

0001

01 PUBLIC HEARING
02 STATE WATER RESOURCES CONTROL BOARD
03 DIVISION OF WATER RIGHTS
04 STATE OF CALIFORNIA

05
06 ---o0o---

07
08 SUBJECT: AMENDMENT OF CITY OF LOS ANGELES' WATER RIGHT
09 LICENSES FOR DIVERSION OF WATER FROM STREAMS
10 THAT ARE TRIBUTARY TO MONO LAKE

11
12 ---o0o---

13
14 Held in
15 State Water Resources Building
16 901 P Street
17 Sacramento, California
18 Thursday, February 3, 1994

19
20 VOLUME XXXVI

21
22 ---o0o---

23
24 Reported by: Kimberley R. Mueller
25 CSR No. 10060

25
0002

01
02 BOARD MEMBERS

03
04 MARC DEL PIERO
05 JOHN CAFFREY
06 JAMES STUBCHAER
07 JOHN W. BROWN
08 MARY JANE FORSTER

09
10
11 STAFF MEMBERS

12
13 DAN FRINK, Counsel
14 JAMES CANADAY, Environmental Specialist
15 STEVE HERRERA, Environmental Specialist
16 RICHARD SATKOWSKI, Engineer
17 HUGH SMITH, Engineer

18
19
20
21
22
23
24
24

25
25
0003
01
01 COUNSEL AND OTHERS
02
02 For the U.S. Fish and Wildlife Service:
03
03 ERIKA NIEBAUER
04 Assistant Regular Solicitor
04 Office of Solicitor
05 Pacific Southwest Region
05 2800 Cottage Way
06 Sacramento, California 95825
06
07
07 For the Sierra Club:
08
08 LARRY SILVER
09
09
10 For California Department of Fish and Game:
10
11 HAL THOMAS
11 VIRGINIA CAHILL
12 McDonough, Holland & Allen
12 555 Capitol Mall, Suite 950
13 Sacramento, California 95814
13
14
14 For the U.S. Forest Service:
15
15 JACK GIPSMAN
16 Office of General Counsel
16 U.S. Department of Agriculture
17
17
18 For the National Audubon Society and Mono Lake
18 Committee:
19
19 BRUCE DODGE
20 PATRICK FLINN
20 Attorneys at Law
21 Morrison and Foerster
21 755 Page Mill Road
22 Palo Alto, California 94304
22
23
23
24
24
25
25
0004
01
01 For California Trout:
02
02 RICHARD ROOS-COLLINS
03 CYNTHIA KOEHLER
03 Attorneys at Law

04 National Heritage Institute
04 114 Sansome Street, Suite 1200
05 San Francisco, California 94104
05
06
06 For the City of L.A. and L.A. DWP:
07
07 THOMAS W. BIRMINGHAM
08 JANET GOLDSMITH
08 Attorneys at Law
09 Kronick, Moskovitz, Tiedemann & Girard
09 400 Capitol Mall, 27th Floor
10 Sacramento, California 95814
10
11
11 For State Lands Commission, Department of Parks and
12 Recreation:
12
13 JOHN STEVENS
13 MARY SCOONOVER
14 Assistant Attorney General
14 1515 K Street
15 Sacramento, California 95814
15
16
16 For Metropolitan Water District of Southern California
17 and L.A. MWD:
17
18 VICTOR GLEASON
18 Attorney at Law
19 Metropolitan Water District of Southern California
19 350 South Grand Avenue
20 Los Angeles, California 90054-0153
20
21
21 FRANK HASELTON
22 Haselton Associates
22
23 JOHN ARCULARIUS
23
24
24
25
25
0005
01
01 For the California Air Resources Board:
02
02 OFFICER OF LEGAL AFFAIRS
03 2020 L Street
03 Sacramento, California 95814
04 BY: KIRK C. OLIVER, Senior Staff Counsel
04
05
05 For the Great Basin Unified Air Pollution Control
06 District:
06
07 PAUL BRUCE, District Counsel
07
08

08
09
09
10
10
11
11
12
12
13
13
14
14
15
15
16
16
17
17
18
18
19
19
20
20
21
21
22
22
23
23
24
24
25
25

0006

I N D E X

01		
01		
02	PANEL	PAGE
02		
03	PETER VORSTER	
03		
04	Direct Examination by Mr. Dodge	25
04	Cross-examination by Mr. Birmingham	44
05	Cross-examination by Mr. Roos-Collins	95
05	Cross-examination by The Staff	107
06	Redirect Examination by Mr. Dodge	115
06	Recross Examination by Mr. Birmingham	124
07	Recross Examination by Mr. Roos-Collins	142
07	Cross-examination by Ms. Scoonover	147
08	Recross Examination by The Staff	148

08
09
09
10
10

E X H I B I T S

11
11
12
12

ID EV

13 L.A. DWP Exhibit No. 156 80 95
13 L.A. DWP Exhibit No. 157 81 95
14 L.A. DWP Exhibit No. 158 89 95

14
15
15
16
16
17
17
18
18
19
19
20
20
21
21
22
22
23
23
24
24
25
25

0007

01 SACRAMENTO, CALIFORNIA
02 THURSDAY, FEBRUARY 3, 1994, 2:07 P.M.
03 ---o0o---
04 HEARING OFFICER DEL PIERO: Ladies and gentlemen,
05 this hearing will come to order.
06 Ladies and gentlemen, welcome back. This is a
07 continuation of the hearing of the State Water
08 Resources Control Board regarding the amendment of the
09 City of Los Angeles' water rights licenses for
10 diversion of water tributary to Mono Lake.
11 My name is Marc Del Piero. I've Vice-Chair of the
12 State Water Resources Control Board, and I'm acting in
13 the capacity of Hearing Officer for this matter.
14 Good morning -- actually, good afternoon,
15 Mr. Dodge.
16 MR. DODGE: Good afternoon.
17 HEARING OFFICER DEL PIERO: I've already been in
18 one meeting already this morning, so you'll forgive me.
19 MR. DODGE: A couple of procedural things before
20 we call Mr. Vorster as our next witness.
21 One, in terms of my client's surrebuttal, it is
22 quite likely that it will be limited to Mr. Vorster and
23 Dr. Stine, and we will decide that the other witnesses
24 will be unnecessary. And if that changes, I'll let
25 people know.

0008

01 Secondly, I have talked informally with all
02 counsel as to the post-hearing submissions. I think we
03 all agree with the concept of an opening brief filed
04 simultaneously some number of days after the last
05 transcript is received and a simultaneous closing
06 brief.
07 But again, it is whatever is going to help the

08 Board.

09 HEARING OFFICER DEL PIERO: I'm prepared to
10 indicate what the Board's desire is this morning or,
11 rather, this afternoon about that.

12 I anticipate that legal briefs and the written
13 closing statement will be filed within 30 days of the
14 close of the hearing. The parties that wish to submit
15 reply briefs would be obliged to submit those reply
16 briefs within 15 days of the deadline of the initial
17 briefs. Okay?

18 Anybody have any problems with that?

19 MR. DODGE: I would just request a little more
20 time on the reply brief.

21 HEARING OFFICER DEL PIERO: More than 15 days?

22 MR. DODGE: Yes. Mr. Birmingham indicated to me
23 this morning that he'd like 45, and he mentioned he
24 had to respond to a bunch of folks, and I'm sympathetic
25 to that. I think 15 is really pushing it.

0009

01 HEARING OFFICER DEL PIERO: I'm sympathetic, but
02 not that sympathetic, Mr. Dodge. The reality is that
03 it's now February. This Board is obliged, pursuant to
04 court order, to have a decision out by August.

05 With the exception of the last few days of
06 transcripts, everyone, all of the parties, will have or
07 have the vast majority of the transcripts of this
08 hearing already.

09 It is not unreasonable to assume that the closing
10 arguments -- or, pardon me, the closing statements
11 could not be already begun. And so I'm somewhat
12 reluctant to do that. I might be willing to shave five
13 days off the 30 days and grant you an additional --
14 grant you 20 for the reply brief. But the net number
15 of days in terms of the response, I don't think is
16 going to change very much.

17 We're obliged to meet the requirements of the
18 court. My staff and my Board need that time to be able
19 to review the voluminous records that exist in order to
20 come up with as comprehensive and as intelligent and
21 appropriate decision as possible.

22 MR. DODGE: On behalf of my clients, I would
23 request three weeks on the closing brief. 30 days
24 we'll live with. Obviously, we'll live with the 15
25 days, too, if we have to.

0010

01 HEARING OFFICER DEL PIERO: Anybody else have any
02 observations or comments?

03 Mr. Birmingham, you have a smile on your face
04 still, sir.

05 MR. BIRMINGHAM: I do. I'm ill prepared, but I
06 have a smile on my face.

07 HEARING OFFICER DEL PIERO: That's okay.

08 MR. BIRMINGHAM: The Department of Water and Power
09 will have to respond to, at a minimum, I would guess
10 five opposing opening briefs. And there's the
11 potential that we will have to respond to a total of
12 eleven opening briefs.

13 I acknowledge that we have had the opportunity to
14 begin preparing our closing brief, but it will be very,
15 very difficult for us, if not impossible for us, to

16 intelligently and accurately respond to the number of
17 closing briefs that we anticipate receiving.

18 So I would join in Mr. Dodge's request that the
19 period between the opening and closing be extended from
20 15 days to three weeks.

21 HEARING OFFICER DEL PIERO: You got a calendar,
22 Dan?

23 MR. FRINK: No, I don't. I'm sorry.

24 HEARING OFFICER DEL PIERO: 15 days.

25 MR. BIRMINGHAM: Thank you.

0011

01 HEARING OFFICER DEL PIERO: 20 days after the
02 deadline for the submission of the initial briefs for
03 the reply briefs. Okay?

04 MR. BIRMINGHAM: One additional request that we
05 were going to make on behalf of the Department of Water
06 and Power.

07 I'm not sure that this would fit into the Board's
08 schedule, but I was going to request that after --
09 shortly after the submission of the closing briefs,
10 that we be given an opportunity to present very limited
11 oral argument to the Board.

12 I recall that we all presented very limited
13 openings statements at the beginning of this process
14 many months ago, and I felt that that was quite
15 helpful. And I think it would be very helpful if we
16 were able to submit a very limited oral argument.

17 HEARING OFFICER DEL PIERO: Closing argument?

18 MR. BIRMINGHAM: I'm sorry. Closing argument,
19 yes.

20 HEARING OFFICER DEL PIERO: It's -- after the
21 reply brief?

22 MR. BIRMINGHAM: Shortly after the close of the
23 submission of the reply brief.

24 HEARING OFFICER DEL PIERO: Any other comments in
25 regard to that?

0012

01 MR. DODGE: Well, we'd be happy to do that if it's
02 going to be helpful to the Board. We don't wish to
03 waste everyone's time.

04 HEARING OFFICER DEL PIERO: I'll think about that,
05 Mr. Birmingham.

06 MR. BIRMINGHAM: If I may, the reason that I
07 suggest it is that the position of virtually every
08 primary party has changed to one degree or another
09 during the course of the hearing.

10 And I'm not certain that, by the time we submit
11 reply briefs, that everyone will be certain of the
12 position that they ultimately will want to advocate to
13 the Board. And it's for that reason I'm making the
14 request.

15 HEARING OFFICER DEL PIERO: I'll think about that.

16 MR. BIRMINGHAM: Thank you.

17 HEARING OFFICER DEL PIERO: I'll give you an
18 answer at the end of the day.

19 Mr. Roos-Collins, good afternoon, sir.

20 MR. ROOS-COLLINS: Good afternoon.

21 For your benefit, my last name is R-o-o-s, hyphen,
22 Collins. I'm the attorney for California Trout.

23 Mr. Del Piero, I have four procedural matters to

24 raise with you this afternoon. First, since we were
25 last here, Judge Finney has ordered the parties to his

0013

01 proceeding before him on February 14th. That day is
02 currently reserved as open in your schedule.

03 As far as Mr. Birmingham, Mr. Dodge and I are
04 concerned, it is now closed. We will be before
05 Judge Finney to discuss the funding for the 1994
06 restoration.

07 HEARING OFFICER DEL PIERO: What would happen if I
08 demanded you gentlemen be here?

09 MR. ROOS-COLLINS: I would have been tempted to
10 ask Judge Finney to meet with you.

11 Secondly, due to the unavailability of funding for
12 the completion of Mr. Trihey's reports for Rush Creek,
13 we are currently uncertain when those reports, which
14 are now being drafted, will be completed.

15 I notified the City of Los Angeles last week that
16 I intend to move for late admission of those reports
17 once they are available, and I wish to notify you that
18 I will so move once I have greater clarity from
19 Mr. Trihey and Judge Finney.

20 HEARING OFFICER DEL PIERO: When's the last day
21 we've got scheduled for hearing, Mr. Canaday?

22 MR. CANADAY: The 18th.

23 MR. FRINK: Actually, we did send out a notice
24 that listed the 14th as a likely hearing date, and then
25 the 17th and 18th were identified in here as being

0014

01 optional days in the event we didn't complete it.

02 MR. ROOS-COLLINS: Judge Finney was apprised of
03 the conflict. He understands that this Board had
04 reserved the 14th. Unfortunately, his criminal docket
05 is so crowded that that was the only date between last
06 week and February 28th when he could hear argument
07 regarding the 1994 restoration project.

08 HEARING OFFICER DEL PIERO: That's fine. I have
09 no problem with Judge Finney or the schedule. He has
10 his responsibilities, and we have ours. And his court
11 and my hearing can work cooperatively together in terms
12 of scheduling. That's not a problem.

13 Is the issue that's going to be coming before
14 Judge Finney the issue of payment?

15 MR. BIRMINGHAM: No, it's not.

16 HEARING OFFICER DEL PIERO: It is not.

17 MR. BIRMINGHAM: And actually, I would take
18 exception to Mr. Roos-Collins' statement that the
19 reason that the reports haven't been finished is the
20 lack of funding.

21 In fact, through the end of 1993, there was
22 funding available for completion of reports and there
23 are many factors which have contributed to Mr. Trihey's
24 inability to complete the reports; one of which is the
25 need to participate in these hearings.

0015

01 But the issue that will be decided by
02 Judge Finney, if, in fact, there is a hearing on the
03 14th, and it's not certain there will be, but the issue
04 that will be addressed by Judge Finney is the maximum
05 annual allotment of money that will be made available

06 for restoration activities in 1994. And that will be
07 the only issue that will be heard by Judge Finney on
08 the 14th.

09 HEARING OFFICER DEL PIERO: Just for my own
10 understanding of what's going on. I've gotten this
11 third hand, so that's why I'm asking the question. I
12 understand there's some payments allegedly in arrears.

13 Is there some truth to that or, at least, is there
14 some argument that might be made that that's true?

15 MR. BIRMINGHAM: There's some truth to the
16 argument that there's a dispute that exists between the
17 Department of Water and Power and the City of Los
18 Angeles and Trihey and Associates concerning payments
19 for work that was performed in 1992 and work done in
20 the first quarter of 1993. There is no dispute over
21 payments or any money due for work that was done 1993,
22 and --

23 MR. DODGE: I don't know about the last part of
24 1993, but I can assure you, there's a dispute about
25 payment for 1992 work and early 1993 work.

0016

01 HEARING OFFICER DEL PIERO: Okay.

02 MR. BIRMINGHAM: But that is not an issue that
03 will be addressed by Judge Finney on the 14th.

04 Under the existing order pursuant to which the
05 Restoration Technical Committee operates, the
06 Restoration Technical Committee, by the end of each
07 year, is to establish a maximum annual allotment for
08 the following year's restoration activities.

09 In 1993, that was not accomplished by the end of
10 year for a variety of reasons, and the judge extended
11 that period until January 31, 1994. There was a vote
12 taken on this issue at a meeting on January 12, 1994.
13 It was not unanimous.

14 Therefore, it is necessary for the matter to be
15 resolved by the court, except Judge Finney requested
16 that the parties meet again, and a meeting has been
17 scheduled for February 10th at which the Restoration
18 Technical Committee will again discuss a maximum
19 allotment of money for restoration activities during
20 1994.

21 In the event there is unanimous agreement on that
22 amount, there will be no hearing on the 14th.

23 HEARING OFFICER DEL PIERO: All right.

24 Mr. Roos-Collins, I've heard Mr. Birmingham's
25 explanation. Tell me yours now.

0017

01 And I'm not particularly -- I mean, I have no
02 great interest in involving myself in terms of what's
03 going on in Judge Finney's court. My big concern is
04 how this may be impeding the future of an evidentiary
05 record for this Board to ultimately render a decision.

06 That's why I'm asking these questions and why I'm
07 interested, simply to make sure that my Board has a
08 full and complete evidentiary record necessary to be
09 able to justify a decision and to certify the
10 Environmental Impact Report.

11 MR. ROOS-COLLINS: Thank you for the opportunity
12 to state our position.

13 I did not mean to imply the parties agree that the

14 unavailability of funding is the principal cause for
15 the delay in completion of certain reports including
16 the restoration alternative report for Rush Creek.

17 HEARING OFFICER DEL PIERO: Let me just ask a
18 point-blank question. I understand that some people
19 have indicated they are no longer going to participate
20 in some of the committees because they have not been
21 paid. Is that true?

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

23 HEARING OFFICER DEL PIERO: Just answer it yes or
24 no. Is it true?

25 MR. ROOS-COLLINS: I have heard --

0018

01 HEARING OFFICER DEL PIERO: Mr. Dodge?

02 MR. DODGE: Let me respond to a slightly different
03 question.

04 MR. ROOS-COLLINS: Can I respond to your question
05 first?

06 HEARING OFFICER DEL PIERO: Certainly,
07 Mr. Roos-Collins.

08 I'd like an answer to my question, and then,
09 Mr. Dodge, you can answer whichever question you'd
10 prefer.

11 MR. DODGE: I was going to answer a better
12 question.

13 HEARING OFFICER DEL PIERO: I'm trying to get
14 better, Mr. Dodge.

15 Go ahead.

16 MR. ROOS-COLLINS: Certain subcontractors to
17 Mr. Trihey have indicated privately to various parties,
18 not to Judge Finney, but to various parties, that they
19 may be unable to discharge their responsibilities to
20 Mr. Trihey if payment for 1992 activities still
21 disputed between Mr. Trihey and Los Angeles is not
22 resolved expeditiously.

23 HEARING OFFICER DEL PIERO: Mr. Dodge, what's the
24 question you want to answer? I need to know the
25 question first.

0019

01 MR. DODGE: The question is: Is Mr. Trihey
02 working as we stand here today? And I believe the
03 answer to be no, that he stopped people from working
04 when his contract expired on 12/31/93.

05 MR. ROOS-COLLINS: That is Cal Trout's
06 understanding as well.

07 I opened this Pandora's box just a little --

08 HEARING OFFICER DEL PIERO: No, because it's on my
09 list of things to discuss here today before we begin,
10 so --

11 MR. ROOS-COLLINS: And I appreciate the
12 opportunity to discuss it, but I wish to emphasize
13 again that California Trout intends to move to open the
14 hearing for the production of late evidence,
15 specifically Mr. Trihey's reports when they are
16 available.

17 As of today I cannot tell you when those reports
18 will be available because their availability depends on
19 the resolution of certain disputes between the City of
20 Los Angeles and other parties regarding 1994 contract
21 funding.

22 HEARING OFFICER DEL PIERO: Mr. Frink, can I ask
23 you a question?
24 MR. FRINK: Certainly.
25 HEARING OFFICER DEL PIERO: Is the State Board a
0020 party to the matters that are before Judge Finney?
01 MR. FRINK: Mr. Canaday has been sitting as a
02 non-voting member on the RTC. The State Board is a
03 party in the litigation but has not been a voting
04 member on the RTC, and we have not taken a stand with
05 regard to the controversies over work or funding.
06 HEARING OFFICER DEL PIERO: Okay. You and I need
07 to talk afterwards.
08 MR. ROOS-COLLINS: My third procedural matter
09 concerns February 9th currently set aside for a
10 fisheries and stream panel.
11 When the current schedule was distributed by Mr.
12 Canaday on January 24th, he asked whether attorneys had
13 conflicts with any of the specified dates. I did not
14 object. That was an error.
15 When this schedule was discussed on January 18th,
16 I informed this Board that I had a conflict on February
17 9th such that I was unavailable in the afternoon. Now,
18 I understand that this date has been set aside for this
19 panel.
20 I wish to apprise you today that I am attempting
21 to work out an arrangement with the parties and with
22 the witnesses to find another date now open which will
23 be convenient for them.
24 HEARING OFFICER DEL PIERO: Okay.
0021 MR. ROOS-COLLINS: The fourth matter I wish to
01 raise to your attention concerns the scheduling of the
02 surrebuttal witnesses on water supply and economic
03 matters. You have a water supply and economics panel
04 scheduled for tomorrow. It is my understanding that
05 one of the City of Los Angeles' surrebuttal witnesses
06 who will be replying to Mr. Fullerton will not be
07 available tomorrow.
08 HEARING OFFICER DEL PIERO: Is that true?
09 MR. POLLAK: For purposes of the record, my name
10 is Andrew Pollak, P-o-l-l-a-k, for the City of Los
11 Angeles and Department of Water and Power for the City
12 of Los Angeles.
13 Mr. Ray Hoblan is going to rebut -- has been
14 identified as surrebuttal to Dr. Fullerton, and his
15 availability -- the availability of his attorney is
16 limited. She was going to take tomorrow off.
17 HEARING OFFICER DEL PIERO: Mr. Hoblan from across
18 the street?
19 MR. POLLAK: Across the street, correct.
20 His availability -- he would prefer to be on some
21 other time.
22 As far as the Department of Water and Power, we
23 would prefer to have --
24 HEARING OFFICER DEL PIERO: This is the employee
0022
01 of the Department of Water Resources?
02 MR. POLLAK: That's correct.
03 HEARING OFFICER DEL PIERO: That's the only reason

04 why he can't be here, because she wants to take the day
05 off?

06 I'm not upset with you, Mr. Pollak, I'm just
07 asking a simple question.

08 MR. BIRMINGHAM: That's what I always tell him.

09 HEARING OFFICER DEL PIERO: Mr. Pollak, I'm not
10 upset with you.

11 MR. POLLAK: I understand that. We had requested
12 that Mr. Hoblan go on after the party that he is
13 rebutting, who is Dr. Fullerton.

14 HEARING OFFICER DEL PIERO: Mr. Canaday, come
15 here, please.

16 MR. POLLAK: That is in order to respond to the
17 issues raised on --

18 HEARING OFFICER DEL PIERO: Mr. Pollak, if I can
19 arrange to have Mr. Hoblan and his attorney here
20 tomorrow, can you --

21 MR. POLLAK: I can inform them of that, and I
22 think they would be here.

23 MR. BIRMINGHAM: Mr. Del Piero, before we elevate
24 this to --

25 HEARING OFFICER DEL PIERO: We just did,

0023

01 Mr. Birmingham, relax.

02 MR. BIRMINGHAM: Before we elevate this to the
03 Chairman of this Board contacting the director of the
04 Department of Water Resources, maybe we could ask
05 Mr. Pollak to convey to Mr. Hoblan's attorney the
06 Hearing Officer's desire that he be here tomorrow. I'm
07 confident that that will be enough to have him here
08 tomorrow, and her, both of them. Mr. Hoblan is the
09 witness.

10 HEARING OFFICER DEL PIERO: Mr. Pollak?

11 MR. POLLAK: Mr. Del Piero, that would be okay.
12 Thank you. I'm off.

13 MR. BIRMINGHAM: Thank you.

14 HEARING OFFICER DEL PIERO: Mr. Roos-Collins, what
15 else do you have?

16 MR. ROOS-COLLINS: Just a request that before the
17 end of the day, we discuss the open dates insofar as
18 any tentative commitments have been made for particular
19 witnesses to come on those dates so that our calendar
20 is up-to-date. Thank you.

21 HEARING OFFICER DEL PIERO: Thank you very much.

22 Ms. Cahill, do you have any procedural issues?

23 MS. CAHILL: I have no procedural issues. Do you
24 want me to make one up?

25 (Laughter.)

0024

01 HEARING OFFICER DEL PIERO: No. Let's save that
02 one for a little while later. We may need a break.

03 My Scoonover, anything from you?

04 MS. SCOOVER: I'm staying out of this.

05 HEARING OFFICER DEL PIERO: That's good.

06 Mr. Dodge, let me see, do you have anything else,
07 sir, before --

08 MR. DODGE: No.

09 HEARING OFFICER DEL PIERO: Let me see, I want to
10 address a couple of things. First of all, we got the
11 brief issue out of the way. The actual dates for the

12 submission of briefs we'll set at the close of the
13 hearing.

14 I've been assured by someone who I had heard
15 about, but never met before Saturday, that there's
16 going to be an extra effort made to get the transcripts
17 of the last days of this hearing out as expeditiously
18 as possible, and I appreciate her willingness to do
19 that for us.

20 Do we have any objections to -- besides the
21 comments made by Mr. Roos-Collins, do we have any other
22 concerns articulated by the witness schedule at this
23 point?

24 MS. CAHILL: Well, I guess I do have one.

25 HEARING OFFICER DEL PIERO: Okay.
0025

01 MS. CAHILL: The same day that Mr. Roos-Collins
02 has raised concerns about, the 9th, tentatively shows
03 Dr. Kondolf on that date. He would be available if we
04 had the session in the late afternoon or evening, but
05 he would not be available earlier on that day.

06 HEARING OFFICER DEL PIERO: He would be
07 available -- I'm sorry?

08 MS. CAHILL: After about 4:00 o'clock, he could be
09 here.

10 HEARING OFFICER DEL PIERO: Is that a problem for
11 anybody aside from Mr. Roos-Collins, who's trying to
12 work it out? And I assume, Richard, you're going to
13 talk to me later about what your discussions with the
14 other parties were.

15 MR. ROOS-COLLINS: Yes, I will.

16 HEARING OFFICER DEL PIERO: Okay. Mr. Dodge?
17 Mr. Vorster, you've been sworn previously.

18 MR. VORSTER: Yes, I have.

19 DIRECT EXAMINATION BY MR. DODGE

20 Q. Mr. Vorster, can you identify your rebuttal
21 testimony for the record?

22 A. BY MR. VORSTER: It's listed as Exhibit 1-A-G,
23 NAS, slash, MLC 1-A-G.

24 Q. And is Exhibit NAS/MLC 1-A-G a true and accurate
25 copy of your rebuttal testimony?

0026
01 A. Yes, it is. There's a few slight typos I'd like
02 to correct.

03 Q. All right. Go ahead and do that.

04 A. In the first paragraph, very unintentionally in
05 the fourth line, where it says, "The reduction of Mono
06 Basin experts," it should be, "The Mono Basin exports,"
07 so an "O" should be substituted for the "E."

08 And on page 3, the third line from the bottom, the
09 last character should go over to the second line.

10 It should say, "11.4 thousand acre-feet per year."
11 This was originally done on a Macintosh and translated
12 into a main frame on Morrison and Foerster, and we had
13 some things like that occur.

14 I think that's the only obvious corrections that
15 need to be made.

16 Q. Are there any other corrections?

17 A. There are, like extra periods and spaces and
18 things like that, but I don't think anything that would
19 affect the testimony. No changes in the testimony.

20 MR. BIRMINGHAM: Excuse me, Mr. Del Piero. I'm
21 informed by Mr. Pollak that Mr. Hoblan will be here at
22 any time tomorrow at the Board's disposal.

23 HEARING OFFICER DEL PIERO: Thank you very much,
24 Mr. Pollak, Mr. Birmingham, appreciate it.

25 Q. BY MR. DODGE: In paragraph 8, Mr. Vorster, you
0027
01 set out certain goals that the two management plans are
02 designed to meet. Was there one goal that was deleted
03 from the 6390 foot management plan?

04 Q. BY MR. VORSTER: Yes. I apologize. I'm sorry if
05 in the haste to put this together, one got eliminated
06 that shouldn't have.

07 In the 6390 management plan goals, one should be
08 added that stating, "Provide additional water-based
09 Tufa," as an additional goal of the 6390 management
10 plan.

11 Q. Mr. Vorster, can you, in approximately 20 minutes,
12 please summarize your rebuttal testimony?

13 A. Yes, I will. I'm going to need the overhead
14 projector.

15 I think we had a discussion last Friday about the
16 different versions of the model, and I used version
17 3.31, which I refer to as 3.3a. It contains a minor
18 correction which I needed to have for the calculation
19 of exports in the Mono Lake water management plans that
20 I'll be discussing.

21 Now, the input assumptions that I use are
22 identical to those identified by Dr. Brown in his
23 testimony, except for the differences that I show in
24 Table 3 in my testimony. And I just wanted to put
25 those up on the overhead to make sure it's clear what

0028
01 those difference are.

02 There are essentially two differences. I use the
03 minimum reservoir targets identified by Dr. Brown that
04 he used for the no-restriction alternative that was
05 11.5 thousand acre-feet for Grant Reservoir and a
06 series of minimum targets for Crowley Reservoir. I
07 used those targets in all of my simulations, while he
08 used different targets in his simulations for the
09 higher lake level alternatives.

10 This table just points out the differences. So I
11 use a minimum Grant storage of 11,000 acre-feet in a
12 year -- another typo, should be "11,500," and then it
13 should also say, "Minimum Crowley storage 80,000
14 acre-feet in dry years 100,000 acre-feet in normal
15 years, 120,000 acre-feet in wet years.

16 I also do not use Grant Lake storage for the Rush
17 Creek deficits to make up deficits in the fish flows.
18 I do use Grant storage to make up the deficits only in
19 the second alternative that I ran just to make a
20 comparison.

21 The result of those two differences is that
22 Dr. Brown, when he ran the DFG flows, he obtained an
23 average Mono export to 27 1/2 thousand acre-feet. My
24 simulation has a result of 32.3 thousand acre-feet.
25 The difference is entirely explained by the different
0029
01 reservoir storages, and the fact that I don't use Grant

02 Lake to make up the fish deficits.

03 In other words, if I use the exact same
04 assumptions that Dr. Brown does, I get the exact same
05 results.

06 The -- one of the reasons why I did not use the
07 Grant Lake storage to make up the fish deficits is that
08 the Department of Fish and Game has issued a
09 clarification to its recommendation that, I think, was
10 contained in Ms. Cahill's letter to the Board last
11 week. And they, Fish and Game, recommend that Grant
12 storage only be used to maintain Rush Creek fish flows
13 only when the inflow is less than the dry-year
14 recommended flows.

15 This use of Grant storage cannot be modeled
16 directly at the current time with LAAMP, but a
17 comparison of the available Rush Creek inflow with the
18 DFG dry-year releases indicates that releases of
19 storage would be required in less than 15 percent of
20 the months and would cause a small reduction, in the
21 order of 600 acre-feet per year over the long term, in
22 the exports of Mono Basin.

23 Therefore, because of that that is the reason why
24 I used the option of not requiring Grant storage for
25 fish deficits.

0030

01 The whole point of my explaining all this is to
02 make a fundamental point about models and actual
03 operations.

04 The model has to make a number of simplifying
05 assumptions that constrain operations that would not
06 necessarily occur with actual operations. For example,
07 LAAMP allocates and LAASM allocates water on a
08 month-to-month basis and does not have a long range,
09 six or more months, view that actual operations can
10 have.

11 This long-range view that an actual operator would
12 have if, for example, he knows the snow pack is very
13 high, and he can make some operational releases early
14 in the year in order to allow, perhaps, more exports
15 later in the year. In general, actual operations would
16 allow more exports -- or more optimum allocation of the
17 water.

18 And so when we're looking at these numbers from
19 the models, we should just be aware of that and not fix
20 on the numbers too precisely. I think with the Fish
21 and Game flow, the yield for the Mono Basin would vary
22 in the long term between 30 and 35,000 acre-feet.

23 Now, I use LAAMP to indicate the number of years
24 it would be required to achieve a lake level with no
25 diversions by DWP, and those results are shown by Table

0031

01 2-A -- excuse me, Table 1.

02 I assumed the lake level, starting this April 1st,
03 with 6375.5, which is what I think the lake will be or
04 very close to it. It is a little above 6375 right now
05 and usually it rises in February and March.

06 Now, the amount of time to achieve a particular
07 lake level, obviously, depends on the sequence of
08 precipitation and runoff that's assumed. And like many
09 other hydrologic models, LAAMP assumes the historic

10 sequence in the order that it actually occurred.

11 However, we can evaluate the fact that different
12 sequences of precipitation and runoff would have on the
13 time it would take to reach any particular lake level
14 by doing a number of different things.

15 One would be a Monte Carlo method where you
16 rearrange the historical sequence in a random way or a
17 stochastic sequence, but the most, kind of a very
18 simple straightforward way to do it would be to have
19 each year of historic sequence be stacked on top of
20 each other. Meaning that I started one sequence in
21 1942, ran it through for 50 years, and had it cycle
22 back to the beginning, and so on and so forth. So my
23 last sequence was starting in 1989 and cycling back to
24 the beginning in the order it occurred.

25 So it gives us a feeling of the range of number of
0032
01 years it would take to achieve a particular lake
02 level.

03 In Table 1-A, I show how many years it would take
04 to achieve the various lake levels with no diversions
05 in a starting year of 1940, a starting year of 1987,
06 and cycling through the first six years would be the
07 six-year drought we just experienced. So it would be
08 1987 through 1992 and cycling back starting with 1942.

09 And I also show it with a starting year of 1978,
10 which was the beginning of the wettest sequence in the
11 historic period. And with that, you get a feel for how
12 long it would take if there were no diversions.

13 So, for example, it would take 13 years to achieve
14 6390 starting in 1940. It would take 23 years if you
15 started in 1987. And it would only take 7 years if you
16 had a sequence that started with 1978.

17 Now, you can do the same thing assuming the
18 exports that the Draft Environmental Impact Report
19 assumed and these transition year exports for the
20 different alternatives, and you would achieve 6390 in
21 28 years if you started in 1940.

22 I can do the same exercise I did for the
23 no-diversions, where I tried 50 different sequences,
24 and it takes an average of 23 years to reach 6390 with
25 the transitioned exports as identified by the Draft

0033
01 Environmental Impact Report. The range is anywhere
02 from 10 to 26 years.

03 Now, in Table 2-A, I show the results for the
04 different alternatives, and I provide information on
05 the minimum, median, and maximum lake levels, as well
06 as the mean annual stream flow releases below the DWP
07 diversion facility, as well as the mean annual flow in
08 the Upper Owens River.

09 Now, these results, the LAAMP results, are most
10 appropriately used in comparing the different
11 alternatives. And Table 4 of my testimony can be used
12 to make that comparison. It is most helpful, for
13 example, to determine the relative difference between
14 the different alternatives.

15 The numbers I show here in this first two columns
16 is comparing the average exports for the Mono Basin, as
17 well as the average delivery to Los Angeles between the

18 various alternatives, and the Fish and Game flows using
19 that as a base, and these two columns do the same thing
20 but compares it to the no-restriction alternative.

21 Q. Mr. Vorster, in your written testimony, you
22 mention 11.4 thousand acre-feet per year as the
23 difference between 6405 and 6390.

24 Can you show the Hearing Officer where that
25 appears on Table 4?

0034

01 A. Yes. That is the difference between the 10.6
02 thousand acre-feet reduction in deliveries from the
03 Fish and Game flow and the 22,000 for 6405.

04 Actually, a more straightforward way would be just
05 to take the 399,000 acre-feet per year export to L.A.
06 or delivery to L.A. and the 387.6. And that difference
07 is 11.4 thousand acre-feet. So I think that's one of
08 the helpful things that this table can be used for.

09 Another thing, the table can also be used to
10 compare the differences in reduction between the Mono
11 exports and the reductions actually to Los Angeles.
12 The model suggests that the Los Angeles aqueduct
13 deliveries for a given alternative is less than the
14 reduction in Mono exports, and this is due, in part, to
15 the fact that as less water is available from the Mono
16 Basin, and you have the same amount of storage
17 available, there are increased opportunities to store
18 and export more of the runoff from the Owens River
19 Basin in wet years.

20 Now, how much you would actually be able to
21 deliver to Los Angeles, obviously, depends on the
22 actual operation and any constraints that occur
23 downstream.

24 The other point I want to make is that the
25 relative differences between the alternatives with

0035

01 LAAMP 3.31 are very similar to what the differences
02 between the alternatives were in Version Two, and
03 that's because there weren't a lot of changes made to
04 the Mono export version of the model.

05 Okay. I now want to discuss the Mono Lake water
06 management plans. The Mono Lake Committee and the
07 Audubon Society asked me to develop two separate
08 management plans that would achieve the goals that I've
09 outlined for 6390 and for 6405, and I just want to very
10 quickly run through the goals for each one of them.

11 For 6390, the goals are to keep fish in good
12 condition, to achieve air quality compliance with the
13 EPA schedule set forth in the letter from David Calkins
14 to Ellen Hardeback, provide a buffer against droughts,
15 create a permanent water barrier between Negit Island
16 and the mainland, increase the area of submerged hard
17 substrate environments, keep the lake at or above a
18 total dissolved solids of 75 grams per liter, to
19 increase the primary productivity of the ecosystem in
20 order to benefit the migratory and nesting birds, to
21 achieve the lake level goals above that I just outlined
22 in the shortest practical time period, to provide water
23 to DWP in dry years when it's most available.

24 And the additional one that I just mentioned at
25 the beginning of my oral testimony, provide additional

0036

01 water-based Tufa.

02 The 6405 management plan will achieve the
03 additional goal of restoring waterfowl habitat by
04 raising the lake above 6400 feet onto the gently
05 sloping delta plains of tributary streams where
06 marshlands can form in association with hypopycnal
07 lenses of freshwater.

08 It will also restore the waterfowl habitat by
09 periodically rewatering the brackish water lagoons on
10 the northeast shore. It will restore still-water coves
11 and hypopycnal conditions around shoreland marshes
12 which will also increase waterfowl habitat. It will
13 permanently cover the playa of the Mono shorelands.

14 It will restore the historic recreational uses of
15 Mono Lake including boating, swimming, picnicking, and
16 hunting.

17 And I want to add that the recreational uses that
18 I just outlined for 6405 would also be enhanced at the
19 6390 level, too.

20 And the 6405 plan will also restore the historic
21 visual characteristics of a full Mono Lake.

22 Now, how can we achieve these goals? What
23 measures do we have to take? Well, there are four
24 basic parts to that; one is to adopt the Fish and Game
25 recommended flows in all cases with the modifications

0037

01 to the recommendations as outlined in Ms. Cahill's
02 letter of last week.

03 One additional part of keeping fish in good
04 condition will be to limit releases in Lee Vining Creek
05 to 250 cfs for the next 10 to 15 years while the creek
06 establishes sufficient high flow refuge habitat.

07 Now, in order to accelerate the protection of
08 these public trust values that I outlined for the 6390
09 and 6405 plans, the recommendations is to have no
10 diversions until the lake reaches 6384 feet. It will
11 get the lake to a reasonable buffer level in the
12 shortest period of time, and the lake will rise as
13 quickly as possible and thus minimize the undermining
14 of Tufa at the South Tufa grove.

15 And the reasoning for no diversions in the first
16 number of years -- and that number of years would vary,
17 obviously, depending on what sequence of precipitation
18 runoff we have. The periods of no diversions can vary
19 from as little as four years to as much as twelve
20 years.

21 But DWP customers have demonstrated that they have
22 been able to do without Mono Basin water. Their
23 efforts are both, what I call, hard conservation with
24 the hardware that has been adopted by DWP, including
25 the ultra-low-flow toilets and the habit changes that

0038

01 seem to have permanently changed the consumption
02 patterns of the people of L.A., which have decreased
03 DWP's need for additional water, for example,
04 population growth in the foreseeable future.

05 Now, when the lake reaches 6384 feet, the
06 diversions of up to 10,000 acre-feet will be allowed.
07 And the concept here is a constant amount of water that

08 is available to DWP in each year type, no matter
09 whether it's a dry, normal, or wet year.

10 The actual amount that would be available,
11 obviously, is somewhat dependent -- well, is dependent
12 upon the runoff and the requirements for Fish and Game
13 flows. So the actual amount varies from 5 to 11,000
14 acre-feet per year.

15 The advantage of allocating a fixed amount,
16 though, in all year types, is that it would avoid the
17 controversy of what if one -- you start out in one
18 runoff year type and because of additional
19 precipitation or lack of precipitation in spring or
20 summer, it becomes another year type. The idea is that
21 DWP would know at the beginning of the runoff year how
22 much they could potentially export.

23 The Mono exports would be allocated to maximize
24 the benefits in the Upper Owens River and not
25 necessarily be bound by continuously uniform monthly
0039

01 expert allocation. I think the flexibility that we're
02 calling for here has been shared by most or all
03 parties.

04 Now, when the lake level achieves the 6390 level,
05 then there will be no more -- the exports that would be
06 available to DWP would be all that is available after
07 the Fish and Game flows are met. And so there would be
08 no lake level targets that would need to be achieved.

09 The reasoning behind that --

10 Q. This is under the first alternative?

11 A. That is under the 6390 plan.

12 There's no lake level release requirement, because
13 LAAMP indicates that the DFG fish flows, by themselves,
14 will keep the lake in the range between 6387 and 6400
15 with a median lake level around 6391 or 6392.

16 MR. BIRMINGHAM: Would the reporter mark that,
17 please?

18 MR. VORSTER: Now, I want to emphasize the basis
19 for choosing this no diversions rather than a constant
20 10,000 acre-foot allocation is the based upon getting
21 the lake up to 6390 in an average 16 years, and that 16
22 years, as I say, is an average. I ran LAAMP 50 times
23 to see what the range would be, and it ranged from 7
24 years to 25 years with this average of 16 years to
25 achieve 6390 under the plan.

0040
01 And Audubon feels that the 16-year period is the
02 longest practically measured time period allowed by the
03 EPA for compliance with the Clean Air Act as outlined
04 in the December 16th, 1993, letter from David Calkins
05 to Ellen Hardeback.

06 Now, under the 6405 plan, once the lake achieves
07 6390 feet, DWP can then export an additional 5,000
08 acre-feet for a total of 15,000 acre-feet until the
09 lake rises to 6405 feet.

10 When the lake is at or above 6405 feet, then all
11 of the runoff above the fish flows will be available
12 for export. When the lake drops down to 6405 feet,
13 then it will switch back to the 15,000 acre-feet per
14 year.

15 Now, there still needs to be some kind of protocol

16 established for determining the year type, because the
17 Fish and Game fish releases are dependent on year time.
18 Mr. Hasencamp has suggested a protocol which, I think,
19 is very similar to what I have outlined. In other
20 words, you get a preliminary indication of the year
21 type from the April 1st runoff forecast, and you can
22 make a final determination after the May 1st forecast.

23 I also suggested that if the forecast projects the
24 runoff to be near the boundary of a year type, in other
25 words, very close to the minimum or the maximum of a

0041

01 particular year type, some kind of protocol should be
02 established to revisit the runoff projections before
03 the end of the peak runoff period in July.

04 And lastly, I have outlined a number of
05 opportunities to mitigate the reductions in Mono
06 exports that DWP could do in the L.A. aqueduct system.
07 And as we heard from Mr. Coufal, DWP has pursued or is
08 currently pursuing many of these opportunities, and
09 there are many opportunities. One of the best
10 opportunities, one of the best opportunities is to
11 reduce the involuntary spilling in the Owens Valley,
12 which currently averages about 15,000 acre-feet per
13 year, by expanding the facilities to spread water in
14 wet years.

15 Other opportunities were outlined and discussed by
16 Mr. Coufal.

17 And that ends my testimony for right now. I'll
18 discuss the water supply implications of the management
19 plans tomorrow when that panel is convened.

20 Q. BY MR. DODGE: Just a couple quick questions,
21 Mr. Vorster.

22 MR. HERRERA: Excuse me, Mr. Dodge. The first 20
23 has expired.

24 MR. DODGE: Can I have an additional two minutes?

25 HEARING OFFICER DEL PIERO: Granted.

0042

01 Q. BY MR. DODGE: Did you run your two management
02 plans assuming that the Upper Owens River is limited to
03 200 cfs?

04 A. BY MR. VORSTER: Yes. That's the Fish and Game
05 recommendation.

06 Q. And did you quantify the effect of that
07 limitation?

08 A. Yeah. I did want to see if the exports would be
09 substantially increased if, for example, there was a
10 300 cfs limitation. So I ran that alternative again
11 with the 300 cfs limitation. And the Mono exports over
12 the long term only rose by about 150 acre-feet per year
13 on average.

14 Obviously, the 200 cfs limitation is not a major
15 constraint, in fact, a very minor constraint on the
16 exports from the Mono Basin.

17 Q. One other question. Once you reach 6390, you said
18 that the DFG fish flows would suffice if you wanted to
19 maintain 6390; is that right?

20 A. Yes. If you wanted to maintain a median lake
21 level around 6390 to 92, which is what, I think, Great
22 Basin Air Pollution Control Assumed was the median lake
23 level to achieve compliance.

24 Q. But if I understand you correctly, once you've
25 achieve 6405, if you want to maintain 6405, you need

0043

01 flows in excess of DFG flows; is that correct?

02 A. That's correct. That's why if the level falls
03 down below 6405, you have to reduce the exports down to
04 the constant 15,000 acre-feet per year.

05 Q. And my question to you is: In the 6405 foot plan,
06 where do you show when the additional water over and
07 above the DFG flows would go down?

08 A. I want to make sure I understand your question.
09 When the lake is at or above 6405 feet, then all the
10 water above the Fish and Game flows can be exported.
11 Is that what you're asking?

12 Q. No. To maintain 6405 you need water over and
13 above the Fish and Game flows, correct?

14 A. Right.

15 Q. And during what part of the year, what months
16 would you send this additional water down to Mono Lake?

17 A. I see. I understand your question. That
18 additional water would be sent down when it's most
19 available, obviously, which is during the spring and
20 summer snow-melt runoff months, although, subject to
21 the optimal allocation for the Upper Owens River.
22 That's where the operator would have some flexibility.
23 But generally, you want to add the flows into the lake
24 during the snow-melt months to simulate the natural
25 hydrograph.

0044

01 MR. DODGE: That's all I have. Thank you.

02 HEARING OFFICER DEL PIERO: Thank you.

03 Mr. Smith, is this mine or is this the file copy?

04 MR. SMITH: This is the file copy.

05 HEARING OFFICER DEL PIERO: I want to make sure it
06 gets back to the file.

07 Mr. Birmingham? Been to Fresno lately,
08 Mr. Birmingham?

09 MR. BIRMINGHAM: No, I haven't. But probably I'll
10 be going to Fresno in the very near future. It's not
11 my favorite place in the State of California.

12 HEARING OFFICER DEL PIERO: I understand that.

13 MR. BIRMINGHAM: I hope I haven't offended anyone
14 from Fresno.

15 HEARING OFFICER DEL PIERO: If they're in
16 Sacramento, they've left.

17 MR. CANADAY: I'm from Fresno.

18 HEARING OFFICER DEL PIERO: I know, but you came
19 here.

20 CROSS-EXAMINATION BY MR. BIRMINGHAM

21 Q. Good afternoon, Mr. Vorster.

22 A. BY MR. VORSTER: Good afternoon, Mr. Birmingham.

23 Q. You stated in preparing your written rebuttal
24 testimony, you relied on LAAMP 3.3a?

25 A. That's correct. I think in Mr. Huchison's

0045

01 testimony --

02 Q. I didn't ask about Mr. Huchison's testimony. I
03 asked about your testimony, Mr. Vorster. You relied on
04 3.3a.

05 A. The reason why I wanted to offer the clarification

06 is because in the record, it's officially 3.31. I'm
07 the divergent one calling it 3.3a.
08 Q. Mr. Vorster, let's establish early on you're going
09 to answer my questions. And if somebody else wants to
10 ask you another question, or you think that there's
11 something you need to say in addition to the response
12 to my question, maybe you can tell Mr. Dodge, and he
13 can ask you that question. But if you would respond
14 just to my questions, I would appreciate it very much.

15 Using LAAMP 3.31 or 3.3a, your testimony states
16 that you calculated the number of years required to
17 achieve certain lake levels assuming no diversions; is
18 that correct?

19 A. That's correct.

20 Q. And you used the LAAMP 3.31 or 3.3a to calibrate
21 lake levels and Mono Basin exports under the Mono Lake
22 Committee/National Audubon Society's management water
23 plans presented in your testimony?

24 A. That's correct.

25 Q. Is it correct that you briefly describe LAAMP in
0046

01 paragraph 6 of your written testimony, your written
02 rebuttal testimony?

03 A. That's correct.

04 Q. There you say that, "LAAMP was designed to be very
05 flexible and easy to use in order to simulate Los
06 Angeles' aqueduct operations with a wide range of Mono
07 Basin fish-flow and lake-level alternatives." Is that
08 right?

09 A. That's correct.

10 Q. And then you go on to say that, "LAAMP's monthly
11 results should be used with caution, since LAAMP is a
12 planning model and not an operations model. Actual
13 operations will be different since they will not be
14 constrained by the simplifying assumptions made in the
15 model." Is that correct?

16 A. That's correct.

17 Q. And then finally in paragraph 6 you say, "LAAMP
18 allocates the water on a month-to-month basis and does
19 not have the long-range, six or more months, view that
20 can be incorporated into actual operations, which can
21 result in a more optimal allocation, including the
22 possibility of greater exports of water."

23 A. That's correct.

24 Q. Now, isn't it also correct, Mr. Vorster, that
25 actual operations may result in lesser exports of
0047

01 water?

02 A. That is a possibility.

03 Q. You indicate that, "LAAMP results are most
04 appropriately used in making comparisons between
05 alternatives."

06 Is that your opinion?

07 A. Yes.

08 Q. And there we're talking about relative
09 comparisons; is that right, Mr. Vorster?

10 A. Yes.

11 Q. For instance, in paragraph 7, you state that,
12 "Table 4 can also be used to determine the relative
13 differences in Mono Basin exports in Los Angeles

14 Aqueduct deliveries between the various alternatives."

15 A. That's correct.

16 Q. What do you mean by "relative"? There, do you
17 mean the general differences between alternatives?

18 A. No. Actually, I just mean that instead of the --
19 focusing on the absolute number for an export or a
20 delivery, it's the difference between those absolute
21 numbers. So the relative difference between one
22 absolute number and another absolute number.

23 In fact, that's what Table 4 is comparing, the
24 different alternatives with the Fish and Game flows and
25 the Mono Basin flows, and that's an exercise in showing

0048

01 the relative differences.

02 Q. It's correct, isn't it, Mr. Vorster, that there
03 are still substantial uncertainties concerning the
04 export that will be available under different
05 alternatives using the LAAMP model?

06 MR. DODGE: Objection. Vague as to what do you
07 mean "relative exports" or "absolute exports"?

08 MR. BIRMINGHAM: Let me see if I can clear it up.
09 I'll withdraw the question.

10 HEARING OFFICER DEL PIERO: Thank you very much.

11 Q. BY MR. BIRMINGHAM: Were you involved,
12 Mr. Vorster, in the process that resulted in the
13 changes between LAAMP 2.0 and LAAMP 3.31?

14 A. BY MR. VORSTER: Yes, I was.

15 Q. Now, it's correct, isn't it, Mr. Vorster, that the
16 algorithms in LAAMP 3.3a used to calculate lake level
17 are the same algorithms in LAAMP 2.0?

18 A. Yes, yes.

19 Q. And none of the logic that's in LAAMP 2.0 that
20 relates to lake level has changed in LAAMP 3.3?

21 A. Yes. Let me see and make sure I understand.
22 You're saying the calculated lake level for a given
23 amount of water flowing into Mono Lake is the same in
24 3.3 as it was in Version Two. That's my understanding,
25 and that's correct.

0049

01 Q. That was my question, and your answer is that the
02 logic with respect to the lake level hasn't changed
03 between LAAMP 2.0 and LAAMP 3.3?

04 A. That's my recollection. I don't think there's
05 been any change in that.

06 Q. Now, it's correct, isn't it, Mr. Vorster, that in
07 your opinion, LAAMP, both LAAMP 2.0 and LAAMP 3.3,
08 overestimate inflow into Mono Lake?

09 A. I think that LAAMP 3.3 and LAAMP 2.0 as well as
10 LAAMP --

11 Q. My question here relates to LAAMP.

12 A. Okay.

13 Q. Let me just ask it differently, Mr. Vorster.
14 LAAMP overestimates inflow into Mono Lake; isn't that
15 your opinion?

16 A. That's my opinion relative to the water balance
17 model that I developed. My water balance model
18 suggests that for a given inflow into Mono Lake, you
19 would not be able to achieve the same lake levels. So
20 it's relative to that.

21 I don't say it's an overestimate. Both of them

22 calibrate with a historic record very well. So I'm not
23 saying LAAMP is incorrect and mine's correct. It's
24 just there's a difference.

25 Q. Now, isn't it correct that you talked about this
0050 difference in your original testimony?

01 A. No, I don't think so. I don't think -- I'm
02 talking about the difference between --

03 Q. Maybe my question isn't clear, Mr. Vorster. In
04 the original testimony that you submitted in connection
05 with these proceedings, I believe it's Cal Trout
06 Exhibit 6, didn't you talk about the difference between
07 LAAMP and the fact that compared to your model, LAAMP
08 overestimates inflow into the lake?

09 A. I would need to see that.

10 Q. Sure. Do you have a copy of your testimony in
11 front of you?

12 A. For Cal Trout 6, I could go get it. I don't have
13 it in front of me.

14 MR. BIRMINGHAM: I have a copy over here. Excuse
15 me, can I take a moment?

16 HEARING OFFICER DEL PIERO: Certainly.

17 Q. BY MR. BIRMINGHAM: Mr. Vorster, I'm handing you a
18 volume of documents that I believe contains Cal Trout
19 Exhibit 6. Do you have that document?

20 A. BY MR. VORSTER: Yes, I do.

21 Q. And Cal Trout Exhibit 6, that's the original
22 written testimony that you submitted in connection with
23 these proceedings?

24 A. Yes, it is.

0051

01 Q. Would you please turn to paragraph 43 of that
02 exhibit?

03 A. Okay.

04 Q. Now, paragraph 43 of Cal Trout 6, your written
05 testimony states, "There are certain errors and
06 inconsistencies in LAAMP. One inconsistency is that
07 the LAAMP water balance for Mono Lake calculates a 1987
08 lake level, assuming no diversions by DWP of 6432 feet,
09 or four feet higher than the historic stand in 1919.
10 This appears to me to be unreasonably high and suggests
11 that the water balance may overestimate Mono Lake
12 inflow. The LAAMP results should be evaluated and
13 compared to the results of the other models."

14 Now, was that your testimony when you submitted
15 it, Mr. Vorster?

16 A. Yes, it was.

17 Q. And at the time you submitted this testimony, it
18 was your opinion that LAAMP overestimates inflow into
19 Mono Lake?

20 A. That's what it states.

21 Q. And it was your opinion that as a result of that
22 inflow -- of that overestimation of inflow, it resulted
23 in a lake level which you thought appeared to be
24 "unreasonably high."

25 Those are your words, aren't they, Mr. Vorster?

0052

01 A. That's correct.

02 Q. Now, did you submit any statement or any comments
03 to the Draft Environmental Impact Report?

04 A. Yes, I did.
05 Q. Did you submit comments to Morrison and Foerster
06 to be submitted on behalf of the Mono Lake Committee
07 and the National Audubon Society?
08 A. Yes, and I also submitted my own separate --
09 Q. Do you have a copy of those comments in front of
10 you, Mr. Vorster?
11 A. No.
12 Q. Let me take a moment and get a copy.
13 Now, the comments you submitted -- actually, let
14 me lay an appropriate foundation.
15 I've put before you, Mr. Vorster, comments that
16 were submitted by Morrison and Foerster on behalf of
17 the Mono Lake Committee and National Audubon Society to
18 the Draft Environmental Impact Report, and I'm looking
19 at page 22 of those comments.
20 Do you have that page in front of you?
21 A. Yes, I do.
22 Q. Now, did you draft that portion of the comments
23 that's contained on page 22?
24 A. It appears that those are the comments I drafted.
25 Q. Now, it states on page 22, "More importantly,
0053
01 LAAMP estimates more net inflow to Mono Lake than does
02 the Vorster model." Is that correct?
03 A. That's correct.
04 Q. And it was based upon that analysis that you
05 compared, that you concluded for your written testimony
06 that LAAMP overestimates inflow; is that right, Mr.
07 Vorster?
08 A. Yes.
09 Q. And it was based upon that analysis you conducted
10 comparing LAAMP with your model and other models that
11 led you to the conclusion that LAAMP suggests lake
12 levels that are, using your words, "unreasonably high"?
13 A. That's what I said.
14 Q. Now, I asked the court reporter to mark a point
15 during your testimony, and I wonder if I could go back
16 and have her reread that portion of your oral summary
17 of your written testimony.
18 (Whereupon the record was read as requested.)
19 Q. BY MR. BIRMINGHAM: Now, there, Mr. Vorster, you
20 said, in response to Mr. Dodge's question, that there
21 wouldn't be any -- under the 6390 foot management plan
22 that you described, there wouldn't be any lake level
23 releases after the lake reaches elevation 6390, because
24 LAAMP indicates that the DFG flows would maintain the
25 lake at an elevation above 6390; is that right?
0054
01 A. That's correct.
02 Q. Now, if you're correct in your original opinion
03 that LAAMP overestimates inflow into Mono Lake, isn't
04 it correct that the DFG flows by themselves would not
05 maintain the lake elevation at 6390?
06 A. That is a possibility, if the inflows aren't as
07 high as estimated by LAAMP.
08 Q. And it was your original opinion that LAAMP
09 estimates lake levels that are unreasonably high?
10 A. I think LAAMP, relative to my water balance model,
11 has higher inflows than Mono Lake.

12 Q. And if your water balance model is correct and
13 your original opinion was correct, the DFG flows by
14 themselves are not going to maintain the lake at a
15 median level of 6391; is that right, Mr. Vorster?

16 A. That assumes one of the models is correct and one
17 is not. As I stated earlier, no one can say which one
18 is correct and which one is wrong. The truth probably
19 lies somewhere in between.

20 So if I ran the Fish and Game flow with my water
21 balance model, I would get a lower median lake level.

22 Q. I don't want to be argumentative here,
23 Mr. Vorster, but I need to go back to paragraph 43 of
24 your original testimony where you said -- because I
25 want to make sure I understand what your position is,
0055

01 there you said, "There's certain errors and
02 inconsistencies."

03 Now, that statement, "errors and inconsistencies,"
04 indicates that when you wrote that paragraph, you were
05 taking a position concerning the accuracy of LAAMP;
06 isn't that right?

07 A. That's correct.

08 Q. Now, I'd like to talk about another aspect of this
09 overestimation. Your testimony talks about -- your
10 rebuttal testimony talks about the transition period
11 between 6375.5 and higher lake levels; is that right?

12 A. Yes, if I understand your question correctly. I
13 look at a variety of different possibilities between
14 now and some lake level flow.

15 Q. For instance, you say that if we started elevation
16 6375.5 using LAAMP, and we make certain assumptions, it
17 will take X number of years to reach elevation 6390?

18 A. That's correct.

19 Q. Let me again ask you to assume that your original
20 opinion of LAAMP is correct, and LAAMP overestimates
21 inflow into Mono Lake.

22 Isn't it correct that the transition period
23 between elevation 6375.5 and 6390 is actually going to
24 be longer than you have indicated in your rebuttal
25 testimony using LAAMP?

0056
01 A. That's correct. If I were to use my water balance
02 model, it would probably indicate a longer period of
03 time.

04 HEARING OFFICER DEL PIERO: Excuse me,
05 Mr. Birmingham.

06 How long?

07 MR. VORSTER: I wish I had the time to do that.
08 Unfortunately, I haven't had the time to do it.

09 MR. BIRMINGHAM: We'll come back to that question
10 a little later, Mr. Del Piero.

11 Q. BY MR. BIRMINGHAM: I'd like to look at Table 1-A
12 of your testimony, Mr. Vorster. Now, Table 1-A is the
13 table you prepared using the LAAMP which shows the
14 number of years it will take to achieve a specified
15 lake level under different assumptions; is that
16 correct?

17 A. BY MR. VORSTER: That's correct.

18 Q. For instance, if we look at the second column from
19 the left in Table 1-A, using LAAMP and the assumptions

20 described in your testimony, you calculated that in the
21 first five years, starting from elevation 6375.5, in
22 the first five years the lake would rise eight feet; is
23 that correct?

24 A. That's correct, by the end of the fifth year.

25 Q. Now, that represents an increase in lake elevation
0057

01 of approximately 1.6 feet per year; is that right,
02 Mr. Vorster?

03 A. That's correct.

04 Q. Now, again, if your assumption is correct, that --
05 or your original opinion is correct that LAAMP
06 overestimates inflow into Mono Lake, it will take more
07 than five years for the lake to rise eight feet from
08 elevation 6375, assuming no diversions, and starting
09 with the 1940 water year scenario?

10 A. It might take six years. You've got to understand
11 that the overestimate I'm talking about is a very
12 relatively small overestimate, maybe on the order of 5
13 percent. But if you see that 5 percent go on for many,
14 many years, it will then, at the end of 50 or 60 years,
15 result in a lake level of eight or nine feet.

16 But in just over a period of time of five years,
17 you wouldn't be able to tell. So it might be six years
18 instead of five years at the most.

19 Q. But the transition period is going to be longer?

20 A. Yes. It would be longer if the inflow was not as
21 great as LAAMP assumed.

22 MR. ROOS-COLLINS: Mr. Del Piero, excuse me, I
23 have a procedural point of order. Either Mr. Vorster
24 and Mr. Birmingham are discussing a different exhibit
25 than I have, or they're misreading it. Mr. Birmingham

0058

01 said the left-hand column in Table 1-A, said 6375 as
02 the starting lake level --

03 MR. BIRMINGHAM: No, you misheard me.

04 HEARING OFFICER DEL PIERO: 6377.

05 Q. BY MR. BIRMINGHAM: Actually, 6377 is not the
06 starting lake level, is it, Mr. Vorster? 6375 is the
07 starting lake level.

08 A. BY MR. VORSTER: 75.5. I think, Mr. Birmingham,
09 you had it correct where you said in my testimony I
10 made the assumption about the initial lake level.

11 Q. And using LAAMP, you calculated that from 6375, it
12 would take one year to get to 6377, assuming that there
13 are no diversions, and you begin with the 1940 water
14 year sequence?

15 A. Slight correction, 75.5.

16 Q. Excuse me. And it will take one year to get to
17 6377?

18 A. With runoff being equal to 1940, yes.

19 MR. BIRMINGHAM: Mr. Del Piero, may we take a
20 recess?

21 HEARING OFFICER DEL PIERO: Ten minutes.

22 MR. BIRMINGHAM: Thank you.

23 (A recess was taken at this time.)

24 HEARING OFFICER DEL PIERO: Ladies and gentlemen,
25 this hearing will again come to order.

0059

01 Mr. Birmingham?

02 MR. BIRMINGHAM: Thank you very much,
03 Mr. Del Piero.
04 Q. BY MR. BIRMINGHAM: Mr. Vorster, during your
05 testimony, I think you said that the transition to lake
06 elevation 6390 from elevation 6375 could be anywhere
07 from five years to --
08 HEARING OFFICER DEL PIERO: Mr. Birmingham, would
09 you like to sit?
10 MR. BIRMINGHAM: If I may?
11 HEARING OFFICER DEL PIERO: Sure.
12 MR. HERRERA: Also, Mr. Birmingham, your 20
13 minutes has expired.
14 MR. BIRMINGHAM: I make an application for an
15 additional 20 minutes.
16 HEARING OFFICER DEL PIERO: Granted.
17 Q. BY MR. BIRMINGHAM: During your testimony, your
18 oral summary, Mr. Vorster, you said that the transition
19 period to elevation 6384 feet from 6375.5 feet could be
20 anywhere from 4 to 12 years; is that correct?
21 A. BY MR. VORSTER: If you look at Table 1-A, the
22 range actually is 4 to 11 years. At least looking at
23 the column for 1978 start, it says 4 years. For the
24 1987 start, it says 11 years.
25 Q. And that figure 4 to 11 years to get to elevation
0060 6384 feet was based upon your use of LAAMP?
01 A. That's correct.
02 Q. And I believe in your written testimony you
03 indicate to get to elevation 6390 from elevation 6375.5
04 feet, it will take from 7 to 25 years; is that correct?
05 A. Yes. I said that it would take -- with the plan,
06 the Mono Lake management plan.
07 Q. You would agree with me, wouldn't you,
08 Mr. Vorster, to coin a phrase from Mr. Dodge, you would
09 agree that there is substantial uncertainty concerning
10 the length of a transition period from the current lake
11 level to any higher lake level?
12 A. Absolutely. It totally depends on what the
13 sequence of runoff and precipitation we receive.
14 Q. And totally depends on which model we use?
15 A. No. In the sense that since this transition
16 period we're talking about isn't a great length of
17 time, I think the differences among the models wouldn't
18 be that great, maybe a couple of years at most. But we
19 can use -- we have LAAMP. We have LAASM. We have my
20 water balance model, and we have DWP -- Gene Coufal
21 developed a water balance model. Mine is kind of at
22 the low end. I think LAAMP and LAASM are right at --
23 kind of the high end.
24 Q. You would agree, wouldn't you, that there is
0061 uncertainty about the flows required to maintain Mono
01 Lake at an equilibrium level?
02 A. Yes. There's uncertainty because of climate more
03 than anything else.
04 Q. I'd like you to look at Vorster Table 2-A, and
05 there's been an Amended Vorster Table 2-A; is that
06 correct?
07 A. That's correct. And I think the Amended Vorster
08 2-A contains the stream flows -- includes the stream
09

10 flows.

11 Q. Now, looking at Vorster Table 2-A -- and we'll
12 concentrate on the first alternative described, the
13 Department of Fish and Game only flows, it indicates
14 that during the first 50 years, there would be a Mono
15 export of 32.3 thousand acre-feet; is that correct,
16 Mr. Vorster?

17 A. That's correct.

18 Q. Now, with respect to that export, that was
19 calculated using LAAMP?

20 A. That's correct.

21 Q. Now, with the Department of Fish and Game
22 recommended flows, the average export may be higher
23 than 32.3 thousand acre-feet; isn't that right,
24 Mr. Vorster?

25 A. I'm trying to -- let me see if I understand the
0062

01 question. The average exports may be higher --

02 Q. What I'm saying is that that is not an absolute
03 number, is it?

04 A. What that number reflects is the output of the
05 model which reflects the input assumptions we make.

06 Q. And, in fact, if minimum Department of Fish and
07 Game flows are released down the streams, the minimum
08 recommended flows, it's correct that export may be
09 higher than 32,000 acre-feet?

10 A. It could be higher, yes.

11 Q. And it could also be lower; is that correct?

12 A. That's correct.

13 Q. Now, again, I'm going to ask you to assume that
14 your original opinion about LAAMP is correct, that
15 LAAMP overestimates inflow to Mono Lake.

16 Making that assumption, Mr. Vorster, isn't more
17 likely that the minimum recommended flows, the minimum
18 Department of Fish and Game recommended flows, it's
19 more likely that the exports will be less than 32.3
20 thousand acre-feet than more?

21 A. No, not at all. Because the exports are
22 determined by what's available after you satisfy the
23 releases. And the releases, of course, they're not
24 subject to any model that's specified. Here you have a
25 given inflow, specified inflow; you have a given

0063

01 release, specified release. How much is left over is
02 32,000 acre-feet given the constraints that we put into
03 LAAMP.

04 Q. Mr. Vorster, your testimony describes two separate
05 water management plans; is that correct?

06 A. That's correct.

07 Q. It describes a 6390 foot alternative; is that
08 right?

09 A. That's correct.

10 Q. And it describes a 6405 feet alternative; is that
11 correct?

12 A. That's correct.

13 Q. Your testimony states that these plans were
14 proposed by the Mono Lake Committee and the National
15 Audubon Society?

16 A. The goals for these plans were articulated by the
17 Audubon Society and Mono Lake Committee.

18 Q. And you're presenting these plans on behalf of the
19 Mono Lake Committee?
20 A. That's correct.
21 Q. And you're presenting these plans on behalf of the
22 National Audubon Society?
23 A. That's correct.
24 Q. And you mentioned goals of the two alternatives.
25 Those goals are listed on pages -- excuse me. Those
0064
01 goals are listed on pages 4 and 5 of your testimony; is
02 that correct?
03 A. That's correct.
04 Q. Now, I have a question about some of those goals,
05 Mr. Vorster.
06 You indicate that the purpose of this plan is to
07 keep fish in good condition; is that correct?
08 A. That's correct.
09 Q. You're not a fisheries biologist, are you,
10 Mr. Vorster?
11 A. No, I'm not.
12 Q. So you are not in a position to tell us what's
13 required to keep fish in good condition?
14 A. That's correct. I have been advised by my client
15 and fellow consultants as to what would be necessary to
16 keep fish in good conditions.
17 Q. Now, you said you've been advised by your clients.
18 That would be Mono Lake Committee and National Audubon
19 Society?
20 A. That's correct.
21 Q. Now, you say one of the goals is to increase the
22 primary productivity of the ecosystem to benefit
23 migratory and nesting birds; is that right,
24 Mr. Vorster?
25 A. That's correct.
0065
01 Q. Now, primary productivity of the lake has not been
02 identified by any expert as a limiting factor for any
03 species of bird at the lake, has it?
04 A. That's correct. I don't think the primary
05 productivity has been defined as a limiting factor.
06 Q. Now, what is the consequences of 90 grams per
07 liter of total dissolved solids on the primary
08 productivity of Mono Lake, Mr. Vorster?
09 A. I don't think I'm in a position to answer that.
10 Q. And you wouldn't be in a position to tell us what
11 the effects of 100 grams per liter of total dissolved
12 solids would be on the productivity of Mono Lake; isn't
13 that right?
14 A. That's correct.
15 Q. Now, with respect to the 6405 feet alternative,
16 your testimony lists six specific goals which you
17 attempt to achieve through that alternative; is that
18 right, Mr. Vorster?
19 A. Let me make sure. Did you say the 6390?
20 Q. 6405.
21 A. Oh, yeah, 6405. Yeah, six goals. Six goals in
22 addition to the ones articulated in 6390.
23 Q. Now, the first three goals are -- in actuality,
24 the first three goals under the 6405 feet alternative,
25 those first three goals are all really to restore

0066

01 waterfowl habitat; isn't that right, Mr. Vorster?
02 A. Yes, you could -- I think --
03 Q. And you've listed as one of the goals, "To restore
04 the historical and recreational uses of Mono Lake
05 including boating, swimming, picnicking, and hunting,
06 as described in the declaration of Jacqueline Volin of
07 the Sierra Club." Is that right?
08 A. That's right.
09 Q. Now, Ms. Volin described many historical
10 recreational uses of Mono Lake?
11 A. That's correct.
12 Q. And, in fact, the restoration of elevation of
13 6405, Mr. Vorster, would not restore all of the
14 recreational uses that she described in her testimony?
15 A. I would have to look at the testimony again to
16 give any definitive answer to that.
17 Q. For instance, Ms. Volin described Mark Twain days?
18 A. That's correct.
19 Q. Isn't it correct that Mark Twain days were
20 terminated as a result of the economy or lack of
21 interest as opposed to any lake level?
22 A. I think I remember hearing testimony to that
23 effect. But I wouldn't -- something to that effect.
24 Q. Well, it's correct, isn't it, that the last Mark
25 Twain days was in 1948?

0067

01 A. No, that's not correct. They've had Mark Twain
02 days recently, actually. In fact, you're refreshing my
03 memory. Lee Vining has resurrected that.
04 Q. When did Lee Vining resurrect that, Mr. Vorster?
05 A. I think sometime during the early '80s.
06 Q. What was the elevation of Mono Lake in the early
07 '80s?
08 A. It reached a historical low stand of 6372 in 1981,
09 early 1982.
10 Q. Now, Mr. Vorster, have you ever -- prior to
11 preparing the two management plans described in your
12 testimony, which you are presenting on behalf of the
13 Mono Lake Committee and National Audubon Society, have
14 you ever consulted with the Mono Lake Committee in
15 preparation of another Mono Lake management plan?
16 A. Yeah. I consult on an ongoing basis. I've been a
17 consultant to the Mono Lake Committee, and there have
18 been a number of plans we've discussed over the years.
19 MR. DODGE: Mr. Del Piero, if Mr. Birmingham is
20 going to pull out some historical Mono Lake settlement
21 proposal, we're going to revisit that same issue that
22 we fought about before.
23 I would object to it on the grounds that -- if
24 that's the intent, on the grounds that -- it was an
25 effort to settle the controversy which we're long

0068

01 past -- that it's based on pre-draft EIR information,
02 therefore, it's irrelevant.
03 And lastly, it's beyond the grounds of the scope
04 of rebuttal. We're here on a rebuttal case. And for
05 him to try to sneak this in on cross-examination and
06 rebuttal is totally improper.
07 HEARING OFFICER DEL PIERO: Okay. Can we take a

08 break?

09 (A recess was taken at this time.)

10 HEARING OFFICER DEL PIERO: We're back on the
11 record.

12 MR. BIRMINGHAM: Mr. Dodge has raised an objection
13 to a line of questions that he is anticipating about --
14 what he has termed "proposed settlements by the Mono
15 Lake Committee."

16 I've got a number of responses, but before I state
17 them for the record, I want to recall a story I told a
18 few weeks ago about how during the early stages of Mono
19 Lake proceeding before Judge Finney, Mr. Flinn was
20 attempting to have admitted a declaration which we
21 objected to and the Court sustained our objection. And
22 Mr. Dodge, teaching the Morrison and Foerster Palo Alto
23 office a lesson, subsequently got that same declaration
24 in.

25 I am prepared, at this point, to again offer the
0069
01 statements that the Hearing Officer has previously
02 considered. And I would propose to examine Mr. Vorster
03 on that proposal, because it is a management plan
04 which, if it's based on his work, if, in fact, what it
05 states is accurate, if it's based on Mr. Vorster's
06 work.

07 Mr. Vorster is here presenting testimony on the
08 management plan on behalf of the Mono Lake Committee.
09 And he has stated that the management plan that is
10 being presented is designed to achieve particular
11 goals.

12 And I think that we are entitled to cross-examine
13 him on how the management plan relates to those goals,
14 and whether or not other management plans that have
15 been proposed by the Mono Lake Committee also relates
16 to those goals.

17 Specifically, the document that the Hearing
18 Officer has previously reviewed and, for the record, it
19 is a portion of the Mono Lake Committee newsletter
20 dated fall of 1989, with respect to that particular
21 document, when we offered it previously, it was offered
22 at a time when a witness was being examined on a very
23 limited question, and that was a question related to
24 stream flows.

25 Mr. Vorster's testimony relates to management
0070
01 plans that go well beyond stream flows and, therefore,
02 it has become relevant. Whether the document is --
03 would be excluded under Section 1152 of the Evidence
04 Code, because it relates to a compromise, is
05 questionable.

06 There is authority, and specifically, I'm
07 referring now to a decision by the First District Court
08 of Appeal, Motion Picture, et cetera --

09 HEARING OFFICER DEL PIERO: Mr. Birmingham, first
10 of all, I need not point out that I know you're as
11 aware of it as anyone else is in the room, that this
12 Court is not obliged to operate under the Rules of
13 Evidence of the Evidence Code of the State of
14 California. That is expressed a number of times in our
15 administration regulations covering the conducts of

16 water rights hearings conducted by this Board.

17 At this point, you've not yet identified for me
18 what portion of that newsletter that you wish to
19 attempt to introduce. If you do that, then I'll be
20 prepared to rule.

21 I would point out, although I think the record is
22 probably clear, that this document came to light not
23 because of it being provided by any of the parties, but
24 simply because I, in my capacity as Hearing Officer,
25 felt somewhat at a loss since everyone on both sides

0071

01 apparently had had access to it, and were referring to
02 it, and it had not been introduced into the record.

03 And at this point, only that portion that I had a
04 question about that related to the testimony that was
05 presented at the time has, in fact, been introduced
06 into the record.

07 MR. BIRMINGHAM: I was going to make that same
08 observation, Mr. Del Piero, that I had previously
09 objected to a question on the grounds that it called
10 for an answer that related to an offer of compromise.
11 And here, I'm referring to the transcript of the
12 November 16, 1993, proceeding, and the Hearing Officer,
13 at that point, overruled my objection stating that,
14 "I'm going to overrule the objection. I'm going to
15 overrule it, one, because, as I stated, this Board has
16 the prerogative of attempting to solicit as much
17 information as possible.

18 And, two, at this point in time, it's impossible
19 for me -- for that matter, for the attorneys or for any
20 other parties, to know the actions that were taken in
21 the course of committee activity," et cetera.

22 What I specifically want to examine Mr. Vorster
23 about is a graph that is contained in the Mono Lake
24 proposal that indicates that it was prepared based upon
25 work by Mr. Vorster.

0072

01 And if I may approach, I'll show the document to
02 you.

03 HEARING OFFICER DEL PIERO: I'd like to see it.
04 Is that the graph that's shown here on page 8 -- or,
05 pardon me, 10?

06 MR. BIRMINGHAM: Yes, it is, Mr. Del Piero.

07 HEARING OFFICER DEL PIERO: Is that the only
08 portion of this you wish to introduce?

09 MR. BIRMINGHAM: Actually, I had intended to offer
10 the entire thing, because the entire document relates
11 to the goals that are described by the document. But
12 for the purposes of this document, I would be happy if
13 this were the only portion of the document to come in.

14 I have a number of other documents that are --
15 well, actually two documents that relate to the same
16 proposal made by the Mono Lake Committee.

17 It is not an offer of compromise. It is simply
18 statements by the Mono Lake Committee. And if I could
19 ask Ms. McKeever to hand out copies of that document,
20 the Hearing Officer would have an opportunity to review
21 it.

22 HEARING OFFICER DEL PIERO: Let's take these one
23 at a time, Mr. Birmingham.

24 MR. BIRMINGHAM: Sure.
25 HEARING OFFICER DEL PIERO: The first document
0073
01 that you've submitted, I'm inclined to allow in the
02 chart, because it's indicated to have been drafted by
03 Mr. Vorster.
04 The balance of the article includes a variety of
05 information on a variety of subjects that Mr. Vorster
06 did not testify to. It seems to me that it would be
07 inappropriate to allow that in at this point in time,
08 particularly inasmuch as your questions at this time
09 relate to lake levels, and that is what the chart
10 refers to.
11 And the rest of the sections refer to things like
12 fisheries, which you yourself established he's not
13 qualified to comment on: Habitat for butterflies,
14 shrimp, alkali flies, rotifers, California gulls,
15 waterfowl, shorebirds.
16 So recognizing this is prepared in 1988, and
17 recognizing that things out of the newsletter that it
18 predates the Environmental Impact Report, I'm going to
19 allow this in because it, in my opinion, reflects the
20 historical position of a representative of Mono Lake
21 some six years.
22 You want to address the other ones?
23 MR. BIRMINGHAM: Yes.
24 HEARING OFFICER DEL PIERO: I have not seen the
25 other ones before, and they have no indication that
0074
01 Mr. Vorster is the author of them.
02 MR. BIRMINGHAM: That is correct, and it would be
03 necessary for me to -- first, I don't think Mr. Vorster
04 is the author of them. They relate to proposals that
05 were made by the Mono Lake Committee who Mr. Vorster is
06 here representing. Mr. Vorster identified them as his
07 client.
08 HEARING OFFICER DEL PIERO: I'd like for you to
09 identify for me what this has to do in terms of
10 rebuttal.
11 MR. BIRMINGHAM: The first one, winter 1993,
12 Volume 15 edition of the Mono Lake Newsletter --
13 HEARING OFFICER DEL PIERO: Yes.
14 MR. BIRMINGHAM: -- and the accompanying article
15 or editorial, sets forth a, what I will refer to as a
16 Six-Point Plan. And it talks about how the Six-Point
17 Plan will protect different aspects of the lake and its
18 ecosystem, and I would make an offer that
19 Mr. Vorster participated in the preparation of the
20 Six-Point Plan.
21 The second article --
22 HEARING OFFICER DEL PIERO: I guess the question I
23 have for you, Mr. Birmingham, is: Why should this be
24 allowed at this point when Mr. Vorster is here
25 testifying as to the model?
0075
01 MR. BIRMINGHAM: Well, actually, Mr. Vorster
02 testifies to more than just the model. Mr. Vorster's
03 rebuttal testimony outlines two management plans which,
04 according to Mr. Vorster's testimony, he is presenting
05 on behalf of the Mono Lake Committee and the National

06 Audubon Society.

07 Those plans are described beginning at page 4 of
08 Mr. Vorster's rebuttal testimony. And he is, again,
09 presenting these two management plans on behalf of the
10 Mono Lake Committee and the National Audubon Society.
11 And he has stated that these two management plans are
12 designed to achieve the goals that have been listed in
13 his testimony.

14 So his rebuttal testimony goes well beyond the
15 scope of modeling. The plans, the documents that I
16 propose to have marked and introduced into evidence,
17 are documents that relate to another plan prepared by
18 the Mono Lake Committee that are designed to achieve
19 very similar goals.

20 And so, to the extent that Mr. Vorster's rebuttal
21 testimony has included these plans, I think that we are
22 entitled -- and he is introducing these plans as a
23 representative of the Mono Lake Committee and National
24 Audubon Society, we're entitled to cross-examine him
25 about the position previously taken by the Mono Lake

0076
01 Committee in connection with a different plan.

02 And these two, as you will note --

03 HEARING OFFICER DEL PIERO: The document that is
04 dated winter of 1993, that's actually a publication
05 from 1992; is that correct?

06 MR. BIRMINGHAM: It's dated winter of 1993. I
07 cannot tell you the publication date. I have the
08 original here with me. It indicates --

09 HEARING OFFICER DEL PIERO: The reason I ask that
10 is, I have not had a chance to read it very closely.
11 But having skimmed the last paragraph, it indicates,
12 "In 1993, the State Water Resources Control Board will
13 begin critical hearings to balance the water
14 requirements of a healthy Mono Lake."

15 The statement appears that it was written prior to
16 the beginning of the year.

17 MR. BIRMINGHAM: Actually, I don't know when it
18 was written, Mr. Del Piero, but the copyright on the
19 original -- if I may approach, the copyright on the
20 original indicates it was copyrighted in 1992, which
21 would suggest that it was written in 1992.

22 HEARING OFFICER DEL PIERO: Have you seen these,
23 Mr. Dodge?

24 MR. DODGE: What? The full document?

25 HEARING OFFICER DEL PIERO: Yes.

0077
01 MR. DODGE: No.

02 HEARING OFFICER DEL PIERO: You want to comment on
03 these, Mr. Dodge? The Six-Point Plan, we haven't
04 addressed that. That's the 1991 --

05 MR. BIRMINGHAM: Well, actually, the winter 1993
06 document and the winter 1991 document both relate to
07 the Six-Point Plan.

08 HEARING OFFICER DEL PIERO: Are the points the
09 same?

10 MR. BIRMINGHAM: Not being under testimony, I
11 think they are. I'm not offering testimony, but I
12 believe that the points are the same or very similar.

13 HEARING OFFICER DEL PIERO: We're going to take a

14 break for five minutes.

15 (A recess was taken at this time.)

16 HEARING OFFICER DEL PIERO: Hearing is back in
17 session.

18 Mr. Birmingham, did you have anything further to
19 say?

20 MR. BIRMINGHAM: No. The only other thing I would
21 add, Mr. Del Piero, is that the two documents, the
22 winter 1993 document and the summer 1991 document, are
23 documents that, from their face, do not appear to be
24 related to an offer of compromise. They certainly are
25 not statements made during the negotiation of an offer

0078

01 of compromise.

02 In fact, they're public statements related to the
03 position of the Mono Lake Committee. Certainly, they
04 are several years old, and that may go to their weight,
05 but it certainly doesn't go to their admissibility.

06 And the other thing is that I'm informed by
07 Mr. Canaday that the 1989 document is already in the
08 record.

09 HEARING OFFICER DEL PIERO: Okay. Mr. Dodge?
10 Mr. Dodge, do you have any further comments?

11 MR. DODGE: I would just restate what I said
12 before. I don't have any further comments except that
13 these are offers of compromise. They are, indeed,
14 public offers of compromise.

15 HEARING OFFICER DEL PIERO: Any further comments
16 by anyone? No?

17 I'm going to allow them to be admitted at this
18 point. I want you to establish a foundation and,
19 Mr. Vorster, pardon me, I want it clear what I'm
20 allowing in.

21 In relationship to the -- well, the '89 document,
22 Mr. Canaday, is it true the entire document is in our
23 record, or is it just what I allowed in the other day?

24 MR. CANADAY: What we have is the entire article
25 entitled the --

0079

01 MR. BIRMINGHAM: Excuse me. You may not want to
02 read it.

03 HEARING OFFICER DEL PIERO: Yeah. You may not
04 want to read that. He did it the other day, and I got
05 really upset with him.

06 MR. CANADAY: Well, this would be a first for me.

07 HEARING OFFICER DEL PIERO: Is the entire article
08 in the record?

09 MR. CANADAY: Yes.

10 HEARING OFFICER DEL PIERO: Or just that portion?

11 MR. CANADAY: Yes. The entire article.

12 HEARING OFFICER DEL PIERO: When was it submitted?

13 MR. CANADAY: It wasn't submitted. It was picked
14 up by staff as we visited Mono Basin. They're there
15 for the public to pick up at the Mono Lake Committee
16 office.

17 MR. FRINK: Yes. Mr. Del Piero, near the
18 beginning of the hearing, we introduced the Division of
19 Water Rights file 0.50 titled "Special studies, Mono
20 Lake, SWRCB Exhibit No. 2," and that newsletter is
21 included in that.

22 HEARING OFFICER DEL PIERO: Okay. Fine. Then I
23 don't have to worry about that. It's already in the
24 record.
25 As to the other two, I'm going to allow them to be
0080
01 introduced recognizing the historic content.
02 You need to establish foundation so Mr. Vorster
03 knows, since his name does not appear on either one of
04 these other two documents, at least as far as I've been
05 able to determine from my quick review of them, that he
06 knows something about these, particularly since they
07 appear to be authored by somebody other than Mr.
08 Vorster.
09 MR. BIRMINGHAM: I will attempt to lay that
10 foundation.
11 May I ask that the summer 1991 document, the
12 Volume 14, Number 1, which has attached to it a
13 statement, an article called "Six-Point Plan Protects
14 both L.A. and Mono Lake," that that be marked next in
15 order?
16 HEARING OFFICER DEL PIERO: Do we have a number?
17 MR. SMITH: Yes. 156.
18 HEARING OFFICER DEL PIERO: Okay.
19 (L.A. DWP Exhibit No. 156 was
20 marked for identification.)
21 MR. BIRMINGHAM: And then I would ask that the
22 winter 1993 publication, Volume 15, Number 3, with the
23 attached editorial entitled "Lake Views, You Can Lead
24 DWP to Water," be marked DWP Exhibit 157.
25 Mr. Vorster --
0081
01 HEARING OFFICER DEL PIERO: That's the editorial?
02 MR. BIRMINGHAM: Yes, it is.
03 (L.A. DWP Exhibit No. 157 was
04 marked for identification.)
05 Q. BY MR. BIRMINGHAM: Mr. Vorster, you've previously
06 testified that you were presenting a management plan in
07 your rebuttal testimony -- actually, two management
08 plans on behalf of the Mono Lake Committee; is that
09 correct?
10 A. BY MR. VORSTER: That's correct.
11 Q. And then I asked you if you had ever participated
12 in the preparation of any other management plans for
13 the Mono Lake Committee, and you said that you had; is
14 that correct?
15 A. That's correct.
16 Q. Now, do you have a copy of L.A. DWP Exhibit 156 in
17 front of you?
18 A. If you identify which newsletter that is.
19 Q. That is the winter 1991, Volume 14, Number 1,
20 newsletter.
21 A. Okay.
22 Q. Do you have a copy of that in front of you?
23 A. Yes, I do.
24 Q. Attached to that cover page of the newsletter is a
25 single-page article entitled "Six-Point Plan Protects
0082
01 Both L.A. and Mono Lake."
02 Are you familiar with this Six-Point Plan?
03 A. Yes, I am.

04 Q. Did you participate in the preparation of this
05 Six-Point Plan for the Mono Lake Committee?
06 A. Yes. In my role as the consultant of the Mono
07 Lake Committee as someone who would develop the
08 hydrologic aspects in the water management aspects of
09 plan.

10 MR. SMITH: Mr. Birmingham, before you go on. I
11 think I'd like to straighten out the title of L.A. DWP
12 156, the summer of 1991.

13 MR. BIRMINGHAM: Summer 1991, Volume 14, Number 1?

14 MR. SMITH: I'm afraid you said "winter."

15 MR. BIRMINGHAM: I beg your pardon.

16 Q. BY MR. BIRMINGHAM: You did participate in the
17 preparation of the Six-Point Plan?

18 A. BY MR. VORSTER: As I stated before, in the water
19 management and hydrologic aspects of implementing the
20 plan.

21 Q. Now, when you were involved in the preparation of
22 the Six-Point Plan that is described in L.A. DWP
23 Exhibit 156, did you have discussions with any of the
24 Mono Lake Committee, with any Mono Lake Committee
25 employees concerning the level of Mono Lake required to

0083

01 protect ecological resources of the lake?

02 A. I had those discussions during a time period which
03 I would not necessarily say was just related to this
04 plan, but the levels which are presented in the plan,
05 the minimum level, for example, of 6377 is one that the
06 Mono Lake Committee decided without my input. I mean,
07 that was their own decision.

08 Q. Now, in the first element of the Six-Point Plan on
09 the left-hand column, under the column entitled "Mono
10 Lake Needs," the second paragraph states, "The 6386
11 lake elevation provides a prudent nine-foot buffer
12 against dramatic declines in the water level resulting
13 from droughts or the diversions still allowed to Los
14 Angeles."

15 Now, you participated in identifying that buffer
16 level; isn't that right, Mr. Vorster?

17 A. That's correct.

18 Q. And then it goes on to say that, "As a management
19 level, it would allow fluctuations between 6390 and
20 6377, the range recommended by both federal and state
21 governments."

22 Now, you are the person who is responsible for
23 identifying the range of lake levels between which the
24 lake would fluctuate under this management plan; isn't
25 that right, Mr. Vorster?

0084

01 A. Yes. That's an output from the model.

02 Q. Now, the bottom paragraph, number 5, the left-hand
03 side column of L.A. DWP Exhibit 156, it states under 5,
04 minimum lake level 6377. "This level, upheld for the
05 third time by the Courts, is the elevation below which
06 Mono Lake must never fall."

07 Now, did you identify elevation 6377 as the level
08 which the lake would not fall under this proposed
09 management plan?

10 MR. DODGE: Objection. Asked and answered.

11 HEARING OFFICER DEL PIERO: Mr. Birmingham?

12 MR. BIRMINGHAM: I'll just stand by the question.

13 HEARING OFFICER DEL PIERO: I'm going to sustain
14 the objection.

15 Q. BY MR. BIRMINGHAM: Now, under the right-hand
16 column, Mr. Vorster, of L.A. DWP Exhibit 156, it
17 states, under drought-year protection, "As long as the
18 lake stays above the 6377 level and minimum
19 court-ordered stream flows continue, water can be
20 diverted from the basin."

21 Did you do an analysis in the preparation of this
22 Six-Point Plan concerning the extent to which DWP would
23 be permitted to divert water during a drought?

24 A. What do you mean by "analysis"? I developed the
25 inputs to the model necessary to achieve these goals so
0085

01 that there would -- there could be diversions during
02 dry periods, as stated here -- the answer is yes. I'm
03 trying to make sure I understand your question, so I --

04 Q. You did calculate how much water and when the
05 Department of Water and Power would be able to divert
06 during periods of drought in preparation of this
07 Six-Point Plan?

08 A. That's correct. In fact, I think, to give you the
09 specifics, the plan proposed that diversions would
10 occur if the runoff was below 75 percent of normal.
11 And if it was above 75 of normal, then there would be
12 no diversion until the lake achieved 6386.

13 Q. Now, in the middle of this page there is a box
14 with smaller print in it. The first paragraph states
15 that, "The Mono Lake Committee and National Audubon
16 Society proposed a Six-Point Plan to restore and
17 permanently protect the public trust and scenic values
18 of Mono Lake and to provide Los Angeles with a reliable
19 and environmentally sound water supply replacing
20 diversions from the Mono Basin."

21 Did you consult with the Mono Lake Committee on
22 the extent to which the Department of Water and Power
23 would be able to develop water supply alternatives
24 under the Six-Point Plan?

25 A. One of my pieces of information that I provide to
0086

01 the Mono Lake Committee is the availability of
02 alternative water supplies. So if you would interpret
03 that as an affirmative answer, yes, I provided
04 information on that point.

05 Q. Let me ask you more specifically, Mr. Vorster,
06 when the Mono Lake Committee was developing this
07 Six-Point Plan or gathering information that it used to
08 develop the Six-Point Plan, did you provide information
09 to them concerning alternative supplies of water for
10 the Department of Water and Power?

11 A. Yes, I did.

12 Q. Now, paragraph 6 of the document, L.A. DWP Exhibit
13 156, states that, "Because it may take time to develop
14 replacement water, L.A. would be able to divert 15,000
15 acre-feet of water a year from the basin for the first
16 five-years, provided that the minimum stream flows and
17 lake level requirements ordered by the Court are met.
18 This is a five-year concession that allows DWP to take
19 basin water until its new proposed projects come on

20 line even though reaching Mono Lake's healthy
21 management plan is delayed."
22 Did you consult with the Mono Lake Committee
23 concerning the length of time it would take for
24 replacement water supplies to come on line for the
25 Department of Water and Power?

0087

01 A. I was one of many sources of information that was
02 relied upon. In fact, Martha Davis and her other
03 associates in the Mono Lake Committee, Betsy
04 Reichschneider (phonetic) and John Cane (phonetic),
05 were also provided information that was used to
06 determine how long this grace period would be.

07 MR. HERRERA: Mr. Birmingham, your 20 minutes is
08 up.

09 MR. BIRMINGHAM: I make an application for an
10 additional 20 minutes, Mr. Del Piero. I don't believe
11 I'll use the entire 20 minutes.

12 HEARING OFFICER DEL PIERO: Go ahead.

13 Q. BY MR. BIRMINGHAM: Mr. Vorster, do you have a
14 copy of L.A. DWP Exhibit 157?

15 A. BY MR. VORSTER: Could you identify which
16 newsletter that is?

17 Q. Yes. L.A. DWP 157 is the winter 1993, Volume 15,
18 Number 3, a newsletter with an editorial attached to
19 it?

20 A. Okay. I have that in front of me.

21 Q. Would you take a moment and review this editorial,
22 please?

23 Have you had an opportunity to review this
24 document, Mr. Vorster?

25 A. I'm slipping on my speed-reading techniques, but I
0088

01 have reviewed it, yes.

02 Q. The Six-Point Management Plan that is described in
03 L.A. DWP Exhibit 157, is that the Six-Point Plan which
04 you helped the Mono Lake Committee develop as described
05 in L.A. DWP Exhibit 156?

06 A. Are you talking about the Six-Point Plan that's
07 highlighted in the middle of what appears to be page 5
08 in this editorial? It appears to be the same
09 principles that are articulated in the previous
10 newsletter, DWP Exhibit 156.

11 Q. Have you previously seen DWP Exhibit 157?

12 A. This newsletter?

13 Q. Yes.

14 A. I get it sent to my home, and sometimes I read
15 them and sometimes I don't.

16 Q. Do you know who Bob Schlichting is?

17 A. Yes, I do.

18 Q. Who is Bob Schlichting?

19 A. He used to be the publication editor for the Mono
20 Lake Committee. He no longer is. He's no longer
21 employed.

22 Q. Now, I'd like to ask, since we now have
23 established the entire document is in the letter, to
24 have --

25 MR. BIRMINGHAM: May I refer to this document by
0089

01 name, Mr. Del Piero?

02 HEARING OFFICER DEL PIERO: Inasmuch as it is in
03 the record, I assume you can now.

04 MR. BIRMINGHAM: I'd like for this to be marked
05 next in order, L.A. DWP Exhibit 158.

06 It is a document from the fall 1989 Mono Lake
07 Newsletter, Volume 12 Number 2. It's a --

08 HEARING OFFICER DEL PIERO: You wish to have --
09 it's being numbered as a staff document here; is that
10 not correct?

11 MR. SMITH: Yes.

12 MR. FRINK: It's included in a lengthy file. I
13 don't know, for ease of reference, it may be preferable
14 to give it its own exhibit number.

15 HEARING OFFICER DEL PIERO: That's fine.
16 (L.A. DWP Exhibit No. 158 was
17 marked for identification.)

18 Q. BY MR. BIRMINGHAM: Mr. Vorster, do you have a
19 copy of L.A. DWP Exhibit 158 in front of you?

20 A. Yes, I do.

21 Q. There is a graph on page 10 of the newsletter,
22 which is actually the third page of Exhibit 158.

23 Are you familiar with the graph that appears on
24 that page of L.A. DWP Exhibit 158?

25 A. Yes, I am.

0090

01 Q. It indicates that the water level graph
02 projections were prepared by you, doesn't it? In fact,
03 did you prepare the water level graph projections that
04 were used in the development of this graph?

05 A. Yes.

06 Q. Now, did you consult with the Mono Lake Committee
07 when it was developing the compromise proposal that is
08 described in L.A. DWP Exhibit 158?

09 A. Yes.

10 Q. And there are a number of lake levels that are
11 identified in this graph. For instance, it states,
12 "6380, 1987, severe dust storms."

13 Is that meant to indicate the level of the lake
14 and the year in which severe dust storms began?

15 A. No. It did not indicate the year in which severe
16 dust storms began since they occurred before that. But
17 I think that portion of the graph you're referring to
18 was taken from or paraphrased from the Daniel Botkin,
19 et al., 1988, "The Future of Mono Lake."

20 That was, I think, contained in that -- this time
21 line was contained in that document. And I'd have to
22 check that document to be sure. But it does say down
23 there the critical lake elevation source is that
24 document.

25 Q. Now, this article appears to be drafted by Emilie
0091

01 Strauss and Lauren Davis. Do you know Ms. Strauss and
02 Ms. Davis?

03 A. Yes.

04 Q. Who is Emilie Strauss?

05 A. Emilie Strauss is a biologist who, at one time,
06 worked for the Mono Lake Committee and is currently an
07 employee of the California Department of
08 Transportation.

09 Q. And at the time this was drafted in 1989, was

10 Ms. Strauss an employee of the Mono Lake Committee?
11 A. I don't know. Because I know she was -- after she
12 left the committee, she did some work for the
13 committee, and I think this article was a result of
14 that. I think she may have left before this time.
15 Q. But to your knowledge, this article was prepared
16 by Ms. Strauss on behalf of the Mono Lake Committee?
17 MR. DODGE: Objection. Vague and ambiguous as to
18 what you mean by, quote, on behalf of, end quote.
19 HEARING OFFICER DEL PIERO: You want to restate it
20 and get the answer you want? I'm going to be
21 sustaining the objection.
22 MR. BIRMINGHAM: Can I ask the last answer that
23 Mr. Vorster gave to me be reread.
24 HEARING OFFICER del PIERO: Why don't you read the
25 last question and the answer to it as well?

0092

01 (Whereupon the record was read as requested.)
02 Q. BY MR. BIRMINGHAM: When Ms. Strauss drafted the
03 article that has been identified as L.A. DWP Exhibit
04 158, was she working for the Mono Lake Committee?
05 A. I do not know for sure, but I think she was not at
06 the time. Someone from the Mono Lake Committee would
07 be able to answer that very easily.
08 Q. When Ms. Strauss wrote this article --
09 A. I think there's actually a pretty easy way to tell
10 if you have the actual newsletter.
11 Q. How is that, Mr. Vorster?
12 A. Because it usually tells who the employees are.
13 Q. Thank you.
14 I'd like the record to reflect that for the first
15 time, Mr. Vorster has gone beyond the scope of a
16 question and has offered some very valuable
17 information.
18 (Laughter.)
19 HEARING OFFICER DEL PIERO: You want to object to
20 that stipulation, Mr. Dodge? Mr. Roos-Collins?
21 MR. ROOS-COLLINS: I object to it. Mr. Vorster
22 has often contributed information of great value to Cal
23 Trout that has gone beyond the scope of his
24 examination.
25 HEARING OFFICER DEL PIERO: I was waiting for

0093

01 someone to say that.
02 MR. BIRMINGHAM: But apparently, as Mr. Vorster
03 many times has been, in offering the additional
04 information, he was wrong.
05 No, he was not.
06 HEARING OFFICER DEL PIERO: He was not.
07 MR. BIRMINGHAM: It's not where he said it would
08 be, but it is there.
09 HEARING OFFICER DEL PIERO: And?
10 Q. BY MR. BIRMINGHAM: Can you tell me, Mr. Vorster,
11 is Ms. Strauss identified as a Mono Lake Committee
12 biologist, staff biologist, by the fall 1989 newsletter
13 of the Mono Lake Committee?
14 A. Yes, she is. I think I said she left shortly
15 thereafter. It's easy enough to confirm because I
16 think the -- that's why I was confused.
17 Q. Now, this appeared in the Mono Lake Newsletter,

18 this article; is that correct?
19 A. That's correct.
20 Q. And you understand that Mono Lake Newsletter to be
21 a publication of the Mono Lake Committee?
22 A. That's correct.
23 Q. Now, I asked you some questions at the outset of
24 this area of examination concerning the degree to which
25 you consulted with the Mono Lake Committee or other
0094
01 consultants when the Six-Point Plan was being prepared.
02 Do you recall specifically what any of the other
03 consultants said about the effect of maintaining an
04 elevation of 6377 would have on the ecosystem of the
05 lake?
06 A. I can't recall any specific conversation, no.
07 MR. BIRMINGHAM: I don't think I have any further
08 questions at this time. Thank you very much.
09 HEARING OFFICER DEL PIERO: Thank you very much,
10 Mr. Birmingham.
11 Ms. Cahill?
12 MS. CAHILL: We have no questions.
13 HEARING OFFICER DEL PIERO: Okay.
14 Mr. Roos-Collins?
15 MR. DODGE: Just so we're clear, Mr. Del Piero.
16 Mr. Birmingham didn't offer these exhibits into
17 evidence, but I understand the tenor of your ruling is
18 that they will come into evidence.
19 HEARING OFFICER DEL PIERO: Yes.
20 MR. BIRMINGHAM: It has been my practice to offer
21 all of the exhibits --
22 HEARING OFFICER DEL PIERO: At the end.
23 MR. BIRMINGHAM: -- at the end. I will offer
24 these three specific exhibits now so that we don't
25 forget.
0095
01 HEARING OFFICER DEL PIERO: Other than your
02 objection, Mr. Dodge, anyone else wish to object to the
03 introduction of these exhibits?
04 I'll order them into the record given the comments
05 and stipulations made early on by me as well as by the
06 others.
07 Mr. Roos-Collins?
08 So, Mr. Birmingham, you don't have to offer them a
09 second time.
10 MR. BIRMINGHAM: Okay. Thank you.
11 (L.A. DWP Exhibits Nos. 156,
12 157, 158 were admitted into
13 evidence.)
14 CROSS-EXAMINATION BY MR. ROOS-COLLINS
15 Q. Good afternoon, Mr. Vorster.
16 A. BY MR. VORSTER: Good afternoon.
17 Q. The rebuttal testimony you have offered is on
18 behalf of the Mono Lake Committee and the National
19 Audubon Society?
20 A. That's correct.
21 Q. It is not on behalf of Cal Trout?
22 A. That's correct.
23 Q. You have that testimony before you?
24 A. That's correct, yes.
25 Q. Please turn to paragraph 6 on page 3. As you

0096

01 previously discussed with Mr. Birmingham, you state
02 there that LAAMP does not have the long-range view that
03 could be incorporated into the actual operation which
04 can result in a more optimal allocation of the water.

05 What was the basis for your opinion that a
06 longer-range view might result in a more optimal
07 allocation, including greater exports of water?

08 A. Well, for example, we heard some testimony last
09 week from Mr. Hasencamp that indicated that in wet
10 years when DWP knows it has an abundant runoff, they
11 would be able to divert a small additional amount of
12 water that the models itself would not indicate would
13 be available, but it's because they would know that was
14 a wet year and be able to operate their reservoirs in a
15 fashion to make room for this runoff.

16 You know, lowering, for example, Crowley Reservoir
17 in anticipation of higher runoff. That would be an
18 example that the natural operations, when you know it's
19 a wet year, you would lower it as much as feasible to
20 be able to capture as much of the runoff.

21 Q. Is it your opinion that the Mono Lake Committee
22 Management Plan presented in your written rebuttal
23 testimony may result in greater export than LAAMP
24 predicts?

25 A. It's possible, yes. I would say that we're going

0097

01 to be in a position in the next few years, next ten
02 years, for example, to see -- to constantly adjust the
03 models that we have that we're relying upon to reflect
04 actual operations.

05 And actual lake level responses to given inflows,
06 and that empirical evidence that we gather in the next
07 ten years and the DWP's operations, the fine-tuning of
08 their operations, will presumably allow them to get as
09 much water as possible while still maintaining certain
10 stream flows or certain lake levels.

11 Q. Is it also your opinion that the Department of
12 Fish and Game's flow recommendation may allow greater
13 export than LAAMP predicts?

14 A. To the extent that, for example, the runoff was
15 different than, obviously, LAAMP assumed, there would
16 be greater exports if the runoff was greater. Given
17 the same runoff, if we had the same runoff pattern as
18 LAAMP assumes, which, as I cited, is impossible, one
19 thing we know for sure, we're not going to have the
20 same runoff as we have in the past in the same
21 sequence.

22 But making that assumption, under actual
23 operations, I would suggest that it is a possibility
24 that greater exports could be achieved because of the
25 foresight that the operators would have.

0098

01 Q. Now, under cross-examination by Mr. Birmingham,
02 you said it was also possible that the export under the
03 Mono Lake Committee Management Plan might be less than
04 LAAMP predicts; is that correct?

05 A. That's correct.

06 Q. Since none of us has a crystal ball and,
07 therefore, since none of us can determine to a

08 certainty what the rainfall pattern will be between now
09 and the year 2004, do you have an opinion which way the
10 probability lies as to whether the actual export under
11 the Mono Lake Committee Management Plan will be greater
12 than the LAAMP prediction?

13 A. The only reasonable response I can give is that if
14 you assume the same sequence of runoff and
15 precipitation that I assumed for this LAAMP simulation,
16 I feel that under actual operations, that the exports
17 could -- there was a greater likelihood that the
18 exports could be a little higher because of long-range
19 view that the operators would have.

20 But, as I say, it's all dependent on what actually
21 occurs runoff-wise.

22 Q. A little bit higher meaning in what order of
23 magnitude in acre-feet?

24 A. I think, as I indicated earlier in testimony, for
25 a given runoff and the specified Fish and Game
0099

01 releases, and there's an absolute maximum that you
02 could get out of the basin, and it's, again, depending
03 on how the runoff actually occurs on a month-to-month
04 basis, it would vary. It would be somewhere in the 30
05 to 35,000 acre-foot range.

06 So it wouldn't be significantly higher than the
07 model indicates now. It would be on the order of, I'd
08 say, less than 10 percent.

09 Q. Let's turn to page 10 of your written rebuttal
10 testimony where you discuss opportunities to increase
11 the yield of the aqueduct, notwithstanding a reduction
12 in export from the Mono Basin.

13 Point A states that the extraction of groundwater
14 in the Owens Valley, "Is constrained but not excluded
15 by the Inyo-Los Angeles groundwater management
16 agreement."

17 Would you elaborate on what you mean that the
18 extraction of ground water is only constrained by that
19 agreement?

20 A. I guess you weren't here last Friday when we had
21 an elaborate discussion on this. Let me see if I can
22 simplify the agreement between Inyo and Los Angeles
23 because it is a very complicated agreement.

24 Q. Mr. Vorster, let me stop you here. Have you
25 previously answered this question in response to
0100

01 another attorney's examination?

02 A. No. But there were several questions to the panel
03 last Friday on this, and I would like to offer my
04 opinion to clarify this.

05 Q. Please do.

06 A. The Inyo-L.A. agreement does not specify a
07 particular pumping level. It attempts to protect the
08 resources of the Owens Valley and determine the
09 pumping, allowable pumping, through a number of
10 mechanisms including monitoring the soil, soil
11 moisture, providing for in-valley uses. A number of
12 things are involved in this agreement, but there's
13 nothing that says DWP can only pump a certain amount of
14 water.

15 It does set some very -- guidelines or constraints

16 that says you can pump if you meet these, you know,
17 these things are met, these constraints are met. So
18 there's nothing in the agreement that says if they
19 recharge the groundwater basin, they won't be able to
20 extract it. In fact, this whole purpose of trying to
21 increase the recharge, which DWP has proposed to do, is
22 on the premise that they will be able to extract the
23 water in a later period.

24 Q. Previous witnesses, including Mr. Hasencamp, have
25 referred to a Green Book or document. Is that the

0101

01 agreement to which you refer in paragraph 18-A of your
02 written rebuttal testimony?

03 A. The Green Book is the -- I think as Mr. Huchison
04 testified last Friday, is the detailed guidelines to
05 implement the Inyo-L.A. agreement. So that the
06 agreement is a broader -- has a broader scope than just
07 the Green Book. The Green Book is a way to actually
08 implement that agreement.

09 Q. Have you estimated the potential increase in
10 exportable water which might be achieved through
11 additional storage in the groundwater basin in the
12 Owens Valley?

13 A. No, I have not.

14 Q. Let's turn now to point E in paragraph 18, where
15 you discuss, "Increasing the efficiency of irrigation
16 in the Mono-Owens Basin."

17 How much water is currently supplied by the City
18 of Los Angeles on a long-term average basis for
19 irrigation in the Owens Basin?

20 A. I would be taking a pretty rough guess at that. I
21 think that information was provided in response to some
22 questions you asked earlier of V. Miller.

23 Q. You have no reason to disagree with Mr. Miller's
24 estimate?

25 A. Not at all.

0102

01 Q. Do you have any estimate of the potential of the
02 increase in exportable water if the irrigation
03 efficiency were increased in the Owens Basin pursuant
04 to paragraph 18-E?

05 A. No. I have not studied that in any detail.

06 Q. Let's turn now to paragraph 5 on page 2 of your
07 written rebuttal testimony. You discuss there the
08 historic average transit loss and release of about
09 15,000 acre-feet per year between the Owens Valley and
10 Los Angeles.

11 Is that to say that 15,000 acre-feet per year are
12 lost for further productive use in the course of
13 transportation between the Owens Valley and Los
14 Angeles?

15 A. Not entirely, because I can break down that
16 transit loss and releases into two parts. The transit
17 loss is about 10,000 acre-feet between the Owens Valley
18 and Bouquet Reservoir, and then about 5,000 acre-feet
19 is for evaporation from Bouquet Reservoir, that's
20 B-o-u-q-u-e-t, no -- well, I'll be corrected if that
21 wasn't correct.

22 And then there's several thousand acre-feet that
23 are required to be released from Bouquet Reservoir for

24 fish flow or fish stream maintenance. So the 10,000
25 acre-feet is the figure that we would look upon as

0103

01 being lost for further use.

02 Let me further elaborate on that. Some of that
03 water is actually released from the aqueduct for their
04 facilities along the way, their maintenance yards and
05 for some irrigation in the Antelope Valley. So there's
06 leaks and losses. There's releases for beneficial use.
07 There's releases for fish. There's releases for
08 irrigation along the way. The actual leaks, I cannot
09 say actually how much of it's leaks.

10 I do know that DWP has pursued -- has tried to
11 identify the leaks and repair it. And they have
12 actually been successful at reducing some of that
13 transit loss, so that figure of, what I said, 10,000
14 acre-feet is no longer that amount. I don't know how
15 much less it is now.

16 Q. Do you have an opinion whether the transportation
17 losses which you have just been discussing can be
18 reduced further?

19 A. No, I do not.

20 Q. Let's turn now to paragraph 9 where you discuss a
21 flow regime to keep fish in good condition.

22 Now, in response to a question from
23 Mr. Birmingham, you stated you were not in a position
24 to state what's required to keep fish in good
25 condition. You were advised by clients and fellow

0104

01 consultants. Was that your testimony?

02 A. I think that was my testimony, yes.

03 Q. Does the Mono Lake Committee Management Plan
04 differ in any respect from the Department of Fish and
05 Game flow recommendation with respect to the flow
06 regime to keep fish in good condition?

07 A. No.

08 Q. Let's turn now to paragraph 10, page 6 of your
09 written rebuttal testimony, where you state that under
10 the Mono Lake Committee Management Plan, "There will be
11 no diversions until the lake level reaches 6384 feet in
12 elevation."

13 Table 1-A estimates that that could take five
14 years with a 1940 start and no diversions?

15 A. That's correct. Yes, well, to get to 6383.5.

16 Q. Now, paragraph 10 states that the no-diversion
17 provision is intended "to accelerate the protection of
18 public trust values associated with higher lake
19 levels." Is that correct?

20 A. That's correct.

21 Q. Does it have any stream protection purpose?

22 A. Could you clarify what you mean by "stream
23 protection purpose"?

24 Q. Insofar as the no-diversion provision puts more
25 water in the streams than the Department of Fish and

0105

01 Game recommends to keep the fisheries in good
02 condition, is it your opinion that that extra water
03 will provide protection for the streams?

04 A. It is my opinion that that extra water actually,
05 in the long term, will benefit the fish because it will

06 work on the streams. It will enable the streams to
07 create more complex habitat and accelerate the recovery
08 of vegetation.

09 Q. And is the basis of that opinion the advice of
10 your clients and fellow consultants?

11 A. That's correct.

12 Q. Finally, let's turn to paragraph 16 on page 9 of
13 your written rebuttal testimony. The second full
14 sentence states, "There is no need to constantly adjust
15 the exports in order to meet the lake level or release
16 target."

17 Is it your understanding that any management plan
18 before this Board would involve constant adjustment of
19 exports in order to meet a lake level or release
20 target?

21 A. Depends on how you define the term "constant."

22 But I do think there is the --

23 Q. As you use the term?

24 A. Oh. There is a possibility that if the exports
25 were tied to a particular runoff amount, then the

0106

01 exports would be adjusted on a fairly constant basis.

02 Let's say, for example, the exports would be 30 percent
03 of the runoff, let's say the monthly runoff, then there
04 would be an adjustment in each month.

05 Q. Let me ask you a related question. Is it your
06 understanding that the Draft Environmental Impact
07 Report contains any alternative which involves constant
08 adjustment of the exports in order to meet the lake
09 level or release target?

10 A. The Draft EIR doesn't go into the detail of
11 actually how a particular alternative would be
12 implemented, so I don't think we can extract that.

13 Q. So this sentence was not intended as criticism of
14 any other management plan?

15 A. No, not at all.

16 Q. It was intended as an explanation of the advantage
17 of the Mono Lake Committee management plan?

18 A. That's correct.

19 MR. ROOS-COLLINS: Thank you very much.

20 HEARING OFFICER DEL PIERO: Miss Scoonover?

21 MS. SCOONOVER: I have no questions.

22 HEARING OFFICER DEL PIERO: Mr. Dodge?

23 MR. FRINK: Excuse me, Del Piero.

24 HEARING OFFICER DEL PIERO: Forgive me.

25 ///

0107

01 CROSS-EXAMINATION BY THE STAFF

02 Q. BY MR. FRINK: Mr. Vorster, on page 7 of your
03 testimony, you state that, "The plan of no diversions
04 until the lake reaches 6384, and then the allocation of
05 a constant 10,000 acre-foot per year export amount in
06 the initial period was designed to have the lake rise
07 to 6390 in an average of 16 years," end of quote.

08 Did you plan to reach a 6390 lake level in 16
09 years in order to comply with your understanding of the
10 requirements of the Clean Air Act?

11 A. BY MR. VORSTER: That's correct.

12 Q. Now, I assume that if you took longer than 16
13 years to reach a 6390 lake level, that that would have

14 the effect of increasing the average amount of water
15 available for export; is that correct?

16 A. That's correct.

17 Let me clarify the answer to the previous
18 question. Trying to get to 6390 in 16 years, that
19 specific number was tied into the Clean Air Act
20 requirements or the way we interpreted them.

21 We also, though, wanted to achieve the public
22 trust values associated with 6390 as quickly as
23 feasible.

24 Q. All right. I believe you testified that the
25 Lee Vining Creek flows should be limited to 250 cfs for

0108

01 a period of ten years to give the vegetation on Lee
02 Vining Creek a chance to get re-established more; is
03 that roughly accurate?

04 A. That's correct.

05 And I want to add a clarification of that because
06 I'm anticipating, perhaps, a question. That if there
07 was a wet year, and it was an indication that
08 diversions from Lee Vining Creek, in order to limit the
09 releases to 250 cfs, would somehow cause Grant Lake
10 Reservoir to exceed its capacity and spill, the Mono
11 Lake Committee/National Audubon Society plan would not
12 want to recommend that limitation.

13 In other words, we don't want to divert water from
14 Lee Vining Creek in order to cause uncontrolled flows
15 on Rush Creek.

16 So if it was a very wet year and that situation
17 was anticipated, we would not want to limit the flows
18 on Lee Vining and, in fact, let them be released down
19 the creek, the entire flow.

20 Q. Have you made an assessment of what the likely
21 impact on Rush Creek flows would be on wet years if you
22 were to move over any excess water from Lee Vining
23 Creek to the Grant Lake Reservoir and release it into
24 Rush Creek?

25 A. The model will give you indications of what that

0109

01 would be. And, as I said, the model requires you to
02 put an assumption in that would hold for the entire
03 period, thick or thin. And to the extent that
04 actually, when you have very wet years, the model just
05 tends to release all the water anyway.

06 So, yes, the model will do that analysis, and I
07 don't have the specifics in front of me.

08 MR. FRINK: All right. That's all the questions I
09 have. Thank you.

10 HEARING OFFICER DEL PIERO: Mr. Satkowski?

11 MR. SATKOWSKI: Just a couple questions,
12 Mr. Vorster.

13 Q. BY MR. SATKOWSKI: On page 6 of your rebuttal
14 testimony, Item 10, you state that in the management
15 plan there will be no diversion until the lake level
16 reaches 6384. Why did you pick 6384?

17 A. BY MR. VORSTER: Well, as I stated under A, we
18 wanted to get the lake to a reasonable buffer level as
19 soon as possible. So 6384 does provide protection
20 against 6378 from a seven-year drought.

21 It also was chosen in order to get to the -- it

22 had to do with getting to 6390 in 16 years and allowing
23 some exports by DWP and, you know, finding a level at
24 which we could do that.

25 But it was specifically targeted to protecting --
0110

01 establishing a buffer level, rising through the
02 vulnerable areas of the South Tufa grove as quickly as
03 possible.

04 Q. In item 11, down at the bottom of the page, it
05 says, "Diversion will be limited to 10,000 acre-feet
06 per year of available water in all the year types."

07 And why did you choose 10,000 acre-feet per year?

08 A. Again, to achieve the goal of achieving 6390 in 16
09 years. Again, the concept is what's important. The
10 concept is, you know, to specify a constant export for
11 DWP.

12 10,000 acre-feet is a result of the assumptions
13 that we made by the hydrology for LAAMP and the output
14 that results in order to achieve the 16-year -- to
15 achieve 6390 in 16 years.

16 If the runoff was greater than what was assumed,
17 then actually more than 10,000 acre-feet could be
18 exported, and you could still achieve the 16-year time
19 line. So the concept is the constant amount of export.

20 MR. SATKOWSKI: Thank you.

21 HEARING OFFICER DEL PIERO: Mr. Smith?

22 MR. SMITH: I have no questions.

23 HEARING OFFICER DEL PIERO: Mr. Herrera?

24 MR. HERRERA: I have no questions.

25 HEARING OFFICER DEL PIERO: Mr. Canaday?

0111

01 MR. CANADAY: Thank you.

02 HEARING OFFICER DEL PIERO: After your questions
03 are completed, Mr. Canaday, we're going to take a break
04 so people can move their cars.

05 MR. CANADAY: Okay.

06 Q. BY MR. CANADAY: Mr. Vorster, on page 4 of your
07 testimony when you talk about the total dissolved
08 solids -- have you found that line?

09 A. BY MR. VORSTER: Yes.

10 Q. It's your plan to keep the lake at or above the
11 total of dissolved solids at 75 grams per liter or at
12 or below the total dissolved solids per liter?

13 A. Very good. It's what happens when you write
14 testimony in the last minute. That should be below 75
15 grams per liter. And I would like to make that a
16 formal correction of the testimony, because the total
17 dissolved solids vary inversely with lake level. And
18 as the lake level stays above 6390, the total dissolved
19 solids will be below the 75 grams per liter.

20 HEARING OFFICER DEL PIERO: I'm sure the brine
21 shrimp will appreciate that.

22 MR. DODGE: It's also one that he can't blame on
23 the transfer to the Morrison and Foerster agreement.

24 MR. VORSTER: That's also correct, but Captain
25 Habitat also picked it up.

0112

01 Q. BY MR. CANADAY: In your discussion, you also
02 discussed a concept for up to ten years and those
03 releases would not be greater than 250 cfs; is that

04 correct?

05 A. BY MR. VORSTER: That's correct.

06 Q. And you also testified in response to a question
07 that if we had very wet years, it's not the intent of
08 your management plan to use Rush Creek, in a sense, as
09 a sluiceway to put that extra water into the lake; is
10 that correct?

11 A. That's correct.

12 Q. Have you thought about how that decision was going
13 to be made and who was going to make that decision and
14 what time of year that decision would be made?

15 A. I have not thought about it in enough detail to
16 give you a well-thought-out answer. But it's something
17 that I'm continuously thinking about, how a decision
18 would be implemented. And that's one I'm giving even
19 more thought to.

20 Q. But that is the kind of decision that would take
21 nearly on-the-spot determination, correct? Or would it
22 take a long -- could you forecast that?

23 A. I think you could forecast that. I think you
24 could forecast that with a combination of actual
25 operational experience in years that had similar

0113

01 runoff, and this is where actually the use of
02 simulation model would be helpful. That's exactly it.

03 It would give you a sense of whether you had a
04 problem, so you could use LAAMP for that purpose.

05 Q. You responded to some questions about LAAMP and of
06 how it's primarily a monthly model and isn't an
07 operations model.

08 Is LAASM also a monthly model?

09 A. Yes. LAASM is also a monthly simulation model.

10 Q. And so the same kinds of caution on the use of
11 LAASM in forecasting would be the same as LAAMP; is
12 that correct?

13 A. That's correct.

14 Q. Your 6390 management plan was based -- one of the
15 criteria was based on your reading of an EPA statute,
16 not statute, but the EPA letter? Your reading of that
17 letter said that you had to reach attainment within 16
18 years.

19 A. That's correct.

20 MR. DODGE: Objection to the use of the term
21 "your" as to whether it applies to Mr. Vorster or as it
22 applies to National Audubon Society and the Mono Lake
23 Committee, which is what I understood his testimony
24 gave him the goals.

25 HEARING OFFICER DEL PIERO: Clarify what you

0114

01 intend to mean, whether "your" is intended to be
02 Mr. Vorster or the Audubon Society.

03 Q. BY MR. CANADAY: The criteria that you used, 16
04 years, that was provided to you to develop the plan?

05 A. BY MR. VORSTER: That was provided to me by
06 Mr. Flinn.

07 Q. And that, I assume, was the interpretation of
08 Mr. Flinn or others representing the Mono Lake
09 Committee?

10 A. That's right.

11 Q. And with that 16-year assumption, that led to the

12 10,000 acre-foot-a-year continual diversion as part of
13 your plan; is that correct?

14 A. Yes. In order to achieve the goal of 6390 within
15 a 16-year period, 10,000 acre-feet was what worked out
16 best.

17 Q. That was the product of that assumption?

18 A. Yes, yes.

19 Q. So let's assume that that letter did not -- let's
20 assume that 16 years -- you had longer than 16 years.
21 Let's assume that you had 20 years. If you had 20
22 years, then continual diversion allowed under your plan
23 would be greater than 10,000 acre-foot per year; would
24 it not?

25 A. I probably should not answer that question because
0115

01 there are other goals in the plan that are articulated
02 besides the Clean Air Act compliance. So I would need
03 to consult with the client before saying yes. It would
04 be -- from a hydrologic standpoint, the answer is yes.

05 Q. That was the question I had, from a hydrologic
06 standpoint.

07 A. Yes.

08 MR. CANADAY: Thank you. That's all I have.

09 HEARING OFFICER DEL PIERO: Thanks very much.

10 Ladies and gentlemen we're going to take a
11 15-minute break. We'll be back.

12 (A recess was taken at this time.)

13 HEARING OFFICER del PIERO: Ladies and gentlemen,
14 we're back in session.

15 Mr. Dodge?

16 MR. DODGE: Yes, just a few questions.

17 REDIRECT EXAMINATION BY MR. DODGE

18 Q. Mr. Vorster, you had an exchange with
19 Mr. Birmingham about how the transition period might be
20 longer under your water balance model than it would be
21 under LAAMP. And Mr. Del Piero interrupted with a
22 question as to how much longer, and you said you didn't
23 know specifically.

24 Do you have any order of magnitude at all that you
25 can give us at this time?

0116
01 A. Yes. I think I did answer Mr. Birmingham when he
02 asked me how much longer it would take to get the
03 6383.5 with no diversions with my model.

04 With LAAMP, it was five years. I said with my
05 model, it would, at most, be six years. We're talking
06 about a very small difference in the number of years in
07 this transition period. So I would say no more than
08 one, possibly two years additional.

09 Q. And hypothetically, if we go downstream, not to
10 mix metaphors, but if we go down through time for 10 or
11 15 years and it turns out that LAAMP does, in fact,
12 overestimate inflow, what would the remedy be?

13 A. Well, I would say we would want to recalibrate
14 LAAMP. And we'd be able to -- if we had a specific
15 lake level target that we were trying to achieve, we
16 would -- it would take some additional waters or
17 additional time to achieve that.

18 But the main thing you want to do is don't accept
19 the models we have at this point in time as the be-all

20 end-all. We recalibrate as we get new information. As
21 the years progress, we can improve their ability to
22 predict.

23 Q. Now, let me move to these various Mono Lake
24 Committee publications, the DWP Exhibits 156 to 158, I
25 believe. And you've told us about your involvement in

0117

01 that.

02 Let me ask you: During the time frame when those
03 documents were published, to what extent did the Mono
04 Lake Committee have awareness of the duck habitat
05 pre-1940 in the Mono Basin?

06 A. We did not have the awareness that it was the
07 critical aspect of the higher lake level for duck
08 habitat.

09 We were aware that ducks did occur prior to 1940,
10 and in fair abundance, but we did not have the
11 information on the critical relationship between the
12 delta marshland, the hypopycnal flow, the lower
13 salinity, all the things that were articulated in
14 Dr. Stine's testimony. That's all new information.

15 Q. And I believe that you told us that around 6391
16 feet, it was your understanding that, at least, on a
17 modeling basis that there would be an elimination of
18 air quality violations?

19 MR. BIRMINGHAM: Objection. Misstates the
20 testimony.

21 MR. DODGE: No, I don't think it does,
22 Mr. Del Piero.

23 MR. BIRMINGHAM: I don't think Mr. Vorster has
24 testified about the modeling results as they relate to
25 air quality.

0118

01 HEARING OFFICER DEL PIERO: Mr. Dodge?

02 MR. DODGE: Well, it's in paragraph 8 of his
03 testimony.

04 HEARING OFFICER DEL PIERO: I handed the testimony
05 back to the staff too fast.

06 MR. BIRMINGHAM: In reviewing paragraph 8, I don't
07 see any reference to the modeling of air quality.

08 MR. DODGE: Well, I'll withdraw.

09 HEARING OFFICER DEL PIERO: You mean the second
10 bulletin --

11 MR. DODGE: Yes, I do.

12 I can ask the question without the modeling if
13 that's the objection.

14 MR. BIRMINGHAM: The question is ambiguous in the
15 sense that there are --

16 HEARING OFFICER DEL PIERO: I'm going to sustain
17 the objection. And, Mr. Dodge, why don't you start
18 again?

19 MR. DODGE: Thank you.

20 Q. BY MR. DODGE: Looking at paragraph 8 of your
21 testimony, sir, "Achieve air quality compliance with
22 the EPA schedule set forth in the December 16, 1993,
23 letter from David Calkins to Ellen Hardeback."

24 Now, my question is simply when DWP Exhibits 156
25 to 158 were written, was the Mono Lake Committee aware

0119

01 of this air quality compliance schedule?

02 A. Absolutely not, because at the time, of course,
03 the Mono Basin had not been designated as a
04 non-containment area which triggered this schedule that
05 was set forth in that letter. That was the key thing.

06 Q. When was it designated non-containment?

07 A. I think December 6th, sometime in December. It
08 was published in the Federal Register whenever David
09 Calkins testified.

10 Q. Now, let me ask you finally, relating to this
11 modeling testimony. And I will note that we have
12 designated Mr. Vorster on surrebuttal on a couple
13 points that will take five minutes, but I don't intend
14 to ask him those questions tonight.

15 But limiting the final area of questioning, sir,
16 to paragraph 8 of your rebuttal testimony. Do you see
17 that?

18 A. Yes.

19 Q. And I want to focus in specifically -- let's start
20 with 6405 feet, first, and Mr. Birmingham correctly
21 pointed out that the first three items related to
22 waterfowl, right?

23 A. That's correct.

24 Q. Now, the compromise proposals set out in DWP
25 Exhibits 156 to 158, management level of 6386 or 6388.

0120

01 Do you have those in mind, sir?

02 A. Yes.

03 Q. Would those compromise management proposals
04 achieve the waterfowl goals set out in 6405 feet?

05 A. No, they wouldn't.

06 Q. And that's based on Dr. Stine's testimony?

07 A. That's correct.

08 Q. How about the remaining goals set out in -- for
09 lake level elevation 6405 feet? To what extent would
10 the 6386 or 6388 proposals achieve those goals?

11 A. Well, it would not permanently cover the
12 deflatable playa of the Mono shorelands, and it would
13 not restore the historical visual characteristics of
14 the full Mono Lake.

15 It would begin -- and besides, it would only begin
16 to restore some of the historical recreational uses of
17 Mono Lake. Boating still, at least power boating, as
18 was once done extensively at Mono Lake, would still be
19 somewhat dangerous when the lake level in the 6380
20 level, mid 6380's.

21 Obviously, swimming could occur, but it wouldn't
22 have the dilution and the freshwater springs which made
23 swimming a much more enjoyable experience historically.
24 And it would not restore the hunting or waterfowl
25 habitat previously described.

0121

01 Q. Unless you wanted to hunt phalaropes?

02 A. That's correct.

03 HEARING OFFICER DEL PIERO: Is there a season for
04 phalaropes?

05 Q. BY MR. DODGE: Everyone has told his hunting
06 story, so -- I've only hunted a few times and not for
07 many, many years. But I hunted with a friend from
08 Redding that I tried a case with, went duck hunting
09 together many, many years ago. And I'm sure the

10 statutes of limitation is running. Is DFG still here?
11 It turned out that that --
12 HEARING OFFICER DEL PIERO: That duck was a swan?
13 (Laughter.)
14 MR. DODGE: -- that duck, I was told by my friend,
15 was a curlew.
16 (Laughter.)
17 Q. BY MR. DODGE: Let me go back, Mr. Vorster, to --
18 MR. BIRMINGHAM: Excuse me, Mr. Dodge, but who was
19 your friend?
20 HEARING OFFICER DEL PIERO: That fact will be lost
21 on this record.
22 Q. BY MR. DODGE: Going back to the goals set out for
23 6390 feet on paragraph 8 of your testimony, sir. Could
24 you go down those goals and tell the Board to what
25 extent the compromise set out in Exhibit 156 to 158

0122

01 would achieve those goals?
02 A. BY MR. VORSTER: Well, at the time we developed
03 the Six-Point Plan, we had the interim -- well, no, we
04 didn't have -- I'm trying -- at 1991, we had the
05 interim fish flow order as set forth by Judge Finney,
06 which I want to emphasize they were interim flows only.
07 So we did not have all the Fish and Game reports in on
08 Rush and Lee Vining and Walker and Parker Creek.
09 I just previously testified that Mono Lake had not
10 been designated a non-attainment area. We did not have
11 the benefit of the modeling that was done for the Draft
12 EIR to indicate what lake level was needed to achieve
13 compliance.
14 Q. What is your understanding of the lake level
15 necessary to achieve compliance?
16 A. Well, I stated on paragraph 14 of my testimony,
17 page 8, as, "I understand, as Duane Ono has testified,
18 that the Great Basin Air Pollution Control District
19 assumed that compliance with the Clean Air Act could be
20 achieved if the median lake level was at 6392 feet."
21 Q. All right.
22 A. As far as providing a buffer against droughts, the
23 6386 was established to provide a buffer against 6377,
24 using historic droughts. But we did not have the
25 information that Dr. Stine has since provided on the

0123

01 duration and magnitude of prehistoric droughts.
02 The Six-Point Plan would create a water barrier as
03 long as the lake level was above 6377, but not
04 necessarily a coyote barrier, as we've heard testimony
05 that coyotes could pass over Negit at 6378.
06 And also the Six-Point Plan would create a problem
07 for some of the Paoha Islets, specifically Duck Islet.
08 And I think we'll hear some testimony from Dr. Stine on
09 that.
10 The Six-Point Plan would maintain the -- or have
11 some hard substrate environments would be increased
12 with that, so there's not much change there.
13 As far as the total dissolved solids, the
14 Six-Point Plan would have delays higher than the 75
15 grams per liter. It would be in the range of 80 to 90
16 grams per liter.
17 And it did provide water to DWP in dry years.

18 That's the similarity between the two plans. And it
19 would also provide additional water-based Tufa, but the
20 6390 plan would provide even more water-based Tufa.

21 MR. DODGE: That's all I have, Mr. Vorster.

22 HEARING OFFICER DEL PIERO: Thank you very much,
23 Mr. Dodge.

24 Mr. Birmingham?

25 ///

0124

01 RE-CROSS EXAMINATION BY MR. BIRMINGHAM

02 Q. Mr. Vorster, Mr. Roos-Collins asked you a question
03 about paragraph 9 of your testimony. That's the
04 paragraph that discusses keeping fish in good
05 condition; is that correct?

06 A. That's correct.

07 Q. And Mr. Roos-Collins asked you whether or not in
08 preparing this management plan or the two management
09 plans, you adopted the recommendations of the Fish and
10 Game?

11 A. I think he asked me that, that's correct.

12 Q. And you said that the management plan adopted the
13 recommendations of the Fish and Game?

14 A. I think I testified to that, yes.

15 Q. Now, what did Trihey -- he's one of the
16 consultants to the Mono Lake and National Audubon
17 Society; is that right?

18 A. He has testified on behalf of the Mono Lake
19 Committee and National Audubon Society. That's
20 correct.

21 Q. In fact, he appeared in this proceeding and
22 testified on behalf the National Audubon Society and
23 Mono Lake Committee; isn't that right?

24 A. That's right.

25 Q. And isn't it right that during his testimony,
0125

01 Mr. Trihey presented what he thought were the minimum
02 flows necessary to keep fish in good condition in these
03 streams?

04 A. I'm not sure in what context he presented those
05 flows. I would have to actually read -- see or read
06 his testimony.

07 Q. Were you present when Mr. Trihey testified?

08 A. I think I was.

09 Q. I'm going to ask you to assume that Mr. Trihey
10 testified that for Lee Vining, he was proposing a
11 minimum flow for the summer months, that would be April
12 through September, of 50 cfs, and that winter months,
13 he was proposing a minimum flow of 25 to 35 cfs for Lee
14 Vining Creek.

15 Now, those flows are higher than the flows
16 recommended by the Department of Fish and -- excuse me.
17 Let me restate that.

18 The flows recommended by Mr. Trihey, if I've
19 accurately represented them to you, those flows are
20 lower than those flows recommended by the Department of
21 Fish and Game; is that correct?

22 A. For some of the year types, I think they're
23 actually higher than the dry-year recommendations.

24 Q. Now, on Rush Creek, I'm going to represent to you
25 that Mr. Trihey testified that it was his proposal that

0126

01 minimum flows in Rush Creek be maintained at 55 cfs
02 during the summer months and that the flows be
03 maintained at a minimum of 35 cfs in the winter
04 months.

05 Now, those flows are also lower than the flows
06 recommended by the Department of Fish and Game; is that
07 correct?

08 A. That's correct, with the same admonition that
09 Trihey's flows are higher than the Department of Fish
10 and Game's dry-year recommended flow.

11 Q. Now, when you were preparing this management plan
12 for the Mono Lake Committee and National Audubon
13 Society, why did the committee decide to abandon the
14 recommendation of its expert and adopt the
15 recommendations of the Department of Fish and Game?

16 MR. DODGE: Objection. Calls for speculation.

17 HEARING OFFICER DEL PIERO: Sustained.

18 Q. BY MR. BIRMINGHAM: Well, you were involved in
19 preparation of the management plan; is that correct,
20 Mr. Vorster?

21 A. BY MR. VORSTER: That's correct.

22 Q. And you were involved in citing what goals would
23 be achieved through the management plan?

24 A. I was involved in providing advice, but the goal
25 of using Fish and Game flows to keep fish in good

0127

01 condition was not my decision. That was the decision
02 of the client, the Audubon Society and Mono Lake
03 Committee.

04 Q. So you don't know why the Mono Lake Committee and
05 National Audubon Society decided to abandon the
06 testimony of their expert and, instead, adopt the
07 recommendations of the Department of Fish and Game?

08 MR. DODGE: Objection. Assumes facts not in
09 evidence.

10 HEARING OFFICER DEL PIERO: Do you want to
11 respond?

12 MR. BIRMINGHAM: Well, I don't have the transcript
13 in front of me here, but I did look at our computerized
14 transcript and, as I recall, that indicates that I've
15 accurately --

16 HEARING OFFICER DEL PIERO: I saw the computerized
17 transcript --

18 MR. DODGE: Well, the point of objection is that
19 we haven't abandoned Mr. Trihey's recommendation.

20 HEARING OFFICER DEL PIERO: I understood the point
21 of the objection. I want to hear --

22 MR. DODGE: I frankly think this is a pointless
23 exercise. If there's some difference in Mr. Trihey's
24 testimony, they can point it out in argument, and
25 beating Mr. Vorster on the head is going to do no good.

0128

01 MR. BIRMINGHAM: I'll withdraw the last question.

02 Q. BY MR. BIRMINGHAM: Do you know why the Mono Lake
03 Committee decided that Mr. Trihey's proposed minimum
04 flows were inadequate to maintain fish in good
05 condition?

06 MR. DODGE: That's a hypothetical question. I
07 assume, Mr. Chairman, he's assuming the Trihey flows

08 are as he stated.

09 MR. BIRMINGHAM: That's correct.

10 HEARING OFFICER DEL PIERO: Fine.

11 Q. BY MR. BIRMINGHAM: Assuming the flows are, as I
12 stated, the Trihey flows are as I stated, do you know
13 why the Mono Lake Committee decided that those flows
14 were not adequate to keep fish in good condition?

15 MR. ROOS-COLLINS: I object to this question, as
16 well, on the ground it assumes facts not in evidence.
17 I have heard no evidence Mono Lake Committee decided
18 that Mr. Trihey's flows were inadequate to keep fish in
19 good condition.

20 HEARING OFFICER DEL PIERO: I'm going to overrule.
21 The way the question was framed, it's a hypothetical.
22 It doesn't assume any facts in evidence. It's a
23 hypothetical.

24 Mr. Vorster, do you understand the question?

25 MR. VORSTER: I think I do, and I will --

0129

01 HEARING OFFICER DEL PIERO: Do you understand this
02 is a hypothetical, and it assumes that what
03 Mr. Birmingham has stated is, in fact, correct?

04 MR. VORSTER: Right.

05 HEARING OFFICER DEL PIERO: Do you have an answer?

06 MR. VORSTER: Yeah. I don't have a specific
07 knowledge why the client chose -- would not have chosen
08 Mr. Trihey's. But I can tell you this, that
09 Mr. Trihey's recommendations were not based upon nearly
10 the rigorous analysis that was done by the Department
11 of Fish and Game in their IFIM analysis.

12 In fact, I helped Mr. Trihey do some of the --
13 what he would call, a modified Tennant analysis to come
14 up with his recommended flow. I think they were
15 originally developed for the interim stream flow
16 hearing, and they were based on, you know, limited
17 analysis, I think, as Mr. Trihey testified.

18 They were not based upon any kind of IFIM, any
19 kind of rigorous study that was done for the Department
20 of Fish and Game.

21 MR. DODGE: May Mr. Vorster be asked to answer the
22 question, Mr. Del Piero?

23 HEARING OFFICER DEL PIERO: Mr. Vorster -- that's
24 why I was asking Mr. Vorster if he understood the
25 question and, again, Mr. Vorster, I don't think you

0130

01 answered the question.

02 MR. BIRMINGHAM: Let me see if I can ask a
03 different question.

04 Q. BY MR. BIRMINGHAM: Mr. Vorster, is it correct
05 that when the Mono Lake Committee gave you these flows,
06 they told you that these were the flows they thought
07 were necessary to keep the fish in good condition, the
08 Department of Fish and Game flows?

09 A. BY MR. VORSTER: That's correct.

10 Q. From that, do you take it that the Mono Lake
11 Committee determined that the flows recommended by
12 Mr. Trihey were inadequate to keep the fish in good
13 condition?

14 A. I can't answer that, because I would be
15 speculating as to what they would be.

16 Q. If the flows that were necessary to keep fish in
17 good condition were, in fact, the flows recommended by
18 Mr. Trihey, then there would be additional water for
19 exports to the City of Los Angeles; is that correct?

20 MR. DODGE: Objection. Unintelligible. Are we
21 assuming the fish flows are the whole criteria here?

22 HEARING OFFICER DEL PIERO: I'm going to overrule
23 the objection.

24 Mr. Vorster, do you understand the question?

25 MR. VORSTER: Boy, I obviously didn't understand

0131

01 the last one.

02 HEARING OFFICER DEL PIERO: Well, if you didn't
03 understand it, then, Mr. Birmingham, restate the
04 question. And you may want to restate it in a
05 different fashion, if he didn't understand it, from the
06 way you stated it the first time.

07 Q. BY MR. BIRMINGHAM: Mr. Vorster, I'm going to ask
08 you to assume the flows that were recommended by
09 Mr. Trihey are the flows required to keep the fish in
10 good condition.

11 It's correct, isn't it, that if that is the case,
12 that the lake level necessary to achieve this goal of
13 keeping fish in good condition would be a lower lake
14 level than the lake levels described in your testimony?

15 MS. CAHILL: Objection. Implies that a lake level
16 is required to keep fish in good condition, or the lake
17 level would keep the fish in good condition as opposed
18 to stream conditions.

19 MR. BIRMINGHAM: May I ask the question be reread?

20 HEARING OFFICER DEL PIERO: That's what I was
21 going to ask, too.

22 (Whereupon the record was read as requested.)

23 HEARING OFFICER del PIERO: Restate the question,
24 Mr. Birmingham.

25 Q. BY MR. BIRMINGHAM: Mr. Vorster, you have

0132

01 identified this 6390 feet management program as one of
02 the goals to achieve fish in good condition; is that
03 correct?

04 A. BY MR. VORSTER: That's correct.

05 Q. Now, let's put aside all of the other goals. If
06 that's the goal, fish in good condition, and
07 Mr. Trihey's recommended flows are the flows necessary
08 to keep fish in good condition, then the resulting lake
09 level is going to be lower than 6390, isn't it?

10 A. The range of lake levels that would occur under
11 those hypothetical flows, the Trihey flows, would be
12 less than what I have actually shown on Table 2-A as
13 the minimum-maximum median levels.

14 Q. Mr. Dodge asked you a question about duck
15 habitat. He said when the compromise proposals that
16 have now been introduced into evidence as L.A. DWP
17 Exhibits 157, 158, and 159 were being developed, was
18 the Mono Lake Committee aware of the relationship
19 between lake level and duck habitat, and I think you
20 said it was not; is that right?

21 A. I said it would not, to the detail we know today.
22 I said we did know that ducks were more abundant prior
23 to 1940. We did know that. In fact -- well, I'll

24 leave it at that.

25 Q. Well, in fact, the document, the winter -- the
0133

01 fall, excuse me, the fall 1989 document that is in
02 evidence as Exhibit 15 --

03 HEARING OFFICER DEL PIERO: Mr. Birmingham,
04 whatever the number is, go ahead and ask the question.

05 Q. BY MR. BIRMINGHAM: I'd ask you to look at page 12
06 of that document, Exhibit 158. The third full
07 paragraph states, "Although a declining water table
08 created some marshland around the lake, it also wiped
09 out extensive shallow lagoons and ponds which once
10 lined Mono's north shore, citing Stine 1989, see photo
11 below. These brackish lagoons afforded excellent duck
12 habitat. Dan Banta, personal communication."

13 That was written in 1989, wasn't it, Mr. Vorster?

14 A. BY MR. VORSTER: That's correct.

15 Q. So in 1989, it was known that the receding lake
16 level, at an elevation below 6390, would have resulted
17 in the loss of excellent duck habitat?

18 A. As this states, we knew that the brackish water
19 lagoons, which were one component and one relatively
20 smaller component of the excellent duck habitat, would
21 be lost.

22 MR. BIRMINGHAM: Mr. Del Piero, in looking at
23 Exhibit 158, I have discovered that a -- one page of
24 the documents which lists the references, it's page 15
25 in the original newsletter, has been omitted. I would

0134

01 ask, with the concurrence of the parties, that this
02 page be copied and attached to each one of the
03 exhibits, and I will provide the copies tomorrow.

04 MR. DODGE: That's fine.

05 HEARING OFFICER DEL PIERO: Fine.

06 Ms. Scoonover?

07 MS. SCOONOVER: No objection.

08 HEARING OFFICER DEL PIERO: Ms. Cahill?

09 MS. CAHILL: No questions -- no objection.

10 MR. DODGE: No objection.

11 Q. BY MR. BIRMINGHAM: Now, Mr. Vorster, Mr. Dodge,
12 in looking at the goals of this management plan that
13 you've described in your rebuttal testimony, asked you
14 about the goal of achieving air quality compliance with
15 the EPA schedule described in the December 16th, 1993,
16 letter from David Calkins to Ellen Hardeback.

17 Do you remember him asking you that question?

18 A. BY MR. VORSTER: Yes.

19 Q. And he asked you, in fact, whether the Six-Point
20 Plan and the compromise plan described in L.A. DWP
21 Exhibit 158, if you were aware of the need to set a
22 lake level at 6392 or thereabouts to achieve
23 compliance.

24 Do you remember him asking you questions relating
25 to that subject?

0135

01 A. Yes.

02 Q. And you said you were not?

03 A. That's correct.

04 Q. And, in fact, when you were responding to his
05 question, you used the term "we" meaning the Mono Lake

06 Committee; isn't that right?

07 A. We, myself and Martha Davis and other people who
08 worked on developing the management plan.

09 Q. Now, when you were developing the Six-Point Plan
10 that's contained in DWP Exhibits 156 and 157, it's
11 correct, isn't it, that the Mono Lake Committee was
12 aware of the exceedences of the Air Quality Standards
13 that occurred in the Mono Basin?

14 A. I think so, yes.

15 Q. In fact, that was the subject of the extensive
16 testimony during the Mono Lake preliminary injunction
17 proceeding before Judge Finney in 1991; isn't that
18 correct?

19 A. That's correct.

20 Q. And at the time the Six-Point Plan was prepared,
21 the Mono Lake Committee was aware that at the elevation
22 below 6390 feet, there would be exceedences of the
23 Federal Air Quality Standard?

24 A. I don't think they had that specific awareness,
25 no. I don't know exactly what they were aware of, but

0136

01 we did not have the benefit of the modeling that's been
02 done since 1990.

03 Q. At the time, you had the benefit of all the air
04 quality monitoring data that had been collected by the
05 Great Basin Unified Air Pollution Control District;
06 isn't that correct?

07 A. I would assume that I was not involved extensively
08 in the air quality testimony.

09 Q. And were you involved in the discussions with
10 Dr. Thomas Cahill concerning the effective lake level
11 and air quality in 1989?

12 A. At times I was involved with discussions, but not
13 all the time.

14 Q. And isn't it correct that in 1989, Dr. Cahill
15 informed the Mono Lake Committee that at elevations
16 below 6390, there would be exceedences of the Federal
17 Air Quality Standard?

18 A. I can't recall that, whether that recommendation
19 or that observation was made by Dr. Cahill.

20 Q. I'd like to ask you a question about these goals
21 in response to a question that I asked you earlier.
22 You said that the Mono Lake Committee, your client, and
23 the consultant gave you these goals; is that correct?

24 A. That's correct, the attorneys for the Mono Lake
25 Committee and National Audubon Society.

0137

01 Q. Now, isn't it also correct that they specified the
02 lake level required to achieve these goals?

03 A. That's correct.

04 Q. The lake level wasn't the lake level that you
05 selected. It was provided by the attorneys --

06 A. That's correct.

07 Q. -- for the Mono Lake Committee?

08 A. Yeah, that's correct.

09 Q. Now, Mr. --

10 MR. DODGE: We'll stipulate for once Mr. Vorster
11 carried out instructions.

12 Q. BY MR. BIRMINGHAM: Now, Mr. Vorster --

13 HEARING OFFICER DEL PIERO: Do you want to agree

14 with that stipulation, Mr. Birmingham?

15 MR. BIRMINGHAM: I couldn't agree with it, because
16 I don't know what the instructions were.

17 Q. BY MR. BIRMINGHAM: Mr. Vorster, Mr. Dodge asked
18 you a question about the flows necessary to keep the
19 fish in good condition, and you said at the time the
20 Six-Point Plan was developed, you didn't, you, the Mono
21 Lake Committee, didn't have the Rush Creek IFIM report,
22 and you didn't have the Lee Vining Creek IFIM report.

23 Do you recall saying that in response to
24 Mr. Dodge's question?

25 A. BY MR. VORSTER: I think I said we didn't have
0138

01 available all the IFIM reports. The Six-Point Plan was
02 first articulated -- and I'm really going to be
03 stretching my memory -- I think in 1988, '89, '90,
04 sometime in that period of time. And so at some point
05 during that time, we got a draft Rush Creek IFIM report
06 but, obviously, we did not have the other IFIM reports.

07 Q. It is correct that in 1991, the Mono Lake
08 Committee was aware of the recommendations of the
09 Department of Fish and Game for minimum flows in Rush
10 Creek?

11 A. That's correct.

12 Q. And, in fact, the court ordered flows that were
13 being advocated as part of the Six-Point Plan were less
14 than the flows recommended by the Department of Fish
15 and Game?

16 A. That's correct.

17 Q. Now, with respect to Lee Vining Creek. In 1991,
18 the Mono Lake Committee was aware of preliminary
19 recommendations of the Department of Fish and Game for
20 flows in Lee Vining Creek; isn't that correct?

21 A. No. I don't think that's correct.

22 Q. Is it your understanding that the Department of
23 Fish and Game made proposed recommended flows for Lee
24 Vining Creek during the interim stream flow hearing
25 before Judge Finney in 1991?

0139

01 MS. CAHILL: Objection. Needs to be clarified
02 whether these were interim or permanent flows.

03 HEARING OFFICER DEL PIERO: The question was
04 interim flows.

05 Mr. Vorster, do you know the answer?

06 MR. VORSTER: I can't recall what the Department
07 of Fish and Game recommended.

08 HEARING OFFICER DEL PIERO: Okay.

09 Q. BY MR. BIRMINGHAM: I'd like to go back to the
10 questions about LAAMP overestimating inflow to Mono
11 Lake.

12 Mr. Roos-Collins asked you some questions on this
13 subject, and Mr. Dodge asked you a question about the
14 remedy, if in 15 years, we discover that you were
15 correct, that LAAMP does overestimate the flows to
16 maintain the inflow of water to Mono Lake.

17 Do you recall those questions by Mr. Roos-Collins
18 and by Mr. Dodge?

19 A. Yes.

20 Q. I'm going to ask you the same question, but I'm
21 going to phrase it a little differently. I'm going to

22 ask you to assume that you are correct, that LAAMP does
23 overestimate the inflow to Mono Lake. And I'm going to
24 ask you to assume that a lake level of 6385 feet has
25 been established by this Board.

0140

01 Now, isn't it correct, Mr. Vorster, that the flows
02 necessary to maintain a lake level at 6385 will have to
03 be increased in order to maintain the lake at that
04 level, if you are correct, that LAAMP overestimates
05 inflow to Mono Lake?

06 A. That's correct. The releases from the DWP
07 diversions facilities.

08 Q. Now, Mr. Roos-Collins asked you a question about
09 whether or not, in your opinion, the projection of
10 exports under LAAMP were too low or too high. That's
11 my statement of his question, not his. But you recall
12 him asking you a question on that subject; is that
13 correct?

14 A. That's correct.

15 Q. Now, I'd like to follow up on that a little bit.
16 You stated that you thought the projections probably
17 were a little bit low because the operators will adjust
18 the conditions; is that correct?

19 A. That's correct.

20 Q. So your statement of your opinion is based upon
21 the operators of the aqueduct system making adjustments
22 to their operation of the system; is that correct?

23 A. Well, that's correct, and the foresight that they
24 would have that the models don't have, that they would
25 have the benefit of the six-month foresight.

0141

01 Q. If we restrict your opinion strictly to LAAMP, to
02 your analysis of LAAMP, isn't it correct, Mr. Vorster,
03 that in your opinion, LAAMP overestimates the amount of
04 water that can be exported under different lake level
05 alternatives?

06 A. If I were to run the lake level alternatives
07 through my water balance model, which is not a monthly
08 simulation model, it's just an annual water balance
09 model for the Mono Basin, I would show that to maintain
10 a given lake level it would require more releases from
11 the streams that DWP controls, and therefore, somewhat
12 less export.

13 Q. Then in response to my question, the answer is
14 yes?

15 A. Yes, if comparing it to my model. I'm not saying
16 my model is correct or LAAMP is incorrect, I'm just
17 saying in comparison.

18 Q. We talked about that earlier, and I'll clarify my
19 question by asking you to assume that the original
20 opinion you expressed about overestimation of LAAMP is
21 correct. Your answer to my question would be yes?

22 A. Yes.

23 MR. BIRMINGHAM: I have no further questions.

24 HEARING OFFICER DEL PIERO: Thank you very much,
25 Mr. Birmingham.

0142

01 Ms. Cahill?

02 MS. CAHILL: Can I have just a moment?

03 HEARING OFFICER DEL PIERO: Certainly.

04 MS. CAHILL: We have no questions at this time.
05 HEARING OFFICER DEL PIERO: Thank you.

06 Mr. Roos-Collins?

07 RE-CROSS EXAMINATION BY MR. ROOS-COLLINS

08 Q. Good evening, Mr. Vorster.

09 A. BY MR. VORSTER: It's now evening.

10 Q. Your written rebuttal testimony, paragraph 6,
11 states that, "LAAMP's monthly results should be used
12 with caution." Is that correct?

13 A. That's correct.

14 Q. And in response to a question by Mr. Dodge on
15 redirect examination, you said that LAAMP is not a
16 "be-all and end-all." Is that also correct?

17 A. That's correct.

18 Q. Assuming that this Board does amend the City of
19 Los Angeles' licenses by August of 1994, and assuming
20 as well that LAAMP is not revised between now and then
21 to make it perfect, do you have any recommendations for
22 this Board how to hedge against the deficiencies you've
23 identified in LAAMP?

24 A. Let me preface my answer in saying the
25 deficiencies are relative to my model. And again, I

0143

01 want to emphasize, I'm not saying LAAMP is wrong or my
02 model is correct. It's just relative to my model. It
03 indicates greater inflow.

04 One thing that could be done is to use other
05 models, such as my model, in trying to see what the
06 exports would be using my model with the different lake
07 level alternatives. It would give you, perhaps, a
08 floor, and then LAAMP would be a range of exports that
09 would be allowed for a given lake level alternative.
10 That would be one -- if we had the luxury of time and
11 money to do something like that.

12 I think that LAAMP right now has gone through a
13 tremendous amount of review and scrutiny and has been
14 shown to be quite an adequate tool, a very good tool,
15 to use to simulate what might happen, predict what
16 might happen, what the exports could be.

17 I think every person who has come up here to talk
18 about that model and the models in general have said,
19 "Models have uncertainty. But it is -- for the inputs
20 that we put in, it's giving us results that we think
21 can be used as a guideline for what we think the
22 exports will be."

23 And I think it's a totally appropriate tool to use
24 at this time, with the understanding that there is a
25 range, a range of exports that would be allowed or a

0144

01 range of releases that would be required to maintain a
02 given lake level.

03 Q. Let's assume that this Board established a lake
04 level target to be met in a certain number of years.

05 Do you have a recommendation for this Board as to
06 how it would interpret LAAMP results in setting the
07 flow regime to achieve that lake level target?

08 A. Yes. It would -- first you have to understand
09 that the hydrology that you use as an input is just one
10 of many possibilities that obviously will occur in the
11 future, and that we could make LAAMP results even more

12 sophisticated in terms of we could have synthetic
13 hydrology as an input. And that would be the next step
14 to give a probability of achieving a lake level in a
15 given time period based upon what we call synthetic
16 sequences. That would be the next step in getting more
17 use out of LAAMP.

18 So it would not -- you would not want to use --
19 say that the output from LAAMP for any given input is
20 what is going to be expected in under all conditions.
21 I think, obviously, we all know it depends on what the
22 hydrology will be. But we can have a better feel if we
23 did, for example, use synthetic sequences,
24 probabilistic view.

25 Q. Mr. Vorster, I have understood all of your answers
0145

01 to my questions today up until that one.

02 A. Okay.

03 Q. Let me try again.

04 A. Okay.

05 Q. Again, let's assume the Board desires to achieve a
06 lake level target in a certain number of years. Let's
07 also assume that LAAMP shows that a flow of X
08 cubic-feet per second will achieve that lake level
09 target.

10 Are you recommending that this Board establish a
11 flow regime of X cubic-feet per second plus some
12 increment, given the tendency of LAAMP to overestimate
13 inflow into Mono Lake?

14 A. No, not at this time. Because, again, LAAMP is
15 the tool that we've agreed to use with the
16 understanding that the -- in achieving that target,
17 dependent upon hydrology, and we are relying upon a
18 model that is not perfect, that would not be my
19 recommendation.

20 We have the tool. We will have to adjust it in
21 the future. There's no question we will have to adjust
22 our understanding, our predictions, as time goes on,
23 and we have the provisions for doing that.

24 Q. Let me pursue a different subject; namely, the
25 opportunities to increase the yield of the aqueduct to
0146

01 offset the reduction in Mono Basin export addressed on
02 page 10 of your written testimony.

03 Are these opportunities captured in LAAMP version
04 3.3a?

05 MR. DODGE: Objection. Beyond the scope of any
06 examination. He's reopening.

07 HEARING OFFICER DEL PIERO: You want to read the
08 question back to me again, please?

09 (Whereupon the record was read as requested.)

10 HEARING OFFICER DEL PIERO: Overruled.

11 Do you understand the question, Mr. Vorster?

12 MR. VORSTER: Yes, I do. Not directly.

13 HEARING OFFICER DEL PIERO: Answer, please.

14 MR. VORSTER: Not directly. Indirectly, we can
15 use LAAMP to suggest how -- for example, we can
16 manipulate LAAMP and assume storages for Crowley Lake
17 Reservoir, the storage range, to see what additional
18 storage would do for the yield of the aqueduct system.

19 But none of these were directly part of LAAMP as

20 it currently stands. But we can use LAAMP to examine
21 some of these opportunities.

22 Q. BY MR. ROOS-COLLINS: Your Table 2-A estimates
23 aqueduct exports. In developing your aqueduct export
24 estimates, did you incorporate any of the opportunities
25 addressed in paragraph 18 of your written rebuttal

0147

01 testimony?

02 A. BY MR. VORSTER: No.

03 Q. One final line of inquiry. Mr. Dodge interposed,
04 during Mr. Birmingham's recross examination, that for
05 once, you had followed instructions.

06 Have you always followed my instructions when
07 you've worked as Cal Trout's consultant?

08 A. To the best of my ability, yes. Yes, I have.

09 MR. ROOS-COLLINS: Thank you. No further
10 questions.

11 HEARING OFFICER DEL PIERO: I assume Mr. Dodge,
12 you feel the first answer was the more characteristic
13 one?

14 MR. ROOS-COLLINS: I think this goes to show that
15 my instructions are clearer.

16 MR. DODGE: They're probably much, much more
17 reasonable.

18 HEARING OFFICER DEL PIERO: Ms. Scoonover?

19 MS. SCOONOVER: I have just a few questions,
20 Mr. Vorster.

21 CROSS-EXAMINATION BY MS. SCOONOVER

22 Q. In 1989, were you aware of the significance of
23 still water coves and hypopycnal conditions around
24 shoreland marshes to waterfowl population in Mono Lake?

25 A. BY MR. VORSTER: No.

0148

01 Q. In 1989, were you aware of Dr. Stine's current
02 drought projections for Mono Lake?

03 A. No.

04 Q. In 1989, did you have the results of Great Basin
05 Unified Air Pollution Control District's air quality
06 monitoring for Mono Lake?

07 A. We didn't -- we have the --

08 Q. Excuse me. Let me clarify. Do you have the model
09 results of the Great Basin Unified Air Pollution
10 Control District's air quality monitoring data for Mono
11 Lake?

12 A. We did not have the model results, no.

13 MS. SCOONOVER: Thank you. That's all.

14 HEARING OFFICER DEL PIERO: Mr. Frink?

15 MR. FRINK: Yes. One question.

16 RE-CROSS EXAMINATION BY THE STAFF

17 Q. BY MR. FRINK: Mr. Vorster, my understanding of
18 your earlier testimony is that your water balance model
19 predicts that a greater quantity of inflow to Mono Lake
20 is required to achieve a given water level than is
21 predicted by the LAAMP model.

22 Do you know what the main reason is for the
23 difference between the predictions of your model and
24 the predictions of LAAMP model with regard to the
25 amount of inflow on Mono Lake required to achieve a

0149

01 given water elevation?

02 A. BY MR. VORSTER: I've thought about it several
03 months ago when I had discussions with Dr. Brown. And
04 before I answer that question, I want to make sure it's
05 clear it's for a given level of releases from the DWP
06 facility.

07 Obviously, I think that if we had the same inflow,
08 our models would say the lake level is the same. I
09 just want to clarify that point: It's for a given
10 level of releases from the aqueduct controlled streams.

11 Now, to answer your question about the
12 differences, I, in my water balance model, attempted to
13 directly estimate all of the water balance components
14 that are in the Mono Basin. And so that would include
15 components such as the evaporation from the exposed
16 playa, evaporation from the riparian vegetation and
17 wetlands, and things like that. I have outflows like
18 that.

19 The LAAMP model, as well as, I think, LAASM are
20 both based on projecting Mono Lake levels using
21 regression equations, not directly estimating the
22 individual water balance components. And to the extent
23 that the regression equations can incorporate those
24 outflows into kind of a lump-sum term or some factor,
25 there would be some similarity.

0150
01 But there's just a difference in approach of the
02 two models, and I -- you know, I think I just have more
03 outflows.

04 And I have generally the same inflow. We use the
05 aqueduct runoff, the same runoff base. I directly
06 estimated the ungauged runoff from a different portion
07 of the basin. LAAMP does that indirectly through this
08 regression equation.

09 Q. In stating that you believe you have more outflow
10 in your model, is the source of that outflow
11 evaporation?

12 A. Yes. Evaporation, and then there's outflow in my
13 model from the export of the groundwater that goes into
14 the tunnel.

15 Q. Okay.

16 A. That's not directly modeled by LAAMP. Again, as
17 we both calibrate our models off of what the actual
18 lake level fluctuations were, and we both are fairly
19 similar. Although, I want to point out that LAAMP is a
20 monthly water balance. Mine is an annual water balance
21 model.

22 MR. FRINK: I think that's all.

23 HEARING OFFICER DEL PIERO: Mr. Satkowski?

24 MR. SATKOWSKI: No questions.

25 HEARING OFFICER DEL PIERO: Mr. Smith?

0151
01 MR. SMITH: I have one question, Mr. Del Piero.

02 Q. BY MR. SMITH: Mr. Vorster, thank you for your
03 testimony.

04 On a follow-up question to Mr. Frink, just a brief
05 question. Do you think that there would be a way which
06 you could generally improve LAAMP to take into account
07 these further outflows by, perhaps, inputting some
08 historical data, or do you think it would be worth it?

09 A. BY MR. VORSTER: Over the long haul, sure. I hope

10 we can continually improve LAAMP if it's going to be
11 used as a tool by the Water Board.

12 In the time frame we're talking about, the next
13 couple weeks before the hearing record closes, no. I
14 think it's -- the approach that was used in LAAMP to
15 predict lake levels is a hydrologically valid
16 approach. For the purposes that it was -- we had to
17 develop some kind of predictive tool to make monthly
18 lake level predictions. We do not have the data to do
19 the same kind of estimates or computations I did in my
20 water balance model. That's why I didn't develop a
21 water balance.

22 We didn't have accurate estimates of each of the
23 terms, so that's why LAAMP took the tack it did, using
24 regression equations. I think it's a valid approach.
25 And as we get more information and as we have an

0152

01 opportunity to refine it, I think we should look into
02 it some more.

03 MR. SMITH: Thank you.

04 HEARING OFFICER DEL PIERO: Mr. Herrera?

05 MR. HERRERA: I have no questions.

06 HEARING OFFICER DEL PIERO: Mr. Canaday?

07 MR. CANADAY: No.

08 HEARING OFFICER DEL PIERO: Mr. Dodge?

09 MR. DODGE: I don't have another opportunity.

10 HEARING OFFICER DEL PIERO: I know. Are we done
11 with him?

12 MR. DODGE: Yes.

13 HEARING OFFICER DEL PIERO: Thank you,
14 Mr. Vorster.

15 Gee, it's ten to seven.

16 MR. ROOS-COLLINS: Mr. Del Piero, before
17 Mr. Vorster escapes too far from the witness table, let
18 me remind you and all parties that I reserve discussion
19 of Mr. Vorster's direct testimony on pre-1941 flow
20 regime until a subsequent date which will be his next
21 appearance now scheduled for February 9th.

22 HEARING OFFICER DEL PIERO: Yes, I recall. You'll
23 be back with us again, Peter.

24 MR. VORSTER: More than once again, I think.

25 HEARING OFFICER DEL PIERO: Okay.

0153

01 Mr. Canaday?

02 MR. CANADAY: So that we can try to develop a
03 better schedule, I would appreciate if the counsels for
04 the various parties could have for me tomorrow morning
05 a list of the witnesses they do intend to call and the
06 subject areas in which they intend to have those
07 witnesses testify, so that I may try to develop a
08 schedule as we're meeting tomorrow.

09 HEARING OFFICER DEL PIERO: Let me help you,
10 Mr. Canaday.

11 You will have that information available for him
12 tomorrow.

13 MR. DODGE: Could I have until Monday,
14 Mr. Del Piero?

15 HEARING OFFICER DEL PIERO: You're going to be
16 gone. That's right. Yes. You can have until Monday.

17 Anyone else, unless you're getting on a plane at

18 6:30 tomorrow morning, I want it by tomorrow afternoon.
19 What else do you have, Mr. Canaday?
20 MR. CANADAY: Just that I'll secure this room,
21 and I'll see everyone tomorrow morning at 8:30.
22 (Whereupon the proceedings were
23 adjourned at 7:00 p.m.)
24 ---o0o---

25
0154

01 REPORTER'S CERTIFICATE

02 ---o0o---

03 STATE OF CALIFORNIA)
04) ss.
05 COUNTY OF SACRAMENTO)

06 I, KIMBERLEY R. MUELLER, certify that I was the
07 official court reporter for the proceedings named
08 herein; and that as such reporter, I reported, in
09 verbatim shorthand writing, those proceedings, that I
10 thereafter caused my shorthand writing to be reduced to
11 typewriting, and the pages numbered 1 through 153
12 herein constitute a complete, true and correct record
13 of the proceedings:

14 PRESIDING OFFICER: Marc Del Piero
15 JURISDICTION: State Water Resources Control Board
16 CAUSE: Mono Lake Diversions
17 DATE OF PROCEEDINGS: February 3, 1994

18
19 IN WITNESS WHEREOF, I have subscribed this
20 certificate at Sacramento, California, on this 17th day
21 of February, 1994.

22
23
24 _____
24 Kimberley R. Mueller
25 CSR No. 10060
25