training and  
11 my post-doctoral training.

12 MR. RUBIN: Do you know if there's a model  
13 that can be used to quantitatively analyze the  
14 relationship between California American Water  
15 extractions from the Carmel River and Carmel River  
16 riparian habitat?

17 DR. WILLIAMS: A model?

18 MR. RUBIN: Yes.

19 DR. WILLIAMS: I know a good deal of work has  
20 been done on that, but frankly I've lost track. I  
21 don't know the state of that.

22 MR. RUBIN: So with your knowledge today, you  
23 don't know if there's a model that can be used to  
24 quantitatively analyze the relationship between --

25 DR. WILLIAMS: Well, model is a big word, so

1 let me ask you to clarify what you mean by model.

2 MR. RUBIN: Is there a computer model that can  
3 be used to quantitatively analyze the relationship  
4 between California American Water extractions from the  
5 Carmel River and the Carmel River riparian habitat?

6 DR. WILLIAMS: If such a model exists, it  
7 would have to be calibrated to data that was collected  
8 and the relationship between water levels and relief  
9 water potential -- I'm sorry. It would have to be  
10 calibrated using data collected some years ago between  
11 the groundwater level and the relief water potential in  
12 the vegetation that was. . . .

13 MR. RUBIN: And you were touching on, as part  
14 of your response, I believe, the need to calibrate the  
15 model. Is that correct?

16 DR. WILLIAMS: That's correct. If any such  
17 model exists, it would have to be calibrated to local  
18 conditions.

19 MR. RUBIN: I'm sorry; you said local  
20 conditions?

21 DR. WILLIAMS: Yes. The conditions at the  
22 site to which you were applying it.

23 MR. RUBIN: And the model would also have to  
24 be calibrated to current conditions?

25 DR. WILLIAMS: That would depend on precisely

1 the question you were asking of the model. The reason  
2 you would you have to calibrate it, for one thing, has  
3 to do with the qualities of the subsurface in terms of  
4 the specific yields of the conductivity and that kind  
5 of thing. That won't change. The riparian vegetation  
6 itself may change, so.

7 MR. RUBIN: Okay. But you did not use a model  
8 to assist you in your preparation of your testimony,  
9 Sierra Club 20?

10 DR. WILLIAMS: No, I relied on the data we  
11 collected back when.

12 MR. RUBIN: And you have been speaking  
13 generally about riparian habitat, but you haven't used  
14 a model for any of the recommendations in Sierra Club  
15 20; is that correct?

16 DR. WILLIAMS: That's correct.

17 MR. RUBIN: Dr. Williams, do you know how much  
18 water will remain in the Carmel River if the State  
19 Water Resources Control Board adopts your proposed  
20 remedy?

21 DR. WILLIAMS: Well, there is in environmental  
22 physics what's called the principle of continuity, so  
23 there will be a basic one-to-one relationship between  
24 reductions and diversions and the increase in the feet  
25 of the surface or subsurface of the river.

1           MR. RUBIN: I'm sorry; you referenced a  
2 principle?

3           DR. WILLIAMS: The principal of continuity,  
4 conservation of mass.

5           MR. RUBIN: Okay. And is there a statistical  
6 relationship between reductions in extractions of  
7 subsurface water by California American Water and the  
8 quantity of surface water in the Carmel River?

9           DR. WILLIAMS: That also would be essentially  
10 one-to-one.

11          MR. RUBIN: What do you base that on?

12          DR. WILLIAMS: That's based on the fact that  
13 the subsurface flow will not vary very much, and so  
14 when you reduce the diversions and essentially all the  
15 diversions going -- all the avoided diversion is going  
16 to go to surface flow.

17          MR. RUBIN: And have you done any statistical  
18 analysis to confirm your statements today?

19          DR. WILLIAMS: That's not based on a  
20 statistical argument, no.

21                 However, I am co-author of a paper that did  
22 evaluate the effects of groundwater pumping on the  
23 water level, and you could from that calculate the  
24 change in the subsurface flow.

25          MR. RUBIN: That paper was prepared when?

1 DR. WILLIAMS: Back in the 1980s.

2 MR. RUBIN: Did it pertain to the American  
3 River?

4 DR. WILLIAMS: It pertained to the Carmel  
5 River.

6 MR. RUBIN: It did. And it hasn't been served  
7 on any of the parties today?

8 DR. WILLIAMS: No, it's listed in my c.v.  
9 It's the Maloney, et al paper back there somewhere.

10 MR. RUBIN: Now, turning back for a second to  
11 your statement on page 5 of your written testimony  
12 where you've identified diversions by people or  
13 entities other than California American Water that  
14 divert approximately 2,000 acre feet?

15 DR. WILLIAMS: Yes.

16 MR. RUBIN: Do you know the location of the  
17 diversions that result in the 2,000 acre feet?

18 DR. WILLIAMS: All along the liver.

19 MR. RUBIN: Are some of the diversions  
20 upstream of California American Water's wells?

21 DR. WILLIAMS: Yes.

22 MR. RUBIN: Is it possible that if the State  
23 Water Resources Control Board ordered California  
24 American Water to reduce its diversions by say 50 acre  
25 feet some of these other persons or entities will

1 increase their diversions by 50 acre feet?

2 DR. WILLIAMS: Anything is possible.

3 MR. RUBIN: And it's possible that as  
4 California American Water diverts less water under an  
5 order by the State Water Resources Control Board that  
6 increasing diversions by other persons or entities will  
7 occur upstream of California American Water's current  
8 diversions?

9 DR. WILLIAMS: Anything is possible. Except  
10 violating the laws of physics and things like that.

11 MR. RUBIN: Now, Dr. Williams, how many feet  
12 of Carmel River will remain wetted with surface water  
13 flows if the State Water Resources Control Board adopts  
14 your proposed remedy?

15 DR. WILLIAMS: Well, that would vary from year  
16 to year.

17 MR. RUBIN: Do you have a sense on average how  
18 many feet of Carmel River will remain wetted if the  
19 State Water Resources Control Board adopts your  
20 proposed remedy?

21 DR. WILLIAMS: It's a more complicated issue  
22 than that, but if you're talking about the part of the  
23 river that stays wet all year, my guess would be a mile  
24 or more. The other side of the issue is flows to the  
25 lagoon would continue longer in the spring and commence

1 earlier in the fall, so it's not simply an effect on  
2 that one part of the river.

3 CO-HEARING OFFICER BAGGETT: Mr. Rubin, how  
4 much longer? Because I think we need to take a break  
5 at some point. Just trying to do a time check here.

6 MR. RUBIN: Probably another ten, 15 minutes.

7 CO-HEARING OFFICER BAGGETT: Okay. Let's  
8 continue. Let's try to get it finished.

9 MR. RUBIN: Now I believe in response to the  
10 question I just asked, you said that you would guess  
11 that about a mile or so would remain in the wetted  
12 sections of the river? Did I understand your answer?

13 DR. WILLIAMS: It's going to depend upon which  
14 of Cal Am's wells they use, so it's hard to figure in  
15 advance.

16 MR. RUBIN: But again, this is a guess that  
17 you're providing today?

18 DR. WILLIAMS: That's correct, based on Cal  
19 Am's past performance.

20 MR. RUBIN: Okay. And you also responded to  
21 my question indicating that if the State Water  
22 Resources Control Board adopts your proposed remedy, it  
23 will result in more water flowing into the Carmel  
24 lagoon? Is that correct?

25 DR. WILLIAMS: That's correct.

1           MR. RUBIN: How much more water would flow  
2 into the lagoon if the State Water Resources Control  
3 Board would adopt your remedy, let's just say in the  
4 first year that your remedy is implemented?

5           DR. WILLIAMS: It would be about a one-to-one.

6           MR. RUBIN: And what's the basis for your  
7 conclusion that it would be a one-to-one?

8           DR. WILLIAMS: Principle of continuity.

9           MR. RUBIN: But again, you've done no formal  
10 analysis to support your conclusion that it would be a  
11 one-to-one increase in the amount of water that flows  
12 into the lagoon?

13          DR. WILLIAMS: None is necessary.

14          MR. RUBIN: Okay. Do you know if there is a  
15 statistical relationship that's been identified between  
16 the quantity of reductions by California American Water  
17 and the quantity of water that flows into the lagoon?

18          DR. WILLIAMS: None that I know of.

19          MR. RUBIN: Dr. Williams, how many more adult  
20 salmon would be produced by the remedy you propose if  
21 the State Water Resources Control Board adopts it?

22          DR. WILLIAMS: Well, I'm glad you agree with  
23 me that steelhead should be called salmon. They're  
24 members of the genus *Oncorhynchus* which is the Pacific  
25 salmon.



1 CO-HEARING OFFICER BAGGETT: Could you just  
2 answer the question, please.

3 DR. WILLIAMS: I don't know.

4 MR. RUBIN: Now, just the last few questions  
5 for you. In your presentation today, of the slide  
6 presentation, I believe on slide 17, you indicate that  
7 no one knows for sure why the steelhead population has  
8 risen recently; is that correct?

9 DR. WILLIAMS: That's correct. I was talking  
10 about the increase from since the last drought year to  
11 around 2000 and subsequent decrease.

12 MR. RUBIN: Thank you. Dr. Williams, do you  
13 know how many members the Sierra Club has?

14 DR. WILLIAMS: No.

15 MR. RUBIN: Do you know what the --

16 DR. WILLIAMS: Talking about Ventana chapter?

17 MR. RUBIN: Either.

18 DR. WILLIAMS: No, in either case.

19 MR. RUBIN: And do you know what the annual  
20 budget is of the Sierra Club?

21 DR. WILLIAMS: I know how much they're paying  
22 me.

23 MR. RUBIN: I don't think you need to disclose  
24 that here. Just generally, what the budget is for the  
25 Sierra Club?

1 DR. WILLIAMS: I don't know.

2 MR. RUBIN: Thank you. Do you know if the  
3 Sierra Club provides funding for technical studies?

4 DR. WILLIAMS: The Ventana chapter does not to  
5 my knowledge.

6 MR. RUBIN: Do you know if the national Sierra  
7 Club provides funding for studies?

8 DR. WILLIAMS: They may, but I don't know.

9 MR. RUBIN: Do you know if the Sierra Club  
10 could provide funding for scientific studies?

11 DR. WILLIAMS: Anything is possible.

12 MR. RUBIN: Do you know if Sierra Club has  
13 funded scientific studies related to Carmel River?

14 DR. WILLIAMS: I don't know.

15 MR. RUBIN: Now, one of your recommendations  
16 deals with a state-of-the-art passage, as you  
17 characterized it, for Los Padres dam?

18 DR. WILLIAMS: That's correct.

19 MR. RUBIN: Have you been participating in any  
20 of the discussions regarding San Clemente Dam?

21 DR. WILLIAMS: I participated only as a -- I  
22 submitted a rather curmudgeonly letter to the Monterey  
23 Herald on the issue, and I commented on the EIR.

24 MR. RUBIN: Do you know if the state -- excuse  
25 me. Do you know if the California Department of Water

1 Resources is involved in those discussions?

2 DR. WILLIAMS: Yes, they are.

3 MR. RUBIN: Do you know why they are?

4 DR. WILLIAMS: They are the Lead Agency  
5 because of the issue of dam safety.

6 MR. RUBIN: Do you know if there was an action  
7 to create a state-of-the-art passage over Los Padres  
8 Dam if the California Department of Water Resources  
9 would need to be involved?

10 DR. WILLIAMS: I don't know. They would need  
11 to be involved if the activity involved a modification,  
12 some type of modification to the spillway. But if the  
13 facility didn't modify the spillway, I'm not aware that  
14 they would have to be involved.

15 MR. RUBIN: I believe that you recommend an  
16 increase in inflow into the Carmel lagoon by .5 CFS; is  
17 that correct?

18 DR. WILLIAMS: That was, as I indicated in the  
19 testimony, what I thought was a reasonable place to  
20 start.

21 MR. RUBIN: And so based upon your testimony  
22 today, you believe that a .5 CFS reduction in  
23 extractions of water by California American Water would  
24 satisfy your recommendation?

25 DR. WILLIAMS: No, it would not.

1 MR. RUBIN: Dr. Williams, you were asked --

2 DR. WILLIAMS: I'll explain that. There's a  
3 time lag in the -- between the reductions in diversions  
4 and the changes in inflow to the lagoon.

5 MR. RUBIN: Well, let's explore that. There's  
6 a time lag so that when California American Water  
7 reduces its extractions, it doesn't immediately result  
8 in surface water appearing in the Carmel River?

9 DR. WILLIAMS: I am -- at one particular time,  
10 the Carmel River, the reaction would be very, very  
11 fast, when it's close to the well. The change further  
12 downstream would be -- would be a greater journey. So  
13 for instance when the aquifer gets pumped down in the  
14 summer, the stream starts to flow again in the winter,  
15 it has to fill that hole again, so that delays the  
16 surface flow reaching the lagoon.

17 MR. RUBIN: Now, you had some discussion today  
18 about potentially conveying water from the Salinas  
19 Valley to the Carmel Valley; is that correct?

20 DR. WILLIAMS: The Monterey Peninsula.

21 MR. RUBIN: But that's from one watershed to  
22 another?

23 DR. WILLIAMS: That's correct.

24 MR. RUBIN: And if I understood the proposal  
25 correctly, what's being proposed is to move water

1 through a canal from one watershed to another  
2 watershed?

3 DR. WILLIAMS: That's my understanding.

4 MR. RUBIN: And you support that?

5 DR. WILLIAMS: Yes.

6 MR. RUBIN: Is that the position of the Sierra  
7 Club?

8 DR. WILLIAMS: I don't know. We do have quite  
9 a few water transfers here in California nowadays.

10 MR. RUBIN: Do you know if there is any legal  
11 prohibition of moving water out of the Salinas Valley?

12 DR. WILLIAMS: My memory is that -- back when  
13 I was involved on the Board, that the Salinas Valley  
14 people actually got a law passed that would prohibit  
15 that. But I don't -- that's a dim memory from the  
16 distant past.

17 MR. RUBIN: I'm sorry; I missed -- I didn't  
18 hear your testimony clearly. You said that you believe  
19 that the Salinas Valley does have a prohibition?

20 DR. WILLIAMS: I believe they got it in the  
21 state law as I remember, but that was a long time ago.  
22 That's why there needs to be some motivation to get the  
23 law changed.

24 MR. RUBIN: Dr. Williams, I think you  
25 testified that substantial conservation savings can be

1 had within the Monterey Peninsula community?

2 DR. WILLIAMS: That's correct.

3 MR. RUBIN: Do you know what the average use  
4 of water within the Monterey Peninsula is by the  
5 community?

6 DR. WILLIAMS: Not recently.

7 MR. RUBIN: Do you know what the average use  
8 of water is within the State of California by people?

9 DR. WILLIAMS: Per capita use of residents?

10 MR. RUBIN: Yes.

11 THE WITNESS: No. Not precisely.

12 MR. RUBIN: Do you think that the community  
13 within the Monterey Peninsula wastes water that's used  
14 for landscape purposes?

15 DR. WILLIAMS: I think some of it's wasted.

16 MR. RUBIN: You believe people within the  
17 Monterey Peninsula waste water when they're brushing  
18 their teeth?

19 DR. WILLIAMS: I believe they waste some water  
20 brushing their teeth, yes.

21 MR. RUBIN: Do you know how much California  
22 American Water and others spend on an annual basis to  
23 promote conservation?

24 DR. WILLIAMS: It's a substantial amount. The  
25 Water Management District began a conservation program

1 when I was on Board and --

2 MR. RUBIN: Would --

3 DR. WILLIAMS: -- continues, as far as I know.

4 MR. RUBIN: Apologize for interrupting you.

5 Would you be surprised to learn that the  
6 amount of money that's spent within the Monterey  
7 Peninsula community on conservation promotions exceeds  
8 a million dollars on an annual basis?

9 DR. WILLIAMS: Not when there's a good reason  
10 why. That is that the Peninsula has been faced with  
11 the limit on the total amount of water that was  
12 available. So there's great interest in conservation  
13 because that frees up water for new development. It's  
14 too bad the same money didn't go to studies.

15 MR. RUBIN: One or two last questions.

16 I believe that you made a statement that the  
17 mayors that testified yesterday overstated the impacts  
18 to the community that would be caused by the remedies  
19 that are being proposed to the Board?

20 DR. WILLIAMS: Yes. I think I recall hearing  
21 somebody talking about shutting down City Hall and that  
22 kind of thing, that was kind of extreme. But beyond  
23 that, I think they rather overstated things.

24 MR. RUBIN: I think you, in response to the  
25 earlier question, indicated in part the mayors were

1 overstating their impact because of the experiences you  
2 saw during the 1976-1977 drought?

3 DR. WILLIAMS: I believe I said that in  
4 response to a question, yes.

5 MR. RUBIN: During the 1976-1977 drought,  
6 water was rationed, correct?

7 DR. WILLIAMS: 50 gallons a day a person, yes.

8 MR. RUBIN: And were people provided  
9 five-gallon buckets?

10 DR. WILLIAMS: I don't remember that.

11 MR. RUBIN: Do you recall hearing stories of  
12 people showering with buckets so that they had water  
13 available for --

14 DR. WILLIAMS: Yes, I did it myself.

15 MR. RUBIN: And what did you shower with a  
16 bucket for?

17 DR. WILLIAMS: A showered with a bucket so I  
18 could water my plants. My mother to this day takes a  
19 bath and leaves the water in the tub and uses it to  
20 flush the toilet.

21 MR. RUBIN: Just a few more questions, four or  
22 five more questions, regarding the lagoon.

23 Do you believe that the Carmel River Lagoon  
24 should be better managed?

25 DR. WILLIAMS: Yes.



1           MR. RUBIN: Do you believe that the Carmel  
2 River Lagoon has been affected by reduced inflows into  
3 the lagoon?

4           DR. WILLIAMS: Yes.

5           MR. RUBIN: Do you believe that the Carmel  
6 River Lagoon has been affected by flood management  
7 activities?

8           DR. WILLIAMS: You asked the same question as  
9 Mr. -- Dr. Thomas, and my answer would be basically the  
10 same, that housing has encroached on the north edge of  
11 the lagoon, and the County Department of Public Works  
12 opens the mouth every year to prevent flooding in that  
13 area. And as I also discussed, works upstream have  
14 effects, but there is more.

15           MR. RUBIN: And what more is affecting the  
16 lagoon aside from flood management and reduced inflows  
17 into the lagoon?

18           DR. WILLIAMS: I think I mentioned management  
19 somewhere in my testimony, and what I had in mind was  
20 the breaching.

21           MR. RUBIN: Okay. Are you familiar with a  
22 study plan for the long-term adaptive management of the  
23 Carmel River State Beach and Lagoon?

24           DR. WILLIAMS: I am.

25           MR. RUBIN: Have you been involved in the

1 preparation of that at all?

2 DR. WILLIAMS: I -- to some degree. There was  
3 a meeting to which I was invited. It was a day I  
4 couldn't attend. I did send in a four or five page  
5 letter with my recommendations for things that ought to  
6 be done.

7 MR. RUBIN: Have you reviewed the final study  
8 plan?

9 DR. WILLIAMS: I have.

10 MR. RUBIN: Are you aware that the final study  
11 plan includes a conclusion that rigorous scientific  
12 investigations are required before one can effectively  
13 manage the Carmel River Lagoon?

14 DR. WILLIAMS: I think that's overstated.

15 MR. RUBIN: I have no further questions.

16 Thank you.

17 CO-HEARING OFFICER BAGGETT: Thank you. Are  
18 there any questions of staff? No? Any redirect?

19 MR. SILVER: No redirect.

20 CO-HEARING OFFICER BAGGETT: Okay. With that,  
21 would you like to enter your exhibits into the record?

22 MR. SILVER: Yes, we'd like to enter the  
23 exhibit -- Dr. Williams' testimony and the accompanying  
24 exhibits.

25 CO-HEARING OFFICER BAGGETT: Okay, they'll be

1 admitted with the noted objections which were  
2 sustained.

3 MR. RUBIN: Not only that, but we are --  
4 consistent with the ruling, there's a number of  
5 exhibits that are cited in those sections that we don't  
6 believe should be admitted for the same reasons per  
7 your ruling. I believe those are Exhibits 15, 16, 7.

8 Those appear on page 20, line 24 through 26;  
9 page 22, line 8; page 21, line 21.

10 We also object to Sierra Club 13, which is the  
11 thesis of Mr. Morgan Bond. Based upon the testimony  
12 today, I don't believe there is an adequate foundation  
13 for it to be admitted. Dr. Williams testified that he  
14 does believe a thesis by Mr. Bond was approved. His  
15 testimony today is that the thesis that he served on  
16 the parties has been unsigned, and he could not testify  
17 as to whether this thesis is the one that was approved.

18 CO-HEARING OFFICER BAGGETT: I think we will  
19 allow the document in, but will take it under the  
20 appropriate weight given the fact that it is an  
21 unsigned thesis. We can't treat it as a thesis. We  
22 can treat it as evidence brought in for what it's worth  
23 that we give an appropriate weight.

24 And other items, let me -- we need to look at.  
25 I haven't looked at them. 15, 16, and --

1 MR. RUBIN: 15, 16, and 7. And I'm providing  
2 them in the order of -- that I have been given them.  
3 They appear on page 20, 21, 22.

4 CO-HEARING OFFICER BAGGETT: Okay. Since  
5 we've stricken that portion of the testimony, we should  
6 have stricken the exhibits to which it refers? That's  
7 appropriate. Okay.

8 So any other objections on the exhibits?

9 DR. THOMAS: I just want to know whether I  
10 have a chance to ask a few more questions.

11 CO-HEARING OFFICER BAGGETT: No, no redirect.

12 DR. THOMAS: Didn't stand up fast enough.

13 CO-HEARING OFFICER BAGGETT: No. So the  
14 exhibits are admitted with those as appropriate for  
15 those rulings. And Dr. Williams is done.

16 (Sierra Club Exhibits were admitted into  
17 evidence as ruled.)

18 CO-HEARING OFFICER BAGGETT: Thank you. Let's  
19 take a ten-minute break and come back with Monterey  
20 Peninsula Water District, so you can get your panel  
21 ready.

22 (Recess)

23 CO-HEARING OFFICER BAGGETT: Back on the  
24 record.

25 MR. RUBIN: I just wanted to make sure that

1 the letter that I discussed with Dr. Williams that he  
2 served as part of the record, the letter that was to  
3 Mr. Sato, it's not posted as part of the documents on  
4 the website.

5 CO-HEARING OFFICER BAGGETT: So you want to  
6 add it as an exhibit?

7 MR. RUBIN: I didn't mark it because I assumed  
8 it was part of the exhibit that was served. If  
9 necessary, I can mark it. I think it's been  
10 authenticated. I could move it into evidence. But  
11 again, it is something that's been served.

12 CO-HEARING OFFICER BAGGETT: It's already in  
13 the record.

14 MR. RUBIN: It's part of Exhibit 5? It was  
15 the first page, part of the Exhibit 5 that was served.  
16 And I just want to make sure that -- it's essentially a  
17 cover page to Exhibit 5 that's been admitted into  
18 evidence.

19 CO-HEARING OFFICER BAGGETT: Very good. Make  
20 sure that happens. Let's go off the record a minute.

21 (Discussion off the record)

22 CO-HEARING OFFICER BAGGETT: Let's go back on  
23 the record.

24 MR. RUBIN: I apologize. Just I wanted to  
25 make sure I understood your direction clearly in terms

1 of the letter from Mr. Williams to Mr. Sato, if that's  
2 part of an exhibit that has been admitted into  
3 evidence?

4 CHIEF COUNSEL TAYLOR: Well, it wasn't a part  
5 of the Sierra Club Exhibit 5. You introduced it in  
6 cross-examination. For purposes of the record, we'd  
7 better introduce this as your exhibit next in order.

8 MR. RUBIN: That's fine. Exhibit California  
9 American Water 42, I believe, is the next in order. So  
10 I would ask that it be marked and admitted into  
11 evidence.

12 CO-HEARING OFFICER BAGGETT: Any objections?  
13 If not, so admitted.

14 (Exhibit CAW-42 was admitted into  
15 evidence.)

16 CO-HEARING OFFICER BAGGETT: Now, Mr. Laredo,  
17 your case-in-chief. Monterey Peninsula Water  
18 Management District.

19 MR. LAREDO: Good morning, just for the  
20 record, David Laredo, general counsel for the Monterey  
21 Peninsula Water Management District. Good morning.

22 On Wednesday, the State Water Resources  
23 Control Board Prosecuting Team stated in its opening  
24 statement that California American Water has the burden  
25 to show that the draft CDO is arbitrary and capricious.

1           That's wrong. It's not accurate. I won't  
2 belabor the point at this time, but we will submit  
3 briefs to the Board to characterize the proper burden  
4 of proof and evidentiary standard that should govern  
5 this proceeding.

6           The Prosecution Team also stated it was  
7 inappropriate for the steelhead to absorb the impacts  
8 caused by Cal Am's illegal water use, but there's not  
9 been any quantitative showing that the draft CDO that  
10 will ramp down reductions will benefit the fishery.

11           The Prosecution Team asks the Board to balance  
12 consequences to steelhead against consequences to Cal  
13 Am.

14           No. That's not the standard. The Board must  
15 weigh and balance consequences to the community.  
16 Preservation of the environment cannot jeopardize  
17 public health and safety.

18           Mr. Sato asserted the draft CDO reflects  
19 thoughtful and reasonable balance between fishery and  
20 health and safety needs of the community. The Water  
21 Management District agrees this is the proper balancing  
22 test: The environmental values against the human  
23 values.

24           Unfortunately, the draft CDO in its present  
25 drafted form does not properly balance these values.

1           The Water Management District will present  
2 evidence on the ways the CDO may better protect the  
3 environment and minimize the effects of Cal Am's  
4 diversions. But the CDO will be punitive if water use  
5 reductions have no demonstrated environmental benefit.

6           Yesterday, the cities addressed community  
7 water needs. We must all keep in mind that California  
8 American Water does not use water. The community does.  
9 Water rationing is a complicated mechanism. For the  
10 Monterey Peninsula, California American Water has  
11 38,000 connections. There are 112,500 moving parts,  
12 each exercising free will.

13           The cease and desist order must be carefully  
14 crafted with this point in mind. As an example,  
15 focusing on Cal Am's unaccounted for water, magically  
16 changing Cal Am's unaccounted water standard from  
17 12 percent to 7 percent, thereby redefining the  
18 difference, 5 percent, to be water waste will not by  
19 itself conserve or save this increment of water. There  
20 has to be a means to actually reduce the water, not  
21 just merely redefining it.

22           The CDO cannot transmute Cal Am's performance  
23 issues to a burden on the community. We're concerned  
24 that no evidence exists that the communities can or  
25 will reduce to the level shown in the draft CDO for the



1 reasons shown and for the duration proposed.

2 If water use cannot reasonably be decreased,  
3 the CDO will harm public health and safety. The cities  
4 testified to the extended and unintended consequences  
5 that may result from rationing.

6 Yes, the community has accepted and  
7 successfully complied with rationing to survive a  
8 drought. But that effort was for a finite term for a  
9 clearly perceived purpose.

10 It is unknown if the community will ration to  
11 that extent when it's raining, when the Carmel River  
12 flows to the sea year in and year out. Rationing works  
13 when the community is motivated to cooperate. If not,  
14 civil disobedience can occur in the home at the  
15 faucets.

16 My point is: Water conservation and water  
17 rationing is a very inexact practice. Please be  
18 cautious in assuming that water use reductions will  
19 actually correlate to any governmental edict.

20 While the draft CDO diversion reductions do  
21 not offer a reasonable remedy, there are other remedies  
22 that can and should be adopted.

23 Darby Fuerst will note nine specific remedies  
24 for consideration as supported by the testimony of the  
25 entire Water Management District team.

1           I'd like to add a tenth. The State Board  
2 staff should actively participate in the Peninsula  
3 water supply planning process.

4           Personally, I'm very pleased that DRA is here,  
5 the Division of Ratepayer Advocates. I am disappointed  
6 that the CPUC staff itself is not here. The DRA is a  
7 division of the CPUC; it does not represent the PUC  
8 itself.

9           I must note that the State Water Resources  
10 Control Board staff has not participated in California  
11 American Water Company's pending PUC applications and  
12 processes. I believe such a presence would help  
13 facilitate a more timely water supply solution.

14           Clearly, there is a need to minimize  
15 regulatory gridlock. That's what we've been facing for  
16 the last 13 years.

17           I will now begin introducing my panel.

18           The District has presented a considerable  
19 volume of testimony through its eight witnesses. Our  
20 intention to streamline our presentation is that only  
21 Darby Fuerst will be asked to provide an overview, a  
22 summary.

23           First, I'd like to ask the District's other  
24 witnesses to introduce their testimony and sponsor the  
25 exhibits they reference.

1 I'll begin with Joe Oliver.

2 JOSEPH W. OLIVER

3 Called by MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

4 DIRECT EXAMINATION BY MR. LAREDO

5 MR. LAREDO: Mr. Oliver, could you please  
6 state your full name.

7 MR. OLIVER: Joseph W. Oliver.

8 MR. LAREDO: You were previously sworn in this  
9 proceeding; is that correct?

10 MR. OLIVER: That's correct.

11 MR. LAREDO: What is your position and  
12 background?

13 MR. OLIVER: I am the Water Resources Manager  
14 with the Monterey Peninsula Water Management District.  
15 I also serve as the district senior hydrogeologist.

16 MR. LAREDO: I think you're going to have to  
17 speak a little more into the microphone.

18 MR. OLIVER: Okay. And I have been employed  
19 with the Water Management District since 1985.

20 MR. LAREDO: And did you have an opportunity  
21 to prepare written testimony for this proceeding?

22 MR. OLIVER: I did.

23 MR. LAREDO: And your testimony is JO-1;  
24 is that accurate?

25 MR. OLIVER: Yes.

1           MR. LAREDO: Do you have any corrections or  
2 modification to that testimony to propose?

3           MR. OLIVER: No.

4           MR. LAREDO: And did you cause and review the  
5 exhibits that are referenced in that testimony to  
6 be attached?

7           MR. OLIVER: Yes.

8           MR. LAREDO: If asked the questions set forth  
9 in your testimony, would your answers be as you stated  
10 in your testimony?

11          MR. OLIVER: Yes, they would.

12          MR. LAREDO: Do you have anything else to add?

13          MR. OLIVER: No.

14          MR. LAREDO: Thank you.

15                           ANDREW M. BELL

16   Called by MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

17                   DIRECT EXAMINATION BY MR. LAREDO

18          MR. LAREDO: Mr. Bell, could you please state  
19 your full name?

20          MR. BELL: Yes, Andrew M. Bell.

21          MR. LAREDO: And you were previously sworn in  
22 this proceeding?

23          MR. BELL: Yes, I was.

24          MR. LAREDO: Could you summarize your  
25 background and state the position you hold with the

1 Water Management District?

2 MR. BELL: I have master's and bachelor's  
3 degrees in civil engineering, about 30 years plus in  
4 water issues. I am registered in the State of  
5 California as a civil engineer and agricultural  
6 engineer. I've worked with the Water Management  
7 District since 1987 as District Engineer and Manager of  
8 Planning and Engineering.

9 MR. LAREDO: Did you personally prepare the  
10 testimony submitted as Exhibit AB-1.

11 MR. BELL: Yes, I did.

12 MR. LAREDO: Do you have any corrections or  
13 modifications to make to that exhibit?

14 MR. BELL: No.

15 MR. LAREDO: That exhibit references several  
16 other attachments and exhibits, AB 2 through 6. Did  
17 you cause those to be prepared or cause those to be  
18 attached to your testimony?

19 MR. BELL: Yes.

20 MR. LAREDO: And you are asking that the State  
21 Board receive your testimony in this proceeding?

22 MR. BELL: Yes.

23 MR. LAREDO: Do you have anything further to  
24 add?

25

1 MR. BELL: No.

2 STEPHANIE PINTAR

3 Called by MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

4 DIRECT EXAMINATION BY MR. LAREDO

5 MR. LAREDO: Ms. Stephanie Pintar.

6 MS. PINTAR: Yes.

7 MR. LAREDO: Could you please state your full  
8 name?

9 MS. PINTAR: Stephanie Pintar.

10 MR. LAREDO: Were you previously sworn in this  
11 proceeding?

12 MS. PINTAR: Yes.

13 MR. LAREDO: Could you summarize your  
14 background and state the position you hold for the  
15 District?

16 MS. PINTAR: Yes. I've worked for the  
17 Monterey Peninsula Water Management District since 1988  
18 in several different capacities. My current position  
19 is Water Demand Manager, and I manage the Water  
20 Conservation and Permitting Program for the District.

21 MR. LAREDO: Did you cause to be prepared the  
22 exhibit containing your testimony in this proceeding?

23 MS. PINTAR: Yes.

24 MR. LAREDO: And do you have any corrections  
25 or modifications to that?

1 MS. PINTAR: No.

2 MR. LAREDO: Did you cause the exhibits  
3 referenced there to be attached and did you review  
4 those?

5 MS. PINTAR: Yes, I have.

6 MR. LAREDO: If asked the questions set forth  
7 in your testimony, would the answers be the same as set  
8 forth in your exhibit?

9 MS. PINTAR: Yes.

10 MR. LAREDO: Do you have anything else you'd  
11 like to add?

12 MS. PINTAR: No.

13 KEVAN URQUHART

14 Called by MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

15 DIRECT EXAMINATION BY MR. LAREDO

16 MR. LAREDO: Mr. Urquhart, could you please  
17 state your full name?

18 MR. URQUHART: Kevan Urquhart.

19 MR. LAREDO: Could you please spell your last  
20 name?

21 MR. URQUHART: Yes. The first name is spelled  
22 differently too: K-e-v-a-n. And last name,  
23 U-r-q-u-h-a-r-t.

24 MR. LAREDO: And you were previously sworn in  
25 this proceeding?

1 MR. URQUHART: Correct.

2 MR. LAREDO: Could you state your background  
3 and position that you hold with the Water Management  
4 District?

5 MR. URQUHART: I am the Water Management  
6 District Senior Fisheries Biologist in charge of its  
7 Fisheries Program with two permanent and varying number  
8 of temporary staff that assist us.

9 I have worked for the water district since  
10 August 2006, and my prior experience in various  
11 research functions at the California State Department  
12 of Fish and Game is outlined in my resume, Exhibit  
13 MPWMD KU-2.

14 I have a master's degree in biology from Cal  
15 State University, Fullerton emphasizing marine biology  
16 and ichthyology. I have a bachelor's degree from UC  
17 Berkeley in zoology emphasizing ecology and aquatic  
18 zoology.

19 I hold a certificate in land use environmental  
20 planning from UC Davis extension, and I am one of the  
21 few certified fisheries professionals by the American  
22 Fisheries Society in California and a member of the  
23 American Institute of Fisheries Research Biologists.

24 MR. LAREDO: Did you personally prepare the  
25 testimony submitted this proceeding as Exhibit KU-1?



1 MR. URQUHART: Yes, I did.

2 MR. LAREDO: Do you have any corrections or  
3 modifications of that testimony?

4 MR. URQUHART: Yes, I do, a correction and  
5 modification to one sentence. It is on page 10. It is  
6 my response to question number 5. It is in the third  
7 sentence that starts with the word assuming:

8 Assuming that at least two percent of  
9 "the" -- instead of "those" -- the fall  
10 juvenile fish -- insert "reared in this  
11 area" -- could return two years later as  
12 an adult to spawn in the river about  
13 55 -- number corrected up from 48 --  
14 more adult steelhead might return for  
15 every mile of habitat rewetted  
16 year-round in this year.

17 The next sentence remains the same with the  
18 exception of the number 110 feet changes to 96 feet.  
19 So it would read:

20 Phrased another way, the final cease and  
21 desist order would have to insure  
22 rewetting at least 96 feet of habitat  
23 year-round to produce enough juvenile  
24 steelhead so that at least one  
25 additional adult steelhead might survive

1 to return to spawn on the river.

2 Those are the only corrections.

3 MR. LAREDO: So except for those corrections  
4 then, your testimony would be as stated if I asked each  
5 of those questions?

6 MR. URQUHART: Correct.

7 MR. LAREDO: And as to the references in your  
8 testimony, KU2 through KU10C, did you personally cause  
9 those to be attached to your testimony?

10 MR. URQUHART: Yes.

11 MR. LAREDO: Do you have anything else you'd  
12 like to add?

13 MR. URQUHART: No.

14 LARRY M. HAMPSON

15 Called by MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

16 DIRECT EXAMINATION BY MR. LAREDO

17 MR. LAREDO: Mr. Hampson, could you please  
18 state your name for the record?

19 MR. HAMPSON: Larry Hampson.

20 MR. LAREDO: And you were previously sworn in  
21 this proceeding?

22 MR. HAMPSON: Yes, I was.

23 MR. LAREDO: Could you summarize your  
24 background and position that you hold with the  
25 District?

1           MR. HAMPSON: I have worked for the Water  
2 Management District since 1991 primarily on the Carmel  
3 River. I have a bachelor's degree in engineering  
4 science and a master's degree in business  
5 administration, and I am a Registered Civil Engineer in  
6 the State of California.

7           MR. LAREDO: And you had the opportunity to  
8 prepare testimony for this proceeding?

9           MR. HAMPSON: Yes, I have.

10          MR. LAREDO: And that's marked as District  
11 exhibit HL1; is that correct?

12          MR. HAMPSON: Yes.

13          MR. LAREDO: Do you have any corrections or  
14 modifications you'd like to make to that testimony?

15          MR. HAMPSON: Yes. I have two minor  
16 modifications. Page 17, line 25 reads Exhibit LH13.  
17 That should be Exhibit LH18. Page 19, line 10, where  
18 it reads Exhibit LH15 should be 19.

19          Those are the only two corrections I have.

20          MR. LAREDO: And you caused each of the  
21 exhibits that are referenced in that testimony to be  
22 attached; is that correct?

23          MR. HAMPSON: Yes, I did.

24          MR. LAREDO: So as modified, if asked the  
25 questions set forth in your testimony, would the

1 answers be the same as are stated in your exhibit?

2 MR. HAMPSON: Yes, they would.

3 MR. LAREDO: Thank you.

4 THOMAS CHRISTENSEN

5 Called by MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

6 DIRECT EXAMINATION BY MR. LAREDO

7 MR. LAREDO: Mr. Christensen.

8 MR. CHRISTENSEN: Yes.

9 MR. LAREDO: Could you state your name?

10 MR. CHRISTENSEN: My name is Thomas

11 Christensen, C-h-r-i-s-t-e-n-s-e-n.

12 MR. LAREDO: And you were previously sworn?

13 MR. CHRISTENSEN: Yes.

14 MR. LAREDO: You had an opportunity to prepare  
15 testimony for this proceeding; is that correct?

16 MR. CHRISTENSEN: That's correct.

17 MR. LAREDO: Do you have any corrections or  
18 modifications to that testimony?

19 MR. CHRISTENSEN: No.

20 MR. LAREDO: And you also personally  
21 supervised the exhibits and attachments referenced in  
22 your testimony?

23 MR. CHRISTENSEN: That's correct.

24 MR. LAREDO: If I were to ask you the  
25 questions that are stated in your prepared testimony,

1 would your answers be exactly the same as set forth?

2 MR. CHRISTENSEN: Yes.

3 MR. LAREDO: Thank you. Do you have anything  
4 else you'd like to add?

5 MR. CHRISTENSEN: Just like to add my  
6 qualifications. I have a --

7 MR. LAREDO: Thank you.

8 MR. CHRISTENSEN: -- degree in natural  
9 resource management from Cal Poly, San Luis Obispo and  
10 a master's in hydrology from the University of Nevada,  
11 Reno.

12 I've been working on the Carmel River for ten  
13 years quantifying impacts and stress to riparian  
14 vegetation, and also been involved with many  
15 restoration projects along the Carmel River.

16 MR. LAREDO: And what is the position that you  
17 hold with the District?

18 MR. CHRISTENSEN: The position I hold with the  
19 District is Riparian Projects Coordinator.

20 MR. LAREDO: Thank you. Anything else to add?

21 MR. CHRISTENSEN: No.

22 HENRIETTA STERN

23 Called by MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

24 DIRECT EXAMINATION BY MR. LAREDO

25 MR. LAREDO: Henrietta Stern, could you please

1 state your name?

2 MS. STERN: My name is Henrietta Stern,  
3 S-t-e-r-n.

4 MR. LAREDO: And you were previously sworn?

5 MS. STERN: Yes.

6 MR. LAREDO: Thank you. Could you state your  
7 background and position that you hold with the  
8 District?

9 MS. STERN: Yes. I'm a Project Manager with  
10 the District. A secondary function is Public  
11 Information Representative.

12 My primary duties have to do with CEQA and  
13 NEQA compliance for either District projects where we  
14 are the applicant and are proposing or evaluation of  
15 other projects that may need permits from our agency.

16 I manage the water permit -- water  
17 distribution system permit process. That entails  
18 people who wish to obtain permits for mostly new wells  
19 within the District.

20 As the Public Information Officer, I handle a  
21 lot of questions from the public. That is somewhat of  
22 a disaggregated function; I do not handle all  
23 questions.

24 My background is a bachelor's in zoology from  
25 UC Davis and master's in ecology, also from UC Davis.

1           MR. LAREDO: And you had an opportunity to  
2 prepare testimony for this proceeding that is displayed  
3 on the State Board website as HS-1.

4           MS. STERN: I'm not sure if it is displayed on  
5 the State Board website as HS-1. Is it Exhibit HS-1.  
6 My understanding is there may be an inaccuracy on the  
7 State Board website.

8           MR. LAREDO: You did prepare the testimony  
9 that's characterized as HS-1?

10          MS. STERN: Yes.

11          MR. LAREDO: And you supervised the production  
12 of the attachments and exhibits to that exhibit?

13          MS. STERN: Yes.

14          MR. LAREDO: Do you have any corrections or  
15 modifications to the testimony?

16          MS. STERN: No.

17          MR. LAREDO: If asked each of those questions,  
18 would your answers be as set forth?

19          MS. STERN: Yes.

20          MR. LAREDO: Do you have anything else you'd  
21 like to add?

22          MS. STERN: No.

23          MR. LAREDO: Thank you.

24                           DARBY FUERST

25          Called by MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

1 DIRECT EXAMINATION BY MR. LAREDO

2 MR. LAREDO: Mr. Fuerst, if I could ask you to  
3 state your name.

4 MR. FUERST: Darby Fuerst. D-a-r-b-y,  
5 F-u-e-r-s-t.

6 MR. LAREDO: And you were -- you previously  
7 took the oath; is that correct?

8 MR. FUERST: Yes, I did.

9 MR. LAREDO: Could you please state your  
10 background and the position you currently hold with the  
11 District?

12 MR. FUERST: I have bachelor's degrees in  
13 geological science and English literature, a master's  
14 degree in hydrology and water resources administration.

15 I have worked over 26 years of professional  
16 experience at the local, state, and federal levels, and  
17 I have worked for the District since 1985.

18 I've been employed as Interim General Manager  
19 since March of 2008. Prior to that, I was the general  
20 manager of the District between December 1995 and June  
21 of 2001.

22 And in addition to the management  
23 responsibilities, I have also served as Senior  
24 Hydrologist at the District during that time and have  
25 been responsible for development, maintenance, and



1 application of the District's principal analytical  
2 tool, the Carmel Valley Simulation Model.

3 MR. LAREDO: You previously testified in Phase  
4 1 of these proceedings in June of this year?

5 MR. FUERST: Yes, I did.

6 MR. LAREDO: You had an opportunity to prepare  
7 testimony for these Phase 2 hearings; is that accurate?

8 MR. FUERST: Yes.

9 MR. LAREDO: That has been referenced as  
10 DF-9B; is that accurate?

11 MR. FUERST: I think it was 9A.

12 MR. LAREDO: Thank you. Do you have any  
13 corrections or modifications to make to that testimony?

14 MR. FUERST: Yes.

15 On page 3, question 2 -- well, actually, on  
16 page 2 under question 1, the exhibit should be  
17 MPWMD-DF1 instead of DF2. And page 3, under question  
18 2, paragraph 4 it should be Exhibit MPWMD DF2 instead  
19 of DF1.

20 MR. LAREDO: Thank you. You personally  
21 supervised the protection of DF 10, 11, and 12; is that  
22 accurate?

23 MR. FUERST: Yes.

24 MR. LAREDO: As corrected by the modifications  
25 you've just spoken to, is your testimony accurate?

1 MR. FUERST: Yes, it is.

2 MR. LAREDO: If I asked you each of those  
3 questions, would your answers be the same as set forth?

4 MR. FUERST: Yes.

5 MR. LAREDO: Thank you. I believe that you  
6 have caused to be prepared 12 slides that provide an  
7 aid to summarize your testimony; is that accurate?

8 MR. FUERST: That's correct.

9 MR. LAREDO: If I could ask you to present  
10 that slide presentation, I think it will facilitate our  
11 direct examination.

12 I think it would be easiest if we just go  
13 ahead and make this as a presentation instead of  
14 question-and-answer.

15 MR. FUERST: In terms of the District's role  
16 as a regional manager, this is the Monterey  
17 Peninsula -- what we refer to as the Monterey Peninsula  
18 water resource system, and it shows that the District,  
19 as a California special district created by the State  
20 Legislature, that we are a local agency with regional  
21 responsibilities, that we were charged with providing  
22 integrated management of the surface and groundwater  
23 resources in the Monterey Peninsula area.

24 This map of the area shows the Peninsula but  
25 also shows the principal water resources in the area.

1 It shows the Carmel River watershed, and the main stem  
2 and principal tributaries.

3 And then it also shows in the shaded blue area  
4 within the Carmel River watershed the Carmel Valley  
5 Alluvial Aquifer, the aquifer that underlies the Carmel  
6 River, and is within the State Board's jurisdiction as  
7 defined in Order 95-10.

8 It also shows to the north of the Carmel River  
9 Basin the Seaside Groundwater Basin which has been  
10 discussed and shows the breakdown of the different  
11 units that have been determined by the court in that  
12 adjudication.

13 I think it's worth noting that in providing  
14 integrated resource management the District looks at  
15 both surface water and groundwater -- groundwater,  
16 whether it's percolating groundwater or surface flow or  
17 subterranean stream. In addition, the District looks  
18 at demand management activities as well as supply  
19 augmentation.

20 So we try to take a comprehensive integrative  
21 look at resources -- resource management in this area.  
22 And we interact on a regular basis with the State Water  
23 Resources Control Board, the California Public  
24 Utilities Commission, and the local jurisdictions and  
25 the Seaside Groundwater Basin Watermaster.

1           The next slide just quickly shows a breakdown  
2 of Cal Am demand by user type, and this is based on Cal  
3 Am's metered production in water year 2007, from  
4 October of '06 to September of '07. And you can see,  
5 as was discussed, the green slice is single-family  
6 residential. The next slice going clockwise is  
7 multifamily residential.

8           Together those include about 54 percent of the  
9 usage. Residential is 46 percent, and multiresidential  
10 is 9 percent to 55.

11           The next slice, which is the gray segment, is  
12 the commercial use, and that's about 22 percent.

13           The remainder are smaller slices where a golf  
14 course is shown there -- excuse me. Industrial is a  
15 very small slice, 1 percent. Then golf course  
16 represents 3 percent of the metered use from Cal Am.  
17 Public authority is 7 percent. Then there's a small  
18 amount for other, miscellaneous.

19           And then lastly, the larger blue slice at the  
20 top is unaccounted-for water. That's actually not  
21 metered consumption; but to complete the amount of  
22 water, accounted for and unaccounted for, this shows  
23 how much water Cal Am produced and delivered to its  
24 customers in water year 2007.

25           MR. LAREDO: So just focusing to

1 unaccounted-for water, that's the difference between  
2 Cal Am's metered sales and the remainder of its  
3 production?

4 MR. FUERST: Yes. In an earlier -- in my  
5 presentation in June, I showed what Cal Am's production  
6 was. And this shows when you subtract the metered  
7 consumption what the difference would be for water year  
8 2007, which is essentially 12 percent unaccounted-for  
9 water.

10 The next slide just shows average daily use  
11 per single-family resident in the Monterey Peninsula  
12 area within the Water Management District served by Cal  
13 Am in their main system. And it shows it for water  
14 years three, four, five, six, and seven.

15 And as shown, you can see it ranges from a  
16 high of 74 gallons per capita per day in 2003 to just  
17 over 70 gallons per capita, or person, per day in 2007.  
18 And I want to stress that this is based on metered  
19 production for all of the single-family residents. So  
20 this is use by a person in a household. It does not  
21 include use by that person elsewhere.

22 CO-HEARING OFFICER WOLFF: Mr. Fuerst, I'm a  
23 little bit confused about what you're doing here given  
24 the discussion that took place yesterday about the  
25 PowerPoint with Sierra Club.

1           Is this new information that isn't in your  
2 exhibits, or is this information in your exhibit?

3           MR. FUERST: It's discussed in my testimony on  
4 page 6. Not exact numbers, but the discussion on per  
5 capita use per day.

6           CO-HEARING OFFICER WOLFF: But you've  
7 supplemented that discussion with additional  
8 information; is that correct?

9           MR. FUERST: I have added additional years.

10          CO-HEARING OFFICER WOLFF: And additional data  
11 points?

12          MR. FUERST: Yes.

13          CO-HEARING OFFICER WOLFF: And going back to  
14 your pie chart prior? There aren't actually numbers on  
15 the pie chart, but I was looking for that very  
16 information and didn't see it in the testimony. Is it  
17 in the testimony someplace?

18          MR. FUERST: No, it's not in the testimony.

19          CO-HEARING OFFICER WOLFF: Is it in the  
20 exhibit someplace?

21          MR. FUERST: It's discussed in an exhibit by  
22 Stephanie Pintar on a rationing plan, how these user  
23 categories are considered by the District.

24          CO-HEARING OFFICER WOLFF: Go back to that  
25 slide for a moment. All right. Now there aren't any

1 numbers here, but you've shown a pie -- where are the  
2 numbers that represent the slices of the pie?

3 MR. FUERST: They're not shown on the slide.  
4 They're not in my testimony.

5 CO-HEARING OFFICER WOLFF: And are they in any  
6 of the exhibits submitted by the Water Management  
7 District?

8 MR. FUERST: No.

9 CO-HEARING OFFICER WOLFF: I didn't think so.  
10 The only place I saw them was in Exhibit A of Mayor  
11 Pendergrass's exhibit, and I don't know if those  
12 numbers match up to your pie chart or not.

13 MR. FUERST: They do other than for the  
14 unaccounted-for water.

15 CO-HEARING OFFICER WOLFF: So this slide  
16 represents -- visually represents the numbers he  
17 provided plus an for adjustment unaccounted-for water?

18 MR. FUERST: Right. For water year 2007. He  
19 showed 1988 and 2007.

20 CO-HEARING OFFICER WOLFF: Right.

21 MR. FUERST: This would just be 2007.

22 CO-HEARING OFFICER WOLFF: Well, I'm going to  
23 turn to our staff here, and Mr. Baggett is more  
24 familiar with these matters. But we have information  
25 being introduced that isn't in your exhibits, and I

1 want be to clear about what we're doing here.

2 I don't know what else is coming through other  
3 slides, but I've been looking for some of this  
4 information and it's suddenly appearing. I'm  
5 delighted, but we need to take care of the process.

6 CO-HEARING OFFICER BAGGETT: So to understand  
7 it, this is just a graphic representation of what is  
8 already in?

9 MR. LAREDO: That's correct. This is just for  
10 summary purposes. We are not proposing to use this as  
11 evidence. This is a summary of Mr. Fuerst's testimony.

12 The data on this slide also derives from  
13 Stephanie Pintar's Exhibit 3 and Mr. Fuerst's written  
14 testimony. But this is only for demonstrative purposes  
15 to help facilitate the --

16 CO-HEARING OFFICER BAGGETT: As long as the  
17 underlying numbers are someplace in the exhibits. If  
18 you could refer to the exhibit, it would be very  
19 helpful.

20 CO-HEARING OFFICER WOLFF: They're not. He  
21 just told me that they're not. The underlying numbers  
22 aren't anywhere in the exhibits.

23 CO-HEARING OFFICER BAGGETT: I thought they  
24 were.

25 MR. FUERST: This slide, the numbers are in



1 the exhibit introduced by Mayor Pendergrass.

2 CO-HEARING OFFICER WOLFF: With an adjustment  
3 which we don't precisely know what the adjustment was.  
4 Perhaps we need to --

5 MR. FUERST: The adjustment would --

6 CO-HEARING OFFICER BAGGETT: Well, I have a  
7 solution. Let's hear from Mr. Fife first.

8 MR. FIFE: If I could try to offer to be  
9 helpful, we -- because of the questions that were  
10 raised during the cities' testimony yesterday about  
11 these numbers and providing these numbers, we had  
12 planned, on cross-examination of Mr. Fuerst, to offer  
13 into evidence an exhibit from the District's files that  
14 actually provides all of these numbers that we're  
15 discussing.

16 We were -- the purpose of the  
17 cross-examination was simply going to be to offer this.  
18 We could offer it now --

19 CO-HEARING OFFICER WOLFF: No, no, no. That's  
20 fine. We can --

21 CO-HEARING OFFICER BAGGETT: We will not allow  
22 this exhibit -- this slide into evidence. We  
23 understand it's demonstrative. I think there also is  
24 rebuttal, and there's an opportunity to bring this  
25 information in. So I think you can see this is very

1 important to this Board. Continue.

2 CO-HEARING OFFICER WOLFF: As long as there's  
3 a process for getting the information.

4 MR. LAREDO: Mr. Baggett, I'd like to  
5 emphasize that none of these slides are being offered  
6 into evidence. They are merely for demonstrative  
7 purposes to facilitate the presentation of the  
8 eight-member panel.

9 CO-HEARING OFFICER WOLFF: In fairness to the  
10 Sierra Club, one could have said the same thing  
11 yesterday, so --

12 MR. LAREDO: But they did not.

13 CO-HEARING OFFICER WOLFF: But I did, so.

14 STAFF ENGINEER MONA: Staff believes that  
15 while we are reviewing the testimony transcribed in the  
16 transcript, it would be very useful to have a copy of  
17 this PowerPoint available to assist in our review of  
18 that transcript; in fact, it could be useful to have a  
19 copy of this PowerPoint submitted as an exhibit just so  
20 that we can follow the transcript.

21 MR. LAREDO: May I suggest that we mark it for  
22 identification purposes? We will not be moving this  
23 into evidence unless requested to do so.

24 CO-HEARING OFFICER WOLFF: I'm not sure I want  
25 to sit here and listen to it if I can't rely on it in

1 any way. I'm not sure what good it does me.

2 MR. LAREDO: We're prepared to offer it into  
3 evidence if it will be accepted. With that, may I  
4 suggest you move to your slide number five which I  
5 believe is a reproduction --

6 CO-HEARING OFFICER BAGGETT: It's going to be  
7 like Dr. Williams. It will be slide-by-slide whether  
8 we allow this in or not.

9 MR. LAREDO: This, I believe, is a  
10 reproduction of your DF-10; is that accurate?

11 MR. SATO: May I say something? You know, to  
12 try to help the process along here, I think the  
13 Prosecution Team is probably prepared to stipulate that  
14 this can come in as evidence.

15 You know, if he wants to mark it right now for  
16 demonstration purposes, and then we can actually  
17 have -- after we see the slides and see what's in  
18 there, we'd be happy probably to stipulate, assuming  
19 there's nothing bizarre in the next few slides. We  
20 haven't seen any version of this slide show yet.

21 CO-HEARING OFFICER BAGGETT: Let's continue.

22 MR. FUERST: The next slide is derived from  
23 MPWMD DF-10. This is actually the right side of that  
24 table, and it's just been simplified for presentation  
25 purposes.

1           What it's trying to do is convert the  
2 percentages that have been discussed into actual acre  
3 feet. Because again, remember, we're talking about a  
4 percent reduction on a portion of the system. We're  
5 trying to look at this in an integrated manner.

6           And through the cease and desist order, that  
7 would be a reduction on Cal Am's diversions from the  
8 Carmel River. Those diversions account for about  
9 75 percent of Cal Am's supply to meet the community  
10 needs.

11           In addition, Cal Am gets 25 percent of their  
12 supply from the Seaside Basin. And so when you take  
13 percentages of different bases, you're going to get  
14 different numbers.

15           So this shows for water years from 2009  
16 through 2015 what the reductions would be as specified  
17 in the draft CDO. And when there would be a 15 percent  
18 reduction in the first two years, that would equate to  
19 1,693 that would need to be conserved or replaced.

20           Similarly, that would increase to a total of  
21 20 over the next two years, and that reflects a  
22 reduction requirement of 2,257, and that would change  
23 in 2013 to just under --

24           MR. LAREDO: Those units are in acre feet?

25           MR. FUERST: All in acre feet.

1           And in 2013 and -14, it would be 3,950. And  
2 then the last reduction called for in the draft CDO  
3 would occur at the beginning of water year 2015 which  
4 would be October of 2014, and that would be 5,643.

5           All of these percentages are off the current  
6 base of Cal Am's allowed to produce of 11,285 acre  
7 feet. So those are the reductions on the Carmel River  
8 side of Cal Am's operations.

9           The next slide --

10          MR. LAREDO: And again, this slide derives  
11 from Darby Fuerst, DF-10?

12          MR. FUERST: Correct.

13          And what -- this is a shortened version  
14 because DF-10 runs these reductions out from 2009 all  
15 the way through 2021 when the reductions are scheduled  
16 for the Seaside Basin adjudication. I've only run that  
17 out to 2015 here to conform with the proposed draft  
18 CDO.

19          And here you can see the percent reduction for  
20 all of the standard producers or really what are  
21 referred to as appropriators in the coastal area, the  
22 Seaside Groundwater Basin.

23          And what I'm showing under the acre foot  
24 column are reductions that will be borne by Cal Am in  
25 each of those years unless there are not -- unless

1 replacement sources are found.

2 As you can see, there will be a 313 acre foot  
3 reduction required starting this year. And then the  
4 next two years, it will go to 417, then in 2012 it will  
5 increase by 10 percent. It would go to 835 for three  
6 years. And then the third cut shown here is 2015, and  
7 the total -- the reduction would be 1,253.

8 I only note that the 2009 is different than  
9 the 10 and 11 because the reduction is only being  
10 applied in 9 of the 12 months of the water year.

11 So again, this is part of the calculus where  
12 there are reductions that could be imposed on the  
13 Carmel River Basin and also in the Seaside Groundwater  
14 Basin which would affect Cal Am's overall ability to  
15 meet the community needs.

16 MR. LAREDO: But DF-10 projects the Seaside  
17 Basin diversion reductions beyond 2015; isn't that  
18 correct?

19 MR. FUERST: That's correct.

20 MR. LAREDO: So how long will those reductions  
21 continue to take effect?

22 MR. FUERST: There would be an additional  
23 reduction in 2018 that would cause Cal Am to reduce by  
24 the 12 -- 1253 would go to eight -- 1,684. The final  
25 reduction would occur in 2021 at which time Cal Am

1 would be required to reduce its diversions from the  
2 coastal areas by 2.010 acre feet. They would have --  
3 they would have at that time the ability to produce  
4 1,494 acre feet.

5 The next chart just summarizes based on the  
6 current allowed amounts. In 2008, it is the  
7 11,285 acre feet from the Carmel River. That is the --  
8 on this chart, which shows for water years 2008 through  
9 2015 along the X axis; and then the Y axis is the  
10 number of acre feet that would remain for Cal Am  
11 customer service in their main system in the Monterey  
12 District following the proposed diversions -- diversion  
13 reductions in the draft CDO and the Seaside Basin  
14 adjudication.

15 The darker blue, the bottom part of the bar is  
16 what would remain from Carmel River and the underlying  
17 alluvial aquifer, and the upper part of each bar is  
18 what Cal Am could produce from the coastal subarea of  
19 the Seaside Groundwater Basin for its main system.

20 As you can see on the left-most bar for water  
21 year 2008, it -- the total is 14,789 acre feet. And  
22 that reflects the 11,285 for Carmel River and the  
23 3,504 acre feet Cal Am is allowed to produce from the  
24 coastal area.

25 And then you can see how the reductions are --

1 would be -- the reductions would affect the water  
2 remaining going from close to 15,000 in 2008 to under  
3 8,000 in 2015. And it's the District --

4 CHIEF COUNSEL TAYLOR: Pardon me. And where  
5 is this particular information found in your current  
6 testimony or exhibits?

7 MR. FUERST: This is derived from the previous  
8 slide which showed --

9 CHIEF COUNSEL TAYLOR: Two previous slides?

10 MR. FUERST: Yes.

11 CHIEF COUNSEL TAYLOR: Thank you.

12 MR. LAREDO: Could you clarify, I believe  
13 going on to the next set of slides, the District's  
14 position with respect to the key issues presented in  
15 this proceeding?

16 MR. FUERST: Yes.

17 As we understand the key issues identified by  
18 the State Board -- try to focus on those. Should the  
19 Board adopt the draft CDO? And if adopted, should any  
20 modifications be made to the measures in the draft CDO.  
21 And if modified, what is the basis for each  
22 modifications.

23 Next slide shows the District position as  
24 adopted in a resolution that was presented in my June  
25 testimony, is that the cease and desist order against



1 Cal Am should not be adopted as drafted. If it is  
2 adopted, the draft CDO should be modified so that the  
3 proposed diversion reductions are realistic,  
4 achievable, and most importantly do not jeopardize  
5 public health and safety in the Monterey Peninsula  
6 area.

7 In that regard, based on the current per  
8 capita per day amount of 70 gallons per person, which  
9 is reflected in my earlier testimony and the graph I  
10 showed and the standard proposed by the Prosecution  
11 Team, we believe that any further reductions would  
12 jeopardize the public health and safety of the  
13 Peninsula. So we're not recommending any further  
14 reductions at this point.

15 The next slide -- before I go to that point,  
16 we also feel it's important that any proposed reduction  
17 schedule should be modified to take into account the  
18 reductions that are specified for from the Seaside  
19 Basin that Cal Am may be required to make.

20 In addition, the proposed reductions should be  
21 tied to development of specific water supply  
22 alternatives. An example of those include both the  
23 District's and Cal Am's joint Phase 1 aquifer storage  
24 project that was described in my earlier testimony as  
25 well as the Phase 2 which we're just embarking on as

1 well as Cal Am's Coastal Water Project.

2 In addition, the District has requested --  
3 this was in my testimony in June -- that we focus on a  
4 smaller -- development of a smaller desalination plant  
5 in Seaside that could possibly come online sooner.

6 In addition, we're working with the Monterey  
7 Regional Water Pollution Control Agency on a recycling  
8 project which they refer to as a groundwater  
9 replenishment program. And you also heard about the  
10 DRA sponsored regional plan.

11 All of those are alternatives that, should  
12 they come online, whatever schedule is proposed should  
13 take account for those.

14 The next slide addresses while -- if Cal Am is  
15 allowed to continue its diversions, what measures  
16 should be taken to protect the Public Trust resources.

17 The District believes that additional  
18 mitigation measures to protect the Public Trust  
19 resources should be included in the draft -- should be  
20 included in the CDO during periods of continuing  
21 diversions. And special emphasis should be given to  
22 projects that either maintain or improve flow  
23 conditions during the low-flow season which is usually  
24 from June through November of each year.

25 The next slide.

1           More specifically -- and again, this is taken  
2 directly from Exhibit MPWMD DF-11. This is just the  
3 table, and you've seen this from earlier testimony.  
4 This doesn't have the dollar amounts and the schedule  
5 shown, but this is for presentation purposes, shows the  
6 mitigation measures that we have proposed, that we have  
7 developed based on direction from our Board and  
8 submitted to the National Marine Fisheries Service.

9           There are -- as you have heard, there are nine  
10 measures here. There's an original ranking from the  
11 National Marine Fisheries Service. That's from an  
12 interagency group which we participated on. And then  
13 on the left column are the ranks that we assigned to  
14 these nine projects that we feel would -- are in  
15 addition to the District's current mitigation  
16 program -- and these measures could help improve the  
17 condition of the steelhead.

18           The last slide I believe shows the witnesses  
19 that are here today and their related areas of  
20 expertise, and they are available to answer any  
21 questions, as am I.

22           MR. LAREDO: Thank you, Mr. Fuerst.

23           That concludes our case-in-chief.

24           CO-HEARING OFFICER BAGGETT: Okay.

25           I think what we will do is what we did in

1 Phase 1 where we reversed the order of the  
2 cross-examination and begin with Cal Am. Is that a  
3 problem with the parties?

4 And Mr. Rubin, do we want to continue now, or  
5 do you want to take a 30-minute lunch break and come  
6 back? What is the pleasure?

7 MR. RUBIN: I'm ready to cross-examine the  
8 witnesses, so whatever the Hearing Officers prefer.

9 CO-HEARING OFFICER BAGGETT: How long do you  
10 anticipate?

11 MR. RUBIN: More than 30 minutes, for sure.

12 CO-HEARING OFFICER WOLFF: And less than what,  
13 for sure?

14 MR. RUBIN: Five hours?

15 CO-HEARING OFFICER WOLFF: Come on. Do you  
16 have a sense --

17 MR. RUBIN: It's going to take quite a bit of  
18 time. We have eight witnesses. I believe I have  
19 questions for seven of the eight. My guess is it's  
20 going to take at least two hours.

21 This is critical, critical testimony here; and  
22 I think very important information could be elicited  
23 through cross-examination.

24 CO-HEARING OFFICER BAGGETT: I suspect the  
25 Prosecution Team has got more than one or two questions

1 also.

2 CO-HEARING OFFICER WOLFF: Shall we go off the  
3 record and discuss time?

4 (Discussion off the record)

5 CO-HEARING OFFICER BAGGETT: Let's go back on  
6 the record. We'll go for an hour and take --  
7 45 minutes, and then we'll take a break.

8 CO-HEARING OFFICER WOLFF: Mr. Rubin, I  
9 appreciate the meticulous way in which you prepare for  
10 cross-examination. But I would urge you to move to the  
11 important points as quickly as possible.

12 It isn't necessary to, for example, ask the  
13 witnesses, as you would in trial court, to verify that  
14 they said something that they already said and already  
15 submitted in writing. I understand that's necessary in  
16 other situations. But things like that, if you can  
17 speed things up here, I'd appreciate it.

18 MR. RUBIN: I will try to work through my  
19 questions; but obviously, part of the issue is to make  
20 sure that we have a clear record in case we need to  
21 rely upon it.

22 (Laughter)

23 MR. RUBIN: I will try to be quick. That's  
24 one of the reasons I try to prepare ahead of time, is  
25 so we can get to the questions we need to without undue

1 delay.

2 I have questions directed specifically to  
3 members of the panel. My first set of questions is  
4 directed towards Mr. Christensen.

5 MR. CHRISTENSEN: Yes.

6 MR. RUBIN: Mr. Christensen, is there a  
7 natural fluctuation in riparian habitat that occurs as  
8 hydrologic changes?

9 MR. CHRISTENSEN: Yes.

10 MR. RUBIN: During drier year types, the  
11 riparian habitat naturally reduces?

12 MR. CHRISTENSEN: Over prolonged times, yes.

13 MR. RUBIN: And conversely, during wetter year  
14 types, the riparian habitat naturally increases?

15 MR. CHRISTENSEN: Yes. To a certain point.

16 MR. RUBIN: Do you believe that the measures  
17 required under Order 95-10 are significantly  
18 contributing to the recovery of the Carmel River  
19 riparian corridor?

20 MR. CHRISTENSEN: I think it has helped by  
21 increasing the diversions and focusing the diversions  
22 downstream as opposed to being diverted at San Clemente  
23 Dam.

24 MR. RUBIN: So in response to my question, if  
25 you believe the measures required in Order 95-10 are

1 significantly contributing to the recovery of the  
2 Carmel River riparian corridor, you would agree?

3 MR. CHRISTENSEN: Yes. With the addition that  
4 we have been extremely lucky with the natural rainfall  
5 patterns in the last years since 1995.

6 MR. RUBIN: So if I understand your testimony  
7 today: You do believe that the measures required in  
8 Order 95-10 have improved the riparian corridor; the  
9 natural conditions have also contributed to the  
10 improvement of the corridor?

11 MR. CHRISTENSEN: That is correct.

12 MR. RUBIN: Now I believe as part of the  
13 testimony you provided on your background as well as in  
14 your written testimony, you indicated that multiple  
15 restoration projects have been undertaken since the  
16 issuance of Order 95-10; is that correct?

17 MR. CHRISTENSEN: That is correct.

18 MR. RUBIN: And have those restoration  
19 activities also contributed to the significant recovery  
20 of the riparian corridor?

21 MR. CHRISTENSEN: That is correct.

22 MR. RUBIN: Do you have a sense of how many  
23 restoration projects have been undertaken since Order  
24 95-10 was issued?

25 MR. CHRISTENSEN: Are you asking specifically

1 District projects, or projects performed by Caltrans or  
2 other interested parties?

3 MR. RUBIN: Let's start first with the  
4 District. How many activities, programs has the  
5 District implemented since Order 95-10 was issued that  
6 you believe have helped contribute to the significant  
7 recovery of the riparian corridor within the Carmel  
8 Valley river basin?

9 MR. CHRISTENSEN: We have the Red Rock  
10 project, and we have many informal activities such as  
11 planting along the banks and irrigating along those  
12 banks. But the biggest one was the Red Rock project,  
13 the All Saints project in 1999, and then smaller scale,  
14 less formal projects.

15 MR. RUBIN: I should be clear. I'm directing  
16 those questions to you because I understand from your  
17 testimony that it might be most appropriate. If  
18 there's somebody else on the panel that has more  
19 information, obviously feel free to supplement.

20 And you mentioned an irrigation project. The  
21 Monterey Peninsula Water Management District maintains  
22 a program to irrigate riparian habitat?

23 MR. CHRISTENSEN: That is correct.

24 MR. RUBIN: And the intent of the riparian  
25 habitat irrigation program is to avoid or minimize



1 stress that might otherwise be caused to the habitat?

2 MR. CHRISTENSEN: That is correct.

3 MR. RUBIN: Mr. Christensen, on page -- excuse  
4 me -- paragraph 6 of your written testimony which has  
5 been marked Monterey Peninsula Water Management  
6 District TC-1, you note floodplain development has  
7 affected storage capacity in San Clemente and Los  
8 Padres reservoirs; is that correct?

9 MR. CHRISTENSEN: Which page are you on?

10 MR. RUBIN: Paragraph 6. I believe it begins  
11 on page 3.

12 MR. LAREDO: Do you have a line reference?

13 MR. RUBIN: There's general discussion. I  
14 believe it begins on line 24, page 3 of your written  
15 testimony?

16 MR. CHRISTENSEN: Okay. I'll just read it:

17 A combination of floodplain development  
18 in the 16-mile alluvial section,  
19 trapping of sediment load behind the  
20 dams and the reservoir and gravel mining  
21 in the channel bottom downstream of the  
22 dams has led to incision as shown in  
23 Exhibit TC-3.

24 MR. RUBIN: So maybe you can characterize for  
25 me, what effect does floodplain development have --

1 excuse me; strike that.

2 What effect has floodplain development had on  
3 the riparian corridor?

4 MR. CHRISTENSEN: Well, when the floodplain is  
5 developed through agriculture or additional houses,  
6 riparian vegetation is often cleared and removed.  
7 People put in gardens. People put in lawns. Things of  
8 that nature.

9 MR. RUBIN: And you reference a 16-mile  
10 alluvial section. Can you describe that a little bit  
11 more?

12 MR. CHRISTENSEN: This 16-mile alluvial  
13 section is much wider than the canyon-controlled  
14 portion of the Carmel River in the upper watershed. So  
15 this is the area where we see wider stands of riparian  
16 vegetation, more opportunity for riparian vegetation.

17 MR. RUBIN: And specifically, like Rivermile  
18 marks --

19 MR. CHRISTENSEN: That would be from the ocean  
20 at Rivermile 0 and moving 16 miles upstream.

21 MR. RUBIN: Has floodplain development  
22 affected other sections of the Carmel River?

23 MR. CHRISTENSEN: Yes.

24 MR. RUBIN: How much of the Carmel River do  
25 you believe is affected by floodplain development,

1 approximately?

2 MR. CHRISTENSEN: Difficult to say without  
3 doing a GIS analysis, but there -- it depends on what  
4 we're talking about. If we're talking about the area  
5 of a roof, and then you want to include parking lots  
6 and things like that -- I don't have that answer.

7 MR. RUBIN: Okay. Do you believe that the  
8 Carmel River has been affected by gravel mining?

9 MR. CHRISTENSEN: Yes.

10 MR. RUBIN: In particular, you are of the  
11 opinion gravel mining has adversely affected the Carmel  
12 River riparian corridor?

13 MR. CHRISTENSEN: Historically, but it has not  
14 been an issue recently. It has not been a significant  
15 issue recently since 1995.

16 MR. RUBIN: Have floodplain structures such as  
17 levees been placed within the riparian areas of the  
18 Carmel River?

19 MR. CHRISTENSEN: Yes.

20 MR. RUBIN: Have roads been placed within the  
21 riparian areas of the Carmel River?

22 MR. CHRISTENSEN: Yes.

23 MR. RUBIN: Have homes been placed within the  
24 riparian areas of the Carmel River?

25 MR. CHRISTENSEN: Yes.

1           MR. RUBIN: Do floodplain structures within  
2 the riparian area adversely affect the riparian  
3 corridor of the Carmel River?

4           MR. CHRISTENSEN: Yes.

5           MR. RUBIN: And do roads within the riparian  
6 area adversely affect the riparian corridor of the  
7 Carmel River?

8           MR. CHRISTENSEN: Yes.

9           MR. RUBIN: Do homes placed within the  
10 riparian area adversely affect the riparian corridor of  
11 the Carmel River?

12          MR. CHRISTENSEN: Yes.

13          MR. RUBIN: Are there other activities within  
14 the riparian area that affect the riparian corridor?

15          MR. LAREDO: Could you be specific as to other  
16 activities?

17          MR. RUBIN: Is there anything that affects the  
18 riparian area other than what we discussed today that  
19 affects the riparian corridor of the Carmel River?

20                 Let me restate that. I apologize.

21                 We've discussed today a number of factors that  
22 are affecting the riparian corridor of the Carmel  
23 River, correct?

24          MR. CHRISTENSEN: Correct.

25          MR. RUBIN: Are there any other factors that

1 are affecting the riparian corridor of the Carmel River  
2 other than those we discussed today?

3 MR. CHRISTENSEN: Diversion of water. Maximum  
4 extent of groundwater withdrawal during the season.  
5 Illegal cutting. Off-road vehicles in the riparian  
6 corridor. And -- well, I'll stop there.

7 MR. RUBIN: Now in paragraph 12 of your  
8 written testimony, appears page 6 in your written  
9 testimony that has been marked as Monterey Peninsula  
10 Water Management District TC-1, you provide an example  
11 of the benefits to the riparian corridor caused by  
12 actions of the Monterey Peninsula Water Management  
13 District; is that correct?

14 MR. CHRISTENSEN: Are you referring to the  
15 table?

16 MR. RUBIN: Just the paragraph in general.  
17 Does it provide an example of the benefits to the  
18 riparian corridor caused by actions of the Monterey  
19 Peninsula Water Management District?

20 MR. CHRISTENSEN: That, and a change to  
21 diversion points along the Carmel River and fairly  
22 normal to wet years of rainfall.

23 MR. RUBIN: Paragraph 12 uses the word  
24 "example"; is that correct?

25 MR. CHRISTENSEN: Yes.

1           MR. RUBIN: Is it correct to state that by the  
2 use of "example" you are aware of other areas of the  
3 Carmel River that have benefitted from riparian  
4 corridor restoration projects?

5           MR. CHRISTENSEN: Yes.

6           MR. RUBIN: And some of those other projects  
7 you identified for us earlier?

8           MR. CHRISTENSEN: Yes.

9           MR. RUBIN: Paragraph 24 of your written  
10 testimony, Monterey Peninsula Water Management District  
11 TC-1, I believe you state that:

12                   The Monterey Peninsula Water Management  
13                   District revegetates bare banks and  
14                   violation areas.

15                   Is that correct?

16           MR. CHRISTENSEN: That's correct.

17           MR. RUBIN: Can you explain what you mean by  
18 violation area?

19           MR. CHRISTENSEN: We frequently have residents  
20 that either trim or remove riparian vegetation without  
21 benefit of a permit. So we contact those property  
22 owners and discuss revegetation plans and do  
23 revegetation to remedy the violation.

24           MR. RUBIN: And do you know how many  
25 violations have occurred since 1995?

1 MR. CHRISTENSEN: Hundreds.

2 MR. RUBIN: Mr. Christensen, I believe in  
3 paragraph 31 of your written testimony there is a  
4 reference to the California red-legged frog; is that  
5 correct?

6 MR. CHRISTENSEN: That's correct.

7 MR. RUBIN: Do you know if the population of  
8 the California red-legged frog within the Carmel River  
9 watershed has improved since 1995?

10 MR. CHRISTENSEN: No, I don't.

11 MR. RUBIN: On page 13 of your written  
12 testimony, Monterey Peninsula Water Management District  
13 TC-1, you indicate that:

14 The Monterey Peninsula Water Management  
15 District has been unable to demonstrate  
16 and filter out all of the factors that  
17 affect avian diversity as it relates to  
18 water extraction.

19 Is that correct?

20 MR. CHRISTENSEN: That is correct.

21 MR. RUBIN: Can one conclude from your  
22 statement that the Monterey Peninsula Water Management  
23 District does not understand the relationship between  
24 abundance of avian species within the Carmel River  
25 watershed and Carmel River water extractions by

1 California American Water?

2 MR. CHRISTENSEN: That is correct.

3 MR. RUBIN: Has the Monterey Peninsula Water  
4 Management District established a statistical  
5 relationship between riparian habitat used by  
6 California red-legged frog and Carmel River water  
7 extractions by California American Water?

8 MR. CHRISTENSEN: We have done small-scale  
9 analysis of the drawdown of off-channel pools  
10 associated with a drop in stage in the river. But  
11 there has not been a rigorous statistical analysis  
12 done.

13 MR. RUBIN: And the analysis that you just  
14 spoke of deals with drawdown of pools?

15 MR. CHRISTENSEN: Yes, that's drawdown of  
16 pools in the alluvial aquifer that are very dependent  
17 on the surface stage of the river.

18 MR. RUBIN: The work that's been done is not  
19 directly related to the population levels of red-legged  
20 frogs within the Carmel River Valley; is that correct?

21 MR. CHRISTENSEN: No. It's just at breeding  
22 sites.

23 MR. RUBIN: Has the Monterey Peninsula Water  
24 Management District established a statistical  
25 relationship between the quantity of riparian



1 vegetation and Carmel River water extractions by  
2 California American Water?

3 MR. CHRISTENSEN: Could you repeat the  
4 question?

5 MR. RUBIN: Sure.

6 Has the Monterey Peninsula Water Management  
7 District established a statistical relationship between  
8 the quantity of riparian vegetation and Carmel River  
9 water extractions by California American Water?

10 MR. CHRISTENSEN: We report what we find  
11 through the monitoring riparian vegetation in the  
12 riparian corridor monitoring reports which looks at how  
13 depth to groundwater is impacting vegetation moisture  
14 stress.

15 MR. RUBIN: But has -- ask my question one  
16 more time because I'm not sure if you answered it.

17 Has the Monterey Peninsula Water Management  
18 District established a statistical relationship between  
19 two factors, the first being the quantity of riparian  
20 vegetation and the second being Carmel River water  
21 extractions by California American Water?

22 MR. CHRISTENSEN: No.

23 MR. RUBIN: Is it correct to state that you  
24 hold the belief that it is difficult to assess the  
25 overall benefit to establish riparian habitat if

1 California American Water were ordered to reduce its  
2 diversions from the Carmel River as proposed by the  
3 Prosecution Team?

4 MR. CHRISTENSEN: That is correct. Without a  
5 surface and groundwater model that is linked, it would  
6 be difficult to establish that relationship at this  
7 time.

8 MR. RUBIN: Thank you. No further questions  
9 for you.

10 Next I have a series of questions for  
11 Mr. Urquhart.

12 MR. URQUHART: Very good.

13 MR. RUBIN: Mr. Urquhart, you are a fisheries  
14 biologist?

15 MR. URQUHART: That's correct.

16 MR. RUBIN: Were you present during the  
17 testimony of Ms. Ambrosius?

18 MR. URQUHART: Yes, I was.

19 MR. RUBIN: Do you agree that the steelhead  
20 are affected by a number of different factors within  
21 the Carmel River?

22 MR. URQUHART: Correct.

23 MR. RUBIN: And those factors include: Loss  
24 of habitat, climate change, recreational fishing, ocean  
25 conditions, predation, development, physical

1 impediments to fish passage, alterations of floodplain  
2 and channels, sedimentation, urban and rural waste  
3 discharge, and the spread and propagation of exotic  
4 species?

5 MR. URQUHART: I agree with all of those  
6 statements with the exception of three.

7 The abundance -- and I'll outline them if you  
8 want. The abundance of exotic species in the Carmel  
9 River is not great.

10 There are brown trout that are remnant in the  
11 watershed which were planted years ago by Department of  
12 Fish and Game. They eat a few steelhead. They are not  
13 highly abundant. They are not ubiquitous. In the  
14 lower river they -- we occasionally, and that means  
15 very rarely, find during our fish rescues green sunfish  
16 or even more rarely catfish, like less than a handful a  
17 year, less than five.

18 And so while those few rare species are there  
19 and do and obviously and will eat steelhead, it's not  
20 as in other watersheds of the state which are heavily  
21 infested with nonnative species.

22 The other factor you mentioned on the list was  
23 sport fishing. Sport fishing regulations over the last  
24 decades have been clamped down to extremely low levels.  
25 The anglers do not have contact with the fish on any

1 more than 20 percent of the possible migration time  
2 based on seasonal fishing restrictions, day fishing  
3 restrictions, et cetera. They use catch-and-release  
4 only; therefore, they do not harvest. And literature  
5 values show that the incidental harvest would be --  
6 effect would be less than a half percent on the -- in  
7 terms of increasing mortality, and the unpublished  
8 critical survey data from the Department of Fish and  
9 Game indicates that it takes more than two days of  
10 angler effort to catch or even contact one steelhead on  
11 the Carmel River. It also indicates that there are  
12 usually no -- usually less than ten anglers on any  
13 fishing day on the river, many times zero. Therefore  
14 angling, because of the depression of the population,  
15 has been reduced to a very minimal activity that could  
16 not possibly have any statistically measurable affect  
17 on the population any more because of those reasons.

18           And if you go through the list again -- oh,  
19 there was one other thing. Climate change.

20           Climate change is widely debated, large  
21 sections of scientists on both sides of the issue. In  
22 terms of climate change in the Carmel Valley, I have no  
23 studies available to me to indicate significant trends  
24 since, you know, Water Rights Order 95-10 or since the  
25 '60s that would have significantly or radically altered

1 the hydrology of the Carmel River.

2 Many people observe changes they attribute to  
3 things, but I have no scientific ability to address  
4 climate change on the Carmel River, and I don't believe  
5 anybody else does either.

6 MR. RUBIN: Let me touch one of your  
7 statements, talking about recreational fishing. You  
8 had an estimate or number that you presented that  
9 recreational fishing, mortality from recreational  
10 fishing results, out of .5 --

11 MR. URQUHART: No more than .5 percent  
12 mortality.

13 MR. RUBIN: And those are mortality generally  
14 of adult steelhead?

15 MR. URQUHART: Correct.

16 MR. RUBIN: And there if there was a thousand  
17 adult steelhead within the Carmel River, and those were  
18 affected by recreational fishing, how many of the  
19 thousand fish do you think would be killed based upon  
20 your testimony today?

21 MR. URQUHART: Sure.

22 It is -- if there were an intensive, you know,  
23 effort on the Carmel River, and anglers were out there,  
24 and they contacted every single one of those thousand  
25 fish, then five of them might possible die. Key word,

1 they would have to contact every single one of those  
2 thousand fish which they undoubtedly do not.

3 MR. RUBIN: Do you think the mortality caused  
4 by recreational fishing increases as the fish are  
5 stressed?

6 MR. URQUHART: The studies that I am aware of  
7 which are conducted on -- most cases -- on rainbow  
8 trout and, you know, implied actions to adult steelhead  
9 indicate that it's a factor of water quality  
10 conditions, extreme temperature, and et cetera. So if  
11 the water quality of the stream is stressing the fish,  
12 if they're not in cool water and good water quality,  
13 then angling will have an increased effect.

14 MR. RUBIN: Mr. Urquhart, you are of the  
15 opinion that prior to 1995 the steelhead population in  
16 the Carmel River was in immediate danger of extinction;  
17 is that correct?

18 MR. URQUHART: That's correct.

19 MR. RUBIN: You are of the opinion -- excuse  
20 me -- you held that opinion because of -- excuse me;  
21 strike that.

22 You hold the opinion today that because of  
23 improvements in abundance of steelhead in the Carmel  
24 River since 1995 the steelhead population in the Carmel  
25 River is no longer in immediate danger of extinction?

1           MR. URQUHART: That is correct. That doesn't  
2 mean that it's in good condition, but it's not on the  
3 verge of going extinct as it was -- as it appeared to  
4 be at the time that Water Rights Order 95-10 was  
5 written.

6           MR. RUBIN: Thank you. You believe that the  
7 improvements in the steelhead population since 1995 are  
8 attributable, at least in part, to the actions  
9 undertaken pursuant to Order 95-10?

10          MR. URQUHART: Yes, that's correct. As far as  
11 anyone could tell, cessation of the droughts, the fact  
12 that we have had moderately good water years for most  
13 of that time since Water Rights Order 95-10, only one  
14 particularly dry year, if I remember, looking at my  
15 water type table here, and various efforts by parties  
16 to improve the lot of steelhead.

17          MR. RUBIN: As a result of the improvements in  
18 the steelhead population since 1995, do you believe  
19 that if existing fishery management actions continue  
20 additional actions are not needed to avoid the  
21 immediate danger of extinction of the steelhead in the  
22 Carmel River?

23          MR. URQUHART: Yes, as long as drought  
24 conditions or multiple low-water year types to recur.

25          MR. RUBIN: It's your belief that additional

1 reductions in the amount of water California American  
2 Water extracts from the Carmel River are not needed as  
3 emergency measures, correct?

4 MR. URQUHART: Correct.

5 MR. RUBIN: How do you define "fully recover"?

6 MR. URQUHART: The recovery goals for  
7 steelhead I believe were presented by Ms. Ambrosius in  
8 her testimony by reference, referring to exhibits that  
9 she provided which were NOAA recovery plans. I can't  
10 off the top of my head give you the exact exhibit  
11 number.

12 MR. RUBIN: But it's your belief that  
13 additional measures for steelhead are only needed if  
14 you are seeking to fully recover the Carmel River  
15 steelhead population?

16 MR. URQUHART: Additional measures are needed  
17 to recover the steelhead population to a long-term  
18 stable level that does not pose any risk of extinction,  
19 and additional measures are needed to reduce any  
20 existing risk of extinction.

21 MR. RUBIN: To fully recover the Carmel River  
22 steelhead, would it be necessary to address many, if  
23 not all, of the factors affecting the species?

24 MR. URQUHART: To fully recover the steelhead  
25 to the targets in the reports presented by the National



1 Marine Fisheries Service, you would have to address the  
2 primary factors, the major ones. Not necessarily all  
3 of them.

4 MR. RUBIN: Now in your testimony, you suggest  
5 that the State Water Resources Control Board consider  
6 an annual steelhead population number as a trigger for  
7 reductions in California American Water diversion from  
8 the Carmel River?

9 MR. URQUHART: I suggested that as one of the  
10 alternatives that the Board could consider, both  
11 because it would provide ecological justification for  
12 severe conservation restrictions, essentially creating  
13 a regulatory drought, buzzword some use, and that the  
14 public being more supportive and cooperative of those  
15 actions if they could see a reason for it, and using  
16 fisheries triggers could be a reason to convince the  
17 public to cooperate with severe restrictions.

18 MR. RUBIN: Mr. Urquhart, I try to present my  
19 questions so that they allow for a yes-or-no answer --

20 MR. URQUHART: I will do better.

21 MR. RUBIN: -- and if you can, great. And I  
22 understand the general rules of the Board, if it needs  
23 an explanation, you can provide that but --

24 MR. URQUHART: Move things along.

25 MR. RUBIN: -- it makes it faster if you can

1 give a yes-or-no, and if an explanation is needed,  
2 please provide it.

3           Again, there are many factors that affect the  
4 population number of steelhead in the Carmel River?

5           MR. URQUHART: Correct.

6           MR. RUBIN: Because of the numerous factors  
7 affecting the Carmel River steelhead, changes in the  
8 level of extractions by California American Water may  
9 not have an impact on the population level of steelhead  
10 in the Carmel River; is that correct?

11           MR. URQUHART: No.

12           MR. RUBIN: You cannot quantify the benefit to  
13 the abundance of steelhead in the Carmel River if there  
14 were a 35 percent reduction in California American  
15 Water extractions from current levels, can you?

16           MR. URQUHART: I -- my testimony, I made an  
17 estimate to show how much habitat might be rewatered.  
18 I also made an estimate to show if habitat were  
19 permanently rewatered roughly how many juvenile or  
20 adult fish might be produced.

21           One can utilities those to come up with such  
22 an estimate but I did not do so in a direct manner. I  
23 didn't say X fish for the 15 percent reduction, X fish  
24 for the 20.

25           MR. RUBIN: Let's talk a little bit about the

1 calculations that you performed and are reflected in  
2 your testimony. Would you consider those rigorous  
3 calculations or analysis?

4 MR. URQUHART: I would consider them bare  
5 bones, arithmetic ways of estimating.

6 MR. RUBIN: If you submitted those  
7 calculations as part of a scientific paper, do you  
8 think they would withstand peer review?

9 MR. URQUHART: I think that one of them might.  
10 I think the other, people would say that more rigorous  
11 methodologies would be more appropriate, and they would  
12 ask for those to be done.

13 MR. RUBIN: Were you here yesterday when the  
14 mayors from the municipalities testified?

15 MR. URQUHART: Correct.

16 MR. RUBIN: Would you rely upon the analysis  
17 you did to support a decision that might result in the  
18 impacts that were discussed yesterday?

19 MR. LAREDO: Objection; that calls for a  
20 conclusion that's beyond the scope of the expertise of  
21 this witness.

22 MR. URQUHART: Correct.

23 MR. RUBIN: I'll move on.

24 Can you quantify any benefit to the abundance  
25 of steelhead in the Carmel River if there was a

1 50 percent reduction in California American Water  
2 extractions from current levels?

3 MR. URQUHART: To the degree that such  
4 reduction caused permanent water to occur farther  
5 downstream in any water year type than it currently  
6 does for a year-round basis, it would result in  
7 additional smolt production which could be assumed to  
8 result in additional adult production. Without better  
9 modeling of exactly how much would be produced by those  
10 things, I can't give you an exact number.

11 MR. RUBIN: So in order to give an exact  
12 number, you would need a model?

13 MR. URQUHART: As a fisheries biologist who  
14 is, you know, on the entry level familiar with  
15 geomorphology and those issues, I would assume that I  
16 would have to rely on an engineering geologist or a  
17 registered hydrologist to produce a model that could  
18 more accurately predict how far down the reductions  
19 would create permanent habitat than were roughly  
20 predicted by my crude analysis.

21 MR. RUBIN: And your testimony today is not  
22 based upon any such modeling?

23 MR. URQUHART: No.

24 MR. RUBIN: Now, in response to a couple of  
25 questions i just recently asked, you used the word

1 "assumption" quite frequently.

2 MR. URQUHART: Correct.

3 MR. RUBIN: In terms of your calculations, you  
4 make a number of assumptions?

5 MR. URQUHART: Correct.

6 MR. RUBIN: Have you tested whether your  
7 assumptions are valid assumptions?

8 MR. URQUHART: It's not possible always to  
9 test all assumptions. Sometimes just we just apply the  
10 logic.

11 MR. RUBIN: One of the assumptions that you've  
12 made is that if California American Water's extractions  
13 are reduced, there would be no additional extractions  
14 by any other person or entity; is that correct?

15 MR. URQUHART: That is correct.

16 MR. RUBIN: Do you know if after Order 95-10  
17 was issued if extractions of Carmel River by persons or  
18 entities other than California American Water  
19 increased?

20 MR. URQUHART: That question, I don't have --  
21 I'm not familiar with that data.

22 MR. RUBIN: Pardon me for one second. Trying  
23 to go through some questions I'll ask a different  
24 witness later, hopefully expedite things.

25 CO-HEARING OFFICER WOLFF: I appreciate your

1 attentiveness to my concern.

2 MR. RUBIN: As extractions by California  
3 American Water decrease, is it possible that people and  
4 entities within the Monterey Peninsula will extract  
5 water on their own?

6 MR. LAREDO: Objection; calls for speculation,  
7 and it's beyond the expertise of this witness.

8 CO-HEARING OFFICER BAGGETT: Sustained.

9 MR. RUBIN: We've had some discussion about  
10 Order 95-10. Is it correct to state that you are  
11 familiar with Order 95-10?

12 MR. URQUHART: I've read it. I'm familiar  
13 with it. I don't have it memorized.

14 MR. RUBIN: Are you aware that the State Water  
15 Resources Control Board found in Order 95-10 that  
16 downstream of Rivermile 15 of Carmel River the aquifer  
17 underlying and closely paralleling the surface water  
18 sources of the Carmel River is water flowing in a  
19 subterranean stream and subject to the jurisdiction of  
20 the State Water Resources Control Board?

21 MR. URQUHART: Yes.

22 MR. RUBIN: Do you agree with that finding?

23 MR. LAREDO: Objection. It's not relevant for  
24 this proceeding. Whether he agrees with it, 95-10 is  
25 the order of this Board.

1           MR. RUBIN: I'm trying to lay some foundation  
2 and the foundation deals with the conduct -- the  
3 connection, excuse me -- between surface and subsurface  
4 flow. And I think that is extremely relevant to the  
5 testimony this witness provided because he made a -- he  
6 provided testimony that makes an assumption that as  
7 extractions from subsurface water occur surface water  
8 will be produced. So these are foundational issues  
9 that I'm trying to raise.

10           CO-HEARING OFFICER BAGGETT: Sustain the  
11 objection, but rephrase. I understand where you're  
12 going. Just rephrase the question or get directly to  
13 your question.

14           MR. RUBIN: Do you believe that the flow in  
15 the Carmel River -- surface water flow in the Carmel  
16 River is related to subsurface flow of Carmel River?

17           MR. URQUHART: Yes.

18           MR. RUBIN: And you agree that California  
19 American Water extracts the majority of its Carmel  
20 River water supplies from wells?

21           MR. URQUHART: To my knowledge, on the Carmel,  
22 that is correct.

23           MR. RUBIN: And therefore, if the State Water  
24 Resources Control Board were to order California  
25 American Water to reduce its extractions California

1 American Water would likely reduce pumping from one or  
2 more of the wells it owns and operates?

3 MR. URQUHART: That is my assumption.

4 MR. RUBIN: And therefore reducing California  
5 American Water's extraction would leave more water in  
6 the ground?

7 MR. URQUHART: Correct.

8 MR. RUBIN: Is it a common approach to assess  
9 factors affecting fish resources using regression  
10 analyses?

11 MR. URQUHART: It's one method we use if the  
12 data is appropriate. It's also one that's severely  
13 abused.

14 MR. RUBIN: But it's a common approach?

15 MR. URQUHART: Correct.

16 MR. RUBIN: Have you attempted to employ a  
17 regression analysis to determine if there's a  
18 statistical relationship between California American  
19 Water extractions and Carmel River steelhead abundance?

20 MR. URQUHART: We have no quantitative  
21 estimate of Carmel River steelhead abundance to conduct  
22 such analysis. We have an index passage number at the  
23 dams. That's it.

24 MR. RUBIN: Mr. Urquhart, in paragraph 18 of  
25 your written testimony that appears on page 9, I



1 believe you attempt to estimate how many more juvenile  
2 and adult steelhead might exist in the Carmel River if  
3 additional reaches of the Carmel River remained wet; is  
4 that correct?

5 MR. URQUHART: Yes, correct.

6 MR. RUBIN: And your estimate again is based  
7 on a number of assumptions?

8 MR. URQUHART: Correct. It's based on numbers  
9 shown in Exhibit 5. Flipping to it to double-check the  
10 number. Sorry KU-6B, column Lower River Sites and  
11 column Scarlett Narrows.

12 MR. RUBIN: We spoke earlier regarding the  
13 analysis that you did, calculations that you performed  
14 that support these statements; is that correct?

15 MR. URQUHART: Yes, sir.

16 MR. RUBIN: And these statements are the ones  
17 that appear on page 9 of your written testimony?

18 MR. URQUHART: Correct, sir.

19 MR. RUBIN: Did you apply any analytical tools  
20 to understand the interaction between reductions in  
21 extraction of groundwater by California American Water  
22 and Carmel River surface flows?

23 MR. URQUHART: No, sir.

24 MR. RUBIN: Mr. Urquhart, you identified  
25 dredging of Los Padres Reservoir as an effective

1 mitigation; is that correct?

2 MR. URQUHART: Yes, sir.

3 MR. RUBIN: Did you consider any legal  
4 requirements that must be met prior to the dredging of  
5 Los Padres Reservoir before making your recommendation?

6 MR. URQUHART: I'm aware that all new projects  
7 of any kind are subject to CEQA and environmental laws  
8 and permitting. So regardless of whether it's a  
9 fisheries restoration project or dredging project, all  
10 of them are subject to environmental laws.

11 MR. RUBIN: Therefore if the State Board were  
12 to order dredging -- excuse me; strike that.

13 Therefore, if the State Water Resources  
14 Control Board were to order California American Water  
15 to dredge Los Padres Reservoir, there would be legal  
16 requirements?

17 MR. URQUHART: Yes.

18 MR. RUBIN: Are you familiar with the 1990  
19 final Environmental Impact Report for the Monterey  
20 Peninsula Water Management District water allocation  
21 program?

22 MR. URQUHART: To some degree. I don't have  
23 memorized.

24 MR. RUBIN: Has the Environmental Impact  
25 Report been modified by the final report implementation

1 plan for the Monterey Peninsula Water Management  
2 District mitigation program?

3 MR. URQUHART: To my knowledge, yes.

4 MR. RUBIN: Are you familiar with the internal  
5 relief program that the Monterey Peninsula Water  
6 Management District has?

7 MR. URQUHART: I was not here at the time. I  
8 don't have the familiarity with it.

9 MR. RUBIN: Do you know if the interim relief  
10 program expired in 1993?

11 MR. URQUHART: I don't know.

12 MR. RUBIN: Does anyone on the panel know if  
13 the interim relief plan expired in 1993?

14 MR. FUERST: It's my understanding it did  
15 expire, and it was subsumed by the District's  
16 mitigation program.

17 MR. RUBIN: That was my next question.

18 So elements of the interim relief plan carried  
19 forward as elements of the 1990 final Environmental  
20 Impact Report for water allocation program as modified  
21 by the final report implementation plan for the  
22 Monterey Peninsula Water Management District mitigation  
23 program?

24 MR. FUERST: Yes.

25 MR. RUBIN: Now Mr. Urquhart, I believe that

1 you testified that all of the requirements resulting  
2 from the 1990 final Environmental Impact Report for the  
3 Monterey Peninsula Water Management District water  
4 allocation program as modified by the final report  
5 implementation plan for the Monterey Peninsula Water  
6 Management District are being satisfied?

7 MR. URQUHART: Yes, sir.

8 MR. RUBIN: Do you know if the 1990 allocation  
9 EIR -- excuse me; strike that.

10 Do you know if the 1990 final Environmental  
11 Impact Report for the Monterey Peninsula Water  
12 Management District's water allocation program is  
13 sometimes referred to in shorthand as the 1990  
14 allocation EIR?

15 MR. URQUHART: I believe it is.

16 MR. RUBIN: Thank you. No further questions  
17 for you.

18 CO-HEARING OFFICER BAGGETT: Let's break for  
19 lunch. We'll recess for 30 minutes and come back.

20 (Lunch recess)

21

22

23

24

25

1                                   AFTERNOON SESSION

2                                   --oOo--

3                   CO-HEARING OFFICER BAGGETT:  Okay, ready?

4  Let's go back on the record.  15 minutes, right?

5                   Mr. Rubin, you're up.

6                   MR. RUBIN:  I think we left off where I was  
7  turning questions to Mr. Oliver.

8                   Mr. Oliver, are you familiar with the process  
9  the Monterey Peninsula Water Management District and  
10 California American Water followed to obtain the water  
11 rights for the Aquifer Storage and Recovery Project  
12 Phase 1?

13                  MR. OLIVER:  I was somewhat involved in that.

14                  MR. RUBIN:  Did the Monterey Peninsula Water  
15 Management District file a petition to change permits  
16 in order to allow for the Aquifer Storage and Recovery  
17 Project Phase 1?

18                  MR. LAREDO:  Mr. Rubin, I believe these  
19 questions as to water rights for the ASR project might  
20 be better answered by Mr. Fuerst.

21                  MR. RUBIN:  Okay.  My question was:  Did the  
22 Monterey Peninsula Water Management District file a  
23 petition to change permits in order to allow for the  
24 Aquifer Storage and Recovery Project Phase 1?

25                  MR. FUERST:  Yes.

1           MR. RUBIN: Just for the ease of questions,  
2 the Aquifer Storage and Recovery Project is often  
3 referred to as the ASR?

4           MR. FUERST: That's correct.

5           MR. RUBIN: During that process did the NOAA  
6 Fisheries file a protest in opposition to the Monterey  
7 Peninsula Water Management District's petition?

8           MR. FUERST: Yes, they did.

9           MR. RUBIN: Did the NOAA Fisheries complaint  
10 indicate it would withdraw its protest in part if the  
11 ASR Phase 1 water savings were used to offset  
12 diversions by California American Water from the Carmel  
13 River?

14          MR. FUERST: Yes.

15          MR. RUBIN: Did the NOAA Fisheries request the  
16 State Water Resources Control Board permit for ASR  
17 Phase 1 require water developed by the Monterey  
18 Peninsula Water Management District and California  
19 American Water through Phase 1 of the ASR project to  
20 offset the California American Water Carmel River  
21 diversions?

22          MR. FUERST: That's a long question.

23                 They required that. It's not in the permit.  
24 It is in the side agreement between California American  
25 Water, the District, the National Marine Fisheries

1 Service and the California Department of Fish and Game.

2 MR. RUBIN: And I should assume by your  
3 reference there California American Water agreed to the  
4 terms and conditions requested by NOAA Fisheries?

5 MR. FUERST: Yes.

6 MR. RUBIN: Were the terms and conditions at  
7 any point presented to the State Water Resources  
8 Control Board Division of Water Rights?

9 MR. FUERST: Yes, they were.

10 MR. RUBIN: Do you know if the State Water  
11 Resources Control Board Division of Water Rights agreed  
12 to include the terms and conditions in the water right  
13 permit?

14 MR. FUERST: The State Water Resources Control  
15 Board water rights staff included the terms and  
16 conditions regarding diversions from the Carmel River  
17 for injection. They did not include the conditions on  
18 the recovery of the water from the Seaside Groundwater  
19 Basin.

20 MR. RUBIN: Thank you.

21 Now I'm going to ask some specific questions  
22 regarding ASR Phase 1. And again, I'll direct them to  
23 Mr. Oliver; but if Mr. Fuerst is more knowledgeable  
24 about the answer, then please feel free to provide the  
25 answer, Mr. Fuerst.

1           The annual average quantity of water that can  
2 be recovered from the Seaside Basin as a part of the  
3 Phase 1 ASR is 920 acre feet; is that correct?

4           MR. OLIVER: Yes. That's the incremental firm  
5 yield from the project.

6           MR. RUBIN: The annual expected range of water  
7 that can be recovered from the Seaside Basin as part of  
8 the Phase 1 ASR is from approximately 30 acre feet to  
9 1500 acre feet; is that correct?

10          MR. OLIVER: No. The annual range would be --  
11 potentially, it could be 0 in a year where no  
12 diversions are allowed. And the maximum diversion  
13 could be up to 2,426 acre feet per year.

14          MR. RUBIN: And let me -- let's just talk  
15 about that 2,426 acre foot number.

16                 It's your understanding that 2,426 acre feet  
17 of water can be recovered from the Seaside Basin as  
18 part of ASR Phase 1?

19          MR. OLIVER: No, I might have misunderstood  
20 your question. The maximum that could be recovered  
21 would be 1500 acre feet per year.

22          MR. RUBIN: So the range of water that could  
23 be recovered from the Seaside Basin, brought out of the  
24 Seaside Basin, the range is from 0 to 1500 acre feet in  
25 any particular year?



1 MR. OLIVER: Yes.

2 MR. RUBIN: Have you reviewed the testimony of  
3 Mr. Mark Stretars submitted by the Prosecution Team for  
4 the second phase of the proceeding.

5 MR. OLIVER: I have not.

6 MR. RUBIN: Were you here when Mr. Stretars  
7 testified?

8 MR. OLIVER: Yes.

9 MR. RUBIN: Do you recall Mr. Stretars  
10 testifying that he believes the State Water Resources  
11 Control Board should count towards the 11285 diversion  
12 limit set in Order 95-10 water recovered from the  
13 Seaside Basin pursuant to the ASR Phase 1 program?

14 MR. OLIVER: I don't specifically recall  
15 listening to that.

16 MR. RUBIN: Is ASR Phase 1 operating in the  
17 2008 water year?

18 MR. OLIVER: Yes. Not to its full capacity,  
19 but we did divert water this year.

20 MR. RUBIN: I'm going to ask you a few  
21 questions about that issue. In the 2007 water year,  
22 how much water was recovered from the Seaside Basin as  
23 a result of Phase 1 ASR?

24 MR. OLIVER: From the -- in water year 2007,  
25 the Phase 1 ASR project was not active yet. But we did

1 have a test program, temporary permit, from the State  
2 Water Resources Control Board. And at the facility, no  
3 water, zero acre feet, were recovered during that year.

4 MR. RUBIN: Okay. As a result of ASR Phase 1,  
5 how much water is anticipated being recovered from the  
6 Seaside Basin in the 2008 water year?

7 MR. OLIVER: Again, from the ASR facility,  
8 Phase 1 facilities, recovered into Cal Am system,  
9 zero acre feet.

10 MR. RUBIN: Do you know how much is projected  
11 to be recovered pursuant to the ASR Phase 1 project  
12 next water year?

13 MR. OLIVER: No, I don't. Because it's  
14 something that we would discuss specifically as part of  
15 our quarterly water supply budget process.

16 MR. RUBIN: Thank you. I have no further  
17 questions for you.

18 Mr. Fuerst, I now will direct some questions  
19 to you. On page 6 of your written testimony which I  
20 believe has been marked as Monterey Peninsula Water  
21 Management District DF-9A, you state that it is  
22 difficult to recommend a specific reduction schedule  
23 that will not jeopardize public health and safety; is  
24 that correct?

25 MR. FUERST: That's correct.

1           MR. RUBIN: You explain that you have  
2 difficulty recommending a specific reduction schedule  
3 that will not jeopardize public health and safety  
4 because you are uncertain -- because of uncertainties  
5 in estimating conservation savings and the availability  
6 of replacement water supplies, correct?

7           MR. FUERST: Correct.

8           MR. RUBIN: Exhibit Monterey Peninsula Water  
9 Management District DF-12 I believe is report prepared  
10 by the Monterey Peninsula Water Management District  
11 community advisory committee; is that correct?

12          MR. FUERST: Yes. It's an ad hoc citizen's  
13 advisory committee.

14          MR. RUBIN: Did the community advisory  
15 committee consider how the draft cease and desist order  
16 prepared by the Prosecution Team could be modified?

17          MR. FUERST: Yes. The committee which is made  
18 up of 14 members from the community, two selected by  
19 each of the seven Board Members, were asked to evaluate  
20 the impacts -- the potential impacts on the community  
21 that could occur if the cease and desist order were  
22 adopted.

23          MR. RUBIN: The community advisory committee  
24 did not consider whether it was lawful or appropriate  
25 for the State Water Resources Control Board to issue a

1 cease and desist order against California American  
2 Water, did it?

3 MR. FUERST: There was no legal analysis done.  
4 During the committee meetings, there was a question of  
5 whether the State Water Resources Control Board had  
6 that legal authority.

7 MR. RUBIN: But did the community advisory  
8 committee determine a cease and desist order should  
9 issue, and therefore they were considering the remedy?

10 MR. FUERST: No. The District's community  
11 advisory committee agreed that the cease and desist  
12 order should be modified. In the exhibit MPWMD DF-12  
13 on page 139, their findings are summarized in the  
14 executive summary.

15 MR. RUBIN: Mr. Fuerst, I believe in your  
16 written testimony you state that the residential water  
17 users in California American Water's main system are  
18 among the most frugal in California?

19 MR. FUERST: That's correct.

20 MR. RUBIN: Can you explain what you mean by  
21 the most frugal?

22 MR. FUERST: Those having the -- among the  
23 lowest per capita daily use in the state of California.

24 MR. RUBIN: I'm going to get back to that in a  
25 second. I believe this is in paragraph 12 of your

1 written testimony which appears on page 6, Monterey  
2 Peninsula Water Management District DF-9A. You  
3 estimate that the actual use of water by each resident  
4 on the Monterey Peninsula is approximately 68 gallons  
5 per day; is that correct?

6 MR. FUERST: That's correct.

7 MR. RUBIN: Is that estimate based on the 2007  
8 water year?

9 MR. FUERST: That's actually based on  
10 information provided by Cal Am that their average  
11 single-family residential use per connection is 170 --  
12 is seven units. A unit being 100 cubic feet.

13 Therefore, when we do the conversion, each  
14 single-family residential unit uses 170 gallons per  
15 day, and then using a census-weighted average that was  
16 provided to us from the Association of Monterey Bay  
17 Area Governments that 2.4 residents per connection,  
18 that -- 2.54, excuse me -- residents per single-family  
19 residence, that calculates to 68 gallons per day.

20 And that is very consistent with the data that  
21 I showed earlier for water year 2007. The average in  
22 that particular year, based on specific metered data,  
23 was 70.1.

24 MR. RUBIN: Have you reviewed the testimony of  
25 Mr. Mark Stretars which was marked and admitted into

1 evidence as Prosecution Team 49?

2 MR. FUERST: Yes.

3 MR. RUBIN: Do you recall Mr. Stretars  
4 determining that actual water use by each resident on  
5 the Monterey Peninsula of approximately 75 gallons per  
6 person is protective of public health and safety?

7 MR. FUERST: Yes.

8 MR. RUBIN: Mr. Stretars used the 75 gallon  
9 per person of actual water use to conclude that  
10 California American Water can reasonably achieve a 35  
11 percent and a 50 percent reduction in diversions from  
12 the Carmel River without jeopardizing public healthy;  
13 is that correct?

14 MR. FUERST: Yes.

15 MR. RUBIN: Mr. Stretars' conclusion, in your  
16 opinion -- excuse me; strike that.

17 Does Mr. Stretars assume any deliveries of  
18 water for landscape uses?

19 MR. FUERST: No. He does not.

20 MR. RUBIN: Does Mr. Stretars assume any  
21 deliver of water for commercial uses?

22 MR. FUERST: It's my understanding he does  
23 not.

24 MR. RUBIN: Does Mr. Stretars assume any  
25 delivery of water for municipal use?

1 MR. FUERST: No, he does not.

2 MR. RUBIN: Based on the explanation provided  
3 by Mr. Stretars -- let me strike that.

4 Mr. Fuerst, were you here when Mr. Stretars  
5 testified?

6 MR. FUERST: Yes I was.

7 MR. RUBIN: Based upon the written and oral  
8 explanation provided by Mr. Stretars, do you agree that  
9 the Monterey Peninsula could withstand a 35 percent  
10 reduction in water supply without jeopardizing public  
11 health and safety?

12 MR. FUERST: No, I do not.

13 MR. RUBIN: Based upon the oral and written  
14 testimony of Mr. Stretars, do you believe that the  
15 Monterey Peninsula could withstand a 50 percent  
16 reduction in water supply without jeopardizing public  
17 health and safety?

18 MR. FUERST: No.

19 MR. RUBIN: In fact, you believe that even a  
20 15 percent reduction in the Carmel River diversion  
21 would jeopardize public health and safety?

22 MR. FUERST: Correct, a further 15 percent  
23 reduction. There has been a reduction that has already  
24 occurred because of the original Order 95-10.

25 MR. RUBIN: For the purposes of the last three

1 questions I asked, were you assuming a diversion from a  
2 level of 11,285 by either 30 percent, 50 percent or  
3 15 percent?

4 MR. FUERST: Yes.

5 MR. RUBIN: Are you familiar with the Monterey  
6 Peninsula Water Management District's Expanded Water  
7 Conservation and Standby Rationing Plan?

8 MR. FUERST: Yes, I am.

9 MR. RUBIN: Is that plan reflected in the  
10 Monterey Peninsula Water Management District's rules  
11 160 to 167?

12 MR. FUERST: Yes.

13 MR. RUBIN: Does the Monterey Peninsula Water  
14 Management District have to take official action before  
15 Stage 3 conservation could occur?

16 MR. FUERST: Yes, we do. We notify both Cal  
17 Am and the public.

18 MR. RUBIN: And in order for the Notice by the  
19 Monterey Peninsula Water Management District to issue,  
20 does the Board of Directors have to act?

21 MR. FUERST: I don't believe so.

22 MR. RUBIN: According to the conservation  
23 plan, what is intended to be achieved when the Monterey  
24 Peninsula Water Management District imposes Stage 3  
25 conservation?



1           MR. FUERST: Stages 1 through 3 are intended  
2 to keep Cal Am within the regulatory limit set by  
3 95-10. So it's looking for an overall reduction of  
4 15 percent based on the water use that was occurring in  
5 1995.

6           MR. RUBIN: Let me -- this is one area I  
7 didn't understand some of the rules. Is Stage 3  
8 conservation intended to reduce water use by 15 percent  
9 to bring the community to a level of 11,285 acre feet?

10          MR. FUERST: Yes.

11          MR. RUBIN: When the Monterey Peninsula Water  
12 Management District adopted its Expanded Water  
13 Conservation and Standby Rationing Plan, did the  
14 Monterey Peninsula Water Management District anticipate  
15 the plan would be used to achieve reductions imposed  
16 for regulatory action?

17          MR. FUERST: It anticipated the regulatory  
18 action that had occurred with respect to the 11,285 on  
19 the Carmel River side. It had been adjusted to account  
20 for regulatory or court action in the Seaside Basin  
21 groundwater basin. Beyond that, no.

22          MR. RUBIN: Therefore when the different  
23 stages of conservation apply that are set forth in the  
24 Expanded Water Conservation and Standby Rationing Plan,  
25 it is intended to assume that existing regulatory

1 requirements, legal requirements exist, but it's  
2 intended to address drought conditions?

3 MR. FUERST: Or emergency conditions of some  
4 type.

5 MR. RUBIN: By emergency conditions, what do  
6 you mean?

7 MR. FUERST: If there was an earthquake, for  
8 example.

9 MR. RUBIN: An act of God?

10 MR. FUERST: Yes. Interruption in service.

11 MR. RUBIN: Thank you.

12 Mr. Fuerst, I would like to ask you a few more  
13 questions. Turning back to water use within the  
14 Monterey Peninsula community, do you know what the  
15 average gallons per person per day are for all uses of  
16 water within the Monterey Peninsula community?

17 MR. FUERST: Yes.

18 MR. RUBIN: Can you explain what they are and  
19 what your --

20 MR. FUERST: Right. Based on water year 2007,  
21 consumption and production data supplied to the  
22 District, if you take Cal Am's total production of  
23 metered sales and divide by the number of residents  
24 that have been estimated to be served, 11,500, it's  
25 just under 100 gallons. It's 99 gallons per person per

1   capita per day, inclusive of all water use categories.

2                   That does not include unaccounted-for water.

3   If you include that -- because that's just using the  
4   metered sales.  If you go to the production meters and  
5   do the same calculations, it's 113 gallons per capita  
6   per day.

7                   MR. RUBIN:  And is that a standard kind of  
8   calculation that's used for water supply planning  
9   purposes?

10                  MR. FUERST:  It is, but it's somewhat  
11   misleading in that different communities have a  
12   different mix of commercial, industrial, so forth.

13                  MR. RUBIN:  Sure.  Let's talk about other  
14   communities.  You testified today that, even with  
15   unaccounted for losses, the community as a whole is  
16   using approximately 113 gallons per person per day?

17                  MR. FUERST:  Yes.

18                  MR. RUBIN:  Do you know what other communities  
19   in California use?

20                  MR. FUERST:  I -- no, but I know it's on the  
21   order of between 1- to 200 gallons per capita per day.  
22   My reference would be the state water bulletin.

23                  Excuse me.  100 to 200 gallons per person per  
24   day.

25                  MR. RUBIN:  And you were saying something

1 about a bulletin?

2 MR. FUERST: I would say my -- the reference  
3 that I would refer to is the State of California  
4 bulletin 160-98. They have data compiled in that  
5 document which shows urban use, which would be what I  
6 refer to as residential specific, and then total urban  
7 water use, which would be all use factors.

8 And the total urban water use, I believe, is  
9 on the order of 200 to 300 gallons per capita per day.

10 MR. RUBIN: And that 200 to 300 gallons per  
11 person per day is comparable to the 113 gallons per  
12 person per day that you referenced?

13 MR. FUERST: That's correct.

14 MR. RUBIN: Thank you.

15 Now, Mr. Fuerst, there was some discussion  
16 this morning about an exhibit to your testimony. I  
17 believe it was Exhibit DF-11. And specifically the  
18 document that has been marked, I guess at the top,  
19 Exhibit 19A if I'm reading it correctly. A table that  
20 includes or is entitled Recommended Spending Priorities  
21 For Restoration of the Carmel River Steelhead Resource?

22 MR. FUERST: Yes, I see it.

23 MR. RUBIN: In order to accomplish the  
24 projects, there are legal requirements that have to be  
25 met; is that correct?

1 MR. FUERST: Yes.

2 MR. RUBIN: And therefore, the time frame  
3 that's provided is provided as an estimate?

4 MR. FUERST: That is correct. That was taken  
5 from the time, from the NOAA -- the National Marine  
6 Fisheries Service interagency group meeting.

7 MR. RUBIN: One of the legal requirements that  
8 has to be met for many of these projects is compliance  
9 with the California Environmental Quality Act?

10 MR. FUERST: Yes.

11 MR. RUBIN: Mr. Fuerst, just a couple of  
12 additional questions. You testified today about  
13 unaccounted for losses. Do you recall testifying?

14 MR. FUERST: Unaccounted-for water use, yes.

15 MR. RUBIN: Do you know if there's a standard  
16 percent for unaccounted-for water losses or water use?

17 MR. FUERST: Yes. The industry standard is  
18 ten percent. Ten percent of total production, total  
19 annual production.

20 MR. RUBIN: And that varies, depending on the  
21 age of the distribution system that's being used?

22 MR. FUERST: That's correct.

23 MR. RUBIN: In the case of California American  
24 Water, do you know what it has to do to reduce the  
25 percent of unaccounted-for water use?

1           MR. FUERST: Well, there are a number of  
2 actions it could take. And I would just preface my  
3 remarks by saying in the work I've done with California  
4 American Water on their efforts to reduce unaccounted  
5 for use, they have undertaken two water audits.

6           And in the process of working, they have --  
7 they have identified that there are apparent losses  
8 versus real losses.

9           Apparent losses have been discussed already,  
10 where it's basically water that's being produced,  
11 physical water that's being produced, transmitted, and  
12 delivered but not registered at the customer's meter.  
13 It's basically free water. And if you were to identify  
14 that, that doesn't reduce the need to produce it; so  
15 that's an apparent loss that, if you identify it, it  
16 wouldn't result in a savings.

17           As opposed to a real loss such as water  
18 leaking from a main or water being stolen from a main.  
19 If that activity is stopped, then that water would not  
20 have to be pumped in the first place.

21           MR. RUBIN: And in the second category of  
22 water, do you believe that a main replacement program  
23 is necessary to reduce a percent of unaccounted-for  
24 water?

25           MR. FUERST: Yes, I do believe that Cal Am

1 needs to replace some of its mains.

2 MR. RUBIN: And do you know how quickly  
3 California American Water can reduce its mains?

4 MR. FUERST: It's over a number of years. I  
5 know that there are -- Cal Am has been on a three-year  
6 cycle, and they have I think a 10- to 12-year period to  
7 replace all of their larger mains.

8 MR. RUBIN: One moment.

9 MR. FUERST: That's for -- the request I just  
10 mentioned is to get approval from the California Public  
11 Utilities Commission, and then the time to do the  
12 reduction is not included in that.

13 MR. RUBIN: So presumably before the main  
14 replacement activities could occur, California American  
15 Water needs approval from the California Public  
16 Utilities Commission.

17 MR. FUERST: Yes, that's correct.

18 MR. RUBIN: Thank you. No further questions  
19 for you. Thank you very much.

20 Ms. Stern, I have some questions for you.  
21 Have you reviewed the draft cease and desist order  
22 prepared by the Prosecution Team?

23 MS. STERN: I have read it once or twice but I  
24 have not carefully reviewed it in detail.

25 MR. RUBIN: Are you familiar with the remedy

1 proposed by the Prosecution Team?

2 MS. STERN: Are you referring to the cutbacks  
3 that have been shown on the screen in previous  
4 testimony?

5 MR. RUBIN: Yes.

6 MS. STERN: I am familiar with it as -- I  
7 don't have it memorized, but if you show it on the  
8 screen, I can address it.

9 MR. RUBIN: Let me ask you this, and if  
10 necessary maybe we can put it up on the screen.

11 Do you believe that the remedy proposed by the  
12 Prosecution Team considers the combined effects of the  
13 proposed remedy and the Seaside Basin adjudication?

14 MS. STERN: It does not. And I believe that  
15 goes to one of my exhibits that highlights that point  
16 and also my testimony that highlights that the draft  
17 cease and desist order should not be viewed in a  
18 vacuum, that are other reductions that are required  
19 that affect the community and the Cal Am system  
20 specifically.

21 MR. RUBIN: Do you believe that the proposed  
22 remedy that's been proposed by the Prosecution Team is  
23 tied to realistic and achievable water project yield  
24 time lines and conservation measures?

25 MS. STERN: I do not. Also in my testimony,



1 and I need to double-check the exhibit number, I  
2 present a table that shows in my best understanding  
3 what water supply projects will come online, the  
4 quantity of water that could be produced by those  
5 projects, and the timing of that in relation to the  
6 cutback.

7 And there is a disconnect between the quantity  
8 of water that could be available by those projects and  
9 the quantity of water that would be needed to be  
10 reduced as part of the draft CDO.

11 MR. RUBIN: You estimate that full use of the  
12 Phase 1 ASR injection wells will occur in water year  
13 2010; is that correct?

14 MS. STERN: Let me double-check my exhibit.

15 I'm looking at Exhibit HS-13. MPWMD HS-13.  
16 And now could you please repeat the question? Now that  
17 I've found the exhibit, I just don't recall the  
18 question.

19 MR. RUBIN: The question that I asked you is:  
20 You estimate the full use of the Phase 1 ASR injection  
21 wells will occur in water year 2010?

22 MS. STERN: Yes.

23 MR. RUBIN: Your estimation is based upon a  
24 schedule to complete certain infrastructure  
25 improvements; is that correct?

1 MS. STERN: Could you repeat that?

2 MR. RUBIN: Is your estimate based upon an  
3 assumption that certain infrastructure improvements  
4 will occur?

5 MS. STERN: Infrastructure improvement by Cal  
6 Am, yes.

7 MR. RUBIN: Do you know if completion of the  
8 infrastructure improvements require compliance with  
9 environmental laws such as the California Environmental  
10 Quality Act?

11 MS. STERN: I'm not sure if some of those  
12 improvements may be a CEQA exemption, but all projects  
13 need to comply with CEQA in some way.

14 MR. RUBIN: Mr. Fuerst, did you have something  
15 to add?

16 MR. FUERST: It would comply with CEQA,  
17 whether -- I think the improvements would be covered by  
18 an exemption, but would be CEQA compliant.

19 MR. RUBIN: Ms. Stern, until and unless full  
20 use of ASR Phase 1 injection wells occurs, the yield of  
21 Phase 1 ASR project is approximately one-third of plan;  
22 is that correct?

23 MR. LAREDO: Before you answer, if I could  
24 just point out that the chart on the overhead is not  
25 HS-14. It's HS-13.

1           MR. RUBIN: Ms. Stern, I believe to assist my  
2 questions right now, I've focused on testimony you  
3 provided on page 13 of your written testimony which is  
4 exhibit HS-1. Let me repeat my question since we've  
5 had a little bit of a break here.

6           My question is: Unless and until full use of  
7 the Phase 1 ASR injection wells occurs, the yield of  
8 the Phase 1 ASR project is likely to be about one-third  
9 of plan?

10          MS. STERN: Roughly.

11          MR. RUBIN: And a one-third yield is an  
12 average annual yield?

13          MS. STERN: I'd refer to Mr. Oliver or  
14 Mr. Fuerst on that.

15          MR. FUERST: That's correct.

16          MR. RUBIN: So in some years, the yield of the  
17 ASR project will be less than 310 acre feet?

18          MR. FUERST: Yes. As noted earlier, it could  
19 range from zero up to 1500. But in a year where there  
20 was no injection and there's no available carry-over  
21 storage from the project, it would be zero.

22          MR. RUBIN: Thank you.

23          Ms. Stern, you estimate that the City of Sand  
24 City desalination project will be complete in late  
25 2009?

1 MS. STERN: Yes.

2 MR. RUBIN: Is it possible that the City of  
3 Sand City desalination plant will not be fully  
4 operational in late 2009?

5 MS. STERN: Anything is possible. Based on  
6 the testimony I heard yesterday, it appears that that's  
7 a reasonable time estimate.

8 MR. RUBIN: Can you please describe to me the  
9 location of the Carmel Valley Alluvial Aquifer?

10 MS. STERN: I would defer to Mr. Fuerst on  
11 that one.

12 MR. FUERST: It would help either to show Joe  
13 Oliver's exhibit or my PowerPoint. If you show Exhibit  
14 J, MPWMD J -- for the second slide, slide 2.

15 In the slide shown on the screen, the Carmel  
16 Valley Alluvial Aquifer it's shown within the Carmel  
17 River watershed. And specifically for the middle of  
18 the slide where -- immediately below San Clemente  
19 Reservoir down to the mouth of the Carmel River.

20 MR. RUBIN: Is it colored in any different  
21 color --

22 MR. FUERST: It's shaded blue as opposed to  
23 the green for the remainder of the watershed.

24 MR. RUBIN: And I believe what we're viewing  
25 is a slide from a presentation you provided earlier

1 today?

2 MR. FUERST: Yes, and it's identical to  
3 District Exhibit MPWMD JO-3.

4 MR. RUBIN: Thank you. Just for the record,  
5 the Carmel Valley Alluvial Aquifer is represented by an  
6 area that's in the middle of the map, and it's  
7 presumably a color, or if it's not a colored  
8 presentation, it would be a darker shade that surrounds  
9 the Carmel River?

10 MR. FUERST: Yes. And it is labeled above it  
11 Carmel Valley Alluvial Aquifer.

12 MR. RUBIN: I see. Thank you.

13 Ms. Stern, do you know how many wells are  
14 located within the Carmel Valley Alluvial Aquifer?

15 MS. STERN: I do not know exactly the number  
16 of total wells, no.

17 MR. RUBIN: Do you know roughly how many wells  
18 are located within the Carmel Valley Alluvial Aquifer?

19 MS. STERN: I think I'll defer to Mr. Fuerst  
20 on that one.

21 MR. FUERST: Right. I'll answer this, and  
22 Joe, you know. In water year 2007, based on the  
23 District's well registration and reporting program,  
24 there were 291 active non-Cal Am wells delivering water  
25 from the Carmel Valley Alluvial Aquifer.

1           MR. RUBIN: Is it possible that there are  
2 wells that are not permitted by the District within the  
3 Carmel Valley Alluvial Aquifer?

4           MR. FUERST: It is possible. The District  
5 requirement is that all wells be registered and report,  
6 but that may not be the case.

7           MR. RUBIN: When did the District adopt a  
8 requirement to register wells that are within the  
9 Carmel Valley Alluvial Aquifer?

10          MR. FUERST: 1980.

11          MR. RUBIN: Are wells that were producing  
12 water prior to 1980 exempt from any permitting  
13 requirements that the District has?

14          MR. FUERST: No. All existing wells as of  
15 1980 need to be registered and any new wells must be  
16 registered and report annually to the District.

17          MR. RUBIN: Again, I'll ask Ms. Stern, but if  
18 somebody else is knowledgeable or more knowledgeable,  
19 please feel free to answer.

20          My question is specific: Do you know how many  
21 wells are located within the Carmel Valley Alluvial  
22 Aquifer which were permitted by the Monterey Peninsula  
23 Water Management District between 1995 and the present?

24          MS. STERN: I do not know between 1995 and the  
25 present. My testimony describes wells that were

1 permitted from 2001 to the present.

2 MR. RUBIN: Does anyone on the panel know how  
3 many wells were permitted by the Monterey Peninsula  
4 Water Management District between 1995 and the present,  
5 wells that are located within the Carmel Valley  
6 Alluvial Aquifer?

7 MR. FUERST: What I can answer is based on  
8 well reporting, how many wells reported in 1995 versus  
9 how many wells reported in 2007. And I can tell you  
10 the net difference. I don't know if it's an inactive  
11 well that became active or vice versa. Henrietta can  
12 talk about subsequent to 2001 when the District  
13 expanded its regulations to require all wells to be  
14 treated as a system and therefore to go through a more  
15 rigorous permit processing.

16 In 19 -- in June of 1995, there were 179 wells  
17 in the Carmel Valley Alluvial Aquifer -- non-Cal Am.  
18 In 2007, there were 291. Did that answer your  
19 question?

20 MR. RUBIN: Yes. Very much so. Thank you.

21 Now Ms. Stern, in your written testimony, you  
22 indicate that the Monterey Peninsula Water Management  
23 District granted 34 written exemption requests to date.  
24 Do you recall that?

25 MS. STERN: Since 2001 to date, yes.

1           MR. RUBIN: So since 2001, the Monterey  
2 Peninsula Water Management District granted 34 written  
3 exemption requests?

4           MS. STERN: Yes.

5           MR. RUBIN: Can you explain what a written  
6 exemption request is?

7           MS. STERN: Yes. Our rules, specifically  
8 rules 20, 21, and 22, require a permit for any new  
9 well. And those regulations have changed over time.  
10 So in the beginning, the regulations focused solely on  
11 the alluvial aquifer and within a thousand feet of the  
12 alluvial aquifer.

13           Presently, those regulations apply to all  
14 wells within the District. So back in 2001, the --  
15 rule 20 has an exemption criteria that if a well meets  
16 the specific exemption criteria embodied in rule 20-C a  
17 written permit -- or written confirmation of exemption  
18 may be issued if it meets the criteria of the rule.

19           MR. RUBIN: Can a well installed pursuant to a  
20 grant of a written exemption request result in more  
21 water being pumped from an aquifer than prior to the  
22 exemption request being granted?

23           MS. STERN: Can you say that again?

24           MR. RUBIN: Sure. Can a well installed  
25 pursuant to grant of a written exemption request result



1 in more water being pumped from an aquifer than prior  
2 to the exemption request being granted?

3 MS. STERN: Today, no. Because a specific  
4 requirement of an exemption to replace a well, for  
5 example, is that the well must be of substantially the  
6 same capacity and purpose of the well that is being  
7 replaced.

8 MR. RUBIN: The provision that you just cited  
9 for an exemption, how long has that been in existence?

10 MS. STERN: I'm referring specifically to rule  
11 20-C-5, having to do with replacement wells. And our  
12 rules have changed over time since 2001. I'm not sure  
13 that exact language existed in 2001, but certainly for  
14 the last several years.

15 MR. RUBIN: Ms. Stern, do you have before you  
16 Monterey Peninsula Water Management District HS-14?

17 MS. STERN: Hold on, please. Yes.

18 MR. RUBIN: You indicate in Monterey Peninsula  
19 Water Management District HS-14 that in water year 2009  
20 there will be 700 acre feet of new yield available to  
21 California American Water; is that correct?

22 MS. STERN: Yes.

23 MR. RUBIN: The estimate in Monterey Peninsula  
24 Water Management District HS-14 of 700 acre feet of new  
25 yield available to California American Water during the

1 2009 water year is based in part on 400 acre feet of  
2 water being made available through the ASR Phase 1  
3 project?

4 MS. STERN: Yes.

5 MR. RUBIN: It's unlikely that 400 acre feet  
6 of water will be made available through ASR Phase 1  
7 during the 2009 water year, correct?

8 MS. STERN: I don't understand the question.  
9 Say that again please.

10 MR. RUBIN: Do you believe that 400 acre feet  
11 of water will be made available through ASR Phase 1  
12 during the 2009 water year?

13 MS. STERN: I don't know exactly what the  
14 hydrologic conditions will be in the year -- water year  
15 2009; but assuming they're average type of conditions,  
16 that is a reasonable possibility.

17 MR. RUBIN: And it's reasonable because the  
18 average yield of ASR is 920 acre feet?

19 MS. STERN: Correct.

20 MR. RUBIN: It's possible that no water will  
21 be available through ASR Phase 1 in the 2009 water  
22 year?

23 MS. STERN: That is possible.

24 MR. RUBIN: The estimate in Monterey Peninsula  
25 Water Management District HS-14 of 700 acre feet of new

1 yield available to California American Water during the  
2 2009 water year is also based upon 300 acre feet of  
3 water being made available through the City of Sand  
4 City desalination plant?

5 MS. STERN: Yes.

6 MR. RUBIN: Is it possible that 300 acre feet  
7 of water from the Sand City desalination plant will not  
8 be available during the 2009 water year?

9 MS. STERN: That is possible.

10 MR. RUBIN: Now in Monterey Peninsula Water  
11 Management District HS-14, I believe you identified  
12 1,520 acre feet of new yield during the 2010 water  
13 year?

14 MS. STERN: Yes.

15 MR. RUBIN: This is going to be a little bit  
16 tricky, but there is a paragraph in your written  
17 testimony which has been marked as Monterey Peninsula  
18 Water Management District HS-1 where you identify  
19 1,670 acre feet of new yield from projects during the  
20 next two years.

21 MS. STERN: Could you please identify the  
22 paragraph?

23 MR. RUBIN: I was afraid you were going to ask  
24 me that.

25 MR. LAREDO: I believe we're on page 15,

1 paragraph 41?

2 CO-HEARING OFFICER BAGGETT: Is your  
3 15 minutes about up, Mr. Rubin.

4 (Laughter)

5 MR. LAREDO: Mr. Rubin, I'm not 100 percent  
6 sure that's your reference.

7 MR. RUBIN: Do you see the two numbers  
8 identified, Ms. Stern?

9 MR. LAREDO: If you could give us a moment to  
10 try to reconcile these two.

11 MR. RUBIN: That was my question. That would  
12 be very helpful.

13 (Brief interruption)

14 MR. LAREDO: We're ready to go back on.

15 MR. RUBIN: Ms. Stern, I've asked you to  
16 consider a number that appears on Monterey Peninsula  
17 Water Management District HS-14 of 1,520 acre feet of  
18 new yield during the 2010 water year as well as a  
19 statement in paragraph 41 of your written testimony,  
20 Monterey Peninsula Water Management District HS-1, in  
21 which you identify 1,670 acre feet of new yield from  
22 projects during the next two years.

23 My question is: Can you please explain for me  
24 the difference in the two numbers?

25 MS. STERN: The numbers in the written

1 testimony, paragraph 41 line 16 of 1,670, should be  
2 replaced by the number in Exhibit HS-14 which is 1,520.  
3 The number in Exhibit HS-14 is the accurate number.

4 I think this occurred due to updated  
5 information and my not catching this error here. Thank  
6 you for catching it.

7 MR. RUBIN: Ms. Stern, I have another  
8 question. Going back to ASR Phase 1, please turn to  
9 page 13, paragraph 35 of your written testimony which  
10 is HS-1. I believe on line 16 you reference a 310 acre  
11 foot per year average; is that correct?

12 For ASR Phase 1.

13 MS. STERN: It's accurate the number 310 is on  
14 that line; but similarly, that is not a correct number.  
15 The correct number should be 400 acre feet per year as  
16 reflected in Exhibit MPWMD HS-14 for the year 2009.

17 MR. RUBIN: Mr. Oliver, do you agree that the  
18 average acre foot per year yield from the Phase 1 ASR  
19 is 400 acre feet?

20 MR. OLIVER: Based on my understanding of the  
21 current capacity of the Phase 1 ASR project, it would  
22 be closer to the 310 acre feet number.

23 MR. RUBIN: And again, the 310 is an average  
24 yield over the period per ASR Phase 1?

25 MR. OLIVER: That's correct.

1           MR. RUBIN:  And some years, that could be  
2 zero?

3           MR. OLIVER:  Yes.

4           MR. RUBIN:  Thank you.

5           Ms. Stern, in paragraph 41 of your written  
6 testimony Monterey Peninsula Water Management District  
7 HS-1, I believe you also identified 1,000 acre feet of  
8 new yield that may be available in water year 2012; is  
9 that correct?

10           Specifically line 17 and line 18 on page 15 of  
11 your written testimony.

12           MS. STERN:  I believe the number should be 820  
13 instead of a thousand.

14           MR. RUBIN:  And --

15           MS. STERN:  And that reflects the information  
16 in HS-14, the row titled Water Year 2010.  520 plus 300  
17 would be 820.

18           MR. RUBIN:  I'm sorry, the exhibit that you  
19 were just referring to?

20           MS. STERN:  HS-14.

21           MR. RUBIN:  And on HS-14, you believe there is  
22 a reflection of an 820 acre foot number?

23           MS. STERN:  Yes, if you look at the row titled  
24 Water Year 2010, you have 520 remainder, plus 300, so  
25 that's 820 for that particular year.  And that 820 is

1 added to 700. So it is accurate, 1520.

2 MR. RUBIN: I am confused. If I understood  
3 your statement in paragraph 41, you were stating that  
4 another 1,000 acre feet per year would be available in  
5 water year 2012.

6 MS. STERN: No. That is not shown. The  
7 exhibit HS-14 in year 2012 shows none identified.  
8 These are -- there is no new supply in 2012 identified.

9 MR. LAREDO: If we could just have a moment.

10 (Brief interruption)

11 MR. LAREDO: Thank you. We're back on.

12 If you could restate the question concerning  
13 the 2012 increment of water?

14 MR. RUBIN: Sure.

15 Ms. Stern, I was asking about a statement that  
16 appears on page 15, line 17 of your written testimony  
17 that states:

18 Another 1,000 acre feet per year would  
19 be available in water year 2012.

20 And I believe that you have corrected the  
21 number, that it should be 820?

22 MS. STERN: I'm sorry. That's not true. And  
23 I apologize how the text in the written testimony is  
24 not matching the table in HS-14, which is the most  
25 recent accurate version. Thus, the statement on line

1 17 paragraph 41 of my testimony: Another 1,000 acre  
2 feet per year would be available in the year 2012.  
3 That should be stricken. There is not an additional  
4 increment in 2012.

5 MR. RUBIN: Thank you. Just so the record's  
6 clear, on your table that appears as Exhibit HS-14, you  
7 have additional water that's available in 2010,  
8 500 acre feet that might be available through Phase 1  
9 ASR; is that correct?

10 MS. STERN: Did you say 520 remainder?

11 MR. RUBIN: Yes.

12 MS. STERN: I'm concerned that that may not be  
13 correct because Mr. Oliver corrected the 400 number in  
14 the row titled water year 2009. They need to add up to  
15 920, the average yield for the ASR Phase 1.

16 The key question is: How much is reasonably  
17 available from the Cal Am system in the near-term  
18 before the infrastructure improvements are made.

19 So Mr. Oliver corrected that 400 number to be  
20 310. So if someone with a calculator could help me,  
21 920 minus 310 should be the correct number to replace  
22 the number 520.

23 MR. RUBIN: If I have my calculations correct,  
24 I believe that is nine -- 610 acre feet?

25 MS. STERN: Yes.



1 MR. RUBIN: And again, that would be  
2 additional water that -- 610 additional acre feet of  
3 water through the ASR Phase 1 program?

4 MS. STERN: Right. So it meets the full  
5 920 acre feet represented in the row titled Water Year  
6 2010.

7 MR. RUBIN: And the quantity of water that's  
8 available from ASR in 2009 as well as 2010 is an  
9 average annual quantity?

10 MS. STERN: Yes.

11 MR. RUBIN: Now Ms. Stern, in -- focused again  
12 on HS-14, in that table you identify yield deficits?

13 MS. STERN: I see that, yes.

14 MR. RUBIN: And I would imagine that the yield  
15 deficit in 2009 would be affected by the change in the  
16 quantity of water that might be available through ASR  
17 Phase 1?

18 MS. STERN: Yes, that is correct.

19 MR. RUBIN: By the use of the word yield  
20 deficit, do you mean insufficient water supply to meet  
21 expected demands?

22 MS. STERN: Not exactly. I mean water that  
23 would not be available from a new water supply project  
24 and would have to be generated in some way or conserved  
25 in some way.

1           MR. RUBIN: Another potential circumstance of  
2 the yield deficit is there's simply not enough water  
3 for people on the Monterey Peninsula?

4           MS. STERN: I'm not exactly sure what you mean  
5 by that question.

6           MR. RUBIN: If conservation measures did not  
7 reduce the need for water, and no new projects came  
8 online, there would be a demand for water that would be  
9 unmet?

10          MS. STERN: I don't believe that's what this  
11 is going to, that the reduction required by the CDO  
12 would not be met.

13          MR. RUBIN: Ms. Stern, you do not believe  
14 California American Water could obtain necessary  
15 approvals for new water supply projects in time to  
16 avoid the yield deficits that you have identified in  
17 Monterey Peninsula Water Management District HS-14?

18          MS. STERN: Correct.

19          MR. RUBIN: And you do not believe that  
20 conservation measures could be reasonably or  
21 realistically achieved for water savings equal to the  
22 yield deficits identified in Monterey Peninsula Water  
23 Management District HS-14?

24          MS. STERN: That is not accurate. I did not  
25 make that statement. I focused my testimony on water

1 supply projects and deferred to the testimony of  
2 Ms. Pintar or others regarding the ability of  
3 conservation to meet those needs.

4 MR. RUBIN: Let me ask Ms. Pintar. Is that  
5 how you pronounce your last name? Do you believe that  
6 conservation measures could realistically or reasonably  
7 achieve the water savings equal to the yield deficit  
8 that Ms. Stern identified in Monterey Peninsula Water  
9 Management District HS-14?

10 MS. PINTAR: No.

11 MR. RUBIN: Thank you.

12 Ms. Stern, I now ask that you turn to Monterey  
13 Peninsula Water Management District 16. There is a  
14 number of well locations that have been identified  
15 upland CV; is that correct?

16 MS. STERN: Yes.

17 MR. RUBIN: Can you please describe the area  
18 that is provided in uplands CV designation?

19 MS. STERN: That would be easiest using that  
20 same overhead that showed the alluvial aquifer. In  
21 essence, it's nonalluvial sources in the Carmel Valley.

22 MR. RUBIN: I think that's -- I don't know if  
23 you're going to be able to describe it any better than  
24 that with the map on the screen if you can.

25 And what we're looking at is the same slide

1 discussed earlier, a slide that's part of the  
2 presentation Mr. Fuerst made earlier today?

3 MS. STERN: Yes. And I'd like to make one  
4 clarification. The upland CV regards areas that are  
5 nonalluvial in the Carmel Valley watershed that are  
6 within the Water Management District.

7 MR. LAREDO: For the record, this is a copy of  
8 MPWMD JO-3.

9 MR. RUBIN: Thank you. Ms. Stern, do you or  
10 does anyone else on the panel know how many wells are  
11 located in the area designated upland CV?

12 MR. FUERST: There are approximately a  
13 thousand registered wells. We talked about the 291 in  
14 the upland area. There are some outside the Carmel  
15 River watershed. I think there's approximately 500  
16 wells in the upland area, 291 in the Carmel Valley  
17 Alluvial Aquifer area, and 500 in the upland area and  
18 the Cachagua area.

19 MR. RUBIN: Ms. Stern, do you or anyone on the  
20 panel know how many wells in the area designated upland  
21 CV has the Monterey Peninsula Water Management District  
22 permitted between 1995 and the present?

23 MS. STERN: I have data as reflected in this  
24 Exhibit HS-16 from the year 2001 to the present. I  
25 don't have the 1995 to 2001 period. Our rules changed

1 significantly at that time.

2 MR. RUBIN: Mr. Fuerst, do you have any  
3 information on the number of wells permitted in the up  
4 lands?

5 MR. FUERST: No, I do not.

6 MR. RUBIN: Ms. Fuerst, is it possible that  
7 water pumped from the uplands CV -- excuse me. Is it  
8 possible that water pumped from the upland Carmel  
9 Valley area affected the quantity of water in the  
10 Carmel Valley Alluvial Aquifer.

11 MR. FUERST: Yes, that's possible.

12 MR. RUBIN: Let the record reflect that it was  
13 Mr. Fuerst who responded to the question.

14 Is it possible that water pumped from the  
15 upland Carmel Valley area affected the quantity of  
16 surface water in the Carmel River?

17 MR. FUERST: That would be less direct, but it  
18 is possible.

19 MR. RUBIN: Ms. Stern, I have no further  
20 questions for you. Thank you.

21 Ms. Pintar, I have a couple of questions for  
22 you. Ms. Pintar, I believe in your written testimony  
23 you indicate that during the 1988 drought average  
24 residential consumption in the California American  
25 Water service area was about 93 gallons per person per

1 day; is that correct?

2 MS. PINTAR: Yes.

3 MR. RUBIN: You also indicate that in the  
4 2006-2007 water year average residential use had fallen  
5 to about 90 gallons per person per day?

6 MS. PINTAR: Yes, I did.

7 MR. RUBIN: As you use the term gallons per  
8 person per day, do you include uses for all purposes  
9 including residential, commercial, landscape, and  
10 public use?

11 MS. PINTAR: No. That was actually a basic  
12 calculation that was done using average residential  
13 information; and Mr. Fuerst has testified, and his  
14 testimony includes a more precise calculation of  
15 70 gallons per person per day which would more  
16 accurately reflect today's water use.

17 MR. RUBIN: Ms. Pintar, when the Monterey  
18 Peninsula Water Management District adopts a  
19 conservation measure, can it guarantee a particular  
20 reduction in water use that will result?

21 MS. PINTAR: No.

22 MR. RUBIN: Just for the record, if you could  
23 speak into the microphone?

24 MS. PINTAR: No.

25 MR. RUBIN: Are you familiar with water

1 conservation programs in regions other than those on  
2 the Monterey Peninsula?

3 MS. PINTAR: Somewhat, yes.

4 MR. RUBIN: Is it your opinion that the level  
5 of conservation encouraged by the conservation program  
6 of the Monterey Peninsula Water Management District  
7 compared to the level of conservation encouraged by  
8 conservation programs in other regions of the state are  
9 more -- well, let me strike that. I'm sorry. I lost  
10 myself.

11 (Laughter)

12 MR. RUBIN: The Monterey Peninsula Water  
13 Management District has a staged conservation program?

14 MS. PINTAR: Yes.

15 MR. RUBIN: How many stages exist in the  
16 conservation program?

17 MS. PINTAR: The Expanded Conservation and  
18 Standby Rationing Plan is a seven-stage plan.

19 MR. RUBIN: And the conservation program is  
20 used to encourage conservation?

21 MS. PINTAR: Yes, it is.

22 MR. RUBIN: Is it your belief that for  
23 California American Water to meet a 15 percent  
24 reduction as proposed in the Prosecution Team's draft  
25 cease and desist order the residents of the Monterey

1 Peninsula would have to live under Stage 5 conservation  
2 measures at a minimum?

3 MS. PINTAR: I would say possibly, yes.

4 MR. RUBIN: Ms. Pintar, I ask that you turn to  
5 page 18 of your written testimony, paragraph 47. I  
6 believe you state at the end of the paragraph, line 1,  
7 page 19, that the community would need to achieve all  
8 planned Stage 5 reductions at a minimum.

9 MR. FUERST: Which page?

10 MR. RUBIN: Looking at page 18 and 19, the  
11 specific statement I believe appears on page 19, line  
12 1. Continues to line 2.

13 MS. PINTAR: Yes.

14 MR. RUBIN: And I imagine that when I asked my  
15 question initially, your response was reflecting the  
16 fact that Stage 5 might not achieve the level of  
17 reductions required under the proposed cease and desist  
18 order?

19 MS. PINTAR: That is true.

20 MR. FUERST: I would add that I think her  
21 testimony assumes there would be reductions from the  
22 cease and desist order accompanied by reductions in the  
23 Seaside Basin.

24 MR. RUBIN: But again, the stages of  
25 conservation cannot guarantee a particular level of



1 water savings?

2 MS. PINTAR: No. And that's why we have the  
3 extra stages.

4 MR. RUBIN: Is it your belief that for  
5 California American Water to meet a 15 percent  
6 reduction as proposed by the Prosecution Team's draft  
7 cease and desist order, the residents on the Monterey  
8 Peninsula may have to live under a stage greater than  
9 Stage 5?

10 MS. PINTAR: It would be possible.

11 MR. RUBIN: Has the Monterey Peninsula Water  
12 Management District ever imposed a Stage 5  
13 conservation?

14 MS. PINTAR: No.

15 MR. RUBIN: Do you know if the Monterey  
16 Peninsula Water Management District has the resources,  
17 either people or money, to implement Stage 5  
18 conservation?

19 MS. PINTAR: At this time, no.

20 MR. RUBIN: Ms. Pintar, I'll ask you a  
21 question based upon paragraph 55 of your written  
22 testimony. Is it your opinion that in response to  
23 Order 95-10 there has been a proliferation of  
24 single-parcel private wells in the Carmel Valley?

25 MS. PINTAR: There has been an increase, yes.

1           MR. RUBIN:  If California American Water were  
2  ordered to reduce its Carmel River extractions as  
3  proposed by the Prosecution Team, do you believe  
4  extractions from non-California American Water wells in  
5  the Carmel Valley will increase?

6           MS. PINTAR:  I don't know.

7           MR. RUBIN:  Ms. Pintar, on page 13 of your  
8  written testimony, Monterey Peninsula Water Management  
9  District SP-12, you reference work by RMC?

10          MS. PINTAR:  Yes.

11          MR. RUBIN:  What is RMC?

12          MR. FUERST:  Larry, can you respond to that?  
13  This is work that was done under an integrated regional  
14  water management planning effort.

15          MR. HAMPSON:  RMC Water and Environment is a  
16  consulting firm providing water planning along much of  
17  the coast and in California.

18          MR. RUBIN:  Thank you.

19          Ms. Pintar, I believe in your written  
20  testimony you indicate that work performed by RMC  
21  identified conservation retrofits?

22          MS. PINTAR:  Conservation programs, yes.

23          MR. RUBIN:  And RMC estimated water savings if  
24  the programs of the Monterey Integrated Regional Water  
25  Management Plan were implemented; is that correct?

1 MS. PINTAR: Yes.

2 MR. RUBIN: Do you know how long it would take  
3 to complete the elements of the Monterey Integrated  
4 Regional Water Management Plan?

5 MS. PINTAR: No.

6 MR. RUBIN: Thank you. I have no further  
7 questions for you.

8 The last set of questions, and they will be  
9 relatively brief, are directed towards Mr. Hampson.  
10 Mr. Hampson, do you consider Mr. Christensen to be an  
11 expert on issues involving the riparian corridor?

12 MR. HAMPSON: Yes, I do.

13 MR. RUBIN: And based upon his expertise, do  
14 you believe Mr. Christensen is qualified to express  
15 opinions on the health and vigor of the riparian  
16 corridors?

17 MR. HAMPSON: Yes, I do.

18 MR. RUBIN: Are you familiar with  
19 Mr. Christensen's beliefs that the Carmel River  
20 riparian corridor has made a significant recovery since  
21 1995?

22 MR. HAMPSON: I would add that there has been  
23 a significant recovery in the area between  
24 approximately Rivermile 5 and Rivermile 15 since  
25 approximately 1984. However, downstream of Rivermile

1 5, this area remains somewhat unstable and --

2 MR. RUBIN: So -- I'm sorry.

3 MR. HAMPSON: -- and subject to erosional  
4 processes. This area did not have highly erodible  
5 banks prior to 1995 when diversions were shifted into  
6 the area downstream between Rivermile 2 and Rivermile  
7 8.

8 MR. RUBIN: Mr. Hampson, to move things along,  
9 I'm going to ask you questions I hope will be yes or  
10 no -- allow for a yes-or-no answer. Again if you can  
11 keep it limited to yes or no, it would be appreciated.  
12 Obviously, if you have an additional explanation, I  
13 think that the Hearing Officers and I would like to  
14 hear that. To the extent it could be yes or no, I  
15 think it will move things forward faster.

16 Mr. Hampson, are you aware that  
17 Mr. Christensen testified today that from 1986 to 2001  
18 there had been a 46.5 percent increase in riparian  
19 cover from San Clemente Dam to the Carmel River Lagoon?

20 MR. HAMPSON: Yes.

21 MR. RUBIN: Are you aware that Mr. Christensen  
22 identifies a 32.17 increase in the number of acres of  
23 Carmel River riparian areas for aquifer subunit 4  
24 during the period 1986 through 2001?

25 MR. HAMPSON: I'm looking at Mr. Christensen's

1 testimony, and I am sure that he's done this correctly.

2 MR. RUBIN: As you're looking at this, are you  
3 aware Mr. Christensen identifies a 62.77 percent  
4 increase in the number of acres of Carmel River  
5 riparian habitat?

6 MR. LAREDO: I'm going to object to this.  
7 This is repetitive. Mr. Christensen's testimony  
8 stands.

9 MR. RUBIN: Let me explain. There is an  
10 unusual circumstance here where there is potentially  
11 conflicting testimony between Mr. Christensen and  
12 Mr. Hampson, and I'm trying to understand that dynamic.

13 CO-HEARING OFFICER WOLFF: I appreciate your  
14 asking these questions. I, in fact, flagged some of  
15 these numbers myself. If you could get to the point  
16 more rapidly, I don't think you need to make them  
17 repeat their testimony.

18 MR. RUBIN: Well --

19 CO-HEARING OFFICER WOLFF: Simply ask the  
20 question. I understand the importance of it. I  
21 flagged it myself.

22 MR. RUBIN: Mr. Hampson, do you agree that  
23 positive changes in the Carmel River riparian habitat  
24 have occurred, particularly in aquifer subunits 3 and  
25 subunits 4.

1           MR. HAMPSON: Yes. I think I can help focus  
2 this. The instability that's present in the lower five  
3 miles of the river is primarily due to interruption of  
4 the natural recruitment process that occurs when there  
5 is flow in a stream.

6           And we are currently unable to fully mitigate  
7 for the loss of stream flow in the lower five miles.  
8 So the instability present is a result of not being  
9 able to recruit enough vegetation in a very small  
10 portion of the river channel that is the key to  
11 maintain the stability in the river. That is the lower  
12 portion of the streambed.

13           MR. CHRISTENSEN: I can add one additional  
14 comment, that the way you look at this data is that I'm  
15 comparing riparian vegetation from 1986 snapshot in  
16 time to 2001 snapshot in time.

17           What I believe Larry is referencing in his  
18 testimony is that there was instability in the lower  
19 river between those dates, which was specifically the  
20 Red Rock project, that had to be a restoration that  
21 went in, and the All Saints project. And those  
22 projects revegetated rapidly. So that revegetation  
23 helped increase the value of riparian vegetation when  
24 you take the snapshot in 2001.

25           And Larry is I believe referencing stuff that

1 happened in between that had a remedy applied to it.

2 MR. RUBIN: So if I understand the testimony  
3 that was just provided, the concerns that Mr. Hampson  
4 identifies in his written testimony have been addressed  
5 through actions by the Monterey Peninsula Water  
6 Management District and others?

7 MR. HAMPSON: No. We are unable to duplicate  
8 the natural recruitment processes that have occurred  
9 upstream where the stream is watered. We are unable to  
10 duplicate the natural processes in the lower five miles  
11 of the river because it is annually dewatered.

12 MR. RUBIN: But again can you explain for me  
13 then how Mr. Christensen identifies increases in the  
14 order of 23.17 in aquifer subunit 4 and 62.77 percent  
15 increase in aquifer subunit 3?

16 MR. HAMPSON: Again, my focus is on a very  
17 specific portion of the river channel. There has  
18 certainly been a recovery in overbank areas. These are  
19 floodplain areas where vegetation has become  
20 established. And this includes vegetation that is  
21 not -- that doesn't need stream flow throughout the  
22 year.

23 MR. RUBIN: But if I understand your testimony  
24 then, you have concerns with specific locations; but in  
25 order to reconcile with Mr. Christensen's testimony,

1 the overall health in the subaquifers 4 and 3 has  
2 improved?

3 MR. HAMPSON: The overall health has  
4 definitely improved throughout the river as a result of  
5 the mitigations that have been going on since the mid  
6 1980s and continuing after 1995.

7 However, what we are seeing is that the  
8 impacts of pumping that were spread out over  
9 15 miles -- or actually approximately 10 miles of the  
10 river from Rivermile 5 to 15 are now concentrated --  
11 previous to 1984 -- are now concentrated in the lower  
12 five miles.

13 MR. RUBIN: And Monterey Peninsula Water  
14 Management District has mitigation or restoration  
15 activities that attempt to address the effect on  
16 riparian corridor due to reduced surface water in the  
17 Carmel River?

18 MR. HAMPSON: Yes. And those mitigation  
19 activities have got about as far as they can go for a  
20 stream that's dewatered. I mean the next step is more  
21 water in the stream if we want to continue the  
22 restoration spectrum.

23 MR. RUBIN: But part of the restoration  
24 activities that the Monterey Peninsula Water Management  
25 District has implemented involves the irrigation of



1 riparian vegetation, correct?

2 MR. HAMPSON: Yes, along many miles of the  
3 river.

4 MR. RUBIN: Does the Monterey Peninsula Water  
5 Management District have any restoration activities in  
6 the lower sections of the Carmel River, specifically  
7 within the aquifer subunits 3 and 4?

8 MR. HAMPSON: Yes. And -- I mean, if you want  
9 to know more about it, Mr. Christensen runs the --  
10 helps run those systems.

11 MR. RUBIN: Thank you. One minute.

12 (Brief interruption)

13 MR. RUBIN: Just a few more questions now. I  
14 believe, and I appreciate your helping me understand  
15 that circumstance better. Mr. Hampson, in your  
16 testimony on page 17, you reference the Carmel River  
17 Lagoon Technical Advisory Committee; is that correct?

18 MR. HAMPSON: Are you speaking about paragraph  
19 45?

20 MR. RUBIN: Yes. I presume you're familiar  
21 with the Carmel River Lagoon Technical Advisory  
22 Committee?

23 MR. HAMPSON: Yes, I help facilitate some of  
24 the meetings.

25 MR. RUBIN: Did a number of federal and state

1 agencies comprise the Carmel River Lagoon Technical  
2 Advisory Committee?

3 MR. HAMPSON: The Technical Advisory Committee  
4 is comprised of all the regulatory agencies involved in  
5 water resource management plus the property owners,  
6 state parks, Carmel Area Wastewater District, and  
7 Monterey County Water Resources Agency and Public  
8 Works.

9 MR. RUBIN: Let me go through a list, and let  
10 me know if any of the entities I identify were not part  
11 of the Technical Advisory Committee.

12 California Coastal Commission, California  
13 Department of Fish and Game, California State Parks,  
14 Monterey County Public Works Department, Monterey  
15 County Water Resources Agency, Monterey Peninsula Water  
16 Management District, National Marine Fisheries Service,  
17 United States Army Corps of Engineers, United States  
18 Fish and Wildlife Service.

19 MR. HAMPSON: And the Carmel Area Wastewater  
20 District and more recently the Regional Water Quality  
21 Control Board, Region 3.

22 MR. RUBIN: Are you aware of a study plan for  
23 the long-term adaptive management of the Carmel River  
24 State Beach and Lagoon which the Carmel River Lagoon  
25 Technical Advisory Committee prepared?

1 MR. HAMPSON: Yes.

2 MR. RUBIN: Do you know when the study was  
3 finalized?

4 MR. HAMPSON: I believe it was April 17, 2007.

5 MR. RUBIN: I would ask my associate,  
6 Ms. Kincaid, to provide you with a copy of a document.  
7 Do you recognize the document Ms. Kincaid provided to  
8 you?

9 MR. HAMPSON: Yes, I put it together.

10 MR. RUBIN: Is it the study plan for long-term  
11 adaptive management Carmel River State Beach and  
12 Lagoon?

13 MR. HAMPSON: Yes.

14 MR. RUBIN: I'd like to have that marked  
15 exhibit California American Water next in order. I am  
16 informed it's 43.

17 According to that document, it appears as  
18 though the stakeholders were also involved in the  
19 process; is that correct?

20 MR. HAMPSON: The stakeholders were described.  
21 The process for involving the stakeholders is that the  
22 communication is between the facilitating entity and  
23 the stakeholders from meetings of the Technical  
24 Advisory Committee.

25 Currently MPWMD is the facilitator. We report

1 the minutes of the meetings, and we also solicit input  
2 from the stakeholders at times. And on occasion,  
3 experts from outside of the area are invited to come  
4 and express their views about how to manage the lagoon.

5 MR. RUBIN: The study plan, though, recognizes  
6 that rigorous scientific investigations are necessary  
7 to better understand the ecosystem, develop alternative  
8 management strategies, and assess effects of ongoing  
9 and proposed management actions; is that correct?

10 MR. HAMPSON: That was the consensus of the  
11 committee.

12 MR. RUBIN: And the study plan also recognizes  
13 that the understanding and information developed from  
14 these investigations are necessary to identify  
15 reasonable and prudent management solutions?

16 MR. HAMPSON: Yes, those were the conclusions  
17 in April 2007.

18 MR. RUBIN: Thank you. I have no further  
19 questions.

20 CO-HEARING OFFICER BAGGETT: Thank you.

21 MR. RUBIN: Looks like I have four minutes on  
22 the time.

23 CO-HEARING OFFICER BAGGETT: Yeah, you do.

24 CO-HEARING OFFICER WOLFF: You shouldn't be  
25 too proud of that.

1 CO-HEARING OFFICER BAGGETT: Let's take a  
2 five-minute recess, go off the record.

3 (Discussion off the record)

4 CO-HEARING OFFICER BAGGETT: Okay. Mr. Fife,  
5 we'll go with you. Then we'll take a break.

6 CROSS-EXAMINATION BY MR. FIFE

7 FOR CITY OF SEASIDE and SEASIDE BASIN WATERMASTER

8 MR. FIFE: Mr. Fuerst, do you recall  
9 testimony, cross-examination yesterday, of the city  
10 mayors in which questions were asked concerning the  
11 allocation of water as between the various types of use  
12 and various jurisdictions around Monterey Peninsula?

13 MR. FUERST: The use by sectors within  
14 jurisdictions, yes.

15 MR. FIFE: Great. And that the witnesses who  
16 were testifying were not able to provide that  
17 information but indicated that this information was  
18 kept by Monterey Peninsula Water Management District?

19 MR. FUERST: Right. That's provided to the  
20 District by California American Water each month.

21 MR. FIFE: Mr. Fuerst, I provided you with a  
22 document, and I believe we've provided copies to the  
23 Board Members and the other parties. Do you recognize  
24 this document?

25 MR. FUERST: Yes, I do.

1 MR. FIFE: And can you tell me what this  
2 document is?

3 MR. FUERST: This is the annual summary of Cal  
4 Am metered consumption by water use type or sector  
5 going across the chart, and on the left it's the  
6 revenue codes for where they -- the jurisdiction in  
7 which it's used.

8 The top part shows each city. The middle  
9 portion refers to areas within the unincorporated  
10 county area within the District served by Cal Am, and  
11 then there are some special categories in the last  
12 column, the last part of that column.

13 MR. FIFE: And is this a document that's kept  
14 in the district files?

15 MR. FUERST: Yes, it is.

16 MR. FIFE: And do you believe that the  
17 information on this chart is accurate?

18 MR. FUERST: I do.

19 MR. FIFE: Do you believe this information  
20 would be helpful to the State Board in its  
21 deliberations in this matter?

22 MR. FUERST: Yes, I do.

23 MR. FIFE: I'd like to mark this as an  
24 exhibit. Given the discussion we had earlier about the  
25 PowerPoint, it might be most helpful from an

1 organizational sense if it were marked as a District  
2 exhibit rather than a Seaside exhibit.

3 MR. LAREDO: We would suggest this be marked  
4 as MPWMD DF-13.

5 CO-HEARING OFFICER BAGGETT: Very good. Thank  
6 you. Okay. Now, we'll take five minutes and come back  
7 with -- where are we -- Public Trust Alliance.

8 MR. SILVER: Mr. Chairman, Dr. Williams is  
9 going to do the cross. And as I indicated yesterday,  
10 he's not available next week, so we do want to be sure  
11 and would request that Sierra Club be able to do  
12 cross-examination this afternoon.

13 CO-HEARING OFFICER BAGGETT: We will discuss  
14 it, and I'll switch you with Carmel River Steelhead, if  
15 that's fine with the doctor back there. You can work  
16 it out with the other two parties, if they're willing  
17 to change. Let's take five minutes.

18 (Recess)

19 CO-HEARING OFFICER BAGGETT: Okay, we're back.  
20 Properly sugared up.

21 I think since we have one witness that's going  
22 to be unavailable, it seems to me we should at least  
23 make sure we get through that one witness. So I would  
24 ask unless a party has very brief cross-examination of  
25 all parties we dispense with it. I don't know how long

1 do you expect?

2 MR. WARBURTON: I've already been admonished,  
3 so I'm going to be keeping it very brief.

4 CO-HEARING OFFICER BAGGETT: Okay.

5 MR. WARBURTON: Since I know other people are  
6 asking some of these --

7 CO-HEARING OFFICER BAGGETT: Very good.

8 Let's just proceed, and when we get to -- I'm  
9 sure Dr. Williams and the Prosecution Team are going to  
10 have a lot of questions for the whole panel. Maybe you  
11 can focus yours and we'll allow the rest of the panel  
12 to come back on the 7th. Okay.

13 CROSS-EXAMINATION BY MR. WARBURTON

14 FOR PUBLIC TRUST ALLIANCE

15 MR. WARBURTON: I'm Michael Warburton for  
16 Public Trust Alliance.

17 First one for Mr. Fuerst. You spoke of the  
18 baseline for your considerations of cuts. You spoke of  
19 a regulatory limit of 95-10 with no reference to  
20 illegal diversions of Cal Am or the stated aim of 95-10  
21 to terminate those diversions. You just spoke of a  
22 regulatory limit. Did you regard that as a -- sort of  
23 a permanent regulatory limit or --

24 MR. FUERST: No, not at all. Not at all. I  
25 was specific to water year 2008. So in the chart, I



1 showed that was the regulatory limit that existed in  
2 the Carmel River based on 95-10 and the Seaside  
3 Groundwater Basin based on that decision for this year.  
4 We know that it's likely that will change in the  
5 Seaside Groundwater Basin.

6 MR. WARBURTON: But you do regard that as sort  
7 of the baseline for the Carmel River and the sort of --

8 MR. FUERST: I know up through 2008 what the  
9 limit has been and is. Beyond that, I'm not certain.

10 MR. WARBURTON: But you're not considering it,  
11 yeah, as permanent in any way?

12 MR. FUERST: No.

13 MR. WARBURTON: That's good.

14 Now, next for the rhetorical question for the  
15 biologist. We have to -- in the application of  
16 science, I think, Mr. Urquhart, actually.

17 In the application of science to another type  
18 of situation, if you were, you know, near the edge of a  
19 road, and it's dark. You see headlights up, you know,  
20 on the side, probably coming towards you, how would you  
21 make the decision to step aside? Would you do a radar  
22 test of, you know, the Doppler effect, and then, you  
23 know, get an entire quantitative -- would you make a  
24 quantitative or qualitative decision as to whether to  
25 step out of the path of an approaching truck?

1 (Laughter)

2 MR. LAREDO: I want to hear the answer.

3 MR. URQUHART: I'm at a loss how to answer  
4 this as a fisheries biologist.

5 MR. WARBURTON: As a fisheries biologist,  
6 knowing that you have a trustee agency which is  
7 responsible for a little trout, okay, in the stream,  
8 and you saw a landslide up above, would you do a  
9 scientific study, you know, and get all the absolute  
10 certainty that would be required before thinking that  
11 there might be some danger posed to the system?

12 MR. LAREDO: I will object now on the grounds  
13 that the question is argumentative.

14 CO-HEARING OFFICER BAGGETT: Could you  
15 rephrase the question so that. . . .

16 MR. WARBURTON: Well, in some ways I'm asking  
17 questions about the level of certainty that is applied,  
18 and sometimes with a Public Trust resource such as fish  
19 or the water and the ecosystems associated with it,  
20 there might be a more practical decision-making  
21 mechanism.

22 MR. LAREDO: Objection. Is there a question  
23 here?

24 CO-HEARING OFFICER BAGGETT: Could you ask the  
25 question?

1           MR. WARBURTON: You spoke about water  
2 diversions and possible effects on fish, on steelhead  
3 in the Carmel River, and do you need scientific  
4 certainty to assure you, as a fisheries biologist,  
5 those fish are in danger or could be aided by the  
6 ceasing of extreme diversions?

7           CO-HEARING OFFICER BAGGETT: If you can't  
8 answer, so state.

9           MR. URQUHART: To answer the question, I would  
10 have to rephrase it to what I think he's asking which I  
11 know is not how we're supposed to operate.

12           MR. RUBIN: I would -- based upon that  
13 response, the question clearly calls for speculation.  
14 I don't think we should be engaging the witness in  
15 trying to question -- raise questions for him to  
16 answer.

17           CO-HEARING OFFICER BAGGETT: Yeah.

18           MR. WARBURTON: I'm just -- I think this  
19 raises sort of my element of frustration with the  
20 attempts to try to bring scientific responsibility  
21 rather than scientific certainty into this  
22 decision-making model here.

23           MR. LAREDO: Objection.

24           MR. WARBURTON: And when --

25           MR. LAREDO: Objection. There is no question.

1 I move to strike.

2 CO-HEARING OFFICER BAGGETT: I understand.

3 You'll have an opportunity again to raise  
4 that. That's definitely a closing brief issue, if you  
5 want us to consider some of the legal issues, and I  
6 assure you, you will have an opportunity to brief that.

7 But it's not a question that you can really  
8 ask a scientific witness, I don't think. You'll have  
9 that opportunity.

10 CO-HEARING OFFICER WOLFF: Let me just counsel  
11 Mr. Warburton. I understand the general concern as to  
12 what standard of evidence is required for the Board to  
13 act, whether that standard is in fact some sort of  
14 certainty standard or different standard such as  
15 substantial evidence. I understand the type of thing  
16 you are going to here. But again, as Mr. Baggett says,  
17 those are appropriate issue for your legal brief,  
18 closing brief.

19 MR. WARBURTON: Do you feel as a fisheries  
20 biologist that you could give advice to a trustee that  
21 would be useful to them in making a decision about the  
22 remedy in this case?

23 MR. URQUHART: If they asked me a question  
24 about which I had knowledge and experience, yes.

25 MR. WARBURTON: And -- okay. Do you have

1 faith in that process?

2 CO-HEARING OFFICER BAGGETT: Okay. Thank you.

3 MR. WARBURTON: I'll make room.

4 CO-HEARING OFFICER BAGGETT: Okay. Planning  
5 and Conservation League, why don't we -- you said you  
6 just had a few minutes.

7 CO-HEARING OFFICER WOLFF: You can come back  
8 on the 7th?

9 CO-HEARING OFFICER BAGGETT: Sierra Club, do  
10 you want to go -- is that agreeable to the Carmel  
11 party? Okay. Sierra Club, you can go next.

12 MR. SILVER: I'm just here to hold his hand.

13 CO-HEARING OFFICER BAGGETT: Deal with  
14 objections, just in case there are any, pre-emptive  
15 move. Continue.

16 CROSS-EXAMINATION BY DR. WILLIAMS

17 FOR SIERRA CLUB

18 DR. WILLIAMS: Most of my questions are for  
19 Mr. Urquhart, but I want to start off by trying to  
20 clear up a matter we were discussing a minute ago with  
21 Mr. Hampson, and it involved the uncertainty with what  
22 was going on with riparian vegetation in the lower  
23 river and relationship to erosion.

24 Mr. Hampson, when there is river flowing with  
25 the alluvial part of the Carmel River, is there a lack

1 of willow roots that form along the flow of the bank of  
2 the river?

3 MR. HAMPSON: In many areas, yes.

4 DR. WILLIAMS: And does that provide  
5 resistance to erosion?

6 MR. HAMPSON: I put in my testimony that I  
7 have seen willow roots that are large to withstand very  
8 high flow.

9 DR. WILLIAMS: And that kind of matter, willow  
10 roots, cannot be reproduced by subaerial irrigation?

11 MR. HAMPSON: I think I'm going to defer to  
12 Mr. Christensen -- he's the project coordinator -- on  
13 that question.

14 MR. CHRISTENSEN: It's very difficult to  
15 achieve that mat in the lower river with irrigation.

16 DR. WILLIAMS: Thank you.

17 MR. CHRISTENSEN: We see those mats in the  
18 upper portion of the river where it stays perennial  
19 flow but we are not seeing those large mats in the  
20 lower river.

21 DR. WILLIAMS: Thank you.

22 Now Mr. Urquhart, you remember we met in the  
23 early 1990s, working with Bill Snider?

24 MR. URQUHART: Correct.

25 DR. WILLIAMS: We've known each other some

1 time. And I have a basis for fearing that you --  
2 giving simple answers is not your nature?

3 MR. URQUHART: Correct.

4 DR. WILLIAMS: Will you try to restrain your  
5 nature here?

6 MR. URQUHART: Absolutely.

7 DR. WILLIAMS: Thank you. All right. Does  
8 exhibit KU-2 describe your professional training and  
9 experience and is reasonably accurate.

10 MR. URQUHART: Yes, sir.

11 DR. WILLIAMS: And complete? Does it show you  
12 have any training for dealing with aquifer  
13 interactions?

14 MR. URQUHART: Repeat the word please?

15 DR. WILLIAMS: Do you have any training in  
16 hydrology or the interaction between streams and  
17 aquifers?

18 MR. URQUHART: Only that which I have received  
19 by working with hydrologists and engineering geologists  
20 and by my own reading and listening to other people's  
21 talks and lectures. No formal class work or  
22 certificate training.

23 DR. WILLIAMS: But your testimony does concern  
24 stream/aquifer interactions?

25 MR. URQUHART: Not really. Not in any complex

1 technical sense.

2 DR. WILLIAMS: Okay. Let's move on. Let's  
3 look at your exhibit KU-10A please.

4 MR. URQUHART: Yes, sir.

5 DR. WILLIAMS: Can we get that up?

6 CHIEF LINDSAY: I'm sorry; it was 10?

7 DR. WILLIAMS: 10A. MPWMD KU-10A.

8 Could you go to the exhibit.

9 CHIEF LINDSAY: Okay.

10 DR. WILLIAMS: Mr. Urquhart, does the left  
11 hand of this exhibit show regression curves in the  
12 Carmel River of Los Padres?

13 MR. URQUHART: This shows the measurements  
14 taken by a member of our District, our District  
15 Hydrologist Fred James, on or about the first day,  
16 first weekday of the month, one day at the beginning of  
17 the month in each one these years.

18 DR. WILLIAMS: I'm just trying to get at what  
19 you mean by recession curve here.

20 MR. URQUHART: What I'm saying is that you can  
21 see that you can see this is the changes in flow above  
22 Los Padres, not under the influence of anything because  
23 that area is in a national forest land, and the  
24 watershed in that area is in the wilderness and  
25 national forest land.



1 DR. WILLIAMS: In your testimony when you  
2 describe recession curves, for example for Carmel Gage,  
3 do you mean something other than the plots of the  
4 declining flow?

5 MR. URQUHART: No. No just the plots of  
6 declining flow.

7 DR. WILLIAMS: Okay. Let's go to your exhibit  
8 KU-7A. Could we have that please.

9 All right. This is a rather complex figure.  
10 Table. Let's focus on the bottom row and try to work  
11 through this where we can all understand your figures.  
12 Let's talk about the column for annual daily flow  
13 increase CFS per day, so it's the 10.9 number at the  
14 bottom row?

15 MR. URQUHART: Correct.

16 DR. WILLIAMS: And let's look at the -- for  
17 the near Carmel Gage, the one next to the right. And  
18 down at the bottom says May 21 plus 16 or 51?

19 MR. URQUHART: Correct.

20 DR. WILLIAMS: Okay. Now let's try to  
21 understand what the May 21 plus 16 means in terms of  
22 the 10.9 CFS per day. Now as I -- May 21 is the day  
23 when flow at the Carmel Gage went to zero in this year,  
24 is that correct? The year 19 -- excuse me, 2007.

25 MR. URQUHART: Correct.

1 DR. WILLIAMS: All right. So to get the  
2 number 16, did you look at the flow record for the Near  
3 Carmel Gage?

4 MR. URQUHART: Correct.

5 DR. WILLIAMS: By the data that had flow equal  
6 or greater than 10.9 CFS?

7 MR. URQUHART: Correct.

8 DR. WILLIAMS: Then it was 16 days from that  
9 until it went dry?

10 MR. URQUHART: Correct.

11 DR. WILLIAMS: So then if I understand your  
12 testimony, you were saying that if the diversions were  
13 decreased by 10.9 CFS per day in a year like 2007, the  
14 result would be you would have only 16 more days with  
15 nonzero flow at the Near Carmel Gage?

16 MR. URQUHART: On or about that amount.

17 DR. WILLIAMS: Do you think the recession  
18 curve of Near Carmel Gage is affected by Cal Am  
19 pumping?

20 MR. URQUHART: Yes.

21 DR. WILLIAMS: In fact, you said -- so stated  
22 in your testimony. If there were less pumping from the  
23 Carmel River underflow, do you believe that would  
24 affect the shape of the recession curve?

25 MR. URQUHART: Yes.

1 DR. WILLIAMS: Do you think it would be  
2 steeper or less steep?

3 MR. URQUHART: My best professional judgment,  
4 it would be less steep and extend longer.

5 DR. WILLIAMS: So in fact if there's a repeat  
6 of 2007 with a reduction of 10.95 CFS per day pumping,  
7 you would have more than 16 days with nonzero flow?

8 MR. URQUHART: It's possible, yes.

9 DR. WILLIAMS: That I agree, very possible.  
10 Let's go now to your Exhibit KU-4. Historical counts  
11 of adult steelhead for various years at Los Padres Dam?

12 MR. URQUHART: This is the -- that's correct,  
13 the data we have for that period of time from Cal Am.

14 DR. WILLIAMS: Focusing on the years left  
15 around 1950, 1949, few years, these were the fish that  
16 were captured at the trap at Los Padres and carried  
17 around the dam?

18 MR. URQUHART: That's my understanding, yes.

19 DR. WILLIAMS: Is it your opinion that these  
20 counts represent all the fish that got up to Los Padres  
21 dam and wanted to go past?

22 MR. URQUHART: No.

23 DR. WILLIAMS: Would you go to your testimony,  
24 paragraph 5 at the bottom of page 3. First of all,  
25 back up. Why did you answer no to the last question?

1 Does that represent all the fish that wanted to go by?

2 MR. URQUHART: Are you asking why I made that  
3 answer?

4 DR. WILLIAMS: Yes.

5 MR. URQUHART: I think most fish passage  
6 engineers and most fishery biologists believe that no  
7 fish ladder is capable of passing 100 percent of all  
8 fish that would approach it. Some fraction are going  
9 to not choose to enter and are going to fall back. So  
10 therefore, when you're in the presence of a fish  
11 passage operation like this, you cannot guarantee 100  
12 percent passage.

13 DR. WILLIAMS: Do you have any information  
14 regarding the Los Padres trap in particular?

15 MR. URQUHART: Can you clarify the question?

16 DR. WILLIAMS: Do you have any information  
17 about the passage efficiency of the Los Padres --

18 MR. URQUHART: No.

19 DR. WILLIAMS: -- in particular?

20 Are you familiar with the the Los Padres 1983  
21 report on the Carmel River?

22 MR. URQUHART: I have read it, yes.

23 DR. WILLIAMS: Do you know whether that  
24 discusses fish milling about below the trap at Los  
25 Padres Dam?

1 MR. URQUHART: It may.

2 DR. WILLIAMS: Let's go now to your paragraph  
3 5.

4 MR. URQUHART: Paragraph 5, page 3, correct?

5 DR. WILLIAMS: Yes. And at the top of page 4.  
6 Does this paragraph discuss, mention anything about the  
7 trap efficiency at the Los Padres Dam?

8 MR. URQUHART: No, it does not.

9 DR. WILLIAMS: Do you think it's a fair  
10 comparison, those past data with the present trap?

11 MR. URQUHART: The data is what the data is.  
12 I have no way of knowing whether the -- the relevant  
13 efficiencies of the three generation of traps that  
14 existed at the dam over that period.

15 DR. WILLIAMS: Mr. Urquhart, does public  
16 alluvial aquifer at the Carmel River tend to dig a hole  
17 in the aquifer, as it were, create a -- draw down the  
18 water table so that the aquifer needs to be recharged  
19 before flowing in the lagoon is uninterrupted or not  
20 impeded as it flows over the aquifer?

21 MR. URQUHART: That doesn't brook a simple  
22 yes-or-no answer, but in the interests of time, yes.

23 DR. WILLIAMS: In your testimony about the  
24 effects of diversions on the Carmel River steelhead,  
25 did you take that effect into account?

1 MR. URQUHART: For what components of my  
2 testimony?

3 DR. WILLIAMS: Discussing the effects of Cal  
4 Am's unauthorized diversions or unpermitted diversions  
5 on the Carmel River steelhead?

6 MR. URQUHART: I'm lost as to how this  
7 question was applicable to my testimony, sorry.

8 CO-HEARING OFFICER BAGGETT: If you can't  
9 answer --

10 MR. URQUHART: I don't understand the  
11 question.

12 DR. WILLIAMS: Okay. Is -- question here  
13 talking about different stages of steelhead. In your  
14 opinion, are the juvenile steelhead most likely to be  
15 affected of the different life stages, most likely to  
16 be affected by the dry season flows on the Carmel  
17 River?

18 MR. URQUHART: I think that is the life stage  
19 at greatest threat for low season flows, correct.

20 DR. WILLIAMS: And that will be primarily the  
21 young of the year?

22 MR. URQUHART: They would be a mix of young of  
23 the year and yearling-plus fish, depending on success  
24 of the prior spawning years.

25 DR. WILLIAMS: In your experience is it

1 usually more of the young of the year than the  
2 yearling?

3 MR. URQUHART: Correct.

4 DR. WILLIAMS: And how long will it be before  
5 conditions that affect the young of the year will have  
6 an influence on the adult returns?

7 MR. URQUHART: Little under three years.

8 Basically they will rear through that year,  
9 leave the following year, come back about two years  
10 later. So basically, you would look out and see  
11 production two run years later from the time of  
12 spawning. And also fish that come back on other  
13 periods but not -- the dominant period is two years.

14 DR. WILLIAMS: In your testimony, you  
15 recommend that the State Board modify the CDO to use an  
16 adults returns as a figure for decreases in diversions?

17 MR. URQUHART: Correct.

18 DR. WILLIAMS: Would that trigger reflect  
19 conditions in the river a year or two or three years  
20 before?

21 MR. URQUHART: The adult runs reflect  
22 conditions in the river that they came back to spawn  
23 and in the years that they were spawned. And ocean  
24 conditions over the intervening period. Three factors.

25 DR. WILLIAMS: Okay. Let's go now to your

1 exhibit KU-3.

2           So if we look at the annual returns here at  
3 the San Clemente Dam for the years beginning in 1995,  
4 what would be the first year before Water Rights Order  
5 1995 could have any effect on adult returns?

6           MR. URQUHART: Obviously, some of that water  
7 rights Order 95 was executed in 1995, and actions would  
8 have been required in the following calendar year.

9           The first effect of 95, the lawyers and  
10 hydrologists could answer -- would be seen in '96. The  
11 first changes, behavior or action by anybody, would  
12 happen in 1996.

13           DR. WILLIAMS: What would be the first year  
14 that adult returns reflect those changes?

15           MR. URQUHART: Approximately 1998.

16           DR. WILLIAMS: What has happened to the counts  
17 of steelhead at San Clemente Dam since 1998?

18           MR. URQUHART: They appear -- if you select  
19 that as your sole starting point, which is an  
20 assumption -- to be possibly slightly declining or  
21 level.

22           DR. WILLIAMS: So they do not provide strong  
23 support for the hypothesis that 95-10 has made things  
24 better for steelhead?

25           MR. URQUHART: Is that your hypothesis?



1 DR. WILLIAMS: No, my question to you: Do  
2 those data provide support for that hypothesis?

3 MR. URQUHART: Those data show that things  
4 have improved since the last drought, and a number of  
5 things happened since then including 95-10 and other  
6 actions.

7 DR. WILLIAMS: All right. Do you remember you  
8 testified before the State Board in 2001 about the  
9 Carmel River?

10 MR. URQUHART: I believe I did.

11 DR. WILLIAMS: And do you believe that your  
12 testimony in this proceeding is consistent with your  
13 testimony that proceeding?

14 MR. URQUHART: As far as I recall. I didn't  
15 review my testimony in that proceeding.

16 DR. WILLIAMS: Mr. Silver will provide that.

17 MR. LAREDO: I'd like to point out this is an  
18 11-page document. And if your inquiry is going to go  
19 into the content, I'd like the witness to have an  
20 opportunity to read the entirety of it.

21 CO-HEARING OFFICER BAGGETT: Does it say where  
22 it's from?

23 CO-HEARING OFFICER WOLFF: This needs to be  
24 labeled more efficiently. Testimony from when, what  
25 preceding, et cetera.

1 DR. WILLIAMS: This was in the hearing for the  
2 concerning consideration of Water Rights Order 2001-08.  
3 Let's see. This was Exhibit DFG-1. I have the exhibit  
4 list, the exhibit identification list, from that  
5 hearing. Consideration of order 2001 before DWR.

6 MR. RUBIN: At this point, I would object to  
7 the testimony or this document being marked, and --  
8 it's not clear if this testimony was submitted and  
9 accepted into evidence, if the witness was subjected to  
10 cross-examination.

11 The fact that it's a document that was  
12 written -- it's not even signed. There's no statement  
13 of penalty of perjury. Without any of that context, I  
14 don't think it's an appropriate document for purposes  
15 of examination.

16 MR. LAREDO: I have to join in that objection.  
17 There is -- although there is a footer on the first  
18 page, there's no reference on any of these other pages  
19 as to where this comes from or if it in fact was  
20 submitted.

21 MR. SATO: May I speak?

22 I think that, you know, if you probably gave a  
23 few more minutes for somebody to just lay a foundation  
24 and have this document authenticated, we might be able  
25 to end this whole thing.

1 CO-HEARING OFFICER BAGGETT: I would concur  
2 this needs to be authenticated somehow. And as I  
3 recall, I did that proceeding myself, and there were  
4 probably two other people in this room who were there.

5 But I can't recall all the exhibits, if this  
6 was from that, and whether it was actually entered into  
7 evidence. That's what we need, some background.

8 MR. RUBIN: And not only just in terms of  
9 whether it was marked, ultimately admitted. The  
10 transcript from the proceeding, presuming there was  
11 discussion about it, could reflect corrections to the  
12 testimony, the changes that were made.

13 Even today, we had a dialogue about written  
14 testimony that reflects the witness's correction -- we  
15 don't know if that was made. This is -- my point is  
16 even if you could establish the fact that it was  
17 submitted, it doesn't necessarily reflect the full  
18 discussion.

19 CO-HEARING OFFICER BAGGETT: I appreciate  
20 that. Do you have any -- I think your counsel  
21 understands what we need.

22 DR. WILLIAMS: I was also at that hearing, and  
23 I have personal recollections of the testimony being  
24 given. If you can help me with what you're looking  
25 for?

1           MR. SATO: I think all he has to do is ask him  
2 if he -- he can review the document, ask him whether he  
3 recalls making this kind of testimony in that earlier  
4 proceeding, and then ask him about statements to  
5 compare to, if he could so choose. I don't know what  
6 Mr. Williams is planning on.

7           CO-HEARING OFFICER BAGGETT: I would concur.  
8 And we can take it as hearsay to the extent it is.  
9 It's not authenticated as an official exhibit. We have  
10 hearsay rules. We can take it and give it that weight,  
11 but we certainly can't give it the weight as an  
12 accepted exhibit without all the offers --

13          MR. RUBIN: If I recall the hearsay rules  
14 correctly, and I'm not sure if I do -- but if I do, I  
15 believe that the hearsay rules allow for hearsay to be  
16 admitted if it's intended to explain testimony that is  
17 provided that is not hearsay.

18          CO-HEARING OFFICER BAGGETT: Right. Let's  
19 continue, and we'll give it the weight for the  
20 situation. So continue. Ask the witness if he's had a  
21 chance to review it.

22          MR. URQUHART: It's 16 pages. I'd have to sit  
23 here for 10 or 15 minutes to read it. I have no idea  
24 whether this is an accurate copy or not.

25          MR. LAREDO: May I have an opportunity to ask

1 a few questions of the witness on this?

2 CO-HEARING OFFICER BAGGETT: You can  
3 consult --

4 MR. LAREDO: It's in the nature of voir dire  
5 to determine whether or not he recalls is this an  
6 accurate copy? Does he recall giving the testimony?  
7 There should be a foundation before there's any  
8 questions based upon this.

9 CO-HEARING OFFICER BAGGETT: I assume the  
10 person providing the document should be laying the  
11 foundation for this.

12 MR. LAREDO: Thank you.

13 DR. WILLIAMS: Mr. Urquhart, you testified  
14 earlier that you remember testifying at the hearing.

15 MR. URQUHART: I'm not sure the number you  
16 gave for the hearing is the correct hearing and date,  
17 so.

18 I did testify at a Carmel River water rights  
19 hearing for the Department of Fish and Game two years  
20 back, in 2001 or 2002. I can't remember which year off  
21 the top of my head, and I have no way of verifying this  
22 is in fact my testimony.

23 DR. WILLIAMS: Have you read it?

24 MR. URQUHART: No. It's 11 pages long, and I  
25 just got it. And even if I would read it, I would have

1 to go back and check it against the State Board's  
2 testimony record or against my own personal files  
3 before I could vouch it's my testimony.

4 CO-HEARING OFFICER BAGGETT: So could you --  
5 what's the relevance of this document?

6 DR. WILLIAMS: The relevance, very briefly, is  
7 that the testimony in the 2001 hearing is going in 180  
8 degrees different direction from the testimony in this  
9 hearing.

10 CO-HEARING OFFICER WOLFF: With respect to the  
11 impacts of pumping or with respect to --

12 DR. WILLIAMS: With respect to pumping along  
13 the steelhead in the river and the importance of  
14 keeping the river -- reducing diversions so there'd be  
15 more water in the river, and the importance of the  
16 river having water in it longer in the year even if it  
17 goes dry for part of the year, and it's quite at odds  
18 with his prior testimony.

19 CO-HEARING OFFICER WOLFF: All right. The  
20 short version is with respect to pumping. Not with  
21 respect to dams, but with respect to pumping.

22 DR. WILLIAMS: Pumping.

23 MR. RUBIN: Again, I would raise an objection  
24 to the use of this document. If the intent of the  
25 document is to impeach the witness, the written

1 testimony that's been provided is not -- there is so  
2 many ambiguous elements of it, if they want to try to  
3 impeach this witness based upon testimony provided in a  
4 proceeding before this Board, there are transcripts  
5 that are provided, and that's the appropriate context  
6 in order to raise it.

7 The witness here is at an incredible  
8 disadvantage. If you take a look at --

9 CO-HEARING OFFICER BAGGETT: I concur. The  
10 objection is sustained.

11 You cannot enter this document for those  
12 purposes without some type of foundation. I think you  
13 would have an opportunity in rebuttal if you want to  
14 bring it back with the appropriate foundation to  
15 demonstrate it. You can do it then.

16 But you can't use it today without -- the  
17 witness has said he doesn't recall --

18 MR. URQUHART: Verbatim.

19 CO-HEARING OFFICER BAGGETT: -- verbatim  
20 whether it was accurate, inaccurate, and where it was.  
21 So you'll have an opportunity later, but it's not  
22 admissible today.

23 DR. WILLIAMS: Done with Mr. Urquhart.

24 Mr. Fuerst, in your --

25 CO-HEARING OFFICER BAGGETT: Okay. You won't

1 be here on the 7th or 8th. We have multiple witnesses,  
2 and we're trying to get through the one, but you won't  
3 be here --

4 DR. WILLIAMS: Neither one of use will be  
5 here.

6 CO-HEARING OFFICER BAGGETT: -- either, so  
7 proceed.

8 DR. WILLIAMS: Mr. Fuerst, you testified that  
9 the District recently entered a smaller desalination  
10 plant to its, what you could roughly call, an active  
11 project list; is that correct?

12 MR. FUERST: Yes, that's correct.

13 DR. WILLIAMS: And how is that normally  
14 described?

15 MR. FUERST: It's -- the seawater desalination  
16 plant in the Sand City, Fort Ord area is referred to by  
17 our Board as the 95-10 project.

18 DR. WILLIAMS: Thank you. And when was that  
19 95-10 project put on the District active list?

20 MR. FUERST: I testified to this at the June  
21 hearing, and it's in the transcript. My recollection  
22 is that it was -- the Board asked -- began asking for  
23 information in March. And I think in April they  
24 decided to make it the number one water supply  
25 alternative. And they have directed us to retain



1 consultants to a constraints analysis.

2 DR. WILLIAMS: So that came after the draft  
3 cease and desist order was issued?

4 MR. FUERST: Yes. That was a -- we were  
5 directed to go back to a project that had gone to  
6 essentially the draft EIR stage but had been put on  
7 hold in December of 2002.

8 DR. WILLIAMS: So 95-10 was issued in 1995;  
9 and in 2008, the Board activated the 95-10 project. Is  
10 that what I understand?

11 MR. FUERST: That's correct. There were other  
12 water supply efforts in between.

13 DR. WILLIAMS: And why in your opinion did the  
14 Board not pursue the 95-10 project before the draft  
15 cease and desist order was issued?

16 MR. FUERST: There were a number of reasons  
17 primarily going back to the Board's action in December  
18 of 2002 when it put the project on hold and go forward  
19 with the CEQA analysis, it was because in February of  
20 that year Cal Am had announced plans to go forward with  
21 the Coastal Water Project.

22 So rather than work on a smaller project,  
23 because the original Sand City desalination project --  
24 not to be confused with the City of Sand City  
25 project -- the District's desalination project was

1 looking at producing a yield of about 8400 acre feet  
2 per year. So the Board, when they made the decision  
3 not to go forward, they said let's put this on hold and  
4 see how Cal Am's larger regional Coastal Water Project  
5 works out.

6 DR. WILLIAMS: Were you present when the Board  
7 made those decisions in 2002?

8 MR. FUERST: Yes, I was at the public hearing.

9 DR. WILLIAMS: How would you characterize the  
10 feeling of urgency about trying to comply with water  
11 rights Order 95-10 that existed at that time in 2002 on  
12 the part of the Board?

13 MR. FUERST: The Board has always been looking  
14 for ways to comply -- for Cal Am and the community and  
15 the District to comply with 95-10.

16 DR. WILLIAMS: You've been working with the  
17 water district for quite a number of years?

18 MR. FUERST: Correct.

19 DR. WILLIAMS: Do you believe that you are  
20 well familiar with water politics in the Monterey area  
21 from that experience?

22 MR. FUERST: I'm aware of the water supply  
23 situation in the Monterey Peninsula area.

24 DR. WILLIAMS: And the various desires and  
25 policy vectors of objectives of the various

1 decision-makers?

2 MR. FUERST: I have knowledge of that.

3 DR. WILLIAMS: Is it fair to state that there  
4 has been a desire for a regional solution rather than  
5 simply District solution to the water supply problem  
6 reflected, for example, in Cal Am's coastal desal  
7 project?

8 MR. RUBIN: I'm going to object to the  
9 question. It calls for speculation. I'm not sure who  
10 he's asking, the Monterey Peninsula Water Management  
11 District generally? Very unclear.

12 CO-HEARING OFFICER BAGGETT: I'll ask the  
13 witness. Do you understand the question?

14 MR. FUERST: I think I do. I think Cal Am has  
15 proposed a basic Coastal Water Project that addresses  
16 95-10 specifically and a small portion of the overdraft  
17 in the Seaside Basin. And as an alternative at the  
18 direction of the PUC, they have also proposed a  
19 regional Coastal Water Project. But their focus is on  
20 the former, not the latter.

21 DR. WILLIAMS: Taking the subject of -- you  
22 were here when the Mayor of Carmel testified the other  
23 day?

24 MR. FUERST: Yes.

25 DR. WILLIAMS: Do you recall her testimony

1 about the number of second homes in Carmel, the number  
2 of homes that are not occupied full-time?

3 MR. FUERST: I don't recall her testimony  
4 exactly.

5 DR. WILLIAMS: Do you have an opinion about  
6 the number of homes in Carmel that are not occupied  
7 full-time?

8 MR. FUERST: I don't have any specific  
9 knowledge.

10 DR. WILLIAMS: Or from the other cities in the  
11 District?

12 MR. FUERST: I don't have that information.

13 DR. WILLIAMS: To the extent that there are  
14 second homes that are not occupied full-time, would  
15 that affect the statistics on water use that you  
16 presented earlier today?

17 MR. FUERST: Right. That would -- if they're  
18 not occupied full-time, then that would reduce the  
19 average use throughout the district.

20 DR. WILLIAMS: Did you hear the mayors'  
21 testimony about the problems with the fire hydrants?

22 MR. FUERST: Yes, I did.

23 DR. WILLIAMS: And her discussion -- I think  
24 she used the word "rotten" water mains?

25 MR. FUERST: I don't recall that particular

1 description, but.

2 DR. WILLIAMS: But those would help account  
3 for the unaccounted-for water use that you discussed in  
4 the testimony?

5 MR. FUERST: That would be a component of  
6 unaccounted-for water use, yes.

7 DR. WILLIAMS: Okay. I have a question for  
8 Mr. Christensen.

9 MR. CHRISTENSEN: Yes.

10 DR. WILLIAMS: There were a lot of -- you got  
11 a number of questions about various factors that might  
12 affect riparian vegetation along the Carmel River from  
13 the counsel for Cal Am. Do you remember that?

14 MR. CHRISTENSEN: Right.

15 DR. WILLIAMS: What I want to ask you about is  
16 your opinion about the relative importance of  
17 groundwater pumping compared to the other factors that  
18 he enumerated. Would you say that the groundwater  
19 pumping is the most important factor?

20 MR. CHRISTENSEN: I wouldn't say it's the most  
21 important factor, but it is a very important factor.  
22 Because we have seen large amounts of clearing from  
23 violations that have impacted it. But it is a very  
24 important factor.

25 DR. WILLIAMS: No more questions.

1 CO-HEARING OFFICER BAGGETT: Thank you. Who  
2 is up next? Carmel River Steelhead?

3 MR. JACKSON, earlier we -- at this point, if  
4 you could just direct your questions to Mr. Urquhart,  
5 and he will be --

6 MR. JACKSON: I was told to do that with  
7 Mr. Urquhart. And what I didn't understand from my  
8 clients was: When I've finished with Mr. Urquhart, I  
9 should go sit down and get the rest of these people on  
10 the 7th?

11 CO-HEARING OFFICER BAGGETT: Since he has a  
12 nonrefundable trip -- far away from here, I hope.

13 MR. JACKSON: Anybody who can get out of here,  
14 given the mess that's out on the freeway right now.

15 CO-HEARING OFFICER BAGGETT: Okay.

16 CROSS-EXAMINATION BY MR. JACKSON  
17 FOR CARMEL RIVER STEELHEAD ASSOCIATION

18 MR. JACKSON: Mr. Urquhart, judging from your  
19 testimony, you believe that there are problems on the  
20 river from the pumping of Cal Am; is that correct?

21 MR. URQUHART: Correct.

22 MR. JACKSON: And that there are other  
23 problems on the river that are also important; is that  
24 right?

25 MR. URQUHART: That's true. I don't believe

1 that that was part of my testimony.

2 MR. JACKSON: Well, I'm -- you talked a little  
3 about the dredging of Los Padres?

4 MR. URQUHART: Correct.

5 MR. JACKSON: Could you elaborate a little on  
6 when you believe that dredging might be one of the most  
7 significant ways to help?

8 MR. URQUHART: Obviously, the -- without fancy  
9 science and ecology, the basic principle is fish need  
10 water; which your client, Roy, says all the time, and  
11 of course it's true.

12 And obviously, you would like to apply as much  
13 water, by whatever measure you choose, to remediate  
14 things. You would like to apply as much water as you  
15 can over as much distance of the river as you can.

16 The dredging of Los Padres creates water which  
17 can be released to maintain stream flows all the way  
18 from Los Padres Dam to the mouth. And it could create  
19 up to four cubic feet per second of flow for the six  
20 months of the dry season each year.

21 MR. JACKSON: Now, what would, in your  
22 opinion, be the significance of four CFS during the dry  
23 months to the steelhead?

24 MR. URQUHART: It's, as I was asked in a prior  
25 question, the low season flows and the dry season are

1 one of the primary impacts that affect juvenile fish.  
2 Therefore, if we can improve the quality and quantity  
3 of habitat for juvenile fishery, we are likely to  
4 produce more smolts which in turn would produce more  
5 adult returns and contribute to recovery.

6 MR. JACKSON: You also say in your testimony  
7 that -- I believe you use the number 50 percent of the  
8 spawning basically takes place above Los Padres?

9 MR. URQUHART: Not that it actually takes  
10 place above Los Padres. It's that studies referenced  
11 by other parties and conducted by the District and  
12 consultants prior to my arrival indicate the potential  
13 spawning habitat, if you removed all the migration  
14 impediments from the stream, the potential habitat for  
15 fish to spawn in the area above the Los Padres Dam, the  
16 San Clemente feed, Carmel River branches and main stem  
17 could be up to 50 percent of what is available in the  
18 whole watershed.

19 MR. JACKSON: All right.

20 MR. URQUHART: Because 50 percent of the  
21 existing fish do not make it past that dam.

22 MR. JACKSON: If fish don't make it past that  
23 dam, what's the extent of the habitat below Los Padres?

24 MR. URQUHART: The habitat below Los Padres is  
25 composed of what is in the main stem and predominantly



1 the tributaries on the south side of the river which  
2 have more -- higher probability of perennial flow. So  
3 those areas combined produce the rest of the habitat in  
4 the river, potential spawning habitat and potential  
5 rearing habitat.

6 MR. JACKSON: To your knowledge, is there any  
7 spawning habitat below Schulte Bridge at the present  
8 time?

9 MR. URQUHART: That's a yes-or-no question, so  
10 I hesitate to go there, but if it remained wet  
11 throughout the length of the season necessary for a  
12 fish's eggs to rear and come out of the gravel, it  
13 would provide spawning habitat.

14 It is not as good as the spawning habitat in  
15 the upper watershed, and it is dewatered almost every  
16 year prior to the opportunity for all spawn, the redds  
17 and their eggs, to come out and mature.

18 MR. JACKSON: Would 4 CFS from up above over  
19 the lengthy period that you talked about, six months  
20 during the dry season, provide enough water for there  
21 to be spawning habitat then in this area?

22 MR. URQUHART: Spawning occurs below -- before  
23 the dry season. The answer to that is no. The  
24 spawning occurs in the -- you know, start of rearing,  
25 occurs in the dry season which is where I'm advocating

1 the 4 CFS be released. The 4 CFS would not be  
2 supplementing flows January through June.

3 MR. JACKSON: All right. So --

4 MR. URQUHART: Spawning is occurring.

5 MR. JACKSON: -- the supplementary flows from  
6 the dam would be useful for rearing --

7 MR. URQUHART: That's correct.

8 MR. JACKSON: -- but wouldn't make any  
9 difference at all in terms of spawning in your opinion?

10 MR. URQUHART: No. The release would be  
11 available -- theoretically available water to recover  
12 capacity would produce 4 CFS per day for six months or  
13 2 CFS per day if you release it all year long.

14 MR. JACKSON: All right. I also notice from  
15 your testimony, and I apologize if I'm sort of  
16 collapsing things, but I get the idea there is a reason  
17 to move along here. You indicate, I believe, in your  
18 testimony that the lagoon plays an important part in  
19 the rearing stage of steelhead?

20 MR. URQUHART: Yes.

21 MR. JACKSON: Would you describe what do  
22 steelhead make of the lagoon at the mouth of the Carmel  
23 River?

24 MR. URQUHART: They of course pass through it  
25 by their way as adults and juveniles if they -- if they

1 are ready smolt and going straight to sea. They also  
2 rear there.

3 MR. JACKSON: All right. If there is no water  
4 in the main stem during this six-month dry period, is  
5 there any other place that steelhead that have been  
6 spawned in any given year can rear other than the  
7 lagoon?

8 MR. URQUHART: Fish spawned in the lower main  
9 stem that could not or did not escape upstream when the  
10 dryback occurred, the only other place they would have  
11 to go is into the lagoon.

12 MR. JACKSON: All right. After they get into  
13 the lagoon, is it important to keep water quality in  
14 order that they survive in the lagoon?

15 MR. URQUHART: Yes.

16 MR. JACKSON: From looking at the hydrology  
17 and knowing what you know about steelhead and about  
18 rearing, is there likely to be any way that they could  
19 retreat from the lagoon upstream without this 4 CFS?

20 MR. URQUHART: Even a 4 CFS flow to the lagoon  
21 might be insufficient -- and probably would be  
22 insufficient -- for juvenile upstream passage. The 4  
23 CFS might keep the lagoon water quality good enough for  
24 them to rear year round in there.

25 MR. JACKSON: All right. What additional --

1 now the pumps basically take the underflow during the  
2 dry season?

3 MR. URQUHART: Correct.

4 MR. JACKSON: And the pumps could be operated  
5 to supply water to the people of the Monterey  
6 Peninsula, correct?

7 MR. URQUHART: Correct.

8 MR. JACKSON: From the underflow.

9 They could also be used, the underflow could  
10 be brought to the surface and added to the 4 CFS, could  
11 it not?

12 MR. URQUHART: I would assume so.

13 MR. JACKSON: How much additional pumped water  
14 from the underflow would be required to allow a refusia  
15 in terms of the main stem for some distance if the  
16 water quality in the lagoon became unusable for the  
17 steelhead that were in it?

18 MR. URQUHART: I wish I knew the answer to  
19 that. I don't. And we are -- Larry and I -- Hampson  
20 and I -- are trying to think of ways to make such an  
21 estimate. But we have not yet done so.

22 MR. JACKSON: All right. How long have you  
23 been working on that project?

24 MR. URQUHART: I've been working for the  
25 District since August 2006.

1           MR. JACKSON: How long have you been working  
2 on trying to qualify what it would take from the  
3 underflow in addition to the potential for CFS from the  
4 dredging of Los Padres to provide such a refusia?

5           MR. URQUHART: It's not one of my primary  
6 assignments. It's something that I'm voluntarily very  
7 interested in and that I've been discussing with Larry  
8 over the past year.

9           MR. JACKSON: Is this something that you -- I  
10 mean just from the point of view of the steelhead, is  
11 it something that you believe would be important?

12          MR. URQUHART: Yes.

13          MR. JACKSON: And thank you very much for  
14 thinking about it in your spare time. Is there some  
15 sort of an amount of money that would help with that  
16 project?

17          MR. URQUHART: In terms of concrete actions,  
18 answering that, with respect to your question, I  
19 believe?

20          MR. JACKSON: Yes.

21          MR. URQUHART: We have budgeted funds to do an  
22 engineering study, and Darby can correct me if that is  
23 not the case. It's my knowledge that the money has  
24 been put in to study the feasibility of utilizing well  
25 water to pump the lagoon, what the engineering problems

1 would be, et cetera, and there's a small amount of  
2 money in the coming fiscal year's budget for the  
3 District for that purpose. That's the only action I  
4 can quote that is an outcome of discussions.

5 MR. JACKSON: May I ask one more question of  
6 someone else, then come back?

7 CO-HEARING OFFICER BAGGETT: Sure.

8 MR. JACKSON: Mr. Fuerst, would you do me a  
9 favor and consider that as an important thing to do in  
10 terms of funding over the next cycle?

11 MR. FUERST: We'll consider it.

12 MR. JACKSON: Thank you.

13 CO-HEARING OFFICER BAGGETT: Proceed. The  
14 hour is late, and we've got two more parties.

15 MR. JACKSON: I just didn't want to lose it  
16 between now and the 7th.

17 Mr. Urquhart, your testimony seems to be that  
18 the CDO recommendations are not sufficiently harsh to  
19 make a lot of difference.

20 MR. LAREDO: Objection; I believe that  
21 mischaracterizes his testimony.

22 MR. JACKSON: I think that's pretty much what  
23 he said, but.

24 MR. URQUHART: What I attempted to do was  
25 simply to illustrate with basic arithmetic techniques,

1 low tech, what the possible outcomes of the cease and  
2 desist order were. I made no statement that you made.  
3 That's your interpretation.

4 MR. JACKSON: Okay. I don't think we have  
5 enough time for me to go back through this and find it.

6 But is it basically fair for me to say that  
7 you did point out in your testimony that only until the  
8 35 to 50 percent cutbacks would we really expect to  
9 have a better situation for the steelhead below -- I  
10 mean, if we don't deal with passage, if we don't deal  
11 with dredging, if we just rely on what we have, it  
12 would take 35 to 50 percent to begin to make  
13 significant differences?

14 MR. URQUHART: I analyzed the proposal of the  
15 Board, and much to my surprise, using those simple and  
16 basic and not complex methods, I did not see a large  
17 potential effect in the first two steps. I did see  
18 what would probably be a significantly beneficial  
19 effect in the last two steps. And that's what I  
20 testified to.

21 MR. JACKSON: Thank you, sir.

22 I notice in your testimony that you -- and  
23 this, please hit me with a gavel or something if this  
24 has been done when I wasn't here. I don't mean to be  
25 going over ground already in front of you.

1           But that you picked a point on a scale of how  
2 many steelhead there were in a given year and picked a  
3 point, basically 95-10, and sort of counted the fish to  
4 compare as to what it was in 95-10, about that year  
5 '97, '96, '95, and didn't go back to the '60s and '70s  
6 as your baseline level. Why was that, sir?

7           MR. RUBIN: I'm going to object to the  
8 question. Ambiguous.

9           MR. JACKSON: It was probably really badly  
10 asked. So I'll withdraw that question and ask it in a  
11 clearer way.

12           Why did you not use a baseline for comparison  
13 of the 1960s or 1970s before the heavy pumping began?

14           MR. URQUHART: For what purpose?

15           MR. JACKSON: To judge whether or not the  
16 steelhead run was doing well.

17           MR. LAREDO: I'd object; assumes facts not in  
18 evidence. Mr. Urquhart already testified, Exhibit  
19 KU-4, that shows historical counts all the way back to  
20 1949.

21           CO-HEARING OFFICER BAGGETT: The witness can  
22 answer -- overruled. Answer the question if you  
23 understand it to the best of your ability.

24           MR. URQUHART: My professional opinion as to  
25 what the current status of the steelhead in the Carmel



1 River is obviously has to be based upon the current  
2 numbers.

3 MR. JACKSON: But don't the current numbers  
4 have to be compared to something? I mean, I notice you  
5 use the number -- I think I remember seeing in here  
6 67 percent since a given year.

7 MR. URQUHART: You are correct, and I know  
8 where you're speaking in my testimony.

9 MR. JACKSON: Right.

10 MR. URQUHART: I am comparing the mean range  
11 of numbers since the drought, since 95-10, to the mean  
12 range of numbers, the only other numbers that are  
13 available, which is the numbers from 1962 to 1975.

14 MR. JACKSON: All right.

15 MR. URQUHART: But that's all that's  
16 available. We don't have the historical numbers that  
17 we would like to have as biologists prior to  
18 significant human impacts.

19 MR. JACKSON: So you picked numbers based upon  
20 what was there.

21 MR. URQUHART: Correct.

22 MR. JACKSON: Rather than what would have been  
23 present prior to the pumping?

24 MR. URQUHART: No one has any quantitative  
25 idea of what was present prior to pumping,

1 unfortunately. There are many best professional  
2 judgments and professional guesses, but that's all we  
3 have.

4 MR. JACKSON: Now this -- you have in your  
5 testimony what is to me a new idea of linking diversion  
6 cutbacks to declines in the steelhead population.  
7 What's your purpose in that recommendation?

8 MR. URQUHART: Obviously, all biologists  
9 believe that fish need water. But the Board faces a  
10 difficult decision-making situation where cutbacks may  
11 be difficult to achieve or to gain compliance with.

12 That whole question, at least in my presence  
13 here hasn't been fully answered yet by the other  
14 experts who have the expertise I don't. So I was  
15 suggesting a way that would provide a rational trigger  
16 to make cutbacks such that they would have a link to  
17 any ecological effect that would be obvious to the  
18 public, and which they could buy into even if they  
19 weren't happy with it, and then it was taking stiff  
20 actions. It could be at least in reaction to obvious  
21 numbers that are quantitated and which might gain more  
22 public acceptance than a uniform action based on  
23 principle only.

24 MR. JACKSON: Thank you, sir.

25 In your testimony on page 6, again talking

1 about the underflow to the lagoon at the end of your  
2 number 11, it -- you say that:

3 Large enough summer and fall reductions  
4 in diversions might improve dry season  
5 underflow to the lagoon such that it  
6 will improve water quality but not the  
7 quantity of dry season rearing habitat  
8 in the lagoon.

9 MR. URQUHART: Unfortunately, I believe that  
10 to be true.

11 MR. JACKSON: Okay. Now, with the reductions,  
12 improving water quality could be an important thing to  
13 the fish that are there, right?

14 MR. URQUHART: Correct.

15 MR. JACKSON: Fish can die from lack of water  
16 quality.

17 MR. URQUHART: Correct.

18 MR. JACKSON: So everything you do in the rest  
19 of the year could be wiped out by a decrease -- a  
20 threshold being exceeded in terms of the water quality?

21 MR. URQUHART: Correct.

22 MR. JACKSON: So one of the ways to improve  
23 that situation would be to cut back on pumping,  
24 correct?

25 MR. URQUHART: Yes, and how much would be

1 required to do so, I can't define.

2 MR. JACKSON: I understand. And another way  
3 to do it would be in periods of the year to use some of  
4 the pumps of the Monterey Peninsula Water District to  
5 add water for quality purposes, right?

6 MR. RUBIN: I'm going to object to the  
7 question. I don't -- I think it misstates the  
8 evidence, assumes facts that have not been presented,  
9 the reference to pumps by the Monterey Peninsula Water  
10 Management District.

11 CO-HEARING OFFICER BAGGETT: I understand. If  
12 you could phrase it as a hypothetical.

13 MR. JACKSON: Well --

14 CO-HEARING OFFICER BAGGETT: I'll --

15 MR. JACKSON: -- let me step back. Does the  
16 Monterey Peninsula Water Management District --

17 CO-HEARING OFFICER BAGGETT: Sustained.  
18 Continue. Rephrase it.

19 MR. JACKSON: Does the Monterey Peninsula  
20 Water Management District have monitoring wells in the  
21 area of the lagoon?

22 MR. OLIVER: I can answer that. Joseph  
23 Oliver.

24 Yes, the Monterey Peninsula Water Management  
25 District has monitor wells in the area of the lagoon.

1    However, there are three sets of those that are  
2    two-inch PVC monitor wells, and they are not equipped  
3    to have water pumped from them other than for sample  
4    selection purposes.

5           MR. JACKSON: I will forego this with  
6    Mr. Oliver until Mr. Oliver comes back. But I will  
7    want to talk about what it would take to equip those  
8    pumps.

9           CO-HEARING OFFICER BAGGETT: That's fine.

10          MR. JACKSON: Are there pumps available in the  
11    general vicinity of the lagoon that are owned by  
12    California American Water Company to your knowledge?

13          MR. URQUHART: It depends on what you call the  
14    vicinity. I'd have to look at the map. I think the  
15    Panetta wells are the first wells upstream of the  
16    lagoon, and that might be between one and a half to two  
17    miles from what would be the wetted front of the lagoon  
18    during the dry season.

19          MR. JACKSON: All right. So the Panetta wells  
20    would be the -- could -- if the water --

21          MR. LAREDO: May I suggest that Mr. Oliver is  
22    the witness best suited to address the hydrology  
23    questions.

24          MR. JACKSON: I'm okay, David.

25          MR. LAREDO: Thank you.

1 CO-HEARING OFFICER BAGGETT: Fishery issues.

2 MR. JACKSON: Yes, sir. I don't want to  
3 argue, but water in here is a fishery issue.

4 CO-HEARING OFFICER BAGGETT: I understand.  
5 You'll have an opportunity. The other panel will be  
6 back here on August 7th.

7 MR. JACKSON: All right.

8 You say, Mr. Urquhart, in your testimony that  
9 there's been a general increase in the number of  
10 steelhead rescued in the lower river since 95-10?

11 MR. URQUHART: Correct.

12 MR. JACKSON: Do you attribute that to more  
13 fish or better rescues?

14 MR. URQUHART: It's attributable to more than  
15 those two factors.

16 MR. JACKSON: All right. Is there any way to  
17 disassemble those two factors or any other factor so  
18 that we know what is causing the -- your impression  
19 that there are more steelhead being rescued?

20 MR. URQUHART: I'm looking for exhibit --  
21 excuse me. Exhibit MPWMD KU-5 shows the fish rescues  
22 upon which I based my information. The fish rescues  
23 for this year are also underway.

24 So far, over 50,000 fish have been rescued.  
25 The highest regular daily rescue counts that we have

1 ever encountered in the history of the District's  
2 rescue program are occurring. Total number of rescued  
3 fish, bar is obviously on the graph, and you may decide  
4 this is not obtainable information, but it's current  
5 data, is going to probably exceed 60,000 maybe as high  
6 as 80,000.

7 MR. JACKSON: I was looking at the graph in  
8 your testimony, and I notice what looked to me like a  
9 drop since 2001 through 2003.

10 MR. URQUHART: You are correct.

11 MR. JACKSON: And I thought about jumping all  
12 over that, but it seemed me that it could reflect  
13 something else which is basically a less effective  
14 rescue program.

15 MR. URQUHART: As part -- Mr. Dettman, my  
16 predecessor, made -- evaluated the relative efficiency  
17 of the rescues in various ways. And over the next few  
18 years as part of our Section 10 Permit for the  
19 operation of the rescues in the facility, we were  
20 required to do quantitative estimates, subsamples,  
21 essentially, doing that. And I don't have a  
22 year-by-year way of estimating rescue efficiency other  
23 than the personal opinion the the biologist in the  
24 field.

25 MR. JACKSON: My remaining question for you

1 has to do with the Sleepy Hollow rearing facility.  
2 Your testimony seems to indicate that -- I mean, San  
3 Clemente Dam is going to be taken down?

4 MR. URQUHART: Correct.

5 MR. JACKSON: Your testimony seemed to  
6 indicate that that will have a negative effect on  
7 Sleepy Hollow.

8 MR. URQUHART: There is a potential it may.  
9 You will have positive effects. You will have  
10 potential negative effects.

11 MR. JACKSON: What changes to Sleepy Hollow  
12 would be possible to avoid the negative effects that  
13 are expected when the dam comes down?

14 MR. URQUHART: The negative effect is that  
15 when the dam passes more sediment, which is good for  
16 the ecology of the river --

17 MR. JACKSON: Correct.

18 MR. URQUHART: It will -- much of that may be  
19 relatively coarse sands which will be very abrasive to  
20 the intake pumps. So an intake retrofit will be  
21 necessary in order to make the facility withstand the  
22 probable sand load that is going to come once the dam  
23 is removed.

24 We have an engineering report -- I can't  
25 remember the date -- which is in -- not in the record



1 of this hearing, but in the public record various ways,  
2 that evaluates that. And based on as we watch the  
3 changes in the planning that the Coastal Commission and  
4 NMFS are doing on the dam removal project here in the  
5 next year, I hope to revise and update that report  
6 based on their new information of likely outcomes and  
7 then be able to make a proposal to various funding  
8 sources to retrofit the intake.

9 MR. JACKSON: So you are working to coordinate  
10 these things so that we don't end up taking a step  
11 back?

12 MR. URQUHART: Correct.

13 MR. JACKSON: And what is the time period for  
14 that?

15 MR. URQUHART: I am -- I had to delay my  
16 production of staff note on revising the list report  
17 and starting that process due to the hearings. When I  
18 am done with the hearings, that's my next primary  
19 assignment from my supervisors.

20 MR. JACKSON: All right. From our point of  
21 view, Sleepy Hollow has some existing problems. Is  
22 there protection from predators at Sleepy Hollow?

23 MR. URQUHART: Yes.

24 MR. JACKSON: And does that work efficiently  
25 in your opinion?

1           MR. RUBIN: I'm going to object to the  
2 question. I've been trying to be patient. I think  
3 it's pushing past the limit that you've set in terms of  
4 background information that you're interested in  
5 hearing that might help guide a remedy in this  
6 proceeding.

7           MR. JACKSON: I guess the -- Mr. Rubin and I  
8 are having a slight disagreement about whether or not  
9 things that will help the fish that can be readily done  
10 to assist are within the purview of the hearing, or is  
11 the hearing solely about shutting down the pumping?

12           MR. RUBIN: And again, this is the dilemma we  
13 have been facing since we started, and it's a very  
14 slippery slope. It's convenient for Mr. Jackson to  
15 point to one thing or another and point fingers at  
16 California American Water or Monterey Peninsula Water  
17 Management District.

18           But again, there are numerous factors out  
19 there that are affecting fish, and are we going to open  
20 up to all the factors, to some of them?

21           CO-HEARING OFFICER BAGGETT: I understand. I  
22 think we've probably got sufficient background. Sounds  
23 like you're almost finished.

24           MR. JACKSON: I'll withdraw the question, if  
25 you don't want the answer.

1 CO-HEARING OFFICER BAGGETT: That's fine.

2 MR. JACKSON: Thank you, Mr. Urquhart. And  
3 I'll see you all on the 7th.

4 CO-HEARING OFFICER BAGGETT: Does PCL have any  
5 questions for Mr. Urquhart? No. You do for the rest  
6 of the panel. Okay. Prosecution, Mr. Sato.

7 MR. SATO: So is my target 20 minutes?

8 CO-HEARING OFFICER BAGGETT: See if you can  
9 pull it off.

10 CO-HEARING OFFICER WOLFF: Actually, Mr. Sato,  
11 if I could ask you: How much time do you anticipate?

12 MR. SATO: I hope to finish before 4:00.  
13 Mr. Fuerst's ad hoc group, said about how the CDO  
14 concentrates the mind, I guess so does a time limit as  
15 well.

16 CO-HEARING OFFICER WOLFF: Fine, but given the  
17 wide strike zone we have for all players here, I don't  
18 want to limit you any more than we limited them.

19 MR. SATO: Appreciate it.

20 CROSS-EXAMINATION BY MR. SATO

21 FOR THE PROSECUTION TEAM

22 MR. SATO: Mr. Urquhart, my name is Reed Sato.  
23 I'm an attorney representing the Prosecution Team. You  
24 heard the, I guess -- have you read the testimony of  
25 Ms. Ambrosius?

1           MR. URQUHART: I read it but I don't have it  
2 memorized, and I did listen to her oral summary.

3           MR. SATO: So you heard it and you read it  
4 once. Do you have any disagreements with the testimony  
5 that Ms. Ambrosius delivered?

6           MR. URQUHART: I think in the prior question I  
7 said there were three factors that I think NOAA  
8 overemphasizes. I answered that question. Other than  
9 that, no, I don't have any disagreement with the  
10 testimony.

11          MR. SATO: All right. I think you also talked  
12 about improvements that occurred to the fishery after  
13 Order 95-10 was issued. Do you recall that testimony?

14          MR. URQUHART: Mm-hmm.

15          MR. SATO: Can you tell me specifically what  
16 activities by Cal Am do you think contributed to the  
17 improvement of the fishery after the issuance of 95-10?

18          MR. URQUHART: I believe the effort to move  
19 diversion as far as downstream as possible, and the  
20 cessation of diversions from San Clemente, the low-flow  
21 season restrictions in the upper valley where only a  
22 couple of wells are pumped at the bare minimum level  
23 necessary to maintain the public health certification.

24                 I believe those things in combination have  
25 made the wetted front of the river extend farther

1 downstream more of the time and have resulted in at  
2 least no Cal Am reduced dewatering of the area above  
3 the narrows. It still dewateres once in a while.

4 MR. SATO: Do you think that the reduction in  
5 Cal Am's pumping -- the 20 percent reduction in Cal  
6 Am's pumping had any beneficial impact on the fishery?

7 MR. URQUHART: I'm sure it did. The basis of  
8 my oversimplified testimony is fish need water.

9 MR. SATO: So any more water that you provide  
10 to the river --

11 MR. URQUHART: Would help in some degree or  
12 another.

13 MR. SATO: Thank you. And just could we not  
14 talk over each other for the court reporter, if you  
15 could --

16 MR. URQUHART: Sure.

17 MR. SATO: -- let me finish. Like that.

18 Now, I think you already testified that if Cal  
19 Am were to reduce its illegal diversions by 35 percent  
20 to 50 percent, that would have a much more measurable  
21 impact on the fishery of the river; is that correct?

22 MR. URQUHART: Correct.

23 MR. RUBIN: I'm going to object to the  
24 question. I don't believe this question has  
25 characterized any diversions today as being illegal

1 diversions.

2 MR. SATO: I believe he answered, but I'll  
3 rephrase the question.

4 CO-HEARING OFFICER WOLFF: Thank you.

5 MR. SATO: You indicated that if Cal Am were  
6 to make the diversions identified in the draft cease  
7 and desist order at the 35 percent to the 50 percent  
8 level, that that would make a measurable impact on the  
9 fishery; is that correct?

10 MR. URQUHART: I believe that's true, correct.

11 MR. SATO: If Cal Am were to make a hundred  
12 percent reduction in the amount of water that it is  
13 taking above 3,376 acre feet per annum, that would have  
14 a better impact on the fishery; is that correct?

15 MR. URQUHART: Correct.

16 MR. SATO: Just so we know, because I think  
17 your counsel talked about balancing issues on the far  
18 end in terms of the balance would be the absolute  
19 protection of the steelhead through 100 percent  
20 reduction of Cal Am's diversions above 3,376 acre feet,  
21 correct?

22 MR. URQUHART: That would eliminate Cal Am's  
23 impacts due to diversion.

24 MR. SATO: Now in your exhibits KU-8A through  
25 KU-8C, you apply a proposed time schedule in the draft

1 CDO to critically dry water years, normal water years  
2 and extremely wet years to show potential benefits on  
3 the river downstream of the narrows, correct?

4 MR. URQUHART: Correct.

5 MR. SATO: Would you say these potential  
6 benefits that you outlined would yield roughly the same  
7 benefits to steelhead as a result of rewetting the  
8 river below the narrows as to those that occurred from  
9 improved water diversion practices ordered in 2002-002?  
10 Do you recall that?

11 MR. URQUHART: Trying to think.

12 MR. LAREDO: I believe the question may be  
13 ambiguous unless you actually pull out that provision  
14 and let the -- for the witness to review.

15 MR. URQUHART: What it is is that the actions  
16 in the two things are so different that I don't think I  
17 can answer the question scientifically. I'm not able  
18 to answer the question.

19 MR. SATO: Can you put up the chart they had  
20 about the nine proposed activities on the river?

21 CHIEF LINDSAY: This one?

22 MR. SATO: Yes, thank you.

23 MR. LAREDO: For the record, DF-11.

24 MR. SATO: Thank you.

25 Mr. Urquhart, looking at these proposed

1 restoration projects, are there any projects listed  
2 there -- strike that.

3 Do you have any additional restoration  
4 projects you would propose that would be helpful in  
5 improving the restoration of the Carmel River for fish?

6 MR. URQUHART: Long answer is obviously this  
7 list was developed as a result of designing to do other  
8 actions in the absence; that's the long answer.

9 And my proposal, and one of the ones on here,  
10 Los Padres Reservoir Sediment and Organic Debris  
11 Removal, is one that could potentially enhance flows.

12 MR. SATO: Aside from that project, are there  
13 other things that you could think of that would  
14 accomplish the flow enhancement you have in mind?

15 MR. URQUHART: Cessation of diversion will  
16 obviously enhance flow. As a hydrologist, I can't tell  
17 you if it's on a one-to-one ratio, but it will enhance  
18 flow. It will enhance flow during the period of the  
19 year when those diversions are occurring. I can't  
20 necessarily target the benefit to the low-flow season  
21 as effectively as Los Padres reservoir dredging.

22 MR. SATO: In terms of looking at this table,  
23 you see that there is ranks, one for NMFS and one for  
24 your District. Did you have any role in helping your  
25 District assess or assign the ranks to any of those



1 project?

2 MR. URQUHART: Yes, I did.

3 MR. SATO: So can you show me why you ranked  
4 some of the things differently than from NMFS?

5 MR. URQUHART: The group discussion among all  
6 technical staff that resulted in the District rank  
7 versus the NOAA rank was based on slight differences in  
8 perspective between our staff and NFMS as to what is  
9 going to provide more benefit.

10 And in terms of what is more feasible to  
11 execute as quickly as possible, those are what drove  
12 the differences in my opinion. And the differences are  
13 slight.

14 MR. SATO: In terms of the ranking, one of the  
15 considerations was how quickly the project could be  
16 implemented?

17 MR. URQUHART: At least in my case.

18 MR. SATO: Okay. Now, when you talked about  
19 the project being implemented, was that including all  
20 regulatory, permitting processes?

21 MR. URQUHART: Yes.

22 MR. SATO: CEQA issues, et cetera?

23 MR. URQUHART: Yes.

24 MR. SATO: Okay. So looking just for example  
25 at the lagoon reverse osmosis water project, do you

1 think that could be implemented the most rapidly  
2 compared to the other projects?

3 MR. URQUHART: When we ranked the list, we did  
4 not understand some of the regulatory impediments that  
5 have been articulated to us by the Regional Board  
6 staff. But I still think it's something that can be  
7 done on a relatively quick scale. It's going to be  
8 more difficult than when we originally ranked the list.

9 MR. SATO: Now based upon your discussions  
10 that you said were with the Regional Board staff, is  
11 that the Regional Water Quality --

12 MR. URQUHART: Right.

13 MR. SATO: -- Control Board?

14 MR. URQUHART: Correct. The South Central  
15 Coast Regional Water Quality Control Board staff in San  
16 Luis Obispo.

17 MR. SATO: Right. After your conversations  
18 with them, would the rankings of any of the projects  
19 change in your mind?

20 MR. URQUHART: No, I can't say that they would  
21 at this time.

22 MR. SATO: In your testimony, you offer this  
23 alternative trigger based upon the amount of steelhead  
24 population in the river. And could you tell me exactly  
25 how you selected the appropriate minimum number?

1           MR. URQUHART: I presented that as a  
2 conceptual suggestion. I am not articulating that  
3 either one of those numbers is the absolute correct  
4 number that should be used. I was articulating a  
5 concept and illustrating how the concept might work.

6           MR. SATO: And in developing the concept, you  
7 were taking into account the fact that there may be a  
8 delay -- in other words, the steelhead would show an  
9 impact that is delayed in terms of what the conditions  
10 on the river were; is that correct?

11          MR. URQUHART: Correct.

12          MR. SATO: So when you set -- when you  
13 conceptually come up with the numbers, do you have a  
14 number that's somewhat higher than what you might  
15 otherwise use if you were just looking for  
16 instantaneous impact to the steelhead?

17          MR. URQUHART: Like I said, it was a concept.  
18 So I was not, in the time allotted between notice of  
19 the hearing and now, I was not working on picking the  
20 justification for the absolute number.

21          MR. SATO: So you suggest that simply was a  
22 concept, but you are not proposing any specific  
23 absolute triggers for this Board, correct?

24          MR. URQUHART: Correct. I have concepts that  
25 I could work through, but I'm not ready to present them

1 at the hearing.

2 MR. SATO: And who do you report to at your  
3 District?

4 MR. URQUHART: Mr. Joe Oliver to my left.

5 MR. SATO: And when you proposed this trigger,  
6 is this something you discussed with Mr. Oliver?

7 MR. URQUHART: I presented all of my testimony  
8 for review by my superiors and chain of command.

9 MR. SATO: So if I had further questions about  
10 this particular trigger I would be able -- and you're  
11 not here to testify about them, I could ask Mr. Oliver?

12 MR. OLIVER: I could attempt to answer  
13 something within my area of expertise which is not  
14 fisheries biology, so it would only be to the extent  
15 that I could do it within my area of expertise.

16 MR. SATO: When you talk about determining  
17 population numbers for your trigger, how do you think  
18 that would be done?

19 MR. URQUHART: As I believe I already  
20 testified, we have no quantitative statistically valid  
21 population estimate for the Carmel River. We have run  
22 sizes past the two dams.

23 MR. SATO: I'm sorry. I wasn't clear. Who  
24 would make that determination in your conceptual model?

25 MR. URQUHART: Recommendations, I would

1    assume, would come to the State Board staff from  
2    experts at the District, Fish and Game, and NOAA.  And  
3    they would caucus in some manner to provide you with a  
4    reliable trigger that represented protective levels for  
5    the fish.  That would be my suggestion.

6           MR. SATO:  You also suggest the dredging of  
7    Los Padres Dam.  Would you characterize this as a  
8    long-term solution or an interim solution until the  
9    Coastal Water Project is operational?

10           MR. URQUHART:  It provides a long-term benefit  
11   to the fisheries.  And in the long run, as far as the  
12   steelhead are concerned, in the watershed even after  
13   the completed elimination of California American  
14   Water's unauthorized, if that's the right word,  
15   diversions, having a full Los Padres Reservoir provides  
16   an alternative water source for the community.

17           All of the water in that reservoir -- and I  
18   believe it is unique to the state of California as far  
19   as I know, west coast -- is released to maintain stream  
20   flows.  There's no direct diversion of water.  The  
21   water is eventually diverted at the wells but not  
22   immediately at the point of the dam.

23           And without the storage capacity in that  
24   reservoir, we will not be able to sustain good  
25   beneficial or higher level flows for fishery in the

1 river, even after Cal Am's diversions are eliminated.

2 So I see it as a beneficial long-term project  
3 to the community as a water resource to the fisheries  
4 to maintain base flows. And dredging -- it's silting  
5 in approximately, to the best of our current knowledge,  
6 at about 19 acre feet a year. If you dredged it, and  
7 if that number remains accurate in the future, I  
8 believe I calculated something like 80-plus years of  
9 benefit would be accrued from it.

10 MR. SATO: Now the dredging you talk about, is  
11 that listed on this list of projects?

12 MR. URQUHART: I believe it's implied as part  
13 of number seven. To the best of your knowledge, have  
14 any plans been proposed by the District to conduct this  
15 dredging?

16 MR. URQUHART: I don't believe there's been  
17 any formal technical memos or analyses or briefing  
18 that's been presented to the board.

19 MR. SATO: Do you know if there's anything  
20 written anywhere in the District that describes any  
21 kind of dredging plan for the Los Padres Dam?

22 MR. URQUHART: Not to my knowledge. I would  
23 ask Dr. Fuerst since my history -- Darby Fuerst. My  
24 history with the District goes back only two years.

25 MR. SATO: If I could ask you this one

1 question, Mr. Fuerst.

2 CO-HEARING OFFICER BAGGETT: Quickly.

3 MR. FUERST: If I heard the question, I would  
4 first add the District would not dredge the reservoir  
5 that is owned and operated by Cal Am. But I would note  
6 that in Cal Am's current general rate case application  
7 to the CPUC, they have requested \$200,000 to do a  
8 dredging feasibility study at Los Padres. That would  
9 look at -- through fieldwork, characterizing the  
10 sediment and determining the feasibility. That has not  
11 been approved. It's in application form.

12 MR. SATO: Couple more questions.

13 You talked about various factors that effect  
14 the fish in the Carmel River, steelhead in the Carmel  
15 River, and people asked you about ongoing conditions  
16 and talked about pumping.

17 Now those factors are somewhat synergistic,  
18 aren't they?

19 MR. URQUHART: Certain of them are, yes.

20 MR. SATO: Which ones aren't? Which ones  
21 would you say are?

22 MR. URQUHART: Water year types, pumping  
23 rates. I don't believe ocean conditions are  
24 necessarily related to actions in fresh water.

25 MR. SATO: You would say pumping rates would

1 be synergistic?

2 MR. URQUHART: Correct. The net effect of  
3 pumping varies by water year type.

4 MR. SATO: So the reduction of water in the  
5 river from pumping would have a synergistic effect?

6 MR. URQUHART: I think so. I think I'm  
7 interpreting your question correctly.

8 MR. SATO: I have no further questions.

9 CO-HEARING OFFICER BAGGETT: Thank you. With  
10 that, I think we are in recess for the proceeding. We  
11 can go on the record.

12 MR. LAREDO: Before we go off the record, I  
13 have no redirect of Mr. Urquhart. And I would like to  
14 move entry of his testimony and 17 exhibits that he  
15 sponsors. I'm not moving the remainder of our evidence  
16 until after the cross-examination is complete.

17 CO-HEARING OFFICER BAGGETT: Is there any  
18 objection to moving those exhibits in? Okay. If not,  
19 they are admitted into evidence.

20 (MPWMD Exhibits sponsored by Mr.

21 Urquhart were admitted into evidence.)

22 CO-HEARING OFFICER BAGGETT: Do we have any  
23 other questions on the record, objections?

24 MR. RUBIN: Just we would mark as an exhibit,  
25 Exhibit CAW-43, just to make sure we get it in,



1 since -- I would move it at this time.

2 CO-HEARING OFFICER BAGGETT: Okay. Any  
3 objection? If not, it's admitted also.

4 (Exhibit CAW-43 was admitted into  
5 evidence.)

6 CO-HEARING OFFICER BAGGETT: Now we can go off  
7 the record.

8 \* \* \*

9 (Thereupon the WATER RESOURCES CONTROL  
BOARD hearing adjourned at 4:00 p.m.)

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